

Galápagos Sustainability, Innovation and Resilience Hub

Initial Proposal February 2021

N.B: This proposal was prepared collaboratively by the authors listed at the end of the document, on behalf of the Hub founding partners listed below. Please reference this proposal in future work as follows:

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The Galápagos 2040 Vision¹, the Galápagos 2030 Plan and a national ambition for the islands to become an “SDG Territory” (i.e. achieving the UN’s Sustainable Development Goals relevant to the context of Galápagos), together set out broad and substantial aims for Galápagos over the next two decades. These include, among others: the creation of a secure, equitable, sustainable and low carbon island economy that will enable the community to achieve a net-zero carbon footprint; improvement in water and sanitation management; increased food security; the reversal of endemic species’ decline and the degradation of biological communities; improved protection and management of Galápagos’ unique terrestrial and marine ecosystems; and increased resilience to climate change. The creation of a Sustainability, Innovation and Resilience Hub, built on foundations of research collaboration, education and capacity-building, will assist in the realisation of these aims and support a transition within the islands away from an over-reliance on tourism and toward a knowledge economy.

Founding partners

- Consejo de Gobierno del Régimen Especial de Galápagos
- Charles Darwin Foundation
- British-Ecuadorian Chamber of Commerce
- Secretaría de Educación Superior, Ciencia, Tecnología e Innovación SENESCYT
- Universidad San Francisco de Quito
- Universidad Central
- University of Edinburgh
- University of Cambridge

Over time, an additional set of associated partners will include local, national and international organisations, civil society groups and universities, as well as relevant government institutions.

Background

Galápagos is a unique archipelago, a World Heritage Site and one of the most important conservation areas in the world. It is also home to >30,000 residents who, prior to Covid-19, supported an annual influx of >250,000 tourists. While tourism has generated employment in Galápagos and continental Ecuador, it has also driven human population growth, which in turn has led to an overwhelming of social services and the rapid spread of damaging invasive species.

On the islands, the towns are experiencing overcrowding, and local services including healthcare, education, water provision and waste management are all substandard. Agricultural production is low and

¹ The Galápagos 2040 Vision is based on a collaboration between the University of Edinburgh, the Government of Galápagos, the Charles Darwin Foundation and the UK-Ecuadorian Chamber of Commerce. Meetings in 2018 and 2019 with representatives of Ecuadorian government institutions, including the Minister of the Galápagos region, led to an initial agreement for a programme of work with the University of Edinburgh on the theme of ‘Sustainable Energy, Environment and Communities’ in Galápagos, in the context of Ecuador’s goal of achieving a net-zero carbon footprint in Galápagos by 2040. Achieving this goal will ensure sustainable development for local people and the local economy, requiring an in-depth understanding of the unique and sensitive ecosystem and local context.

uneconomic, resulting in high levels of food importation and poor management of the agricultural areas in the humid highlands, which, in turn, is driving further increases in invasive species. In addition, the marine ecosystem is extremely sensitive to the effects of climate change, as well as over-fishing and harmful fishing methods. The recent collapse of tourism due to Covid-19 has generated additional economic and social challenges, further highlighting the urgent need for a change in direction.

While improvements in this complex situation are sought by many key actors, and ambitious goals have been set, barriers to efficient reform remain. Contradictory sectoral policies, conflict between national and local perspectives, poor communication of available evidence (from both scientific and local knowledge) to policy-makers, regular disbandment of policy and planning teams, and deficiencies in participation of local and national stakeholders all seriously hamper progress and require resolution if the Galápagos 2030 Plan and the vision to achieve zero carbon are to be achieved.

To tackle these issues and enable a change of course for this unique archipelago, there is a need for increased innovation, knowledge sharing and capacity building, as well as a reshaping of the policy-making process. We therefore plan to launch a Hub, with a physical base in the islands, which aims towards, among other goals: SDG achievement; restoration of biodiversity; reduction in carbon emissions; transition toward circular and knowledge economies; population stability and sustainable development; development of research and new technologies; education and training; improvement in wellbeing (understanding this within the concept of *'Buen Vivir'* or *'Good Living'*); reformation of policy processes; and resilience against climate change and other potential threats.

A Hub for sustainability, innovation and resilience

The fundamental objective of the Hub is to develop innovation around economic recovery, energy transition and conservation of the natural heritage of Galápagos, whilst progressing toward the objectives of the 2030 Plan and the achievement of the UN SDGs. Its framework is rooted in the empowerment of stakeholders and the conceptualisation of sustainable and inclusive development, with appropriate recognition and management of the synergies and conflicts between different (existing and future), development and conservation initiatives, ever-present in ocean island ecosystems. By presenting an open space for dialogue on economic productivity within the principles of sustainability in such a fragile environment, the work of the Hub will enable Galápagos to lead as a global example.

Facilitation and promotion of horizontal collaboration and knowledge exchange among local and national organisations, institutions and communities in Galápagos will be a key component of the Hub, as well as the connection of these actors to a broad range of international partners. The Hub will support capacity-building, local engagement and participation, and community-based management of resources and conservation, providing local residents, researchers and policy-makers with access to tools, methods, spaces, technologies and training. The Hub will also enable research-informed action, support negotiation and equitable power relationships between stakeholders, and facilitate policy development to allow the continuity and scale-up of its work. The Hub will therefore represent:

- A **platform for knowledge development and exchange** between diverse Galápagos stakeholders – both local and national – with international partners. It will provide participants access to tools, information, spaces, technologies and training, with resources and systems that will be adapted to local skills and knowledge, as well as environmental and cultural heritages. Training and transitioning skills will allow vulnerable groups to join other skilled groups in co-creating and implementing the goals of the Hub. This approach will facilitate community adjustment to a rapidly changing economic and cultural landscape, while creating a resource system that is appropriate and maintainable. Resources will also be made available to local schools and teachers.
- An **incubator for innovative ideas** concerning the challenges of climate change impacts, biodiversity decline, economic recovery and unsustainable energy systems, along with the development of new strategies and prototypes, the success of which will be measured in relation to their interactions with the islands' communities and ecosystems. The Hub will support the

growth of innovative solutions into local businesses, thus strengthening the economy and diversifying livelihoods.

- A **laboratory for research and policy development** for Galápagos and other island nations facing similar challenges. The Hub will help in identifying agendas for research and innovation, promote suitable and sustainable partnerships, attract funding and generate policy advice.

Focal themes of the Hub

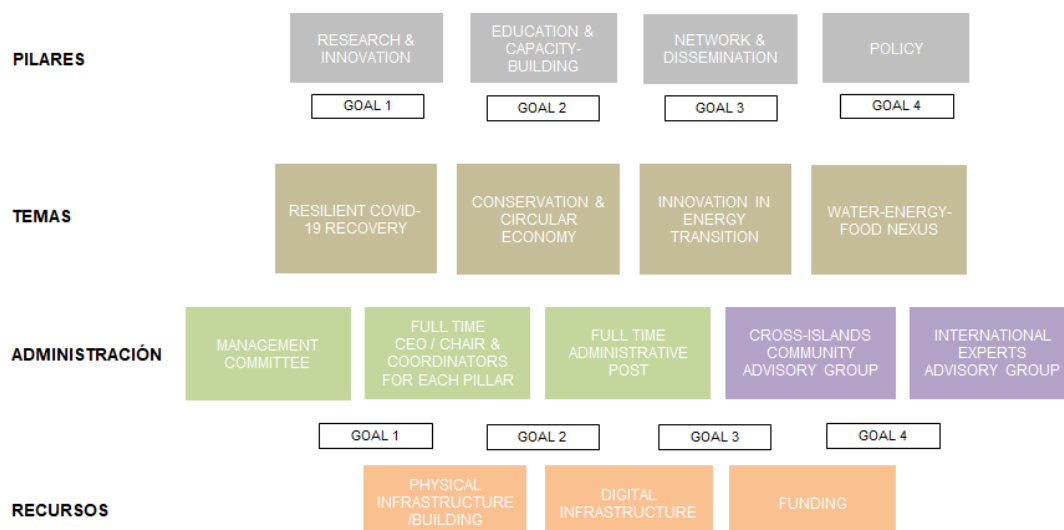
The following four themes (with constant consideration of their synergies and conflicts) will guide the Hub's agenda and activities through the first two years:

1. Resilient Covid-19 recovery:
 - Achieve a sustainable economic recovery from Covid-19
 - Improve tourism sustainability and begin a shift towards a knowledge economy
 - Increase resilience against future shocks such as climate change and pandemics
2. Conservation and circular economy:
 - Reverse species' declines and ecosystem degradation
 - Improve detection and management of invasive species and maintain ecological isolation
 - Increase local education around, and participation in, conservation activities
 - Reduce waste and support a transition to a circular economy
3. Innovation in energy transition
 - Pilot innovative, scalable ideas aimed at sustaining energy resources whilst reducing carbon emissions
 - Improve clean drinking water availability across the inhabited islands
4. Water-Energy-Food nexus:
 - Increase food security and local production
 - Improve management of the agricultural areas
 - Increase sustainability of food systems, including both fishing and farming

Structure of the Hub

The Hub is structured around four main pillars, which will support activities developed across all themes:

1. **Research and innovation:** A research and innovation programme will draw on existing practices and pilot innovative ideas, in partnership with local and international organisations and networks, representing private, public and civil society sectors.
2. **Education and capacity-building:** The Hub will increase context-based education in schools, local capacity and community-based management and participation, and strengthen the relationships between the environment and the local community.
3. **Connectivity, network and dissemination:** A network will be set up, including local, national and international organisations, partners, stakeholders and investors associated with the Hub, within which collaboration, knowledge exchange, information sharing and ideas dissemination will be promoted through the new REVISO Network for Sustainable Island Life (*Red para la Vida Isleña Sostenible*). As well as facilitating international relationships and increasing the visibility of the Hub, this network will promote connections between the islands and mainland Ecuador.
4. **Policy advice and development:** A Policy Advisory Group (GAP; *Grupo Asesor de Políticas*) will consolidate outputs of the Hub and REVISO, provide policy advice and identify research gaps based on policy needs, in the context of the Galápagos 2030 Plan and SDGs achievement. The Hub will help increase the capacity of Galápagos to reform and adapt policy to tackle new and emerging challenges, and preserve continuity of resources and management irrespective of political changes.



Plan of work for Years 1 and 2

The following two strands of objectives will be pursued in the first two years:

A. Governance and internal systems

Objective	Overview	Deliverables
A1. Legal entity	Establish governance and legal structures of the Hub.	Signed agreement between all parties.
A2. Partnership and funding	Establish and structure a multi-layered global, regional and local partnership in relation to the themes of the Hub and consider funding opportunities.	Partnership and funding structure document.
A3. Operational growth	Develop five-year pathways to existing and proposed programmes in consultation and collaboration with the partner organisations.	Five-year plan document.
A4. Research and innovation	Create a research plan, within the context of the thematic areas of the Hub, with clear funding sources, actors and opportunities.	Research plan document.
A5. Communications	Create a local and global communications strategy with a clear message and mode of delivery, to establish Hub identity.	Communications strategy document; online presence of the Hub.
A6. Workshops	Run two workshops in Galápagos to contribute to the development of the Hub's plans and strategies, ensuring participation of local and national institutions and stakeholder representatives (Spring and Autumn 2021).	Plan of action agreed at first workshop; progress checked at second workshop.
A7. COP26 in Glasgow	Present the first-year achievements and the developed strategies.	Engagement of partners; presentation strategy.

B. Direct action, results sharing and pilot projects

Objective	Overview	Deliverables
B1. Physical facilities	Review the logistics and facilities at the physical Hub. Establish a plan of work to enhance physical and online infrastructures.	Enhancement plan; services appointed where required.
B2. Skills and knowledge	Identify skills necessary for professional development related to ideation, entrepreneurship and innovation in the Hub.	Research report detailing important skills gaps.
B3. Education	Establish an education plan for the Hub and deliver a number of accredited online/blended educational courses related to innovation, resilience, entrepreneurship, communication, systems thinking and digital fluency.	2-3 courses delivered to 2-3 groups of 5–10 people.
B4. Research and innovation	Complete ongoing research led by partner organisations and launch a 'grand challenge' pilot ideation competition, linked to both major and smaller-scale developments and initiatives to support the economic, social and ecological needs of the islands.	Ongoing research outputs; identification of the ten strongest ideas from the 'grand challenge', later narrowed to 3–5 to be supported through local/global partnership.
B5. Policy	Establish the Policy Advisory Group and engage with prior processes and groups involved in participatory policy development, including the <i>Asamblea Provincial de Galápagos</i> (Provincial Assembly for Galapagos set up in the 2030 Plan). Build trust in the Galápagos 2030 Plan, and complete initial policy action plan research.	Post-Covid-19 recovery scenario analysis; SDG synergies and conflicts analysis in the Galápagos context; identification of the policy and actions needed to achieve the Galápagos 2030 Plan objectives; and a methodology to implement and maintain the goals of the vision stated in “El Camino Hacia una Nueva Ley de Galápagos” regarding the new Special Law for Galápagos.
B6. Connectivity and knowledge dissemination	Establish the REVISO network and achieve wider visibility and buy-in of the Hub.	Agreed list of members with roles and requirements understood by all; establish online presence of the network.

A number of academics and non-academic colleagues contributed to the development of this proposal.
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Galapagos Islands