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This Is Not About Cows: Historic and Contemporary Challenges to South-Central Madagascar's Cattle Systems

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This Is Not About Cows: Historic and Contemporary Challenges to South-Central Madagascar's Cattle Systems



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Abstract

Madagascar's most cattle-dependent regions have, in recent years, been surrounded by narratives of a sudden and violent decline in both the sheer number of and benefits conferred by the nation's distinctive zebu cattle, narratives which largely attribute this decline to theft and insecurity. This paper examines the broader state of cattle-based livelihoods in two such regions, Haute Matsiatra and Ihorombe, through evidence garnered from semi-structured interviews conducted over three weeks in the major cattle market towns of Ambalavao and Ihosy, and in the rural commune of Sakaviro, five kilometers south of Ambalavao. By incorporating secondary historical sources and recent work from both Malagasy and Western academics, the paper finds that the cattle economy has cyclically experienced high levels of related violence, foreign involvement in cattle trafficking, and conflict between and among the local and Malagasy state institutions involved in the process. However, the paper also finds that this historically cyclical system is under increasing duress from two mutually worsening sets of stressors: one constituted by deepening poverty, environmental adversity, and population growth, the other a pervasive process of social disintegration within pastoralists communities and the institutions that work with them. It concludes with a set of recommendations for relevant actors in an attempt to avoid the worst-case scenario- the collapse of cattle-based livelihoods due to a rapid decline in Madagascar's cattle population.

For my Grandma, Geraldine "Tedde" Myers, whose certainty that when cows lay down it means it's going rain would have come in handy in a place where nothing is ever less certain than cows and the rain.

Acknowledgments

If this paper is at all informative or even coherent, it's no thanks to me, I promise you that much. I've been fortunate to have stumbled blindly into the lives of some extraordinary people in some extraordinary places. First, thank you to my friends in Fianarantsoa, Ambalavao, Sakaviro, and Ihosy for clearing schedules, calling contacts, and otherwise bending over backwards to help a sunburnt foreigner who wanted to talk about cows. Thanks to JB, Marcel, Hery, and the *patrons* in Ambalavao, Ernesto, Macy, and Nirina in Sakaviro, and Jeannot, the urban commune, and to all of the *patrons* in Ihosy. Thanks to the godrogodro and mofogasy saleswomen of Haute Matsiatra and Ihorombe regions, for providing much needed doses of sugar, coffee, and conversation. Thank you to my host families in Tana, Mahajanga, and Betafo, for preparing me to live alone in Madagascar and teaching me what it means to be related to strangers. Thanks to Roland Pritchett, Professor Bernardin, and the program staff, for being inhumanly available and patient with me both before and during seat-of-the-pants voyage south. Thanks also to my advisor, Dr. Karin Wedig, for her continued support back at the University of Denver. Thanks to Abi, Caroline, Elena, Hayley, Mason, and Sakura, giving me such a life-changing experience (if not the six-pack abs we were on track for) from start to finish. Finally, thank you to my family for providing all sorts of constant support in heading off to a gigantic, left-shoe shaped unknown.

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Introduction: Narratives, Questions, and Purpose-

In late September of this year, I found myself sitting at a dinner table in Mahajanga, in the northwest of Madagascar, hearing one hell of a story. I'd heard a bit about the rampant cattle theft currently afflicting the south of the country, and had asked my host for her views on the subject. To my surprise, she calmly replied that what most people did not know was that the thieves, known as *dahalo*, were "made", not born. Members of the Bara ethnic group living in Madagascar's southern forests, they consisted of a sort of "medicine" of pearls, cattle horns, leaves, and red and black fabrics. I choked on my rice in surprise at the time, but I don't think I would do so today. Madagascar is, for better or for worse (usually both), a country often defined by its narratives. I suspect that this is partially attributable to the strength of the Malagasy as a nation of orators, of Madagascar as the land of *kabary*. For me, no conversation on the subject of the country's past and present has passed without one or another convincingly grand account of the fate of the place being conjured up by one of my hosts. I've grown rather familiar with each these: the tumble off of the cloud nine that was the heyday of the First Republic, a corrupt state slowly breaking the backs of a noble and courageous people, foreign powers meddling to hold back the full potential of the Malagasy, and so on. The stories have their respective adherents, and more often than not a firm grounding in the truth. There is one portion of the Malagasy experience, however, where the stories seem to have taken a bus-too-many out of town, to some dark edge of what's known and expected, where they compete with each other for a sheer lack of believability. To my steadily evolving surprise since I arrived here, these stories are being told about cattle, and more often than not about their theft. They are told by outsiders: There is the story told on the front pages of the Antananarivo-based newspapers seemingly every morning, of murderous bands of thieves roaming lawless regions in defiance of valiant forces of order. There's the inevitable accompanying tale of the debasement of a rite of passage among the Bara people of the center-south, leading to an unprecedentedly violent and

chaotic situation on the distant southern plains. One hears, too, the story of state complicity in heinous reprisals against pastoralist communities told in recent years by, among others, Amnesty International and the French journalist Bilal Tarabey (Tarabey 2014). While these stories of *dahalo* are worth telling, an entirely different pack of stories is being told more often by insiders: One is that of the inextricable link between the *omby* and the Malagasy, for whom the cattle serve in a host of indispensable capacities. Another is a darker story being told about the precipitous decline of Madagascar's cattle and the ways of life that depend on them. These are but a few of the stories, and a different paper would be well-spent in properly telling them. This paper, however, was not written to relate these stories (which have been buzzing around my head since I first heard them): rather, it is an attempt to confront them. In writing about *omby*, one cannot avoid dealing with these narratives, accepting some and rejecting others, in order to (I've hoped) depict the relevant characters and events as they actually exist. To be fair, my research has increasingly led me to the conclusion that my version of events will be just that—a different account of the same story. That being said, I strongly believe that the tales told by both Westerners and the Malagasy about cattle in Madagascar have fallen several steps short of being holistic, to the disadvantage of those who have heard them. This one attempts to bridge at least part of the gap by answering some of the more tangible questions which led me to undertake this research in the first place: What are the effects of broader social, economic, and political processes on cattle-based livelihoods in southern Madagascar? What are these livelihoods, precisely, and how do they work? How do local and national institutions interact with these livelihoods? Has there been a decline among pastoralist economies in the areas of study? If so, why? How do broader processes like urbanization, climate change, drought, political instability, crime, and population growth effect pastoralism here? It is only in providing a few tenuous answers to these questions that this paper aims to meet its broader aim: to cut through the mass of narratives surrounding Madagascar's cattle livelihoods in an attempt to

provide an explication of the current state of *omby* systems and the people who depend on them. If such an explication can be even plausibly forwarded, my hope is that it will spur further research on a topic which has been woefully under-examined by Western academics. Towards this end, I should acknowledge the fundamental process that has shaped this research: that of a discernible and quickening decline in the number of cattle in Madagascar. The remainder of this paper will explore the myriad causes of this decline, and its broader implications for the populations most affected by it. Put simply, the Malagasy cattle economy is a bellwether system. It is an integral part of rural life, and a vital liaison with the urban world. As a functioning element of Malagasy well-being, it is an indicator of many of the broader processes eating away at Madagascar's social fabric. Although the fact is rarely given sufficient attention by outside observers or cattle professionals, the cattle economy is by its very nature historically cyclical. I contend that this cycle is today, however, beset by two new, very different sets of stressors- an increasing strain on daily life made up of deepening poverty, environmental adversity, and population growth, and a pervasive process of social disintegration within pastoralist communities and the institutions that work with them. Moreover, the effects of changes taking place within this system extend far beyond its constituent elements: the holistic role played by cattle for those who live in tandem with them means that any decline in the strength of the system will have far-reaching effects on nearly every aspect of rural life. These effects can only be truly understood in light of the historical, political, and economic backgrounds of both the system and the study sites in question, and with an introduction to some of the basics of how pastoralist economies function and why it's important that they continue to do so. Then, drawing from both interviews and participant observation, I will outline the broad workings of today's cattle system with a particular focus on the regions of study, and begin to elucidate the causes and effects of the cattle decline mentioned above. Almost inevitably, I will devote some space to addressing the place of *dahalo* in all of this, before moving on to examine the current status of

“hardship” stress, and of social and institutional cohesion, in the context of cattle, as conveyed to me by my informants. I will also analyze the themes emerging from the conversations of the past three weeks in view of both sets of stressors, which I will refer to here as the “hardship trinity” and “multilevel anomie”. Finally, I discuss the wide-ranging effects of these findings as a whole, provide some recommendations rooted in the views expressed by my informants, and pose questions for future study.

Methodology-

This paper is the product of 35 semi-structured interviews¹ conducted across three sites along southern Madagascar’s “cattle corridor” (Route Nationale 7) from November 8th to November 23rd, 2015. I spent 6 days in the cattle market town of Ambalavao, at the southern edge of the central highlands in Haute Matsiatra region, 5 days in a rural commune, Sakaviro, five kilometers to the south, and five days in the cattle market town of Ihosy, the plateaued capital of Ihorombe region. The sites were selected for a variety of reasons: the intrinsic importance of Ambalavao and Ihosy to the cattle economy, the timely availability of a rural contact in the Sakaviro area, and the potential insights inherent in comparing two geographically approximate (but ethnically and economically diverse) regions. Both Ambalavao and Ihosy are, in fact, useful locations for interviewing informants from rural areas, serving as they do as regional hubs of exchange for their respective hinterlands. This was a particularly useful function in light of increasing insecurity across wide swathes of rural Haute Matsiatra and Ihorombe, which limited my possibilities for study within the rural context. Interviews were conducted with herders, local government officials, Ministry of Livestock officials, and market insiders, to name a few of the major informant groups. The data from these interviews was supplemented by three days of observation in the markets of Ambalavao and Ihosy, and time spent observing the versatile

¹ Two of which were conducted on November 3, 2015 in Antananarivo.

roles of cattle in the rural setting of Sakaviro. My findings draw on a diverse body of literature dealing with the history of the cattle systems and peoples I encountered throughout the study, a theoretical background for the various factors surrounding cattle decline, and other insights into rural life and pastoralism as it exists here in southern Madagascar. In synthesizing these elements, and viewing them as parts of a larger whole, I was able arrive at some of the tentative conclusions outlined above.

Ethical Considerations-

Cattle are, at the moment, an extremely sensitive topic of conversation in the areas in which this research was conducted. Much of this sensitivity can be attributed to entirely understandable fears of cattle theft and the violence against people which frequently accompanies it. These fears can extend to topics I initially considered innocuous, like the mere number of cattle a herder owns. Most offered this freely, but several herders I spoke with were palpably suspicious of the idea of providing any details on herd size, and I quickly learned that this was a topic better brought up by the participant than of my own initiative. That broader principle ended up being my rule of thumb during interviews. If theft was not brought up by participants, it was not discussed. The same was true of corruption within the cattle economy, the breathtaking extent of which proved to be one of the project's principal sensitivities. At times it seemed as if every actor I spoke with had (convincing) reason to believe that every other actor was guilty of malfeasance. Again, I waited to discuss the topic until it was introduced by the participant: otherwise it was not discussed. All of this should be more than sufficient to give the reader an indication of the working and personal relationships which could be damaged, the criminal charges which could be brought, and the bodily harm which could be inflicted if I chose to employ the names of my participants in this paper. The fundamental responsibility of the researcher is to first do no harm, and so I will not refer to anyone by name here. That being

said, I do strongly believe (in keeping with conversations I've had with my thesis advisor at the University of Denver) in the inalienable accountability of *institutions*, and so will reference them as freely as my prerogative to protect the personal identities of my participants permits. It is also incumbent upon me as a responsible researcher to present as balanced of an image as possible of the parties discussed in this study, something which I will try my utmost to do throughout the paper. In terms of the findings themselves, research is justifiable only to the extent to which it can act as a net positive in the lives of those who participate in it. The tone and content of the conversations I had with people in all three of my sites leads me to believe that if nothing else, discussing the subjects we did provided an outlet for frustrations and ideas participants might not have otherwise found occasion to express. With this in mind, I have tried to accurately report the views and concerns of my participants, in the hopes that future research, or well-connected readers, may draw relevant lessons for future involvement with rural livelihoods or pastoralism. It is also important to acknowledge the inherent power differential in my reporting any of these findings as a white, foreign researcher. I attempted to put participants at ease concerning this differential by trying to actively minimize the formality of the occasion: greeting and chatting in Malagasy before interviews, in particular, was essential to making interviews more conversational than inquisitorial. Finally, a major ethical concern (and a potential limitation for the validity of any of these findings) is the large preponderance of male informants who took part in this study. The Malagasy cattle economy is staffed almost exclusively by men, with agriculture in the areas where I studied often being seen as the domain of women. While I wrestled with the issue throughout the interview process, I ultimately determined that studied attempts to include female perspectives on some of the broader social questions I was examining was a potentially useful way to temper some of the one-sidedness of my data and welcome in other perspectives from these communities. Still, cultural considerations as to the appropriateness of a male foreigner interviewing a woman without the

knowledge of a male relative, conveyed to me by a contact from the area of study, led me to restrict my interviews with women to government and private sector offices (which, it turns out, are also overwhelmingly male). Regardless, I have made every effort to address these ethical concerns in both the recording and reporting of the information I was fortunate enough to glean from my participants.

Limitations-

Whatever else, dear reader, you learn from this paper, keep in mind that it is predicated upon the results of 35 interviews conducted over three weeks by a first-time researcher. The depth and quality of my questions and interactions is, quite simply, a serious limitation on the validity of the results. While I believe I was able to assemble a body of evidence sufficient to identify some of the most immediately relevant factors, I would have liked to have had 6 months to do this project, and another 3 to prepare for it. Unfortunately, I had neither, which meant a short project with very little preparation, and quite a lot of potential error. For better or worse, you are reading the result. The second most immediate limitation was the existence of two distinct language barriers in the form French and Malagasy. I was able to conduct a large majority of my interviews in French (which I speak adequately enough for the purposes of this project), but that fact doubtlessly changed both the content and tone of my conversations by injecting the presence of a third (and colonial) language between myself and my participants. With that in mind, I did conduct several interviews in Malagasy, which I speak at an elementary, but passable, level. These interviews provided me with insights (which I made certain to verify and nauseam during conversations) that I would not have otherwise garnered, particularly in the markets, where much less French was spoken than among most of my other groups of informants. That being said, I am sure that quite a bit of additional information was lost in translation. Fortunately, I had the services of a French-speaking translator in Sakaviro, where

virtually nobody spoke a foreign language. While I was fortunate enough to receive some rural perspectives through my visit to Sakaviro, I was unable, for want of time and concerns over security, to pursue a comparable stay in rural Ihorombe, which no doubt would have provided me with altogether different answers from a very different social and physical environment. I was also constantly confronted with a lack of reliable quantitative information, which left me dependent on the responses of my informants and my own powers of observation to corroborate some of the most commonly discussed trends. While some quantitative information is included below, I was informed by several people ostensibly responsible for gathering such information that the Malagasy government, for instance, had no real idea of how many cattle were in the country. As concerns state sources as a whole, I am aware that the preponderance of civil servants among my informants could well imbue the project with a modernist streak implicitly disparaging of informants outside of state institutions (the long history of which is discussed below). To balance this, I have made a real effort to engage critically with this modernist, state-constructed narrative. Finally, my relatively limited sample size and the outsized number of well-educated French speakers within it likely gave me a very different set of data than might have been the case had I used a translator for every interview². With that in mind, I have tried to ensure that my findings are as valid as the circumstances have permitted them to be. This meant attempting to gather as much high-quality data as I could in the limited time available to me, grounding it in relevant secondary sources, and adhering to the ethical standards set for the project by both myself and my Local Review Board.

² At the same time, 35 interviews has proven rather more than I can process for a paper being written in less than a week, so I will likely be unable to do that much justice to the valuable information my informants were kind enough to share with me.

Background-

Study Sites-

In the southern third of Haute Matsiatra region at the edge of Madagascar's central highlands, Ambalavao sits along Route Nationale (RN) 7. RN 7 runs south from the nation's capital, Antananarivo, through the regional capital and major city of Fianarantsoa, and southwest to the coastal city of Toliara. According to the Oxford Poverty and Human Development Initiative's (OPHI's) June 2015 Country Briefing on Madagascar, Haute Matsiatra (which contains 5.4% of the national population) ranks 11th out of the nation's 22 regions in its multidimensional poverty index (MPI), with an MPI of 0.400, compared with a national score of 0.357, and a national rural score of 0.396 (Oxford Poverty and Human Development Initiative (2015), p.5). Statistically speaking at least, the region is thus highly typical of the economic conditions found elsewhere on the island. It is of further value as a site because of the widespread amalgamation of agriculture and livestock raising, both of which have their regional economic centers in Ambalavao markets. The aforementioned highway is the main artery for the transport of cattle from southern Madagascar to the major consumption markets of Antananarivo (often referred to as Tana) and Toamasina. As a direct result of the highway's construction in the early 20th century, Ambalavao's market was founded in 1916 as a point of departure for cattle being purchased by buyers from the northern highlands (usually of the Merina ethnic group from around Tana) (B. Rabarijoana, personal communication, 11/23/2015). It functions in much the same way today as it did then, relying heavily on the steady flow of cattle on Wednesdays and Thursdays around which the rest of the local economy is based. After all, Ambalavao is a town of exchange, and not merely within the cattle economy. On Wednesdays, farmers from the surrounding countryside come to town to do business, sell produce, and buy essential goods. The town thus fulfills a vital role as an economic hub for those living in its vicinity, as the seat of

the district government and most of the area's schools, and as the social gathering place for those coming from the outlying rural communes (Anonymous, personal communication, 11/09/2015). One of said communes is Sakaviro, five kilometers south of town, where I spent a portion of my study. Sakaviro is in fact a loose collection of five villages: Malalia (where I was based), Ambalatsilalova, Soalatsena, Visambo, and Ampiafana. The commune has a population of roughly 1,000. Its inhabitants are farmers and livestock raisers from the Betsileo ethnic group, which also purportedly makes up about 85% of the population of Ambalavao. It's an hour's walk from Malalia to a larger village along the highway called Iaratsena, and two hours back to Ambalavao. It is, nevertheless, surprisingly isolated. Health services and education beyond the primary level are found only in Iaratsena and Ambalavao. Farmers plant rice, corn, and a bevy of other crops, and raise cattle, pigs, and chickens. Agriculture and animal husbandry are the only widespread economic activities in any of the five villages, all of which I visited. It is crucial to note that for the inhabitants of Sakaviro, identities as farmers and pastoralists aren't mutually exclusive; rather, they're crucially complementary to the livelihoods of those who lay claim to them. The region falls within a tropical highland climate, with more plentiful rain in the north gradually lessening as one heads south, and again as one heads from east to west. Both Ambalavao and Sakaviro fall within the relatively rainy southeastern portion of the region, which seems to have been traditionally conducive to agriculture (Malagasy Ministry of the Environment, 2006). Ihosy, meanwhile, lies 2 hours southwest along the RN 7 from Ambalavao, where it serves as the capital of Ihorombe region. With only 1.9% of the national population, OPHI ranks it as the sixth-poorest of Madagascar's 22 regions, with an MPI score of 0.448 (Oxford Poverty and Human Development Initiative (2015), p.6). Within Ihorombe, there are three different microclimates: a dryer climate in the west not unlike the area around Morondava, a wetter eastern portion similar to the east coast, and an intermediate zone around Ihosy itself. In the eastern microclimate, agriculture is dependent on the labor of zebu cattle- for transport,

plowing, fertilizer, etc. In the west of the region, the soil isn't of the variety that needs tilling- people grow corn and manioc, which do well even with less water, as well as rice where irrigation is available. There are more head of cattle in the west than in the east of the region because of the more favorably flat topography and resulting suitable pasturage (purportedly some of the best to be found anywhere in the country) (Anonymous, personal communication, 11/20/2015). The region is more economically dependent on cattle raising in its own right than is the case in Haute Matsiatra, as becomes apparent when one drives through the drier and largely farmless west of the region. Ihosy serves in a similar capacity to Ambalavao as a town of exchange for the surrounding area, including as a major national cattle market (routinely described to me as the third-largest, behind Ambalavao and the western town of Tsiroanomandidy, which participants alternately listed as the largest.) However, it has recently witnessed something of a population boom as a result of a sapphire rush in nearby Ilakaka since the year 2000. When mining doesn't work out for migrants who arrive in the region to search for gems, they often stay in the region and enter small-scale commerce in Ihosy. As a result of this heavy migration, less than 10% of the city's population of roughly 50,000 (there hasn't been a national census in Madagascar since 1993) people are from the Bara ethnic group, who constitute a large majority in the cattle-raising hinterland of Ihorombe (Anonymous, November 20, 2015).

Madagascar: Contemporary Political and Economic Situation-

Shortly after a centralized state headed by monarchs of the highland Merina ethnicity gained control over most of the country in the late 19th century, Madagascar fell under French colonial rule in 1895. The colonial period was largely characterized by French extraction of natural resources and a series of policies aimed at bolstering the role of Merina civil servants in positions of power at the expense of most of the country's other ethnic groups, known collectively as *côtiers*. This tactic of "divide and rule" was used elsewhere in French Africa with

considerable success, and largely stifled serious Malagasy resistance to colonialism (apart from a revolt crushed in 1947) until pressure began to mount internationally and in Madagascar for an end to the colonial project. In 1960, Madagascar achieved independence with the proclamation of the First Malagasy republic under President Philibert Tsiranana, from 1960 to 1972. This period was remembered as something of a golden age by many of my informants, as the economy has steadily deteriorated since Tsiranana was forced out of power by national protests in 1972. There then followed three years of political chaos culminating with the rise to power in 1975 of a military commander named Didier Ratsiraka, who proclaimed the Second Republic and subsequently introduced socialist-style collectivization reforms during his long and undemocratic reign, which culminated in his own ouster in elections spurred by popular protests in 1993, inaugurating the Third Republic. He won re-election in 1997, but his rule quickly became unpopular again, and in 2002 another political crisis developed between forces loyal to President Ratsiraka and the then-Mayor of Antananarivo, Marc Ravalomanana. Ravalomanana ultimately won out, and implemented a series of free market reforms during his seven year reign. Losing popularity himself by 2009, he left office during yet another political crisis centered around the main figure of the opposition, then-Mayor of Antananarivo Andry Rajoelina, who subsequently inaugurated today's Fourth Republic. From 2009-2014 Rajoelina presided over a period of "Transition", which eventually culminated in the election of the current president, Hery Rajaonarimampianina. Although the nation has enjoyed some modest periods of economic growth between each of the numerous crises, every subsequent transition has halted any nascent progress. National GDP has shrunk considerably since independence, and living standards declined by 40% between 1971 and 2004 alone (Kull, 2004, p. 30). While it's difficult to know the exact numbers because of the lack of any recent census, roughly three quarters of Madagascar's population live in rural areas, making agriculture and animal husbandry the primary means of survival for the large majority of the nation's population. Foreign investment

has been hit hard by the crises, and tourism numbers have not yet recovered. Even natural resource extraction has soured in recent years, with mineral busts, for example, putting many of Ilakaka's sapphire miners out of work. Although today's political situation seems more stable than it did a few years ago, insecurity has been bemoaned as particularly severe since 2009, and many of my informants traced a majority of their current ills to that inauspicious year (Roland Pritchett, personal communication, September 8, 2015).

Cattle System History-

Today, there are significant populations of cattle in virtually every part of Madagascar. However, certain groups and regions of the country have, historically, had a more intensive relationship with herding than others. Campbell (2005, p.29) identifies the Bara, Mahafaly, Antandroy, Tsimehety and Sakalava peoples as some of the most notable of these. It is crucial to note that each of these groups had some varying primary conception of cattle as bearers of wealth and status, rather than as mere conduits for consumption of meat or milk (p.29)³. Crop cultivation was an indispensable (largely female) activity, but remained a secondary one when compared to the more socially definitive ownership of cattle. Interestingly, in light of contemporary human-caused brushfires in Malagasy grasslands, while such seasonal fires intended to improve the growth of fresh grass were common in the savannas, it was the intensity of burning in the highlands that "resulted in such erosion ' as to leave many acres totally inaccessible to cattle'" (p.29). The Merina king Andraintsimitovy (c. 1650-70) seemed cognizant of the potential scarcity of cattle in the highlands, and set a limit of 15 cattle to be butchered in each market in his realm (p.29). Nevertheless, there is a long history of cattle being exported from Madagascar for foreign consumption. In the early 1800s, 1,350 head were exported to the Mascarenes

³ Several of my informants decried what they perceived to be a novel, harmful over-commercialization of cattle systems once defined more by their social utility than their profitability (Anonymous, November 19, 2015).

(Madagascar's island neighbors) for around \$30 a head (Campbell p.184). The Merina state controlled some 30-40% of the market during this period, but there were, even then, signs of conflict between the monarchy and herders elsewhere on the island. From 1828-50, the Merina crown mandated that all cattle intended for religious ritual use be forfeited to imperial slaughterhouses (Campbell p.186). Additionally, the export of cattle within the considerable territory of the Merina Empire "was a court monopoly", and the state made sure to take advantage. Setting a local price for purchase from herders at \$0.0071 a bullock, the state resold the cattle to foreign merchants on the coast for between \$11 and \$15 a head (these prices fell considerably after the French conquest) (Campbell p.184). The scale of cattle export increased accordingly: 12,000 head to Reunion between 1821-45, 10-12,000 to the Mascarenes in the 50s, 15,000 in the 60s, and so on. By the 1870s, the Bara and Sakalava were themselves doing a tidy business exporting to South Africa, providing some 80% of Natal Province's cattle imports between 1875 and 1909 (Campbell p.185). Around that time there was an explosion of growth in the export of cattle hides, with American and European traders alternately competing with one another and colluding together to force down prices, leading to tensions with Merina dealers. By the 1890s, as many as 200,000 hides a year were leaving Madagascar (Campbell p.188). Throughout this period, aggressive political and military activity provided some semblance of order to the often chaotic and dangerous business that was cattle. From the late 18th century, the Merina monarchy began an era of rapid and determined expansion, which largely succeeded in spite of the intensity of resistance by the peoples it subjugated. The Merina conquest of Betsileo in 1814, and seemingly incessant Merina raids on southern cattle herds (usually undertaken with an eye towards future export) provided the growing state with new sources of revenue to provide for its rapidly mounting expenses (Campbell p.67). Conversely, particularly during the Franco-Merina War of 1883-85, Sakalava and Bara pastoralists furiously resisted Merina incursions and launched their own counter-raids deep into the imperial

heartland (Campbell p.336). Despite its foundations as a fundamentally agricultural state, the Merina state became heavily invested in cattle raising, as is made clear by its insistent control of exports outlined above. Merina kings and queens became major cattle *patrons* in their own right⁴, embracing the relatively novel form of wealth brought to their attention by territorial expansion into cattle-dependent regions. Accordingly, the monarchy began implementing harsh penalties against cattle thieves, including the potential reduction of the offender to slave status, a year in prison for every head of cattle stolen, and capital punishment, according to the situation's demands. (Rakoto 2011). However, an increase in military conflict in the 1880s, particularly with the French, began to erode the state's capacity to enforce these penalties, in part because of its inability to adequately fill its rural military garrisons. As a result, cattle theft sky rocketed in the 1880s, particularly in the West and in the central Highlands. Indeed, state functionaries were routinely complicit in this theft. A letter from the London Missionary Society to the Malagasy Prime Minister chastises these officials, claiming that " 'servants of senior officials responsible in principle for keeping their herds , are transforming themselves into veritable robbers , plundering and enraging entire regions...' " (Rakoto 2011). Rakoto identifies this period of military turmoil and state as a cause of the proliferation of *dina* law, a sort of informal communal pact in rural Madagascar, in this case outlining how to arbitrate and settle cases of cattle theft. He contrasts the rise of this legal tradition with the implementation of formalist French colonial law after 1895. France seems to have played something of a dualistic role in the cattle economy during the colonial era. Kaufmann (2008) examines the well-intentioned mess created by overconfident French administrators in attempting to eradicate cactus in the country's southwest in hopes of improving the health and number of cattle in the region. The case marks an example of an overconfidently "modernist" state convinced of the merit of its own

⁴ This role of the central, Tana-based state as *patron* continues up to the present: when I asked one market insider who the most powerful *patron* in Ihosy was, he chuckled and replied "Ça, c'est l'état".

technical solutions heavy-handedly disrupting a more or less balanced system governed by local knowledge⁵. The French involved themselves on a limited scale in the cattle economy through the establishment of massive colonial ranches, although the majority of these were broken up after Independence (Kull, 2004, p.29). While an ad-hoc French legal system was initially ineffective in combatting cattle theft, a delegation of power to mostly-Malagasy staffed tribunals tasked with ruling on what the French considered petty crime in 1946 was, to Rakoto, behind a sharp decline in the rate of cattle theft in the 1950s. It must be noted, however, that the *dina* system continued to function normally alongside the formal French system. In the years after independence, new and localized *dina* conventions were promulgated in so-called *boky mavo* (yellow books) in the face of various states of independence. An informant in Ihosy connected to the *dina* process explained to me that *dina* has traditionally worked in coordination with local representatives of state institutions, namely authorities within the rural commune and *fokontany* (Anonymous, November 23, 2015).

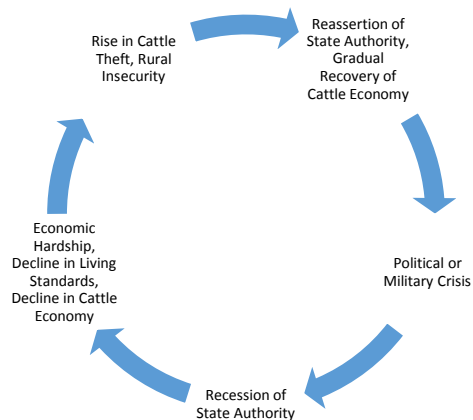


Figure 1: Historical Cycle of Cattle System Volatility

⁵ This bears an eerie resemblance to the deleterious anti-fire policies propagated by the Malagasy state in Kull's *Isle of Fire* (2004).

History of Bara and Betsileo Areas-

As early as the 1640s, the French traveler Etienne de Flacourt tells of a king of Ibara, Andriamanely, who began to build “a cattle empire” in the savannas of the south (Kent 1970, p.139-40). Well before that, though, there were political entities in southern Madagascar rising and falling on their respective prowess in the raiding and trading of cattle, often intended for foreign export and consumption. Extended family-based political units known as *raza* were founded upon the possession of “a great deal of cattle...This is a kind of belief in predestination that compels one to be successful on Earth...in its own way it acts as a powerful economic incentive” (Kent 1962, p.30-31). While Bara political units often had short life spans, major clans served as reserves of identity and social organization. Similarly, Bara kings, while often limited in the temporal extent of their power, played important roles as regulators of cattle looting and internecine crime. Kent (1962) speculates that there may have been a centralized Bara political unit at one point, but this was certainly not the case by the mid-19th century. In fact, the dependence of Bara clan-kingdoms upon revenue from both war and cattle taken as fines for breaking the law caused volatile expansion and consolidation among Bara royal families struggling to maintain their status on the basis of a uniquely mobile form of wealth- cattle. The continual fragmentation of political units made it difficult for interested members of these units to obtain community approval for foreign wars, therefore further exacerbating the depth of the need for more cattle (Kent 1970 p.148). Despite these internal divisions, outsiders had considerable trouble exerting control over Ibara. Refugees fleeing Merina expansion elsewhere augmented the numbers of Bara clans and warriors, leading to reprisals against the very areas they had fled (Kent 1970 p.124). The Merina managed to maintain a fragile garrison at Ihosy, but the Briton James Richardson found 96% of its soldiers missing in 1877, being supposedly “elsewhere on trading ventures” (Campbell p.165). The French struggled for years to gain control over the region despite their technological advantages (Kent 1970 p.124). Interactions

with outsiders were economic in nature as well as conflictual, however. In Bara country, between 1607 and 1614, “ ‘there started the trade for rifles, imported by the English, 14 to 16 head going for one of them’ ” (Kent 1970). For their part, the Betsileo are described by Campbell as having been relative latecomers to intensive cattle raising, with the practice having taken root by 1810, much later than was the case in Ibara (p.29). Kent (1962) implies that the Betsileo were the most pliant and successful subjects of the rising Merina state, quoting a British observer as describing their conquest by the Merina as “[having been] one of vast improvement for the Betsileo. They now have peace and security, which they never had under their former government.” (p.29). This does not seem to be in keeping with the events of 1811, when the Merina King Radama I took the Betsileo town of Ambalavao, whose population chose to commit collective suicide rather than submit to his rule (B. Rabarijoana, personal communication, November 23, 2015)⁶. While it is also worth noting the reputation of the Betsileo as stalwart farmers (B. Rabarijoana, personal communication, November 23, 2015, Kent, 1962, p.29), it is crucial to underline the fact that this has not precluded the development of cattle rearing as an integral aspect of their broader agricultural processes, in addition to the other roles of cattle which I have already outlined (at least in southern Betsileo, where Sakaviro and Ambalavao are located).

Theoretical Background-The Economics of Pastoralism-

Hatfield and Davies (2006) define pastoralism as “any predominantly livestock-based production system that is mainly extensive in nature and uses some form of mobility of livestock...regardless of the extent to which it contributes to the household economy...Pastoralism is an adaptation to marginal environments, characterized by climatic

⁶ Not to mention informal conversations I had with Betsileo people fiercely proud of their separate identity from the Merina.

uncertainty and low-grade resources. It has considerable economic value and latent potential in the drylands, and is central to the livelihoods and wellbeing of millions of the worlds poor.”

(Hatfield and Davies (2006) p.1, 6). While Haute Matsiatra and Ihorombe do indeed depend upon agriculture to varying degrees, the interviews I conducted (particularly in the rural context of Sakaviro) left me convinced that my informants were themselves classifiable as pastoralists. While agriculture, as was stated above, has long functioned in Madagascar’s cattle belt largely as a subsistence-level activity, cattle raising fulfills a number of crucial social and economic roles in the areas under study. Both within and beyond the Malagasy context, it may be helpful to examine four aspects of the pastoralist experience which became particularly salient over the course of this project:

1. The Intuitive System: Although pastoralism is often seen by outsiders, particularly national governments, as an irrational and marginal economic activity, Hatfield and Davies argue that it is often in the fact the *only* rational economic activity in many of the more arid parts of the world, both in terms of production and of environmental management (Hatfield and Davies, 2006, p.1). The intuitiveness of cattle raising in marginal environments is becoming apparent in the increasingly dry regions of Haute Matsiatra and Ihorombe where this project took place.
2. Mobile Banking- Livestock function as reserves of wealth in areas where sufficient agricultural surpluses are scarce, and where the workings of industrialized and urban economies can seem alien. In a cash economy like Madagascar’s, livestock products have value for those outside of pastoralist economies, and thus can be used by herders to make enough money to buy other goods- food, private schooling, medicine, etc. However, for those who depend upon livestock to function in this capacity, their utility is only as good as the system doing the conversion. Similarly to what I found in my

discussions with market informants knowledgeable of the workings of the national cattle supply chain:

In pastoral areas, asset wealth is often high, if volatile, but markets do not enable pastoralists to convert that wealth at times of stress. Food entitlement failure in this case can also be considered market failure: high transaction costs, poor information flow to producers, lack of competition in supply of goods and services and inability to choose the time of sale, because of an absence of alternatives for investment of the wealth generated. Selling livestock during favourable periods can often generate significant revenue, but this can be of limited value when few goods or services are provided that could make relevant and safe investments. Instead, the safest place to store wealth is on the hoof, where the returns to investment are substantial during good times, but with the inevitable downfall that its value is eroded at exactly the time when it is most useful. (Hatfield and Davies, 2006, p.4)

3. (Unequally) Linked- Despite the tendency of many outside observers to treat pastoralism as an isolated system, livestock raising is usually integrally linked to national and global economies. That being said, these links are often skewed in favor of outside buyers, rather than the pastoralists themselves (this is very much the case in Madagascar, as both prices and profits steadily rise for the host of middlemen operating between the herder and the eventual consumption market): “ Many pastoralists face constraints in realising the economic potential of their system owing to high transaction costs, such as long distances to processing plants, absence of formal markets, poor access to information and fair contracts, lack of financial services such as credit facilities, and excessive government bureaucracy and fees.” (Hatfield and Davies 2006). Pastoralist’s own primary production systems have become maddeningly difficult for them to access: “Kenya provides one such example, where it is estimated that pastoralists should be obtaining up to 70% of terminal livestock prices but in reality they are only averaging 40% (Kibue, 2005). Ethiopia presents a similar picture, where the proportion of transaction costs and service fees at the municipal market in Addis Ababa including broker fees is equivalent to an astounding 17% of the purchase price of a steer, 29% of a Bullock/oxen and 27% of a barren cow. It is little surprise that producers seek

alternative markets or that smuggling of live animals, hides and skins from Ethiopia into neighbouring countries is costing the treasury an estimated US\$100 million each year (BBC, 2001). Illegal trade reflects the cost of going the legal route.” (Hatfield and Davies 2006). Indeed, this lack of proper access to the selfsame systems that depend upon the production of pastoralists is largely to blame for the tendency of producers to seek out illicit systems in hopes of benefitting more from their own production.

4. States Just Don't Understand-

Much of the exodus of livestock producers from the formal sector can be chalked up to senseless overregulation of markets characterized by thin profit margins to begin with: “Instead of facilitating this trade to stimulate local economies, and investing in those economies, governments tend to impose tariffs and restrictions that ensure the trade remains in the informal, or black market, sector, relying on bribes at border posts where necessary.” (Hatfield and Davies, 2006, p.13). This acknowledgment of the often corrupt and counterproductive role of government in pastoralist supply chains will prove prescient, as we shall see. Frequently though, government’s unintentional and intentional marginalization of pastoralist economies goes well beyond simple market failures: “The perception that pastoralism does not produce significant economic gain means that many governments fail to make the necessary public investments in market infrastructure, roads, security, education and human and institutional capacity building” (Hatfield and Davies, 2006, p.16). More often in southern Madagascar, this lack of investment can take on an ethnic overtone, particularly for those from the Bara ethnic group, as is detailed below.

Findings: The Malagasy Cattle Economy

Over the course of my research, I was given a mountain of information about the structural workings of the Malagasy cattle economy, information which varied widely depending on the region and institutional affiliation of the speaker. This variation makes it difficult to provide a representative summary of the system and how it works, but this is what I have come up with. Cattle raising is particularly important in southern, middle-western, and northern Madagascar, namely in the Sava, Sofia, Menabe, Bongolava, Antsimo Andrefana, Antandroy, Anosy, Haute Matsiatra, and Ihorombe regions, although arguments could be made for the inclusion of others. In the formal sector, the cattle are mainly transported by truck from the major cattle markets to slaughterhouses in major cities with high beef consumption, like Tana or Tamatave. In the west, four or five smaller market towns in the hinterland converge on Tsiroanomandidy, the Ambalavao equivalent for western herders, after which they're sent directly on their way to Tana. Many cattle are also driven on foot to Mahitsy, just west of Tana, where butchers and slaughterhouse operators from the capital come to make their selections. For cattle coming from the north, the Ambalavao equivalent is Mampikony, but this sees the smallest volume of the major markets. In the experience of a former buyer, the slaughterhouse buyers from Tana worked the dry season from April to September in the Ambalavao markets, and the rainy season from October to March out west. During my time in the south, this seasonal divide was palpable in the markets both at Ambalavao and Ihosy, where November volume is considered particularly low this year (Anonymous, November 3, 2015). Indeed, beyond mere seasonal fluctuations in volume, the market is often dependent upon drought conditions in the far south (Antandroy, Anosy, Atsimo Andrefana), which, when severe enough, lead to a rush on the market by southerners desperate for cash to supplement their failing food crops. An official in the Ambalavao market showed me a graph of market activity appearing to confirm the existence of such a boom and bust cycle in keeping with severe southern droughts between 2009-11

(Anonymous, November 12, 2015). As droughts have become more and more common, there have been fairly regular gluts of the market in September and October as desperate southerners sell their bulls. Buyers know this, and take the opportunity to profit from the desperation of the vendors, as prices tumble because of the high supply. A former buyer from Tana outlined the major links in the cattle economy like this: zebu are typically driven on foot out of the deep south (Antandroy, Anosy, and Atsimo Andrefana) to the towns of Betroka, for the center-south and Sakaraha for the south-west. From there, the two chains merge on the national highway at Ihosy, and are driven by truck to Ambalavao, Madagascar's largest cattle market and where most major buyers come to buy southern cattle on Wednesday and Thursdays. That being said, the traditional primacy of the Ambalavao market has been steadily eroded since improvements to the road from Ambalavao to Ihosy were made in 1989 (Anonymous, November 21, 2015). One Ambalavao informant expressed his fear that if the municipal government continues to "badly manage"⁷ the market, Ihosy will supersede Ambalavao as the southern cattle market of choice. At one point, tensions over the shifting roles of the two towns led to a summit between the mayors of Ambalavao and Ihosy in an attempt to find some sort of equilibrium between the markets through a delineation of "rights of place" (Anonymous, November 12, 2015). As it stands, though, there are many *dahalo* between Ihosy and Ambalavao, and transporting cattle by truck between the two gives the *patrons* (a word that arises everywhere, signifying the southern men who own large herds of most of the cattle that are sold here) growing reason to worry. The patrons would prefer to stay in Ihosy because they're afraid to make the journey, whether for fear of their own safety or that of their cattle (Anonymous, November 9, 2015). Conversely, buyers from the north are reluctant to journey directly to Ihosy, even though prices there are considerably lower there (and even lower at

⁷ Read: "Manage corruptly".

Sakaraha, which is where one of my informants from Ambalavao journeys each Friday to make his purchases for re-sale to northern buyers.) As a result of this reluctance on the part of cattle merchants to change their buying and selling habits, Ambalavao limps on despite a sizable drop in its volume: on a typical market week today, each market might process somewhere between 6 and 700 head a piece, about half of Ambalavao's prior traffic, although this fluctuates according to seasonal and drought conditions (Anonymous, November 12, 2015). There are a few major types of players at work at any given time in market dealings in either Ambalavao or Ihosy. The chain was (hypothetically) outlined to me in this way by an informant in Ambalavao: Player 1 lives in Sakaraha, and has 500 head of cattle. He gives Player 2 100 head at a given price, say 100 ariary (again hypothetical). There's a deadline on this beneficence: Player 2 has to repay Player 1 with a fixed sum on a fixed day, say a week from when he receives them. He cannot avoid this, even if he takes a huge hit at the market and makes less than Player 1, whose profit is guaranteed. Player 2 is based in Ihosy, maybe. He finds Player 3 in Ambalavao. He steeply raises the price per head compared to what he is paying Player 1. Why is all of this necessary? Because Patron 1 has no desire to work without an intermediary. Anyways, Player 3 ups the price again and heads to the Ambalavao market with this stock. The majority of the men working in the market are known as *panera*, or *démarcheurs* in French. It is they who approach the sellers coming from the south on behalf of the buyers coming from the north. At the market, *panera* approach Player 3 and haggle over the price, which, mind you, has risen considerably by this point. The *panera* make very, very little off of the transaction. Rather the profits flow back proportionally back up the chain: Player 1 makes more than Player 2, and so on. In this case, Player 2 and 3 are what I heard referred to as *panao hira kely*, the guys who are buying low in southern markets and Ihosy and selling high to buyers in Ambalavao. Of course, Patron 1 is a *patron*, a wealthy cattle owner (usually with hundreds or even thousands of head of cattle) from somewhere in the south who prefers to do business through intermediaries and thus guarantee

himself a fixed profit, as outlined above. (Anonymous, November 12, 2015). With the cattle decline, however, there are fewer and fewer true *patrons*, and an increasing concentration of cattle among those who have managed to protect their herd sizes. However, while these actors (and outside ones discussed in greater detail below) are integral parts of the system in which they operate, it is also important to recognize the positive spillover effects of the existence of cattle markets on the communities which host them. I was told repeatedly in both Ambalavao and Ihosy that the strength of the entire local economy was integrally tied to that of the cattle markets. If volume is down and fewer people come to town to participate in the market, fewer people will buy and sell other things in the general market elsewhere in the town. In places without much secondary industry, the presence of a consistent excuse to exchange things is of vital importance. While it is, therefore, worth mentioning the role the markets play in towns themselves, it is the small-scale herders *outside* of the markets who make the economy function, and as such merit some discussion.

The Role of Cattle in the Rural Context

In every village, town, and city in Madagascar, there is a localized and wholly unique role to be played by cattle. That reality was impressed upon me by the variety and nuance in the ways that *omby* were used even among Sakaviro's five villages, let alone large and diverse regions like Haute Matsiatra and Ihorombe. It is more than likely that conducting this project with the same sets of questions in a different region of Madagascar would have yielded different answers. However, while it is important to note this fundamental locality of cattle, there do seem to be a few constants. In understanding just how crucial livestock are to Malagasy families in rural areas, my opportunity to study in Haute Matsiatra's Sakaviro commune was invaluable. There, I was given the same list of importances of *omby* in daily life with such regularity that my translator and I had to suppress our laughter when we posed the question in our later

interviews: the zebu is used to work the land for crops, to fertilize the fields, and to pull carts. When someone dies, you kill a zebu for people to eat at their funeral, and sell another to pay for the funeral itself- the same goes for holidays like *famadihana*. The zebu serves as a kind of bank- if you have zebu and you need money for medicine or school fees, for instance, you sell one (Anonymous, November 16, 2015). Beyond these immediately utilitarian uses, however, cattle play more subtle but equally vital roles. These were often most apparent in speaking with farmers who had none. In the village of Soalatsena, I met two such men. The first was in his 50s, and had had his family's herd of 70 head of cattle stolen by "adversaries" when he was a boy (the resulting tribunal case was marred by the excesses of some corrupt magistrates). Without zebu of his own to plow the fields, he relies on borrowing cattle from other members of his community. The number of cattle in the village as a whole has steeply decline in recent years, with such intensity that few villagers are active in Ambalavao's market anymore-they need the cattle they have left to work the land, nothing more (Anonymous, November 16, 2015). Another man I spoke with was in his late 70s, and had once had as many as 30 head of zebu. Poverty forced him to sell those 10 years ago, and now he must rely on loans to pay for things like medical costs. He says that zebu are about status: if one has many, one is a respected man; without them, he is beneath the man who has more. Without zebu reserves, he can only make money by selling his crops (Anonymous, November 16, 2015). It is in contingency-type situations like this that one begins to realize the true extent of the social reliance upon cattle in this part of the country. In case of a bad harvest, agropastoralists here can sell their zebu (as was discussed in the case of the far south) to buy enough food to make up for the harvest. To be sure, there are surplus harvests in certain years. Without cattle to invest in, however, one is forced to keep a reserve of cash in the house (which may not last in a run of bad harvests), losing the ability to grow the money and improve one's circumstances. I spoke with a representative of Ambalavao's only microfinance agency, who told me that most of his 350-400

clients came from town or the immediate area-most farmers and livestock raisers farmer afield did not meet qualifications for participation in their programs because they weren't producing enough to be counted as a "personal economic activity." In other words, the agency did not make loans to subsistence farmers or herders. He also informed me that the three banks located in town were used almost exclusively by *patrons* processing payments from the cattle market and state functionaries working in town (Anonymous, November 12, 2015). With formal sector banking options unavailable to the population, farmers' best investment option is something always in demand, which can be relatively quickly replenished: cattle. It is useful here to speak in terms of the existence of a "poverty trap", or a progressively worsening set of circumstances preventing the poor from escaping poverty (indeed, worsening its existing effects). The findings of Thomas and Gaspart (2014) speak to the existence of this phenomenon in rural Madagascar. One can observe the existence of the trap in the examples of farmers who have managed to prosper because of their zebu. In the village of Visambo, I met a farmer who currently owns 14 *omby*. He once had 30, but he sold most of them to pay for life's needs- to build his house, for instance. He goes to the cattle market every week, where he engages in a practice common among many of the small-herders I met: he buys some of the smallest available zebu, raises them to a larger size for 4 or 5 years, and sells them back at a profit. In this way, he's constantly growing his herd, and by extension his financial reserves. Note that although his herd is smaller than before, he's converted some of that wealth into more-difficult-to-acquire sorts of investments; a house, for instance. Another man had a similar story, but had sold most of his 20 head to pay for private schooling in Ambalavao for his children. It becomes increasingly apparent just how indispensable zebu are in places like Sakaviro: for people who routinely told me that the national government had virtually no presence in their area and that they had no access to formal sector financial services, the most effective safety net against illness, death, and crop failure is cattle. The importance also becomes apparent in speaking with

people concerning their access to quality health and education services. While there is a public primary school in Sakaviro, participants routinely expressed their belief that state schools were of an inferior quality, and those with the means to do so sent their children to private schools in Ambalavao. Because of the distance, this also usually meant renting a room for the kids to stay in during the week, rather than walking four hours round-trip each day (Anonymous, November 14, 2015). Similarly, a hospital stay or a much-needed medicine was likely to be well out of the quotidian price range of rural inhabitants, so access to these services usually demands that a bull be sold, repeatedly in the case of school fees. For the wealthier inhabitants of Sakaviro, the ability to afford health and education services (largely provided by profits from selling cattle) makes the difference in avoiding the poverty trap that some of my other informants found themselves in. Finally, the consequences of not having zebu could be most dire in the lack of an ability to invest in the agricultural inputs upon which people there depend for daily life. Without the use of manure for fertilizer, for instance, farmers face the difficult choice of spending scarce funds on synthetic fertilizer or watching yields decline in land that seems to be getting drier by the year. (Anonymous, November 10, 2015)

Decline: Causes, Effects, and Manifestations-

As I mentioned towards the beginning of this paper, I was given serious reason to doubt the validity of statistical estimates on the number of cattle anywhere in Madagascar. This makes it difficult to know the exact scale of what I was repeatedly told is unfolding today: a sharp decline in the number of cattle nationwide. That being said, I heard various numbers from my informants which seemed to be sufficient cause for alarm: Officials at the Ambalavao market told me that the number of head in a typical Wednesday-Thursday market has changed dramatically since 2000, when Ambalavao consistently sold 1,400 head a week. Now, it's closer to 6-700 (Anonymous, November 12, 2015). Ihozy officials largely echoed these lamentations: whereas

in the 1980s there were around five cattle for every inhabitant, the number today hovers around 0.25 (Anonymous, November 23, 2015). The existence of a decline was confirmed by nearly all of my informants, in Sakaviro as well as in the towns. It's manifesting itself in a variety of ways. One is smaller herd sizes, both nationally and regionally. While I routinely heard of farmers who once had 50-70 head of cattle and Sakaviro, I met none who had more than 15 today (Anonymous, November 14, 15, 16, 2015). A prominent *panao hira kely* at the Ihosy market told me that whereas he once routinely took 200 head of cattle to Ambalavao each week, today he rarely reached 180 because of the sheer scarcity (Anonymous, November 19, 2015). Even the once-mythic herds of the *grands patrons* of the *Grand Sud* are rumored to be smaller than before: the former buyer from Tana told me that the bovine population of Betroka was 60,000 when he was a kid, but this has fallen to 35,000 today. The lack of formal statistical evidence seems to be more than offset by the burden of evidence provided by the consistency of participants' confirmation that the decline exists. The following sections will unpack the causes and effects of this precipitous decline as it concerns the lives of those who depend most on cattle.

The D-Word: Thieves & Omby-

This paper is, quite consciously, not about the *dahalo* phenomenon.⁸ That being said, any discussion of cattle today, especially as concerns the decline, would be woefully incomplete without some sort of treatment of the issue. In doing so, I'll largely rely on the accounts provided by people I spoke with at all three of my sites. While cattle theft is by no means a recent development in Madagascar (see historical discussion above), participants usually felt that the situation had become exacerbated sometime in the recent past. Often, this exacerbation was

⁸ For a few recent and diverse examinations of the phenomenon see McNair's 2008 *Romancing Dahalo*, Tarabey's 2012 *Madagascar Dahalo*, and Scheideker's 2014 *Cattle, Conflict, and Gendarmes in Southern Madagascar*.

associated with a particular political event: the 2009 crisis, the 2002 crisis, the rise of President Ratsiraka, the fall of President Ratsiraka, the fall of President Zafy Albert, etc. Regardless, the result of these crises has been increasing lawlessness in rural areas throughout the country, particularly in the south. The ways in which this lawlessness was explained tended to take on a few specific forms. First and foremost among these was the perceived deepening of intense poverty in rural areas, often manifesting itself in astronomical unemployment rates for young men (Anonymous, November 9, 11, 2015). The accompanying deterioration of living standards will be further discussed below. Second was a conflation of *dahalo* activity with the Bara ethnicity. Traditionally, Bara men have had a custom of stealing a bull or two from a prospective bride's family to prove themselves as men. This practice was often referred to as a "game" or a "sport". (Anonymous, November 9, 2015). However, the custom is increasingly seen (invariably by non-Bara informants) as having "degraded" into theft, with rising rates of violence against cattle owners and their property. While many participants ascribed this degradation to Madagascar's deepening poverty, a large portion attributed it directly to Bara culture, particularly when I spoke to people in Ambalavao. To them, the Bara stole for custom or for "pleasure". The Betsileo, by contrast, had no choice but to steal, often to pay for school fees for themselves and their children (Anonymous, November 11, 2015). This division between studious Betsileo and hedonistic Bara was equally present in the minds of officials coming from other parts of the country (Anonymous, November 11, 2015). Even as thieves, the Betsileo people I spoke to differentiated strongly between themselves and their Bara counterparts: "Guys here are small, but strong. For the Betsileo, if you have to work you have to work. If you have to fight you have to fight. In the south the guys are big, but afraid to die. Betsileo aren't!" (Anonymous, November 13, 2015). Interestingly, I heard several young people describe the indispensable working relationships between Bara and Betsileo *dahalo*. Dahalo rarely come from the immediate areas they steal from. Rather, a contact from within a village will contact a known dahalo from far

away, and act as a sort of guide for the assault, providing information on the best directions to approach from, members of the community with guns, etc. The motivation for this betrayal of one's own community (frequently, even of one's own family) was attributed not to the portion of the profits given to the informant, but to rampant jealousy of either wealth or romantic partners within rural villages (Anonymous, November 19, 2015). This jealousy will be examined in greater details, but for now suffice to say that dahalo operate over long distances, almost invariably with a local partner. Crucially, my participants repeatedly underlined the existence of dahalo activity as contingent on high demand for stolen cattle. There are different illegal networks crisscrossing the country, each known to some, but not all, of the informants in a particular market. There are two major endgames for these networks: the reselling of stolen cattle back into legitimate markets with false papers, and the direct clandestine export of these cattle on the coasts. Insiders in both Ambalavao and Ihosy confirmed the presence of large numbers of stolen cattle in the markets they worked in. (Anonymous, November 12, 19, 2015). For the *grands patrons* largely responsible for buying stolen cattle, (at much reduced prices: thieves have little desire to hold on to their stolen merchandise with angry villagers and gendarmes tracking them, and so lose much of their bargaining power to the well-insulated *patrons*). The regulatory process at both markets works something like this: Upon arrival from the south, sellers must stop at a checkpoint staffed by representatives of the gendarmerie, the urban commune in which the market is located, and the national police. Each bull is required to have an identity card called a FIB (Fiche Identitaire Bovin), detailing its personal history and previous owners. Each owner has a "cattle passport", listing the physical description and origins of the cattle they are looking to sell. Before leaving their own district, they need to receive paperwork approval from a rural "delegate" of the state. They also need approval of the cattle's vaccination records from a private veterinarian employed by the state. Theoretically, finding discrepancies in the paperwork will allow officials to catch resold stolen cattle in the market and

punish their owners. In reality, I heard every step of this process described as corrupt by multiple informants. False papers are generated by the “delegates”, sending indistinguishably false FIBs and passports on to the checkpoints just before the markets. Controllers at the markets are often aware of the falsity of the papers they’re receiving, and charge sellers steep bribes for the right to use them or to replace “lost” ones. Vets are infamous for falsifying vaccinations records and reaping massive benefits in illegal payments (one informant quipped that you find the town vet by finding her three cars) (Anonymous, November 9, 2015). In any case, while all participants seemed to be aware of the presence of stolen cattle in the market, few seem to have any qualms about dealing with them, especially as they’re often practically untraceable after having been sold 5-10 times before they reach market (Anonymous, November 19, 2015). The other major artery of the illicit traffic consists of the driving of cattle to various points on the coasts, often in conjunction with foreign buyers. While I was informed of the existence of a dizzying number of these networks, suffice to say that there are major ones being run from Toliara to South Africa, from Farafagana to China, from Mahajanga to the Comoros and Mauritius, and from illegal (usually Chinese-owned) slaughterhouses in Ihosy, Tana, and Toamasina. Insiders often blamed these illegal operations for buying up the rapidly depleting stock within the formal markets as well as the informal ones, exhausting the system before it can replenish itself and pushing out Malagasy buyers in the process. While it must be added that a number of legitimate foreign meat processors seem to be doing busy in Ihosy and Ambalavao, at least according to market officials there, the end results of high-volume foreign involvement in the formal sector are the same (Anonymous, November 21, 2015). As concerns the thieves themselves, participants identified as young adults from rural areas, deprived of economic and educational opportunity, craving the pleasures of life in town, and often fresh from finishing a stint in the Malagasy military. While it’s relatively easy to construct a profile of the typical thief, the young people I spoke with differed as to the eventual uses of the profits from

heists. A university student from Ambalavao described the need to me for a number of his classmates to participate in cattle theft to pay high tuition rates (I was also told of the exorbitant bribes often required to get in to university courses, the cost of which begins at a price very much out of reach for the vast majority of rural families) (Anonymous, November 9, 2015). At the same time, another youth in Ambalavao emphasized the overriding desire to “have fun in life”, with many informants outlining the use of money for alcohol and “pleasure” (Anonymous, November 12, 2015). Regardless of the historical persistence of dahalo activity (which participants rarely emphasized, at least not before the 1970s), there was a pervasive sentiment throughout my interviews that deepening poverty and young people looking to “have fun in life” were responsible for a serious escalation of the practice and its violence. The degree to which this reflects broader panic as to the degradation of rural living standards is open to debate, but the presence of theft has clearly had some alarming effects on the whole of the system. Because possessing large numbers of big bulls makes farmers more conspicuous targets for theft, many herders have nervously begun to sell their herds, a once secure form of wealth which has started to look increasingly liquid. (Anonymous, November 10, 2015). The most compelling evidence of this, for me, was my experience with herds which were invariably smaller than what was described to me as “normal”: 5-10 cattle instead of 20-40, or even 50-100. Desperately seeking to protect their vulnerable (and often only) assets, many communities have begun to hire “jama”, sorcerer figures from the southeast of the country who are purported to be impervious to bullets. One source said that these had been increasingly effective in deterring theft, but that “impostors” were arriving in equal numbers to swindle communities desperate for protection (Anonymous, November 9, 2015).

Stress-

As the most frequently mentioned cause of decline, better understanding the reasons behind theft was crucial to my understanding of the roots of decline. However, perhaps more informative were the reasons behind the intimately-linked decline in the health of the cattle system and general living standards outlined to me by informants in Sakaviro, and largely echoed by government officials within the Ministry of Livestock. I contend that the three largest manifestations of physical “stress” outlined to me by the people I spoke with constitute an interconnected whole: this means poverty, environmental pressures, and population growth straining a system already weakened by social cohesion problems, institutional weakness, and theft (the former two are outlined further below.) As Bremner et al (2010) acknowledge, the existing body of research on the relationships between population, environmental degradation, and poverty remains tenuous, although there has been a lot of research indicating the existence of *some* relationship between these variables. Regardless of the formal theoretical body of evidence, my repeated brush-ins with these variables in conversations with my informants seems, to me, sufficient reason to consider them collectively. As we shall see, there are linkages between the three in the minds of participants which inform their understanding of a life that seems to be becoming increasingly difficult.

Poverty-

Allusions to increasingly entrenched poverty were blunt and widespread throughout the interview process. While the effects of “technical unemployment” are readily apparent in the streets of Ambalavao and Ihosy (a local government official told me that there were now throngs of beggars in town for the first time in living memory) (Anonymous, November 19, 2015). there remain significantly greater economic opportunities (typically, it seemed to me, centering on

informal, small-scale commerce) in the cattle towns than in the rural areas populated by herders themselves. The existence of deepening poverty in rural Ihorombe and Haute Matsiatra has had direct repercussions on cattle decline and, in turn, has been exacerbated by the effects of consequences stemming from the diminution itself. While theft has already been explored as one of these, it by no means stands alone. With decreasing recourse to cattle as a financial service, informants felt increasingly nervous about their susceptibility to bad harvests, deaths, and cases of bad luck (Anonymous, November 16, 2015). Conversely, the effects of deepening poverty among small herders have had apparently detrimental effects on the health of the cattle system as a whole. Less and less able to adopt their well-worn strategy of buying small cattle, raising them for 4 or 5 years, and reselling them at a profit (and in doing so “absorbing” and hold large numbers of cattle in the rural hinterlands), farmers are increasingly powerless to stop the effective liquidation of herds by larger buyers from foreign companies or domestic slaughterhouses. Of course, poverty has forced herders to sell their cattle below easily replaceable levels, pushing many into a poverty trap. There were some apparent nuances in the manifestation of that process between the two regions of study; while farmers in Haute Matsiatra had the benefit of recourse to relatively robust agricultural systems in the event of a loss of cattle wealth, there are large swathes of Ihorombe in which, according to officials from the Ministry of Livestock there, this would be a considerably less viable alternative. This illustrates the critical role played by climate and soil fertility in efforts to avoid descending into poverty traps.

Environmental Stress-

For many of those with whom I spoke in Sakaviro, a new headache has begun to arise: shifting climatic and environmental conditions have placed an added strain on already marginal

livelihoods. The most immediately apparent manifestation of climate change in Madagascar⁹, at least according to the farmers currently experiencing it, has been a marked decrease in rainfall in recent years (Anonymous, November 16, 17, 2015). The results of this have been rather paradoxical. While crops yields are generally lower than they were ten or twenty years ago (forcing those who have cattle to sell them to make up harvest deficits more frequently than has traditionally been the case), one poor informant in the village of Soalatsena told me that the rain has resulted in a lack of “good *omby* food”. This has prompted many to convert less productive pasturage into crop land, reducing the area’s carry capacity for zebu. While this adaptation allows farmers to get the most out of their land in the short term, it reduces the strength of their four-hooved safety nets. As far as crop yields are concerned, meanwhile, the decline in recent years has forced those with cattle to sell large portions of their herds and those without them to try to find work as hired hands in neighboring fields in an effort to make enough cash to buy enough food to compensate for their meager returns (Anonymous, November 16, 2015). In the Ihorombe region, meanwhile, farmers have watched in horror as hailstorms have mounted in intensity (destroying many crops just a week before my arrival) and locusts who typically stop briefly on their way further north have begun to lay eggs and settle in to demolish precious fields (Anonymous, November 20, 2015). Livestock Ministry officials also confessed their anxiety to me about the malnutrition of many of the zebu coming to market in recent years (evident in every visible bovine ribcage), largely as a result of the degradation of the region’s famous pasturage by a combination drought and brushfires (Anonymous November 19, 2015). However, as Christian Kull writes in *Isle of Fire*, his examination of the brushfire phenomenon in rural Madagascar, such fires are often the result of carefully taken, historically informed decisions by Malagasy herders familiar with the particular needs of their rangelands (Kull, 2004,

⁹ The deleterious effects of which are modeled (with particularly grave consequences for crop yields in the south) by Vololona et al. (2012)

p.272). While there certainly is evidence that irresponsible burning can lead to heavy erosion, Kull notes that “the most realistic stance is that there has always been fire in Madagascar, there always will be, and there always should be” (p.270). Unfortunately, one finds in the nation’s current anti-fire policy the same incessantly modernist state outlook (focused on formal, rationalized “solutions” to incomprehensibly local phenomena) described by Kaufmann in the case of the southwestern cactus (2008). Regardless, Ministry officials are aware of the exhaustion of soil as what they perceive to be result of these fires, despite the short-term bursts of plant growth for which they are set. One particularly intractable problem, to the official responsible for examining the phenomenon in Ihorombe, is the perception of pastures being essentially limitless to herders, despite the steady exhaustion of this collective resource. The resulting malnutrition of zebu has left huge numbers of cattle dangerously sickly and fragile- one merchant told me that a few weeks some 50 head died in a freezing rain in Ambalavao. (Anonymous, November 19, 2015). Collectively, these emerging strains have reduced the economic choices available to people in both regions, and placed a ceiling on the future of cattle raising in increasingly degraded and dry pasturages.

Population Growth-

Intimately connected to the problems with poverty and environmental stress is the burgeoning rural population, increasingly being forced to share diminishing resources amid stagnant economic growth, both locally and nationally (van den Heuvel and Evers, 2007). I was surprised at the consistency with which people who mentioned there being “too many kids today” explicitly connected this to deepening poverty. An interesting example is an older man I met in Sakaviro’s Visambo village, one of the wealthier and more colorful inhabitants of the community. He’s doing well for himself: he owns 40 hectares of land, in an area where 7 or 8 is more typical for the average farmer. He once had 20 cattle, but he’s sold most of them to pay for school for his

kids—all 18 of them. Even with the land he inherited from his parents (he was an only child), each of his children will get only around 2 hectares. Increasingly, families are searching for land to rent or buy for their children, further adding to the rising cost of living. For many young people, the cattle and land passed down by one's parents are absolutely critical to getting one's start in life. He himself brought up the negative consequences of increasingly over-divided land, and tough-to-allocate cattle (Anonymous, November 17, 2015). Multiple informants spoke of difficulties in giving cattle to one's children when there are more kids than cows, with the consequence that some daughters are married without dowries and some sons start without a single zebu to work their fields. Thus what was much wealth in one generation (in a place where most wealth is passed down from parent to child) has become insufficient by the next. Interestingly, participants were generally clear about there being no real "rural exodus" among young people in the area, despite what they acknowledged to be insufficient resources upon which to start a life and a family. Rather, many frantically search for work as hired hands in fields, as several of the young people with whom I spoke attested to doing. In fact, this unemployment seems to stem as much from the population growth itself as it does from the well-documented ills of the Malagasy economy, since it's from this large pool of restless surplus rural labor that thieves are reportedly drawn (Anonymous, November 19, 2015). One informant told me that there were so many people looking for work that *dahalo* bands in Ihorombe often numbered 400 for a single raid! (Anonymous, November 3, 2015). Despite the acute awareness of the effects of overpopulation which I encountered in my interviews, family planning remains unpopular. A Ministry of Population & Women official in Ihosy had two explanations for this reluctance: first, people view children as a gift from God, helpful in working the land and caring for their parents when they get old. Second, she said frankly, people do not enjoy using contraceptives. Whatever the reasoning, she did say that a small but rising percentage of the population was using birth control. In Sakaviro, however, birth control was available only in

Ambalavao or Iaratsena. With costs of living as high as they are, it seems understandable that farmers do not want to spend additional money on condoms (Anonymous, November 20, 2015).

Institutions-

Beyond these “physical stressors”, there exists a rapidly deteriorating institutional and social cohesiveness surrounding Madagascar’s cattle systems. An aspect of life in the areas I studied that particularly interested me was the presence (or lack thereof) of institutions in the lives of those working with cattle. What I found was a sharp disparity in institutional presence in towns and the countryside, particularly in terms of the Malagasy state. As we’ve seen, the state plays the type of heavy-handed, corrupt role in the cattle markets themselves predicted by Hatfield and Davies (2006). In an examination of the causes of corruption in business practice, Martin et al (2009) found that

Organizational anomie means that benevolent and principled climates tend to decline in relative influence while egoistic climates become more influential. Unchecked self-interest, in turn, can become the dominant normative framework. We believe, and the theoretical perspectives from which we draw support, that this is the organizational situation where corruption brews and thrives. (122)

In the Malagasy context, this sort of institutional impediment of the normal functioning of the cattle trade goes well beyond the market itself: a *panao hira kely* who buys in Sakaraha each Friday told me he paid no less than 10 bribes to gendarmes and national police each time he made the trip to Ambalavao (Anonymous, November 12, 2015). A similar role is played by Malagasy tribunals, today charged with adjudicating disputes over cattle as well as cases of theft in Ambalavao and Ihosy. Legal costs are often backbreaking for cattle traders and herders, and accusations of corruption among the courts were widespread. The role of these courts has grown in importance since informal *dina* law was suspended in 2010, ostensibly because of corruption among those responsible for its implementation. Indeed, I ate dinner with a man who believed that *dina* operated by leveling accusations of theft against the wealthiest community

members community, and stripping them of their wealth through the resulting penalties. That being said, I also encountered a large number of respondents who believed that *dina* was the solution to today's theft problem. When *dina* was in place, one source in Ihosy said, thieves were scared! He said that the courts survived off of fees and payments: they suspended *dina* because it was too effective in reducing theft. While there has been a superficial correlation with the suspension of customary cattle law and a rise in theft, it's difficult to attribute causation to this. *Dina* is a system to reimburse, through a penalty, the owners of stolen cattle. It works within the *fokonolona* (members of a village community). It once consisted of certain measures of capital punishment, but this is no longer permitted by the national legal system. A family is still obliged to make reparations, however. *Dina* is fluid, it changes often. It exists at village, district, and regional levels and it works with the state. While advocates of *dina* acknowledge the fact that it works closely with the state, they often presented it as an alternative to a government that was not doing its job. While *dina* still exists today in Ihorombe, it does so only intermittently and at the village level. For its findings to be considered valid by the state, a *dina* ruling needs approval from the village administrator, commune head, district chief, and regional governor (Anonymous, November 23, 2015)¹⁰. It is thus greatly reduced from its former status as a complementary legal organ to a state whose resources are often overextended. The potential importance of *dina* was emphasized to me by the commandant of the Ambalavao gendarmerie, among others, who spoke of the near impossibility of his underfunded and underequipped men enforcing the rule of law in the 20 rural communes surrounding Ambalavao (3 of which, according to local rumor, no longer have any cattle at all as a result of theft). His preferred strategy was to work together with rural authorities to provide additional measures of security for

¹⁰ It is telling, perhaps, of the state's lack of respect for local institutions that the *dina* established by the Convention of Sakaraha in the early 1970s (itself initiated by the state) was viewed as necessary only in the south, because of its ineffable nature as a "collection of archaic societies" (Rasamoelina 1993).

a population his men cannot feasibly police (Anonymous, November 11, 2015). The Malagasy state was repeatedly said to have *no* presence in the Sakaviro area when I posed the question to participants. One local resident told me that although he was sure there *must* be a *fokontany* (the smallest unit of government in Madagascar) office somewhere in Sakaviro, he had no idea where it actually was (Anonymous, November 16, 2015). Beyond Sakaviro, the state has made efforts to make its military strength felt in some of the areas generally beyond its control: this year's Operation Fahalamena, 2012's Operation Tandroka, and even 1973's Operation Ikalamavony all represent attempts by successive Malagasy administrations to confront an embarrassing and seemingly intractable rural scourge. While Bilal Tarabey's *Madagascar Dahalo* provides reason to fear the human rights infractions often associated with these elite military unit-led operations, my participants tended to scorn the efficacy of what one man called a "patchwork" response: after the commandos return to Tana, regardless of how effective their operation has been, the *dahalo* return to fill the vacuum left by their unwelcomed guests (Anonymous, November 20, 2015) (Anonymous, November 12, 2015). There was a palpable sense of frustration on the part of people living in all three locations towards a central government seen to be missing in action. I was consistently told in my conversations that the state's role was to "protect the peace", an obligation that few felt was being met by those on high (Anonymous, November 9, 2015). Corruption and malfeasance, in any case, have made rural inhabitants less than eager to seek help from institutions in resolving disputes- the commandant told me that they usually prefer to violently resolve them among themselves (Anonymous, November 11, 2015). As we have seen, corruption among state veterinarians has led to rising numbers of sick cattle being passed off as healthy at market, further endangering the tottering system. There was, amongst all of this criticism of the current shambles in which the government now finds itself, another, more nostalgic thread present in the interviews: that of a formerly benevolent state that once looked out for livestock raisers. During the First Republic,

two officials told me, the state provided animal health care for herders free of charge (Anonymous, November 3, 23). This policy was said to have been reversed under Ratsiraka or Albert (1993-97), depending on the informant. Intriguingly, 1973, during the crisis which ultimately brought Ratsiraka to power, is the year to which Rasamoelina (1993) traces the proliferation of *dahalo* activity in Betsileo territory, due to the elimination of taxes on cattle by a Minister of the Interior “seeking to relax his grip” (Rasamoelina, 1993, p.23). Indeed, there appears to be a strong association between perceived spikes in theft and crises undermining the state’s capacity to enforce its monopoly on violence and provide critical services to herders. Ministry of Livestock officials bemoaned the lack of investment by the central government into projects aimed at preserving the disappearing *omby gasy*, despite the outsized role the zebu play in everyday life for farmers (Anonymous, November 3, 19, 2015)¹¹. Even more alarming is the fact that, according to the mayor himself, the city of Ihosy has received no funding from the government in Tana since 2009 (Anonymous, November 19, 2015). The lack of central state control over local government seems to encourage the rampant corruption common to local government functionaries. The only other “institutions” which seemed much in evidence during the study were the market structures themselves. Ihosy’s F.MMM (The Association of Herders, Intermediaries, and Buyers) whose founder I interviewed, is said around the market to be the new, de facto informal authority, even acting as a sort of ad-hoc *dina* in rural areas since the 2010 suspension (Anonymous, November 23, 2015). Indeed, it is important to avoid a narrative of total government incompetence and bravely struggling industry workers striving for a clean system. *Most* people working in the Ambalavao and Ihosy markets seemed to be complicit in the culture of corruption surrounding them. It appears that this culture (at least in its current ubiquity) is viewed by locals as a result of the broader decline of state influence in the wake of

¹¹ The Ministry of Livestock purportedly receives a smaller budget than any other government department.

the 2009 political crisis (Anonymous, November 23, 2015). Ironically, as Kaufmann (2008) and Kull (2004) make abundantly clear, the broader recession of state authority has not precluded the implementation of heavy-handed top-down policies harmful to the fortunes of herders. In a sense, Malagasy herders have been handed the worst of both worlds: An absentee state whose handful of recognizable organs are suffocating the entire cattle economy, and to whom there are few real alternatives: despite my frequent questions as to other institutions or powers in both the towns and rural areas, I was never informed of the existence of institutions involved in cattle beyond the government, market groups, and *dina*.

Social Cohesion and Perceptions of Change-

To hear my informants speak of it, there have been fundamental shifts in the way Malagasy society functions. I chose to largely examine these shifts through the lens of the Malagasy concept of *fihavanana*, defined by the French scholar Frederic Sandron as a “system of norms, rules, and customs which govern local society, interpersonal behaviors, modes of sociability, and anti-risk strategies “(Sandron, 2008, pg. 1). Sandron (and, more importantly, my informants themselves) emphasizes the role of *fihavanana* as a fundamental arbiter of social relations, particularly in the rural context. My participants frequently evoked the idea in conjunction with situations requiring mutual aid-to help pay for funerals and burials, to allow a poorer neighbor to borrow a zebu to plow the fields, etc. Indeed, one source spoke wistfully of a time when people referred to all property collectively: come into “our” house, look at “our” cattle. (Anonymous, November 9, 2015). While a good portion of respondents maintained that *fihavanana* is as strong today as it ever was, most expressed misgivings as to its contemporary relevance. This was most apparent in frequent allusions to rising jealousy among neighbors and families, often manifested in petty theft, and, more disturbingly in violent attacks on family members. (Anonymous, November 12, 2015). An official in Ambalavao spoke to me at some length about

increasing violent and fractious disputes over succession to land and cattle. If a father dies, sons will pay third parties to kill each other rather than share the land among themselves (“It’s not that they can’t share, it’s that they don’t want to”). (Anonymous, November 11, 2015). While jealousy of wealth seems to have been a historical factor in Madagascar’s cattle system, interfamilial violence, rising theft (including of crops, chickens, and even water), and an increasing preoccupation with pleasure (kids today just want to have fun, to play, one Ambalavao student told me) among the young are certainly not. Furthermore, many of my informants in Ambalavao and Ihosy expressed their growing fears about rising drug use and alcohol consumption among the young, although many acknowledged that many Betsileo and Bara people have long been heavy-drinkers. To some, this is a sign of some sort of moral erosion among young people, and was frequently offered as an explanation for the rise in theft (Anonymous, November 9, 19, 2015). “People are divided”, many of my informants would tell me. There are also signs of this which are pertinent to the way cattle are actually raised. Many of the people working with cattle in Sakaviro, for example, told me that when they were younger, cattle had been herded and grazed collectively. With increasing suspicion, jealousy, and theft, men began to divide their herds. To many, this hoarding of wealth once regarded as communal is a disturbing sign that “*fihavanana* is almost destroyed” (Anonymous, November 12, 17, 2015).

Analysis: What’s New?

Throughout my exploration of Madagascar’s cattle systems, I have wrestled with questions of the historicity of today’s current ills as they relate to any sort of “new” developments. As we have found in the historical discussion in the early sections of this paper, considerable evidence points towards the existence of a cattle economy not hampered but *defined* by flux and (reliably violent) turmoil, from the wars of the short-lived Bara cattle kings of the 17th century to the bullet-ridden front bumpers of the trucks of the Ambalavao gendarmerie today. I would argue that any

holistic discussion of the system needs to treat theft, no matter how disruptive or shocking it may seem, as a more or less constant variable. While there are changes afoot in Madagascar's security situation, these are not to be found in the existence of largescale and violent theft. Nor is the system under anything approaching some sort of newly manifested foreign influence- cattle have been intimately linked to international trade in Madagascar for at least 400 years. Throughout those centuries, centralized states based in Tana (namely the Merina-dominated Kingdom of Madagascar, the French Colonial government, and today's post-colonial state) have been deeply involved in the cattle economy (particularly exports), alternately helping and hindering the development of a healthy system in regions with outsized dependencies upon zebu. It would therefore be a mistake to construe the Malagasy cattle economy as existing in isolation. In point of fact, the system relies on outside demand for economic goods generated in increasingly marginal environments, like those found in the south. That being said, no amount of historical documentation of cattle theft and related ills seems to account for the sheer scale of chaos in today's system, and the deep-seated panic which it is beginning to generate. And indeed, part of this chaos does appear, at least to my informants, to be attributable to a rising foreign demand for cattle. While it is important to acknowledge the role played by foreign consumption, however, nothing I have found in the course of this research leads me to believe that the deterioration of cattle livelihoods has its root causes beyond Madagascar. This is particularly evident in the manifestation of ethnic divisions in the way cattle crime is approached by the state, for instance. As Astuti (1995) found in her examination of the basis of identity among the Vezo in southwestern Madagascar, ethnicity is often constructed and perceived here as a facet of one's occupation as much as anything else. Through this lens, one begins to understand the national-level stigmatization of the Bara, for instance, whose name literally means "rude, naïve, barbaric, and simple" (Kent 1970). It seems telling of the historical relations between those most reliant on cattle and those living elsewhere on the island that the one group

most closely associated with cattle raising is *conceptualized* of in such terms. Regardless of these internal divisions, however, there have been fundamental shifts affecting cattle both its viability as a resource and the way in which society and institutions interact with it. Despite what I feel to be a need to emphasize (often in opposition to the narratives of my informants), the venerable and cyclical nature of dysfunction and conflict within the cattle economy, these shifts do in fact mark significant departures from the way in which the system has characteristically lurched through time. This begins with something I have come to refer to as the “hardship trinity”.

The “Hardship Trinity”- Although the markets themselves often seemed to be the center of the *omby* universe, I have come to realize that the Malagasy cattle economy is anchored by the functions played within it by rural herders and farmers. Although the exchanges within the system are largely urban, most of the stock and actors involved are rural to the bone. With that in mind, the frequent mention of three distinct (and recently exacerbated) stressors upon life related to me by my rural informants made me sit up and pay attention. While the relationship between poverty, population, and environmental degradation has previously been within the context of the Vicious Circle Model (VCM) (which holds that deepening poverty, population growth, and environmental degradation operate as a series of positive feedback loops consistently worsening standards of living and the environment), Bremner et. al (2012) and de Sherbinin et. al (2008) are careful to avoid confirmation of the practical existence of such a circle. Their wide review of the existing literature on the subject seems to suggest that the relationships between the variables may not be as predictable as the VCM suggests. At the same time, there is little doubt that significant relationships exist between all three of these hardships. As such, it makes more sense to me to conceive of these relationships not as a circle (or even a shape, given how little we still know about the relationships themselves) but as a less

definite “trinity”. This model may be particularly useful in the case of this study, as we are dealing not so much with explicit environmental destruction as broader environmental change, which does not seem to have been considered in its own right under the VCM. In any case, linkages between each of these variables were repeatedly made by my informants, particularly in the rural setting of Sakaviro. People are thinking about an increasingly difficult life through these three broad stresses: as rainfall and crop yields decline, as parents struggle to allocate resources among their numerous children, and as poverty traps begin to restrict agency for an increasing proportion of the rural poor. As cattle is intimately linked to survival and prosperity in the rural setting, there are two-way interactions between the deteriorations in prosperity resulting from these stresses and one of said prosperity’s principal vehicle- the zebu. Thus we have the farmer who sold his herd to avoid poverty nonetheless mired within it and the farmer mired within poverty still unable to ride out of poverty on the back of a newly-bought bull. The lack of other opportunities amid a stagnant economy and deteriorating security situation have only served to compound the disproportional reliance upon zebu for the vast majority of people living outside of Madagascar’s urban areas, particularly in regions like Ihorombe and Haute Matsiatra where agriculture is less consistently reliable than in the rich-soiled north of the country, for instance. Keeping in mind that cattle theft as an act should be treated as constant, I have been nonetheless repeatedly confronted by the fact that this act as a response to poverty has increased commensurately with decreasing standards of living. This is where the “trinity” makes its presence felt: pastoralism as a response to a marginal environment is nevertheless jeopardized by changes in the direction of a yet *more* marginal environment. Despite the intense strain placed by the worsening of the “trinity” variables upon the lives of herders, however, I still saw signs of a social safety net responding to the stress. Take, for example, the farmer in Soalatsena who relied upon the generosity of his neighbors to plow his fields, or his neighbor who received loans in times of stress. It is this social safety net which underlies the resiliency of

rural Malagasy society, constantly adapting¹² to a long history of economic turmoil, rapid change, and violent crime. Which is what has made uncovering new fractures within this beautifully adaptive society and its institutions so very troubling.

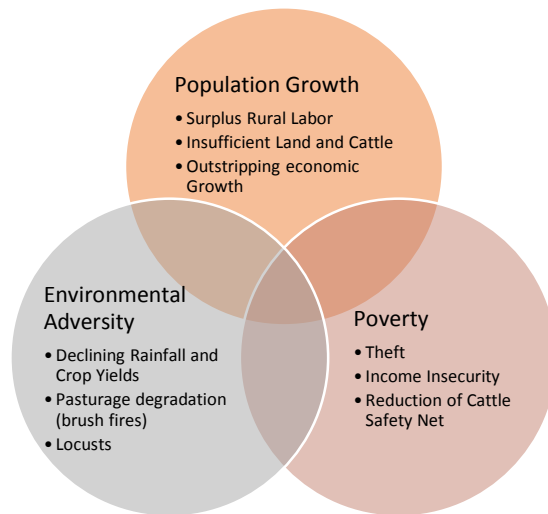


Figure 2: The “Hardship Trinity”

Multilevel Anomie in Cattle-Centric Communities-

Writing in the late 19th century amid pan-European political instability and unfamiliar industrialization, the French sociologist Emile Durkheim was troubled by what he perceived to be an increasing “normlessness” taking root among his era’s increasingly harried generations. He termed this phenomenon “anomie”, which he defined as:

an absence of norms or a fundamental conflict over societies basic values Durkheim called anomie, and he particularly feared that such a social ‘sickness’ would arise during a time of social upheaval or transition. In small-scale traditional societies, where relationships are personal and there is a limited division of labor, it is fairly easy for a general consensus as to the values and norms of society and of the rights and privileges of individual members to be established and upheld-especially if back by the moral authority and sanctions of religion. Everyone knows their place and aspires no higher. However, in the transition from the mechanical solidarity of such societies to the organic solidarity of industrial ones, where there is an extensive division of labor and relationships are often highly impersonal, a breakdown in social consensus and so of social controls over the individual is highly possible...Anomie literally means normlessness. It arises when social controls are weak, when moral and political restraints collapse and is particularly prevalent during periods of rapid social change, such as industrialization and

¹² One of the most striking features of *dina* law, for example, is its inherent fluidity: it’s constituted and reconstituted every decade or so in the areas in which it is in effect, reflecting an admirable ability to evolve for such a vital institution. (Anonymous, November 23, 2015)

urbanization, when traditional norms and values are disrupted and uprooted. People become restless and dissatisfied and a new moral consensus about what people can reasonably expect from life is needed. Industrialization and consumerism accentuate this process, encouraging specialization and self-interest. (Durkheim 2003, p.22, 26)

Despite the obvious differences between Industrial Revolution France and as-yet-largely-rural Madagascar, I encountered multiple aspects of the “sickness” in Durkheim’s description throughout my interviews in both towns and villages. Perceptions of a steady erosion of morals and a “breakdown in social consensus” were very much in evidence. These phenomena, and the unique causes at work in creating them in Madagascar, were superbly documented by Richard Marcus in his 2008 article *Tokana: The collapse of the rural Malagasy community*:

Robert Putnam’s now venerated (2001) findings in regard to the United States—that associational life is in decline—holds in Madagascar as well in that the decrease in social capital is having grievous social and economic effects on the community members. Yet in contrast to Putnam’s U.S. example, the root cause of the decline in Malagasy community life is economic hardship. People do not associate with one another because they are too busy trying to eat. Decreasing resources and the diminution of arable lands have collided with demographic changes, ecological challenges (Rakotoarisoa 1998), and the problems of self-serving elites, external interests, and economically challenging social norms to reduce associational opportunities. (Marcus 2008, p. 86)

While Marcus uses Robert Putnam’s *Bowling Alone* (2001) as the theoretical perspective through which he reaches his sobering conclusion, Putnam’s work is itself steeped in the rhetoric of social disintegration initially probed by Durkheim. Regardless, Marcus’ assertion that economic hardship is the root cause of anomie as it exists in rural Madagascar was seemingly reflected in the explicit links made by the people I spoke with between the deterioration of *fihavanana* and intensive poverty. Jealousy, interfamilial theft, and arranged assassinations between brothers do, however, mark an escalation of the forces at play in the mere erosion of associational life which Marcus described (notably before the 2009 crisis). If my participants are to be believed, there are initial signs of a near-complete “normlessness”: one in which local and even familial ties are increasingly meaningless in the face of a desperate race to survive amid the worsening conditions of the “hardship trinity”. It’s important to reiterate that there was not a total consensus about this decline in *fihavanana*. That being said, I remain deeply impressed by

the frequency with which participants described symptoms in anomie in response to questions about recent changes in life. From a Durkheimian perspective, some of the predicted manifestations of anomie as it unfolded in industrializing Europe are coming to the fore in a Malagasy society increasingly interested in consumption. This is reflected in the increasing desires of young people from rural areas to benefit from the pleasures of life in town (and, purportedly, their willingness to steal to get to them). Within this wider tableau of anomie one finds, of course, the country's most reliable constant: zebu. Marcus' decision to look at associational life as a barometer of broader social cohesion is an apt one especially considering Putnam's previous success using such a comparison, but I strongly believe that the singular importance of the zebu in assigning social status, providing a financial safety net, and serving as a magnet for exchange of all sorts in the form of cattle market towns makes it a uniquely useful lens through which to view the broader decline of social cohesion here. While a good portion of this paper has focused on the decline of the cattle population itself, there is good reason to believe that these two diminutions are connected, based on the body of evidence outlined above. To me, it is at the confluence of people and zebu, the markets, where one finds the most striking evidence of their tied fortunes, and the deterioration thereof. This is why I've come to conceptualize of the anomie at play in the Cattle Belt around Ambalavao and Ihosy as essentially "multilevel". The role played by the cattle markets, and the institutions associated with them, is of critical importance in the lives of the rural and urban inhabitants of both of my regions of study. It has therefore been with some alarm that I have witnessed vivid examples of institutional decay and evidence of theft embedded within the very fabric of the market, with devastating consequences for all but the wealthiest participants in the market. As has been mentioned, corruption among the market's regulatory bodies, the various levels of local government, and state veterinarians have all contributed in their own way to cattle decline. I believe that the general erosion of norms and controls placed upon individual behavior by both

the broader social bedrock of *fihavanana* and the ostensible restraining functions of the state have contributed to a culture of wanton theft and wrongdoing at all levels of the cattle economy, which has made the intensifying liquidation of the nation's cattle wealth all the easier. This process has accelerated, in social and state terms, since the 2009 crisis, after which my participants noticed marked increases in both the brazenness and volume of corruption within the markets (Anonymous, November 23, 2015).

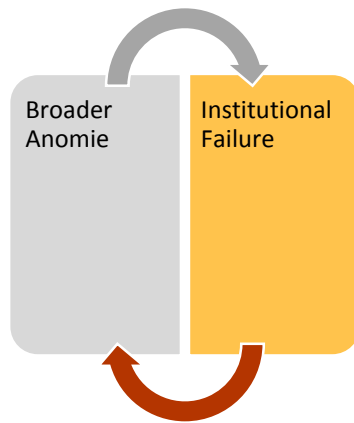


Figure 3- Multilevel Anomie

Synthesis and Conclusion: The Decline and (Prospective) Fall of Madagascar's Cattle Empire-

South-central Madagascar's cattle raisers face a difficult future. Despite the long history of volatility within their dearly-held system, including the frequently deleterious effects of a strong foreign demand for Malagasy livestock products and an often parasitic state based in Antananarivo, a cycle accustomed to instability is at risk of falling apart at the seams as a result of a bevy of new and worsening stressors. First and foremost, the longstanding practice of cattle theft has, indeed, become much more damaging to the system as a whole because of the pre-existing razor thin margins of survival for herders. With cattle raisers afraid to own large zebu or numerous herds, an artificial ceiling of fear has limited the ability of the countryside to absorb and hold cattle, thus expediting the process of liquidation as domestic and foreign meat demand

consume cattle faster than the system can produce them. Social statuses predicated upon cattle wealth have witnessed a drop in the number of herders considered respectable by their peers, as fewer and fewer of the old *grands patrons* are able to avoid theft or the need to sell off their herds to cope with mounting costs of school fees and service access, not to mention much-needed food to make up for increasingly frequent deficits in crop yields. Indeed, a veritable “hardship trinity” of poverty, environmental adversity, and population growth have placed unprecedented strains on a system already compromised by theft and insecurity. Historically, a dynamic and resilient social framework based on the idea of *fihavanana* and embedded within fluid institutions like *dina* law bodies would rise to the immense challenge posed by physical strain. Indeed, I encountered multiple examples of just that- adaptation and mutual aid. Increasingly, however, manifestations of a novel, wholly Malagasy version of the social normlessness predicted in times of rapid social change and crisis by (among others) Emile Durkheim have resulted in rising violence, jealousy, and general dysfunction. This is particularly the case in regards to the cattle economy on which so much of life in Ihorombe and Haute Matsiatra regions has its foundations. In my regions of study, I was constantly reminded of the multifaceted importance of the zebu, and the insights which their presence (or lack thereof) provide into the functioning of communities in which they are raised and exchanged. It was thus with great sadness that I became increasingly aware of the general corrosion of the institutions governing the points of exchange so vital to these communities, and usually failing to govern the rural hinterland at all. Part of this failure of the local arms of the central state’s institutions appears to be the result of repeated crisis and an almost complete lack of support, both financial and otherwise, from the capital. I contend, however, that the failures of these institutions are reflective of the wider fraying of social relations in the communities which host them. Thus we see widespread and tacitly accepted corruption, apathy towards the greater good of the system, and an increasing perception of theft and other crime as legitimate options of survival. One

panao hira kely (who also works as a government accountant) told me that while he didn't want to steal, he felt he had to *something* to improve his life (Anonymous, November 19, 2015). It is telling of the extent to which the state has failed even its own agents in providing opportunities for advancement. What's worse is the relative lack of alternative institutions in what should be an opportunity vacuum for cohesive groups. While some associations like Ihosy's F.MMM are certainly beginning to assert themselves, the state's suspension of Ihorombe's *dina* law (which, to avoid any romanticization, was itself accused of corruption by several informants) in 2010 is in keeping with an increasingly cynical imperative within the cattle system to protect corrupt interests at the expense of healthy markets. One irony in this is the preoccupation of state institutions with protocols and bureaucracy at the expense of local knowledge and concerns often being flaunted by those formally tasked with safeguarding them. The blame falls too, however, upon the informal powers-that-be within the system: the *grands patrons* who fuel the trafficking of stolen cattle while knowing full-well its long-term effects on the system they depend on. The interconnected social disintegration within institutions and the general livestock raising population has begun to impede the ability of Malagasy herders to adapt to the rising physical hardships of the present, which seem to call out for a great deal *more* cooperation. If Marcus (2008) is to be believed, the deepening economic hardship one may expect to result from any continued decline in the size and quality of cattle herds will only serve to further strain the social fabric and institutions. The situation may not, however, be quite as dire as it seems. While the cattle systems under consideration here arguably face greater challenges than ever before, they have a long and distinguished history of overcoming adverse conditions causing panic and cynicism among the people who compose the systems. If there is hope, it is that this is not a society new to crisis: it is one forged in it. In the end, this is not about cows. This is about a collection of remarkable and complicated human beings struggling to keep their heads above water. And it is a story worth telling.

Recommendations-

As several informants opined to me, there would be no need or room for *dahalo* if there weren't people looking to buy stolen cattle. This encompasses, of course, Malagasy *grands patrons*, but it also includes Chinese, South African, Comorian, and Mauritian buyers operating in slaughterhouses on the island and waiting in boats offshore. Perhaps the most effective way to halt the erosion of Madagascar's cattle wealth is to put pressure on the governments of countries which consume stolen cattle to crack down on their citizens' illicit purchases in Madagascar. The contemporary political situation on the island itself seems to preclude much possibility of the Malagasy state itself adequately policing the cattle trade domestically, much less restricting foreign abuses. Towards this end, continued research on both the wider issues discussed in this paper (cattle decline and social disintegration being chief among them) and their palpable effects could go a long way towards starting some form of consumer-society backlash against the consumption of products whose legitimacy and legality, given the paucity of any sort of meaningful regulation, should not by any means be accepted at face value. It is up to consumers in the aforementioned countries to demand stricter standards for Malagasy cattle products. Perhaps more importantly, it is incumbent upon Western governments (namely France, the United States, and the European Union) to apply pressure to both the Malagasy government and the governments of consumer societies to re-examine the existing consumption of zebu abroad. The long-term answer, of course, is for Madagascar to break its damning cycle of political crisis and the connected breakdown of social relations. Participants pined for the days when the state provided support for both the health and safety of rural inhabitants and their animals. While the current reality of poverty and state fragility may make a complete return to the level support of those days next to impossible, providing even a

semblance of continuity within which institutions can begin to repair themselves is a prerequisite for any amelioration of the situation. If history is any guide, it is the role of dominant political units (today, Madagascar's Fourth Republic) to assert themselves over the slow-burning chaos that is the cattle economy. The Malagasy government would do well to rediscover that.

Questions for Further Study-

With the considerable limitations inherent within both this paper's methodology and its validity, further research is still greatly needed on a variety of pressing, unanswered questions. To me, foremost among these are those concerning the unique manifestations of anomie and cattle decline elsewhere in Madagascar, particularly in the even more strained regions of the far south, such as Atsimo Andrefana and Antandroy. If my findings have any truth to them, it is in these regions that one may observe the most severe consequences of the processes described here. As has been acknowledged, the exact relationships between the hardship variables of poverty, resource degradation, and population remain poorly understood, and further study of the explicit connections (if they exist) among these factors could have lasting implications for the future of sustainable development and poverty relief. Lastly, considerable effort should be made to re-establish some sort of credible awareness of the size Malagasy cattle population. The obscurity shrouding existing data on zebu makes effective deterrence of theft and monitoring of illness next to impossible. With the Ministry of Livestock (by its own admission) unable to legitimately provide these figures, it falls to independent researchers to provide some measure of clarity.

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Glossary of Terms

Dahalo- A Malagasy cattle thief. Purported to be a distortion of a Bara rite of passage, it stands for what is in fact a long-running, geographically dispersed phenomenon.

Dina- A Malagasy legal tradition practiced alternately at the village, commune, district, and regional level. While also associated with conversation efforts, the tradition has played a vital role in attempting to control cattle theft.

FIB (Fiche Identitaire Bovin) - The primary method of documentation within Madagascar's cattle economy, a biographical form accompanying each zebu sold at market.

Fihavanana- Madagascar's "system of norms, rules, and customs which govern local society, interpersonal behaviors, modes of sociability, and anti-risk strategies. "(Sandron, 2008, pg. 1)

Fokonolona- The Malagasy term for the citizenry of a village, in this context constituting *dina* bodies.

Fokontany- Base-level administrative unit determined by population in Madagascar, at the neighborhood level in cities, but covering a wider geographic area in less densely populated rural areas.

Jama- While I initially thought that the term referred to any local defense group combatting cattle theft in the rural areas, it seems to refer pointedly to men employed in that capacity who come from the south-east of the country, purportedly with certain charms and "sorceries" which give them special protection against harm.

Kabary- A proud, wholly Malagasy oratorical tradition.

Panao Hira Kely- While the term's meaning is rather fluid in its reference to those working in specific roles in the cattle economy, it tends to refer to those who buy at one market (usually Sakaraha or Ihosy) and sell for a higher price at another (usually Ambalavao).

Panera/Demarcheur- Constituting a majority of those working on market days, the *panera* is responsible for seeking out buyers and initiating price negotiations on behalf of more powerful *patrons*. *Panera* make very little on each transaction in relation to their employers.

Patron-Again, a fluid term, and often one of respect in the markets, but also signifying a prominent seller, typically from the south. The so-called "cattle barons" of the island.

Map of Study Region and Associated Cattle Chain



Source: Google Earth

