

Dow Sustainability Fellowship

“Building the Foundations for the Palmichal Community Park”

Final Report 2021

Team Members

Javi Piñeiro (Ford/Law)
María Isabel Dabrowski (SEAS)
Peter Siciliano (SEAS/SOE)
Shannon Nelson (MPH/Law)
Simona Martin (U-M Medical School)

Team Advisor

Dr. Jose Alfaro (School for Environment and Sustainability)

Project Site

Nacientes Palmichal (San José, Costa Rica)

Executive Summary

I. Background

Nacientes Palmichal is an ecotourism site located in the mountains of Costa Rica, approximately an hour outside of San José. It is home to a lodge, forest preserve, and stream and hosts both local and international visitors. Nacientes Palmichal is home to birding, hiking, and cultural events and they host educational programming about sustainability and preservation. Nacientes Palmichal has played a large role in protecting the environment of their community through sustainability advocacy and has a large presence in their rural community. The organization identified a need for a sustainable business model with which to fund their pursuits, particularly with the COVID-19 pandemic having created additional economic challenges. The ultimate vision of Nacientes Palmichal is to have a functioning hotel, coffee house, education center, green space, and marked hiking trails through the mountainous land upon which the property is situated. With their tourism, advocacy and educational roles in their community, it is critical that they are able to overcome the financial setbacks from the COVID-19 pandemic. The Dow Fellows team was sought out to help with the creation of a sustainable funding model to aid the ecotourism and sustainability goals of Nacientes Palmichal.

II. Methods

Early stages of the project were largely concerned with compiling necessary information and data. This process was hindered by the global pandemic and University travel restrictions that prevented the team's Site Visit before departure. As a result, the team transitioned to virtual work and repositioned the project's scope accordingly.

In place of a Site Visit, the team identified Rebeca Morales and Mauro Ramírez as community liaisons to organize local business leaders and serve as the team's "boots-on-the-ground" for community engagement. With the help of our community liaisons, we facilitated a stakeholder meeting with business leaders in the community. Over twenty-five community members from Palmichal de Acosta and the surrounding area attended the meeting. The group represented a broad cross-section of the community, from established business leaders to first-time entrepreneurs. In addition to gathering focus group insights from local community members, the team additionally partnered with Vincent Delgado of Michigan State University (MSU), who has extensive collaboration experience with Nacientes Palmichal regarding their facilities and sustainable energy

efforts. The goal here was to build a cross-university partnership to help push the mission and visioning of Nacientes Palmichal forward, especially in a time of extreme economic uncertainty given the sharp decline in community rural tourism as a result of the COVID-19 pandemic.

After gathering these data, the team moved towards drafting the following three items:

1. A sustainable business plan (with associated models)
2. A “fishbone” diagram (detailing the conceptual outline of organizational resources)
3. Program brochures (for dissemination by the organization)

III. Results and Recommendations

The team identified a primary need for a forward-facing, sustainable funding model to help restart the ecotourism mission of Nacientes Palmichal. Where many similar sites in the country have failed due to lack of funding and unsustainable tourism models, we set out to create a holistic plan to help the organization adapt to a post-pandemic world. Beyond the preservation of stream water, Nacientes Palmichal has a vested interest in engaging the community of Palmichal de Acosta with the local wildlife, including birds and plants endemic to the area.

The community expressed a desire to partner with Nacientes Palmichal, and offered ways their businesses could contribute to tourism experiences or bolster the infrastructure of Nacientes. They also expressed interest in developing a “Palmichal brand” (“Hecho en Palmichal”) and stressed that “we should collaborate to market ourselves together as one”. From that community forum and ongoing conversations with the client, we drafted a community offering map and “fishbone diagram,” which provide the conceptual outline for our comprehensive business plan. We also partnered with Vincent Delgado at Michigan State University (MSU). Mr. Delgado directs MSU’s Residential College in the Arts and Humanities’ Program on Sustainability in Costa Rica, and his team has done ongoing work at Palmichal. We met with Mr. Delgado regularly and paved the way for future collaborations between his team and future Dow teams. Specifically, we discussed Mr. Delgado’s team’s focus on things like signage on the established trails, while the Dow team works on “big picture” offerings, such as a business model. Continued communication between the Dow team and Mr. Delgado’s team is critical to successful and nonredundant work being done at Palmichal.

We created a step by step business model for Nacientes Palmichal, as well as an integration plan for them and the community business leaders with whom we met. We provided them with brochures they could provide tourists visiting the area, with various agendas grouped by theme, like cultural tourism, food and nature and hiking. These brochures will serve to strengthen the “Hecho en Palmichal” brand that was produced during the community liaison meeting. Ultimately, this

project's final deliverables were facilitating a community entrepreneur meeting, providing the organization with a business plan and brochures, and building a relationship between Vincent Delgado's team at MSU and the Dow Fellowship. These deliverables will serve as a foundation for future work with Nacientes Palmichal as an important organization doing education and advocacy work in their community.

Introduction & Background

Between 2007 and 2011, the United Nations Development Programme (UNDP) initiated a program that allocated funds to establish ecotourism sites across Costa Rica. Titled the Asociación Comunitaria Conservacionista de Turismo Alternativo Rural (ACTUAR) at the national level, the goal of the grant was to stimulate sustainable development and tourism opportunities in rural communities, with the larger goal of adding a new dimension to traditional tourism models (UNDP, 2012). While ambitious and initially successful, the program largely failed, as many sites did not manage to achieve financial stability. Nacientes Palmichal is a site in the mountains south of the capital, San José, that did manage to overcome the financial obstacles that shut down other ecotourism initiatives. However, the COVID-19 pandemic has created a new set of economic challenges. The vision of Nacientes Palmichal is to have a functioning hotel, coffee house, education center, green space in which community members and visitors can relax, and marked hiking trails through the beautiful mountainous land upon which the property is situated.

Nacientes Palmichal is currently owned and run by Don Hernán Ramírez Alfaro and the Asociación para el Desarrollo Sostenible de San José Rural ("ADESSARU"). The land upon which Nacientes Palmichal is situated has a stream passing through it. Prior to the development of Nacientes Palmichal, the stream was heavily polluted by a coffee plant. Nacientes Palmichal and Don Hernán advocated for cleaning up the stream, and after the owners of the coffee plant changed they stopped polluting the stream. There has been a big push from the community for the continued protection not only of the stream, but also of the surrounding area. As Nacientes Palmichal has played a large role in protecting the local environment, it is critical that they are able to overcome the financial setbacks from the COVID-19 pandemic. Their sustainability challenge is therefore both a fiscal one as well as an environmental one.

Methods

Primarily, this project's data were qualitative in nature, sourced and compiled through the following channels:

1. Business model research/drafting
2. Informational interviews/forum with client, community members, and business leaders
3. UN sustainable development efforts in Costa Rica
4. Collaboration with organizational partners

After compiling early data on previous UN sustainable development involvement, organizational structuring (specifically ADESSARU's previous efforts in the region), the fellowship team explored the possibility of conducting a site visit to meet with Nacientes Palmichal staff, tour the facilities and property, and begin networking with the local community. Unfortunately, due to complications related to the COVID-19 pandemic, the team was unable to secure approval for travel, and thus transitioned the project's scope to a summer phase of work conducted virtually between team members, client personnel, advisors and fellowship staff members.

After transitioning to virtual work, Rebeca Morales and Mauro Ramirez were recommended by organizational partners as beneficial community liaisons to organize local business leaders and assist with community engagement. Through the work of our community liaisons, the study team conducted a preliminary stakeholder meeting with entrepreneurs, business leaders, and community representatives, in addition to Nacientes Palmichal staff and our project advisor Jose Alfaro (who attended locally in Costa Rica at the time). In total, more than twenty-five community members from Palmichal de Acosta and the surrounding region attended the meeting. Taken broadly, the focus group gathered together both established business leaders and first-time entrepreneurs; as such, the study team felt confident that those in attendance represented a comprehensive cross-section of the community.

From that initial community forum and ongoing conversations with the client, the fellowship team then drafted a community offering map and "fishbone diagram," which provide the conceptual outline for our comprehensive business plan. The offering map describes key resources that are necessary for the project's success which the community already possesses or has access to. The "fishbone diagram" details three potential avenues to achieve sustained income for the reserve.

Finally, drawing on these conceptual diagrams, the fellowship team drafted a formal Business Case, including a market analysis, an internal analysis of strengths, weaknesses, and opportunities, a summary overview of the visitor economy and suggested profiles/itineraries, and a description of funding needs and recommendations.

Results & Recommendations

The fellowship team's primary recommendation is the adoption of a sustainable business model for Nacientes Palmichal. These models can take many different forms to best suit client needs, and can

additionally be adapted as needed due to contextual factors such as location, targeted patrons, goals/impacts, and so on. In doing so, the team's hope was to create a foundation for both the organization and future fellowship teams to best access streams of sustainable income for the organization in the wake of the COVID-19 pandemic. The eventual goal herein is to establish Nacientes Palmichal as a replicable example of community-centric ecotourism in Central and South America. Once the organization is able to support itself, its resources, staff, and business plan can serve as a broader model of this brand of rural tourism.

Sustainable Business Model

Based on our assessment of the community, we found that our partner organization has access to key resources that are necessary for the project's success. The offering map (see Fig. 1) illustrates a recommendation on how to best organize available resources around the priority areas of the project. During the community forum, the Palmichal de Acosta community expressed several key desires and goals, the most prominent of which was to partner with Nacientes Palmichal. Community representatives offered ways their businesses could contribute to tourism experiences or bolstering the infrastructure of Nacientes, expressing a key interest in developing a "Palmichal brand" ("Hecho en Palmichal"). In these efforts, they stressed that community members, *"...should collaborate to market ourselves together as one"* (Community Forum, Summer 2021). Efforts to work collaboratively across local entrepreneurship and the Nacientes Palmichal organization will help bolster efforts for local sustainable development, in addition to ensuring future sustainable income for the community at large.



Fig. 1 - Community offering map for Nacientes Palmichal.

Fishbone Diagram

Our needs assessment allowed us to identify that there is a pressing need for sustained income to ensure the continuation of operations for both the bioreserve and its partner organization. The fellowship team's Fishbone Diagram illustrates three key areas (funding, marketing, and community) that can contribute to the project's sustained income, and further segments them into related recommendations that are included in our business plan. Through targeting these areas of Palmichal's business structure, the organization can begin building traction for targeting new clients, partners, and patrons.

Beyond macro-level project impacts, the team plans to provide the client with several tangible deliverables in the form of community integration efforts, such as the aforementioned brochures (see Appendix). Doing so will help facilitate financial support via tourism for both Nacientes Palmichal and business leaders from the surrounding community. In addition, the organization will need to garner national and international interest to draw visitors to the community. Thus, this approach to community marketing will need to be twofold: 1) tapping into existing national tourism networks, and 2) using marketing resources to target clientele internationally.

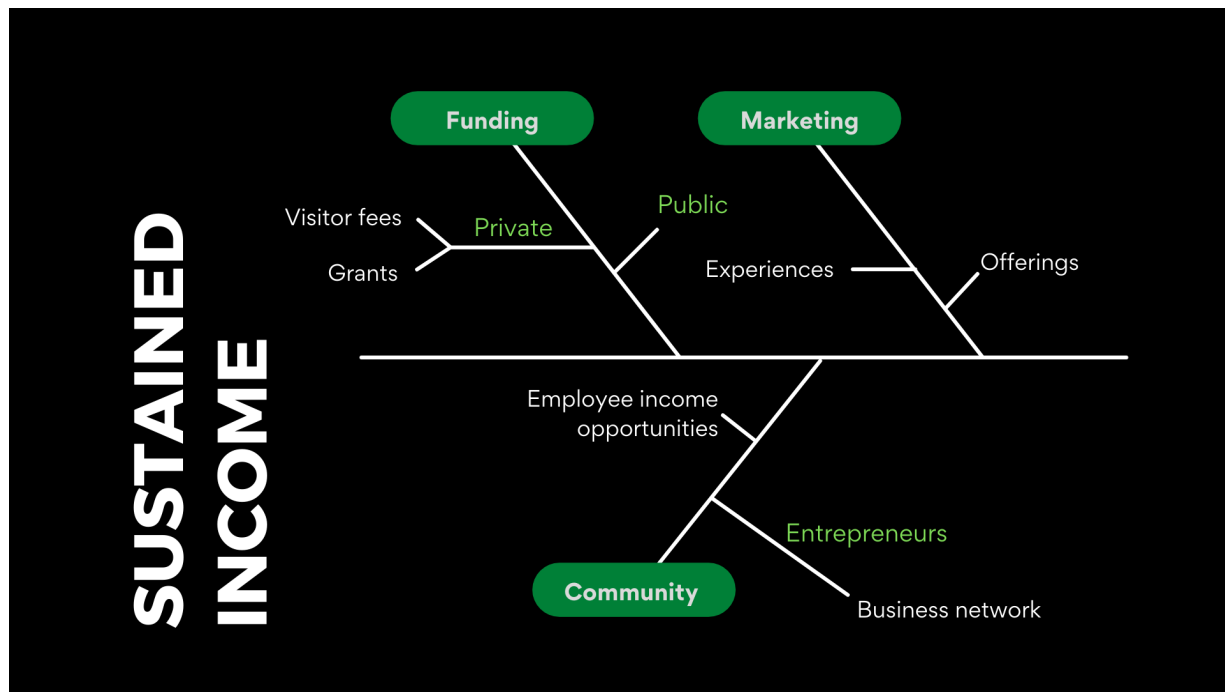


Fig. 2 - Nacientes Palmichal fishbone diagram.

Anticipated Project Impact

I. Continued Bioreserve Preservation

Costa Rica maintains a broad system of federally-protected lands and forests. Primarily preservationist in nature, these lands are vital safe havens for regional biodiversity, flora, fauna, and habitat. However, public land recreation and tourism remain vital to the country, especially reserves of land that are adjacent to local communities. There is also a sense of local pride in the preservation of the country's natural resources; a robust plan for supporting Nacientes Palmichal means that the staff of Nacientes Palmichal can spend more energy focusing on community engagement and less energy worrying about planning fiscal aspects of the lodge.

II. Community Impacted by Project

A key anticipated impact of this project is the economic revitalization of not only Nacientes Palmichal, but also the surrounding community. By positioning both entities to focus on increasing local, national, and international interest through the use of a sustainable business plan, the community can greatly reduce the economic impacts of COVID-19 pandemic. With the added element of integration with other community businesses and offerings, the study team has collaborated with entrepreneurs and local community business owners to achieve their goal of a

Palmichal brand (“Hecho en Palmichal”). These efforts to create sustainable and ongoing enrichment of the community - are perhaps the most important anticipated impacts of this fellowship project: the revitalization of local social capital connected to Nacientes Palmichal itself.

Future Goals and Directions

Given past UN sustainable development efforts and current funding entities, future project teams should look to secure future funding and support through the use of final project deliverables. Within the context of sustainable development in Costa Rica, Nacientes Palmichal holds a unique position as an ecotourism site that was able to adapt to function as a retreat center before being essentially shut down due to the Covid-19 pandemic. Herein, future project work should look to reframe the organization within the broader umbrella of sustainable development work within the country. To these ends, the following organizations should be considered as potential sources of sustainable development funding.

- UN Biofin (<https://www.biodiversityfinance.net/>)
- Crusa (<https://crusa.cr/>)
- Costa Rica Por Siempre (<https://costaricaporsiempre.org/en/>)

Additionally, the project team has submitted a proposal to the Dow Fellowship Managers to integrate our work into the coming Dow Fellowship Project cycle, where the next phase of work can be easily inherited by future project teams. In doing so, the organization will retain sufficient support both from outside sustainability organizations as well as the Graham Sustainability Institute, in addition to future collaborations with the MSU engineering department (connected through Vincent Delgado).

Throughout the duration of the project, reported data, figures, and goals have been chiefly concerned with arriving at appropriate business models for use with our project. In doing so, the fellowship team prioritized contextual information related to Nacientes Palmichal, the surrounding community, and the state of rural ecotourism in Costa Rica more broadly. While sourcing our background information, team members maintained an awareness of the project’s positioning as a community-adjacent entity; in other words, ensuring that our perspectives and positioning as Western students in higher education did not impact important cultural and community constructs. Furthermore, we intend our business model to remain a “living document” that can adapt and change as both Nacientes Palmichal and the community at large emerge from the COVID-19 pandemic.

APPENDICES

Client Contact Information:

Hernan Ramírez Alfaro
+(506) 8353-4055
hernan.ramirez.alfaro@gmail.com

Project Site Information:

ADESSARU/Nacientes Palmichal
San José Province
San Pablo, Costa Rica
+(506) 2418-4328
<http://www.nacientespalmichal.com/en/>

List of business leaders from community forum (Summer, 2021):

Name of Business Leader	Type of Business/Additional Business Ideas and Goals
Hernán Jiménez	Coffee plantation, citrus, aloe vera. He makes soaps and other artisanal products
Alexander	Business leader interested in more administrative aspects of bringing tourism to Palmichal, owns a sugarcane processing trapiche
Dixon	Greenhouse, needs financing, wants to increase organic farming and environmental practices + women empowerment
Yamileth Porras	Typical Costa Rican tamales (her main business is during Christmas), she also sells flowers and other types of food
Román Jiménez	Farmer of citrus fruits and coffee, makes dulce de caña, identifies these as opportunities for business and tourism but doesn't run it as a business yet
Yessenia	Owens a pet fish store, her business makes shipping and attends farmer markets, makes fish tanks and aquariums as well, her business is trying to adapt and innovate because the pandemic has hit their sales. She's learning about social media marketing and online business
Rocío Fuentes and her husband	Coffee farmers and process coffee for sales, they pack it and sell it
Lidia Guzman	Textile business, production of garments and other handmade products
Jorge	Member of the development association for the region
Laura Lang	Foundation for reforestation in the ecological corridor, supporter of the project

Brochure examples:

1. Food & Agriculture Profile



2. Cultural Experiences Profile



3. Nature & Adventure Profile



REFERENCES

United Nations Development Programme. (2012). *COS/07/41-ACTUAR-Consolidating the Community-Based Tourism Sector in Costa Rica*. Retrieved from <https://sgp.undp.org/spacial-itemid-projects-landing-page/spacial-itemid-project-search-results/spacial-itemid-project-detailpage.html?view=projectdetail&id=11237>.