

THE IMPACTS OF ECOTOURISM ON ENVIRONMENTAL CONSERVATION AND RURAL DEVELOPMENT: A STUDY OF *“EL CAMINO DE COSTA RICA”*

Master Thesis in Global Markets, Local Creativities (GLOCAL)

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION TO THE TOPIC

In countries possessing abundant natural ecosystems and wildlife, tourism has been regarded as an alternative to exploitative industries in leveraging economic growth and bringing jobs to local communities, especially those living in poor rural areas.¹ Numerous researches also claim that long-term economic revenues from tourism are strong incentives for habitat and wildlife protection.² Costa Rica has become a pioneer in promoting a sustainable form of nature-based tourism, called ecotourism, as a national strategy for economic development and rainforest conservation. According to a study made by OECD, this approach has brought promising effects – the country managed to reverse deforestation and the tourism industry has grown into the largest export sector, providing direct and indirect employment for over one fifth of the total population and offering on average 2-3 times higher salaries than traditional agriculture.³ However, in the academic field there are constant debates about the impacts of ecotourism on local environments and livelihoods. Some studies observed that in the long-term ecotourism often leads to uncontrolled massive tourism, contradicting its conservation principles.⁴ In Costa Rica, several natural areas that initially were promoted as ecotourism destinations, have become mass tourism places characterized by all-inclusive resorts and uncontrolled urban development.⁵ Other researchers questioned also the effectiveness of ecotourism, arguing that it is based on neoliberal principles which often neglect local poor communities.⁶ The existing literature on ecotourism in Costa Rica is

¹ "Creative Economy Report: Widening Local Development Pathways", UNESCO, Accessed 10.12.2020, <https://en.unesco.org/creativity/publication/creative-economy-report-2013>

² Sven Wunder, "Ecotourism and Economic Incentives — an Empirical Approach," *Ecological Economics* 32, no. 3 (2000): 465-479.

³ "OECD Tourism Trends and Policies 2018. Costa Rica", OECD, Accessed 10.12.2020 https://www.oecd-ilibrary.org/urban-rural-and-regional-development/oecd-tourism-trends-and-policies-2018/costa-rica_tour-2018-46-en;jsessionid=B_80L4MY4_Tmd-9O0zAeyWib.ip-10-240-5-18

⁴ Martha Honey, "Treading lightly? 'Ecotourism's impact on the environment," *Environment*, 41(5) (1999)16.

⁵ Lara Moragrega Martín, "Tourist Expansion and Development of Rural Communities: The Case of Monteverde, Costa Rica," *Mountain Research and Development* 24, no. 3 (2004): 202-205; Eben N. Broadbent, *et al.*, "The Effect of Land use Change and Ecotourism on Biodiversity: A Case Study of Manuel Antonio, Costa Rica, from 1985 to 2008," *Landscape Ecology* 27, no. 5 (2012): 731-744.

⁶ Javier Escalera Reyes, Rafael Cáceres-Feria, Antonio Luis Díaz Aguilar, "Las apariencias engañan". Conservación, sociedad local y relaciones de poder: El caso de Caño Negro (Costa Rica). *Aibr, Revista De Antropología Iberoamericana*, 8(3) (2013), 369-394; David A. Himmelgreen *et al.*, „Tourism, Economic Insecurity, And Nutritional Health In Rural Costa Rica: Using Syndemics Theory To Understand The Impact Of The Globalizing Economy At The Local Level." *Annals of Anthropological Practice*, 36(2) (2012), 346-364.

broad and addresses many of those debates, however in vast majority it is limited to the assessment of the most famous protected zones.⁷ With over 3 million annual foreign visitors in this small Centro American country, many of those popular natural areas are already experiencing a form of “mass ecotourism”.⁸ In contrast to that, some small-scale ecotourism projects have appeared also, particularly in more remote parts of the country. This thesis will study the economic, social and environmental effects of ecotourism activities of one of these projects, located in areas misrepresented in the academic literature – *El Camino de Costa Rica* (further called *El Camino* or “the project”) - with the purpose to fill the geographical gap in research on ecotourism in Costa Rica and address several academic debates mentioned further. *El Camino* is a young initiative consisting of a hiking trail that crosses Costa Rica from the Caribbean to the Pacific coast through mostly underdeveloped regions that have been excluded from the country’s tourism growth. It has been developed since 2018 by a local non-profit organization called *Mar a Mar*, whose main goal is to bring rural development to the communities that are located along the route, following sustainable principles that will contribute to the preservation of local ecosystems.⁹ This study area was chosen as it offers good context to study ecotourism at its early stage, and assess its effectiveness in supporting rural development and nature conservation. To explore these issues, the author conducted in February 2021 a 3-week field study in Costa Rica, gathering data through over 40 semi-structured interviews with local residents involved in ecotourism activities related to *El Camino* and complementing it with direct observations and written sources. The analysis hopes to generate conclusions that may contribute both to academic debates (which are mentioned in the next section) and to the sustainable development of the project in the future.

⁷ A literature review of existing research on ecotourism in Costa Rica is presented in the next chapter.

⁸ „Anuario Estadístico de Turismo 2019”, Instituto Costarricense de Turismo, Accessed 15.01.2021.
<https://www.ict.go.cr/en/documents/estadisticas/informes-estadisticos/anuarios/2005-2015/1583-2019-1/file.html>

⁹ “Plan de Negocios Proyecto de Desarrollo Rural *El Camino de Costa Rica*”, Asociación *Mar a Mar*, business plan, Costa Rica, (2020).

1.2 RESEARCH QUESTION

As mentioned in the introduction, there is not a consensus among scholars regarding the effectiveness of ecotourism. While some claim that it brings both economic benefits and conservation incentives, others argue that ecotourism often neglects the local communities and in the long term becomes massive ecotourism, losing its principles of environmental protection.¹⁰ In addition, in the case of Costa Rica, the vast majority of studies were limited to the most famous protected areas attracting large ecotourism.¹¹ Taking inspiration from that, this study aims to contribute to these academic debates and fill the research gap in the literature by researching a small-scale ecotourism project at its early stage of development – *El Camino de Costa Rica*. More specifically, this thesis aims to add to the debates on (1) whether small-scale ecotourism contributes to rural development by providing better earnings and employment opportunities than traditional local livelihoods (e.g. agriculture) as well as improving access to important resources as education, job training, etc. (2) whether small-scale ecotourism is more effective at supporting environmental conservation than existing alternative livelihoods. Accordingly, the main research question is:

What have been the impacts of ecotourism activities related to the project ‘El Camino de Costa Rica’ established in 2018, on rural development and ecosystems’ conservation?

In addition, several sub-questions have been formulated to help answer to the main research question. The first two sub-questions are expected to help in understanding the concept of ecotourism, its origins and principles, as well as the main debates about ecotourism in the academic literature.

1. *What are the origins and main principles of ecotourism? What other similar terms have been used in the debates on alternatives to mass tourism?*

¹⁰ Details can be found in the literature review presented in the next chapter.

¹¹ Details can be found in the literature review presented in the next chapter.

2. *How have previous researchers evaluated the potential of ecotourism in protecting the environment and providing development to rural communities? What are the main academic debates in regard to this?*

In continuation, sub-question 3 refer to the existing literature about ecotourism in Costa Rica, focusing on which geographical areas have been mostly studied and what main academic debates were addressed. This will help to illustrate the current research progress in this field and identify the main gaps. Sub-question 4 addresses the historical evolution of ecotourism in Costa Rica and its outcomes, with the aim to lay the foundations for the research of *El Camino* by creating the context in which this project has been developed.

3. *What are the main geographical areas of ecotourism studies in Costa Rica and how they changed through the time? What major debates were addressed by previous researchers? What methodologies they used and what were their findings?*
4. *What are the origins and historical developments of ecotourism in Costa Rica? What is ecotourism's contribution to ecosystems conservation and socio-economic development in Costa Rica?*

Finally, the last five sub-questions refer to ecotourism related to the project *El Camino de Costa Rica*, and will be answered through empirical data from the research on this case study. The answers to those sub-questions are expected to generate conclusions that will contribute to the academic debates mentioned at the beginning of this section.

5. *What are the origins of the project 'El Camino de Costa Rica' and how the concept of ecotourism was adopted by its founders?*
6. *What are the basic environmental and socio-economic characteristics of the areas/communities that participate in the project?*
7. *What are the characteristics of ecotourism activities in the rural communities that participate in the project 'El Camino de Costa Rica'? How profitable is employment in ecotourism-related jobs comparing to other occupations available in each community?*
8. *What is the impact of the development of ecotourism in the context of 'El Camino de Costa Rica' on people's access to education, job trainings and other basic resources in the rural communities that participate in the project?*

9. *What is the impact of the development of ecotourism related to 'El Camino de Costa Rica' on ecosystems preservation in the natural areas that take part in the project, as well as on conservation practices and attitudes of the members of the participating rural communities? Is it more effective than other existing livelihoods?*

1.3 RELEVANCE OF THE STUDY

First, this thesis adds to the academic debates about the effectiveness of ecotourism in supporting ecosystems conservation and rural development. Although there is a large number of studies on ecotourism in Costa Rica, the vast majority of them are dedicated to the most famous natural areas that are already experiencing massive ecotourism. A few scholars analyzed also different cases, related to small-scale ecotourism in more remote areas of the country, however, no research about the impacts of ecotourism connected to the project *El Camino de Costa Rica* has been made yet.¹² Thus, the analysis of a case that was not studied before brings the innovative aspect to this research. In addition, *El Camino* is characterized by a large geographical area and high diversity – the 20 communities located along a 280km hiking trail differ from each other in terms of socio-economic aspects and the types of natural ecosystems that exist in their locality. In effect, this creates unique conditions to assess ecotourism activities in diverse communities and areas and compare the obtained results. Finally, this study is expected to bring relevant conclusions and recommendations to the stakeholders of *El Camino* – rural people that participate in the project, guides, tour operators and representatives from the association *Mar a Mar*.

1.4 STRUCTURE OF THE WORK

This thesis is divided into five chapters. Chapter 1 introduced the topic of this work, the research questions and the relevance of the study. Chapter 2 will approach sub-questions 1-4 by presenting the historical developments of ecotourism, both as a concept studied by scholars and development strategy applied by policymakers, in particular in Costa Rica. The discussion in this chapter begins with the genesis of the concept of ecotourism and is followed

¹² Details can be found in the literature review presented in the next chapter.

by a literature review, with a separate section dedicated to the past studies about ecotourism in Costa Rica. It ends by providing an overview of historical developments of ecotourism as a development and conservation strategy in Costa Rica. The remaining three chapters are dedicated to the case study. Chapter 3 presents the methodology of this research. Chapter 4 is dedicated to answer sub-questions 5-9, that are related to the case study. It is divided into three sections, each presenting the collected information about the communities and an analysis of obtained data. Chapter 5 concludes this study by answering the research question and giving recommendations to both academia and stakeholders of the project *El Camino*.

CHAPTER 2: HISTORICAL DEVELOPMENTS OF ECOTOURISM

2.1 GENESIS OF THE CONCEPT OF ECOTOURISM

The research on ecotourism has its origins in the debates on alternatives to “mainstream” tourism and can be traced back to the late twentieth century. Two factors were critical for the scholars’ growth of interest in this topic. First, the criticism of conventional tourism, that did not bring expected development to poor societies.¹³ Second, the idea of conservation, which arose around sustainable development strategies that identified the natural environment as a crucial element of human wellbeing and asked for its protection while simultaneously improving economic welfare.¹⁴ In 1976 IUCN Director General, Gerardo Budowski, as one of the first suggested that tourism and conservation can coexist in a symbiotic relationship.¹⁵ In 1983, Hector Ceballos-Lascurain – Director General of the Mexican Ministry of Urban Development and Ecology, first used the term ecotourism when proposing ecological tourism as a conservation strategy for rainforests in the state of Chiapas.¹⁶ In the following years, governments of many states became more interested in ecotourism, regarding it as a valuable source of revenue and an alternative to exploitive land use. This led to the development of various National Development Plans which recognized that the tourism industry can be managed in a way that it brings economic gains and simultaneously conserves the environment. Some first legislations of this kind were approved by nations in the Asia-Pacific region - the Solomon Islands (in 1990), Papua New Guinea (in 1993) and Tonga (in 1997).¹⁷ Other countries that implemented similar acts were Australia (in 1994) and Botswana (in 2002).¹⁸ Simultaneously, from the decade of the 1990s, several international organizations have formulated the official definitions of ecotourism. First, the International Ecotourism Society, founded in 1990, regarded ecotourism as “responsible travel to natural areas that

¹³ Emanuel de Kadt, “Tourism: Passport to Development?” *The Economic Journal*, Volume 90, Issue 360, 1 (December 1980): 947–948.

¹⁴ Valene L. Smith and William R. Eadington, *Tourism Alternatives: Potentials and Problems in the Development of Tourism*. (Philadelphia: University of Pennsylvania Press, 1992).

¹⁵ Gerardo Budowski, “Tourism and environmental conservation: Conflict, coexistence, or symbiosis?”, *Environmental Conservation*, 3(1), (1976): 27-31.

¹⁶ Stephen Wearing and John Nail, *Ecotourism: Impacts, Potentials and Possibilities?* (London, Amsterdam, Boston: Butterworth-Heinemann, 2009).

¹⁷ Idem.

¹⁸ Idem.

conserves the environment and improves the welfare of local people”.¹⁹ The latter definitions adopted by the International Union for the Conservation of Nature (IUCN) in 1996 and by the UN World Travel Organization in 2002 where more extended and suggested that ecotourism should meet the following principles - (1) be a nature-based form of tourism in relatively undisturbed areas with the objective to study and appreciate nature and traditional cultures prevailing there, (2) have low visitor impacts upon the environment, (3) promote conservation through both education and direct financial benefits and (4) provide direct involvement of local communities that sustains their socio-economic development.²⁰ In regard to the negative environmental effects of mass tourism, many other, similar terms have also appeared, for example, “responsible tourism” which focuses on “maximizing the benefits of local communities, minimizing negative social or environmental impacts, and helping local people conserve fragile cultures and habitats or species” (this term was formulated during the Cape Town Conference Declaration - a side event preceding the 2002 Johannesburg World Summit on Sustainable Development).²¹ Another similar and frequently used term is “sustainable tourism” defined in 2004 by the UN World Tourism Organization as tourism “that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities”.²² Although these terms are slightly different, they all refer to the core proposition that these kinds of tourism, are expected to bring positive benefits to both host communities and the natural environment. There is also a term called nature-based tourism, which originated at the end of the 20th century, and similarly to ecotourism, it has been often used by scholars studying tourism impacts on the environment.²³ While some researchers consider nature-

¹⁹ “What is Ecotourism?”, The International Ecotourism Society, Accessed 10.12.2020

<https://ecotourism.org/what-is-ecotourism/>;

²⁰ “Ecotourism and Protected Areas”, UNWTO, Accessed 10.12.2020 <https://www.unwto.org/sustainable-development/ecotourism-and-protected-areas/>; “Wildlife Development Plan 1998-2003, Volume 5, Ecotourism”, IUCN, Wildlife Department (1997), Accessed 10.12.2020, <https://portals.iucn.org/library/node/7416/>

²¹ “The Cape Town Declaration, Cape Town” International Conference on Responsible Tourism in Destinations, (2002), Accessed 10.12.2020, <https://responsibletourismpartnership.org/cape-town-declaration-on-responsible-tourism/>

²² “Sustainable Development”, UNWTO, Accessed 10.12.2020, <https://www.unwto.org/sustainable-development>

²³ Hubert Job and Ferdinand Paesler, "Links between Nature-Based Tourism, Protected Areas, Poverty Alleviation and crises—The Example of Wasini Island (Kenya)," *Journal of Outdoor Recreation and Tourism* 1-2, (2013): 18-28; Sumudu Marasinghe, Priyan Perera, Greg D. Simpson, and David Newsome, "Nature-Based Tourism Development in Coastal Wetlands of Sri Lanka: An Importance–Performance Analysis at Maduganga Mangrove Estuary," *Journal of Outdoor Recreation and Tourism* 33, (2021): 100345.

based tourism as an important component of sustainable development and conservation strategies, others argue that this term does not necessarily include contribution to nature conservation.²⁴

2.2 THE EVOLUTION OF ACADEMIC DEBATES ON ECOTOURISM

The first studies on ecotourism were mainly focused on defining this concept and highlight the “win-win” opportunities that it can bring to both communities and the environment. In the 1990s, most scholars interested in this field were specialized in multiple backgrounds, usually combining economics with tourism or environmental disciplines. Pamela Wight, who studied the intersection of tourism and conservation, regarded ecotourism as a sustainable form of visitor demand and product supply that has the components of adventure, nature-based and cultural tourism based on ethical principles.²⁵ Another pioneer researcher, Kreg Lindberg (with a background in forest resources and economics), used initially in his publications the words “nature tourism” as a synonym of ecotourism, focusing on its contribution to ecosystems conservation through direct financial tools (concessions, royalties, entrance fees) and economic benefits that reduce the pressure of natural areas’ exploitation for resources.²⁶ Similarly to Lindberg, Jan Laarman and Patrick Durst, another scholars from the field of forestry, used in 1987 the term “nature travel” when arguing about tourism’s potential to provide economic incentives for the protection of natural ecosystems, especially in developing countries.²⁷ The increase of literature on ecotourism led to the intensification of many academic discussions on its effectiveness. One of these debates was - whether ecotourism really supports the local economies of host communities. Some researchers claimed that ecotourism have positive impact on communities in developing countries, bringing employment and income opportunities from accommodation and food services,

²⁴ Julius Arnegger, Manuel Woltering, and Hubert Job, "Toward a Product-Based Typology for Nature-Based Tourism: A Conceptual Framework," *Journal of Sustainable Tourism* 18, no. 7 (2010): 915-928; Harold Goodwin, "In Pursuit of Ecotourism" *Biodiversity and Conservation* 5, no. 3 (1996): 277-291.

²⁵ Pamela Wight, "Sustainable ecotourism: balancing economic, environmental and social goals within an ethical framework." *J. Tour. Stud.* 4(2) (1993):54–66.

²⁶ Kreg Lindberg, *Policies for Maximizing Nature Tourism’s Ecological and Economic Benefits*, (Washington, DC: World Resources Institute, 1991).

²⁷ Jan Laarman and Patrick Durst, "Nature travel in the tropics: is this growing enterprise a trend in wildlands management?" *Journal of Forestry* 85 (1987): 43-46.

handicrafts and other activities.²⁸ Plummer and Fennell for example presented the case of fishermen from developing countries who could increase their earnings by exploring complementary occupations as seafood restaurant owners, scuba divers or boatmen.²⁹ Jeff Langholz analyzed rural communities in the Guatemalan Maya Biosphere Reserve, concluding that the use of rainforest for ecotourism activities resulted both in an additional income for the local community and in better ecosystem protection.³⁰ Amanda Stronza and Javier Gordillo came to similar conclusions when studying the effects of ecotourism on indigenous communities of the Amazon. They found that local people perceived ecotourism as positive, in general, for their communities and as a motivating factor for nature conservation.³¹ Other researchers, in order to contribute to the mentioned debate, focused on identifying the key factors that determine the positive impacts of ecotourism on local communities. Regina Scheyvens for instance, whose research mostly focused on the relationship between tourism, sustainable development and poverty reduction, studied the potential of ecotourism on empowering local communities. She concluded that their equitable share in benefits and control over the activities is a fundamental condition to regard ecotourism as successful.³² In 2007, a pair of tourism researchers, Richard Butler and Tom Hinch, published a book that examined a large number of case studies from all the continents regarding indigenous people's role in the ecotourism industry. They concluded illustrating the most successful practices which included the active participation of indigenous people in ecotourism management.³³ Similarly, Robin Nunkoo (whose research combines the fields of political economy and tourism) and Dogan Gursoy (whose publications focus on hospitality and tourism management) argued that participation and support from the local communities are crucial

²⁸ Kreg Lindberg and Jeremy Enriquez, *An analysis of ecotourism's economic contribution to conservation in Belize, vol. 2: Comprehensive report*, (World Wildlife Fund and Ministry of Tourism and the Environment of Belize: Washington DC, 1994).

²⁹ Ryan Plummer and David Fennell are scholars studying the fields of tourism and environmental protection. Ryan Plummer and David Fennell, "Managing protected areas for sustainable tourism: Prospects for adaptive co-management", *Journal of Sustainable Tourism*, 17 (2) (2009), pp. 149-168.

³⁰ Jeff Langholz is a researcher interested in the sustainability of world's natural resources. Jeff Langholz, "Exploring the effects of alternative income opportunities on rainforest use: insights from Guatemala's Maya Biosphere Reserve." *Society & Natural Resources* 12(2), (2019):139-49.

³¹ Amanda Stronza is an environmental anthropologist. Javier Gordillo is a community development coordinator in Peru. Amanda Stronza and Javier Gordillo, "Community views of ecotourism", *Annals of Tourism Research* 35, (2008): 448-468.

³² Regina Scheyvens, "Ecotourism and the empowerment of local communities". *Tourism Management* 20(2) (1999): 245-49.

³³ Richard Butler and Tom Hinch, *Tourism and Indigenous Peoples: Issues and Implications*, (Oxford: Butterworth Heinemann, 2007).

for balanced ecotourism.³⁴ Another main debate in the academic literature concerns ecotourism's impacts on the conservation of natural ecosystems and their wildlife. Some scholars document positive impacts on the protection of endangered species, demonstrating that ecotourism gives local people conservation incentives to stop hunting and oppose poaching.³⁵ Others have also recognized that ecotourism, by being an alternative to other forms of land-use (e.g. agriculture or extraction of natural resources), has contributed to the preservation of large areas of land.³⁶ Some researchers however, challenged its effectiveness, demonstrating that ecotourism in the long term often leads to mass tourism, losing its ethical principles, threatening the environment and commercializing the authenticity of traditional cultures.³⁷ Others have also described ecotourism as a tool used by Western-oriented international organizations to promote a neoliberalist attitude towards nature, subjecting it to market-based systems of governance (regarding sufficient financial revenues from tourism as a condition for the protection of nature).³⁸ In fact, the idea of "putting a price on nature" has been further developed during the RIO+20 Earth Summit in 2012 which defined the environment as "natural capital" suggesting even its trade on the stock exchange as a conservation solution (which has been strongly opposed by indigenous communities from all over the world). Finally, some scholars have also discussed the negative phenomena of conventional tourism's relabeling into ecotourism (the so called "greenwashing").³⁹ It has frequently happened in the nature-based tourism sector that promotes outdoor recreation,

³⁴ Robin Nunkoo and Dogan Gursoy, "Residents' support for tourism", *Annals of Tourism Research*, 39 (1) (2012), pp. 243-268.

³⁵ Ralf C. Buckley, Clare Morrison and J. Gay Castley, "Net effects of ecotourism on threatened species survival". *PLOS ONE* 11(2):e0147988 (2016); Ralf Buckley, "Endangered animals caught in the tourist trap" *New Science*, (October 2012):28-29.

³⁶ Christopher A. Kirkby, *et al.*, "The market triumph of ecotourism: an economic investigation of the private and social benefits of competing land uses in the Peruvian Amazon", *PLOS ONE* 5(9):e13015 (2010).

³⁷ Paige West and James G. Carrier, "Ecotourism and authenticity". *Current Anthropology* 45(4) (2004): 483-98; David Bruce Weaver, "Ecotourism as mass tourism: contradiction or reality?" *Cornell Hospitality Quarterly*, 42(2) (2001): 104-12.

³⁸ Rosaleen Duffy, "Neoliberalising nature: global networks and ecotourism development in Madagascar", *Journal of Sustainable Tourism*, 16(3) (2001): 327-44; Carol S. Kline, Susan L. Slocum, "Neoliberalism in ecotourism? The new development paradigm of multinational projects in Africa", *Journal of Ecotourism* 14, no. 2-3 (2015): 99-112.

³⁹ Martha Honey, *Ecotourism and Sustainable Development: Who Owns Paradise?*, (Washington, DC: Island Press, 2008).

adventure and wildlife tourism as ecotourism, even when it does not have any connection to conservation actions.⁴⁰

2.3 HISTORY OF RESEARCH ON ECOTOURISM IN COSTA RICA

The first studies on ecotourism in Costa Rica appeared in the 1990s and in majority were limited to two areas – Tortuguero National Park and Monte Verde Cloud Forest Reserve. Tortuguero, established in 1975 by Costa Rican government to protect the country's principal area of turtle nestling, began to draw attention of various researchers since the late 1980s when it became one of the most popular places visited by foreign travelers. For example, Susan Place, a geographer with interests in the role of nature tourism in rural development, studied the impact of ecotourism on the economy of Tortuguero's villagers that previously depended on the exploitation of the biological resources now legally protected (lumbering, turtle eggs and meat). She concluded that during the first decade after the establishment of the national park, the economy of the villagers was stagnating, with primarily four families out of twenty-nine benefitting economically, which indicated that preserving large natural areas may not necessarily contribute to rural development.⁴¹ In contrast to that, Jessica Brown while conducting a master thesis research on ecotourism in Tortuguero, found that in 1989 half of the residents benefited from employment in tourism-related occupations.⁴² Susan Jacobson came out with similar conclusions when studying the effects of a tour guide training program in that national park.⁴³ In another research, concerning tourist impacts on nestling turtles in Tortuguero, she concluded that the guide training program has a potential to reduce the disturbance of nestling turtles produced by the presence and behavior of tourists.⁴⁴ Finally, another early researchers on ecotourism in Tortuguero, David Lee and David Snepenger from

⁴⁰ James Higham, "Ecotourism: competing and conflicting schools of thought" In *Critical Issues in Ecotourism: Understanding a Complex Phenomenon*, ed. J. Higham, (Oxford: Elsevier, 2007), 1–19.

⁴¹ Susan E. Place, "Nature Tourism and Rural Development in Tortuguero." *Annals of Tourism Research* 18, no. 2 (1991): 186-201.

⁴² Jessica Brown, "Building community support for protected areas: The case of Tortuguero National Park, Costa Rica." Master's thesis, International Development, Clark University, Worcester, Massachusetts, 1991.

⁴³ Susan Jacobson is a graduate in environmental education who focused her research on park program evaluation, planning and natural resource education. Susan Jacobson and Rafael Robles, "Ecotourism, Sustainable Development, and Conservation Education: Development of a Tour Guide Training Program in Tortuguero, Costa Rica." *Environmental Management* (New York) 16, no. 6 (1992): 701-713.

⁴⁴ Susan K. Jacobson and Alfredo Figueroa Lopez, "Biological Impacts of Ecotourism: Tourists and Nesting Turtles in Tortuguero National Park, Costa Rica" *Wildlife Society Bulletin* 22, no. 3 (1994): 414-419.

Montana University, developed a study that included information on tourists motivation, expenditures and on-site behaviors, as well as the economic benefits for both the residents and the national park. As the discussed publications show, in case of Tortuguero, the main academic debates concerned the potential of ecotourism to bring economic benefits to the local rural community and the impact of the inflow of tourists on the local wildlife. For the purpose of this thesis, all those publications are introduced not only to show the historic evolution of ecotourism research in Costa Rica, but also to create a space to discuss the methodologies applied in those studies. In all mentioned publications on Tortuguero's ecotourism, surveys distributed among villagers and visitors constituted the principal source of data that was used for a quantitative analysis to obtain specific, numeric results. This research method resulted also feasible for several-week fieldworks in a small study area as Tortuguero (the village is composed by around 30 households). Similarly, most publications on ecotourism in Monteverde Cloud Forest Reserve are also characterized by quantitative research methods based on surveying. This protected area which became one of the most visited places by foreign tourists in Costa Rica, attracted many scholars who aimed to analyze the economic benefits of sustainable management of a private reserve, contributing to the academic debate on whether ecotourism is a more economically profitable strategy of land-use than alternative methods.⁴⁵ One of the first studies was published in 1991 by Dave Tobias (environmentalist) and Robert Mendelsohn (economist) who using a travel cost method developed an estimate of the ecotourism value of Monteverde's forests which resulted to be far higher than the acquisition price of new lands, leading to a conclusion that expansion of the protected area of the preserve is economically a well-justified investment.⁴⁶ Similarly, a study made by Echevarria *et al.* claims that the economic benefits of ecotourism far exceed both current land prices in the area as well as earnings from alternative agricultural uses.⁴⁷ Susan Menkhaus and Douglas J. Lober presented in 1995 a study that also used the travel cost method. By being familiar with the research of Tobias and Mendelsohn, they decided to calculate a value placed on Costa Rican rainforests considering only U.S. travelers (who in that

⁴⁵ Monteverde is a private reserve created in 1972 by American scientists connected with the Tropical Science Center with an objective to protect the biologically rich cloud forests from mining developments and hunting.

⁴⁶ Dave Tobias and Robert Mendelsohn, "Valuing Ecotourism in a Tropical Rain-Forest Reserve" *Ambio* 20, no. 2 (1991): 91-93.

⁴⁷ Jaime Echeverria, Michael Hanrahan, and Raúl Solórzano, "Valuation of Non-Priced Amenities Provided by the Biological Resources within the Monteverde Cloud Forest Preserve, Costa Rica" *Ecological Economics* 13, no. 1 (1995): 43-52.

time formed a large majority of all visitors). The authors received an averaged value of \$1150 per visit and a total yearly U.S. ecotourism value of \$4 to 5 million for the Monteverde Cloud Forest Reserve.⁴⁸

Since the 2000s, one can observe the appearance of many publications on ecotourism in Costa Rica, dedicated to another region - Osa Peninsula - which was named by National Geographic "the most biologically intense place on the earth".⁴⁹ One of the first studies was developed by Caroline Stem *et al.* in 2003, and compared three communities in that region, bordering Corcovado and Piedras Negras National Parks. The main objective of the researchers was to add to the academic discussions about the contribution of ecotourism to ecosystems conservation. They analyzed qualitative data collected through interviews with quantitative data from surveys, finding that while economic benefits of ecotourism may discourage rainforest conversion into agricultural lands, legal restrictions play the biggest paper in decreasing deforestation and hunting. Increasing the levels of people education and awareness were also observed as crucial elements to conserve the local ecosystems.⁵⁰ Another studies developed in Osa addressed simultaneously several debates about ecotourism's effectiveness - both in terms of providing local development and preservation of the environment. For instance, Almeyda *et al.* analyzed the case of Lapa Rios Ecolodge Nature Reserve, using a diverse range of research methods (camera tracking of wildlife and human activity, as well as interviews, surveys and spatial landcover analysis) and presenting detailed quantitative data. They argued that ecotourism in that place has been properly conducted bringing very positive social and environmental effects. Those findings show that if well-managed, ecotourism can be very effective. However, because of being limited to this particular ecolodge, the study could not present regional ecotourism trends in Osa Peninsula. In contrast, Hunt, Durham, Driscoll and Honey, whose research interests mostly focus on tourism management and responsible traveling, addressed the same debates but with the aim

⁴⁸ Susan Menkhaus and Douglas J. Lober, "International Ecotourism and the Valuation of Tropical Rainforests in Costa Rica" *Journal of Environmental Management* 47, no. 1 (1996): 1-10.

⁴⁹ "Four places where humans are living in sync with the natural world", National Geographic, Environment News, Accessed 04.06.2021. <https://www.nationalgeographic.com/environment/article/partner-content-living-in-sync-with-the-natural-world#:~:text=%E2%80%9CThe%20most%20biologically%20intense%20place,well%20as%20more%20than%20350>

⁵⁰ Caroline J. Stem, James P. Lassoie, David R. Lee, and David J. Deshler, "How 'Eco' is Ecotourism? A Comparative Case Study of Ecotourism in Costa Rica" *Journal of Sustainable Tourism* 11, no. 4 (2003): 322-347.

to develop conclusions about the entire region of Osa. They studied the economic, social and environmental benefits of ecotourism conducting structured interviews in Drake Bay and Puerto Jimenez, the two largest communities in the peninsula, to gather both qualitative and quantitative data.⁵¹ Their findings show positive overall effects, with ecotourism providing more stable employment and higher incomes than other sectors as well as contributing to a positive perception of environmental conservation among the local communities. Comparing those two studies, it can be noticed that while the first gives conclusions that may be relevant to individuals running their own ecotourism project, the second can contribute to policymaking entities that take decisions on the development paths of a specific region.

Finally, there are also a few studies on ecotourism dedicated to Costa Rican locations other than Monteverde, Tortuguero and Osa Peninsula. Taking into account the topic and characteristics of the case study that will be analyzed by this thesis, it might be useful to present the following two publications: a research focused on the impact of ecotourism on rural development of a small community and a multiple-case study that compares ecotourism's effects in four different regions of Costa Rica. Howitt and Mason, two scholars specialized in rural development research, analyzed the effects of ecotourism on providing sustainable development in San Gerardo de Rivas, a rural community that regularly receives hikers who climb Mount Chirripó, Costa Rica's highest point.⁵² The authors used a community-based participatory approach during their field study by involving in the daily activities in San Gerardo de Rivas in order to build relationships with the villagers and identify the key local issues. The scholars found that ecotourism is a crucial component for the economies of the habitants, however, it provides insufficient earnings to allow them to fully dedicate to this occupation. This publication is a good example of a research on a rural economy in transition from traditional agriculture to ecotourism, which might be also the case of many communities on *El Camino*. Finally, Koens, Dieperink and Miranda were one of the few scholars that developed a comparative study of several ecotourism initiatives in different regions of Costa Rica.⁵³ Their analysis focused on the assessment of four areas (Manuel Antonio, Monteverde,

⁵¹ Carter A. Hunt, William H. Durham, Laura Driscoll, and Martha Honey, "Can Ecotourism Deliver Real Economic, Social, and Environmental Benefits? A Study of the Osa Peninsula, Costa Rica," *Journal of Sustainable Tourism* 23, no. 3 (2014;2015;): 339-357.

⁵² Howitt, Josephine and Courtney W. Mason, "Ecotourism and Sustainable Rural Development in Pérez Zeledón, Costa Rica," *Journal of Rural and Community Development*, Vol 13, No 1 (2018).

⁵³ Koens, Jacobus Franciscus, Carel Dieperink, and Miriam Miranda, "Ecotourism as a Development Strategy: Experiences from Costa Rica," *Environment, Development and Sustainability* 11, no. 6 (2009): 1225-1237.

Tortuguero and ASCOMAFOR) in terms of environmental, social and economic impact of ecotourism activities. The authors used semi-structured interviews as main source of data which led them to several conclusions. First, Manuel Antonio and Monteverde were assessed as areas of massive tourism focused on economic benefits, where uncontrolled infrastructure development affected negatively the local biodiversity. In contrast, thanks to low amounts of visitors, the natural ecosystem in ASCOMAFOR was found to be in very good condition, however the positive economic effects of ecotourism were found to be minimal because of its very small scale. This examples show that finding the balance between economic benefits and conservation is a major challenge of ecotourism. This research confirmed also findings from previously mentioned other publications. For example, large involvement of local population was connected with greater economic benefits and smaller environmental drawbacks, while well-organized turtle tours in Tortuguero contributed to positive impacts on the protection of those animals.

2.4 HISTORICAL DEVELOPMENTS OF ECOTOURISM IN COSTA RICA

Ecotourism in Costa Rica has its origins in the growing interest of biologists and conservationists in the 1960s and 1970s to study local tropical rainforests, which led to the emergence of “science tourism”.⁵⁴ Many researchers, mostly from the United States, began to establish private reserves and research centers in Costa Rica for both scientific visits and conservation. The most famous private protected areas founded in that times include Monteverde Cloud Forest Reserve and La Selva Biological Station. Simultaneously, global international environmental organizations began to raise public awareness about the increasing deforestation, its consequences and the importance of conserving world’s biodiversity. The planet’s most diverse ecosystems – tropical rainforests - were given a particular focus.⁵⁵ According to scientists, around 5 million species of plants and animals are estimated to live in tropical rainforests which accounts for 50% of the world’s terrestrial

⁵⁴ Geoffrey Jones and Andrew Spadafora, "Creating Ecotourism in Costa Rica, 1970–2000" *Enterprise & Society* 18, no. 1 (2017): 146-183.

⁵⁵ S. L. Sutton, T.C. Whitmore and A.C. Chadwick, “Tropical Rain Forest: Ecology and Management Special Publication No. 2 of the British Ecological Society Blackwell Scientific Publications, Oxford 1983,” *Oryx* 19, no. 2 (1985): 120–21.

biodiversity.⁵⁶ Despite the incredible wealth of those ecosystems, deforestation in the majority of world areas has been progressing fast, driven by short-sighted governing that regarded the value of rainforests only in terms of timber, extractable resources or earnings from alternative use, e.g. agriculture plantations.⁵⁷ This led to massive extinction of numerous species, bringing also major consequences for people. Deforestation contributed to the destruction of many indigenous communities, the loss of an unknown amount of medical plants and natural catastrophes (floods, droughts).⁵⁸ It also forced humans to live in anthropogenic landscapes that affect negatively people's health and wellbeing.⁵⁹ Costa Rica was one of the countries that suffered the biggest deforestations. Its tropical rainforests, which are believed to contain 5% of global biodiversity (in just 0,035% of world's territory) were reduced from 75% to 26% of the total land area in just 40 years (1940s-1980s).⁶⁰ This was a consequence of strong orientation in agricultural development in those decades. Until the late 1970s the government was heavily subsidizing cattle breeding which in 1975 occupied up to 82% of national agriculture land.⁶¹ In practice, farmers were given credits to cut rainforests and convert the land into pasture. In regard to the rapid loss of rainforests, at the end of the 1970s and in the 1980s, Costa Rican government, influenced by foreign conservation groups, conducted initiatives to protect the remaining rainforests and restore deforested areas.⁶² The administration of President Daniel Oduber (1974-78) played a crucial role in this process, founding Costa Rica's national park system (which currently protects one fourth of Costa Rica's territory).⁶³ A decade later, President Oscar Arias (1986-1990) extended

⁵⁶ Edward O. Wilson, Frances M. Peter, and ProQuest (Firm), *biodiversity*. (Washington, D.C: National Academy Press, 1988).

⁵⁷ The total area covered by tropical rainforests has decreased from 14% to 6%. „Rainforest Threats”, National Geographic, Accessed 03.12.2020 <https://www.nationalgeographic.com/environment/habitats/rainforest-threats/>

⁵⁸ “Deforestation: The Human Costs”, Cultural Survival, Accessed: 03.12.2020

<https://www.culturalsurvival.org/publications/cultural-survival-quarterly/deforestation-human-costs>

⁵⁹ “The Health and Social Benefits of Nature and Biodiversity Protection”, Institute for European Environmental Policy, Final Report 2016

<https://ec.europa.eu/environment/nature/biodiversity/intro/docs/Health%20and%20Social%20Benefits%20of%20Nature%20-%20Final%20Report%20Main%20sent.pdf>

⁶⁰ Geoffrey Jones and Andrew Spadafora, "Creating Ecotourism in Costa Rica, 1970–2000" *Enterprise & Society* 18, no. 1 (2017): 146-183.

⁶¹ Carol Hill, "The paradox of tourism in Costa Rica", *Cultural Survival Quarterly*, 14(1) (1990):14-19

⁶² Idem.

⁶³ “Anuario Estadístico de Turismo 2018”, Instituto Costarricense de Turismo, Dirección de planeamiento y desarrollo turístico, Unidad de administración de la información, Accessed 10.12.2020.

<https://www.ict.go.cr/es/documentos-institucionales/estad%C3%ADsticas/informes-estad%C3%ADsticos/anuarios/2005-2015/1349-2018-1/file.html>

environmental conservation to other categories of protected areas. In 1994, the government of Jose Maria Figueres took radical actions to restore the natural environment introducing several legal restrictions and promoting ecotourism as a strategy to protect the natural heritage while providing simultaneously economic development. Some of the most important initiatives taken by the Figueres administration (1994-98) included a new carbon tax aimed to transform cattle pastures into rainforests, the introduction of the program of payments for environmental services (Pago por Servicios Ambientales) to private landowners who decide to conserve or regenerate rainforest areas, and the creation of tradable pollution permits for foreign companies with the objective to finance Costa Rica's ecosystems conservation. The Figueres government also encouraged the development of ecotourism in privately owned rainforests and created the Certificate of Sustainable Tourism branding program with the aim to rate and certify different actors in the national tourism industry according to their compliance with the values of sustainability.⁶⁴ The joint conservation efforts of the consecutive governments and foreign biologists, as well as the long-term political stability which differentiated Costa Rica from other states in the region, contributed to the rapid inflow of international tourists to the country. By the end of the 1990s, Costa Rica became a world-renowned destination for "nature travelers" attracting 1 million of foreign visitors a year.⁶⁵ The following governments continued the strong pro-environmental approach which in effect brought very promising results. Nowadays, rainforests cover 55% of the country's area with half of them being classified as primary forests – those that have never been disturbed by significant human activity and still possess a high level of biodiversity.⁶⁶ In comparison, less than 1% of European forests are regarded as primary forests.⁶⁷ From an economic perspective, the protection of the natural environment, which became Costa Rica's most important touristic asset, has led to a spectacular growth of the tourism industry. In 2016 tourism accounted for 37% of total exports and generated 450 000 of direct and indirect jobs (over 28% of total labor) – substituting a large amount of the agriculture employment which

⁶⁴ Geoffrey Jones and Andrew Spadafora, "Creating Ecotourism in Costa Rica, 1970–2000" *Enterprise & Society* 18, no. 1 (2017): 146-183.

⁶⁵ Idem.

⁶⁶ Banco Central de Costa Rica, *Cuenta de Bosques: Documento de Trabajo. Área de Estadísticas Ambientales*, (Departamento de Estadística Macroeconómica, División Económica, Mayo 30, 2016).

⁶⁷ F. M. Sabatini *et al.*, "Where are Europe's last primary forests?" *Diversity and Distributions* 24 (10), (2018): 1426-1439.

provides on average 2-3 times lower salaries than tourism.⁶⁸ However, it is hard to estimate how many of the 3 million annual visitors engage in ecotourism activities.⁶⁹ It is largely because of the creation of an international image of Costa Rica as a fully ecotourism destination, which led to the labeling of all connected with nature touristic initiatives in the country as “ecotourism”. It is especially visible in the most famous protected areas as Manuel Antonio and Monteverde, which became centers of mass tourism, with large hotels and all-inclusive resorts. Although this process brought some negative effects to the ecosystems as mentioned in the literature review, ecotourism alone, which includes limitations of tourist numbers, would not permit every year 3 million of visitors to come and leave their money in Costa Rica. In that case, the numbers describing the development impact of tourism on the entire country, which were mentioned before, would be much smaller. However, this development was not equally distributed and have concentrated mostly in popular coastal areas easily accessible from big cities, leaving the rest of Costa Rica’s habitants without any benefits from the touristic boom in the country.⁷⁰ That is why in the last decade, numerous private small ecotourism projects have developed in more remote parts of Costa Rica, as the Talamanca Mountains, aiming to attract tourists that seek for more authentic places and to bring development to marginalized rural communities. To this kind of initiatives belongs *El Camino de Costa Rica*, established by the non-profit association *Mar a Mar* after several years of planning, with the objective to provide development to communities located in the central area of the country. The project was officially initiated in 2018 and according to the association, it has grown successfully through the first two years, providing economic benefits and creating a type of tourism that takes into account the protection of local ecosystems.⁷¹

⁶⁸ “OECD Tourism Trends and Policies 2018. Costa Rica”, OECD, Accessed 10.12.2020. https://www.oecd-ilibrary.org/urban-rural-and-regional-development/oecd-tourism-trends-and-policies-2018/costa-rica_tour-2018-46-en;jsessionid=B_80L4MY4_Tmd-9O0zAeyWib.ip-10-240-5-18; Hunt, Carter A., William H. Durham, Laura Driscoll, and Martha Honey, "Can Ecotourism Deliver Real Economic, Social, and Environmental Benefits? A Study of the Osa Peninsula, Costa Rica" *Journal of Sustainable Tourism* 23, no. 3 (2014;2015): 339-357.

⁶⁹ Idem.

⁷⁰ “Índice de Desarrollo Humano Cantonal, Atlas de Desarrollo Humano Cantonal de Costa Rica”, UNDP, Accessed 01.05.2021 <https://www.cr.undp.org/content/costarica/es/home/atlas-de-desarrollo-humano-cantonal.html>

⁷¹ “Plan de Negocios Proyecto de Desarrollo Rural *El Camino de Costa Rica*”, Asociación *Mar a Mar*, business plan, Costa Rica, (2020).

2.5 CONCLUSION

In summary, the review of the origins of ecotourism and the existing literature on this topic brought several observations that may be particularly relevant in the context of the research of *El Camino* that will follow in the second part of this thesis. First, although the concept of ecotourism was defined by many scholars and several international organizations, their interpretations slightly differ and often overlap with another terms used to define alternatives to ecotourism. Second, the general literature review about ecotourism revealed two main debates in the academia: (1) whether ecotourism contributes to the development of local (host) communities and (2) whether ecotourism can contribute to the conservation of ecosystems. While different publications focus on more specific aspects of those debates, e.g. on rural communities' benefits from employment or on the profitability of ecotourism as a land management form in a private reserve, the mentioned two main debates remain the core of the academic discussion on ecotourism. The publications on ecotourism in Costa Rica addressed the same major academic debates that were mentioned in the previous section. In large majority the conclusions have been in favor of ecotourism as a strategy bringing benefits to both development and conservation. However, previous studies on ecotourism in Costa Rica focused mostly on the country's most famous natural areas and in majority used quantitative data analysis to assess the impacts of ecotourism. In addition, those publications mostly studied a very reduced area, usually one ecotourism initiative or one community living in a protected zone. Those researchers that wanted to develop conclusions on regional trends, decided to collect qualitative data through semi-structured interviews, which allowed them to obtain information on a diverse range of topics during a reduced time of their field research. Finally, the overview of the origins and historical developments of ecotourism in Costa Rica revealed, that although the rapid growth of ecotourism brought large economic benefits to the country, contributing also to the preservation of tropical rainforests, some negative aspects have also appeared. Two major identified drawbacks were (1) the labelling of massive tourism as ecotourism, that could resulted from the growth of ecotourism in the most famous natural areas into "massive ecotourism" and (2) the marginalization of rural communities located in remote areas of the country that did not benefit from Costa Rica's tourism development.

CHAPTER 3: METHODOLOGY

3.1 STUDY SITE – EL CAMINO DE COSTA RICA

El Camino de Costa Rica is a 280km hiking trail in the central part of the country, that extends from the Atlantic (Caribbean) to the Pacific coast. The route was designed by the association *Mar a Mar* with the aim to include poor rural communities and diverse landscapes and ecosystems, and at the same time to make it accessible for an intermediate hiker. It is divided into 16 official stages that can be completed in 12-16 days. The trail crosses the following administrative divisions: Matina and Siquirres cantons in Limon Province; Turrialba, Jimenez, Paraiso and El Guarco cantons in Cartago Province; Dota, Leon Cortes and Tarrazu cantons in San Jose Province and the canton of Quepos in Puntarenas Province.

Figure 1. Map of *El Camino de Costa Rica*



Source: Official website of *El Camino de Costa Rica* (<https://www.caminodecostarica.org>)

In geographical terms, it starts in the southern part of Tortugero Canals (Barra Parismina and Barra de Pacuare) and continues south-west through the Caribbean Lowlands. Further, the trail goes between the Central-Volcanic Mountains and Talamanca Mountains, maintaining proximity to the Pacuare and Reventazon Rivers and continues through the cloud forests located in the northern part of Talamanca Range before descending through Los Santos Zone to the Pacific coast in Quepos.

Until now, almost all hikers have done this route with one of the local tour operators, as *Mar a Mar* does not recommend to walk the trail without a guide because of security reasons. However, the association predicts that in a few years, the development of better signalization and the increased number of hikers will contribute to the safety on *El Camino*, allowing most of the visitors to complete the route by themselves. Thus, at the moment, local tour operators are managing all tourism on *El Camino*, offering different options depending on individuals' hiking skills, budget and objectives, as well as taking care of all food and sleeping arrangements. The most popular itineraries offered to foreign visitors are: 12-16 days complete hikes, 5-6 days hikes in one of the three main sections (Caribbean, Central or Pacific), and customized adventure tours where some hikes are substituted by car transfers in order to offer visitors more time to experience the local attractions offered by different communities. Regarding national tourists, the most common way of completing *El Camino* is doing short itineraries of 1-2 stages every weekend, also with the guidance of local tour operators.

3.2 METHODS OF DATA COLLECTION AND ANALYSIS

The diversity of the studied area results not only in geography, but also in differences in socio-economic and tourism development among the communities.⁷² In order to assess the impacts of ecotourism connected to *El Camino* in those communities, the author contacted *Mar a Mar* in January 2021 to obtain help in organizing the on-site study. The executive director of the association provided a plan of a 3-week field trip that included the names of people in each community who have been most involved in the project. The plan was further developed by a local tour operator, familiar with *El Camino*, who took care of all logistic issues.

⁷² Detailed descriptions of geographic and socio-economic characteristics are provided in Chapter 4.

With the objective to complete the field trip in the planned 3-week schedule, the time in each community was limited to 1-2 days, with mornings dedicated to hiking (or in some case car transfers) from one *El Camino* stage to another, and afternoons reserved to getting familiar with the ecotourism activities in the area and gathering information from local residents. Because of previously mentioned characteristics of the project and the field research (large area and diversity of the case study, time-limitations) semi-structured interviews have been chosen as the best method of data collection as they can provide large amounts of qualitative data on a different range of topics related to ecotourism activities and their impacts in each community. While initially, distribution of surveys among residents of each community was also considered, with the aim to obtain quantitative data, it resulted to be unmanageable because of time limitations, logistics and security reasons as well as in case of several communities - lack of participation of most of the residents in ecotourism and their unfamiliarity with *El Camino*. Despite this fact, the information gathered through semi-structured interviews resulted to be useful for this study, mostly sufficient to obtain a general understanding of the developments of ecotourism in all visited areas. The interviewed people were accommodation providers (lodge operators, cabin owners, families providing home stay), food providers (in majority owners of small restaurants, locally called *sodas*), tour operators and guides, leaders of local associations of integral development, environmentalists, artisanal and organic productors that offer tours and representatives from the association *Mar a Mar*.⁷³ Most interviewees were asked similar questions, although their knowledge on different aspects was often variable, even among the same category of respondents. In specific, the information gathered from accommodation and food providers as well as small-scale productors and tour operators was related in majority to the evolution of their businesses through the time, especially since their integration in *El Camino*, the characteristics of local tourism, profitability of employment in ecotourism-related jobs in comparison to other occupations available in their community and their attitudes toward conservation. In many cases they also shared valuable knowledge about their perceived local environmental changes and the socio-economic characteristics of the community. In some areas, leaders of local associations of integral development provided more detailed data on the characteristics of the communities, while environmentalists and guides were able to give

⁷³ Detailed description about the interviewed people in each area of *El Camino* are provided in Chapter 4

specific information on the changes in local ecosystems and the role of ecotourism in conservation. Three representatives from *Mar a Mar* were interviewed on distinct topics, focused on the role of the association in the project, its objectives and principles, as well as the cooperation with the participating communities. All respondents were asked also about the biggest challenges and necessities of their own business and community, in particular about aspects that restrict the development of local ecotourism and its positive effects on the environment and rural development. Because of the specific characteristics of the field study, many interviews took form of several conversations with the same interviewee that were often combined with participation in the activities of the villagers and with direct observations. The obtained data was saved in form of written field notes. This approach had its benefits as the author had time to create closer relations with local people, who in majority of the cases did not treat him with skepticism, as a stranger. This created an atmosphere in which interviewees were speaking more open. In areas where the author was more limited by time, the interviews took usually a more formal form and were recorded by phone. Regarding the first studied community (Barra de Pacuare), an additional source of data was author's participation in a conference on the future of local ecotourism on January 30th, 2021, which was held in the property of a local entrepreneur involved in ecotourism and was leaded by the mayor of Matina canton, gathering also representatives from the local municipal authorities, nature reserves, security forces as well as many habitants involved in diverse tourism activities. Data from this conference was also saved in form of written field notes.

After finishing the field study, information from recordings and field notes was revised and put into structured forms that summarize each interview. Recordings (in Spanish) and interview summaries (in English) are available upon request. The information from the field study was complemented by quantitative data obtained from the Costa Rican Institute of Tourism (documentation on number of visits to protected areas), the United Nations Development Program (statistics on the Human Development Index in Costa Rica's cantons) and *Mar a Mar* (the association's business plan). The analysis of collected data involved examining the interview summaries in search for information relevant for this study. The first step consisted in organizing the data by community/area in order to make descriptions of the characteristics and impacts of ecotourism activities (with particular focus on those related to *El Camino*) in each community. Basic socio-economic and environmental information from

interviews was combined also with previously mentioned quantitative data sources and incorporated in the communities' descriptions for further analysis. Then, the data was analyzed, by looking for common and contrasting effects of ecotourism, making comparisons between communities and developing conclusions in order to answer the research questions.

Finally, it is important to mention that not all communities located along *El Camino* have been researched. Two of them were not visited during the field study because of logistic reasons that will be explained in detail in the next chapter (Barra Parismina and Cerro Alto). In addition, two communities were excluded from the research - Quepos, one of Costa Rica's biggest centers of mass tourism, connected with Manuel Antonio beach and national park, as well as La Suiza, a large community belonging to the city of Turrialba. Both locations were not analyzed as they do not have rural characteristics.

CHAPTER 4: THE CASE OF *EL CAMINO DE COSTA RICA*

4.1 THE CREATION AND DEVELOPMENT OF THE PROJECT

El Camino de Costa Rica is a 280km hiking trail from the Atlantic to the Pacific coast of Costa Rica. It was initiated in 2018 by the association *Mar a Mar*, a non-profit organization which was created with the aim to develop *El Camino*. *Mar a Mar*, which operates as a destination management organization, attracts external funds in form of subsidies from international organizations and charity foundations, as well as receives donations from individuals and firms. In 2020 a total amount of \$82.000 was received, while in 2021 the income is estimated to reach \$184.000.⁷⁴ All this amount was spent to *El Camino*-related initiatives. The founder and biggest contributor to the initiation of this project has been the association's executive director. During an interview she explained that the idea of creating *El Camino* have been taken from the Compostela Trail that she visited in Spain. The principal objective was to bring development to poor rural communities that did not participate in the country's ecotourism boom from the 1990s. Analyzing the example of the Compostela Trail, as well as other famous hiking routes that are also part of World Trails Network, *Mar a Mar* found that hiking trails create a higher development potential for communities that individually do not possess sufficient attractions to receive regular visitors. However, by being connected through the same project, they become more visible in the touristic map and do not compete between each other.⁷⁵ The route has been chosen through a careful selection of different areas and communities, which took several years and was focused on establishing a trail accessible to people with different hiking skills that would cross very diverse areas in terms of cultural and natural environment and that would include the most underdeveloped communities. The founders of *El Camino* incorporated values that can be associated with the principles of ecotourism. The business plan of the *Mar a Mar* describes that *El Camino* is inclusive, sustainable, carbon neutral and contributes to the protection of biodiversity. It is also stating that the association aims to support the development of tourism activities in the rural communities, while promoting high standards for biodiversity and environmental protection as well as integrating practices for social inclusion. Special attention is given to

⁷⁴ "Plan de Negocios Proyecto de Desarrollo Rural *El Camino de Costa Rica*", Asociación *Mar a Mar*, business plan, Costa Rica, (2020).

⁷⁵ Idem.

promote biosecurity, conservation of the biological corridors, reforestation, and education and appreciation of local cultures.⁷⁶ Therefore, while the principal goal of the association is to achieve gradual rural development for the community by looking for a constant increase of visitor numbers on the trail, promoting a form of tourism that is sustainable, accessible and respectful for the environment and local cultures remains crucial. It is important to mention, that along *El Camino*, the communities often use terms different than ecotourism when talking about the local tourism, e.g. rural tourism, cultural tourism, sustainable tourism or just tourism. In all cases however, they refer to a form of tourism characterized by the described principles incorporated by the founders of *El Camino*. Finally, during an interview, the executive director of *Mar a Mar* pointed out that for the association it is important to keep *El Camino* as a rural development project in which the local communities play the principal role. She explained that it will be crucial to keep this strategy during the projected increase of tourist numbers and avoid investments on *El Camino* from outside, focused on big hotels, characteristic to mass tourism.

Mar a Mar plays an important role in developing and promoting the project of *El Camino*. While this part discusses different types of initiatives taken by the association, detailed examples, and the outcomes of those initiatives, which were studied during the field research in Costa Rica, will be presented and assessed in the following sections of this chapter. Initially, the focus of *Mar a Mar* was on facilitating the access to *El Camino* through the development and maintenance of the trail including signage of the route, improvement of the trails and its surroundings and installation of cultural attractions and sculptures of famous artists. The association also developed a digital route on Google Earth and Wikiloc, which shows in detail the trajectory of each stage, with distances and altitudes. It also created a website with information on lodging and other services available along the trail. Secondly, the association has focused on improving the capacity and quality of services offered by the communities. This part includes initiatives such as donations to small local tourism businesses (providers of accommodation, food, and tour operators) for the improvement of cabins, rooms, bathrooms, ramps. It also includes donations supporting different basic needs of local development associations, schools and medical centers (e.g. electrification). Those donations are often a part of a larger project aimed at being able to train in those buildings people from

⁷⁶ Idem.

local communities on entrepreneurship, social media marketing, etc. *Mar a Mar* acts also as an intermediary between numerous small businesses on *El Camino* and large institutions as government agencies and chambers of tourism which benefits local small entrepreneurs as they do not need to bear the costs of membership by themselves and can get access to different financing options offered by those institutions. Thirdly, *Mar a Mar* dedicated some resources to promote *El Camino* to hikers and tour operators all around the world. This marketing initiative has been taken with reserve, considering the limited capacities that local service providers possess at this stage in the development of the project. An important part of this strategy was promotion through articles in international travel magazines and the production of a high-quality video by the magazine *Oxygeno*, which was published on YouTube.⁷⁷ At the national level, the most significant step was the declaration of *El Camino* in 2018 as a project of “public interest” by the president of Costa Rica, Luis Guillermo Solís.⁷⁸ It has been followed by numerous publications in national media and by an article dedicated to *El Camino*, published in the Spanish edition of National Geographic.⁷⁹ *Mar a Mar* also established relations with international tour agencies in Europe and the United States as well as with big Costa Rican tour operators. All those strategies contributed to the growth in the number of hikers on the trail from 0 in 2017 to around 100/month at the beginning of 2020.⁸⁰

Mar a Mar is focused on attracting the segment of hikers defined by World Trails Network as people over 55 years old, usually having a high budget and a sufficient amount of free time to participate in a long hike. They are characterized by a willingness to explore nature and culture through hikes with low and medium levels of difficulty. They value authenticity, local food and rural life.⁸¹ Thus, the association looks for pensioners, mainly from countries where hiking is perceived as a popular way to have a healthy lifestyle while getting to know fauna, flora and new cultures. The segment of hikers of secondary interest is composed by

⁷⁷ Jorge Jimenez Rios, “*El Camino* de Costa Rica, una gran aventura del Caribe al Pacífico”, *Revista Oxígeno*, 15.12.2020, https://www.revistaoxigeno.es/costa-rica-te-oxigena/camino-costa-rica-gran-aventura-caribe-pacifico_224427_102.html

⁷⁸ Walter Herrera, “Presidente Solís declaró de interés público sendero que va de *Mar a Mar*”, *La Republica*, 20.04.2018, <https://www.larepublica.net/noticia/presidente-solis-declaro-de-interes-publico-sendero-que-va-de-mar-a-mar>

⁷⁹ “Así es la ruta senderista de Costa Rica inspirada por el Camino de Santiago”, *Viajes National Geographic*, 20.01.2021, https://viajes.nationalgeographic.com.es/a/asi-es-ruta-senderista-costa-rica-inspirada-por-camino-santiago_16394/5

⁸⁰ “Plan de Negocios Proyecto de Desarrollo Rural *El Camino de Costa Rica*”, Asociación *Mar a Mar*, business plan, Costa Rica, (2020).

⁸¹ Idem.

young people (20-35 years old), who are characterized by lower budget, but often look for adventures and challenges similar to *El Camino*. According to the association's executive director, tourists from this category, who are often perceived as backpackers, are expected to form a significant part of hikers in the near future, when *El Camino* becomes more internationally recognizable and easy to cross without the assistance of local guides and tour operators, which at the moment is the reason of its relatively high cost. In this context, the association is nowadays supporting projects of development of camping platforms in different communities that would be available to hikers with lower budget. Another segment of tourists considered by the association as potential visitors of *El Camino* are birdwatchers, who consist usually of middle age and retired travelers with high budget. Costa Rica is already one of the most famous places in the world for birdwatchers, and *El Camino* creates the unique opportunity to cross in two weeks various ecosystems that host different species of birds. While the areas located on and in proximity to *El Camino* offer the majority of adventure activities that Costa Rica is famous for (including rafting, zip-lines, sea water sports, volcano tours, ATV tours), *Mar a Mar* does not intend to direct its marketing to the market segment of mass adventure tourism, as they believe that the customers of *El Camino* are looking for an experience different from what most adventure tourism operators in Costa Rica are offering now. The association is also cautious in competing with the segment of family adventures, as the offer for this category of travelers is also already large in the country.⁸²

Concerning the economic effect on the local communities, *Mar a Mar* developed projections of the economic impact of *El Camino* using data from Costa Rican Tourism Institute which estimated the average spending per tourist in the country in 2018 to be US\$1335,40 (only foreign visitors that arrived via air were taken in the account) and the average time of stay - 11,7 days.⁸³ Those calculations resulted similar to tourist spending on *El Camino* - around US\$1500 gross for a 14 day trip, which is the lowest offered price by tour operators.⁸⁴ Further, this amount has been multiplied per 100 (which is the estimated number of hikers that the association expects each month to complete the entire trail in 2021) and divided per 20 - the number of main stakeholders (communities – 15, and local tour operators - 5). From the

⁸² "Plan de Negocios Proyecto de Desarrollo Rural *El Camino de Costa Rica*", Asociación *Mar a Mar*, business plan, Costa Rica, (2020).

⁸³ Idem.

⁸⁴ Idem.

obtained amount, 30% was deducted as the operational cost. Finally, the result (US\$5250) was considered as the projected monthly net economic impact on one community in 2021.⁸⁵ This amount only takes in count principal basic services given to tourists, i.a. logistics, transport, guidance, accommodation and food. The association believes that with the increase in hikers, *El Camino* will create additional opportunities for earnings to local people. As an example, they calculate that a villager could double the minimal income which in rural zones of Costa Rica is estimated between US\$200-400 per month, by selling 15 coconuts a day for a price of US\$0,80 for a piece.⁸⁶

4.2 EL CAMINO DE COSTA RICA – CHARACTERISTICS, ANALYSIS AND FINDINGS

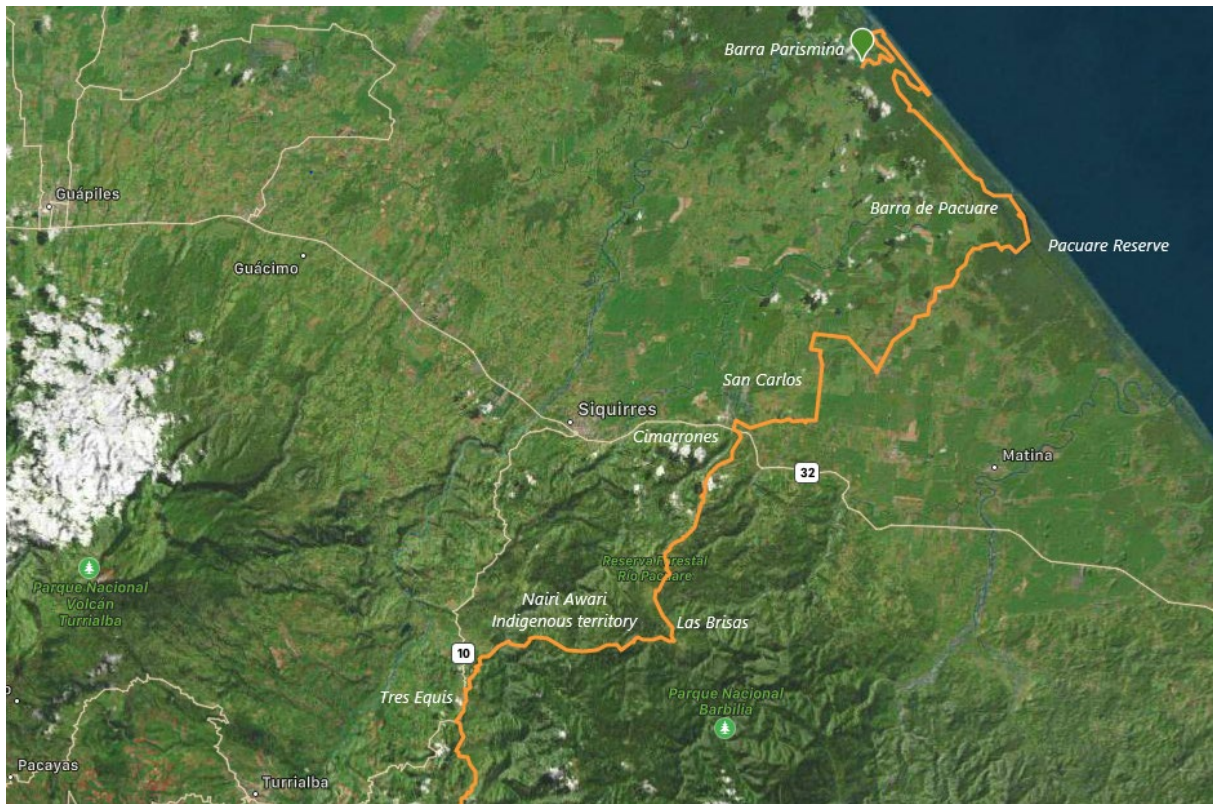
For better clarity of the analysis, the communities located on *El Camino* were grouped into three sections (Caribbean, Central and Pacific). At the beginning of each section there is a brief description of the route and a specification of the sources of collected data. Then, the relevant information about each community gathered during the field study, is being introduced, including socio-economic background, environmental aspects, characteristics of ecotourism activities, with particular focus on those related to *El Camino*, and their economic and environmental impacts, as well as main challenges identified by interviewees. Each section ends with an analysis of the impacts of *El Camino*-related ecotourism on both rural development and ecosystems conservation and resulting from this analysis findings.

⁸⁵ Idem.

⁸⁶ Idem.

4.2.1 THE CARIBBEAN SECTION – CHARACTERISTICS

Figure 2. Map of the Caribbean section of El Camino de Costa Rica



Source: Author's own elaboration based on Wikiloc.com (<https://www.wikiloc.com/hiking-trails/el-camino-de-costarica-atlantico-mar-caribe-al-pacifico-via-tsiobata-57171637>)

The Caribbean section of *El Camino* starts at the coastal villages of Barra Parismina and Barra de Pacuare, which are accessible only by boat, and continues through the banana and pineapple plantations areas of San Carlos de Pacuarito and Cimarrones de Siquirres. From there, the trail begins ascending to Las Brisas de Pacuarito situated in the entrance to Barbillia National Park, and continues through the mountainous indigenous territory Nairi Awari to Tres Equis, located on the opposite site of the Pacuare River. According to the arrangements with the tour operator involved in organizing the field trip, the community of Barra Parismina was not visited, as most tour operators currently start from Barra de Pacuare because of significantly lower costs of transportation. Thus, the field work began with a 2-day stay in Barra de Pacuare with a local leader and guide, who was interviewed together with his wife. On the second day, the author participated in a conference about the future of local tourism, which was led by the mayor of the canton of Matina and gathered local environmentalists,

representatives from the municipality and public forces, and people working in tourism. The fieldwork continued with a hike from Goshen Dock, south of Barra de Pacuare, through San Carlos de Pacuarito (where the leader of local association of integral development was interviewed), to Cimarrones de Siquirres. During a 2 day-stay in this community, one accommodation provider, two leaders of local associations of integral development and one biologist were interviewed. Unfavorable weather did not permit to continue the hike to Las Brisas de Pacuarito and temporal access restrictions made impossible to travel through the indigenous territory. In effect, a short 1-hour visit was made by car in order to interview a local leader in Las Brisas de Pacuarito, before heading directly to Tres Equis, where the research was continued. The data in Tres Equis was gathered through participant observations and several conversations with the owner of a local ecotourism property. In addition, two interviews with local habitants working in tourism were also conducted. Finally, the data about ecotourism in the indigenous territory was collected during a 1-day visit in Tsiöbata, that took place after the completion of the entire *El Camino*, when that area reopened to tourism, and included an interview with the local leader.

Barra Parismina and Barra de Pacuare

Barra Parismina and Barra de Pacuare are two villages situated in the middle of Tortuguero canals, which connect the city of Limón with the touristic area of Tortuguero.⁸⁷ Those artificial waterways have been developed since the 1960s as an extension of existing rivers (such as Pacuare River and Madre de Dios Lagoon in Barra de Pacuare) with the aim to create transportation networks in the north Caribbean area of Costa Rica. The region's most famous part is the Tortuguero National Park that since decades has been promoted as the country's main point of sea turtle nesting and has become one of Costa Rica's major tourist destinations.⁸⁸ According to the interviewed guide from Barra de Pacuare, with the rapid growth of ecotourism in Costa Rica since the 1990s, the habitants of Barra Parismina and Barra

⁸⁷ Although Barra Parismina was not visited during the field study, the author mentions in this section basic information about this community which was obtained during the research in the neighboring village of Barra de Pacuare.

⁸⁸ Tortuguero National Park is the second most visited by foreigners national park in Costa Rica. "Visitas de residentes y no residentes a las áreas silvestres protegidas", Instituto Costarricense de Turismo, Accessed 30.05.2021, <https://www.ict.go.cr/es/documentos-institucionales/estad%C3%ADsticas/cifras-tur%C3%ADsticas/visita-a-las-%C3%A1reas-silvestres-protegidas-sinac/1397-2017-2/file.html>

de Pacuare started to witness large numbers of touristic boats travelling daily through the canals on the route Moín (Limón) – Tortuguero. This contributed to the development of first tourist infrastructure in the villages, particularly small restaurants and grocery shops which were often visited by travelers who decided to make a short break on their way to Tortuguero. The interviewed guide explained that this situation drastically changed in the 2000s when the docks in Caño Blanco and La Pavona were developed. Situated closer to the entrance to the national park, the new docks shortened the travel to Tortuguero from a whole day trip to just few hours, taking most of the tourism that was passing through Barra Parismina and Barra de Pacuare. While the indices of development in both northern and southern part of Limón province were growing, largely thanks to the emergence of tourism, the central part remained one of the poorest regions of Costa Rica, with the Matina canton (where Barra de Pacuare is located) placed at the bottom of the country's HDI index (0.671 in 2018).⁸⁹

Barra Parismina and Barra de Pacuare have been chosen by the Association *Mar a Mar* as the starting points of *El Camino* as they belonged to the group of the most excluded communities in the Caribbean area. The interviewed local guide explained that since the initiation of the hiking route, tourism in the area not only increased, but also changed its characteristics. Barra de Pacuare is no longer merely a transit point to Tortuguero, but has become a travel destination. Additionally, in the proximity of the village, between the Caribbean Sea and the water canals, there are several private areas dedicated to nature conservation, the most famous being the 2000 acres' Pacuare Reserve.⁹⁰ They were established to protect the local beaches that host the biggest amount in Costa Rica of nesting leatherback sea turtles (world's largest turtles). This fact is still little known both among national and foreign citizens, which according to the interviewed local people is a consequence of the overpromotion of Tortuguero by the national tourism institutions. For decades, volunteers were the only visitors of the reserves, however, as the local guide described, this has been slowly changing, with more tourists arriving especially to the Pacuare Reserve. Hikers doing *El Camino* also take the 7km hiking path through the reserve which is combined with boat tours and an overnight stay in Barra de Pacuare. Some operators of *El*

⁸⁹ "Índice de Desarrollo Humano Cantonal, Atlas de Desarrollo Humano Cantonal de Costa Rica", UNDP, Accessed 01.05.2021 <https://www.cr.undp.org/content/costarica/es/home/atlas-de-desarrollo-humano-cantonal.html>

⁹⁰ "The Reserve", Pacuare Reserve, Accessed 12.04.2021

Camino offer the longer version of the first stage of the trail, which includes a boat trip from Barra Parismina, but involves significantly higher transportation costs.

According to interviewed local people, the main sources of employment in Barra Pacuare are coconut processing and fishing. Tourism increases in the periods of turtle nesting. Interviewees also admitted that incomes from ecotourism not only are significantly bigger than from agriculture but even higher than illegal hunting of turtles and iguanas. Thus, during the assisted conference, current municipal authorities were emphasizing the need to base the development of the Matina canton on ecotourism rather than plantations, as in their assessment it proved to bring higher incomes and better environmental protection. A major initiative currently taken is the construction of three asphalt roads that connect local river docks to facilitate the access of tourism to the zone (e.g. the Batán – Goshen Dock road, which is crucial for the inflow of tourists to Barra de Pacuare). It is important to notice that this project focuses only on short access roads and is different from ideas of developing asphalt roads along the canal system which are strongly opposed by the local community. During the conference, the municipality also pledged itself to help villagers with obtaining their land ownership titles, which are required for any bank loans that they might need in order to develop their tourism infrastructure. It also promised to provide solutions to broaden the internet connection in the area. The current local authorities plan also to strongly focus on promoting the area of Barra Parismina, Barra de Pacuare and Barra Matina as attractive tourist destinations and are planning the organization of kayaking contests, first at the regional and then national levels. Since the establishment of *El Camino*, the association *Mar a Mar* has also participated in improving the development of the area by financing some local infrastructure projects as the electrification of the health center in Barra de Pacuare.

During the field study, many challenges to the development of ecotourism in the area have been identified. One of the most severe has been the contamination of the waters of the lagune Madre de Dios with pesticides flushed into the canals from the nearby banana and pineapple plantations. These contaminations have been occurring since the late 1990s, causing in 2003 an ecologic catastrophe that resulted in massive death of most of the fishes. Both local villagers and scientific institutions as the Regional Institute for Toxic Substances Studies (*IRET – Instituto Regional de Estudios en Sustancias Tóxicas*) report that

contaminations are still regularly taking place.⁹¹ The interviewed local leader described that over the time of 53 years that he has lived in this area, numerous species of animals became extinct and the amount of fish drastically decreased, not only in the lagoon but also in the sea. He submitted around 50 complaints over the last two decades. He concluded that the lack of interest from the central government has been the principal reason why large plantations keep using the cheapest and least environmental-friendly methods.

The second big challenge restraining tourism development has been the insecurity in the area. During the conference with local authorities, environmentalists from the reserves claimed that every year they have to confront armed turtle egg robbers who pose a threat both to the animals and people (volunteers and tourists). Interviewed local habitants also confirmed, that due to poverty and lack of employment, poaching is still an attractive alternative source of income. They explained that while those employed in tourism changed their mentality and perceive hunting as unacceptable, other people, who did not experience any benefits from tourism, may still follow the old mentality towards wildlife. In addition to that, the conference revealed that despite the ecological importance of the area, the central government provides only 7 coastal guards to patrol dozens of kilometers of sea and river coasts (of whom even less can be active at the same time). Another source of insecurity in the region has been drug consumption and trade, which has been associated with sporadic crimes that take place in neighboring areas, especially in the town of Batán. Although none of the tour operators ever reported insecure situations when travelling with tourists, they described during the interviews that security precautions are always made when organizing trips and include the assistance of local guides familiar with the area and car support. In addition, the local authorities of Matina canton began this year the construction of a police station in Batán, which is believed to significantly increase the level of safety.⁹²

⁹¹ Vinicio Chacón, “Más de 20 agroquímicos contaminan la laguna Madre de Dios”, *Semanario Universidad*, November 19th, 2019. <https://semanariouniversidad.com/pais/mas-de-20-agroquimicos-contaminan-la-laguna-madre-de-dios/>

⁹² Danny Canales, “Municipalidad de Matina anuncia nueva delegación de policía para Batán”, *EcoMunicipal*, March 17th, 2021. <https://ecomunicipal.co.cr/municipalidad-de-matina-anuncia-nueva-delegacion-de-policia-para-batan/>

San Carlos de Pacuarito and Cimarrones de Siquirres

San Carlos de Pacuarito and Cimarrones de Siquirres are two villages located in the flat, agricultural lands of central Limón province. San Carlos is totally surrounded by three large banana plantations (Finca Corsega, Finca Triple Tres and Finca San Pablo) where according to an interviewed local leader, most of the villagers found employment. Some habitants also work in pineapple plantations or own small cattle farms. The community, led by the local association of integral development, plans also to start the cultivation of avocado and hemp as more profitable alternatives to traditional crops. The employment of the habitants of Cimarrones is more diversified as this community is situated next to the National Road number 32 which connects San José with the seaport of Limón. Interviews revealed that apart of people working in plantations, there is a significant number of professionals that found jobs in public institutions as Costa Rican Institute of Electricity, Costa Rican Social Security Fund, the Ministry of Education or the Public Forces. Tourism in both locations is still at a very early stage of development and almost did not exist before the founding of *El Camino*. A local home-stay provider explained that the only sporadic travelers consisted of groups of young hikers who a few times a year passed through the village of Cimarrones and were hosted in private houses due to the lack of lodging infrastructure.

San Carlos is located on the second stage of *El Camino*, between Goshen Dock and Cimarrones and serves as a rest point for hikers who arrive to San Carlos around midday and after having a lunch at a local small restaurant continue their walk. Although the development of *El Camino* brought tourism to the community, its scale is still minimal. There is no lodging available there, nor any leisure activities that would encourage travelers to stay longer. The association *Mar a Mar* tried to assist the village by different projects. The first consisted on hiring local young people to plant trees along the main road of the village. The second was a donation of school books to all children in the community starting the new school term. Despite this, the interviewed local leader claimed that the habitants still feel marginalized as those initiatives did not contribute to the creation of tourism employment in the village. In contrast to that, the owners of the large plantations were identified as the most significant contributors to the development of the community as they financed infrastructure projects, e. g. the reconstruction of local primary school and the health center. Insecurity and drug-

related crime that sporadically takes place in this area have been identified in the interviews as main challenges to the growth of tourism.

Cimarrones, which marks the end of the second stage of *El Camino*, is a community that received much attention from *Mar a Mar*. The association put effort to improve the lodging available for the hikers and offered some donations to individuals offering home-stay to improve the conditions of their houses. *Mar a Mar* organized also training projects for the habitants of this community – artisanal craft classes and cultivation of vegetables and animal breeding. However, the location of the center of Cimarrones along the noisy National Road number 32 makes it an unattractive place for visitors who due to lack of additional activities, usually only spend the night in the village and the next morning continue their travel. This situation may become even worse with a new redevelopment project which will convert the road into a four-lane highway. While the central area of Cimarrones has been facing those challenges, there is a section of the community located 2 km up into the mountains, along the small road leading to Barbilla National Park, which may become a potential place for ecotourism development in the community. By being located in a higher altitude, far from the main road, it characterizes with favorable natural conditions to create low-impact lodging infrastructure with attractive views and proximity to *El Camino*.

In the case of San Carlos and Cimarrones, interviewees could not identify ecotourism's positive contributions to ecosystems conservation, as the local lands are dominated by large plantations, and tourism activities almost do not exist. The few habitants that provide food or home-stay services confirmed also that the arrival of visitors is still sporadic and irregular.

Las Brisas de Pacuarito and Nairi Awari Territory

Las Brisas is a small, multiethnic community, which is divided into a part inhabited by White/Mestizos and a part called Tsinikicha, populated by indigenous Cabecar people. Both communities have their own administrative structures as well as primary schools. The village is located near the entrance of Barbilla National Park and hosts the park administration headquarters. This protected area had been created in 1982 and was upgraded to a status of national park in 1998. It conserves 12 000 ha of primary tropical rainforests characterized by very rich biodiversity which is an effect of the large differences in altitude, from 110 to 1617

m above the sea level. It also hosts all 5 species of Costa Rican wildcats.⁹³ The area is also protected through the establishment of three large indigenous territories of the Cabecar people that surround the national park and possess similar natural wealth – Bajo Chirripó, Alto Chirripó and Nairi Awari.

In an interview, the local leader described that White/Mestizo population of Las Brisas work mostly in cultivation of their own lands with few people employed in plantations in the Lower Caribbean region and only one family providing lodging for travelers. She also admitted that recently, there has been a growth of interest in this area among national visitors, a phenomenon that has not happened before, and can be a consequence of both promotion efforts of Barbilla National Park authorities and the association *Mar a Mar*, as well as an effect of the sudden growth of national tourism which seeks unexplored, secluded places in nature and has been connected with the government release of travel restrictions since November 2020. In regard to this development opportunity, *Mar a Mar* has been involved in promoting this area for travelers, particularly hikers and simultaneously assisting the local community in their opening to ecotourism, for examples through projects of job training. Particular efforts are made to improve the access to the wealth of Barbilla National Park through popularization of ecotourism activities and development of trails. However, the interviewed local habitant identified that many local people worry that future inflow of tourists may disturb their peaceful way of life and affect negatively the precious environment of the national park. As for now, Barbilla remains the least visited national park by foreign residents and one of the least visited by nationals.⁹⁴

The indigenous communities of the villages located in the Nairi Awari land, through which *El Camino* passes, for decades have been preserving the traditional way of living based on the goods they could find and cultivate in the rainforest, without the availability of electricity and modern appliances. The administration of the territory obtains financing from the Ministry of Environment and Energy (MINAE) for the conservation of the rainforests (the program of payments for environmental services – Pago por Servicios Ambientales) which the

⁹³ “Parque Nacional Barbilla”, Áreas Protegidas y Parques Nacionales de Costa Rica, Accessed 19.04.2021, <https://areasyparques.com/areasprotegidas/parque-nacional-barbilla/>

⁹⁴ “Visitas de residentes y no residentes a las áreas silvestres protegidas”, Instituto Costarricense de Turismo, Accessed 30.05.2021, <https://www.ict.go.cr/es/documentos-institucionales/estad%C3%ADsticas/cifras-tur%C3%ADsticas/visita-a-las-%C3%A1reas-silvestres-protegidas-sinac/1397-2017-2/file.html>

indigenous association of integral development uses for different projects in the community. However, according to the interviewed indigenous guide and leader, the funds are insufficient to bring progress to the entire land, inhabited by over 600 people and thus, the tribe started to look for complementary earnings from tourism. The pioneer has been the village Tsiöbata, located in the eastern edge of Nairi Awari, close to the banks of the Pacuare River. Thanks to its proximity and easy access from Tres Equis, (a community located along the National Road number 10 connecting the metropolitan area with the central Caribbean region) Tsiöbata have started since 2008 to attract hikers who were sporadically visiting Nairi Awari. When *Mar a Mar* created *El Camino*, the original route of the trail was established through the village of the indigenous community of Valle Escondido, which required very advanced hiking skills. The route Las Brisas/Tsinikicha – Tsiöbata was first considered an alternative, easier hike, but soon became the most frequently chosen path. In effect, Tsiöbata started to be the focal point of the development of cultural tourism in the indigenous territory and obtained strong support from *Mar a Mar*. Interviewed representatives from the association, as well as guides and tour operators, explained that a crucial factor for the successful development of many projects in Tsiöbata, was the active involvement of the young leader of this indigenous community, who was able to combine the traditional life perspective of the old members with the development needs of the community that required increased contact with the outside world. One of the most remarkable projects was the development of “casas cosmogónicas” - two traditional-made houses storying cultural items of the Cabecar people. They were constructed with funds that the association *Mar a Mar* managed to obtain for this project from foreign donors. This largely contributed to the popularization of Tsiöbata as a center of Cabecar cultural tourism. In an interview, the local leader described that the village began to attract not only *El Camino* travelers, but also national hikers interested in the mix of nature and cultural tourism, who started to arrive with different tour operators. He admitted that the community as a whole obtains economic benefits from tourism through entrance fees, while individuals earn money as guides, food and artisanal product sellers, people working in construction and in maintenance of trails. According to the local leader, for many habitants of the indigenous territory, the earnings from these activities are the only source of financial income. Thus, the community is planning to increase tourism by creating a camping platform for an overnight stay of guests and developing a hiking trail that will lead to a 100m waterfall located inside the territory.

Tres Equis

As previously mentioned, Tres Equis is a village located along the National Road number 10, which connects the metropolitan zone, through the canton of Cartago, with the Central Caribbean area. It is accessed by *El Camino* hikers from the east, after crossing the Pacuare River from the Nairi Awari Territory. The trail goes through a 170 ha private property called *Finca Tres Equis – Farm and Forest*, which is the main participant of the project *El Camino de Costa Rica* in this community. It is an old cattle farm that through the last few decades have been gradually converted into rainforest, which now accounts for two thirds of the total area. The owners have been remodeling their business from agriculture to ecotourism, as the area began to attract large numbers of tourists interested in rafting on the Pacuare River (interviews with local habitants revealed that some other owners of lands located along the Pacuare River followed a similar trajectory of development). In an interview the current owner claimed that ecotourism has worked really well as an alternative to agriculture, both in bringing higher incomes and better conservation of the ecosystems. He explained that the rainforest regenerated to the level of a primary forest in just a few decades, which was confirmed by indigenous people reporting in the property similar plant species that in their own territory, as well as by the diversity of fauna caught by night cameras. In the present, the property offers accommodation and food services, as well as different ecotourism activities, i.a. hiking, birdwatching, night wildlife observation tours and horse riding. It combines it with small-scale coffee and cacao cultivations and receives also funding from the government for the conservation of the rainforest (Pago por Servicios Ambientales). In contrast to that, the majority of habitants in Tres Equis do not work in tourism, except a few individuals that live along the main road and provide accommodation and food services (when leaving Tres Equis, most *El Camino* hikers make also a short visit to a local producer of artisanal chocolates). Concerning *El Camino* hikers, interviewed guides pointed out that some of them only walk through *Finca Tres Equis* to the next stage on the trail with their group of tourists, while others decide to spend one day there, in order to take advantage of the ecotourism attractions it offers. Thus, as confirmed by the interviewed owner, travelers doing *El Camino* do not form the majority of visitors he receives.

4.2.2 THE CARIBBEAN SECTION – ANALYSIS AND FINDINGS

Impact of *El Camino*-related ecotourism on rural development

In the case of the Caribbean section, the collected data revealed that ecotourism related to the project *El Camino* had different socio-economic impacts, depending on the community. The habitants of areas with abundant nature, as Barra de Pacuare and the indigenous territory Nairi Awari, noted that *El Camino* significantly contributed to the promotion of those places and the development of local ecotourism. In terms of employment, the people who work in tourism in that areas, claim that it offers higher income than other local livelihoods, and sometimes even the only available income. In contrast, in communities that do not possess rich nature, as San Carlos de Pacuarito and Cimarrones de Siquirres, employed in tourism constitute a small share of the working population, as the numbers of hikers - the only tourists appearing in those villages, is reported by local people to still be very low. However, the research indicated that *El Camino* had positive effects in terms of providing important basic goods to the participating communities. All villages in the Caribbean section benefited from development projects financed by the association *Mar a Mar*. In Barra de Pacuare it was the electrification of the health center, in San Carlos de Pacuarito – plantation of trees and donations to children, while in Cimarrones and Las Brisas – training programs. One of the most significant projects was the construction of the cultural center (casas cosmogónicas) in Tsiöbata, which largely contributed to the emergence of cultural tourism in the indigenous zone. Finally, the case of Tres Equis is different and raises the following question: which ecotourism impacts are actually a contribution of the project *El Camino* and not of other, usually older initiatives? Although the limited data collected for this study do not permit for a detailed estimation, the conducted research allows for some basic conclusions, that will be presented in the following examples. First, in Tres Equis, local big land owners have run successful ecotourism projects, generating higher incomes than from agriculture and contributing to the regeneration of rainforests. However, the study revealed that the transition from land cultivation to ecotourism was initiated decades before the beginning of the project *El Camino*, and was connected with the inflow of tourists interested in rafting on the Pacuare River. Thus, the positive effects of ecotourism in Tres Equis, on both conservation and development, cannot be regarded as driven by *El Camino*, although the inflow since 2018 of additional tourists related to this hiking trail can partially contribute to the continuing

development of ecotourism and its economic and environmental effects. A more significant contribution was found in Barra de Pacuare, where interviewed habitants connected *El Camino* with travelers arriving particularly to visit their local attractions, in contrast to the frequent tourists that came only in short transfer to Tortuguero. *El Camino* hikers, together with volunteers and visitors to local turtle reserves, have been considered as principal drivers of local ecotourism, which has been also regarded by the local municipality as the most important strategy for development, initiating public investments in transportation infrastructure and security in the area. Thus, in this case, the impact of *El Camino*-related ecotourism has been found as higher than in Tres Equis. Finally, the study found that the appearance and growth of ecotourism in the Nairi Awari territory, especially in Tsiöbata, can be fully regarded as driven by *El Camino*, which was described in detail before. Also the presented most recent developments in Las Brisas/Tsinikicha and Barbilla National Park show that a similar scenario of *El Camino*-driven emergence of ecotourism is beginning to develop there.

Impact of *El Camino*-related ecotourism on ecosystems conservation

Regarding the Caribbean section, because of the anthropogenic characteristics of some areas and limitations during the field research, the majority of findings regarding environmental impacts of *El Camino*-related ecotourism are limited to Barra de Pacuare. San Carlos and Cimarrones are located in areas almost entirely dominated by anthropogenic landscapes consisting in human infrastructure and large plantations and thus, has been excluded from this part of analysis. In the case of Las Brisas/Tsinikicha and Nairi Awari territory, the findings are minimal, because of several reasons. First, those areas were never exploited and according to interviewed local people involved in conservation, they have been effectively protected for long time by legal restrictions in both the Barbilla National Park and the surrounding indigenous territories. Very low human population leading a traditional way of rural life, as well as indigenous people's respectful attitude towards nature were mentioned as another factors contributing to the preservation of those areas. Finally, the very short stay in the area, that was a consequence of unfavorable weather conditions and temporary access restrictions, limited the opportunity to gather data from direct observations and contact with more local habitants. In the case of Tres Equis, most findings were already mentioned in the

previous section – the development of ecotourism had large positive impacts on the regeneration of local rainforests and pro-conservation attitude of local land owners and other people working in tourism, however, local ecotourism has its origins in the Pacuare River rafting initiated decades ago. Thus, *El Camino*-related ecotourism can be regarded only as a contributor to the continuation of this positive environmental effects.

The data obtained about ecotourism in Barra de Pacuare indicated that this natural area faces big challenges related to environmental degradation. Local people pointed out that the constant contamination of the water canals has been the biggest threat for both the ecosystem and their own livings, suggesting also that the development of ecotourism and increase inflow of visitors will motivate the public authorities to intervene and force large plantations to stop this harmful process. Thus, initiatives as *El Camino*, focused on increasing ecotourism in the area, can be regarded as contributing to the efforts of ecosystems preservation in Barra Pacuare. According to the interviewed habitants, one of the biggest benefits of ecotourism, that already can be observed, is the changed attitude of local people towards hunting. Especially villagers working in ecotourism were regarded by interviewees as totally opposing hunting, especially when they noticed that living animals can bring higher benefits than their meat. As one of them said:

“Why would I want to kill an iguana for meat, as we did in the past, if one foreign tourist from El Camino de Costa Rica is ready to give me 20\$ for showing him this living animal during a boat ride. The same apply to turtles. Tourists pay much more for observing them than this small group of people that still wants to spend money on their meat or eggs.”⁹⁵

In regard to turtles however, local people from Barra Pacuare confirmed that illegal hunting and egg collection still sometimes takes place. Taking into account that this area belongs to the poorest in the entire country, and that the levels of tourism are still very low, comparing to many overpromoted destinations in Costa Rica, this leads to the conclusion, that legal restrictions, when not accompanied with initiatives providing development and direct economic benefits to local communities (e.g. ecotourism), are often insufficient for effective conservation.

⁹⁵ Recordings (in Spanish) and summaries (in English) of the interviews are available upon request.

4.2.3 THE CENTRAL SECTION - CHARACTERISTICS

Figure 3. *Map of the Central section of El Camino de Costa Rica*



Source: Author's own elaboration based on Wikiloc.com (<https://www.wikiloc.com/hiking-trails/el-camino-de-costa-rica-atlantico-mar-caribe-al-pacifico-via-tsiobata-57171637>)

The Central section begins in the village of Pacayitas (with alternative route leading there from Mollejones) located in the canton of Turrialba, south of Tres Equis, and continues through La Suiza and Pejibaye to the communities that border the large area of Tapantí National Park – Purisil, Oroquí (sector of Río Macho), Navarro de Muñeco and Palo Verde Cloud Forest. The field study continued with a hike from Tres Equis to Mollejones and Pacayitas followed by a 2-day stay in this area that included participation in the daily activities of the villagers and six interviews – with three accommodation and food providers, one tour operator and two artisanal producers. The next day was dedicated to a hike from Pacayitas to La Suiza and a car transfer from La Suiza to Pejibaye. The author stayed two days in Pejibaye interviewing three local accommodation and food providers and visiting El Copal Reserve. After that, the field study continued with a hike from El Copal to Oroquí (Río Macho), passing through Purisil where one restaurant owner and one former owner of a lodge were

interviewed. During one evening in Rio Macho, three local entrepreneurs involved in tourism were also interviewed. The next day was dedicated to a hike from Rio Macho to Navarro de Muñeco where in the afternoon the author interviewed the owner of the local restaurant and one owner of cabins. The last two days of the field study in the Central section consisted in a hike to the Palo Verde Reserve, an interview with the owner and a visit to a nearby retreat center where both the owner and the executive director of *Mar a Mar* were interviewed.

Mollejones and Pacayitas

Mollejones and Pacayitas are two villages located in the mountainous area of Turrialba canton - between indigenous territories in the east and the National Road number 10 in the west. All of the interviewed habitants identified small and medium-scale land cultivation as the dominant occupation in the villages. The local agriculture includes sugar cane plantations and processing, milk production, coffee, cacao and various kinds of vegetables and fruits for own consumption. Many local habitants admitted also that rural tourism has well developed as a complementary source of economic growth for the communities. In both villages, this type of tourism was initiated by cooperation with schools from the United States which have been sending students for voluntary programs. In Mollejones, since 2013 local families have been offering home stays to young volunteers (13-17 years old) who during their 5-6 day visit helped the villagers with projects around the local school and churches as painting and gardening. At the same time the community offered them tours of local cane sugar production, making of tortillas or artisanal crafts. According to the interviewed villager, around 14 families in Mollejones have been participating in hosting volunteers. In Pacayitas, a similar process of creating rural tourism was initiated in 2012 by the founder of *Finca ViaLig*, who began to bring students from the United States for programs of “communitarian service” in the village. During an interview he described that initially, in a community inhabited only by farmers, the ideas of creating rural tourism have been treated with a lot of skepticism and lack of interest. Volunteers have been hosted by local families, in the mornings helping with projects in the school and during the afternoons participating in diverse tours introducing them in the rural life of the village, as coffee and milk production or butterfly farming. According to the interviewed local tour operator, those activities created good foundations

for the villages to involve in *El Camino* since 2018. The communities were already prepared to receive foreign tourists and offer them a unique experience of rural life.

The field study indicated that *El Camino* brought an opportunity for the local communities to extend their tourism services beyond the holiday period (February-March and June-August). Hikers, who started arriving regularly since 2018, allowed some habitants to dedicate to tourism all year round. The founder of *Finca ViaLig* extended his activities through a new local tour company *ViaLig Journeys* that began to organize guided hikes through the entire *El Camino*. At least two families started to offer food and accommodation services in Pacayitas, creating a capacity to receive larger groups of tourists. One of them received also financial support from *Mar a Mar* to extend housing facilities. In addition, several other families continued to offer home-stays. During the field study local producers of coffee, cacao and artisanal cookies confirmed that thanks to *El Camino* they have a chance to sell larger amounts of products and host regularly visitors interested in learning about the traditional process of food elaboration. In one interview, a local guide explained that for many of those local artisanal producers, incomes from tours compensated them the use of traditional, manual methods that are not as efficient as mass production. The research also revealed that there is not only close cooperation between many actors in the community, but even competition between some individuals, which acts as a driver to develop their entrepreneurial skills and improve the quality of services offered to tourists. The scale of arriving tourism was assessed by interviewed villagers as very significant before March 2020. After that period, the cooperation with foreign schools was temporarily stopped due to travel restrictions introduced by the government (and was not restored yet), and the inflow of *El Camino* hikers from abroad was significantly reduced. However, since the release of the limitations to the tourist sector by Costa Rican government in the end of last year, national tourism have been growing fast, partially compensating the decreased number of foreign travelers. National visitors have been reported to arrive usually in the weekends, as large groups of hikers (around 30 people). They are led by local tour operators, who guide them through the stage of *El Camino* that leads to La Suiza, starting from a breakfast in Pacayitas. Asked for an economic impact of *El Camino*-related tourism, all respondents in Mollejones and Pacayitas perceive it as significant. For instance, a local guide explained that the income gained during one day of guiding tourists on *El Camino* exceed the earnings from an all-day hard work in the local sugar

cane plantation. As there are no other sources of paid job in the villages, apart from tourism and seasonal work in medium scale commercial agriculture, most interviewed local people regarded employment in *El Camino*-related tourism as essential for the maintenance of their families. Finally, local habitants offering accommodation were asked about the impacts of tourism on environmental protection. Many admitted that the arrival of tourists motivated them to create spaces with untouched natural environments that will be appreciated by visitors. One of them explained that thanks to the development of ecotourism, he decided to maintain a large part of his land as a forest. Direct observations in the area confirmed, that this property contrasted with the farmlands owned by people involved only in agriculture.

Pejibaye and El Copal

The community of Pejibaye is located next to a river that holds the same name and attracts many local tourists who seek for a natural place to rest. Its crystal-clear waters come from the Tapantí National Park in the south, which is one of the largest protected areas in Costa Rica (58 495 ha) and one of the most rainy regions of the country.⁹⁶ Its mountain cloud forests that extend from 700 to 3491 m above the sea level host around 150 rivers which makes Tapantí one of country's most crucial clean water suppliers.⁹⁷ Many visitors have been coming to Pejibaye to take a hike inside La Marta Wildlife Refuge located on the edges of this national park, which is a former agriculture property, that has been converted into a protected area many decades ago and hosts primary and secondary forests, as well as ruins of historical agriculture infrastructure. On the opposite side of Pejibaye, west of the sector of El Humo, there is another private reserve, called El Copal, which is less known and has been integrated into the project of *El Camino*. El Copal is a 177ha area, almost entirely covered by a primary forest, which according to an interviewed employee, was purchased in 1987 by 11 local farmers from Pejibaye, El Humo and Taus. After introducing some small agriculture in limited parts of the land (coffee and cattle farming) they noticed that the soil is not convenient for agricultural use because of high concentration of clay and decided to use it for conservation. In the late 1990s, the owners developed basic infrastructure on the top of one of the hills (two

⁹⁶ "Parque Nacional Tapantí Macizo de la Muerte", SINAC, Accessed 20.05.2021, <http://www.sinac.go.cr/ES/ac/accvc/pntpmm/Paginas/default.aspx>

⁹⁷ Idem.

lodges) with the financial aid of a program of small donations for development. Thus, in 2001 the area was opened for tourists who at the beginning consisted mostly of groups of students, birdwatchers and scientists (the reserve claims that there are 380 species of birds that have been reported and many visitors are particularly attracted by the snowcap hummingbirds that are very easy to spot in this place). The interviewed person employed in the reserve described, that in the following years, El Copal hosted mostly groups of international hikers, usually no more than 2 groups a month spending 1-2 days in the reserve. She mentioned also that according to the statistical data kept in the reserve, 227 tourists visited El Copal in 2019. Because of lack of promotion, the reserve remained unknown even to most nationals, and it was hard to achieve sufficient profit from ecotourism operations (a minimum of 3-4 groups per month would be required). Thus, the owners applied for the government program of payments for rainforest conservation (Pago por Servicios Ambientales) which was granted in 2017 for five years. Asked for the biggest challenges, the interviewee in the reserve explained that apart from lack of economic profitability, El Copal faces also sporadic illegal hunting with dogs.

Despite having all those attractions, Pejibaye has not significantly developed tourism yet. The owners of *Rio del Valle*, one of the most famous eco-lodging places in the village, in an interview confirmed that the local community has not taken advantage of its good conditions for tourism development and visitors who would like to do activities as rafting or cycling have to contract agencies from Turrialba. There are not many families involved in tourism in Pejibaye, however the three that participate in *El Camino* and took part in the research, acknowledged that they obtain earnings that surpass the income they could gain in other occupations available in the village. Two of them admitted that tourists arriving with *El Camino* constitute “a large part of all visitors”, while the remaining one described this share as “very small”. One of the interviewed owners combines also lodging with other activities - agriculture and tours of bees. According to the interviewees, the majority of tourists in Pejibaye are national visitors, with some foreigners usually passing through the area when doing *El Camino*. The surveyed owners of properties in Pejibaye acknowledged also that ecotourism has been one of the principal motivators for reforestation of their lands as well as for the development of lodging infrastructure friendly with the local environment.

Purisil

Purisil is a very small community situated in the middle point of *El Camino*, 2km from the bridge over the Orosí River, that flows out from the entrance of Tapantí National Park. Despite being located along the main road leading to this protected area, the field study revealed that tourism still plays a minimal role in the socio-economic life of the local community which does not have infrastructure connected to receiving visitors. Most travelers to the national park dedicate only one day to the stay in the area, as similarly to the village, Tapantí has no restaurants or lodging facilities. In Purisil, there is only one food store and one very small restaurant whose owner has an agreement with the national park administration to recommend the catering services of local women to groups of tourists. Comparing to other national parks in Costa Rica, Tapantí receives a relatively low amount of visitors, especially when considering its large size (around 20 000 tourists yearly, who are mostly national residents).⁹⁸ This national park, established in 1982, is part of an immense protected area called Talamanca Range-La Amistad Reserve which extends far beyond the border of Panama and has been declared a World Heritage Site. In the interviews, local habitants signalized that while the ecosystems are being preserved in good condition, the biggest challenge has been the very low number of guards provided by the government (in case of Tapantí, locals estimated that less than 10 guards are watching over the entire territory). In consequence, there are frequent cases of illegal hunting with dogs that take place in the protected areas and the guards when informed, almost always are unable to react in time. Concerning visitors to Tapantí, local habitants declared that they consist mostly of groups of cyclists and families arriving during weekends and the Easter holiday period. Before 2020, the incomes of the restaurant owner and two other assisting women were significant as groups were regularly coming and even some other villagers benefited by providing space for camping around their homes. The owner described that currently (February 2021), after more than half year of complete closure of tourism in the country, visitors, mostly nationals, are coming back to the area, however sanitary restrictions make it impossible to offer again catering services inside the national park. The majority of people in Purisil still work in own small agriculture or have to travel to Orosí or Cartago for employment as according to the interviewed restaurant

⁹⁸ "Visitas de residentes y no residentes a las áreas silvestres protegidas", Instituto Costarricense de Turismo, Accessed 30.05.2021, <https://www.ict.go.cr/es/documentos-institucionales/estad%C3%ADsticas/cifras-tur%C3%ADsticas/visita-a-las-%C3%A1reas-silvestres-protegidas-sinac/1397-2017-2/file.html>

owner, the local agricultural plantations of red pepper, tomatoes and coffee prefer to contract workers from Nicaragua. Commenting also the lack of development in the area, the interviewee believe that public or non-profit organizations could contribute to the development of the community by creating some tourism infrastructure e.g. pleasant space in the central square, butterfly farms, places to sell artisanal crafts, food. One of the main identified challenges for the growth of local tourism has been the blockade of the access to the river that the local community always had until a private owner created tomato and red pepper plantations, closing the road. The river (which is public, unlike the access) was not only a source of recreation but it also brought many visitors from other communities in the region, which contributed to the economy of Purisil through purchases of food, drinks, parking permissions, etc. For *Mar a Mar*, this small community is considered important as it is located exactly in the middle of *El Camino*. The association installed a sign next to the small restaurant and donated funds to the owner to put concrete around the property where future hikers may put their tents for camping. Another place in the area that was considered relevant for *El Camino* was the lodge *Hongos Tapantí*, located 7km before the village, where begins the descending in the route from El Copal towards Tapantí and Purisil. This property hosted the official inauguration of the project *El Camino* in 2018 with the participation of the president of Costa Rica, Luis Guillermo Solís. The lodge, located in a point where hikers traveling from both directions finish ascending, was developed by one of the key contributors to this project in the region, who had to stop the operations due to the long reconstruction of the bridge over Orosí River and constant road blockades.

Orosí (Rio Macho)

The area of Orosí is a well-known tourist destination among national residents, particularly for weekends and holidays. As the former president of the Tourism Association of Orosí describes:

“In terms of tourism we have everything. We have adventure tourism – cycling (the town is full of bikes during weekends, it is hard to drive a car), clean rivers where you can do rafting or sport fishing, zip lining. We have mountains with hiking trails and many viewpoints. A lot of people come for bird watching and ecological tourism. Orosí is the gate to the largest protected

area in Costa Rica, which starts from Tapantí here, and extends until Bocas del Toro in Panama. We also have thermal waters. And we have historical and religious tourism – Orosí was one of the first colonial towns in Costa Rica and it has the oldest running church as well as a museum of colonial history. The town is also nationally famous of its gastronomy. Orosí has the largest amount of accommodation in the province of Cartago (1200 beds).”⁹⁹

Looking into all the attractions that this small town and its surroundings have to offer, as well as at its strategic position of the area – in the center of the country, very close to the largest cities that form the metropolitan area (Gran Área Metropolitana), home of 60% of Costa Rica’s population, it becomes clear that Orosí was an attractive place to include in *El Camino*. Thanks to that, hikers are given access to all mentioned attractions and local tour operators can easily find national tourists for short hikes on 1 or 2 stages of *El Camino*. The official route does not pass through the historical center of the town, but 3km to the south through the area called Rio Macho, located up in the mountains. Historically, this area was an agricultural zone (cattle farms and coffee plantations) whose environment was heavily impacted by the construction of a water reservoir for a hydroelectric project in the 1960s. According to the interviewed local entrepreneur, after its finalization, the Costa Rican Institute of Electricity reforested the area with cypress, eucalyptus and fruit trees to revitalize it. Most agriculture also disappeared, and since the 1970s the area has been strictly protected by laws that acknowledged its high importance for the water resources and proximity to national parks. Nowadays, it is forbidden to cut trees and even recollect wood from the rivers. Interviewed local habitants report a significant increase in animals spotted around their homes compared to the previous decades, especially birds and mammals (as lowland pacas and margays). They mentioned also that the law strictly forbids the development of numerous industries, not only heavy and light manufacturing but even large animal farming, food processing or car rental services. While some of those regulations are appreciated by interviewed people and regarded as contributing to the conservation of the environment, other policies are believed to be illogical and act against the economic growth of the region. Due to the significant development of tourism in the region, many land owners extended their activities beyond traditional farming. An example affiliated with the project *El Camino* is *Finca Queveri*, located a few kilometers from the trail in Rio Macho. Originally a farmland, it has

⁹⁹ Recordings (in Spanish) and summaries (in English) of the interviews are available upon request.

been converted into a property that combines cattle farming in accordance to the animal welfare standards (that define the 5 liberties of animals) with forest conservation and ecotourism activities focused on giving the best experience of a sustainable agricultural farm. The interviewed owner explained that the combination of those three activities gave “an aggregated value to traditional cattle production”. He pointed out also that the government is more eager to subsidize farmers who decide to reforest their areas (especially those located in biological corridors) rather than landowners of already existing primary forests. In terms of changes in the local environment, interviewed local habitants spotted a significant difference, explaining that in the past hunting animals for recreation was very common, as well as cutting trees in the forests. They regarded both national laws and the development of ecotourism as important contributors to the change. One interviewee added that European tourists, who are usually characterized by critical attitude, had a strong impact on the behavior of local people, who started to pay more attention on protecting the environment. Thus, foreign visitors play a special role as “auditors” who generate a moral obligation among locals to be very conscious and careful with their activities. In this context, *El Camino* has been assessed by interviewed people as an important initiative supporting ecosystems conservation as it provides more international tourists in the area, especially during weekdays which usually are periods of reduced amounts of tourism activities. Despite the unquestionable change in relation to environmental protection in the area, there are still some aspects that require improvement. One of the negative effects mentioned in the interviews that still takes place is the constant use of large amount of agrochemicals in some plantations. Direct observations during the field research in the area confirmed also that chemical substances, instead of cutting, are being used by some people to get rid of the unwanted grass. This behavior, which is being easily spotted by tourists as it sometimes takes place close to roads and hiking trails, is not an uncommon practice in Costa Rica, and strongly contradicts with the ecological image that the country tries to promote.

Navarro de Muñeco

Navarro de Muñeco is a very small community located 10 km to the south from Cartago. According to the interviewed restaurant owner, the habitants of the village are composed by only four families and some older man living alone who take care of the large

local properties. The field study revealed that Navarro de Muñeco lacks with most basic infrastructure. The government does not provide electricity service, drinkable water or telecommunication. There is also no public transportation to the village, nor rubbish recollection service. The interviewee also indicated, that in terms of employment there are no opportunities for the locals apart from coffee plantations that contract only for short periods of recollection. In terms of tourism, Navarro de Muñeco since years has been experiencing an inflow of visitors seeking for outdoor attractions during the weekends, e.g. spending time on the river, cycling, ATVs, horse riding. The village and its surroundings became a popular destination for those activities as it is the closest natural area accessible for habitants of the city of Cartago - in Navarro de Muñeco begins the Protection Zone Rio Sombrero - Rio Navarro which extends south until Tapantí National Park. However, the research found that all touristic activities in the village are contracted in external agencies. The village itself did not provide any services for visitors until around 2012, when the first local small restaurant (soda) was established. The founder was an unemployed women who noticed that tourists passing regularly during the weekends through Navarro de Muñeco seek for any place to buy refreshment or snacks, but none was existing in the village. The small business grew when the route of *El Camino* was established in this area and for first time, tourists started sporadically to appear also during the weekdays. The owner commented:

*“ I always say that thanks to El Camino, I could send my daughter to study. Without regular visitors, I would not be able to pay for her everyday transportation to Cartago. El Camino brought also earnings to other people in Navarro de Muñeco. While I am offering always the services of food, another person here who owns lodges, provides accommodation for tourists and there is also someone local that earns by transporting the luggage”.*¹⁰⁰

An interesting phenomena, that was also observed in other communities on *El Camino*, has been the unprecedented growth of national visitors since November 2020 when most restrictions in Costa Rica to the tourism industry were released. Interviewees from Navarro de Muñeco described that national travelers, mostly families, started to look for quiet and secluded places in this village, not only for weekend stays but sometimes even during weekdays. Thus, the numbers of visitors have surpassed the best pre-restriction periods.

¹⁰⁰ Recordings (in Spanish) and summaries (in English) of the interviews are available upon request.

The biggest identified challenge is the complete lack of infrastructure provided by the government, especially telecommunication signal, which makes difficult to contact with tourists and does not allow local children to follow classes remotely. However, the restaurant owner also pointed out that she would not like the entire infrastructure to arrive to the area, especially public transportation, as it could transform this peaceful place into a mass tourism destination. At the moment, there are a few private properties developing lodging infrastructure in the village.

Palo Verde Cloud Forest

Palo Verde Cloud Forest is a private reserve, located inside the Protection Zone Rio Sombrero - Rio Navarro, and conserves 692 ha of primary and secondary tropical cloud rainforest. In the 1970s and 1980s its western part was used for agriculture (milk production), however, since the area was declared a protection zone in 1982 because of having rich water resources, the owners decided to reforest the entire property and dedicate to conservation.¹⁰¹ By being located in different altitudes, the reserve is characterized by high biodiversity. One of the owners, who is a guide in the reserve, claimed that during a week stay, birdwatchers can observe over 300 species of birds, including the famous quetzals and three-waddled bell birds. Palo Verde was opened to visitors in 1992, however in that times the access to the area was difficult and accommodation options were very limited. The interviewed owners described that visitors initially were coming to hike only between December and April, before the start of the rainy season. Four years ago they began to dedicate fully to ecotourism, developing several hiking routes as well as a new wooden house and a smaller lodge to host tourists. In 2018, when *El Camino* was established, the owners contacted *Mar a Mar* suggesting a route through the reserve. Since then, it became a crucial stage of the trail as it offers one of the most wild and beautiful hiking experiences on *El Camino*. Currently, the reserve is being maintained by both financing from the government program of payments for environmental services (Pago por Servicios Ambientales) and incomes from the entrance fee paid by visitors who according to the owner, are mostly birdwatchers, families or *El Camino* hikers (usually small groups of foreigners and larger groups of nationals). Some of the visitors

¹⁰¹ In Costa Rica protection zones are areas created over private lands, often with proximity to national parks, that restrict the industrial and agricultural activities to those that do not impact negatively the environment.

decide for an overnight stay in the lodge which provides additional earnings to the reserve. The owner acknowledges that in terms of ecosystems conservation, there were many factors that contributed to a positive transformation. First, the change in legislation since the 1990s – from supporting agriculture into creation of protected areas in the country as well as subsidies to owners for reforestation. It was accompanied by educational efforts led by Costa Rican governments in that period aimed to change people's consciousness about the nature. Furthermore, the development of ecotourism, especially initiatives attracting foreign visitors as *El Camino*, influenced even more local people commitment to environmental protection. Similarly to interviewees in some previously discussed *El Camino* areas, the owners of Palo Verde admitted that illegal hunting with dogs still takes place sporadically and the guards that patrol the neighboring public protected areas are always unable to react despite receiving calls because of very low personnel number. In recent years, other ecotourism businesses were also developed in the area, as the retreat center *Verdesana*, river canopy activities and different lodging places. Interviews indicated that many new job positions in tourism were created thanks to properties like the Palo Verde Reserve or *Verdesana* that need assistance in different activities, e.g. maintenance of trails, food preparation. In addition, the executive director of *Mar a Mar* explained that high standard ecotourism accommodation providers as *Verdesana* are important for *El Camino* as they are under high demand from the segment of hikers with high budget.

4.2.4 THE CENTRAL SECTION – ANALYSIS AND FINDINGS

Impact of *El Camino*-related ecotourism on rural development

The field study found that *El Camino*-related ecotourism effectively supported rural development in some villages in the Central section. According to interviewed people in Pacayitas and Mollejones, local tourism brings higher incomes than alternative livelihoods. The role of *El Camino* was considered important there, as it brings earnings from arriving tourists all year round, in contrast with the seasonal voluntary programs. The research revealed that in Navarro de Muñeco the economic impact of *El Camino*-related ecotourism is also significant, as it provides the only available regular income to the interviewed habitants. In some other communities, the development effect was smaller or cannot be regarded as a

major contribution of *El Camino*. In Orosí for example, where tourism has been well developed since decades, *El Camino* hikers constitute a minimal part of the total amount of arriving visitors and their economic impact is insignificant. In Pejibaye, the arrival of tourists connected with the project brought moderate economic benefits to accommodation providers. In Purisil, the effect has been minimal and the community can be regarded as one of the most underdeveloped in the Central section of *El Camino*. Despite being located close to the entrance to Tapantí National Park, as well as in the middle of *El Camino*, no tourism services can be found in the village. Regarding El Copal and Palo Verde reserves, the economic impact of *El Camino* hikers has been moderate. The interviews with the owners indicated, that although they host also other visitors, as birdwatchers or families, the total numbers of arriving tourists is not high, which makes the contribution of *El Camino* relatively important, both in terms of owners earnings and employment positions for locals in the reserves. In addition, *El Camino* plays also a more important, promotional role for these reserves, making them more recognizable in the touristic map of Costa Rica. Finally, the study found also that the role of *El Camino*-related ecotourism on providing access to basic resources as education, job training or assistance to local habitants in developing ecotourism infrastructure was significantly smaller in the Central section than in the Caribbean section. This can be explained by the fact that the areas of the Central section are more developed and did not required many assistance comparing to the marginalized communities in the Caribbean. This is also reflected by the HDI Index (for 2018). The cantons located in the Central section: Turrialba (0,809), Jimenez (0,795), Paraiso (0,816) and El Guarco (0,825), have notably higher HDI than the canton of Matina (0,671) where most of the Caribbean section of *El Camino* is located.¹⁰²

Impact of *El Camino*-related ecotourism on ecosystems conservation

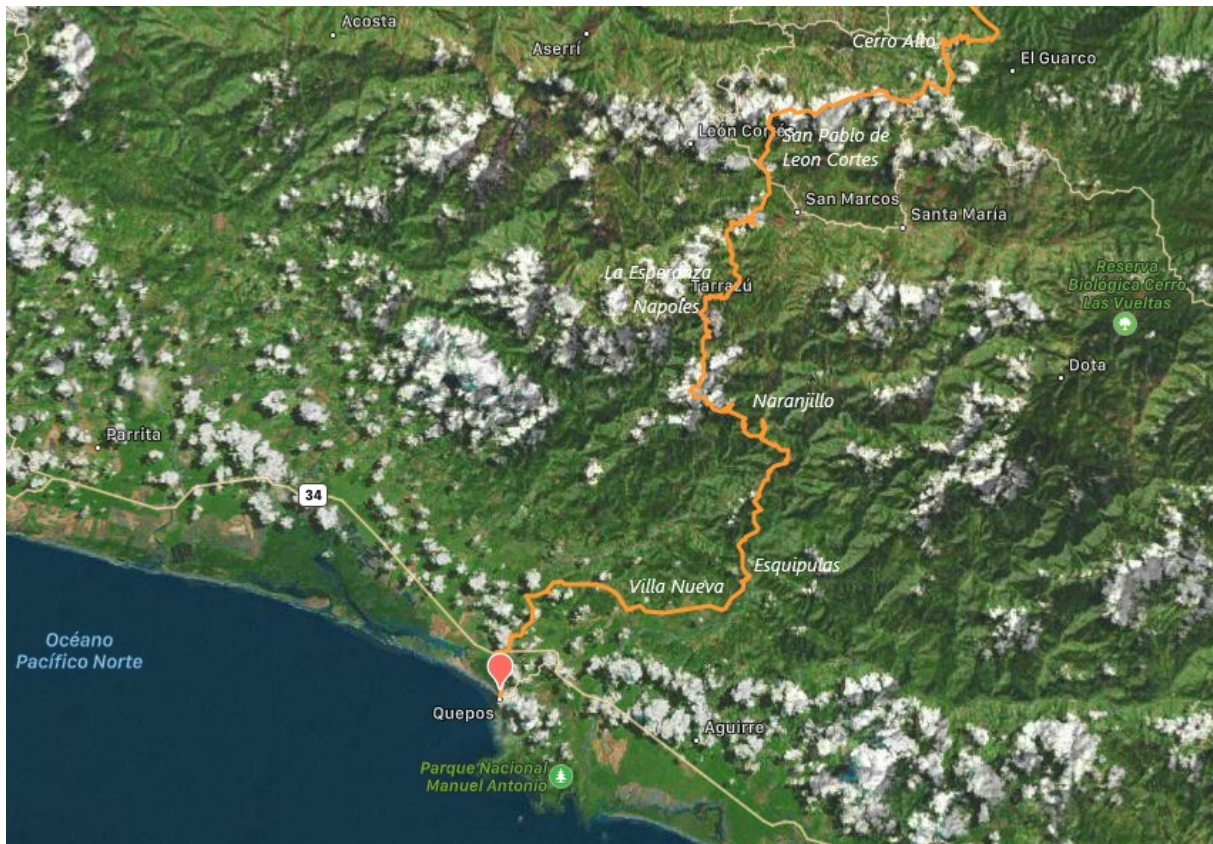
The principal areas for analysis of the effects of *El Camino*-related ecotourism on ecosystems conservation in the Central section are the private reserves of El Copal and Palo Verde. As mentioned before, the research found that the project provides direct economic benefits to the owners through entrance fees and money spent on food and accommodation

¹⁰² “Índice de Desarrollo Humano Cantonal, Atlas de Desarrollo Humano Cantonal de Costa Rica”, UNDP, Accessed 01.05.2021 <https://www.cr.undp.org/content/costarica/es/home/atlas-de-desarrollo-humano-cantonal.html>

by hikers, and indirect benefits through popularization of those natural areas which struggle with lack of promotion. Thus, *El Camino*-related ecotourism supports the conservation of the ecosystems in the reserves by contributing to their profitability, although it is important to note that it is not crucial for their existence, as according to legal restrictions in both areas, the owners would not be able to cut the forests. Increased ecotourism however may contribute to a better protection of the reserves. For example, in the case of El Copal, sporadic illegal hunting with dogs was mentioned as one of the challenges. Taking into consideration that an increased number of hikers will arrive with the potential development of *El Camino*, this might contribute to the earnings of the owners, allowing them to contract more guards to patrol the area. Regarding conservation attitudes of the communities in the Central section, the research found that ecotourism motivated people in Pejibaye, Pacayitas and Orosí to perform environmentally friendly practices as conservation of the nature in their surroundings, reforestation, construction of ecological lodges and respectful behavior towards the environment. International tourists, especially from Europe, have been perceived as auditors that pay close attention at those practices and can impact the behavior of local people. In this context, *El Camino* is a significant contributor to the conservation of the ecosystems, as it provides mostly international visitors who additionally arrive often during the weekdays when no other tourists are present. However, as examples given in the descriptions of the study shows, not all harmful practices have disappeared.

4.2.5 THE PACIFIC SECTION - CHARACTERISTICS

Figure 4. Map of the Pacific section of El Camino de Costa Rica



Source: Author's own elaboration based on Wikiloc.com (<https://www.wikiloc.com/hiking-trails/el-camino-de-costa-rica-atlantico-mar-caribe-al-pacifico-via-tsiobata-57171637>)

The Pacific Section starts on the trail leading from Palo Verde Reserve to the highest point of the route in Cerro Alto (2338 m) and continues mostly descending through Los Santos Zone to Esquipulas and Quepos. The field study continued from Palo Verde to Los Santos Zone, omitting the community of Cerro Alto because of unwillingness of the local lodging owner, that usually hosts *El Camino* hikers, to participate in the research. Direct observations during the transfer through that area revealed that because of its location along the Interamerican Highway it receives large amounts of mass tourism, which makes the impacts of ecotourism related to *El Camino* minimal. In this situation, the research in the Pacific section started in San Pablo de León Cortes, a medium size community located in the north of Los Santos Zone. During a 2-day stay in the area, 4 local actors involved in both ecological farming and ecotourism were visited and interviewed. The next day was dedicated to a hike from San Pablo

de León Cortes to La Esperanza where a local accommodation provider and a coffee cultivator were also visited and interviewed. From La Esperanza the field study continued with a hike to Naranjillo where a local owner of an ecotourism property outside the village was interviewed. In the village of Naranjillo the author took only direct observations because of difficulties with arranging a meeting with the local leader, however additional data about this community was obtained from interviews with the tour operators and representatives from *Mar a Mar*. The afternoon of the same day was dedicated for a car transfer from Naranjillo to Esquipulas. During a 2-day stay in Esquipulas the author participated in the activities of the owners of two properties dedicated to ecotourism, collecting data from numerous conversations and from an interview with a local person that offers catering services for tourists. The next day, the author was transferred to Villa Nueva where a local owner of cabins was interviewed. At this point the field research for this study ended as the next community – Quepos – was excluded from the research because of being one of the largest centers of massive tourism in Costa Rica (as explained in the methodology).

Los Santos Zone

The zone of Los Santos is nationally famous for coffee production. The plantations here are located at a high altitude of over 1500 m which gives the coffee fruits a specific taste. The route of *El Camino* initially descends to the main inhabited centers of this area – San Pablo de León Cortés and San Marcos de Tarrazu, and continues south through Nápoles (alternative route through La Esperanza) to Naranjillo. As the land structure of Los Santos Zone is mostly composed by plantations, the ecosystems in this region belong to one of the most exploited on *El Camino*. According to interviewed local habitants, the balance between nature and coffee plantations has been always a challenge for this area. Large parts of those cultivations belong to big companies specialized in mass production, however, small entrepreneurs (called “microbeneficios”) are also common in this area. All three interviewed owners of microbeneficios pointed out that while 40 years ago the cultivation of coffee was a source of high earnings, nowadays even businesses that developed own processing and elaboration have to struggle in order to make profits. It became a consequence of constantly growing costs of production (maintenance, labor force, electricity, fertilizers) accompanied by very stable coffee prices. Small productors, in order to compete with large companies and make profits,

have been forced to specialize in coffee cultivation for a very fine, high-end market. Others switched also to the more beneficial avocado production which according to the interviewed local coffee producer, can bring even 6 times higher earnings. One of the most significant joint efforts made by local coffee microbeneficiarios was the establishment of the certification of origin that denominates the cultivations from Los Santos Zone as Café Tarrazu. However, interviewees explained that the organic and high-end market segments are characterized by the strong role of intermediaries who mandate the prices and earn high commissions. Thus, many producers (including all three that participated in this research) have tried to add aggregated value to their coffee production by offering tours of coffee cultivation, processing and degustation. In effect, coffee tours became the most popular tourism activity in the area and according to the producers, they are often selected by short time visitors who decide to spend one night in the zone because of its favorable transit location between the South Pacific region of Costa Rica (Manuel Antonio, Corcovado) and the Caribbean region (Puerto Viejo, Tortuguero).

The growth of travelers interested in coffee production boosted also the development of other tourism activities in Los Santos Zone. Some properties decided to differentiate from the predominant coffee production and use the land for more environmental friendly activities. According to interviewed members of *Mar a Mar*, one of the most important contributors to this growth has been the owner of *Finca El Casquillo* who since the establishment of *El Camino* has been making efforts to consolidate together different actors in the area that offer diverse ecotourism activities. Her property is an organic farm specialized in bio-intensive agriculture, permaculture and sustainable construction and promotes also spiritual and holistic human development. It organizes also workshops, short tours and provides food and accommodation services for tourists. The research also found that although the area has several conventional accommodation options, there are some providers that offer very different alternatives, e.g. the lodges *El Coyote* located in one of the few remaining small forested areas that were not converted into coffee plantations because of the rocky surface. In effect, the owners decided to conserve the forest and develop some short trails and lodges. The owner stated that earnings from this form of tourism are significantly higher than coffee production and that in the last few months his property experienced also an increased inflow of national tourists seeking for secluded natural places. Another place that

operates very differently from the majority of local properties is *Finca Los Lirios*, located in the small village La Esperanza, which is totally surrounded by mountainous coffee plantations. The owners, seeing the negative impact of massive agriculture and use of fertilizers on the environment, decided to dedicate to conservation, preserving the forest that covers most of their land and developing small scale ecological farming. They started also to offer accommodation and food services to tourists, becoming one of the few lodging locations available to hikers on this stage of *El Camino*. During the interview, the owners stated that offering ecotourism services plays an important role in being able to maintain themselves by continuing an environmentally friendly management of their property. Another tourism initiative that took part in the research was *EcoMiel*, a honey production farm that began to organize bee tours that offer to visitors the chance to observe from close the life of those animals in a safe way. This local entrepreneur decided to complement earnings from honey production through ecotourism activities. As observed during the visit in the area, the organization of bee tours was a motivation to revitalize the land with new trees in order to create a pleasant and natural looking space for visitors.

Naranjillo

The study found that the southernmost part of Los Santos Zone, where the village of Naranjillo is located, is an area that has experienced major reforestation in the last decades. Large cattle farms and plantations (coffee, annatto, beans, rice, yuca) have mostly disappeared. According to the interviewed local habitants, this process has been a consequence of major depopulation of the region as most people that traditionally had worked in agriculture were deciding to emigrate to big cities in search for better employment opportunities. In effect, many communities lost more than half of their original population, as Naranjillo, which in the past was a large community with around 60 houses (nowadays only 8 remain). Local habitants admitted that despite the regeneration of large forest areas, coffee plantations, which constitute the majority of remaining agriculture, have been doing significant harm to the local ecosystems. Collected data showed that coffee cultivation is also the main source of employment for the few families that still remain in the area. The only exception is a rancho located a few kilometers from Naranjillo, which in 2014 began to provide services for tourists. According to the interviewed owner, the property has 132 ha of land,

mostly forest and organic agriculture and has been recognized as a sustainable ecologic project, obtaining 4 stars of the Ecological Blue Flag Program. The owners focus on food production using ecological methods as compost and mountain microorganisms, with the aim to be self-sustainable and offer elaborated with natural ingredients dishes to visitors. Interviews with the owners and direct observations revealed that lack of funding remains a major challenge as the property is in need of urgent improvements, especially related to construction, in order to guarantee a safe stay for visitors. The absence of electricity is another obstacle for the owners. They acknowledged that the initiation of *El Camino* in 2018 came as a big opportunity for the rancho which previously relied only on own small-scale advertising. The owners estimated to host up to twenty, mostly national visitors during some weekends and additionally groups of international hikers that arrive for lunch when walking the stage of *El Camino* leading to Naranjillo. The interviews confirmed that *El Camino* plays a crucial role in supporting environmentally-friendly activities as the incomes from regular visits of hikers allow to continue ecological management of the lands belonging to the rancho (organic agriculture, maintenance of forests).

The research found that the association *Mar a Mar* dedicated efforts to help the neighboring village of Naranjillo that completely lacked with infrastructure and experience required to offer tourism services. It supported local habitants with funds for the development of accommodation infrastructure and with training programs for local women. In the case of this community, tourism is being managed jointly by its members in the local public area where food and accommodation (camping) is being provided. However, according to interviewed members of the association *Mar a Mar* and tour operators, the community of Naranjillo still struggles with development and management of ecotourism and the achieved progress is small.

Esquipulas and Villa Nueva

Esquipulas and Villa Nueva, two villages located close to the Pacific coast, are the last two communities that took part in this research. A crucial asset of this area, mentioned by interviewed people employed in tourism, is the proximity to Quepos/Manuel Antonio (less than 30km away) – one of the most popular tourist destinations in Costa Rica (Manuel Antonio

National Park receives around 1400 visitors per day)¹⁰³. The interviewed people in Esquipulas and Villa Nueva explained that those places are often visited by tourists staying in Quepos and Manuel Antonio, who would like to experience for one or two days a different, quiet atmosphere, rural climate and mountains, or just benefit from lower prices than in the coast. Esquipulas, similarly to Naranjillo, lost most of its population during large migrations to the big cities in the previous decades. The few remaining original habitants continue cattle farming combining it with new activities related to ecotourism, as for example the owners of *Esquipulas Rainforest* that were interviewed for this research. Other live of small-scale agriculture and catering services they offer to visitors. The community has also a significant number of non-local people who purchased large land areas to develop different ecotourism initiatives. In Esquipulas, interviewed local people confirmed that the local ecosystems significantly changed due to depopulation of the area and abandonment of large scale agriculture. They described that forests have largely regenerated during the last few decades and created favorable conditions for the development of ecotourism. Some owners of large properties decided to take advantage of the natural conditions of their lands by offering diverse activities as birdwatching, hiking, night walks through the jungle and rafting. The owners of two visited during the field study ecotourism initiatives that participate in *El Camino - Esquipulas Rainforest* and *Esquipulas Bird Paradise* – considered their forests as very well preserved and possessing a great abundance of fauna which particularly attracts birdwatchers and hikers. Direct observations in those places confirmed the presence of numerous species of birds, reptiles and other animals in a rainforest area that may be compared to Palo Verde and El Copal reserves in terms of low human interference and abundance of big trees. What distinguish those two ecotourism areas in Esquipulas from the reserves in the earlier stages of *El Camino* is the fact, that they are not located on lands with legal protection or unfavorable conditions for agricultural use. Their conservation comes from full ecotourism motivations of the owners. While *Esquipulas Bird Paradise* dedicates fully to nature tourism offering day and night animal observations and exploration tours through the forest in a touristic van, *Esquipulas Rainforest* combines bird observation and hiking with rural tourism that include small-scale cattle farming and coffee tours. According to the owners, the total area of those

¹⁰³ “Visitas de residentes y no residentes a las áreas silvestres protegidas”, Instituto Costarricense de Turismo, Accessed 30.05.2021, <https://www.ict.go.cr/es/documentos-institucionales/estad%C3%ADsticas/cifras-tur%C3%ADsticas/visita-a-las-%C3%A1reas-silvestres-protegidas-sinac/1397-2017-2/file.html>

two cooperating properties exceeds 100 ha, with vast majority being a rainforest. The interviews revealed also that ecotourism is the most profitable activity in the area, bringing significantly higher earnings to the owners than agriculture and providing additional employment for local villagers for whom part-time job in large ecotourism properties is the only available source of income. This is how one of the interviewed employees described this situation:

“Esquipulas is a totally marginalized community for families with low-income. There is completely no work here and we cannot travel to Quepos for employment because of the lack of public transportation. Cooking and cleaning in those ecotourism properties is our only source of income. Thanks to the tourists that come there and to the owners, we have food to eat.”¹⁰⁴

In the interviews, *El Camino* was considered as an important initiative for all the actors mentioned before, as it contributes to the profitability of the ecotourism businesses through promotion and supply of visitors. The owners of one of those ecotourism properties received also donations of ecological bamboo materials from *Mar a Mar* for the construction of platforms for camping that are expected to serve for future low-budget hikers.

While some *El Camino* tour operators make the last stage before Quepos in Esquipulas, others decide to advance a few kilometers to Villa Nueva. This community is bigger than Esquipulas and has public transportation that links it with the area of Manuel Antonio, enabling many local habitants to travel there every day for employment in the large tourism sector. Some habitants work also in agriculture and a few families offer tourism services. The interview with the owner of *Cabinas y Piscinas Villa Nueva*, one of the accommodation providers, indicated that most of the visitors in the village have been national tourists attracted by significantly lower prices than in the area of Manuel Antonio and who also seek for a quiet natural place that at the same time is relatively close to the beach zone. Thus, the vast majority of tourists have been arriving during weekends and national holidays, with some first travelers appearing also on weekdays thanks to both *El Camino* and the post-restrictions growth of national tourism. Asked about the main advantages of the area, the interviewee responded that tourists are attracted by the location of the cabins in a peaceful place, surrounded by forests and rivers and accompanied by small private swimming pools. She also

¹⁰⁴ Recordings (in Spanish) and summaries (in English) of the interviews are available upon request.

identified ecotourism as a main contributor to reforestation of old cattle farms and beautification of the lands of cabin owners. Apart from lodging, there are also other activities for tourists in Villa Nueva including a tour of vanilla production and a hiking route leading to a small waterfall.

4.2.6 THE PACIFIC SECTION – ANALYSIS AND FINDINGS

Impact of *El Camino*-related ecotourism on rural development

The field study revealed the following findings regarding the impacts of *El Camino*-related ecotourism on rural development in the communities located in the Pacific section. First, all interviewed actors in Los Santos Zone confirmed that earnings from tourism have been significantly higher than from coffee cultivation or processing (which are the most common occupations of the majority of the local population). For the small coffee producers, tourism brings complementary income, while for providers of accommodation and other services, it was the principal source of earnings. All interviewees stated that they receive both *El Camino* hikers and other (mostly national) tourists. The proportions are usually in favor of the visitors not related to *El Camino*, however, the owners confirmed that the project contributes additionally to the popularization of their places. The research found that *El Camino*, mostly through the efforts of the owner of *Finca El Casquillo*, played an important role in consolidating different actors in Los Santos Zone that run initiatives characterized by sustainability and ecological values, which differentiate them from the predominant in this area mass coffee producers or owners of hotels. In contrast, the collected data on the community of Naranjillo revealed that ecotourism activities are at very early stage of development and because of lack of experience, the local inhabitants are dependent on external help, as this provided by *Mar a Mar*. Despite financial support and guidance, the community was not able to successfully manage ecotourism and receive significant economic benefits. An exception is the property located a few kilometers before the village, whose owners specialize in ecological agriculture and possess experience in tourism. Interviews indicated that *El Camino* largely contributed to their higher economic benefits, however similarly to the villagers from Naranjillo, they lack with necessary funding urgently needed to develop basic infrastructure for tourists. In the case of Esquipulas, ecotourism was regarded by interviewees

as more profitable than cattle farming and also as the only available source of income for poor villagers. The two local properties that participate in *El Camino* confirmed to receive both hikers and other visitors (mostly birdwatchers) who often come from the Manuel Antonio area. Although the exact proportions were not registered, *El Camino* visitors play an important role for their economies, as almost all *El Camino* tour operators stay with their clients in Esquipulas in one of those properties. Finally, the research in Villa Nueva found that a major part of the population works in the large touristic area of Quepos/Manuel Antonio. In this case, *El Camino*-related ecotourism provides a very small part of total tourism employment and incomes in the community. However, it was found to contribute economically to the local accommodation and food providers who host *El Camino* hikers, especially by providing them visitors during weekdays. In terms of providing basic resources as job trainings and essential tourist infrastructure, the research found that *El Camino* had its biggest impact in Naranjillo, which is located in the most underdeveloped canton in the Pacific section (canton of Tarrazu is the 6th poorest in Costa Rica with HDI 0,733 in 2018) and where *Mar a Mar* put many efforts to support the local habitants.

Impact of *El Camino*-related ecotourism on ecosystems conservation

The study found that in the Pacific section of *El Camino*, ecotourism related to this project had a positive impact on the local ecosystems in all analyzed areas. In Los Santos Zone, *El Camino* provided promotion and additional visitors to ecotourism initiatives that decided to follow sustainable principles and conserve parts of the local ecosystem, which has been significantly harmed by coffee plantations. Some owners explained in the interviews that earnings from ecotourists, including *El Camino* hikers, allow them to continue a sustainable management of their projects. Similarly in Naranjillo, owners of a large property considered visitors from *El Camino* as crucial contributors to the profitability of their business focused on ecological agriculture and forest conservation. In Esquipulas, ecotourism was found to be the principal reason why land owners decided to conserve large areas of rainforest which were not a part of any legally protected conservation zones. Although the local rainforests have regenerated during the last decades in consequence of depopulation and abandonment of large agriculture, the current profitability of ecotourism activities, which was described by owners as dependent also from *El Camino* hikers, was considered as a major motivation to

protect the local ecosystems and dedicate to environmental-friendly activities. Finally, interviews in Villa Nueva revealed that the development of local tourism contributed to the regeneration of old cattle farms into forests and other natural places. However, this was mostly motivated by the inflow of national visitors connected with the touristic area of the Manuel Antonio. *El Camino* hikers still form a small part of local travelers and thus, their contribution can be regarded as small.

4.2.7 CONCLUSION

Chapter 4 aimed at answering the sub-questions related to the case study - *El Camino de Costa Rica*. First, the research found that *El Camino* was established with the primary objective of supporting rural development in marginalized Costa Rican communities. In order to achieve this goal, the association *Mar a Mar* was established as principal promotor and sponsor of this project. In addition, in the business plan, the founders of *El Camino* adopted sustainable development principles, which overlap with the definitions of ecotourism presented in Chapter 2. Secondly, Chapter 4 showed that the communities participating in *El Camino* are very diverse in terms of socio-economic and environmental characteristics. Several possess large natural areas, while a few of them are surrounded by anthropogenic landscapes. Some communities are also located in the poorest cantons of Costa Rica, which was presented by the HDI Index, while others belong to administrative divisions characterized by very high level of development. Third, the analysis of the case study revealed that the communities participating in *El Camino* possess different ecotourism initiatives that are not on the same stage of development. In all areas however, earnings from ecotourism were reported to have been higher than from alternative sources of employment locally available. In the private reserves participating in the project, ecotourism was also considered as an important contributor to ecosystems conservation. In addition, people involved in ecotourism activities were found to be motivated to follow environmentally-friendly practices. However, the research revealed that not all those impacts can be regarded as a contribution of *El Camino*, as many communities have developed ecotourism initiatives long before the creation of this project. Finally, the analysis found that *El Camino*, through the projects organized by the association *Mar a Mar*, plays an important role in providing access to many important

resources (as basic infrastructure and job trainings) to the habitants of the participating communities.

CHAPTER 5: CONCLUSIONS

This thesis aimed to contribute to the academic debates about the effectiveness of small-scale ecotourism in providing rural development and supporting ecosystems conservation, especially in comparison to other alternative livelihoods. First, the literature review of the historical developments of ecotourism helped to detect the main academic debates and illustrate the developments of ecotourism, both as a concept studied by the academia and a policy tool used by governments, with the particular focus on Costa Rica. This created the context in which the author selected the case study of *El Camino de Costa Rica* for an analysis, with the aim to add an innovative aspect to the thesis by filling the geographical gap in the existing research and contributing to the understanding of small-scale ecotourism initiatives focused on rural development, that contrast with Costa Rica's famous natural areas characterized by "massive ecotourism". This chapter will present conclusions based on the developed analysis, with the objective to answer the research question. Basing on those findings, the author developed also recommendations for future researchers and the stakeholders of the project *El Camino*.

5.1 RESEARCH FINDINGS

The findings revealed that the impacts of ecotourism activities, related to the project *El Camino de Costa Rica*, on rural development and ecosystems' conservation were in general positive, however, their levels were different depending on the community and natural area. In terms of economic benefits, in all communities incomes from ecotourism were reported to be higher than from other sources of employment locally available. Also the majority of land owners were found to benefit more from ecotourism than from alternative forms of land use (as traditional agriculture, particularly cattle farming), especially when ecotourism was combined with earnings from the program of government payments for environmental services. This was found to have positive effects on the local ecosystem, contributing to the regeneration of rainforests. However, some protected areas participating in *El Camino* were found to have difficulties with profitability because of very small numbers of visitors. A few of them experienced also sporadic illegal hunting. This led to a conclusion that legal protection, even when accompanied by subventions to land owners, may be not fully effective if the local

population do not also benefit economically from the natural areas, for example through participation in ecotourism initiatives. In terms of ecosystems preservation, the development of ecotourism was mostly associated with pro-conservation attitude of the local habitants, in particular those employed in this sector. As this thesis was focused on the effects of ecotourism related to *El Camino*, an important aspect of the analysis was estimating to what extent the impact of ecotourism in each community has been a contribution of activities associated with this project. Although the study did not count with quantitative data that would allow to calculate a detailed share, the obtained information was useful to estimate whether *El Camino*-hikers constitute a significant part of all visitors received by a given community, as well as more specifically, by each interviewed accommodation owner. This helped in finding to which communities *El Camino* contributed most in terms of providing economic benefits by supplying them with hikers. The research revealed, that while in some areas, as the Nairi Awari Territory, this contribution was very large, in other communities, particularly those that possessed large pre-existing tourism, the contribution was minimal. However, the research found also that all communities and owners of ecotourism businesses benefit from being more recognizable thanks to the participation in *El Camino* and the marketing provided by this project. In terms of providing access to important basic sources as education and infrastructural needs, ecotourism related to *El Camino* was found to be most effective in communities characterized by the lowest HDI Index. This contribution had usually a form of donations given to individuals by *Mar a Mar* as well as different projects dedicated to communities, organized and also financed by the association. No negative environmental effects directly connected with this project were identified, which can be explained by the relatively small-scale of current *El Camino*-related ecotourism. In fact, the research found that in several areas located on *El Camino*, the growth of ecotourism has the potential to contribute to a better protection of the local environments. Small number of hikers has been identified as the biggest factor that reduces the positive impacts of ecotourism on *El Camino*. Although the project had positive economic effects in all communities, they were usually limited to a few beneficiaries in each community and in many cases those earnings were identified as insufficient and had to be complemented by other activities, usually agriculture. However, taking into account the very young age of the project, as well the government's restrictions to the tourism industry in 2020 that disrupted its development, the low numbers of hikers is understandable. In overall, *El Camino* shows that small-scale ecotourism projects can bring

positive effects in terms of both rural development and ecosystems conservation. The success of this particular project is a contribution of careful planning and guidance of the association *Mar a Mar*, which indicates that non-profit organizations, fully dedicated to the management of an ecotourism initiative, can largely contribute to its success. Supposing that *Mar a Mar* will continue to oversee the development of ecotourism on *El Camino*, ensuring that the increasing numbers of tourists contribute economically to the local rural communities and do not threaten the local ecosystems, this project has the potential to increase its positive effects.

5.2 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This thesis possesses some limitations, which are mostly connected with the research design of the case study. Time restraint during the field research did not allow to include a bigger sample of interviewees, which combining with logistic difficulties in a few communities, did not permit to gather enough data to conduct a very detailed analysis. A longer on-site study, that would additionally include collection of quantitative data through surveys, would largely contribute to the quality of the research. Despite these limitations, the thesis hopefully brought important findings and conclusions to the academic debates on the effectiveness of ecotourism. Future scholars could develop a more comprehensive study of ecotourism on *El Camino de Costa Rica*, preferably in 3-5 years when the project is expected to grow significantly. It is recommended that the future scholars organize a longer field study involving a large number of cooperating researchers, allowing them to simultaneously collect data in all participant communities. A combination of qualitative and quantitative methods could also be beneficial. Additionally, a separate research analyzing the impacts of ecotourism in the private reserves of El Copal, Palo Verde or Esquipulas could be developed. A study dedicated to less popular natural areas, that sometimes experience difficulties with achieving profitability, could bring novelty to the existing research focused only on Costa Rican most famous preserves.

5.3 RECOMMENDATIONS

The author developed some general recommendations for the stakeholders of *El Camino de Costa Rica*, based on the findings of this research. More specific suggestions,

directed to particular individuals and communities, will be delivered separately to the association *Mar a Mar* after the official approval of this master thesis. In reference to the finding that small numbers of visitors limit the positive effects of ecotourism on the communities and ecosystems located on *El Camino*, the author suggests to both the association and local tour operators to start promotional campaigns directed to foreign visitors already present in Costa Rica. While many efforts were made to attract international travelers from abroad, which has been challenging and not always successful, there is already a large amount of foreign tourists in Costa Rica that belong to different segments (backpackers, families, high-budget) and do not necessarily have a full itinerary established for their holidays. They could be approached in hostels and popular tourist zones across the entire country through cooperation with accommodation providers and by development of large, visible posters. In particular, the area of Quepos/Manuel Antonio, which is the final stage of *El Camino*, has a big potential to provide many travelers interested in short hiking trips in the Pacific section of *El Camino*. Promotion through collaboration with popular social media accounts that are followed by people interested in visiting Costa Rica (as the official account of the Costa Rican Tourism Institute) is also recommended. The author suggests also the guidance of the association *Mar a Mar* in online promotion of individuals who provide accommodation, food and other ecotourism services on *El Camino*. In particular, the assistance in the development of personal accounts on Booking.com and in creating the geographical locations on Google Maps could greatly increase their visibility, allowing international tourists to find those places. In regard to different initiatives created by the association to boost rural development on *El Camino*, the author recommends the organization of a project dedicated to the young generation, with the aim to provide young people with abilities that they could use to contribute to the growth of ecotourism in their communities. Such a project can consist for example in the organization of an English course for adolescents, with the focus on teaching language skills useful for future employment in the tourism industry. Finally, the author recommends the continuous involvement of *Mar a Mar* in monitoring the development of *El Camino*, particularly when larger amounts of tourists will start to arrive, in order to ensure that no negative effects on the local ecosystems emerge in the future, as was the case of several popular natural areas in Costa Rica. The extension of the project with different alternative routes may help in reducing the potential environmental impacts of increased tourism in the future.

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