Construction of 25km of shared-use paths to walk, run or cycle

Region
Latin America and the Caribbean

Award Scheme
Dubai International Award

Sustainable Development Goals
Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

Summary

Rutas Naturbanas is a non-profit collaborative organization which aims to connect people to the city through nature. Urban rivers provide a huge opportunity for a more environmentally sustainable city. Construction setbacks established by law create a new opportunity to make rivers and their ecosystems accessible by creating shared-use paths that enable people to walk, run, bike and roll along the riverbanks of the Torres and María Aguilar.

Background and Objective

Situation Before the Initiative Began:
600,000 capital region residents have virtually no access to urban rivers, active mobility infrastructure and quality of parks. Rivers are in a state of decay and contamination affecting mainly those in lower income groups.

Establishment of Priorities:
Rutas Naturbanas is a citizen-led initiative led by SUM Consulting, PPAR Design, Chepecletas, Amigos del Río Torres, Río Urbano, Fundación Árboles Mágicos representing a cross-section small businesses, community associations and foundations. It was developed with over 100 volunteers and involved key experts in many fields through a CoDesign session. The Government declared the project of National Interest in 2016 and allowed for the intervention. The first km is set to inaugurate late 2017 (with private funding already guaranteed). The larger team is comprised of a 50-50 representation of males and females.

Formulation of Objectives And Strategies: Policy:
Integrate ecosystem services into urban development- interurban biocorridors; Cooperation structures between 5 municipalities; Ecosystem services assessment of metro area and identification of emission reduction potential; Incentive systems for interurban biocorridor management

Implementation:
Participatory coordination platforms; Implementation of "hearing" processes with relevant stakeholders for bottom-up planning; Technical/financial support of restoration and rehabilitation initiatives; Establishment of up to 30 km interurban biocorridors and stepping stones for migrating species Communication: Promotion of national dialogue and networking (private, scientific, civil sector); Up-dating of existing databases (training, best practices, CHM); Networking / exchange of experiences with countries / cities / international initiatives (Habitat III)

Mobilisation of Resources:
All the work developed during phase I 2015-2016 (Master Plan & Promotion) 2015 to date is estimated at US$314,000, invested in professional hours donated for the preparation of the master plan, legal advice, technology support, and office expenses. Phase II 2017 is estimated at US$532,000 invested in technical studies, design,
construction plans, tree inventory, management, office expenses and construction costs. Staff and volunteers leveraged by the seven organizations partnered to make the plan a reality, plus 90% in-kind and cash donations through local private companies and foundations have allowed this to take place. The full project cost is estimated at US $8.1 million (each kilometer costs approximately $350,000).

Currently, a Community Empowerment initiative funded in part by CRUSA Foundation (formerly US AID) will involve neighbourhood leaders to inform future design in a participatory way as well as empower them to enter local land agreements and fundraising efforts with neighbouring corporate sponsors and international donors in collaboration with the Foundation. Rutas Naturbanas Foundation, under the surveillance of the Board of Directors was created to support the initiative and its staff and permanent volunteers.

**Actions and Implementation**

As segments are built, suggested road paths are articulated to connect discontinuous segments for non-pedestrians (e.g. cyclists) while other phases are completed to allow full connectivity via both riverbanks. These roadway paths present the opportunity for municipal governments to articulate bike and pedestrian paths alongside greening these paths to extend biological corridors into the city and linking to public parks. The full project cost is estimated at US $8.1 million (each kilometer costs approximately $350,000). By law, properties abutting a river bank must have a 10 meter set-back, or 50 meters where the slope of the terrain is 45 degrees or more. The National Laws of Forests and Water protect these areas to ensure protection of the watershed and its environment, and does not allow construction in these areas. Additionally, municipal bylaws (or ordinances) allow certain interventions and also regulate these 10-50 meter easements set by national law. Moreover, private property laws also add to the complexity of these spaces, as they are in fact, privately held – whether by the State or by private individuals. This legal “no-man’s-land” is one of the key factors that explain why urban rivers face such dire environmental outcomes. This has led to a city built with its back to urban rivers where illegal construction and solid waste pollution run rampant.

To overcome this, the proposal is built in three core phases that articulate the legal reality:

Phase I: Creates segments in public lands such as parks, publicly owned lands such as easements, and other institutional uses.

Phase II: Adds segments in commercial properties that despite having a private legal nature, have a public purpose and award an incentive for flow of people.

Phase III: Completes segments in residential properties that are both private in legal nature and use.

**Outcomes and Impacts**

Environmental degradation in urban areas of Costa Rica have been disastrous to other parts of the country. The Grande de Tárcoles River basin is fed by rivers and creeks in the capital region of San Jose and is the most polluted in the country with over 46 tons of solid waste per year. The two main rivers in the capital city of San Jose, Torres and Maria Aguilar, register close to 484,000 and 512,000 fecal coliforms (over 17 million fecal coliforms were found in 2km alone of the former). This intervention will achieve help to solve this. The project was constructed with over 100 volunteers from civil society and received a +25K petition to government for it to be declared of national interest. The project aims to connect communities with one another that are divided by the river, allowing for some of the most impoverished families to save about a month’s worth income in public transportation costs. It connects parks in communities rich and poor. The design process is participatory and allows for the general public to vote and comment on design competitions for kms 2-4. Km 1 is being designed inhouse and will be subject to an open house for people to comment and improve. A core component of the proposal of the regeneration process is selecting the right flora. A team of volunteer biologists and forestry engineers selected species considering four key criteria: Native Pioneer species that will create the habitat for endangered species in the future; Species that are safe for human habitation; Resilient to 2C climate change. In a city region that has 0 forest coverage, there will be significant impacts on landscape design and improve both the environmental and aesthetic value of the city, as well as providing rain water, drought and land slide resiliency.

**Gender and Social Inclusivity**
We have three deliberate key knowledge-transfer activities that have taken place:

1) Citizens: working openly and with transparency about our process, elements of our comprehensive proposal so they can see how a participatory urban planning project should be done. In part, so they can expect better and more important projects from their governments as well as recognize the complexities that city-building entails. Most of the process is done through social media, our web page and online videos.

2) Government: working with them in a partnership that bridges the importance of participation, exchange and collaboration among local municipalities, orders of government and autonomous institutions. Through this experience we hope to reinforce the importance and value of transparency, participation and community initiatives to achieve their goals. Most of these have occurred in official events, meetings and project updates with elected officials.

3) Communities: Our upcoming Community Empowerment Program transfers knowledge on Rutas Naturbanas proposal, harnesses new ideas and perspectives, transfers knowledge on environmental remediation, tree planting, river cleaning, among others through volunteer-led workshops which are led by partnering organizations: Río Urbano, Amigos del Río Torres, Árboles Mágicos, Programa Bandera Azul Ecológica.

Innovative Initiative

1) Inspire: Have a clear communication strategy that fuels the hearts and souls of people, of citizens that is coherent with local values (in Costa Rica’s case: nature) while addressing a pain point (in Costa Rica’s case: urban mobility) and reconcile them with a powerful simple message that ripples through all you do.

2) Understanding local legal frameworks: Be aware of legislation, constraints and build your strategy around working within those boundaries. Changing legislation requires a long time, seek what you can do within know constraints.

3) Power of social media and community input: Build an audience of supporters who won’t only rally around the initiative but who will hold you accountable. Your best allies are those who will question and make you better.

4) Don’t be perfect, be possible: Don’t wait to execute until you have everything figured out: move forward and let pieces fall into place. Understand known unknowns, think about alternatives but don’t marry yourself with one (as is the case of building capital, operational and maintenance dollars). With legal agreements, we have learned to be flexible, understanding that property owners are taking a gamble. We’ve been lenient in ensuring they feel safe and committed.

Conclusion

Rutas Naturbanas has been declared of National Interest by the Government of Costa Rica. A recent Executive Decree on Biological Corridors considers for the first time Urban Biological Corridors and extends its definition to urban rivers and streets. Additionally, the initiative is helping build the required National Biological Corridor Strategy of which it will be a part of once it is completed and approved. Our Board of Directors is working with presidential candidates to ensure Rutas Naturbanas is part of the National Development Plan with the change in government forthcoming in 2018. Agreements between local governments and ministries are drafted and soon to be signed.