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**Between expulsion and incorporation: variegated forms  
of processes and outcomes of land grabs  
Pineapple monoculture expansion in Costa Rica**

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## List of Acronyms

CANAPEP	Cámara Nacional de Productores y Exportadores de Piña (National Camara of Pineapple Producers and Exporters)
FAO	Food and Agriculture Organization
FRENASAPP	Frente Nacional de Sectores Afectados por la Producción Piñera (National Front of Sectors Affected by Pineapple Production)
MOCUPP	Monitoring Land Use Change Within Production Landscapes
PINDECO	The Pineapple Development Company
UNDP	United Nations Development Program

## **Abstract**

Much of the land grab literature is dominated by accounts of land deals involving large tracts of land, acquired through questionable mechanisms, often involving the violent expulsion of local populations or the latter's adverse incorporation into emerging enterprises, usually involving military or police force for the purpose of installing highly-mechanized monoculture plantations. Such land deals usually occur in land-abundant, low income societies with 'weak governance'. The case that is examined in this Research Paper tells a different story. In the small country of Costa Rica, the situation is not one of land abundance, weak governance, nor low income- yet, recent land deals have pushed the expansion of the pineapple sector that is radically altering social life in rural areas. The dichotomous outcome of either expulsion or incorporation does not adequately paint a picture of the processes of change occurring in many of these areas. The characteristics of pineapple sector expansion do not correspond with nearly any of the dominant features of what defines a land grab- namely the scale, process, setting, outcomes, or use of extra-economic coercion. This paper explains that the narrow 'land grab' definition and the research that builds on such, misses important empirical conditions such as the ones in Costa Rica, with significant implications for scientific studies and policy and political debates and actions. With Costa Rica, exploitation of laborers, contract farming and leases, limited access to equal incentives for small holders, and environmental contamination are all engendering further penetration of agribusiness in rural areas as well as opening up opportunities for profound control of not only land but other resources, like water and forests. We see 'environmental contamination' act, deliberate or otherwise, as a form of extra-economic coercion, with the insidious effects of sickening everything in close proximity and deeming other livelihoods unviable- driving locals to relocate or suffer the consequences. We see the state implicated and incorporated into the agribusiness expansion, as it struggles to balance facilitating capital accumulation and maintaining political legitimacy. The findings have theoretical, methodological, political, and policy implications as the land grab analysis continues to be a major part of the debates on international development.

## **Relevance to Development Studies**

Over 75% of world poverty is concentrated in rural areas. As agribusiness further penetrates the countryside, more research is needed on the specifics of how this is altering livelihoods in rural communities and the diverse processes occurring that lead to this end. Much of the large-scale land deals, agribusiness expansion, and plantation expansion in the countryside is lauded as a 'win-win' situation for businesses and for the communities in which they take place. How do these deals actually unfold and how are local communities affected by them? Mainstream literature has typically documented binary reactions when these deals hit the ground or expand- local communities resisting or acquiescing, but more recent literature shows the complexities of reactions. How can the implications of these deals be better understood, particularly in the context of how local communities and other aspects are incorporated into deals and with what implications?

## **Keywords**

Land grab; land control grab; monoculture; pineapple; Costa Rica; adverse incorporation

# Chapter 1 Introduction

## 1.1 The Contemporary Land Grab

When GRAIN released a report in 2008 probing into the contemporary land grab, it propelled an international discussion led by scholars, non-governmental and international development institutions to understand the characteristics and consequences of the phenomenon. The contemporary land grab is said to be triggered by what has been labelled a ‘converging crises’ of food, fuel, climate, and finance (GRAIN 2008; Borras et al. 2011; Borras and Franco 2013). Visser et al. (2015) expound upon the role and consequences of financial speculation and rising global food prices into the land grab conversation as well. The general assumption is that the global land grab has transpired as a corporate-led operation to acquire large tracts of land for the purpose of installing industrial, mechanized, monoculture plantations. GRAIN’s original report is packed with numerous examples of this exact storyline—of a country or private entity initiating a large-scale land deal, facilitated by the state using extra-economic coercion<sup>1</sup>, in a country considered to have significant ‘available’ farmland, with the intent to establish monoculture plantations (2008). The report strongly posits that the deals are less about rural and agricultural development, or about solving the global food crisis, and that the “real aim” is “simply agribusiness development” (GRAIN 2008: 6). GRAIN states that the biggest consequences of the contemporary land grab are the displacement of those currently inhabiting and typically working the land, as well as the transformation of smallholder agriculture into “large industrial estates connected to large far-off markets” (2008: 9). In the decade since the report, handfuls of cases have emerged in the literature documenting situations under these near identical circumstances.

Schneider (2011) discusses the case of Cambodia in which 27 evictions took place in 2009 affecting the lives of 23,000 people, as the state gave land concessions to 19 companies totalling 124,000 hectares of land. Untitled land considered ‘idle’ and ‘underproductive’ by the state was deemed available for private investment. The military police have played a key role in ensuring that local populations do not interfere as acacia, eucalyptus, and sugar further encroach their communal lands (Schneider 2011). Sassen (2014) dedicates an entire chapter in her book to the expulsion of small farmers and villages due to land acquisitions that frequently result in the planting of monoculture biofuel or food crops. Kröger (2012) examines the rapidly growing eucalyptus industry in Brazil due to multiple large-scale projects requiring at least 80,000 hectares each, totalling over one million hectares. Out of nine Brazilian states where eucalyptus expansion has been concentrated, eight states have eucalyptus planted on land under agrarian reform or where peasants have been expelled in order to establish the plantations (Kröger 2012). At least four out of the nine states have witnessed violence against the rural population as a result of efforts resisting expulsion. As expansion has continued, resistance has gained momentum. Local populations are reclaiming land and the many existing movements are demanding land redistribution (Kröger 2012). The above examples have been simplified, as the context of each case is unique, however the overarching narrative remains nearly identical—local populations resisting violent expulsion from their land as the state enables corporate agribusiness to take over the countryside in the form of monoculture

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<sup>1</sup> Marx used the term ‘extra-economic’ means to describe the way in which the state and landlords used direct coercion by “employing superior force, privileged access to military, judicial, or political power” (Wood 1998: 15). What this term encompasses for the purposes of this paper will be further developed.



plantations. While these cases and this storyline are valid, do they portray a complete picture of agrarian change occurring in the countryside? Li (2011) claims that when land is needed and labor is not, the likely outcome is expulsion from the land. However, do land deals everywhere always and necessarily result in the direct expulsion of people from their land? As evidenced in various places, corporations are most interested in generating a profit. Whether this is best achieved by expelling peasants when necessary or incorporating them in a variety of forms largely depends on the situation.

## Exploring the Complexities

The forms of land deals, be it the expulsion of peasants or incorporation into emerging enterprises- in the latter case, the details of schemes and the terms of that incorporation are relevant- largely, but not solely, shape and condition the political reactions of villagers where these land deals materialize. Due to the diverse array of possibilities in which these processes transpire, it is not surprising that the forms of political reactions from below are equally as diverse. There exists a large spectrum between expulsion and incorporation that begs further investigation into nuanced reactions. Hall et al. (2015) reminds us of the limited and thin analyses pertaining to these diverse reactions, even as the global land literature has expanded in the past decade.

It is worth noting that recent literature has become more critical of the simplistic assumptions of land grabs and their implications, particularly related to reactions from local populations. Hall et al. (2015) offers a nuanced analysis of political reactions ‘from below’ pertaining to large-scale land deals, as research increasingly reveals the complexities and variations of reactions when deals materialize on the ground. In this sense, it challenges the “dominant framings of rural and peasant communities across the global South as either passive victims or unified resisters of land grabs” (Hall et al. 2015: 468). Moreda (2015) shows that the silence from the Gumuz people in Ethiopia towards large-scale land deals on their ancestral lands is misleading, as resistance has materialized in many forms- specifically towards investors, migrant seasonal agricultural workers, and the state- though it has been individual, unorganized and clandestine. This is specifically related to Scott’s theorization of ‘everyday forms of resistance,’ a form of collective action that, though frequently overlooked, includes “acts such as foot-dragging, dissimulation, desertion, false compliance, pilfering, feigned ignorance, slander, arson, sabotage, and so on” (1985: xvi). Kerkvliet (2009), coming from the same theoretical tradition as Scott, discusses four types of ‘everyday politics’ which includes resistance as well as support, compliance, and modifications and evasions. In addition, exploring how class and other intersecting identities shape political reactions and alliances has been a component of further inquiry. Gingembre (2015) shows how wealthy cattle owners and local leaders in southern Madagascar were able to halt a large-scale biofuel project by joining forces with prominent activists. Another crucial point emphasized is that reactions do not simply fall under the categories of ‘for’ or ‘against.’ Other responses could include demands to be included in the land deal, better terms of incorporation into the project, or better compensation for land (Hall et al 2015). The terms in which communities and locals are incorporated into land deals is becoming a significant component within the scope of land grab struggles that demands further inquiry.

As mentioned already, not all land deals require the expulsion of people from their land; many of these deals actually incorporate villagers. It is key to take a look at the diverse conditions of local incorporation into the enterprises and the dynamics that accompany this

incorporation. Between expulsion and incorporation trajectories, we see diverse possibilities of how politics unfold.

Du Toit and others have carried out extensive research on the concept of ‘adverse incorporation’ (du Toit 2004; 2007; Hickey and du Toit 2007). Du Toit posits that poverty in a commercial farming district in the Western Cape of South Africa was less a result of social exclusion and more the outcome of *what* schemes people were inserted into and *how* they were integrated (2004: 26, emphasis added). ‘Transcending the simplified ‘inclusion’ or ‘exclusion’ binary permits a greater emphasis on the unique local processes of negotiation and directs attention to the implicit power relations. Du Toit focuses on adverse incorporation of poor households in labor markets and favors the use of the term marginality, “for what defines marginality is not exclusion or even imperfect inclusion, but the terms and conditions of incorporation” (du Toit 2004: 26). In the context of contemporary land grabs, McCarthy (2010) finds varied outcomes of oil palm expansion that are highly dependent on the local factors such as the presence or absence of smallholder farming schemes, the design of existing schemes, and the state’s role, among others.

This research paper looks to build on the robust literature on land grabs and offers fresh complementary insights. It will do this by navigating the varied, uneven, and highly diverse dynamics and trajectories between expulsion and incorporation- exploring the case of Costa Rica.

## 1.2 Pineapple Expansion in Costa Rica

Costa Rica, a small country of 4.8 million people, is the world’s leading exporter of fresh pineapples. Though the country has a long history of monoculture production, including crops like coffee, banana, sugarcane, and palm oil, between the years 1984 and 2014 the area of planted monoculture pineapple grew by 1408%- more than any other monoculture crop (León 2017). Costa Rica was the first country to default on its loans during the debt crisis of the 1980s, which subsequently led to the implementation of Structural Adjustment Programs promoted by the World Bank (Edelman 1999: 2). This paved the way for a dramatic shift away from protectionist agricultural policy to the liberalization of markets promoting non-traditional exports and foreign direct investment (Shaver et al 2015). A subsidiary of the transnational Del Monte, called PINDECO (the Pineapple Development Company), began experimenting with a new variety of pineapple called the MD-2 in the southern region of the country- a variety that is known for its rich yellow color and sweetness (Vagneron et al 2009). PINDECO began large-scale production of the MD-2 variety in 1996 with 4,000 hectares (Vagneron et al 2009). In just three decades, Costa Rica has come to dominate the pineapple industry controlling 47% of the global pineapple export market in 2017 (Workman 2018). Cultivation is concentrated in three regions: the Huetar Norte region, which borders Nicaragua; the Huetar Atlantica, which is located in the north Atlantic part of the country; and the Brunca Region, in the south of the country. Though pineapple cultivation was first introduced in the Brunca region, the Huetar Norte and Huetar Atlantica regions are where the majority of expansion has unfolded from the late 1990s up until present day.

This rapid expansion has not transpired without numerous environmental and social costs. During the past decade especially, pineapple companies have been increasingly denounced by environmental activists, NGOs, and communities for water contamination from the heavy use of pesticides and herbicides, deforestation, poor labor conditions, and dispossession (Cuadrado and Castro 2009). Excessive contamination has left entire communities

without safe drinking water, in which municipalities have intervened and delivered the precious resource via large tanks for as long as ten years (Lawrence 2010). Workers on plantations are exposed to hazardous pesticides and herbicides on a daily basis, typically work longer than the legal work day, and are sometimes contracted instead of hired as to keep them in a precarious situation (Cuadrado and Castro 2009). One particularly contentious aspect of expansion is the uncertainty surrounding the number of actual total hectares planted in the country. While organizations like CANAPEP were reporting 44,500 hectares total, a study funded and carried out by the United Nations Development Program's Green Commodities Program with the assistance of national organizations such as the Ministry of Environment and Energy, used satellite imagery to identify pineapple land cover. They found that the number of total hectares was closer to 58,600 (MOCUPP 2015). The same study compared the results and images taken from 2000 to conclude that more than 5,500 hectares of forest had been cut in order to facilitate expansion of plantations between 2000 and 2015 (Araya 2017).

Map 1. Area of Pineapple Cultivation in Costa Rica (MOCUPP 2015)



The case of pineapple expansion in Costa Rica cannot adequately be explained by the dominant tendencies in the current land grab and large-scale land acquisition literature. Perhaps the scale of this case is not of equivalent gravity to that of others, such as the biofuel crops or tree plantations that have involved the transformation of millions of hectares of land. As mentioned, the recent study by MOCUPP concluded that there are around 58,000 hectares of pineapple cultivation in the country (2015). However, the Costa Rican pineapple case is an important one for various reasons. It transcends the ‘land-centric’ tendency of “current land grab thinking” and directs attention to control grabbing with the resulting implication that “analytically and empirically, land grab does not always require expulsion of peasants from their lands; it does not always result in dispossession” (Borras et al. 2012). It reveals the dynamics of current and smaller scale land acquisitions which can- and should be- examined. A close look at the post-financial crisis global trends led to the logic that acquisition of large-scale farms is more profitable, but Visser discusses examples in Malawi, Indonesia, Brazil, Russia, and the Ukraine that strongly refute that (2015). The analysis of smaller scale land deals present opportunities for the dissection of dominant logic like this.

In addition to scale, the case places emphasis on the importance of relative vs absolute land share. Costa Rica is a small country and although the number of implicated hectares is a mere 58,000, as of 2015, the number of total hectares of arable land in the country is 232,000 (The World Bank n.d.). Therefore, a quarter of the arable land in the country is devoted to pineapple cultivation. The extent to which pineapple has transformed the landscape and social relations in the countryside- particularly the severe environmental and labor transformations- of this small nation is not trivial nor insignificant. What is particularly fascinating in this case is that Costa Rica is heralded worldwide for its democratic stability and progressive environmental policy (Sada 2015; Rubio 2018). Despite this, a countryside dominated by agribusiness-controlled monocultures is more of a reality every day- though the path towards this reality has been distinct. Whereas much of the dominant literature describes the use of extra-economic coercion in which the state plays a direct role in sending military or police forces to violently expel populations from the land, extra-economic coercion remains relevant in the Costa Rica case but takes a radically different form. Contamination has achieved the same outcome in driving people from their land in an equally insidious manner as military-led expulsion. How the dominant characteristics in land grab literature match up with the case of Costa Rican pineapple can be found in the chart below.

Table 1. Dominant characteristics in land grab literature and Costa Rican Pineapple case

<b>Dominant characteristics in land grab literature</b>	<b>Costa Rican Pineapple Case</b>
Scale of individual deals: large, typically 1,000 hectares or more	The scale of individual deals has been much smaller, especially in the Huetar Norte and Atlántica regions where most expansion materialized through small and medium-scale contracts. To put it further in perspective, an FAO study in Huetar Norte characterized ‘large’ producers as cultivating more than 50 hectares (2007: 63). In the Brunca region, the scale has been larger and closer in line with the dominant characteristics, with a reported 7,000 hectares owned by PINDECO.
Process of acquiring land: non-transparent and non-consultative	In nearly all cases, small and medium-scale farmers have made the ‘choice’ to convert their land use to pineapple cultivation. Much of expansion has transpired within what would be considered as ‘transparent’ and consultative.
Setting- land abundant, poor country with weak governance	Due to the mountainous terrain and small size, there is not vast amounts of land available for farming in Costa Rica. It has attained high levels of economic development- ranking 4 <sup>th</sup> in Latin America with an HDI of .794 considered ‘high’ and has a strong history of stable democracy (UNDP 2018).

Outcome- expulsion of people from land and exclusion from the emerging enterprises	Locals have not been explicitly expelled from their land, but land has been slowly but steadily concentrated into fewer hands- and ultimately into the commodity chain control of big corporations. Thus, the forms and terms of incorporation have been highly diverse depending on existing social class configuration and livelihoods, among others.
Process and Outcome- violations of human rights	There have not been blatant violations of human rights directly caused by expansion; however, cases have been brought to the Inter-American Commission on Human Rights on the grounds of <i>secondary</i> effects of pineapple expansion such as water contamination (Pomareda 2015).
Process and Outcome- expulsion or incorporation	Pineapple expansion has encompassed both expulsion and incorporation to varying degrees; it is characterized by many shades of grey- and not black or white- that is, less a dichotomy of ‘expulsion or incorporation.’
Extra-economic coercion: almost always refers to the use of state apparatus of police, military, and the judiciary	There is a grey area in what is considered economic and extra-economic coercion. Environmental contamination has essentially arisen as a form of extra-economic coercion and perhaps just as violent and insidious as the dominant form of extra-economic coercion involving violent expulsion vis-à-vis military and police force.

These seven characteristics in column 2 are among those that set apart the case of Costa Rica. Altogether, these show that the country case does not correspond with much of what is considered ‘dominant’ or ‘typical’ within land grab literature. This country case can make important theoretical and methodological contributions to international theoretical literature, as well as policy and political debates on land grabs, as well as international development more generally.

### **Between expulsion and incorporation: variegated forms of processes and outcomes of land grabs**

The dominant land grab characteristics outlined in the table above are not the only storyline among land grab cases. Iconic expulsion or adverse incorporation are not the only paths in which capital pursues accumulation in the countryside. Land control has been a strategy since colonial times, but contemporary land control strategies particularly in the era of advanced capitalism have taken different forms and involved a variety of actors and new processes (Peluso and Lund 2011). How does capital manage to take control of land without outright expulsion and how are different actors incorporated into these strategies? Labor, property, nature, and the state are some of the key components that have experienced incorporation

and consequently permitted the continued expansion of monoculture pineapple. The story transcends the frequently simplified ‘expulsion or incorporation’ dichotomy, and the many processes and outcomes on the spectrum of this dichotomy can further contribute to land grab literature. A key component even within these variegated forms is the power relations between various actors involved, and how these elements-land, property, nature, and the state- are incorporated and to the benefit of whom.

### 1.3 Research Question

This paper will explore the following question:

**Between iconic forms of expulsion and adverse incorporation, what are the various possible dynamics of social change that large-scale land deals could bring upon affected communities?**

The following sub-questions will assist in exploring the various dynamics of expansion.

- How does the incorporation of labor and property actually unfold?
- How does environmental contamination play a role in facilitating the expansion of the pineapple plantation sector?
- How does the interaction between corporations and the state shape the extent, pace, and character of the pineapple plantation sector expansion?

### 1.4 Methodology and Methods

Field research was completed over a six-week time period from August 1 to September 13, 2018. Fourteen interviews were completed with diverse actors and to varying degrees of formality in order to begin to understand the dynamics of expansion from distinct perspectives. All three regions where pineapple cultivation is concentrated were visited to better comprehend the nuances of expansion in each region. Though Costa Rica is known for being a peaceful country and has a long history of democracy, pineapple and the controversies surrounding expansion have been contentious. Activists have been threatened and workers have been fired for bringing light to the environmental and social consequences of expansion. For this reason, the identities of respondents will not be revealed nor will pseudonyms be used. Rather, they will be identified by the organization they represent or the role they have played in expansion or resistance (see Appendix A for the complete list of informants and dates of interviews). The number of informants was not determined pre-field work, but was arrived at due to access to informants as well as the wealth of information generated from interviewing such diverse actors. Therefore, it does not seek to serve as a complete representation of the situation as there were plenty of nuances that could not be explored at the expense of gaining a comprehensive overview of the relevant processes influencing or inhibiting expansion.

Potential respondents were identified by current Peace Corps volunteers living in communities that were economically dependent on pineapple plantations.<sup>2</sup> This proved crucial in gaining access to small rural communities where pineapple production is part of the everyday reality of locals, as well as gaining access to managers and supervisors of pineapple plantations. A lot of the individuals in management positions at plantations are hesitant to talk to researchers and outsiders because of documentaries and reports that have been released in the last five years targeting the social and environmental consequences of pineapple production. Being introduced by the volunteer who has been living and working in the community for an extended period of time helped to create trust between the researcher and informants. The gained benefit of trust also came with the downside of having to rely on the Peace Corps volunteers and being limited to their initial contacts and communities they live in. In attempt to combat this, some of the respondents and individuals interviewed or spoken with were also a result of ‘snowball sampling,’ particularly with activists or those involved in the social movement and resistance. Snowball sampling is when “the researcher uses the initial few interviewees to recommend other potential participants who fit the inclusion criteria of the study” (King and Horrocks 2010: 34). Snowball sampling can be problematic and create biases in the data due to the tendency of participants to recommend people who hold similar opinions on the topic (King and Horrocks 2010). However, this type of bias did not tend to materialize in the data and was also balanced by the different actors that were sought out. For example, one family whom the researcher stayed with recommended two community members in particular who were active in the resistance and social movement. These two actors actually held diverging opinions and perspectives on a number of matters. In addition, the researcher was able to interview a supervisor of a plantation in the same community to understand the ‘other side.’ This proved to be challenging for a number of reasons but was most evident in some of direct contradictions between those seemingly ‘against’ pineapple expansion and those ‘for’ it- though it proved more useful to analyze this on a spectrum rather than as a binary. These complexities, though having complicated the data to an extent, provide a richness and overview that could have only been acquired through interviewing diverse actors.

The interviews were semi-structured and the researcher had three separate templates prepared depending on the actor that was being interviewed- activist, small producer, and management/supervisor of a plantation. Questions were focused around the history and the who/what/why of expansion and touched as well on state-society dynamics of the different regions. Each template contained 6-7 questions that were similar in nature, for example, the template to interview activists had more questions about resistance and the template for managers focused slightly more on the inner-workings of the plantation. Depending on the direction of the conversation some questions were altered or skipped altogether to allow the interviewee to discuss what they felt most important and to let the conversation flow. This led a few of the interviews down unique and at times irrelevant paths but also cultivated natural discussion in a way that avoided awkward silences or an unwillingness to converse on the part of the interviewee. All interviews were carried out in Spanish and most were recorded and then transcribed by the researcher. There were three interviews that were not recorded due to the environment not being conducive for a recording or because the interviewee preferred not to be recorded. In these cases, the researcher took notes during the interview on the important points discussed. Once transcribed, the interviews were coded

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<sup>2</sup> The Peace Corps is a volunteer program providing technical assistance and facilitating cultural exchange. The program is funded by the U.S. government and volunteers are sent to live in a single community in another country for two years. The researcher was part of this program from 2015-2017 and lived in a rural community in Costa Rica.

by hand focusing on eight specific codes in order to highlight similarities and key points throughout all interviews.

To give an idea about the types of matters discussed, the template used to interview activists or those involved in resistance is provided below. To reiterate, these questions were starting points of discussion as interviews were flexible and allowed for conversations to flow naturally.

- How did you decide to get involved in the social movement against the pineapple and what has been your role?
- What exactly is the movement fighting for?
- What has been the reaction from the municipality and the State?
- Why do you think this zone (Huetar Norte) specifically has seen growth of the pineapple plantations at such a fast past?
- What do you think has to be done by communities and the movement in order to stop or change the expansion of pineapple plantations?
- What do you think the future holds for pineapple? Will the industry continue to grow? Why?
- There was a case a few years ago where a municipality in the North passed a moratorium on pineapple expansion, which was overturned by the Supreme Court of Costa Rica. In the South, a protest over a 600-hectar expansion of pineapple in an indigenous region forced the project to be put on pause. (For those in the region) Is the project still on pause? Why do you think the State had these two contradictory responses? What has been the role of the State in the expansion?

The researcher stayed in the various communities, either with the Peace Corps volunteer or with a host family whom was recommended by the volunteer, accounting for the participant observation component. This allowed for an opportunity to experience some of the social dynamics of the communities, comprehend the extent of the expansion, and led to various informal conversations that enriched the primary investigation. The researcher spent 18 nights in seven different communities during the investigation process. Six of the seven communities were rural sites with populations ranging from 300-1200, two of which were communities within indigenous territories. The sixth community was an urban site and the headquarters of PINDECO with a population around 26,000- the pineapple plantations are located on four separate farms surrounding the town.

## 1.5 Scope and Limitations

Due to the nuances, various contexts, and distinct settings in which monoculture expansion takes place worldwide, the task of understanding this broad phenomenon was quite challenging. For this reason, the study does not at all seek to be a comprehensive understanding of pineapple expansion as a whole. The scope of field work was limited, as multiple types of actors were interviewed in order to provide an overall picture of expansion. Many dynamics and details were left unexplored in order to focus on the fundamental elements that most frequently surfaced in interviews and subsequently emerged as key focal points.



The study seeks to serve as relevant in understanding the methods deployed by capital in the expansion of other monoculture crops, but also recognizes that each crop possesses unique characteristics that also influences the type of expansion that materializes. Pineapple, as other individual monoculture crops, has unique characteristics that contribute to determining how and where it is planted. The study seeks to find a balance between recognizing the importance of this but not falling prey to ‘crop essentialism’ which is the idea that “the biological characteristics of a crop determine the organization of production” (Hall et al. 2011: 88).

## **1.6 Ethical Considerations**

When conducting interviews the researcher asked for consent to record the interview and explained that respondents would not be identified by name but by a brief description of their identity using words such as manager or activist and attaching the name of an organization where applicable. The author chose this form of identification instead of complete anonymity because differentiating responses from, for example, a supervisor of a plantation and an activist are relevant for the context of the paper. In reflecting post-field research, the researcher felt that perhaps a better way of identifying interviewees could have been the interviewees themselves deciding on the exact wording they wanted to be identified by instead of the researcher choosing what she deemed to be most relevant. The researcher used broad identifying words to protect interviewees’ identities as much as possible while still being able to demonstrate and recognize the diversity of the informants in order to stay consistent with the attempt to gain a broad representation of actors pertinent to pineapple sector expansion.

## **1.7 Chapter Overview**

Chapter 2 will discuss how labor and property are incorporated into pineapple expansion with a focus on landless and migrant laborers, ‘propertied proletarians,’ and propertied peasants. We will see the diverse strategies deployed by capital: the exploitation of labor, risk-shifting and land grab control through the use of contracts and leases, and the outright purchase and control of property as peasants sell or are forced off their land because of the inability to access similar benefits that large businesses receive or as their livelihoods become unviable. The results of these strategies offer substantially different outcomes for locals and communities. Chapter 3 will discuss environmental contamination as a means of extra-economic coercion that is characteristically unique, as the violence is protracted and less obvious but with similar consequences as peasants abandon their property and communities. An overemphasis on land in land grab literature fails to recognize the other dimensions of socio-environmental change and the ways that nature is incorporated. Chapter 4 outlines the state’s investment in land deals and agribusiness expansion, taking into account its contradictory role of facilitating capital accumulation while maintaining a minimum level of political legitimacy. The state becomes integrated into expansion- part of its monopolistic form- as the state’s historical role and current actions are examined.

## Chapter 2 Incorporation of Labor and Property: Class and Property Relations

Li (2011) argued, rather convincingly, that when land is needed and labor is not, expulsion is the likely outcome. Particularly in areas with vast quantities of ‘under-used’ land as documented by Visser and Spoor (2011), a prominent social consequence of the installation of agro-industrial operations is the severe reduction in labor needed. In some cases, capital’s pursuit of profit may lead it to conclude that land *and* labor are needed- in which gradation and various forms of incorporation may be observed. What might these processes look like in an area with limited land, as with the case in Costa Rica, particularly for the incorporation of labor and property? As discussed by Borrás and Franco (2013) the two most commonly explored types of struggle with regard to incorporation include labor and agrarian justice. Though there are overlaps between the two, labor justice struggles comprise of workers fighting for better working conditions and wages while agrarian struggles encompass land-based social relations particularly those who were expelled from land, have leased their land or are under growing contracts for the company (Borrás and Franco 2013). Monoculture pineapple expansion has been highly differentiated and companies have promoted expansion through distinct strategies (León 2018). These strategies have consequently led to different outcomes in the three regions where cultivation is concentrated.

The pineapple sector in Costa Rica serves as an example of capital needing land *and* cheap labor, and the process to this end is reflected in the three regions of the country where pineapple is cultivated. Cheap labor can be incorporated by capital through the implementation of contracts with small-scale growers or through the employment of landless laborers, among other ways (Borrás and Franco 2013). Both of these strategies are observed in Costa Rica as pineapple expanded rapidly through the 1990s and 2000s as well as both types of struggles against incorporation and overlaps between them. Expansion in the Huetar Norte region initially incorporated many small-scale and medium-scale producers while larger company-owned plantations dominated the Atlántica and Brunca region, predominately under the control of PINDECO or other transnationals (Aravena 2005). Whereas crops such as soy are highly mechanized and labor saving, conventional pineapple requires a large, year-round workforce due the crops dependence on agrochemicals and routine sprays (Shaver et al. 2015). It is estimated that every 1.9 hectares of pineapple requires one worker (La Nación 2011). The state often reiterates the benefit of job creation, stating that it provides around 32,000 jobs in the country (Arauz 2017). As such, the incorporation of labor *and* land have been fundamental for continued expansion.

As du Toit states, inclusion does not necessarily presage a favorable situation for local communities (2004: 26). Many communities have been integrated into labor schemes on pineapple plantations, though the extent of this incorporation and the demands made for better incorporation vary. Class<sup>3</sup> has particularly important implications for the terms in which people are incorporated under and the power relations permitting or hindering their ability to demand better terms. While field work was carried out in rural communities, particularly in the north, it was near impossible to encounter an individual who had not worked

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<sup>3</sup> ‘Class’ here will be distinguished as those who own the means of production, including but not limited to land, tools, machines, and those who do not own the means of production and therefore sell their labor power (Bernstein 2010 :25).

or did not have family currently working or who had previously worked on the plantations. In theory, pineapple plantations bring jobs, infrastructure, and opportunity to these rural communities- but whether these factors have translated to the alleviation of poverty remains controversial. The assumption that merely integrating or incorporating rural areas into the global economy is a panacea for poverty needs to be further unpacked and analyzed (du Toit 2004: 25). Equally, incorporation into global markets and capitalist relations may create “wealth for some” while “generating and perpetuating poverty for others” (Hickey and du Toit 2007: 15). Who exactly are these households, what exactly are these households integrated into and to the benefit of whom?

The following sub-sections will further explore some the regional dynamics of pineapple expansion using a class ‘lens’ focused on landless laborers and migrant workers, ‘propertyed proletarians’, and landed peasants. These nuances influence the type of resistance and demands from implicated communities as well as further distinguish the outcomes of expansion. Incorporation of labor is most evident in landless laborers and migrant workers and the incorporation of property in propertyed peasants, but the obvious overlaps among the three sections with regard to land and labor influenced the combination of this chapter.

## **Landless laborers and the role of cross-border migrant workers in global land grabs**

Plantations have become the dominant form of production around the country. Labor justice struggles are especially relevant for plantation workers who have demanded better incorporation through better working conditions. The majority of pineapple in the Brunca region is concentrated in Buenos Aires, one of the six cantons of the region, and the enterprise is entirely controlled by PINDECO who also packages and exports the crop (Aravena 2005). Though the region was the first site of exported pineapple cultivation, it is currently home to around 14% of the country’s total pineapple production (8,000 hectares) according to the study carried out in 2015 by MOCUPP. These 8,000 hectares are run entirely as large-scale plantations divided into four main farms surrounding Buenos Aires: Santa Marta, Volcán, Buenos Aires, and Los Angeles (interview, 21 August 2018). A stroll through the center of Buenos Aires confirms the strong presence of PINDECO, as their logo appears on schools, parks, and on signs denoting plantations. In the year 2000, workers decided to create a labor union in attempt to address problems such as long working days, working conditions, and exposure to dangerous chemicals (Aravena 2005). Unfortunately, threats from the company towards workers participating in the labor union have affected the extent to which it has been able to work (Aravena 2005). One indigenous activist discussed that “the company did not achieve the expectations that everyone thought, the jobs exploit workers for poor wages and Buenos Aires continues to be one of the poorest cantons in the country” (interview, 24 August 2018 #2). Buenos Aires does consistently rank in the bottom 10 of the 81 cantons, taking 74<sup>th</sup> in the Human Development Index in 2011 (Programa de las Naciones Unidas para el Desarrollo 2011).

Though expansion in the Huetar Norte and Atlántica has unfolded differently than in the Brunca region through the involvement of small and medium producers, large plantations are becoming a greater part of the landscape. The Huetar Norte region accounts for 65% of the country’s pineapple cultivation and the Atlántica region accounts for 20% (MOCUPP 2015). Many plantation workers are landless and/or migrant labor from Nicara-

gua. Migrants are especially incorporated under precarious, adverse terms, as their undocumented status constrains their ability to explicitly demand better conditions and wages. Interviewees in this part of the country consistently affirmed that there are pineapple companies who bus Nicaraguans across the border on a daily basis and pay these workers 5,000 colones (about \$8.50) for 8-9 hours of work (interviews 8 August 2018; 10 August 2018; 11 August 2018; 10 September 2018). This wage is nearly half the country's legal minimum wage for agricultural workers listed at 9,822 colones (Ministry of Labor 2017) and by employing undocumented workers these companies can also evade paying into the national health care system. The researcher was assured by various supervisors that this is not how all plantations operate, and one stated that workers are paid 58,600 colones for six days of work with Sundays off, amounting to about \$400 a month (interview 9 August 2018). Workers experience hazardous conditions, especially during rainy season, as intermittent afternoon thunderstorms produce bolts of lightning that frequently strike and kill plantation workers—who stand as the tallest objects for hectares in the sea of pineapple plants. Shortly after arrival to a rural community in the Huetar Norte region, a bolt of lightning killed one young Nicaraguan male and sent two females to the hospital. Because of the extent of expansion, there exist few other opportunities for work, especially for those who are landless. Similar in that sense to oil palm, where “few other livelihoods are possible, and other paid work is severely limited” (Li 2005: 3). That coupled with the extent of poverty in these zones “massively circumscribes and limits the forms of agency that are available to them” (du Toit 2004: 24). However, it is important to note that those who work on plantations do benefit from consistent, year-round, work. A stable salary was one aspect that has driven many to gain employment at the plantations, though this stability has implications for the relations of power. According to du Toit, exploitation is not the only characteristic of “relations of patronage and clientelism” and that they “involve a degree of protection” but with significantly unequal relations of power (1994: 27). One outspoken activist repeatedly noted how fearful plantation workers are to speak out against the companies and that they covertly send the activist videos and pictures of environmental and labor violations committed by the company (interview 11 August 2018). Companies give employees this ‘degree of protection’ in the form of a stable employment at the expense of their ability to explicitly demand better incorporation and fight for better working conditions or wages.

In many places, as in parts of Costa Rica, land grabs have been enabled by the availability of cheap, typically undocumented, cross-border migrant laborers. Borrás et al. (2018) show that growth in the sugarcane sector in China, that has increased from 1.1 million hectares in 2000 to 1.76 million hectares in 2014, is largely attributable to Vietnamese migrant workers who harvest the sugarcane. Cheap, exploitable labor becomes an important aspect in the continued accumulation of profit for companies and inherently enables land grabs and land deals. One prominent activist who works with the National Front of Sectors Affected by Pineapple Production (FRENASAPP, hereafter) stated that one facet of expansion they are currently analyzing is the new strategies of exploitation on the part of pineapple companies. With the current national crisis and widespread violence in Nicaragua, “the refugees coming to Costa Rica have to apply for refugee status and the process takes over a year... they do not have a work permit during this time and are highly vulnerable to suffer this kind of exploitation by pineapple companies” (interview, 4 September 2018).

## ‘Propertied proletarians’

Though a contested concept, the term ‘propertied proletarians’ was first put forward by Lenin to describe peasants “cultivating crops on allotments” (Watts 1992: 93). For the purpose of this paper, the concept includes those who are involved in contract farming for transnationals or who have rented their land to companies and have perhaps been subsequently subsumed into the pineapple operation as a laborer. These individuals still *own* their land (thus, they are peasants), but their control with regard to how the land is managed and worked is significantly diminished and many of them make much of their living by working for the company of the individuals who rented their land (thus they are workers). Integration into global markets has been emphasized as a potential poverty reduction strategy, but depending on the configuration of the arrangements they “can either exacerbate or alleviate poverty” (Bolwig et al. 2010: 173). Those who exalt the ‘contract’ as the ultimate embodiment of “laissez-faire mutuality” conceal the “degree of economic compulsion and the power exercised by the contractor” (Watts 1992: 93). Much of the literature examining the extent of poverty reduction associated with integration into global value chains has not considered “how participation in value chains exposes poor people to risks” (Bolwig et al. 2010: 174). These risks include subjection to volatile world prices and overproduction (Watts 1992). In some cases, individuals are included into schemes but within the terms of this incorporation, are excluded from capital accumulation. McKay and Colque (2016) outline the process of ‘productive exclusion’ in the expansion of soy in Bolivia where exclusion has not been the result of lack of access to land- most small-scale producers have retained their land tenure- but a result of “their inability to access agro-capital and credit, technology and labor markets outside of commercial farming” (585). This can permit some to benefit from their property relations through the collection of rent that provides a large portion of their income (McKay and Colque 2016). Some of the nuances here will demonstrate how labor and property are incorporated into pineapple expansion and the kinds of struggles that result depending on the distinct processes of incorporation.

Contract farming has been theorized as a form of “proletarianization of small farmers without dispossession” because decision making is funneled to the distributors and is usually dictated by the terms of the contract (Oya 2012: 7). Contract farming by small scale pineapple producers is now almost non-existent in the Huertar Norte and Atlántica regions due to consolidation in the industry and the adverse terms faced by small farmers in production. The average inversion needed to begin producing pineapple in the Huertar Norte region is around \$9900 per hectare, rendering participation out of reach for most peasants in rural Costa Rica (Programa Estado de la Nación, as cited in Shaver et al. 2015). McCarthy concludes that due to the commodity characteristics of oil palm, “large swathes of rural land-owners may not be able to access oil palm under the terms where they can hope to prosper” without outside support (2010: 847). Due to the high-investment costs and strict export standards, only a small number of small farmers are able to participate in export (Vagneron et al. 2009). Unfortunately, the researcher was unable to find a small-scale contract farmer to interview. Even with some early support from the Ministry of Agriculture and Livestock who provided technical knowledge and support to those entering the burgeoning pineapple export business, peasant producers became gradually more indebted as they attempted to keep up with the standards imposed by contracting companies (León 2018). The same contracts that offered small-scale producers the best prices for the crop simultaneously drowned them in debt (León 2018). Though this has been the most common storyline, there are circumstances where contract farming has offered producers invaluable assistance and knowledge. Rojas (2006) outlines a case of a group of former coffee producers who received small land concessions and entered the pineapple business, but due to inexperience regarding

the particulars of pineapple production and the specifics of its commercialization, the business failed and they were left with significant debt. They were able to reinstate production under contract with Dole, who ensured a market for the pineapple, and the state provided financing to buy necessary machinery and bigger farms (Rojas 2006). The enterprise is said to provide formal employment for 400 families in the community, but it has not unfolded without problems. To be able to pay off debt, the group has to consistently grow the business taking on more debt as they invest in keeping up with the requirements arranged by Dole (Rojas 2006).

There have been various cases in which land owners near existing pineapple plantations rented their land to companies for expansion and have consequently been employed by the company as a laborer. One small-scale dairy farmer recounted how a neighbor was one of the first to rent land to a company and receives \$800/hectare for 100 hectares totaling \$80,000 and subsequently became a laborer on the farm (interview 8 August 2018). This is a substantial amount in the same region where the average agricultural household income is around \$625 (Programa Estado de la Nación, as cited in Shaver et al. 2015). The small-scale dairy farmer was then offered \$700/hectare by a pineapple company to rent the land and tried to negotiate for a better price before ultimately denying the offer (interview 8 August 2018). Much of pineapple expansion in the Atlántica region has been on land in Peasant Settlements (León 2018). Beneficiaries of land in Peasant Settlements were leased land to produce and are therefore unable to legally sell it. Nearly all of the beneficiaries were basic grain producers and those who leased their plots of land were incorporated as wage laborers on their land, employed by the pineapple companies (León 2018). Two major consequences resulted from this: 1) Fertility of the land plummeted because of the extensive pesticide-use and 2) Other families who were beneficiaries of land had to look elsewhere for land as pineapple began to invade the surrounding landscape (León 2018).

In these circumstances, land grabbing becomes more about land control grabbing- in that companies no longer need land tenure- and in many instances, this leads to enhanced opportunities for agribusiness-controlled accumulation. Agribusiness realized that “control over production did not necessarily require a plantation system in all cases” (Oya 2011: 18). Contracting companies dictate many of the terms of production and shift risks inherent to production to the producer. In cases where pineapple companies lease land, they circumvent decreases in land value due to the effects on the fertility of land from the pesticide-intensive style of production. At the completion of the lease, companies can seek out adjacent lands to further expand while the land owner is left to grapple with what to do with the now unproductive land. For agribusiness, dispossession is not a necessary condition for increasing control over land and its uses, and deflecting risk onto other actors can open numerous opportunities for profit accumulation (Hall et al. 2015)

## Landed peasants

The incorporation of property is most visible through the examination of landed peasants and their integration into pineapple sector expansion. For the purpose of this study, landed peasants include small-scale producers *not* contracted by transnationals, land owners who have sold land or are located near plantations, and land owners who labor on plantations.

As mentioned, small-scale pineapple producers are nearly impossible to find. One small-scale producer of 3 hectares explained that they were one of the only small-producers

remaining, and that small-scale producers practically disappeared about four years ago (interview 7 August 2018). In an industry increasingly dominated by powerful transnationals and nationals, small-scale producers are marginalized in the marketplace (Vagneron et al. 2009). Pineapple expansion has had the dual effect of concentrating land into the hands of powerful companies and eliminating smallholder participation and ownership (Shaver et al. 2015). The small producer mentioned switched from producing for export to producing for the small national market in order to save on transportation costs and to avoid the burden of strict export standards (interview 7 August 2018). Even then, after a recent period of overproduction in early 2018, the small producer explained that pineapple from export companies flooded the national market driving the prices down so “if a small producer has to sell at \$.20/pineapple, they won’t turn a profit and the business will fail” (interview 7 August 2018). Though economies of scale do play a role in the expansion of large, consolidated plantations, as Li (2015) points out in with palm oil in Indonesia- “if plantation corporations were obliged to pay for land and credit at the same price that smallholders pay, they would be bankrupt tomorrow... they are massively subsidized and protected by their monopoly position” (5). In the late 1980s as the state was promoting non-traditional export production and providing export subsidies for companies called *Certificados de Abono Tributario* (CAT, hereafter) (Vagneron et al. 2009). Over the course of the 1980s, CATs accounted for 8% of the total government budget and the program’s total cost is an estimated \$40 billion- with PINDECO receiving nearly 10% of CATs, the most of any recipient (Lappé et al. 1998: 117). This was public money, directly deposited to PINDECO so that they would install their operation in the country. Small producers are fighting for better incorporation into the market, as the interviewed small producer said “a while ago I heard that they [fellow small producers] were wanting to strike at the municipality because the big companies have the export market, they should leave the national market for the small producers” (interview 7 August 2018). Pineapple production is not an inherently adverse use of peasant property but the configuration of the market makes it more challenging for small producers to stay afloat. As Li argues, “it isn’t the overall efficiency, but the way benefits are channeled that accounts for the expansion of plantations” (2015: 5).

Expansion has transpired vis-à-vis small-scale and medium-scale pineapple producers selling their land, as mentioned above, as well as other small and medium-scale producers of staple crops selling their lands. The decision by peasant households to sell their land is influenced by a number of factors, including the lingering aftermath of Structural Adjustment that devastated producers of staple crops like rice, beans, and corn (León 2018). As pineapple expanded, those who initially chose not to sell their land eventually became surrounded by a sea of pineapple and it became increasingly difficult to continue practicing their forms of livelihood as a result of the widespread use of pesticides. Though land concentration does not necessarily equate the presence of land grabbing given its narrow definition, understanding other underlying trends associated with land grabbing becomes a vital task. Murmis and Murmis (2012) discuss land concentration and foreign land ownership in Argentina and the implications for small and medium producers, as well as the implications for how to approach defining land grabs. They found that the expansion of large farms that are involved in livestock or agricultural crops may result in “the displacement of small and medium producers due to the lower production costs and technological arrangements that are available to larger companies” (Murmis and Murmis 2012: 503). This could result in small and medium producers selling or leasing their land, or even opens the possibility that these producers are evicted, with obvious consequences for land control (Murmis and Murmis 2012).

In addition to the inability of small and medium-scale producers to access the same lower production costs, technological arrangements, and government subsidies all outlined above, the process of displacement can be traced to processes and consequences of contamination which have also engendered land concentration. Cattle ranchers saw their livestock lose extreme amounts of weight and contract anemia due to a fly (*Stomoxys calcitrans*) that feeds off the blood of live animals and is reproduced in the organic waste of decomposing pineapple plants post-harvest (The Tico Times 2010). Ranchers were indirectly incorporated into expansion but under unfavorable terms as their livelihoods were affected and they were not compensated for the losses or the investments they had to make from their own pocket to prevent further losses. One former member of the Regional Camera of Ranchers explained that “the problem of the fly arrived and it caused us to lose money because we had to spend around 80,000 colones (\$150) just in medicine so that the animals didn’t die... the pineapple companies didn’t want to recognize or reimburse those expenses and neither did the government” (interview 9 August 2018). Not only is land directly incorporated into pineapple cultivation under adverse terms, including the stripping of nutrients and soil erosion (León 2018), but surrounding property is inherently implicated. Pineapple renders unviable any other livelihood that surrounds it.

One interesting situation that emerged during field work was landed peasants who went to work on a pineapple plantation as a way to increase household income. One small-scale dairy rancher admitted to working for two years on a nearby plantation while a child was in university to ensure that household income was sufficient for tuition (interview 10 August 2018). The same crop that has severely affected the future of ranching in the region is partially incorporating the locals most affected. As discussed earlier in the paper, stable income was the key factor that drove the rancher to seek work at the plantation. After two years the rancher quit and went back to working solely on their property (interview 10 August 2018). As expansion hinders the continuation of rancher livelihoods, affecting the productivity of dairy cattle upwards of 50% and destabilizing small-scale operations, some choose opportunities to be incorporated into the enterprises (Ramírez 2018).

## **2.1 Resistance and incorporation of labor/property**

Whereas resistance has typically been outlined in literature “via an ‘exclusion versus inclusion’ dichotomy” ((Borras and Franco 2013: 1735), empirical data showed that resistance regarding pineapple monoculture expansion tends to fall on a spectrum, partially influenced by the extent of and terms of incorporation. Interviews with local activists confirmed that even the toughest critics of expansion have demanded better regulation and control and not necessarily for the closure and exit of pineapple companies from the area. The more incorporated communities are, the more difficult it is to organize resistance- partially because of the power held by companies and various tactics used to intimidate those who do organize and speak out- as demonstrated with the PINDECO labor union. The former member of the Regional Camera of Ranchers said “We had a meeting and a lot of the community said they could not go to the mayor’s office (to protest) because they have kids, siblings who work in the plantations... the companies manipulate that” (interview 9 August 2018). The fly problem culminated in 2016, devastating ranchers surrounding the plantations and yet, much of the social movement did not demand for the closure of plantations but rather regulation and accountability. Demands were essentially for improved terms of incorporation- particularly for property inherently implicated as expansion extends.



The level of incorporation of landless laborers seems to play a large role in the strength of resistance and ability of the community to organize. The FRENASAPP activist recounted the story of a community in the Atlántica region that organized and eliminated the existing pineapple company in 2010. The community was able to take legal action and show that the company, Tico Verde, did not complete environmental requisites and that contamination of the local aquifer was inevitable (interview 4 September 2018). Local aquifers in many communities have been contaminated, so how was this community able to take such swift action? The FRENASAPP activist noted that what was interesting in this case is that the local community was not incorporated at all into the business- “the people that worked on the plantation were people that arrived on a bus in the morning and left in the afternoon, because the majority of people [in the community] work as ranchers... nobody was connected with the plantation and that made the movement that much stronger” (interview 4 September 2018). This case could be defined as an outlier, corresponding more with the ‘exclusion versus inclusion’ dichotomy.

Incorporation of labor and property into pineapple expansion is highly differentiated. A class ‘lens’ can illuminate the types of struggle experienced and the processes and outcomes of expansion, but also demonstrates the ample overlaps between classes. Unequal power relations and less than ideal arrangements have led to the marginalization of those incorporated into expansion and a countryside further controlled and dictated by agribusiness’ terms. Much of resistance is organized around demands for better terms of arrangements particularly the terms under which labor and property are directly and indirectly incorporated into expansion. For local populations and migrants, the extent of expansion leaves little opportunity for the pursuit of other livelihoods, but does offer opportunities for stable, year-round employment.

## Chapter 3 Environmental contamination and the incorporation of nature

An overly land-centric focus within the land grab literature misses critical dimensions of socio-environmental change which are equally important in understanding livelihood change in the countryside. As export-led industrial agriculture is promoted worldwide, literature has been gradually introduced that indicates how this type of farming, typically manifested as the expansion of monoculture crops, has profound implications for the environment (see Altieri 2009; Altieri and Rojas 1999; Kröger 2014: 252; Bejarano 2009). Nature is inherently affected, even if not directly converted to cultivation under the terms of expansion. In many instances nature is not merely included or excluded, but incorporated, with varying implications for rural livelihoods. Though the impacts on the environment are still not completely understood, intensive monoculture plantations that require high amounts of agrochemicals “can exacerbate biodiversity loss, impede native species’ movement across the landscape, increase habitat fragmentation, and degrade soil and water quality” (Shaver et al. 2015).

The process of incorporating nature is underpinned by its appropriation and commodification. Fairhead et al. (2012) describe the concept of ‘green grabbing’ and the appropriation of land, with appropriation implying “the transfer of ownership, use rights and control over resources that were once publicly or privately owned... from the poor (or everyone including the poor) into the hands of the powerful” (238). Land appropriation has implications for the assigned values of land, which can be undervalued when the importance of nature and surrounding forests for local communities is underemphasized. ‘Green grabbing’ has been categorized under the umbrella of land grabbing, particularly in cases of green agendas where sizeable swathes of land are acquired “not for commercial farming, but for ‘more efficient farming to alleviate forests’” (Fairhead et al. 2012: 238). In this green context, nature becomes valued in new and various ways (Fairhead et al. 2012). One problem frequently identified by activists is the severe contamination at the hands of powerful transnationals. An indigenous activist remarked that “pineapple is not good or bad... it is a fruit... why not [production] in less space and in the hands of more people? More locally... in groups or with small producers and in a way where we coexist with the earth” (interview, 23 August 2018 #2). The issue is not necessarily the environmental contamination, but who is benefitting from a result of this contamination- namely large transnationals and not local communities.

Pineapple cultivation requires the application of 20kg of active ingredient per hectare per cycle (Lawrence 2010). The sheer amount of pesticide use is due to intensive production that has generated cheap pineapples and created new markets for export (Lawrence 2010). One major documented consequence of this intensive pesticide use has been the contamination of local aquifers and drinking water that has directly affected local communities and populations. The large quantities of pesticides and herbicides that are used in the cultivation of pineapple are due to the intensive style of production. Another prominent environmental consequence has been the *Stomoxys Calcitrans*, or more commonly referred to as the stable fly. As previously mentioned, the problem is aggravated when plantations do not properly dispose of the organic waste and can severely affect surrounding animals and farms. In order to avoid this, the waste is typically buried in pits, burned or through the use of pesticides and herbicides like the application of Paraquat (Pesticide Action Network UK 2016). Paraquat is an herbicide that must be applied at the rate of 12 liters per hectare and is labelled in the

EU and US as ‘very toxic.’ This chapter will open by discussing the implications of environmental contamination and how it has become a form of extra-economic coercion and then will further outline the environmental implications of pineapple expansion on local livelihoods focusing on water, biodiversity, and deforestation.

## **Environmental contamination as a form of extra-economic coercion**

Extra-economic coercion in the context of large-scale land deals or establishment of monoculture plantations has been typically discussed in mainstream discourse as the violent expulsion of people from the land (Borras and Franco 2013). While the role of violence is underscored, extra-economic coercion “also includes mechanisms of expropriation that do not involve the explicit use of force, such as manipulation of the public debt, the international credit system, financial speculation...” (Adnan 2013: 7). As discussed in the introduction, expansion of pineapple in Costa Rica has not involved the kind of explicit, violent expulsion that has been documented in other cases. What are other forms of violent expulsion and how can it be understood in the context of extra-economic coercion? Empirical data showed environmental contamination has played a role in expansion, characteristic of extra-economic coercion. Nixon (2011) discusses ‘slow violence’ as “a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all” and applies it to examining environmental destruction that disproportionately affects the poor (2). Contamination is not the kind of explicit violence as witnessed with the arrival of military or police forces that threateningly force locals off their land- but is an insidious slow violence. Nixon points out that “media bias toward spectacular violence exacerbates the vulnerability of ecosystems treated as disposable by turbo-capitalism while simultaneously exacerbating the vulnerability” of the poor (2011: 4).

Dispossession due to pineapple expansion has been nearly absent from the most commonly discussed consequences, though it has played a substantial role. A professor who has done extensive research on pineapple expansion in the Atlántica region discussed ‘ghost towns’- communities surrounded by pineapple that have seen community members slowly abandon the area because of how inviable other livelihoods become due to the contamination and the effects of contamination on the population (interview, 4 September 2018). A rancher and activist mentioned how they had to leave their farm that belonged to the family for 35 years as the surrounding land became further inundated with pineapple sickening his cows and garden (interview, 11 August 2018). Residents in communities where the drinking water was found to be contaminated with agrochemicals experienced years of headaches, skin problems, spontaneous abortions, and congenital malformations (Pomareda 2015). As contamination makes life unbearable, the exodus of community members frees up land to be bought by pineapple companies in order to further expand cultivation of the crop. Ranchers that have seen their livelihoods destroyed due to the stable fly have had no other option but to sell to the same pineapple companies said to be responsible for the plague. Dispossession by contamination has been a distinguishing trait of the kind of expansion taking place in Costa Rica and a kind of slow, insidious violence characteristic of Nixon’s ‘slow violence’- that ultimately engenders further expansion and consolidation of land in the countryside.

## Water

The issue of contaminated aqueducts and impacted water use is one of the most frequently highlighted problems associated with the expansion of pineapple. In interviews with activists as well as informal conversations with community members, water contamination almost always emerged as the primary concern (interview 8 August 2018; 10 August 2018; interview 23 August 2018; interview 23 August 2018). Contamination of aqueducts has been extensively documented, with various communities in the canton of Siquirres (Atlántica region) measuring up to five times the ‘safe’ level of bromacil set by the U.S. Environmental Protection Agency (Pomareda 2015). A study completed in the Atlántica region on the Jiménez river evaluated the environmental impact of pineapple production and found 39 different pesticide residues in the water (Echeverría-Sáenz et al. 2012). The problem is further aggravated by pineapple companies located near water sources who have not taken vegetation margins seriously (Echeverría-Sáenz et al. 2012). One case that was investigated in the region found a plantation located a mere 20 meters from the water source, when law requires a minimum of at least 100 feet (Pomareda 2015). It is jarring to see what close proximity many plantations are to schools, houses, and water sources such as rivers and creeks, as one drives through these regions. It was recently revealed that the Center of Investigation of Environmental Contamination which is part of the University of Costa Rica started an investigation in 2015 examining the contamination of water in the Huetar Norte (Córdoba 2018). The study observed the presence of various agrochemicals used in pineapple production in 22 samples taken from rivers and creeks and 10 samples taken from underground sources like wells, prior to water treatment (Córdoba 2018). After the completion of the study, local officials were deliberately not made aware of the results, as communities continued using and drinking contaminated water.

The contamination of the Térraba river has been a major concern for the indigenous population in the Brunca region. One indigenous activist conveyed the importance of the river- “we are looking, from a spiritual perspective, to protect what is left [of our culture], and what is left in the region is the river that connects all of the [indigenous] communities” (interview, 23 August 2018 #1). The river plays an important part in indigenous culture and holds spiritual significance for the territories in the region. Another indigenous activist noted the changes in the past three decades- “with pineapple crops the soil is left very exposed, the hard rains take everything with it... you almost never see the blues and greens of the river now like you used to, it’s always the color of chocolate” (interview, 23 August 2018 #2). Intense rain, especially during the rainy season, would also lead to pesticide run-off into the river and affect marine life. Indigenous communities consume fish and shrimp from the river and the activist shared concerns over the real possibility that “the fish contain certain levels of pesticides that cause sicknesses like cancer” (interview, 23 August 2018 #2). A study in Buenos Aires concluded that 60% of water samples taken from rivers and creeks presented concentrations of bromacil that would compromise the protection of aquatic life (De la Cruz et al. as cited in Montiel Segura 2015).

## Biodiversity

León (2018) points out an interesting statistic for Costa Rica- that the amount of protected wildland has doubled since the mid-1990s alongside a 60% increase in the number of hectares dedicated to the production of monocultures in the last two agricultural censuses of 1984 and 2014. While increasing resources to protect biodiversity, a type of agriculture has been installed around the country that simultaneously has the impact of destroying it. Costa Rica is renowned for its biodiversity, accounting for .02% of the world's land and nearly 5% of the world's species (Butler 2016). The expansion of pineapple and other monocultures have profound implications for the biodiversity of the country. One published study showed that certain species of birds in Costa Rica struggled to adapt when large areas are converted to intensive monocultures (Dyer 2014). The same study showed the greatest diversity of bird species was found in native forests and that number dropped by 15% in diversified farmland and an astonishing 40% in monoculture farmland (Dyer 2014). The wildlife refuge called Caño Negro in the Huetar Norte region has been encroached upon by pineapple expansion. This has profound implications for the ecosystems protected by the refuge and some experts have claimed that it could disappear completely in the next 10 years (Córdoba 2011). The rancher activist showed much concern regarding the changes in the Caño Negro refuge and in general in the region- that you hardly see wildlife anymore in the refuge and in the region in general (interview, 12 August 2018). One study corroborated these claims, showing a decrease in monkey populations in the Huetar Norte region, again causing great concern to the surrounding biodiversity and the future of biodiversity in the regions (Acuña, as cited in Montiel Segura 2015).

## Deforestation

The 2015 MOCUPP study compared images from 2000 with the images taken in 2015 and calculated that upwards of 5,500 hectares of forest were cut in order to facilitate the expansion of pineapple plantations (Araya 2017). Using forest data available from various institutions, a biology professor from the University of Costa Rica estimated that the 5,500 hectares is equivalent to around 725,000 trees that would have been cut (Araya 2018). Law in Costa Rica makes it illegal to cut forest and many activists cited the study as proof that the pineapple industry has destroyed thousands of hectares of forest, subsequently destroying the ecosystems that inhabit those forests as well (Araya 2018). In a country that exalts the importance of conservation, it is quite contradictory that these processes have taken place without repercussion. The activist with FRENASAPP discussed that the organization is currently involved in a process to report around 63 pineapple farms that have failed to comply with forestry law and cut forest in protected areas (interview, 4 September 2018). The hope with this is that they can pressure the government to bring the companies to court for their incomppliance with the country's laws. A supervisor at PINDECO noted that an important part of the business is leaving about 40% of the land covered in forest to help with conservation efforts (interview, 21 August 2018). Yet, another study suggested that the scattered makeup of the forest cover on plantations when compared with natural forest or other land types such as pasture, likely "reduces habitat availability and connectivity" with implications for wildlife (Shaver et al. 2015).

## Chapter 4 Incorporation of the State

Wolford et al. (2013) posit that “while good governance and land rights are worthy goals, they are not implemented in a vacuum... we need to know more about the nature of state themselves... about the motivations of particular actors as well as the capacity of governments” (191). Li (2011) observed that the oil palm sector in Indonesia was “a so-called neoliberal world said to be ruled by markets, and governed by rational systems, but actually dominated by state-protected monopolies reminiscent of the colonial period” (5-6). This situation described by Li in the Indonesian context is not unique to that country and state. More generally, the state cannot be considered a neutral arbiter in the midst of the global land rush, but it is neither a mere tool of capital. Fox (1993) delineates ‘state’ as “the ensemble of political, social, economic, and coercive institutions that exercise ‘public’ authority in a given territory” (11). As land grabs were thrust into the international spotlight, the state became a principal unit of analysis as organizations and institutions contemplated ‘solutions’. The strength and extent of state-capital alliances vary greatly and rarely remain static as governments, especially those claiming to be democratic, do have to answer to their constituents. Fox (1993) discusses the two contradictory tasks of the state: to continue facilitating accumulation of capital while retaining the necessary minimum of political legitimacy (Fox 1993:15). The Costa Rican state has historically played a role in expansion, particularly as it opened up new arenas for capital accumulation permitting the extraction of resources and wealth without interference (Obando 2017).

One year after the country defaulted on its loans in 1971, inflation was at 100%, employment was almost double the 1979 levels, and the country as a whole was essentially regarded as an “economic basket case” (Edelman 1999: 2-3). After Costa Rica defaulted on its loans and Structural Adjustment programs were initiated in the 1980s, the generous government programs and the former democratic welfare state were dramatically transformed (Edelman 1999: 2). The shift to neoliberal, free market ideology began to take hold. The role of the state within the context of neoliberalism is first and foremost “to support freely functioning markets” and that “interventions in markets (once created) must be kept to a bare minimum” in order to avoid “bias state interventions for their own benefit”- though the actual implementation of the neoliberal agenda “frequently diverges from this template” (Harvey 2007). The implementation of Structural Adjustment ended state support for smallholder basic grain production and provided massive incentives for foreign direct investment and non-traditional export crops, with subsidies like CATs, already mentioned (Shaver et al. 2015). Credit available for basic grain production was reduced by 90% between the initial implementation of Structural Adjustment in the 1980s until 2000 (León 2018). Many of these structural changes led the shift towards non-traditional export crops and the involvement of transnational firms through foreign direct investment. Unlike other cases where the state has played a direct, explicit role in the sale of land to corporations or the expulsion of locals using violent militaristic force, the role of the Costa Rican state has been more implicit, but it is arguably incorporated to varying degrees into pineapple sector expansion.

It is worth noting that the state is not one homogenous actor as it contains “multiple actors, factions and interests, many of which are in direct competition for political influence” (Hall et al. 2015: 475). In fact, one point consistently mentioned is the lack of coordination and sharing of information between local governments and state institutions (Obando 2017). This chapter will look at situations and the resulting actions taken by local municipalities and

the central government that have contributed or led to the unfettered expansion of monoculture pineapple. The state has taken some- albeit limited- action when faced with resistance from civil society, but the state appears to act more as an extension of corporate interests. There exist variations in regard to the multiple responses from local municipalities and the central government as they become inevitably incorporated into expansion. As will be shown, the state seems to be incorporated under adverse terms as they are obliged to pay for damages presumably caused by pineapple plantations in addition to companies' exemption from paying an export tax like other sectors, such as banana (El Mundo CR 2018).

## **The state's role and responses**

Though the state has been involved in the expansion of pineapple, it has not been, I would argue, exempt from incorporation into capitalist corporate interests under adverse terms. We see the contradictory role and responses of the state, squeezed to function both to facilitate capital accumulation and retain a minimum level of political legitimacy. The state covered the costs to construct a new aqueduct in the Atlántica region that was finished in 2017, amounting to nearly \$4 million (Madrigal 2017). Prior to the completion of the new aqueduct, the state also foot the bill to deliver water to the affected communities by tanks- twice a week for 10 years (León 2018). Communities have had a challenging time trying to prove to the state that their water is contaminated and assistance needed. Yet, once the new aqueduct was complete, the state actually openly admitted that the contamination was the fault of neighboring pineapple plantations (León 2018). Is taking responsibility for paying the damage caused by plantations its best attempt at maintaining a modicum of political legitimacy? As previously discussed, the state deliberately hid water tests from communities and authorities in the Huetar Norte region that concluded contamination was present. This implies the state would have had to take responsibility particularly with maintaining its legitimacy, but this responsibility has implications for the state's ability to accumulate capital. Therefore, the state would have reason to not disclose the studies carried out in 2015 by the university that showed significant contamination in the water in the Huetar Norte region- knowing there was a high chance the economic burden to repair them would fall to the state. The state has not taken legal action against the companies responsible for the contamination of aquifers and aqueducts (Pomareda 2015).

Another contentious topic is the tax exemptions enjoyed by pineapple companies. Not only did companies, mainly PINDECO, receive millions of dollars to install their operations in the country, but they continue to receive incentives and benefits. Pineapple companies do not pay taxes on the machinery used for cultivation that has to be imported and do not pay any sort of export tax once the crop is ready for exportation (Obando 2017). Banana, another prominent export crop in Costa Rica, pays \$1 per 40 pounds exported (El Mundo 2018). The current economic climate in Costa Rica is particularly concerning because of the fiscal deficit and many organizations involved in resistance against expansion have called for a tax on pineapple exports- whose value amounted to \$953,166,000 in 2017 (El Mundo 2018). The FRENASAPP activist pointed out:

The pineapple companies pay absolutely nothing [to municipalities] ... the export sectors are the ones that are currently growing most and they have historically been the beneficiaries of exemptions and financial incentives... why don't they take on a part in helping to solve the fiscal crisis?... not only do they not

help carry a portion of the fiscal load but they are saying that the current conditions in Costa Rica are impeding production and they are asking the government for *more* guarantees and incentives (interview, 4 September 2018).

This came up in other interviews with activists, who mentioned things like “they don’t pay any taxes on the machinery or anything... the municipality doesn’t get any money... so there is no money for the schools or anything and the small towns continue on the decline” (interview, 12 August 2018). The discourse around the importance of pineapples for the country is centered on job creation and exports, and the state has not taken responsibility in overseeing the expansion. Even though it does contribute to job creation in the country, it is recognized and explored previously in the paper, that the jobs created in the communities are not necessarily under favorable terms- but, there are limited other options. A former minister of agriculture and livestock even concurred that “with crops like pineapple, the wealth is concentrated in few hands... it is not a crop that distributes wealth like coffee, for example” (interview, 13 September 2018). The situation appears to have escaped control of the state as it becomes further implicated and incorporated into expansion.

Local municipalities have made more direct attempts to limit expansion particularly due to the stable fly epidemic and water contamination. FRENASAPP heavily engaged in lobbying and political work in 2012 resulting in the acceptance of a moratorium on expansion in three municipalities in the Atlántica region, only to have the Constitutional Court overturn the moratorium on the grounds that it violated ‘freedom of enterprise’ (León 2018). The same process and outcome unfolded with a proposed moratorium in a municipality in Huetar Norte in 2016. León (2018) explained the feeling of dismay in communities because the “Constitutional Court, traditionally taken to be one of the few neutral authorities, ruled against the autonomy of the municipal governments” (13). But according to local activists, local municipalities are increasingly unable to take any action at all- as two described a march to the municipality that resulted in the mayor essentially conceding that they had no control over the decisions being made (interview, 9 August 2018; interview, 11 August 2018). It is becoming more challenging to separate government and agribusiness objectives. As Li (2015) observed in Indonesia with oil palm expansion- “authorities are not outside ‘the system’- they are too inside, integrated into it, as extensions of its monopolistic form.” A similar sentiment was expressed by the former minister of agriculture and livestock in that the situation “is not necessarily provoked by pineapple, but by other situations transpiring on a global level, the rules of free trade... a bean producer here cannot compete with a bean producer in Nicaragua... [the problem] is more difficult because it is structural” (interview, 13 September 2018).

Understanding the incorporation of the state in the case of Costa Rica presents challenges for the management and governance of land grabs. With evidence of the dwindling partiality of the state, given its historical role and continued incorporation in expansion, solutions cannot be limited to ‘better governance’ and ‘secure land tenure’. A more comprehensive analysis of the variegated forms of processes and outcomes can be beneficial in understanding the processes, namely the various governance structures that have stimulated land deals.



## Chapter 5 Conclusion

This paper posed the question, ‘Between the iconic forms of expulsion and adverse incorporation, what are the various possible dynamics of social change that large-scale land deals could bring upon affected communities?’ The case of Costa Rica positions itself as a case outside the typical dichotomy of iconic ‘expulsion or incorporation’ with particular outcomes of social change resulting from the variegated forms and processes found between ideal-types of expulsion and adverse incorporation. My analysis shows how capital deploys different strategies in the countryside in its quest for profit, namely, exploitation of labor, the utilization of contracts and leases, dispossession, and implicit incorporation of land surrounding plantations. The incorporation of nature and the state emerge as key parts of the land grab process once a perspective that transcends the ‘land-centric’ mentality is applied. Regardless of the distinct forms and processes that have engendered the expansion of the pineapple sector, the outcome of expanded agribusiness penetration and control of the countryside becomes the eventual result.

The exploitation of landless and migrant laborers has played a large factor in the expansion of the pineapple sector and can provide invaluable insight to expanding the processes that accompany cases of land grabs. Though expansion has unfolded distinctly in the three regions of the country where cultivation is concentrated, cultivation in the Huetar Norte and Atlántica regions that originally involved small and medium-scale producers continues to be consolidated into larger plantations. Workers on plantations have struggled to demand labor justice and have been threatened and pressured by pineapple companies to abandon worker unions. Undocumented Nicaraguan migrants have been a significant source of labor for plantations in these two regions and are paid half the legal minimum wage, while working in precarious conditions exposed to agrochemicals and thunderstorms. The ability to exploit labor in this manner actually provokes land grabs-without this exploitation, further expansion would be considerably less profitable. Borras et al. (2018) mentioned the role Vietnamese migrant labor played in sugarcane expansion in China and the land grabs likely resulting from said expansion. Plantations do offer relatively stable employment, but the workers essentially forgo their ability to demand better wages and conditions, in exchange for this stability. The FRENASAPP activist underscored migrant labor as a possible indicator in analyzing the possibility of continued expansion, as political turmoil in Nicaragua has led to the arrival of Nicaraguans into Costa Rica- people at greatest risk for this type of exploitation as they go through the application process for refugee status.

‘Propertied proletarians’, a contested concept first theorized by Lenin, denotes individuals that own land but have lost significant autonomy over decisions regarding how the land is managed. The inclusion of peasants into global value chains has been lauded as a potential poverty reduction strategy, but frequently does not recognize poor peoples’ exposure to risks within this inclusion (Bolwig et al. 2010). Contract farming and land leases have been expansion strategies for the pineapple sector with varying consequences for locals. Many contract farmers have gone into debt due to the alterations in standards required by contracting companies. Rojas (2006) offered a case where a group of former coffee farmers were able to reinitiate their failed pineapple enterprise with the help of Dole ensuring a market for the pineapple- but have also had similar debt problems mentioned above. Those who have leased land to pineapple companies have received rent money, but because of the pesticide-intensive style of production, declining fertility of the land leaves land owners in a difficult

position after the completion of the lease. These strategies are more about land control grabbing as opposed to outright land grabbing, as agribusiness realized that “control over production did not necessarily require a plantation system in all cases” (Oya 2011: 18).

Landed peasants- those that own land and work it- have also seen varied processes of incorporation. Small-scale producers not producing under contract have struggled to compete with larger companies as they do not have similar access to credit or technology and have not historically received the same tax exemptions. As Li (2015) raised with palm oil, it is not only economies of scale that leads to expansion by corporations, but the protection and subsidies offered to them. The historical support given to pineapple companies, especially PINDECO leads us to a similar conclusion. Small and medium-scale basic grain producers have sold or leased land because of the increasing difficulty in maintaining their livelihoods. As Murmis and Murmis (2012) observe in Argentina, land concentration does not automatically correspond to land grabs but can lead to the displacement or even eviction of small and medium producers. Similarly, the stable fly that reproduces in pineapple waste has seriously affected cattle ranchers as they are forced to pay for medicine, manage losses, or worse- leave ranching altogether and sell their land. The processes leading to this type of land concentration stem from dispossessing locals from their land with implications for the processes of dispossession outlined in much of the land grab literature.

Environmental contamination as a means of economic-coercion sheds lights on another form of violent expulsion, namely a kind of ‘slow violence’ expounded upon by Nixon encompassing “a violence that occurs gradually and out of sight, a violence of delayed destruction...” (2011: 2). The incorporation of nature and contamination from expansion elucidates the dimensions of socio-environmental change providing additional understanding of changing livelihoods. The appropriation, or the “transfer of ownership, use rights and control over resources... from the poor (or everyone including the poor) into the hands of the powerful,” has been a contentious aspect of expansion (Fairhead et al. 2102: 238). The incorporation of nature and the resulting implications for water, biodiversity, and deforestation have been for the benefit of few and have negatively affected many. This affects livelihoods, causing communities to be abandoned and the creation of what one professor referred to as ‘ghost towns’- freeing up land to be essentially taken over for continued expansion.

Taking into consideration the two contradictory roles of the state as discussed by Fox, namely facilitating the accumulation of capital while maintaining minimum political legitimacy (1993), the state’s role and reactions in the case of pineapple expansion show the extent to which the state itself is incorporated. The state seems to simultaneously inhabit these roles when it does not take legal action against pineapple companies who contaminate water sources and actually pays for new aqueduct construction and water delivery to communities. In terms of what this means for land grab literature particularly regarding the role of the state, is that the state cannot be seen as a neutral arbiter nor as merely a tool of capital. The state itself becomes incorporated into expansion- even when the terms under which it is incorporated are adverse. As Li expressed in the case oil palm expansion, these deals are said to be taking place under the umbrella of ‘market logic’ but they are actually “dominated by state-protected monopolies reminiscent of the colonial period” (2015: 5-6). The impartiality of state governance becomes ever more questionable, as it is further incorporated into expansion.

## Implications

The findings in the Research Paper offer fresh and original insights with global resonance, and have important implications for land grab literature and future research more generally. These are discussed briefly below.

**Theoretical.** As visualized with the chart in the introductory chapter that outlined the dominant characteristics of land grabs and the characteristics of the case of the Costa Rican pineapple sector, current land grab theory essentially excludes a large number of cases that do not fit within the dominant narrative. Simplifying land grabs to a number of cases or hectares “reduces land grabbing to a quantitative problem rather than focusing on the social relations that it may or may not transform” (Edelman 2013). Moving forward, the findings in this study suggest that theoretical fine-tuning will be necessary, and this should put front and center the dynamics of capital accumulation process, rather than a ‘land centric’ lens, in understanding causes, character, conditions, and consequences of the global land grabs.

**Methodological.** Within scientific studies of the global land rush, small-scale land grabs in countries where land is not abundant and with functioning governance structures, should not be overlooked. Exposing other processes and broadening the rather narrow ‘land grab’ definition of land can be a positive outcome of including other cases and countries that do not fall within the ‘typical’ scope of land grab research. Proceeding research should include these other cases in attempts to better understand the variegated processes and outcomes of land grabs.

**Political.** For activists and fronts of resistance focused on land grabs, many challenges emerge in light of what has been discussed in the paper. As the context of land grabs broadens, how and under what important elements does resistance organize? Perhaps the best way to go about this is understanding that the contexts and processes of land grabs are nuanced but the outcome has been similar, namely agribusiness penetration in the countryside. But overall, the findings here suggest of the converging- and the need to combine- various strands of struggles for social justice: land, agrarian, food, environmental health, labor, and climate justice. The ways in which agribusiness is controlling the countryside have differentiated outcomes for local communities that are largely dependent on the processes and terms of their incorporation.

**Policy.** There are many implications for policy as far as how national and international institutions interested in the governance of land deals approach these situations. The complexity of the land grab phenomena makes it particularly difficult to approach, and becomes even more so as other cases and definitions are included within the realm of land grab. An over emphasis on ‘good governance’ for ‘land tenure rights’ cannot be considered as the lone solution to the problems brought about by the global land rush- particularly when the analysis does not include the state’s historical and continued role, as well as its incorporation into expansion. Rather, policy interventions need to take into careful consideration the overlapping policy dimensions of the struggles for social justice and its multiple dimensions: agrarian, food, environmental, labor, and health issues.

## Appendix A: List of Interviews

Supervisor at 400-hector plantation	7 August 2018
Small Producer of 3 hectores	7 August 2018
Small scale rancher/dairy farmer	8 August 2018
Supervisor at 800-hector plantation	9 August 2018
Former member of the Regional Camera of Ranchers	9 August 2018
Small scale rancher/dairy farmer	10 August 2018
Rancher/Activist	11 August 2018
Supervisor PINDECO	21 August 2018
Indigenous Activist 1	23 August 2018
Indigenous Activist 2	23 August 2018
Activist/Representative of FRENASAPP	4 September 2018
Professor of Political Science	4 September 2018
Activist/Department of Investigation at a national university	10 September 2018
Former Minister of Agriculture and Livestock	13 September 2018

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