
Nikolai Alexander Alvarado

University of Denver

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Abstract
In post-revolutionary Nicaragua tourism development has been embraced as a way to inject foreign exchange into an ailing economy. Despite rapid growth of the sector, particularly along Nicaragua’s southwestern Pacific coast, little attention has been given to the impacts of this development on local producers. This research focuses on the tourism development taking place in the fishing community of Playa Gigante and its impacts on artisanal fisheries. Additionally, I focus on the struggles over access to marine resources, especially with creation of La Anciana Marine Protected Area (MPA), a marine conservation corridor being pushed forth by the largest resort development in the area. In my findings I show how tourism is beginning shape Playa Gigante's landscape by competing for space and labor with the community's traditional fishing economy. I reveal how La Anciana MPA overlaps with some of the most important fishing grounds that support local subsistence and small-scale commercial activities. The implementation of this MPA, without adequate ecological, economic, and social studies and without the effort to include local producers during the planning stages, could result in the failure of the MPA and a marginalization of the local population and the eradication of Playa Gigante's fishing tradition. I suggest that the Nicaraguan Sandinista government provide protection to local producers and tangible avenues for them to be able to participate in the tourism industry. In addition, I suggest that the tourism industry looks beyond economic benefits and integrate social and cultural dimensions to ensure sustainable development that prioritizes community well-being. Lastly, local fishermen would benefit from forming a cooperative that would give them the political power to negotiate outcomes that are beneficial to them.

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Matthew J. Taylor, Ph.D.

Second Advisor
Eric Boschmann

Third Advisor
Donald G. Sullivan

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In Partial Fulfillment
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Master of Arts

by
Nikolai Alexander Alvarado
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Advisor: Dr. Matthew J. Taylor
Abstract

In post-revolutionary Nicaragua tourism development has been embraced as a way to inject foreign exchange into an ailing economy. Despite rapid growth of the sector, particularly along Nicaragua’s southwestern Pacific coast, little attention has been given to the impacts of this development on local producers. This research focuses on the tourism development taking place in the fishing community of Playa Gigante and its impacts on artisanal fisheries. Additionally, I focus on the struggles over access to marine resources, especially with creation of La Anciana Marine Protected Area (MPA), a marine conservation corridor being pushed forth by the largest resort development in the area. In my findings I show how tourism is beginning shape Playa Gigante’s landscape by competing for space and labor with the community’s traditional fishing economy. I reveal how La Anciana MPA overlaps with some of the most important fishing grounds that support local subsistence and small-scale commercial activities. The implementation of this MPA, without adequate ecological, economic, and social studies and without the effort to include local producers during the planning stages, could result in the failure of the MPA and a marginalization of the local population and the eradication of Playa Gigante’s fishing tradition. I suggest that the Nicaraguan Sandinista government provide protection to local producers and tangible avenues for them to be able to participate in the tourism industry. In addition, I suggest that the tourism industry looks beyond economic
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Chapter One: Introduction

“Those fishing lines could damage our trasmallo (gill net) if we drop it here. Let’s move to a different spot by those rocks over there”\(^1\), said Angel to the rest of the crew as they scouted the area near La Anciana Island for a good place to set the last net of the day. Their work of placing their trasmallo in this productive fishing spot was impeded by the presence of a sport-fishing boat carrying tourists that was trolling around the island. Angel, the captain of the expedition, feared that the trolling lines from the tourist boat would become entangled with the trasmallo and damage the net—one of their only instruments of subsistence. Meanwhile, the tourists, beers in hand, waved and took pictures as if the barefooted fishermen in tattered clothes and their ramshackle panga (fiberglass boat used in Nicaragua’s artisanal fisheries) were part of the excursion they had paid for, oblivious to the fact that their leisure activity had prevented the fishermen access to the resource that they depend on for their survival.

For decades, the seas around La Anciana Island have been one of the most important fishing grounds for the fishermen of Playa Gigante (Figure 1 and Figure 2). Now, their access to this area is being threatened by tourism development along the coast and the impending creation of a Marine Protected Area (MPA) to enclose the area around La Anciana Island and prevent local access to the seas and resources in that area (Figure 2). Days before, on my first day in Playa Gigante (Gigante hereinafter) in the summer of 2012, I visited Rufino, one of the original cooperative members who received land titles\(^1\).
in the community through the Sandinista Agrarian Reform of 1981, which redistributed land among Nicaragua’s rural poor. Rufino is a life-long fisherman in these coastal waters. I asked about his views about tourism development and the potential displacement of Gigante’s small-scale and subsistence fisheries. He responded simply and emphatically, “Del mar quién es dueño? Dígame usted, del mar quién es dueño?” (Who owns the sea? Tell me, who owns the sea?). He repeated this several times as if his phrase conveyed the only rational answer to this dilemma. Rufino did not believe that outsiders had any power to change a resource use pattern that for decades has remained unchanged and open to the poor coastal communities as a mode of subsistence. Certainly, Rufino argued, the Sandinista government that he had fought for during the Nicaraguan Civil War\(^2\), would not permit a violation of the very same principles that made the revolution a success. That is, in his eyes there is no way the Sandinistas would allow a takeover of resources by the new elite.

As tourism continues to play a dominant role in Nicaragua’s economy, however, conflicts between the more traditional modes of subsistence of Nicaragua’s rural populations and demand for resources by the elite for leisure and profit occur more frequently. Along the Pacific coast, where tourism development is occurring at an unprecedented rate, the question of how coastal communities, their culture and their livelihoods are shaped by tourism, is an important issue that needs to be addressed immediately because Nicaragua’s new Sandinista government (back in power since 2006), somewhat paradoxically\(^3\), is promoting tourism to help lift Nicaragua’s ailing economy: The pace of tourism development outpaces the capacity of local communities to adapt to the rapid changes brought about by this form of globalization.
The fishing village of Gigante on Nicaragua’s southwest Pacific coast presents a perfect scenario to study the impacts of tourism development on the country’s rural livelihoods. This case is typical of many similar conflicts along the coast. Gigante’s population has historically relied on small-scale and subsistence fisheries for food security and as a source of income. The majority of households in Gigante rely on fishing as either their only economic activity or as a vital supplement to agriculture and cattle ranching. In the last decade, however, tourism has flourished in Gigante. Many locals sold all or part of their land along the coast to foreign investors and Nicaraguan elites. As tourism burgeons and attracts large amounts of capital to the area, these powerful stakeholders are turning their attention to how they are perceived by the outside world. Part of this image creation involves the adoption of a conservation discourse and practice. Thus, as larger tourism developers green wash (McCarthy and Scott 2004) their activities, they move to include aquatic resource conservation as part of their schemes (including MPAs). In these cases, they employ the easily understood language of how local marine resources are over exploited and must thus be preserved. This not only improves their image, but also provides sea spaces that are for the exclusive use of the developers and their wealthy clients. Within this context, Rufino’s phrase about who owns the sea gains relevance and poses a real interrogation amidst the colliding interests that are threatening to shape Gigante’s traditional and relatively isolated landscape. Who owns the sea? This is the question that motivates this research.

Taking the above question about ownership of the sea commons as a starting point, the article focuses on the potential impacts on Gigante’s artisanal fisheries of tourism as it starts to play a more dominant role in the local economy. In addition to
trying to understand how Gigante’s tourism landscape interacts with traditional fisheries, the research explores future struggles over access to marine resources that will inevitably result from the creation of La Anciana Marine Protected Area, a 3600-acre marine corridor from Punta Pie de Gigante to Punta Brito, which spatially overlaps with some of the most utilized fishing spots by Gigante’s fishermen. In my findings I show how Angel’s dilemma with the sport fishing boat reflects more than an isolated and innocuous decision made in the face of an unusual encounter. His dilemma reflects the future reality of Gigante’s artisanal fishing tradition as it barrels towards collision with the competing interests of tourism development.
Chapter Two: Theoretical Background

Political Ecology and Resource Use Struggles

Studies on the struggles over access to resources are a central concern in the study of human-environmental interactions. Numerous seminal examples have shown that current patterns of resource exploitation and control answer to realities forged at multiple scales and within numerous realms including economic, political, social and historical (Robbins 2012; Neumann 2005; Peet and Watts 2004; Bryant 1992; Blaikie and Brookfield 1987). In this sense, long-established traditional resource use patterns of local producers have been shaped, and continue to be shaped, by past and current global economic models, the politics put in place to ensure the advancement of such economic interests, and the socio-economic consequences of these interactions to local producers. These past and current trends also play a key role in emerging conflicts over resource control. Consequently, future resource exploitation and control will too reflect the multi-scalar interests that shape them.

In the developing world today, the economic and political impositions that determine resource use and control are often channeled through the historical colonial relationships that perpetuated social and class differences within nations and which left rural populations, and the resources that support their livelihoods, prone to further exploitation by the elite (Burke 2012; Escobar 2006; Stonich 1993; Peluso 1992). During the colonial era, and, in the case of Latin America, up until the 20th century, the
imposition of elitist economic models of resource exploitation and control took place through the direct intervention of global superpowers and the violent subjugation of rural masses (Guardiola-Rivera 2010). Today, a postcolonial rule disguised in international neoliberal policies and executed through national capitalist-oriented governments set the stage for a resource exploitation and control that work in favor of the more powerful actors, while marginalizing the rural poor (Harvey 2003). Regardless of methods, the end result persists. Accumulation of profits continues to take place far away from sites of resource and human exploitation. Transfer of assets occurs by the dispossession of local producers from their land and resources. Local populations are then further driven into poverty, while their resilience to impacts upon their modes of subsistence is shattered (Stonich 1998; Watts 1983). Furthermore, the resulting marginalization of local producers from denied access to the resources and spaces that have historically supported their systems of livelihood can trigger or worsen unsustainable resource use patterns that were absent prior to the imposition of these new globalizing economic models (Robbins 2012).

Such human-environmental interactions and struggles over resources have received increasing attention in the context of coastal communities that depend on small-scale and subsistence fisheries for their subsistence (Cinti et al. 2010; Pomeroy et al. 2007; St. Martin 2001; Young 1999; Derman and Ferguson 1995). These communities hold some of the most vulnerable groups of producers, continuously facing food insecurity and poverty, and currently facing the impacts of global declining fish stocks that pose a serious threat to their livelihood and survival (FAO 2012; Mansfield 2011; Béné 2003). Because of this threat to local producers and because, amidst declining fish
stocks, northern consumers continue to demand fish, coastal communities and artisanal fishermen have been subjected to fish management schemes and development strategies orchestrated by international development agencies, NGOs and national governments (FAO 2007). For example, fisheries management policies have been imposed upon ecosystems to allegedly safeguard resource availability for future generations and allow them to recover from overexploitation (Mansfield 2011; St. Martin 2001). Although a seemingly good idea at first, these policies tend to place small-scale and subsistence fishermen in a political and socio-economic vacuum, managing to constrain their resource use, but leaving unchanged the political and economic apparatus that unsustainable extraction stemmed from in the first place (Hilborn et al. 2004).

Consequently, the discourse places them as rapacious exploiters of common-pool-resources and blames them for environmental degradation (Mansfield 2011; St. Martin 2001). By doing so, the discourse ignores other causes of environmental degradation beyond the influence of local producers, such as fish stock declines through industrial fisheries (Mansfield 2011) and stock migration due to changes in the ecosystem (Badjeck et al. 2010; St. Martin 2001). The end result is often a disempowerment of local fishermen, who may not, in the first place, be responsible for environmental degradation. Ultimately, top-down management strategies transfer resource control to powerful stakeholders operating and, now, profiting, elsewhere (Mansfield 2011).

Efforts have also concentrated in diversifying the local economy and moving subsistence fishermen away from ocean dependency. Examples of such efforts include introducing fish farming (Veuthey and Gerber 2012; Stonich et. al. 1997; Stonich 1995), imposing fishing quotas (Mansfield 2011; St. Martin 2001), implementing multiple-use
and no-take protected areas that favor non-extractive over extractive activities (Stevenson et al. 2013; Hilborn et al. 2004; Agardy et al. 2003) and promoting tourism development (Mbaiwa 2011; Mbaiwa and Stronza 2010; León 2007). These top-down schemes also transfer control to powerful stakeholders, who manage to profit from the new commodified resources to the detriment of the well-being of the original users (Gibson 2009; Stonich 1998). Moreover, the drawbacks of these schemes have been seen in numerous case studies, showing that benefits do not always “trickle down” and, rather, exacerbate environmental and socio-economic conditions, while destroying local cultures and livelihoods (Stonich 2000; Egan 2011; Young 1999).

Tourism as a Development Strategy

Tourism has been proposed as a way to diversify local economies and to alleviate the poverty and vulnerability endured by rural and coastal communities through the “trickle down” effect (WTO 2012; Holden et al. 2011; Chok et al. 2007; Zhao and Ritchie 2007). While the importance of tourism in terms of global services trade and income generation is undeniable, whether these benefits remain within the community and improve conditions locally is debatable (Stonich 2000; Young 1999). Economic benefits alone may not ensure a socially and culturally sustainable development for local communities. As a result, in order to gauge the success of tourism as a development strategy, scholars have suggested taking into consideration other tourism-related changes at the local scale beyond the economic. Stronza and Gordillo (2008) argue, for example, that tourism-related changes that affect a community’s social cohesion, cooperation and reciprocity among individuals, small producer empowerment, and traditional culture,
could determine the success or failure of tourism as a development strategy for local communities. These aspects of a community, however, are often drastically transformed when traditional livelihoods are eradicated as a result of capital-oriented tourism development (Mbaiwa 2011; Kottak 1992).

One of the assumptions embedded in the discourse in favor of tourism development is that local communities will benefit from the creation of jobs as local producers move from subsistence livelihoods to paid employment in the tourism sector (Chok et al. 2007; Solis 2009). However, while job growth is a plausible measurement of options to supplement subsistence livelihoods, it only represents, and still with limitations, the economic aspect of the development of a community, while social and cultural facets are largely ignored (Stonich and Gordillo 2008). Furthermore, due to the seasonal tendency of the tourism industry and its strong dependency on global markets, moving communities completely away from subsistence livelihoods becomes risky as new generations lose and are unable to rely on a tradition that has supported their community for decades. Thus, a better approach to tourism development should attempt to diversify local livelihoods while safeguarding the subsistence activities that have forged a community’s socio-economic and cultural traits.

*Conservation Schemes and Resource Control: Marine Protected Areas*

Besides the impacts to local communities from tourism development, another concern is the regulation of livelihood-supporting spaces to promote conservation, but also, the capitalist interests in non-extractive and non-traditional uses. The implementation of conservation schemes has resulted in numerous conflicts around the
world between local producers and powerful stakeholders with end results often being disadvantageous to the former (Robbins 2012; Goldman 2011). Needless to say, the powerful stakeholders involved in the promotion of conservation schemes are often also involved in the tourism industry (Stonich 2003). In addition, just like with tourism development, meager economic benefits of conservation schemes to local communities may not ensure the success of their implementation. Social and cultural impacts of conservation schemes may obstruct the internalization of conservation efforts by the community and trigger unsustainable resource use practices (Robbins 2012; Thu Van Trung 2012; Goldman 2011).

In coastal and marine settings, these conservation schemes take the form of Marine Protected Areas (MPAs). These areas are part of a number of conservation schemes that operate under the banner of promoting biological conservation and protecting overexploited species. Despite wide-use of MPAs in conservation and fisheries management, a notorious lack of success stories and empirical evidence pointing to success, indicates problems in their effectiveness to meet their proposed goals (Chuenpagdee et al. 2013; Hilborn et al. 2013; Willis et al. 2013). For MPAs to meet their proposed ecological goals, for example, rigorous studies need to be conducted to ensure that a site is not randomly selected and that the proposed ecological functions of the MPA will indeed take place given the conditions of a particular marine system (Chuenpagdee et al. 2013). In MPAs that are introduced to manage fisheries, the risk of failure is great when the fisheries itself is not well understood (Stevenson et al. 2013). Issues that can cause an MPA to fail in successfully managing fisheries include little understanding of fish mobility and larval dispersal patterns of commercially important
species, both of which can result in decrease in yield for fishermen and unsustainable resource exploitation elsewhere from spatial shifts in fishing effort (Hilborn et al. 2013; Stevenson et al. 2013). Lastly, the success of MPAs in meeting conservation and fisheries goals has been correlated to negotiations among stakeholders during the initial (step zero) stage that consider the “social, cultural, and political contexts underlying their conception and establishment” (Chuenpagdee et al. 2013 p. 235). MPAs will likely ensure community well-being when they seek to empower, promote economic benefits to local producers, and integrate traditional resource use knowledge during step zero (Chuenpagdee et al. 2013; Thu Van Trung et al. 2012; Gonzalez and Jentoft 2011; Kareiva 2006).

In addition to their ecological and management goals, MPAs, like other conservation schemes, also serve to covertly ensure control of resources for non-extractive, albeit highly profitable, human uses (e.g.: through tourism activities; Stonich 2003). As such, MPAs can become neoliberal spaces of commodified resources, ready to be consumed by participants of global capitalistic endeavors. Given the economic potential of the resources enclosed within the random geometric boundaries of MPAs, they often act as a strategy to control access to natural resources that directly impact local fishermen (e.g.: Christie 2004; Stonich 2003). Who ends up controlling the resources enclosed within the boundaries of MPAs becomes a socio-political issue in which the most powerful stakeholders steer outcomes to their favor during the decision-making process, disfavoring disempowered actors locally (Chuenpagdee et al. 2013; Stonich 2003). The tourism industry, and its attempts to restrict access to traditional fishing grounds, may end up marginalizing local fishermen, provoking food insecurity, poverty
and unsustainable resource exploitation. Lastly, tourism development and conservation schemes have shown differential outcomes that also depend on local circumstances. As such, their implementation as development strategies and means of environmental conservation demand close assessment that can only be accomplished in a case-specific basis (Young 1999; Derman and Ferguson 1995).

The fishing village of Gigante is currently experiencing an unprecedented rate of tourism development that is coming into direct contact with the community’s traditional livelihood: artisanal fishing. As seen with Angel’s encounter with the tourism boat, increase influx of tourists to areas traditionally used for subsistence fisheries will inevitably bring conflicts over spaces and resources along the coast. Because local fishermen occupy a place in society that historically left them vulnerable to exploitation and to imposition of global economic models, they risk being further marginalized. Although tourism may bring new sources of income to the community, the overall development strategy runs the risk of failing without the protection of subsistence livelihoods through the empowerment of local producers, and the protection of the social and cultural institutions that developed through decades of artisanal fishing. In addition, the impending creation of a Marine Protected Area that will enclose access to crucial resources for local fishermen, also have the potential of precipitating some of the conflicts and struggles over resources witnessed in similar cases around the world.
Chapter Three: Background

Nicaragua’s Political and Economic Context

The political history of Nicaragua is a tale of perpetual confrontation between two fractions seeking to control the country (conservatives and liberals) and backed by foreign superpowers trying to secure control of resources throughout Latin America via local allied governments (Gobat 2005). Because of the geographical proximity that made Nicaragua and Latin America a U.S. backyard and inspired by the Manifest Destiny that drove U.S. imperialistic ambitions since the 19th century, Nicaragua became subject to continuous U.S. interventions that manipulated political and economic conditions to make colonial and neo-colonial forms of exploitation possible (Walker and Wade 2011; Gobat 2005). The most significant of these interventions in Nicaragua’s recent past was the U.S. support of the Somoza dictatorship beginning in 1936, which lasted for 43 years until the triumph of the Sandinista revolution in 1979. The U.S. supported the rule of 3 Somoza family members, disregarding their economic, political, and human atrocities conducted in the name of capitalism. The U.S., fearing it would lose its economic and political influence in the region, reached a peak of interventions, supporting coups against democratically-elected governments and installing puppet neo-liberal dictators (Kinzer 2006).

The Frente Sandinista de Liberación Nacional (FSLN) came into the scene in the 1950’s as an anti-Somoza/anti-U.S. armed guerrilla movement seeking to return the
country to democracy after 43 years of despotism. The revolution succeeded in 1979. Eleven years of Sandinista government followed (1979-1990) and concurrently, a series of reforms that aimed to bring the masses out of poverty through the redistribution of wealth and land. Prominent among these reforms was the _Ley Agraria_ (Agrarian Reform Law) of 1981, which redistributed land among rural masses organized in agricultural cooperatives (Everingham 2001; Jonakin 1996). The success of the Sandinista revolution was limited, however, due to U.S. sanctions and a US-backed _Contra_ revolution that slowly bled the country of human blood and money from 1980 to 1990. The Sandinistas lost power in 1990 to a regime inclined towards the more familiar economic and “democratic” models of “U.S-friendly” nations (Brown 2001). These continuous political transitions in Nicaraguan history perpetuate social, political and economic turmoil, and created instability in many areas of Nicaraguan life that persist today and that have left marginalized populations vulnerable to further exploitation (Zimmermann 2000; Kinzer 1991; Cupples 1992; Hunt 2011).

_Tourism Development in Nicaragua and Gigante_

According to the World Tourism Organization (UNWTO 2012) “international tourism arrivals reached a record 982 million, an increase of 4.6% on 2010, while receipts grew by 3.8% to US$ 1.030 billion.” In Nicaragua, tourism became an emancipatory development strategy to inject much-needed foreign exchange into the national economy, shattered after years of revolutionary conflict and instabilities (Hunt 2011; Stronza and Gordillo 2008; Babb 2004). With an economy highly dependent on coffee and other traditional exports, tourism was also seen as a way to alleviate poverty
and diversify rural livelihoods (Eagan 2011). When tourism became a priority in the national development agenda and a series of concomitant neoliberal incentives were given to investors (LAW No. 495 & 306), tourism became one of Nicaragua’s top exports. Since 2007, for example, tourism has made it into Nicaragua’s top three exports along with coffee and meat (INTUR 2011). To illustrate the importance of tourism to Nicaragua’s ailing economy, in 2011, for example, tourism brought 377 million dollars into the national economy, a 22% increase from the previous year and representing 5% of the total GDP (INTUR 2011). Additionally, in the same year, over a million tourists visited Nicaragua, a 4.8% increase from 2010, confirming the increasing popularity of Nicaragua as a destination and the importance of tourism to its economy (INTUR 2011).

Tourism is burgeoning along Nicaragua’s southwestern Pacific Coast. The tourism corridor expanded from northwest Costa Rica to the Nicaraguan town of San Juan del Sur, 27 kilometers across the border and 23 kilometers south of Gigante (Figure 1). Long miles of pristine and undeveloped coastlines quickly transformed the area into an attractive destination for western tourists. Consequently, Nicaragua slowly shed its stigma of a violent country with a revolutionary past to that of an affordable and safe destination for visitors (The Economist 2012). Today, the department of Rivas9 possesses 11% of hotel rooms in Nicaragua, second only to Managua and has received the majority (48%) of tourism-oriented investment from the central government (INTUR 2011).

Pro tourism development and incentives like laws No. 495 & 30610 had an early impact on the community of San Juan del Sur, however. San Juan del Sur went from being a quiet fishing village in 1995 to a well-known tourism destination among western tourists by the end of the 2000s. The benefits of tourism development for San Juan del
Sur are debatable, however. Egan (2011) showed that foreigner-driven short-term and residential tourism have changed the landscape by, for example, making land and property unaffordable to locals and by dissembling traditional systems of livelihood. In addition, the increased influx of foreign exchange to San Juan del Sur, as a result of tourism, has not translated in a more equitable distribution of wealth and it “threatens to create neo-colonial spatial, economic and social dualism” (Egan 2011 p. 3). Moreover, Babb (2011) documents an increase in prostitution associated with the rise in tourism over the decade of 2000-2010.

The municipality of Tola (Gigante is in Tola) is starting to experience tourism development similar to that of its southern neighboring municipality of San Juan del Sur. As of 2011, twenty large-scale tourism projects were being developed in this municipality (Bonilla and Mordt 2011). Today, the scale and pace of tourism development in Tola is unprecedented, particularly with the construction of Guacalito de la Isla, a mega-resort project that promises to bring wealthy tourists to the area. As a result of the rapid and poorly regulated tourism development, out of the 19 beaches located along Tola’s 54 km of coastline, only 9 remain accessible to locals (Bonilla and Mordt 2008). The remaining beaches became inaccessible to locals as coastal lands fell into private hands, fenced off and guarded.

In Gigante itself, tourism proliferated through a transfer of land from local peasants into the hands of developers. The majority of the local population acquired titles when the Sandinistas distributed the Somoza-seized land among rural peasants grouped in agricultural cooperatives. Ever since the redistribution of land, private developers have secured and continue to secure more of this coveted private coastal property. The
situation has resulted in both judicial and armed disputes\textsuperscript{11} that perpetuate land tenure instabilities and make the local population vulnerable to capital-oriented development (Figure 3). Most of Gigante’s coastline has developed through the arrival of tourism in the last decade. While the two dirt roads that lead to Gigante’s coastline have prevented the arrival of larger numbers of tourists, the new paved road being laid by Guacalito de la Isla from the town of Tola to Gigante will allow tourism to develop more rapidly in the years to come. However, a number of foreigners have been able to acquire land rights on the coast to build lodging facilities and run marine-based tourism activities. Locals who already resided on the coast are trying to capture tourism revenues through food services, surf taxis and lodging. The rest of Gigante’s residents, however, have not been able to take direct advantage of the tourism boom and risk being marginalized, as tourism becomes the dominant economic activity.

Despite this rapid increase in tourism in Nicaragua, little attention has been paid to the impact of tourism on local society, economy and environments (for recent exceptions see Babb 2011; Egan 2011 and Hunt 2011). Also, because civil unrest prevented research, little academic work, other than the seminal work in the country by Nietschmann (1973) on the political ecology of artisanal turtle fisheries on the Miskito coast, examines the consequences of capital-oriented development, and globalization in general, on traditional livelihoods. Nicaragua in general, and Gigante in particular, present a perfect scenario to examine the repercussions of the latest of the capitalist interventions to the country’s rural populations—tourism. Nicaragua is a unique case study because of its recent revolution, which defeated a neocolonial-type dictatorship, empowered marginalized groups, and resulted in a redistribution of resources into the
hands of rural populations. As resources shift back to being controlled by the elite and other powerful actors, and this time with support from the Sandinista government, the interaction between artisanal fisheries and tourism could serve as exemplar of the impacts that current capitalist and globalization forces have on local producers and their livelihoods.
Chapter Four: Study Site

The fishing village of Gigante is located 124 kilometers from the capital city of Managua in the Department of Rivas, Municipality of Tola. The village sits on Nicaragua’s southwestern Pacific coast, on the fertile lowlands of the Rivas isthmus that separate lake Nicaragua (also known as Cocibolca) from the Pacific Ocean (Figure 1). Volcanic activity has made the area favorable for agriculture and cattle ranching. In addition, both lacustrine and ocean fishing have traditionally been part of Rivas’ subsistence activities since pre-Colombian times (Healy and Pohl 1980). The area known today as Gigante was part of a vast private hacienda known as finca Güiscoyol purchased by Nicaragua’s former president Anastasio Somoza in 1937. From that time until the triumph of the revolution and the resultant confiscation and redistribution of the land, the Somoza family used finca Güiscoyol primarily for large-scale cattle ranching. Today, two wells and drinking troughs in Gigante are the only remnants of the dominant activity in times of the dictatorship. The Sandinista government re-distributed the confiscated finca after 1979 among rural masses grouped in agricultural cooperatives. The area of Gigante (840 hectares total) was granted to fishermen and small farmers that came together under Cooperativa Pedro Joaquin Chamorro between 1984 and 1987. In 1994, the cooperative finally received a title for the entire area that was granted to them during the Sandinista government.
Today Gigante is inhabited by a population of around 480 people settled along two dirt roads that lead from the beach to the main access road that connects towns along the coast (Woo 2011). Artisanal small-scale and subsistence fishing are the most important economic activities in the community (Figure 4). Fishing is supplemented with subsistence agriculture and cattle ranching. The actual number of fishermen in Gigante is difficult to estimate due to several factors. First, not all fishermen go out to sea on a yearlong basis and others were fishermen in the past but now favor other forms of subsistence livelihood. Additionally, open access to rocky shores and coastal waters serve to satisfy the need of subsistence fishermen from other coastal villages and inland communities, making the number of people who depend on and benefit from fisheries much larger. Regardless, most households in Gigante are, or have been, involved in artisanal fisheries. Local culture reflects the community’s close relationship with the ocean over the decades (Figure 5).
Chapter Five: Methods

The results presented in this article are based on in-depth unstructured and semi-structured interviews conducted during the boreal summer of 2012 and between November and December of the same year. Findings are based on 48 interviews with local fishermen, acopio owners (stockpile and distribution centers where daily catches are brought and commercialized), representatives of the tourism industry, fishermen’s wives, and fishermen who have made the transition to tourism-related activities. Findings are also based on participant observation methods and involvement in 10 fishing excursions with different fishing crews who targeted different commercially important species. Because fishing excursions take an average of 7 hours at sea, participating in these different fishing excursions provided the opportunity to interact closely with local fishermen and experience their daily lives, jobs, methods of survival, and conversations.

Ethnographic methods were the most appropriate to follow in this research because participation and observation helps build trust with the local community (Bernard 2006). It is difficult to simply approach fishermen in Gigante and start asking questions about their activity without getting a look of distrust. After all, as tourism started to become more prominent in the area, many “gringos” foresaw its potential and acted quickly to acquire large parcels of land and strategically position themselves along the coast. Any outsider that comes to Gigante and starts asking questions is assumed by locals to come with economic interests. Instead of simply asking questions, despite being
a native Spanish speaker and thus being well aware of the nuances of colloquialisms used by locals, I had to immerse myself into the life of the fishermen. Countless times I caught myself helping repair *trasmallos*, carrying catch to *acopios* (without getting fish in return), swimming to nets to retrieve fish, driving *pangas* back to Gigante while fishermen gutted fish, and (a must) eating lobster legs that were plucked from live lobster. I took participation seriously. One sunny afternoon after a day out fishing with the locals, I was brave enough to help them bring the *panga* onshore, a task that requires both strength and understanding of waves. I was asked by the boat captain to roll one of the wooden logs that are used to roll the *panga* over the sand, in place. My inexperience made me leave my hand on the log as the *panga* was being dropped. ¡Súbanla! ¡Súbanla! I screamed in agony. Raise it up! There are few painful things that I can relate to having a *panga* dropped on one’s index finger. “It has happened to all of us at least once,” the boat captain said in a comforting tone. I knew I was part of the bunch then.
Chapter Six: Results

Small-scale and Subsistence Fisheries in Gigante

The aquatic ecosystems of the Pacific southwest coast of Nicaragua act as important nurseries for a number of species of commercial interest, including Snappers (*Lutjanus* spp.), Groupers (*Serranidae*), and the Pacific Green Lobster (*Panulirus gracilis*), all of which serve to maintain the livelihood of fishing communities along the coast. This area of the Eastern Pacific Ocean is considered to have high levels of primary production (Pennington et al. 2006). The high productivity levels along Nicaragua’s Pacific Coast result from a shoaling thermocline, and by wind-driven mixing and upwelling of nutrient-rich subsurface waters, which supply macronutrients to the eutrophic zone (Pennington et al. 2006). As a consequence, the contribution of Pacific Coast fisheries to Nicaragua’s fishing sector is paramount—holding 30% of the country’s artisanal fishing force, the Pacific coast accounted for 75% of total fish landings by volume in 2011 (INPESCA 2012). This is crucial considering that close to 100% of fishing on the Pacific Coast is conducted by artisanal fishermen in small-scale settings. As defined by Nicaragua’s National Institute of Fishing and Aquaculture (*Instituto Nicargüense de Pesca y Acuicultura*, INPESCA), artisanal fisheries include any fishing effort conducted in *pangas* no more than 15 meters long, regardless of methods used and degree of industrialization. Locally, however, *pangas* do not exceed 8 meters in length. Shrimp fishing and farming closer to the Gulf of Fonseca in the north
Figure 1), account for 79% of Pacific Coast landings. This is followed by finfish and lobster, which make up 16% of Pacific Coast landings (INPESCA 2012).

In Gigante, artisanal fisheries provide food for the household as well as a source of income by harvesting commercially valuable species for international markets. In this sense, artisanal fishing is both a subsistence and small-scale commercial endeavor. Gigante’s small-scale operation, like most others along the Pacific coast, is mostly intended to supply global demand for fish and lobster (INPESCA 2012). International commercialization of Gigante’s catches was expedited by the implementation of The United States-Dominican Republic-Central America Free Trade Agreement (CAFTA-DR) in Nicaragua in 2006, putting artisanal fisheries in the loop of the international fish market. According to INPESCA (2012), in 2011, Nicaragua exported 96% of its total fishing production. Although total exports by volume decreased by 4% from the previous year, they increased by 8% in revenue. In 2011, 44.27% of fish were exported to the US, and 36% to Europe. In Gigante, species of commercial value such as snappers, lobsters, and groupers are captured to supply global demand and, more recently, to meet the increase in local/regional demand from tourism (tourists demand snapper and lobster in local restaurants). This commercialization to meet distant and now local markets is an important income source for many households in Gigante. Prohibiting fishing activities in key areas that hold some of the most valuable stocks along the coast, such as in the area of the proposed La Anciana Marine Protected Area, may result in economic marginalization and increase poverty among the local population who rely on this ocean corridor for much of their catch.
Fish also represents an important food source for local households. By-catch from daily operations that target income-generating species is normally taken home for the family to consume. Numerous fishing families rely on fish for their protein intake because they don’t own other farm animals and because basic foodstuffs have become more expensive. “This is what we eat. If we can’t rely on the ocean to feed ourselves, then we are going to starve to death,” a fisherman’s wife told me as she relayed their reliance on fish for household sustenance. For other families, fishing helps supplement other agricultural food sources. These households use a combination of cattle ranching, agriculture and fishing to meet their alimentary needs. The network of people that benefit from fisheries is much larger than those involved directly with the fishing labor, however. For example, it is also common for fishermen to give away leftovers such as lobster heads and some by-catch to friends and family (usually women) that wait for every boat to return from a day out at sea (figure 6). “The people are hungry and we have to give them anything we can,” explained a fisherman to me as he contemplated what to give away to the locals congregating around his panga. This solidarity from local fishermen ultimately helps provide food for an additional number of households in the community. In reciprocity for the free food, these people help fishermen pull the pangas out of the water or to carry the outboard motors, gas tanks, and catches to the acopios. An acopio is a stockpile and distribution center. Acopio owners serve as the middleman between local fishermen and exporting firms/consumers. Most catches go through the acopio before continuing their commercialization path.

By-catch can also be sold to the acopios, however, to generate additional revenue. This low-priced chatarra or “junk” is made of fish species that lack any commercial
value in international markets, but are widely consumed in the region. *Chatarra* is commercialized locally by *chatarreros*, people from outside Gigante that take the product to be sold in neighboring towns (figure 7). In this sense, artisanal fishing in Gigante produces very little waste in comparison to other fishing operations, particularly industrial shrimp trawling fisheries, which fishermen informed me that used to be common along the coast. In Gigante, most of the by-catch is consumed by fishermen and their families, given away in reciprocity, or sold to *acopios* and ends up supplying low-priced fish to neighboring towns.

The monetary difference between fish for export and locally consumed *chatarra*, however, illustrates the importance of targeting commercially valuable species to the local economy and consequently, the importance of coastal waters to sustain local livelihoods. Although prices fluctuate with global demand, in general *acopios* pay 1.50 USD/lb. for snappers, 1.20 USD/lb. for groupers (*Cabrilla*) and 1.25 USD/lb. for Mahi-mahi (*Coryphaena hippurus*). Lobster fishing also contributes greatly to the local economy. *Acopios* generally pay fishermen 9.50 USD/lb. for lobster tails that weight 4 oz. and above and 8.30 USD/lb. for lobster tail weighing between 3 and 4 oz. While these sizes can still be exported and are legal to capture, the increase in tourism has created a market for the smaller, restricted lobster tail weighing less than 3 oz. The *acpio* pays an average of 2 USD/lb. for the smaller size lobster tail, which is mostly consumed by tourists at local restaurants. It is not unusual in local restaurants to be served a plate with 3 to 5 lobster tails, each weighing less than 3 oz. This increase in local demand for lobster from a growing tourism industry gives fishermen an incentive to further increase lobstering of restricted sizes. These commercially important species like lobster and
snapper are mostly found in waters near the coast. Restricting part of the coastline with the creation of the MPA will restrict access to the very species upon which local fishermen rely.

*Acopios* play a key role in Gigante’s fishing industry (figure 8). The *acopios* work directly with two exporting firms (Inversiones Nicafish SA and Central American Fisheries). Fishermen have no direct commercial ties with these firms. Trucks from these two firms come twice a week to Gigante bringing in gasoline, ice and money, and leave with fish! *Acpio* owners sell gasoline and ice to the fishermen and then buy the fish, enabled by the sale of gasoline and ice. This fish is then taken to a processing plant 3 kilometers from the international airport in Managua (in the case of NicaFish) where the product is prepared for export to the USA and Europe. Because of this direct link between *acopios* and exporting firms, middlemen have been able to make handsome profits from the labor of the fishermen. Also, the unavailability of gasoline in Gigante makes *acopios* the only providers of engine fuel to fishermen. In this way, fishermen are obligated to sell their catch to the middlemen in order to pay for gas, which is deducted from fishing profit. “He never runs the risk of losing, [he] always makes money; that’s why the fisherman is always at the bottom [of the socio-economic strata],” Iván lamented when I asked about his perspective on the role played by the middleman. In addition to having the direct link with export companies, *acopios* also sell directly to tourists, restaurants and large-scale tourism developments along the coast. According to Fidel\(^15\), the owner of the biggest *acpio* in Gigante, selling fish directly to local touristic operations brings in the largest gains for him as these buyers pay close-to-export prices for the product. The last path of commercialization is the one followed by *chatarra.*
People from outside Gigante, called *Chatarreros*, come in the late morning to buy the fish (which includes all fish that are not exported such as needlefish, catfish, etc.) from the middlemen to sell in local and regional towns like Tola and Rivas.

*Acopio* owners are able to accumulate capital that is often used to diversify their sources of income. This structure prevents fishermen from improving their condition. Fidel, for example, has been able to open a small provisions store (*pulpería*) that also sells cheap beer to tourists. In addition, he has acquired *pangas* that are fully dedicated to tourism activities like fishing and surf taxis (Figure 9). He also owns two minibuses that make frequent local trips and longer journeys to and from Managua’s international airport.

The Spaces of Fishing in Gigante

Decades of close-to-shore fishing and local knowledge of high levels of site-fidelity shown by some fish species such as snappers, and rocky-bottom preference of lobster, have resulted in an in-depth traditional knowledge of local ecology and bathymetry among fishermen. As a result, local fishermen have identified a number of productive fishing grounds along the coast, which they regularly visit. In addition, fishermen classify these specific areas by what species can be caught at each and what method should be used. Navigation to these spots is accomplished through following landmarks on shore, although a few fishermen have acquired GPS units that facilitate navigation. With the exception of Mahi-mahi and shark fishing, which take place farther off shore, all of these fishing grounds are located close to the coast and overlap with areas of current and future tourism activities, including the proposed Marine Protected Area. Indeed, a study conducted on coral communities along Nicaragua’s southwestern Pacific
Coast showed that the area around La Anciana Island was the most biodiverse along this marine corridor (Alvarado et. al. 2006). It is from this very same area that Gigante’s fishermen get a good portion of their catch and the exact area of the new MPA$^{16}$. This overlap between the proposed conservation area and fishing grounds used by local fisheries needs to be examined closely before implementation decisions are taken. Of particular concern is the high level of site-fidelity shown by certain species of commercial value that local fishermen harvest from this area such as snappers (Schroepfer and Szedlmayer 2006; Willis et al. 2001). Because snappers are not a very mobile species, it is likely that closing an ocean area crucial for snapper fishing will result in economic impacts for Gigante’s artisanal fisheries and, most likely, in unsustainable resource use patterns as fishermen put additional pressure on available stocks elsewhere.

The majority of fishing in Gigante takes place with pangas very close to the shore. The small boats and old motors of the fishermen limit open-water fishing to times of calm seas (Figure 10). This, locals told me, has created seasonality in the fisheries of Gigante. Between January and April, for example, ocean conditions do not permit fishermen to venture far from shore and most fishing thus takes place within 1 kilometer from the coast. During this time, fishing efforts focus on targeting lobster and snappers. On the other hand, when ocean conditions improve, although near shore fishing still takes place, fisherman can target offshore pelagic species like Mahi-mahi and sharks. These species are caught starting at approximately 6 km from shore, but usually fishermen go as far out as 10 to 17 km. Less commonly, when targeting sharks, fisherman may venture up to 35 km offshore. This season of diminishing winds and improved oceanographic
conditions create a Mahi-mahi season from May to October. INPESCA extends the Mahi-mahi season for small-scale fisheries until late December. However, Gigante’s small 8-meter-long *pangas* cannot venture out after October without risking being dragged by the strong winds. It is not uncommon to read in the newspapers or hear stories about fishermen lost at sea, caught in winds that their small *pangas* and old motors could not withstand—some are found days later drifting in the currents, others are not so lucky and die! (See for example Jarquín 2012). It is precisely this lack of reliable equipment and, to an extent, the operating costs associated with long trips that make open ocean and multi-day fishing so difficult for most of the locals. This leaves near-shore fishing grounds as the most crucial for supporting local livelihoods.

Access to the shoreline is important for locals because not all fishing takes place in *pangas*. Fishermen from Gigante and neighboring communities often prefer to walk to nearby rocky shores either because this is the only access they have to the resource or because it represents saving on operating costs. In fact, many prefer to use the rocky shores when the debt with the *acopios* from gasoline is too high. On the weekends, the entire shoreline from Punta Pie de Gigante to Manzanillo Beach and even La Anciana Island is dotted with fishermen trying to bring some catch home for the day. While using hand line is the most common method for fishing from the shore, some locals swim out into nearby rocky areas to set up a permanent net that they check every early morning for lobster and *chatarra* (Figure 11).
Economics of Fishing in Gigante

Fishing is an expensive endeavor for the artisanal fishermen and they work hard to stay out of debt. First, acquiring a *panga* requires an investment of at least 4000 USD, while buying an average (60 horsepower) motor requires up to an additional 5000 USD. *Trasmallos* need to be constantly repaired, which takes days of work, and regularly, they need to be replaced all together (Figure 12). A snapper fishing line is ~400 meters long and requires an average of 300 hooks, with a cost of ~ 200USD/line\(^{17}\) (Figure 13a and 13b). Mahi-mahi lines, according to Fidel, are way more expensive and thus can only be afforded by the *acopios*. Fishermen must also buy or fish for small fish, octopus, and sea snakes to bait the long lines (figure 14). Because baiting lines is expensive and labor intensive, many fishermen prefer to drop *trasmallos* near identified underwater rocks (such as around La Anciana Island). *Trasmallos*, though, according to local fisherman, do not keep the fish fresh because the fish drown once they become trapped in the net. Fish caught on line systems stay fresher once they are hooked.

Gasoline is by far the biggest ongoing expense at an average of 6 USD/gl. Near-shore trips to place, check, and recover nets, require less gasoline (~ 3 gallons) and are therefore the most common fishing excursion in Gigante. On the other hand, trips to more distant locations can consume between 10 and 12 gallons. In a bad fishing day, fishermen end up owing the middlemen for the gasoline. Debt can pile up fast in periods of low catch! The expense and risk associated with offshore fishing in *pangas* means that the majority of fishermen in the area often walk to nearby rocky areas and fish from the shore. For example, the highly profitable lobster can be caught by snorkeling rocky formations near shore; a method that does not require so much start up capital and daily investment\(^{18}\).
It is difficult to know the current state of fish and lobster stocks in the Gigante area, and the Pacific Ocean in general, because no serious studies have been conducted to accurately study the impact of fishing on available biomass. Likewise, few studies provide baselines upon which evaluate change. A single study by INPESCA (2008b) estimated that stock exploitation had been significantly below Maximum Sustainable Yield for snappers and other dermesal (bottom-dwelling) fish species along the Pacific coast. Stakeholders in the tourism industry, however, have started to use the discourse of declining stocks and unsustainable fishing to undermine the artisanal fishing effort in order to clear fishermen from the ocean, provoke an occupational shift from fisheries to tourism activities, and, conceivably, advance the implementation of the Marine Protected Area. When I asked local fishermen in Gigante about past and present resource abundance and their overall perception on declining stocks, their opinions varied. Some fishermen, specially the older ones, believed that there was much more abundance in the past and that fish stocks have declined. “Before we had great amounts of sardines come very close to shore and bigger fish would follow them, now they are all gone…now we have meager catches,” said Leonidas, one of the original fishermen in Gigante. “In the past, you only needed four *trasmallos* to get five hundred pounds of snapper, today you barely get twenty or thirty pounds,” added Martin Mora, who over 40 years ago built the first *cayuco* (wooden boat carved out from a single Guanacaste tree) to set sail from Gigante. Other fishermen believe that there have always been good and bad seasons and that eventually catches get better. “Times of bonanza,” they call them. Still, many argue
that although good and bad seasons have always been the norm, bad seasons are occurring more often than in the past.

No two groups agree on the reasons for the perceived decline in catches. While government authorities and stakeholders in the tourism industry point to artisanal fisheries and access to open commons, fishermen point to the industrial shrimp trawling ships that used to operate in the area, which, locals told me, produced an exorbitant quantity of by-catch that was then thrown over board. “The shrimp trawlers came here and you see, they killed everything, [they killed] all the larva…they took the shrimp and killed everything else”. Since then, catches have plummeted,” argued Tucho. Indeed, INPESCA (2009) reports that industrial near-shore shrimp trawling operations along the Pacific Coast of Nicaragua had to be terminated in 2007 due to overexploitation of shrimp stocks and unsustainable practices. Others believe that unsustainable practices continue today through blast fishing, a method preferred by the larger fishing force of Masachapa, a fishing community further up the coast. Masachapa fleets are regularly spotted fishing in Gigante waters followed by an appearance of dead sea turtles and other marine fauna along the coast (Figure 15; Villarreal 2012). Still others identify phenomena such as el Niño and la Niña, as agents of shifting water temperatures, which drive fish to different latitudes.

The wide range of perceptions illustrates the need for rigorous ecosystem studies to measure the degree of fish stock exploitation and the sustainability of artisanal fisheries in this area. Eradicating artisanal fisheries assuming a “tragedy of the commons” discourse, could work in detriment of local livelihoods by advancing non-extractive and capital-governed interests that privatize resources.
Tourism, Local Jobs, and Changes in Artisanal Fishing

Tourism has brought new job opportunities to Gigante. Gigante’s younger generations are finding jobs in local bars, construction work, and nearby hotels (Figure 16). Many women find employment as housekeepers in several tourism projects and second homes along the coast. However, the majority of new job opportunities created in the construction industry are being filled by migrant workers from other communities, in particular the town of Tola, and from as far away as Managua. Everyday, dozens of buses leave Tola’s main plaza for Guacalito de la Isla carrying workers to work in construction⁰. The boom of construction work, however, will come to an end once the project is completed, leaving hundreds of people without jobs. In addition, this increase of outsiders is bringing new social and cultural dynamics to Gigante’s traditional and relatively isolated milieu. Theft, prostitution and drunkenness are on the rise with the influx of temporary outside workers.

While young people see a good economic alternative in paid employment in tourism, many have not turned completely away from their parent’s fishing traditions. “Although there is good money working in tourism, I keep on leaving my net here every night so that I can bring some food to my family”, said Armando as he was gutting a jurel (Yellow Tailed Jackfish: Carangidae spp.) on the rocks at the south end of Gigante's bay. Armando, who is 19 years of age and works as a bartender at one of the local hostels, represents a new generation of fishermen who see a future in tourism development, but believe that fishing is indispensable to their livelihood²¹. Others, however, have turned their back from artisanal fishing and see it as backward and destructive livelihood will
eventually come to an end and that it is a livelihood that is pertinent to their parent’s generation.

It is not up to us, as outsiders, to determine the way of life that locals chose to follow. We can, though, raise awareness of the dangers of moving a fishing-dependent community towards paid employment that is seasonal, that makes local livelihoods dependent on distant throbs of the global economy, and that could break a link to traditional subsistence. Particularly threatening for Gigante is the rapid and unregulated development that it is experiencing. The community does not have the time or resources to adapt to these rapid changes and the government fails to implement policies that protect local traditions and social structures from the fast-paced changes brought about by tourism development.

With regards to fishermen, a few job opportunities have opened for them in the transition to marine tourism services. These opportunities include taking surfers to surfing spots, water taxi services, and providing sport-fishing expeditions. Partnerships between local fishermen and foreign investors resulted in an increase in tourism pangas. For example, Evelio related, “I managed to partner with some gringos, …much of the investment for the engines was on their part. They [the gringos] have a website and tourists come here with the entire package paid for. I take them to different spots to surf and fish.” Evelio is a fisherman who is now dedicated mostly to tourism activities, thanks to his partnership with foreigners with spare capital who foresaw the future potential of tourism in Gigante. This increase in work opportunities, however, has not turned Evelio completely away from his previous livelihood. “During the [tourism] low season, I go out fishing as a marino since my panga can no longer be used for [artisanal] fishing.”
The middlemen at the *acopios* have also taken advantage of the boom in tourism. *Acopio* owners charge 40USD/hr. for sport-fishing trips. The fisherman driving the boat receives around 12 USD for the day (figure 17). This is a good earning for *acopio* owners and the fishermen. Other fishermen who have tried to partake in the tourism boom have seen their aspirations crushed by tourist themselves. Angel made this clear to me when he relayed, “I have offered tourists to take them out for the day for 50 USD, but they say it’s too expensive for the service they receive. Then they go to Fidel [the owner of one of Gigante’s fishing *acopios*] and see 300 USD as cheap.” In Angel’s perspective “it is because they perceive us as poor people; our clothes are all torn and they [tourists] think we shouldn’t ask for such high prices. Plus over there [at the *acopios*], tourists are provided with beer, water, and fishing rods. In other words, the impoverished fisherman cannot make it even if our prices are lower.” At first glance, tourism activities seem a plausible alternative for Gigante’s artisanal fishing force, but the reality is that only a few families have been able to benefit from it because the investment required to prepare a *panga* for tourism, including buying more powerful outboard motors and fishing tackle, is out of the reach for the majority of Gigante’s fishermen. This majority will be severely marginalized and driven further into poverty as access to productive fishing grounds are closed and their transition to tourism activities is impeded by limited economic resources and, according to fishermen, the lack of governmental support that has characterized artisanal fisheries in Gigante (e.g.: access to credit to invest in equipment).

Guacalito de la Isla is the apotheosis of tourism development in Gigante. The 250 million USD, 1670-acre project, is an oceanfront resort for affluent tourists (Canales Ewest 2013; Felsenthal 2012). The resort is being developed by the Pellas, one of
Nicaragua’s elite and most powerful families. Located directly onshore from La Anciana Island, one of the components of Guacalito de la Isla’s master plan is a marina from where a variety of marine recreational activities will be hosted in the surrounding waters. Their website advertises several activities for tourists, including snapper and grouper sport fishing and perfect diving among unspoiled coral formations around La Anciana Island (Guacalito de la Isla 2012). These activities, however, overlap spatially with the past and current fishing grounds of Gigante’s fishermen, driving “the Pellas” to advance the creation of a Marine Protected Area that could provide the grounds to displace fisheries while promoting “environmentally-friendly” tourism activities.

Guacalito de la Isla see themselves as promoters of the local culture, arguing that their clients, as part of their Nicaragua experience, want to see and participate in local culture. It is not clear, however, how “local culture” (a fishing community) will be promoted and preserved beyond the recruiting of local fishermen to drive tourism pangas. It is unlikely that paid employment will help preserve the local artisanal fishing culture, particularly when perceptions of this local culture among tourism stakeholders is far from positive. As the Public Relations Representative and Community Liaison for Guacalito de la Isla explained, “we don’t have any particular plans for them [the fishermen]…fishing communities are very stubborn and difficult to work with. Unless they organize, we are not going to channel any help their way.” This perspective reveals a few issues. First, this tourism project has adopted a neocolonial stance of seeing themselves as bringing prosperity to an impoverished, backward region, and to a stubborn population that fails to adopt the ways of the modern globalized world. They are willing to help, but first the “uncivilized” need to get organized. Secondly, Guacalito is not “all
about conservation,” as their Public Relations Representative portrayed them. They don’t seem to be concerned about Gigante’s culture of artisanal fishing beyond the romanticized stories that can be sold to tourists about “the small, bucolic fishing village, which earned its name from the interesting rock formation on its southern end that resembles the foot of a sleeping giant” (Guacalito de la Isla 2012). They have not conducted any in-depth studies into the fishing economy from an economic perspective or studies investigating claims of fish overexploitation from an ecological perspective. They simply employ the discourse of environmental degradation and protection of marine resources to position local fishermen in a negative light (Solís 2009). Conservation of this traditional fishing society, that is deemed an acceptable outcome by the fishermen themselves, first requires a thorough understanding of its history and the importance of marine resources to past and current livelihoods. With regards to La Anciana Marine Protected Area, for example, Guacalito de la Isla (and other stakeholders in the tourism industry, including the central government) has not taken the steps to understand and safeguard resource use patterns among the original users of the coast, the artisanal fishermen of the area (see Solís 2009).
Chapter Seven: La Anciana Marine Protected Area: Tourism vs. Local Livelihoods

Studies on the coral communities of the southwestern Pacific coast of Nicaragua identified the sites of Punta de Pie de Gigante, Guacalito Beach (immediately south from Manzanillo Beach), and La Anciana Island as having an important abundance and biodiversity of corals and fish (Alvarado et al. 2011). Based on their findings, they proposed “management action to protect the diversity and uniqueness of this region” (p. 1). The idea of protecting the area or, as local fishermen see it, “prohibiting fishing from Punta Pie de Gigante to Punta Brito,” has been floating around in Gigante since at least 2009. As explained by Tucho, “they [The Pellas] proposed [to us] not to fish close to shore…[we] the fishermen said O.K., but that it was necessary to plan for compensation. If they were going to impose a ban on fishing, then we needed some type of monetary indemnification, yes that’s what we said. We live off fishing and they want to prohibit it… how are we going to survive? They said that they were going to see if it was possible [to establish a monetary indemnification] but never came back…that was like three or four years ago”. When I asked fishermen about this rumor of prohibiting coastal fishing along this marine corridor, they saw it as an idea proposed to them by “Los Pellas” that never moved forward. Moreover, many saw it unlikely to succeed because most of their important fishing spots are located within the boundaries of the proposed Marine Protected Area and a ban on fishing would signify a direct threat to their survival. Local
fishermen did not believe that their community would obey a fishing restriction in this area.

Recently, with the completion of the Guacalito de la Isla’s first building phase, stakeholders are pushing to secure near shore resources and eradicate artisanal fishing through the implementation of this Marine Protected Area. Plans to intensify coastal tourism activities collide with the daily livelihood of local fishermen that rely on the same space to provide food for their families and to generate income. Tourism stakeholders are taking the necessary steps to erase nearby traces of artisanal fisheries in order to increase the aesthetic value of their packages. With guests paying an average of 700 USD per night, Guacalito de la Isla cannot afford having their guests compete for space with local producers (Figure 18).

Management plans for the MPA are not clear at this point. Although the Municipality of Tola officially approved the designation of the area as an MPA in February of 2013 (Alcaldía Municipal de Tola 2013), it is still in the management planning stages and my outreach to the group responsible for pushing the MPA forward, Fundación Nicaragüense Para el Desarrollo Sostenible (FUNDENIC-SOS), was not answered. The only information available at this point is through a website hosted by Fundación Futuro Latinoamericano, who is working in conjunction with FUNDENIC-SOS in the planning and execution of the MPA. The site states that the NGO is working on a “Proposed MPA with unique mix of corals, rocky reef and sandy bottom, exceptional species richness, close to major turtle nesting beaches on Pacific coast.” Their site continues on to say, “fishing communities endure severe poverty. The two adjacent municipalities have about 1,100 fishers in 4 main fishing villages.” Finally, they
state that “the company planning adjacent tourism resort seeks collaboration with FFI/FUNDENIC.” (Fundación Futuro Latinoamericano 2012). Several things are made clear through this description. First, the number of artisanal fishermen that will be affected by this Marine Protected Area is much larger than just Gigante, as it will affect livelihoods in four fishing villages along the coast. Secondly, the NGO is working by a request put in place by Guacalito de la Isla, which gives rise to the question of who benefits from the establishment of La Anciana Marine Protected Area? At the very least, one needs to question if efforts are truly concentrated on diversifying local livelihoods and protecting marine environments to promote community well-being, or, instead, these conservation and the creation of an MPA are part of a discourse being used to conceal capitalistic interests amidst tourism growth in the area.
Chapter Eight: Conclusions

The interaction between tourism development and artisanal fisheries in Gigante provides yet another example of how power (economic and political) is used to achieve the goals of stronger stakeholders in natural resource control and human-environmental interactions (Robbins 2012; Neumann 2005; Peet and Watts 2004; Bryant 1992; Blaikie and Brookfield 1987). Increased struggles over control of and access to marine resources are around the corner for Gigante as tourism starts to play a role in the local economy.

Tourism development was first promoted in Nicaragua as a way to bring foreign exchange to an ailing economy and to help alleviate poverty and diversify livelihoods in rural communities. The central government gave little attention, however, to the ways in which tourism could compete with local livelihoods and exacerbate poverty by marginalizing local producers. This is alarming because, in the case of Gigante, artisanal fisheries provide income to local fishermen, profits to middlemen and fish exporters, and also an easily accessible for most households in Gigante and neighboring communities.

In Gigante tourism has started to compete with artisanal fisheries— an interaction that is beginning to forge new patterns of resource control that favor those with power and money. In addition, the increased influx of visitors to Gigante and enclosure of important fishing grounds may result in marginalization of local fishermen and trigger unsustainable resource exploitation (see also Robbins 2012). The privileged position of local and foreign elites, despite a brief period of empowerment for the peasantry during
the first Sandinista government (1979-1990), once again works to the advantage of the elite—the poor and powerless are once again marginalized. The Sandinista government (since 2006), somewhat paradoxically, stands to see the very people that made the revolution a success, raped by this latest form of capitalist intervention. Through neoliberal policies that favor tourism development, the government is disempowering artisanal fishermen. In addition, through adoption of conservation discourses, the tourism industry has started to label artisanal fishermen as rapacious exploiters of the commons, and have promoted themselves as conservationists. This use of environmental discourse and economic and political power resulted in the recent approval of La Anciana Marine Protected Area by the Tola Municipality.

The creation of La Anciana Marine Protected Area is an example of what Robbins (2012) calls “conservation and control” (p. 176). Robbins proposes that control of livelihood-supporting areas is often snatched from local producers under the discourse of environmental and community conservation and by depicting local subsistence practices as unsustainable. This creation of protected areas, Robbins argues, often leads locals who previously managed local resources in a sustainable fashion, to break rules and often use the new protected resources in less sustainable ways (2012). The real intention, however, behind the green discourse of powerful stakeholders, is to gain an advantage in the struggle over resources by displacing local producers. On the Pacific Coast of Nicaragua, La Anciana Marine Protected Area will enclose a large and extremely important marine corridor, which includes some of the most important fishing grounds for Gigante’s fishermen.
Banning coastal fishing within the MPA may have several outcomes on local livelihoods and environments. First, prohibition of fishing in nearby productive fishing grounds may force local fisherman to fish more distant grounds beyond the proposed 22 km exclusion zone. This option, though, is only possible for fishermen who already own better equipment and for acopios, who have more capital to defray the costs associated with longer trips. The creation of the MPA will see the complete eradication of on-shore fishing from the rocky shores of the coast and La Anciana Island. This will threaten food security for hundreds of individuals.

Another outcome is that local fisherman may be forced to employ tactics that get around the rules created by the elite and powerful (cf. James Scott 1990). As tourism development continues and as spaces are enclosed to seize control of resources, Gigante’s artisanal fishermen can resist and break the new rules for resource extraction imposed upon their traditional fishing grounds. In what Scott (1990) calls “weapons of the weak,” fishermen can use everyday resistance by, for example, pilfering inside the boundaries of the Marine Protected Area, or by fishing at night. This will ultimately allow fishermen to informally complain, while avoiding a full-blown conflict with the powerful stakeholders of the tourism industry, including the government.

Another possible scenario is that local fishermen could use the power and experience gained during the revolution, and more recently, the conflicts over land, to protest their lack of inclusion in the creation of the MPA. The success of MPAs in other parts of the world has been directly linked to community empowerment and the inclusion and adequate consultation of local producers during the planning (step zero) and implementation stages (Chuenpagdee et al. 2013; Thu Van Trung et al. 2012; Gonzalez
and Jentoft 2011; Kareiva 2006). In addition, from a fisheries management perspective, the implementation of an MPA must germinate from rigorous ecosystem studies that ensure that the proposed ecological functions will take place given the particularities of the marine system (Chuenpagdee et al. 2013; Hilborn et al. 2013; Stevenson et al. 2013). Unless tourism operations, local and central governments and institutions create alternatives for fisherman, the implementation of the MPA may result in fishermen displacement and the removal of a resource from local families who rely on this resource for food security and income generation. I was perhaps able to catch a glimpse of these future conflicts tourism development and the establishment of the Marine Protected Area through Angel’s fishing excursion interaction with the sport-fishing boat. Little doubt remains that Angel’s dilemma reflects the future reality of Gigante’s artisanal fishing tradition as it barrels towards collision with the competing interests of tourism development.

Lastly, the power of the Pellas and their control of the Nicaraguan government can subsume local fishermen, prompting them to transition to paid employment in the tourism industry and, potentially, bringing Gigante’s artisanal fisheries tradition to an end and with that, the society and culture that the tourism industry attempts to sell. Despite the questions and intent of revolutionaries like Rufino, the ocean seems to be falling into the hands of those with power. Paradoxically, the revolution that empowered peasants in the 1970s to the 1990s might remove them from the new landscape where, yes, there are owners of the sea—dueños del mar.
Chapter Nine: Suggestions

Several suggestions can be made to the different actors involved in this conflict between tourism development and artisanal fisheries and the struggles over access to marine resources that is creating. The Nicaragua government should pay closer attention to the impacts of tourism development on local livelihoods and put in place policies that protect local societies and cultures from the hegemony of capital-oriented development. The detrimental impacts of tourism development to San Juan del Sur’s local population and livelihoods (Egan 2011) raise concerns about what could happen to Gigante if the Nicaraguan government fails to take the steps to safeguard its traditional economic activity. Particularly, and given Nicaragua’s revolutionary history, the Sandinista government should make an effort to safeguard the rural masses that made the revolution a success.

Guacalito de la Isla and other tourism projects along the coast have a unique opportunity to truly promote a type of development that is sustainable for both the environment and the local population. To do so, the Pellas family should look beyond the economic dimension of development and work towards a complete inclusion of local producers in tourism strategies and projects. With regards to La Anciana MPA, the Pellas could invest in serious in-depth studies of how local waters support the livelihood of fishermen and their families. By doing so, they will realize the risks that may result from marginalizing local producers from the environment.
In addition, although tourism may be a plausible supplement to subsistence livelihoods, the tourism industry should take the steps to keep substantial profit within the communities. While Gigante moves towards a tourism-oriented economy, the meager economic benefits of the new economy to the community could prove to be insufficient to ensure the survival of local producers and their families.

Lastly, local fishermen could benefit from forming a cooperative to gain the political power to negotiate outcomes that are more favorable to them, both in tourism development and commercialization of fish products. A cooperative, for example, could give them the organizational power to negotiate directly with exporting firms and consumers, making the middlemen unnecessary and keeping more of the profits in their own pockets.
End Notes

1. All quotes are translated from Spanish by the author, a native Spanish speaker.

2. Rufino served first in the Sandinista guerrilla and later in the National Sandinista Army from 1976 to 1983 after being trained at Manzanillo beach (the location of Guacalito de la Isla today) by Gaspar Garcia Laviana, a Catholic priest that worked closely to and witnessed the hardships of San Juan del Sur’s and Tola’s rural poor and felt compelled to join the insurrection. Although father Gaspar was killed prior to the triumph of the revolution in July of 1979, he remains a hero among the peasant populations of the department of Rivas, particularly in Tola where his remains are buried today (Figure 19). The National Sandinista Army was composed of the rural masses that made up the bulk of the Sandinista guerilla movement prior to the triumph of the revolution in 1979. When the Sandinista revolutionary forces took power, the rural armed fraction, largely, became the official Nicaraguan army. Rufino commanded a group of 35 soldiers. Today, Rufino proudly carries his military tag around his neck and his FSLN army ID. Every conversation about Sandinismo and the revolution with Rufino is a good reason for him to bring out an old laminated picture of Che, which serves as a sort of saint to him when discussing matters of the Nicaraguan revolution (Figure 20). Prior to leaving the army out of exhaustion from the prolonged conflict with the U.S.-backed Contra forces, Rufino was scheduled to travel to Cuba to receive further military training.

3. The Sandinista party has taken a self-contradictory path since its return to power in 2006. While the revolution ideals that lead to the Sandinista victory in 1979 embraced socialist tendencies and anti-capitalism/anti-imperialism views for the post-Somoza Nicaragua, those ideals have been reduced to political rhetoric since 2006. The Sandinista government has continued the neoliberal policies put in place since 1990 to reinstitute the social and class dynamics dominant prior to 1979. That is, a concentration of capital in the hands of few families and the pauperization of the unprivileged. The Sandinista revolutionary leaders (who are still in control of the Sandinista party) became a privileged class (social and political) themselves during their first period in power from 1979 to 1990. Thus, neoliberal policies and the continuation of these, despite paradoxically contradicting the revolution, work in favor of further accumulation in the pockets of this new Nicaraguan social class. Taking the redistribution of land after the triumph of the revolution in 1979 as an example, although it was given to the rural masses to sustain their livelihoods, we now witness further privatization of previous communally owned parcels that began to take place after 1990, following international neoliberal principles. Today, these policies continue through the supervision of the Sandinista government, which is now in a position to economically benefit from them, but seems to have forgotten about the ideals that made the revolution a success and the masses of rural peasants who helped bring about change in 1979.

4. Nicaragua is experiencing serious instabilities with regards to land tenure and property rights. During the last four decades, for example, land tenancy went from being 96%...
private during the Somoza period (1936-1979) to 60% private at the end of the Sandinista regime (1979-1990), and back to 84% private during Arnoldo Alemán’s government in 2002 (Bonilla and Mordt 2008). The multiple land titles created during these periods continue to provoke conflict among titleholders. In addition, discrepancies in the laws that regulate land tenancy have also allowed powerful actors to acquire and develop lands that are a priori protected from any type of development, such as the coasts (Jonakin 1996; Everingham 2001; Bonilla and Mordt 2008). At the national level, for example, coasts are protected from development by a law stipulating a 30-meter exclusion zone (200-meter in an early law that is still called upon by certain municipalities). At the municipal level, however, coastal properties are classified as ejido-type properties, which allow municipalities to rent them out for any type of purpose (Bonilla and Mordt 2011). As a result of these drastic shifts in land tenure patterns and legal loopholes, rural communities have become vulnerable to the effects of globalization by allowing powerful actors to buy, and in some cases misappropriate, land. Land misappropriation has caused serious conflicts in Gigante and adjacent beaches, driving locals to defend their lands through any necessary means, including armed conflict (see for example: Martínez Mairena 1999; Quinteros 2010).

5 For an example of such management schemes and development strategies orchestrated specifically by the Nicaraguan government see INPESCA (2008a).

6 For example, as a result of the 2008-2009 global economic crisis, 2009 was an adverse year for the international tourism industry. UNWTO (2011) reports that after four years of above-expectations growth, 2009 saw a notable decline in international tourist arrivals (-4%) and international tourism receipts (-6%), evidencing the degree to which tourism relies on international market and economic trends.

7 Manifest Destiny was an 19th century ideology held by Americans of a divine right and duty to Americanize “uncivilized” peoples and create an American empire through territorial expansion, not only west, but also south into Latin America. First coined by Democratic Review journalist John L. O’Sullivan, Manifest Destiny made its way into Nicaragua in the form of American tycoons such as Cornelius Vanderbilt, who monopolized the Nicaraguan transisthmus route that transported migrants from the U.S east coast to California during the Gold Rush. Vanderbilt manipulated internal political affairs to gain advantages over national competitors and involved the U.S. government in more direct military interventions to safeguard his interests. Manifest Destiny was also the banner of William Walker and his American filibusters, who believed that divine providence and racial superiority gave them the right to turn Nicaragua into a U.S. colony. Aided by Nicaraguan liberals opposing the current Conservative government, Walker declared himself president and instituted slavery. Manifest Destiny turned its back on Walker, however, for he was quickly defeated by a coalition of Central American forces and eventually executed in Honduras.
The movement was named after Augusto C. Sandino, who founded a small army of peasants in 1927 to resist the latest U.S. invasion of Nicaragua and the Conservative government they had helped install (Wilm 2012). Sandino’s anti-imperialist ideologies and actions quickly made him a target to the United States and its Nicaraguan puppet government. In 1934, during peace negotiations with Sandino and his men, Anastasio Somoza García, then head of La Guardia Nacional, and future founder of the 43-year Somoza dictatorship, ordered Sandino’s assassination. Sandino’s actions and ideas, however, inspired the Sandinista movement to end the 43-year dictatorship of the Somoza family.

The Department (State) of Rivas is divided into 10 municipalities, including the municipalities of San Juan del Sur (bordering Costa Rica) and Tola (where Gigante is located).

The *Ley de Incentivo para la Industria Turística* (Law 306) and the *Ley General de Turismo* (Law 405), declare and make tourism “an industry of national interes.” In particular, Law 306 put forth a number of neoliberal incentives such as major monetary exonerations and substantial tax brakes for both nationals and foreigners who participate in the tourism industry. The incentives apply to investments within numerous areas of tourism including transportation, lodging, construction, and Protected Areas of special interest for tourism (such as investments in a Marine Protected Area that will be used for tourism activities). The degree of incentives given by these laws increases with increase capital investment, promoting tourism development from large capitals and elites.

Conflicts over land in Gigante started around the year 2000 when Nicaraguan elites with close family ties to former president Enrique Bolaños (2002-2007) started frequenting the area. Through deception, these private investors managed to “legally” seize the area of Redonda Bay (immediately south of Gigante) from the agricultural cooperative. The coveted land was quickly sold to several other owners. The cooperative attempted to recover their land with a fierce fight through the judiciary system, but the advantage of the elite in knowing how to manipulate the system proved superior. The cooperative lost this valuable peace of coastal real estate forever. Today, Redonda Bay has gone through major development of, mainly, second-home residential tourism. Similarly, just north of Gigante, in Playa Amarillo, several groups are caught up in a violent conflict that involves a cooperative, private investors, and demobilized guerrilla/National Army soldiers from outside the area and have resulted in numerous armed disputes. The boom in tourism has put a price on these coastal lands and many are seeking to cash in (see for example Quintero 2010). As tourism continues to grow and private investors flee to the coast, we will stand to see if the Sandinista government is willing to protect the very same recipients of one of their flagship reforms.

Close to 85% of Tola’s population live in rural conditions. High poverty levels in this region has motivated the forced migration of about 20% of the population to neighboring Costa Rica in search of seasonal and permanent work.
A Brief History of Gigante

The region where the village of Gigante today sits was part of a private estate known as finca Güiscoyol purchased by Nicaragua’s president Anastasio Somoza in 1937. From that time until the triumph of the revolution and the resultant confiscation of the land, the Somoza family used finca Güiscoyol primarily for large-scale cattle ranching. Today, two drinking troughs in town are the only remnants of the dominant activity in times of the dictatorship. The privatization of these lands since, at the very least, the beginning of the twentieth century, and the dense forests cover in the area contributed to Gigante being largely inaccessible to settlers; except by sea. In fact, most of Gigante’s inhabitants first came to fish its coastal waters allured by the abundant marine life that guaranteed a good catch even with the limitations of the simple technology used by artisanal fishermen back then.

Because the Somoza estate was so vast, peons would be sent to the area of Gigante with their families to take care of the cattle. A coastal property that was later destroyed by the Sandinistas served as the home to some of Gigante’s first permanent residents. “I was one of the first inhabitants here because my dad brought me here when I was 2 months old in the 1950s” recounted Martin Mora, one of Gigante’s first fishermen. “My dad was the caretaker. Back then there was no town, no road, no electricity, there was none of that.” Others would ask caretakers permission to live in the area, despite knowing that Somoza’s personal army could show up at any time, knock down their improvised houses and chase them away. “The caretaker would let us know that la Guardia was approaching so we would hide in the mountains and they would demolish our champas (hut),” explained Tucho, another early inhabitant. “We would return afterwards and rebuilt the whole thing.” Don Leonidas Ruiz also brought his family to Gigante under these circumstances before dedicating his entire life to fishing Gigante’s waters. Today he has grown too old to go out fishing, but his sons, grandsons and great grandsons continue to live in Gigante and have adopted the fishing tradition as their main source of livelihood.

Martin Mora made the first boat that sailed out of Gigante. Leonidas Ruiz would follow with a first boat called San Martin and then two other boats. The 8-meter-long cayucos or wooden boats were built from the trunk of a single Guanacaste tree (Enterolobium cyclocarpum). Martin Mora constantly asked his friends Alejandro Grillo and Tucho, who lived in the area and who today are also considered some of the Gigante’s first fishermen, to go out fishing with him. In those years, fishing was still done exclusively for consumption purposes. “There was abundance here, the catches were fabulous, very good” said Martin Mora. “Before, we had lots of sardines, fish was plentiful, now they have vanished… too many people.” Tucho seemed to have a similar opinion about the past and present state of fisheries in Gigante, “We would get at least 300 pounds per day, now 20 or 30 at the most.”

Selling fish to the outside took place first in the form of dried fish, since the lack of roads made transporting fresh product to neighboring villages arduous to say the least and many times simply impossible. However, fishing efforts continued to be predominantly for self-consumption. “Fish were plentiful right here next to the coast. Sardines would come all the way up to the shore and other fish would follow them, but we fished only to
eat ourselves,” described Leonidas Ruiz. After the triumph of the revolution the Sandinista government created in 1981 the Empresa Nicaragüense Distribuidora de Productos de Mar y Lagos (ENDIMAR), which, according to Martin Mora, was the first “agency” to receive product from fishermen to be commercialized, mostly in local markets. Martin Mora, Leonidas Ruiz and others, would take their daily catches by sea directly to Astillero, Masachapa and San Juan del Sur; by now their cayucos had lost their oars in favor of outboard motors.

With the win of the revolution also came the expropriation of finca Güiscoyol by the Sandinistas and the redistribution of the land in the hands of the rural poor through the Agrarian Reform of 1981. Between 1984 and 1987, members of the cooperative Pedro Joaquin Chamorro settled what today is known as Gigante and began combining agriculture, herding and fishing activities as a mode of subsistence. At this time the “new generation” of fishermen began taking some of the product to Gigante’s entrance where the first middlemen awaited to purchase and commercialize the fresh product in local markets (the precarious road still made Gigante, for the most part, inaccessible to the outside world).

On September 1st 1992 a Tsunami hit the entire Nicaraguan Pacific coast. Don Leonida’s house on the coast of Gigante was washed away by the waves, and he and his wife barely made it out alive. Martin Mora lost his wife to the tsunami, relocated his house inland and never returned to live on the coast. Gigante’s cayucos, engines and fishing gear were lost forever. Through national and international efforts most affected fishermen saw their cayucos replaced with the new fiberglass pangas, in an effort to modernized small-scale fisheries. Gigante received 6 of these boats and was officially considered a fishing village. Soon the first acopio is established by the current mayor of Tola, Don Angel Morales. Fidel and Lucas will follow with the establishment of acopios a few years later. With the construction of the main road, Gigante is no longer isolated from external influence. Gigante’s products now go out to the world and also, very soon, the world will started to arrive in Gigante.

14 Several snapper species that are captured in Gigante’s waters are considered as valuable as the red snapper (Lutjanus colorado), and probably labeled as such in international markets. However, some snappers such as the Barred Snapper (Hoplopagrus guntheri) are paid at lower prices by the acopios.

15 Fidel and several fishermen from Gigante (along with others within the department of Rivas) were recently arrested under charges of drug trafficking (Villarreal and Vázquez 2013). The drug trafficking network along Nicaragua’s Pacific coast is no secret to national authorities and locals, many of whom, enticed by money, opt to partake in drug operations. Drug smugglers have adopted navigation patters resembling artisanal fishing as a way to avoid detection. In order to make this slower trip, drug runners need a constant supply of gasoline that is provided in key positions along the coast, usually by local fishermen. During the early hours of March 1st, 2013, the police raided Fidel’s house and acopio, confiscating 5,000 USD in cash, his outboard motors, and several of his pangas. They closed down his acopio, convenience store, and recently opened
Others that were informed of the police actions managed to escape prior to the operation. The detainees, however, were immediately translated to Managua to be prosecuted, were they still remain. Recent information reveals that the police do not actually have incriminating evidence against Fidel. Rumors among locals point out to large funds provided by the Russian government to repress the drug trafficking taking place along the coast and a need by the Nicaraguan central government to account for the funds. The final resolution could be decisive in the future political economy and overall social and cultural survival of Gigante’s fisheries. One cannot rule out the possibility of this operation being yet another strategy to debilitate the dominant sector in the local community (artisanal fisheries) and force a transition of the now out-of-job fishermen to paid employment in the tourism industry.

Although rumors about “prohibiting fishing close to the coast”, as locals refer to it, have been floating around in Gigante for several years, the establishment of La Anciana Marine Protected Area was recently approved by the Municipality of Tola (in February of 2013). Currently, an NGO is working in a management plan that will regulate the activities that will be allowed within the boundaries of the MPA.

Some fishermen, however, prefer to catch snapper using a single handline at fishing spots that are known to have higher underwater rocky formations. Four to five fishermen go out in a panga and fish throughout the night at these spots, returning early in the morning with the catch.

Diving with air compressors is also common for catching lobster. When diving, fishermen go out in pangas holding an air compressor, which delivers air through a host. It is important to note, however, that using this method can be detrimental to the diver’s health as motor fumes are also constantly delivered to diver’s lungs. Angel, for example, had quit diving for lobster after he was diagnosed with an embolism.

Shrimp trawling is a shrimp fishing method that is mostly used by industrial fisheries. In industrial shrimp trawling, a large net is dragged along the bottom of the ocean. These nets are kept wide open through flotation devices attached to its upper section (creating the vertical aperture) and through devices that hold each side of the net on board (horizontal aperture). Sometimes two boats are used to create this horizontal gap. The end result is a cone-shaped net that can cover vast ocean areas. Trawling nets do not discriminate among marine fauna and catch, besides shrimp, everything that comes in its way. As a result, the industrial shrimp trawling industry creates an exorbitant amount of by-catch, which, because it was not targeted in the first place, gets thrown overboard. By then, most of it is dead.

According to a report on Nicaraguan newspaper La Prensa (Canales Ewest 2013), 1,300 workers have been permanently employed during the last two years by Guacalito de la Isla years in construction.
The more I delved beneath the surface of these individual stories, perceptions, and actions, the more I drew parallels between Gigante’s current transitional stage (from fishing-dependent to tourism dependent) and the transitions described by Kottak (1992) in his multi-decade study of Arembepe, Brazil. In the 1960s Arembepe was an isolated village on Brazil’s northeastern coast that relied exclusively on traditional fisheries for subsistence. By the 1970s, through a booming tourism industry, “increased contact with the outside world and changes in the local economy had affected social relations and attitudes in Arembepe” (p. 117). By the 1990s, in a period of two generations, not much remained of the traditional fishing-dependent village witness by Kottak in the 1960s. Gigante is now experiencing these transitions and the perceptions and attitudes of the new generations suggest yet another “assault on paradise.”

Often, because of the poor conditions of dirt roads, it is easier and faster to move from town to town via water taxi.

A fishing excursion is composed of a boat captain (who usually owns the panga), and 3 to 4 marinos. The marinos are allowed to bring 1 or 2 trasmallos on board, but have to pay the boat captain 30% of their earnings. Boat captains, on the other hand, in addition to collecting 30% from each fisherman, gets to keep the earnings from his own trasmallos. Boat captains have to pay for the gasoline used during the entire excursion (which includes placing, checking and retrieving the nets). With this arrangement, boat captains receive a higher pay than marinos at the end of the month. Most marinos do not own a panga, but some boat owners may chose to go fishing as a marino in order to save on gasoline.

Evelio’s remark illustrates how his transition to tourism activities now prevents him from earning at the higher boat captain rate. As a marino, now he occupies a lower rank and consequently, is not able to bring as much money home. Also, his boat must be kept clean for tourist operations. Fishing takes a heavy toll on pangas and tourist do not accept fishing pangas for their surfing and sport fishing excursions. A tourist panga is equipped with racks for holding surf boards, sun shades, and holders for fishing rods and drinks.

The Pellas family has been one of the wealthiest families in Nicaragua since before the revolution. According to Wilm (2011) by 1979, the Somoza, Pellas and Montealegre families accounted for close to 50% of Nicaragua’s GDP. Despite the fact that the Sandinistas drove elite families out of the country in the 1980’s (most of which went to Miami and thus upon their return to Nicaragua in the 1990s they were dubbed “the Miami Boys”), and despite current Sandinista anti-oligarchy discourse, the Pellas have always received protection from the FSLN. This protection perhaps derives from family connections with Sandinista leaders and the Pellas owned companies under the family brand Grupo Pellas (Wilm 2011).
“Los Pellas” has become a well-known household name in Nicaragua that derived from the family business agglomerate Grupo Pellas. Everybody in Nicaragua knows whom “Los Pellas” are, especially because of the physical presence of “Casa Pellas” in many Nicaraguan towns, which sells motorbikes, outboard motors and spare parts for those engines. Also everyone knows them and are reminded daily because many bank at Banco de América Central (owned by Pellas), drink the prestigious Nicaraguan rum Flor de Caña (owned by Pellas), drive or hitch rides in a Toyota car/truck or on a Suzuki motorbike (only distributed in Nicaragua by Casa Pellas), or work in the sugar cane fields (owned by Pellas) to make the national rum, or, now, work in the large tourism operation of Guacalito de la Isla (owned by Pellas).
References


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Appendix 1: Figures
Figure 1. Map of Nicaragua showing Study Area and other locations referenced throughout the text.
Figure 2. Detail of Study Area
Figure 3. A sight that is becoming more common in Gigante as coastal lands previously held by agricultural cooperatives fall into the hands of developers. While traditional fisheries continue along the coast (but for how long?), access to these beaches is now prohibited for non-tourists.
Figure 4. The fiberglass boats (pangas) of Gigante’s artisanal fisheries are a dominant sight along the beach, showing the importance of this economic activity to the community.

Figure 5. Young locals hitch a ride on top of an oxcart carrying trasmallos to a fisherman’s home to be repaired. Daily activities reflect a culture that has been forged through decades of close relationship with the ocean (photo courtesy of Tobi Schmidergall).
Figure 6. A local approaches a recently arrived *panga* to solicit lobster heads, one of the most common leftovers from daily fishing activities—the boat captain on the right accedes to the request. These lobster heads are often used in local households to make soup.

Figure 7. A basket full of *chatarra* from a single fishing excursion awaits at one of the *Acopios* to be picked up by *chatarreros* later that day.
Figure 8. A local fisherman weighs his snapper catch at one of the Acopios. Monopolization of gasoline and direct commercial ties with buyers force fishermen to sell their catch to Acopios, giving the middlemen a privileged position in the political economy of Gigante’s fisheries.

Figure 9. Surf taxis have become a popular tourism service in Gigante. These surfers are being taken to one of the popular surfing spots along the coast in a panga owned by Fidel and driven by a local fisherman who will receive around 12 USD for his workday (photo courtesy of Tobi Schmidergall)
Figure 10. Angel repairs his old outboard motor that failed to start while in the middle of a fishing excursion. The insecurities provided by old equipment and small pangas make near-shore fishing the safest trip for local fishermen and limit open-water operations to times of calm oceans.

Figure 11. Armando gathers the catch retrieved from a trasmallo that he places everyday near Punta Pie de Gigante. Although this fish is considered chatarra and would sell at 0.40 USD/lb. at local acopios, it provides an important source of food for his household. This catch, Armando told me, would feed his parents, siblings, wife and child.
Figure 12. Local fishermen repair a trasmallo that is used to target snapper. Trasmallos need to be regularly repaired, which takes away working days for fishermen (photo courtesy of Matthew Taylor).
Figure 13a. The different net (trasmallo) methods used by Gigante’s artisanal fishermen. (A) The net used to target lobster rests on the ocean bottom is placed very close to shore in areas with rocky substrate. This net measures around 100 meters long and 1.5 meters wide. Minimum mesh size is 4 inches. (B) The net used to target snapper rests just above the ocean bottom and is placed in areas 10 to 30 meters deep. This net measures around 100 meters long and less than 10 meters wide. Up to three nets can be strung together. Minimum mesh size is 7 inches.
Figure 13b. The different longline fishing methods used by Gigante’s artisanal fisheries. (C) The snapper longline rests on the bottom of the ocean and is placed in areas known to have underwater rocky formations. It measures an average of 400 meters and can have between 200 and 300 hooks. (D) The longline to target Mahi-mahi floats near the ocean surface and is placed in open waters beginning at around 10 kilometers from the coast. The mainline measures between 1 and 3 kilometers long and the snoods an average of 2 meters.
Figure 14. Local fishermen bait a snapper line before going out to place it at one their identified spots for snapper fishing along the coast (photo courtesy of Matthew Taylor).

Figure 15. Tucho shows a snapper lacerated in half allegedly through recent blast fishing by Masachapa fishermen in Gigante’s waters (photo courtesy of Villarreal 2012).
Figure 16. Yaoska and Rosalia pose for the picture while working at one of the local bars that are owned by foreigners. They represent a new generation of young locals who are finding jobs in the booming tourism industry. Rosalia’s father, however, is still a full-time fisherman (photo courtesy of Kelsey Guziak).

Figure 17. Fidel’s pulperia, or small provisions store, exhibits a banner that reads “Fidel’s Charters.” Key position as the middlemen in the fishing industry has allowed acopio owners to accumulate capital and diversify their source of income by participating in the tourism industry (photo courtesy of Matthew Taylor).
Affluent western tourists may not find the sight of neglected pangas, poor fishermen and bloody scenes of dying fish, aesthetically pleasant. Five-star resorts that cater to these tourists cannot afford having their guests compete for space with local fishermen.
Figure 19. Father Gaspar García Laviana was able to experience the cruelty of the Somoza dictatorship in the suffering of Tola’s rural populations. This inspired him to join the insurrection. Although he was killed prior to the triumph of the revolution, he remains a hero in Tola where murals celebrate his commitment to the town’s rural poor.

Figure 20. Rufino is a life-long fisherman and one of the original cooperative members who received land titles in Gigante through the Sandinista Agrarian Reform. He was part of the Sandinista guerrilla and National Sandinista Army from 1976 to 1983. Today he clings to Che’s ideals to pose the question: Who owns the sea? (photo courtesy of Gary Lavanchy).