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LAND AND REBELLION:  
Property Rights and Contracting in Andean Peru

by Astrid A. Arca Leigh



The opinions expressed in this Graduate Policy Essay are the author's and do not represent official positions of the Mercatus Center or George Mason University.

## ABSTRACT

This paper explores the mechanism by which a change in the relative price of an export commodity can act as an economic force behind a pattern of rebellions in the Peruvian Andes between the 1880s and the 1960s. This research suggests peasants will revolt when there is a latent motivation to renegotiate contracts when transaction costs are lowered. Further, insecure property rights exacerbate conflict. Two cases in recent Peruvian history, wool in the 1880s to 1930s, and coffee after WWII, are presented and analyzed within a framework of the theory of property rights and the economics of conflict.

The first chapter reviews the theoretical background that undergirds this research. Chapter 2 is an extensive history of the property rights structure in Andean Peru from the Inca Empire to the present day, whereas chapters 3 and 4 are parallel analyses of a change in the relative price of wool and coffee and the resulting rebellions that followed. Chapter 5 summarizes the relevant policy lessons and concludes. A glossary can be found at the end of this paper with translations of terms in Spanish and Quechua used extensively throughout this paper.

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**Land and Rebellion:  
Property Rights and Contracting in Andean Peru**

Mercatus Policy Essay

By

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The Mercatus Center at George Mason University  
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## Introduction

In this policy research essay, I explore some of the factors behind underdevelopment in the Andean region and focus on conflict over land. I review more than 500 years of property rights history and the distribution of land, starting with the Inca Empire and continuing through the Spanish conquest, independence, the republic, and modern Peru. My interest in this topic, however, began on the other side of this timeline. The Shining Path was a revolutionary group that terrorized the small villages of the *Perú Profundo*—meaning the deep, isolated areas of the Andes, seemingly untouched by the advancements of modern civilization. Its “War of the People” spread throughout the country like wildfire in the 1980s and persisted until 1992, when Abimael Guzman, the leader of the organization, was captured.

I was only five years old when the Shining Path reached the peak of its power, control and expansion, creeping into Peru’s most important city, Lima. Even to a small girl, blithely unaware of the seriousness of the situation, the terror was palpable. The wounds left by the blood-thirsty Shining Path are not soon forgotten, nor is the fear overcome. The economic costs of the Shining Path were considerable, and so were the invaluable 69,280 lives lost in the midst of this internal war.<sup>1</sup> Scholars such as Paul Collier have established empirical links between economic underdevelopment and civil war, and determined that “the prevention of civil war is therefore a key priority for international attention.”<sup>2</sup> Therefore, it is crucial to understand the roots of underdevelopment in the Peruvian Andes to prevent the future emergence and spread of extreme revolutionary movements, such as the Shining Path.

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<sup>1</sup> Informe de la CVR, conclusions <http://www.cverdad.org.pe/ifinal/conclusiones.php>

<sup>2</sup> Paul Collier, Anke Hoefler, and Dominic Rohner, “Beyond greed and grievance: feasibility and civil war,” *Oxford Economic Papers* 61 (2009): 1.

As I went deeper into the topic of the Shining Path, trying to understand where the organization came from, how it spread and persisted, and why so many people in the Andean region supported this extremist movement, my research took me hundreds of years back. What I found was that centuries of social, political, and economic inequality had rendered a once prosperous region completely backward and underdeveloped, suffering terribly from the ravages of extreme poverty and neglect.

A close look at the evolution of property rights in the Andean region reveals constant discrimination against the indigenous people at the hands of the landed elite. Contrary to a typical, yet completely erroneous portrayal of the *Hombre Andino*, indigenous people are incredibly resilient, resourceful and, when the time is right, rebellious. This essay reveals the story of rational, calculating individuals who responded to different factors and situations strategically in order to recapture the lands grabbed by the landed elite in a centuries-old struggle for power.

My objective in this work is to offer a hypothesis of the emergence of indigenous rebellions in the Andean region, which responded to deep-cleavage social, political, and economic inequality. The first chapter reviews the theoretical background that undergirds this research, including Paul Collier's feasibility theorem, Demsetz's approach to property rights and the literature on the economics of conflict. The second chapter outlines the property rights history of Andean Peru from the Inca Empire to modern days.

The third and fourth chapters focus on two case studies in Peruvian history: the advent of the market for wool in Peru in the 1880s and the 1,200-percent increase in the price of coffee after World War II. The third chapter documents the change in the value of the export commodities and draws a relationship to a direct increase in the value of

land and the choices peasants and landowners made to act on the profit opportunity. The fourth chapter addresses the breakdown in the renegotiation of contracts over land due to insecure property rights and follows the factors that trigger the rebellions. Finally, the fifth chapter offers some policy lessons and concludes. A glossary can be found at the end of this paper with translations of terms in Spanish and Quechua used extensively throughout this paper.

### *The Setting – The Andean Region Today*

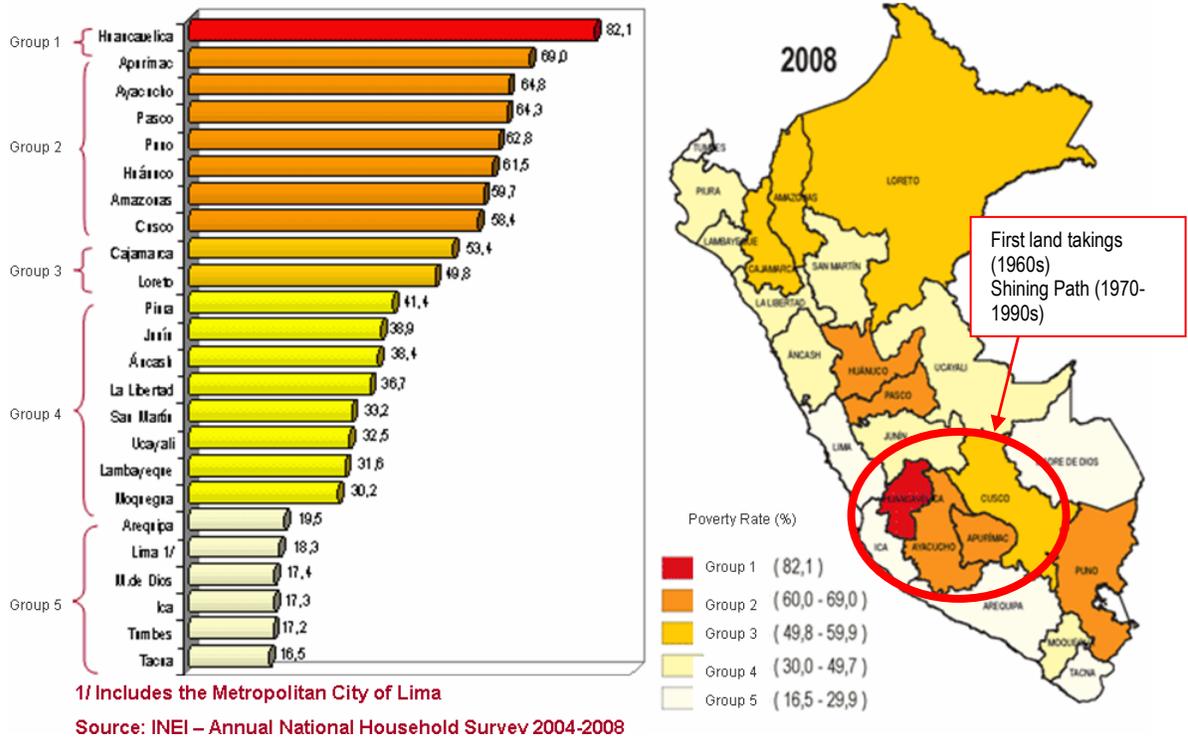
The central Andean region once held the political, economic, and social center of South America—the Inca Empire—in the mountains of what is now Peru’s poorest region. The Inca managed to build the wealthiest, most extensive and elaborate state in South America of its time. Yet, after colonialism, independence, and the republic, the land the Spaniards once marveled at is today stricken by poverty and stagnant growth, with little to show for the past several hundreds of years.

The people of the Peruvian Andes have minimum or no access to basic services, such as education, health clinics, water and sanitation, or balanced nutrition. High poverty levels are observable throughout the region, despite a drop in poverty rates of over 12 percent since 2004 in the country as a whole.<sup>3</sup> As with most developing countries, the rural region of Peru is especially poverty-stricken, with poverty levels reaching 82.1 percent in Huancavelica.

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<sup>3</sup> Instituto Nacional de Estadística e Informática (INEI), *Peru en Cifras*, <http://www.inei.gob.pe> (accessed December 2009).

**Figure 1**  
**PERU: GROUPING OF DEPARTMENTS BY POVERTY RATES AND SIGNIFICANCE LEVELS, 2008**



In the country as a whole, the rate of chronic malnutrition of children less than five years old has been 20 percent for the past four years while the levels of illiteracy in the country hover at 10 percent for the same time period. The provinces of Huancavelica, Ayacucho, Apurimac, and Cusco make up the southern Andean region, which is the poorest in the country. Moreover, ongoing conflict over land has taken place in this area for several centuries, including massive land invasions in the 1960s, a government experiment in agrarian reform a decade later, and finally the emergence of the terrorist group, Shining Path.

It is important to mention that the poorest region in the country, circled in red in figure 1, is surrounded by relatively prosperous provinces, especially on the coast (Ica, Arequipa, and the capital, Lima). As would be expected, there has been massive migration from poorer areas toward the better-off provinces as recorded and studied by

Jose Matos Mar<sup>4</sup>—mostly indigenous peoples from the Andes migrating toward the coastal area as they lost their lands or fled the armed conflict of the 1980s. Why does poverty in this region persist even when surrounded by more-prosperous places within the same country? It will be argued in this essay that changing factors motivating the renegotiation of contracts over land and insecure property rights have much to do with the persistence of poverty in the Andean region.

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<sup>4</sup> José Matos Mar, *Desborde Popular y crisis del Estado: Veinte años después*, (Lima: Fondo Editorial del Congreso del Perú, 2004).

## Chapter 1: Theory

Economists are concerned with the age-old question: “Why do some countries remain poor while others prosper?”<sup>5</sup> Property rights are key to economic development,<sup>6</sup> whereas an inadequate institutional environment can delay a nation’s growth. In turn, poverty affects the probability of conflict, and conflict can perpetuate poverty in an area. As stated, this research is concerned with the reasons behind underdevelopment in the central Andean region of Peru. Peasant rebellions in the late 1800s and again in the 1960s are part of an intertwined story of poverty and conflict.

This chapter reviews three literatures. The first, conflict and economic development, offers empirical findings on the motivations of civil war to compare to the Peruvian case. Second, Harold Demsetz’s contributions to the theory of property rights suggest a theoretical rationalization for the peasants’ decision to rebel. Finally, the *paradox of power* and contracting under uncertainty are useful concepts in the economics of conflict literature for the purpose of understanding peasant rebellions in Andean Peru.

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<sup>5</sup> At least as far back as Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, (Indianapolis: Liberty Fund, 1981). For more recent work, see Benjamin Powell’s edited volume *Making Poor Nations Rich: Entrepreneurship and the Process of Economic Development*, (The Independent Institute, 2007).

<sup>6</sup> There is a vast literature on property rights and development. See Douglass North, *Institutions, Institutional Change and Economic Performance*, (Cambridge: Cambridge University Press, 1990). See also, Mary Shirley, “Institutions and Development,” (Working Paper, 2003). Also, Stephen Knack and Philip Keefer, “Does Social Capital Have an Economic Payoff? A Cross-Country Investigation,” *Quarterly Journal of Economics* 112, no.4 (1997): 1251-88. For an application in Peru, see also Hernando de Soto, *The Other Path: The Invisible Revolution in the Third World*, (New York: Harper and Row, 1989).

## *Conflict and Economic Development*

Paul Collier, widely recognized for his work in conflict and economics, declares that “the key root cause of conflict is the failure of economic development,”<sup>7</sup> referring to a conflict trap where conflict originates in poverty yet it also breeds more of it. Collier and his colleagues have conducted several empirical studies on the question of development and conflict and found that “countries with low, stagnant, and unequally distributed per capita incomes that have remained dependent on primary commodities for their exports face dangerously high risks of prolonged conflict.”<sup>8</sup> The economic costs and political legacy of civil wars described by Collier, such as “abnormally inflated military spending [that] persists long after the conflict is over,” in addition to severe capital flight and a “loss of social capital,” are important consequences of conflict that influence the level of wealth and prosperity in a country.<sup>9</sup>

Collier, Karen Ballentine, and Mats Berdal have focused their research on the debate on *greed or grievance* as causes behind the emergence of conflict and rebellion.<sup>10</sup> Grievances are based, for example, on the lack of access to the political system, a skewed distribution of land, social discrimination, and low or stagnant incomes. This literature acknowledges that “for such grievances to explain rebellion they should be significantly worse than those of groups in other societies that resort to less violent political

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<sup>7</sup> Paul Collier et al, *Breaking the Conflict Trap: Civil War and Development Policy*, (Washington, DC: World Bank, 2003), p.53.

<sup>8</sup> Ibid, p.53.

<sup>9</sup> Ibid, p.20-21

<sup>10</sup> Paul Collier and Anke Hoeffler, “Greed and Grievance in Civil Wars,” (working paper series 2002-01, Centre for the Study of African Economics, Oxford, U.K., 2002), <http://www.csae.ox.ac.uk>. See also, Karen Ballentine and Jake Sherman, eds., *The political economy of armed conflict: beyond greed and grievance*, (Boulder, Co.: Lynne Rienner Publishers, 2003). Also, Mats Berdal and David M. Malone, eds., *Greed and Grievance: Economic Agendas in Civil Wars* (Boulder, CO: Lynne Rienner Publishers, 2000), p.3.

processes.”<sup>11</sup> Much of the work done in social psychology on rebellion also highlights this fact (what is commonly referred to as relative deprivation<sup>12</sup>).

The question remains: Are rebellions responses to acute grievances? Collier and his colleagues emphasize the role of greed over grievances to explain the onset of civil war. In earlier work they hypothesized civil wars “are motivated by greed, which is presumably sufficiently common that profitable opportunities for rebellion will not be passed up.”<sup>13</sup> Collier’s most-recent paper formalizes this idea as the “feasibility theorem,” which “proposes that where rebellion is materially feasible it will occur.”<sup>14</sup>

However, most work in political science and theories of revolution emphasize the role of grievances and human agency in the analysis of civil war, as opposed to greed. Critiques of Collier and Hoeffler’s work on civil war focus on the lack of qualitative research (i.e. actually studying specific cases of rebellions, not just the aggregate data).<sup>15</sup> Moreover, the lack of emphasis on human agency and motivation is inconsistent with the predominant research into revolutions in the social sciences.<sup>16</sup> Finally, Collier’s statistics

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<sup>11</sup> Collier et al, *Breaking the Conflict Trap: Civil War and Development Policy*, p.66.

<sup>12</sup> Ted Gurr, *Why Men Rebel*, 1970 Princeton U Press. The concept of relative deprivation was coined by Chalmers Johnson yet Gurr popularized the theory with the publication of his book and his work at Princeton during the 1960s and 1970s. Gurr has since dismissed some of his younger theories of rebellion and relative deprivation, yet their wide applicability to rebellions across the world and its focus on micro-issues makes it a valuable contribution to the modern study of rebellion.

<sup>13</sup> Paul Collier and Anke Hoeffler, “Greed and grievance in civil war,” *Oxford Economic Papers* 56 (2004): 564.

<sup>14</sup> “Hirshleifer (2001), who pioneered much of the analytic research on conflict, proposed the Machiavelli Theorem, that no profitable opportunity for violence would go unused. Our variant of this theorem, the feasibility hypothesis, proposes that where rebellion is materially feasible it will occur.” See Collier, Hoeffler, Rohner, “Beyond greed and grievance: feasibility and civil war,” p.3. The paper presents this claim as an empirically testable hypothesis.

<sup>15</sup> Laurie Nathan, “‘The frightful inadequacy of most of the statistics’: A critique of Collier and Hoeffler on causes of civil war,” (discussion paper no.11, Crisis States Development Research Centre, London School of Economics, September 2005). See also, S. Mansoob Murshed and Mohammad Zulfan Tadjeddin, “Reappraising the Greed and Grievance Explanations for Violent Internal Conflict,” (Research Working Paper 2, Brighton, MICROCON, 2007).

<sup>16</sup> John Foran’s *Taking Power: On the Origins of Third World Revolutions*, (Cambridge University Press, 2005), is the leading theory of revolution and it has a clear and heavy emphasis on human agency. See also, Jeff Goodwin, *No Other Way Out: States and Revolutionary Movements, 1945-1991*, (Cambridge

have been questioned. He originally conceded that “obtaining good objective measures of the intensity of grievances is difficult.”<sup>17</sup> In his original research with Hoeffler and Soderbom they find “no effect of either income or land inequality on the risk of conflict, but do find that once a conflict has started it will tend to last much longer if income is unequal.”<sup>18</sup>

Despite critiques of Collier’s work, Collier’s venture into the relatively unexplored area of civil war, rebellion, and revolution within the economics discipline produced valuable research. Collier pioneered the investigation into the economic causes<sup>19</sup> and economic consequences<sup>20</sup> of civil war that inspired a growing literature on the economics of civil war and development.<sup>21</sup>

### *Property Rights Theory*

To understand the pattern of rebellions in the central Andean region in the late 1800s through the 1960s, we must identify the forces behind the decisions taken by the indigenous population. Harold Demsetz’s classic 1967 paper “Towards a Theory of

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University Press, 2001). Also, Theda Skocpol, *Social Revolutions in the Modern World*, (Cambridge University Press, 1994). Ted Gurr, who pioneered the micro-level look into rebellion focuses almost exclusively on the individual’s motivations. See, Ted Gurr, *Why Men Rebel*, (Princeton University Press, 1970). In the conflict and economics literature, the focus is also micro, emphasizing things like “conflict is a choice,” rationality, causality and self-interest.

<sup>17</sup> Collier et al, *Breaking the Conflict Trap: Civil War and Development Policy*, p.66.

<sup>18</sup> Ibid.

<sup>19</sup> Paul Collier and Anke Hoeffler, “On economic causes of civil war,” *Oxford Economic Papers* 50 (1998): 563-573.

<sup>20</sup> Paul Collier, “On the economic consequences of civil war,” *Oxford Economic Papers* 51 (1999): 168-183.

<sup>21</sup> A very useful and complete overview of the advances in conflict economics has been compiled by Ted Miguel and Chris Blattman, “Civil War,” (working paper 14801, National Bureau of Economic Research, March 2009), p.32, where they conclude “civil war is more likely to occur in countries that are poor, subject to negative income shocks, have weak state institutions, sparsely populated peripheral regions and mountainous terrain.” This observation is the aggregation of the results of several empirical studies, such as Collier and Hoeffler (1998, 2004), James D. Fearon, “Why do some civil wars last so much longer than others?” *Journal of Peace Research* 41, no.3 (May 2004): 275-302. See also, James D. Fearon and David Laitin, “Ethnicity, Insurgency, and Civil War,” *American Political Science Review* 97, no.1 (February 2003): 75-90.

Property Rights” and Yoram Barzel’s attempt to expand Demsetz’s original hypothesis provide the theoretical background. According to Barzel, “Demsetz hypothesized that as the value of a common-property resource increases, people are more likely to establish rights over it.”<sup>22</sup> The history of property rights in the Andean region reveals a slow yet decisive move toward private property as a response to growing land value, discussed in detail in the following chapter. It will be shown that as history progressed, the advent of markets and the development of capitalist activities transformed the fabric of society and created the forces that would push for more privately-held property as the country’s economy grew, leading all the way up to the land invasions of the 1960s.

Barzel buttresses his theory on the premise that “people acquire, maintain, and relinquish rights as a matter of choice”<sup>23</sup> while incorporating Demsetz’s key insight: “Demsetz’s point is so simple that it appears to be self evident: He showed that new rights are created in response to new economic forces.”<sup>24</sup> In the case of Andean Peru, the economic forces are the advent of the wool market in the 1880s and an increase in the relative price of coffee after WWII.

Barzel warns that “economic conditions, however, are constantly changing, and with them the equilibrium property rights delineation is changing as well.”<sup>25</sup> This is the case in Peru, where the progression to private property fluctuated between different types of property rights systems, depending on what worked best in the Andean region at the time. For example, communal property and the *ayllu*<sup>26</sup> survive in some areas of Peru even

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<sup>22</sup> Yoram Barzel, *Economic Analysis of Property Rights*, (Cambridge University Press, 1991), p.65.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid. Chapter 5, “The formulation of rights” is a good review of Demsetz and Umbeck’s point, which Libecap considers in his analytical framework.

<sup>25</sup> Barzel, *Economic Analysis of Property Rights*, p.74.

<sup>26</sup> *Ayllus* were “endogamous kin groups” whose function was to manage grazing lands communally and to grant members of the *ayllu* conditional rights to arable land in proportion to family size.

to this day. Regardless, the economic forces of changes in wool and coffee markets marked an overall move toward more privately held property.

Gary Libecap has systemized the work of many scholars in the property rights literature, including Harold Demsetz's 1967 insight, into a useful approach to property rights. In *Contracting for Property Rights*, Libecap provides an analytical framework to understand what motivates individuals to change property rights. He addresses three questions: "First, what are the losses of the common pool that motivate individuals to contract for property rights? Second, what factors lead to pressures to change existing property rights institutions? Third, what can go wrong in contracting?"<sup>27</sup> Thus, Libecap identifies the following factors that motivate individuals to change contracts:

1. Shifts in relative prices.
2. Changes in production and enforcement technology.
3. Shifts in preferences and other political parameters.<sup>28</sup>

Out of the three factors, the first one, a shift in relative prices, is the most relevant factor to illuminate the situation of land encroachment and the emergence of conflict in Andean Peru, following changes in the wool and coffee markets. It reflects Demsetz's point that "given a community's tastes in this regard, the emergence of new private or state-owned property rights will be in response to changes in technology and relative prices."<sup>29</sup>

Libecap's analytical framework offers some answers to the question of why contracting breaks down:

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<sup>27</sup> Gary D. Libecap, *Contracting for Property Rights*, (New York: Cambridge University Press, 1989), p.12.

<sup>28</sup> Ibid, p.13.

<sup>29</sup> Harold Demsetz, "Toward a theory of property rights," *American Economic Review* 57, no.2, (1967): 350.

“A reduction in resource values can be exacerbated by ownership uncertainty. To maintain claims to valuable assets or to wrest control from others through the use of force, competing claimants have incentive to divert labor and capital inputs from socially valued production to predatory and defensive activities.”<sup>30</sup>

Libecap is referring to a myriad of research in the economics of conflict and property rights, which points to the general rule that “secure private property rights encourage long time horizons and voluntary cooperation such as exchange while insecure private property rights or common pools create conflict and encourage short time horizons.”<sup>31</sup>

The relevant insights from this literature are discussed in the next section.

### *Transaction Costs*

A shortcoming in Libecap’s analysis is his narrow choice of cases, limiting them to American examples. This western approach assumes constitutional elements as basic as democracy, not present in the Andean region in neither the wool nor coffee case.

Libecap discusses *political* conflict when the renegotiation of contracts breaks down, yet this concept is not useful for the analysis of violent social conflict. Thus, Libecap’s framework is useful to recognize the motivation behind the renegotiation of contracts, yet not to understand the breakdown and conflict in the case of Peru. However, the economics of conflict offers some insight into contracting under uncertainty and the outcome of a renegotiation of contracts with weak property rights.

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<sup>30</sup> Libecap, *Contracting for Property Rights*, p.13. Libecap cites Umbeck 1981 for a “discussion of the use of force in reallocation of claims.” More modern work along the lines of Umbeck would be Hirshleifer’s “paradox of power.” See, Stergios Skaperdas, “Can the shadow of the future harm cooperation?” *Journal of Economic Behavior and Organization* 29 (1996): 355-372. See also, Bruce L. Benson, “Emerging from the Hobbesian Jungle: Might Takes and Makes Rights,” *Constitutional Political Economy* 5 (1994): 129-158.

<sup>31</sup> Charles Rowley and Friedrich Schneider, *The encyclopedia of public choice*, vol.1, (Kluwer Academic Publishers, 2004), p. 217.

## *The Economics of Conflict*

The work done by Collier on the probability of conflict and the link to economic development, as well as Libecap's framework for the renegotiation of contracts can be supplemented with research done in the economics of conflict—spearheaded by Jack Hirschleifer, Michelle Garfinkel, and Stergios Skaperdas. To understand the logic of land and rebellion from an economics of conflict approach, this essay draws four generally accepted principles from this literature, as presented in Anderton and Carter:

1. Conflict is a choice.
2. Conflict affects economic outcomes, such as growth, income and migration patterns.
3. Economic variables, such as trade, FDI, growth, income and resource endowments, affect conflict.
4. Conflict in the form of appropriation is a fundamental mode of wealth acquisition.<sup>32</sup>

In addition to these four premises, a rationality assumption undergirds the analysis. Hence, violence is always considered purposeful. A rational, self-interested agent who responds to incentives and is bound by the rules of causality is a straightforward and widely employed assumption not only in conflict economics research but in economics in general.<sup>33</sup> However, the fourth principle employed in this research differs from neoclassical economics because “there is no presumption that agents can only produce and trade to make a living. They can also engage in appropriation, grabbing the production of others or defending what they themselves have produced.”<sup>34</sup> The presence of appropriation as an option changes the game for individuals, and explains

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<sup>32</sup> Charles H. Anderton and John R. Carter, *Principles of Conflict Economics: A Primer for Social Scientists*, (Cambridge University Press, 2009), p.10.

<sup>33</sup> “Human action is purposeful behavior,” see Ludwig von Mises, *Human Action: A Treatise on Economics*, (Irvington: Foundation for Economic Education, 1996), p.1.

<sup>34</sup> Michelle Garfinkel and Stergios Skaperdas, "Economics of Conflict: An Overview," (working paper 050623, University of California-Irvine, Department of Economics, revised Sep 2006), p.2.

many questions in conflict research. This premise was not introduced into conflict economics until Haavelmo in 1954,<sup>35</sup> and later on developed and popularized by Hirshleifer,<sup>36</sup> Garfinkel,<sup>37</sup> and Skaperdas<sup>38</sup> in contest-theory models.

The study of conflict from an economics perspective adds to research on “institutions and economic growth as well as group formation,”<sup>39</sup> which aims at figuring out conflict and its effect on prosperity. Garfinkel and Skaperdas “suspect that governance plays an important role” in the emergence of conflict and that, “moreover, conflict itself appears to play an important role in the emergence and evolution of governance.”<sup>40</sup> However, the authors admit that on questions of conflict and governance solutions “research about how it functions and interacts with economic growth has essentially only just begun.”<sup>41</sup>

The economics of conflict literature offers unique insights into issues of incomplete property rights and the enforcement of contracts and how these are related to long term economic growth for a society. As Garfinkel and Skaperdas observe, “where property is insecure, whoever is relatively more productive will have a smaller chance of enjoying the output she produced with her opponent.”<sup>42</sup> They are alluding to the *paradox of power*, coined by Hirshleifer, which they go on to explain as a situation where “the

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<sup>35</sup> See Trygve Havelmo, *A Study in the Theory of Economic Evolution*, (Amsterdam: North Holland, 1954).

<sup>36</sup> See Jack Hirshleifer, “The analytics of continuing conflict,” *Synthese* 76 (1988): 201-33. See also, Jack Hirshleifer, “Conflict and rent-seeking success functions: Ratio vs. difference models of relative success,” *Public Choice* 63 (1989): 101-112.

<sup>37</sup> Michelle R. Garfinkel, “Arming as a strategic investment in a cooperative equilibrium,” *American Economic Review* 80 (1990): 50-68.

<sup>38</sup> Stergios Skaperdas, “Cooperation, conflict, and power in the absence of property rights,” *American Economic Review* 82 (1992): 720-739.

<sup>39</sup> Garfinkel and Skaperdas, “Economics of Conflict: An Overview,” p.59.

<sup>40</sup> Garfinkel and Skaperdas, “Economics of Conflict: An Overview,” p.59.

<sup>41</sup> *Ibid*, p.4. This means that this essay includes the most current and cutting-edge research on the determinants of economic growth, yet it may also suffer from some of the drawbacks of using new theories that may be incomplete or not yet thoroughly tested.

<sup>42</sup> *Ibid*, p.17.

agent who is less effective in useful production will be the more powerful agent, in the sense that she has the greater chance of emerging as the winner of the conflict to take sole possession of total output.”<sup>43</sup> Poorly defined and enforced property rights create conflict as well as hamper production, which in turn affects economic growth. Therefore, it is important to acknowledge when institutions are imperfect and address the question of “how institutions and governance themselves evolve to reduce conflict and appropriation.”<sup>44</sup>

This chapter reviewed three literatures: conflict and economic development, theory of property rights, and the economics of conflict. Insights from these theories, including the empirical causes and probability of rebellion, the economic motivation to secure property rights and the incidence of conflict when the negotiation of contracts is insecure, offer an initial framework to understand peasant rebellions in Andean Peru in the late 1800s and in the 1960s.

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<sup>43</sup> Ibid, p.16.

<sup>44</sup> Ibid, p.54.

## Chapter 2: History of Property Rights in the Andean Region

### *The Evolution of Property Rights in Andean Peru*

The Andean region in Peru is home to a long legacy of ancient cultures. The most influential by any standard is the Inca Empire, also known as *Tahuantinsuyo*, which arose as early as AD 1000 from the ashes of previous cultures, such as the Huari, Moche, and Chimú. The Inca culture is known for a number of technological advances and unique ways of organizing society and production. The *Tahuantinsuyo* “spanned a third of the South American continent and achieved a level of general material well-being and cultural sophistication that rivaled, perhaps even surpassed, many of the other great empires in world history.”<sup>45</sup>

The Incas cleverly harnessed irrigation and agricultural technologies. Their innovations in communication systems served the Inca’s administrative need to control the vast and often times rebellious empire. The communications system in the *Tahuantinsuyo* relied on a network of agile runners, called *chasquis*, who would transmit information and important objects by foot throughout the Inca Empire. The *chasquis* would also carry a *quipu*, an accounting tool similar to an abacus used to keep records and information concerning the empire. The meticulous administration of the empire included early forms of taxation, such as the *mita*, and the management of stocks of grain and meat to be stored for communal consumption during hard times.

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<sup>45</sup> Peter Klarén, *Peru: Society and Nationhood in the Andes*, (New York: Oxford University Press, 2000), p.12. See also Henry F. Dobyns and Paul L. Doughty, *Peru: A Cultural History*, (Oxford University Press, 1976), p.46: “The Tawantinsuyu, as the Incas called it, was truly one of the more remarkable conquest states in world history. In many ways it was analogous to those of the Greeks and Romans in their time and place.”

The empire was without a doubt an advanced form of organization and domination for its time. The Inca was a despot who ruled his subjects harshly, imposing unfair requirements on the Andean people in favor of the *elite cusqueña*,<sup>46</sup> such as forced labor on the elite's lands or serving in the Inca's military force. The heavy burden placed on the citizens<sup>47</sup> explains why some ethnic groups, such as the Huanca of the central *Sierra*, were happy to turn the Inca over to Francisco Pizarro at the time of the conquest in the hope of being liberated from the Inca's authoritarian rule.<sup>48</sup>

The political and social form of organization in the empire, called *ayllu*, “constituted the basic, micro-level unit of Andean society.”<sup>49</sup> *Ayllus* were “endogamous kin groups” whose function was to manage grazing lands communally and to grant members of the *ayllu* conditional rights to arable land in proportion to family size. The *ayllus* had an established division of labor depending on age and gender.<sup>50</sup> In the *ayllu*, private property did not exist.<sup>51</sup> On the contrary, all activities were conducted collectively, which is why the concept of reciprocity, called *ayni*, was of extreme importance; all were expected to share the responsibility and the burden for the construction and upkeep of public works. Reciprocity dictated social relationships and the

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<sup>46</sup> The Inca ruled from Cusco, and so his close family and circle of advisors constituted the “elite cusqueña”.

<sup>47</sup> Dobyns and Doughty, *Peru: A Cultural History*, p.53: “The heavy handed government and general lack of freedom of choice that prevailed may have made essential the psychological release provided by ceremonies and festivals.” See also p.56: “the net result of such institutions, encompassing the daily activities of all commoners, was not only to keep them under the tightest possible control and well occupied with activities sustaining the state, but also to bind them into compactly organized local units with clear identities, leaders, and land...”

<sup>48</sup> Alberto Flores Galindo, *Obras Completas Vol. III*, (Lima: Casa de Estudios del Socialismo, Julio 2008), p.43: “Los campesinos del rio Pampas fueron, precisamente, victimas de esta ultima modalidad de desarraigo...”

<sup>49</sup> Klarén, Peru: Society and Nationhood in the Andes, p.14.

<sup>50</sup> Hence, responsibilities were assigned to “teenagers working as shepherds; men plowing; and women planting, spinning thread, weaving cloth, and brewing chicha beer. Some members of the community also produced crafts, such as pottery and silver objects, perhaps during slack time.” Ibid.

<sup>51</sup> Ibid.

moral code that told individuals the standard for proper behavior. The expansion of the Inca Empire consolidated the communal system and subsistence farming for the peasants, whereas those closest to the Inca, the *elite cusqueña*, decided their best strategy was to move toward more privately held property to protect their growing riches.<sup>52</sup>

Given that the soil and terrain of the high mountains in the central Andes is very difficult to cultivate, plus the fact that they grew yearly crops subject to extreme changes in weather (like early or late frosts), the Andean people faced the need to spread out risk and create a “safety net” to address possible periods of famine, low crop size, and other disasters. This explains the emergence of the *ayllu* as a sort of insurance for hard times.

Several characteristics of the *ayllu* have survived the centuries in some areas of the Andean region, especially the custom of *ayni* (reciprocity) and the preference for holding land communally.<sup>53</sup> However, the Andean institution has gone through many changes in the course of history, starting with the fall of the Inca Empire in the Spanish Conquest of 1533, the Spanish *encomiendas*, a new distribution of land as a result of *reducciones* and major changes in property rights schemes as the Republic of Peru was formed in the early 19th century. All of these changes constitute the background that helps us understand the rebellions and land takings in the 20th century.

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<sup>52</sup> José Matos Mar and José Manuel Mejía, “La reforma agraria en el Perú,” (Lima: Instituto de Estudios Peruanos, 1980), p.17. For *elite cusqueña* see footnote 46.

<sup>53</sup> Historians and scholars in general are actually divided on this topic. Laureano del Castillo thinks of the *ayllus* as a “fusion of the tradition of these organizations of old Peru with the experience of the Spanish *comunidades*” (translated). See, Laureano del Castillo, “Comunidades, Tierras, Recursos Naturales y Desarrollo Incluyente,” in *A 38 años de la Reforma Agraria*, ed. Ileana Vegas de Caceres (Lima: Tarea Asociación Grafica Educativa, 2008), p.82-83. On the other hand, Jeffrey Paige argues “the subsistence economy of the sierra, on the other hand, is based on land tenure patterns established at the time of the conquest and has changed little since the consolidation of the hacienda system at the beginning of the republican era.” See Jeffrey M. Paige, *Social Movements and Export Agriculture in the Underdeveloped World*, (NY: The Free Press, 1975), p.161. Plus, Paige also argues the *encomienda* system left “agricultural organization unchanged.” See Paige, *Agrarian Revolution*, p.162. Peter Klarén notes that communities with the same characteristics as an *Ayllu* survive to this day in the Andes and are called *mingas*. See Klarén, p.14.

Following the fall of the Inca Empire, many traditions started to change and evolve with the institutional shock of colonialism. The indigenous people were forced to relocate and separate communities into two different countries (Peru and Bolivia).<sup>54</sup> To institutionalize its power in Perú, the Spanish crown devised the *encomienda*, described as a “trusteeship granted by the crown over large numbers of Indians as a reward for services rendered in the conquest and colonization of the New World.”<sup>55</sup> This institution gave the Spanish *encomenderos* the right to collect tributes from the Indians in return for taking care of the material and spiritual welfare of the crown’s newly conquered population. However, in 1542, the crown called for the abolition of the *encomienda*, as a result of high Indian mortality rates and several reports of abuses by the Spanish *encomenderos*.<sup>56</sup> Historical accounts testify that the *encomenderos* often forced the indigenous population to work to the point of exhaustion while ignoring minimum standards of living, resulting in a drop in population figures of indigenous people from 9 million to 600,000 a century later.<sup>57</sup>

To replace the abusive *encomienda* system, viceroy Toledo decreed the forced resettlement of indigenous families. The 614 *ayllus* at the time scattered in the Andean region were regrouped and concentrated into *reducciones* to facilitate the state’s control

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<sup>54</sup> See Xavier Albó, “Ethnic identity and politics in the central Andes: The cases of Bolivia, Ecuador and Peru,” in *Politics in the Andes: identity, conflict, reform*, eds. Jo-Marie Burt and Philip Mauceri, (Pittsburg, PA: University of Pittsburgh Press, 2003), p.18.

<sup>57</sup> Klarén, p.41.

<sup>56</sup> For a full explanation of the *encomienda*, see Klarén, p.44. See also Paige, p.162: “While the *encomienda* system of indirect control of Indian communities exacted tribute while leaving agricultural organization unchanged, the land grants were exploited directly by binding Indian communities to the land in a system of villein tenure transplanted from the feudal economy of Spain.” See also, Daniel Cotlear, *Desarrollo campesino en los Andes*, (Lima: Instituto de Estudios Peruanos, 1989), p.39 on the Spanish quickly adopting the Inca *mita* as well as more information on the *encomienda*.

<sup>57</sup> Cotlear, p.37. This is a widely cited and accepted historical fact.

of tax affairs, indigenous labor, and Christianization efforts.<sup>58</sup> Needless to say, the new government policies caused resentment among the indigenous population who witnessed their own culture and kin networks destroyed by the state's standardizing efforts.<sup>59</sup>

The colonial economy was mostly centered on mining and, to a lesser degree, agriculture. In fact, the *conquistadores* focused primarily on the exploitation of minerals, such as gold and silver, rendering most of the fertile land useless. Moreover, the exploitative nature of the economic activities led the colonizers to adopt government policies unconcerned with institution building or the long-term development of the area.<sup>60</sup> The failure to diversify economic activities in Peru gravely hindered the colonial economic model when several crises in the mining industry forced the state to re-focus on agricultural production, yet this economic sector was also depressed and undeveloped (as a result of the previous economic policies focused on exploitation). The 17th century marks the shift in economic importance for overall economic growth from mining back to agriculture.<sup>61</sup>

Following the system of *reducciones*, the *hacienda* system was imported from Spain and adapted in Peruvian lands. Matos Mar and Mejia define a *hacienda* as “the socioeconomic institution organized for the exploitation of the land on a grand scale, based on subordinated labor and a system of relations of domination.”<sup>62</sup> Throughout the centuries it evolved and adapted to the changes made to the distribution of property

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<sup>58</sup> See Klarén, p.60. Also, Cotlear p.40-41.

<sup>59</sup> Klarén, p.61.

<sup>60</sup> Daron Acemoglu, Simon Johnson and James A. Robinson, “The Colonial Origins of Comparative Development: An Empirical Investigation,” *The American Economic Review* 91, no.5 (December 2001): 1369-1401.

<sup>61</sup> Matos Mar and Mejia, p.18-19.

<sup>62</sup> Ibid, p. 23: “la hacienda puede definirse como la institución socioeconomía organizada para la explotación de la tierra a gran escala, en base a trabajo subordinado y a un sistema de relaciones de dominio.” (translation: “the *hacienda* can be defined as a socioeconomic institution organized for the exploitation of land on a large scale, based on forced labor and a system of relationships of domination”

rights, taking very different shapes on the Peruvian coast (with crops such as sugar and cotton) and in the more cut-off regions of the central Andean region (producing wool and crops like coffee).<sup>63</sup> The *hacienda* as a social structure has survived 500 years by mutating and adapting to organize production in present-day Peru.

Historically, the feudalist system set up in the central Andean region required locals to be bound to the land they were born on. In this system, a *hacendado* (landowner) would lease a parcel of land to a *colono* (peasant) to cultivate his own food and live with his family. In return, the *colono* worked the *hacendado*'s land for a very low daily wage or for free.<sup>64</sup> There was a number of other works done, such as *faena* (unpaid labor work on roads and other infrastructure), *propio* (transporting products), and *pongo* (domestic work at the landowner's house).<sup>65</sup> These works would include the peasant's immediate family, too. In addition, *yerbaje* allowed *colonos* to graze their animals on a *hacendado*'s property in exchange for a number of animals given to the *hacendado*.<sup>66</sup> All of these conditions and norms imposed on the indigenous population were abusive and part of a greater social and political power enjoyed by the landed elite. De jure, *colonos* were supposedly protected against this type of work, the encroachments upon their land and other forms of discrimination and abuse. De facto, the might of the ruling elite classes mattered most to define the rules in the Andean region.<sup>67</sup>

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<sup>63</sup> Ibid, p.18.

<sup>64</sup> "In exchange the serfs were paid a nominal wage of less than 3 cents a day, apparently so that the patron could claim that no one worked for nothing." See Paige, p.167.

<sup>65</sup> Hugo Blanco, *Tierra o Muerte*, (Mexico: Siglo Veintuno Editores, 1974), p.15.

<sup>66</sup> Blanco, p.16.

<sup>67</sup> See Blanco p.17. Also, Lee J. Alston, Edwyna Harris and Bernardo Mueller, "De facto and de jure property rights: Land settlement and land conflict on the Australian, Brazilian and U.S. frontiers," (working paper 15264, National Bureau of Economic Research, August 2009). And, Paige, p.128 on titles of land not being enforced.

The biggest changes toward a system of private property rights happened after the Peruvian Independence in 1821. Simon Bolivar, the liberator of South American colonies alongside San Martin de Porres, envisioned a liberal state throughout the freed territories. This meant that the submissive role played by the indigenous people could not continue and the Peruvian state had to recognize their rights and stop the abuse. Bolivar decreed the abolition of the tribute of Indians in 1821<sup>68</sup> and following the liberal tradition of private property, in 1824 Bolivar thought it crucial to grant the indigenous people rights to their own parcels of land.<sup>69</sup> The influence of the Spanish Bourbon crown was felt throughout South America as Bolivar insisted in creating “a class of prosperous independent farmers as a social foundation for a republican government,” with the abolition of the *contribución indígena* as the beacon of a new age of equality.<sup>70</sup>

These state policies rejected the behavior of past ruling elites, who were more intent on keeping the indigenous people uneducated and bound to their lands. Unfortunately, Bolivar underestimated the power and resentment of the elite and failed to anticipate the landed elites would abuse his decrees. For example, Peter Klarén reports that “as for Bolivar’s “privatization” decree, it was followed by a massive land grab by *mestizos* (non-Indians), so that Congress passed a new law in 1828 that greatly curtailed the sale of such lands.”<sup>71</sup> As for the landmark abolition of the unjust tax on the indigenous population, the *contribución indígena* was reinstated in 1826.

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<sup>68</sup> The *Contribución Indígena* (tribute of Indians) was a heavy tax levied on the lower castes of society, mainly the indigenous populations since they were the colonized. The *contribución indígena* has survived the centuries, since it was first imposed by *encomenderos*.

<sup>69</sup> Cotlear, p.45.

<sup>70</sup> Klarén, p.146.

<sup>71</sup> Ibid.

As the elite believed they held a tight grip on the population, rebellion was brewing in the Peruvian Andes. In 1867, during the elitist rule of the Prado administration, the state increased taxes on the peasantry to fix roads and bridges and added the *Contribucion Personal*. In addition, the state attempted to implement different policies and tax schemes that were ultimately analogous to the *contribución indigena*.<sup>72</sup> The outcome was the outbreak of a “serious Indian rebellion” in the province of Huancané in the department of Puno, which “marked the beginning of a proliferation of Indian rebellions in the late nineteenth century, after a quiescence of more than three-quarters of a century.”<sup>73</sup> The rebellion spread and the elite-run government was further weakened in the War of the Pacific with Chile, which had begun in 1879. Losing the war meant that Peru was left in an economic depression, its cities in ruins, pillaged and plundered by the Chileans. The state’s coercive powers were diminished, creating an opening for social conflict to magnify.<sup>74</sup>

As the 19th century came close to the end, the elites scrambled to maintain their hold of government powers and control over the military, trying to keep the country in a tight grip. On the first year of what was termed the Aristocratic Republic (1895–1919), Congress ratified “the 1890 constitutional amendment requiring men to be literate in order to vote . . . on the premise that “the man who does not know how to read or write is not, nor can he be a citizen in modern society.”<sup>75</sup> This government actively

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<sup>72</sup> Klarén, p.176. Also, p.175: “the government began to reinstitute, if in disguised and altered forms, the previously abolished Contribución Indígenas.”

<sup>73</sup> Klarén, p.175. See also Klarén, p.194 for another example of an indigenous revolt over an increase in the head tax in 1885.

<sup>74</sup> Theories of revolution in general will point to an economic decline and the weakening of the state as a necessary yet not sufficient condition for revolution to occur, since it provides a sort of political window for action. See Skocpol, Goodwin, Foran.

<sup>75</sup> Klarén, p.206. For quote in cited text, see Florencia E. Mallon, *Peasant and Nation: The Making of Postcolonial Mexico and Peru*, (CA: Berkeley, 1995), p.275.

discriminated against the indigenous population and ensured they remained uneducated and with little prospects of development so that they would be a submissive population.

### *Property Rights in the Modern Andean Region*

The purpose of the previous section is to paint a picture of everyday life in the Andean region and understand where communal holding of land came from and why it persists as a useful strategy for some indigenous communities. This section aims to dig deeper into the property rights structure in modern Andean Peru. In that respect, this is an attempt to address Libecap's first question presented in the previous chapter: "What are the losses of the common pool that motivate individuals to contract for property rights?"<sup>76</sup> This section looks at productivity issues in the Andean region, which are arguably a result of insecure property rights.

The previous section documented technologies developed by the Inca culture to overcome the difficulties of their environment, such as the construction of *andenes* to improve agricultural yields in higher altitude areas. These innovative techniques are still useful today, yet more than half a millennium later, peasants in the Andean region have failed to develop or adopt modern technologies. For instance, "while the Inca foot plow now usually has a steel rather than a stone blade, the foot plow and the Inca *adze* are still the principal implements of cultivation in most Andean communities."<sup>77</sup> With a limited set of skills, tools, and low level of education, the Andean peasant is unfortunately a very unskilled and inefficient worker.

The landowner's production process is also plagued by several inefficiencies. Jeffrey Paige argues that the landowner's control of force over the colonos and the serf-

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<sup>76</sup> Libecap, p.12.

<sup>77</sup> Paige, p.164

landowner relationship dictated “the labor supply of the hacienda,” which “depended ultimately on the threat of force” that the *hacendado* had at his disposal.<sup>78</sup> This meant keeping serfs through force was more profitable than modernizing and adopting mechanic methods to increase productivity and reduce the amount of labor required. In addition, the *hacendado*’s inefficiency is heightened by the lack of competition due to the cut-off geographic location that limits the number of producers in the area as well as the landed elite’s control over access to global markets. Paige also realizes this and remarks that “in fact in a free market situation the inefficient *patrón* would rapidly lose out to small holders.”<sup>79</sup> Therefore, we observe the curious situation where both the *colono* and the *hacendado* are deemed inefficient, as they both adopt sub-par types of technology and have very low production levels.

Paige argues *colonos* and *hacendados* are fundamentally at odds, since these two groups are competing for the same resource and “the expansion of the lands or agricultural production of one are invariably at the expense of the other.”<sup>80</sup> In addition, this situation of mutual inefficiency is interesting because it leads Paige to conclude that “in such a situation any change in the status quo is dangerous to both sides,”<sup>81</sup> under the assumption that if they modernize, the *colono* would lose out to machinery and the *hacendado* would lose because of an increase in salaries if the *colonos* are allowed to enfranchise and join a union.<sup>82</sup> However, this analysis is incomplete. The fact that there is a limited quantity of land does not mean that *colonos* and *patrones* must be in constant

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<sup>78</sup> Paige, p.170.

<sup>79</sup> Paige, p.170.

<sup>80</sup> Paige, p.171.

<sup>81</sup> Paige, p.171.

<sup>82</sup> This is actually what happened in the big haciendas on the coast (sugar and cotton). Landowners decided to adopt new technologies and mechanization. This in turn meant that maintaining serfs on the land was no longer profitable (they are too costly) and so instead *hacendados* hired wage labor. Labor unions appear.

conflict; it means that clear, tradable and enforceable property rights must be established over the land. As shall be explored in the fourth chapter, the property right structure in place in the Andean region is not conducive to investment and cooperation towards growth.

In fact, the weak enforcement and incomplete property rights structure of Peruvian feudalism prevented development in the Andean region. However, these mutually reinforcing inefficiencies did not survive much longer. The following chapter makes the argument that the actual forces behind the sprouting of indigenous rebellions can be traced back to an economic motivation (changes in prices) to overcome inefficiencies, whereas the escalation of conflict can be attributed to insecure property rights.

### Chapter 3: Factors that Motivate Change

The previous section outlined the many changes that occurred in the system of land tenure in Peru since the Inca Empire, transitioning through Spanish colonization, Independence, and the new republic. The Spanish *reducciones* created the first indigenous communities while legislation at the turn of the 19th century gave the indigenous people private rights to the lands they worked. However, the landed elite acted to undo the rights given to peasants by contesting titles to land and encroaching on communal land. The pattern that emerges from these changes in the distribution and organization of land is a decisive move toward more privately held property.<sup>83</sup>

This section discusses two cases, wool and coffee, where changes in the demand for an export commodity translated into a direct increase in the relative value of land. This in turn prompted the landed elite to use their power to encroach on communal land. These efforts were met with resistance from the indigenous people. The first case, the opening of the market for wool led to massive encroachments, which in turn resulted in bloody rebellions discussed in the following chapter. The second case, a rise in the price of coffee after WWII, also translated into an increase in the relative value of land. This time though, the landed elite was considerably weaker than almost a century earlier and did not have as strong of a hold on their lands as in the first case, resulting in several successful land invasions led by organized peasants.

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<sup>83</sup> Cotlear agrees, especially with population pressure pushing for a transition to private property. See Cotlear, p.47: “cuando la tierra empezó a escasear, los derechos de propiedad tendieron a una mayor privatización.”

### *Change in Relative Prices*

In his original paper, Demsetz realized that “the emergence of new property rights takes place in response to the desires of the interacting persons for adjustment to new benefit-cost possibilities.”<sup>84</sup> As a case study, Demsetz revised the history of the “development of private rights in land and the development of the commercial fur trade”<sup>85</sup> in different Native American tribes. Demsetz found that the newly created fur trade caused an increase in the value Native Americans placed on beaver fur. In turn, the higher value of furs led to a significant increase in the scale of hunting. However, it is the open access nature of the property rights over beavers that exacerbated the externalities of the fur trade. Accordingly, Demsetz observes the solution found by the parties involved was a clear move toward more privately held property.

Peruvian history presents two similar cases: wool and coffee. The advent of the wool trade in Peru in the 1880s led to an increase in the value of the commodity, which translated into a rise in the value of land in the Andean region. After WWII, the price of coffee soared also resulting in a revaluation of the land. Indigenous communities in the Andean region, like their Native American counterparts, realized a system of private property could be a better way to organize their economic activities. However, their efforts were met by the landed elite’s opposing interest. The weak protection of property rights and skewed balance of power hindered the renegotiation of contracts, leading to conflict over land.

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<sup>84</sup> Demsetz, p.350.

<sup>85</sup> Demsetz, p.351.

*Wool: The Advent of a Market in Andean Peru*

The international price for wool declined as the 19th century came to a close, hitting an all-time low in 1885. This change in prices relocated production around the globe. Initially, “London was the main international wool market in the nineteenth century.” However, between the 1880s and the 1930s, Australia decided to establish its own wool auction house, rescinding British services and contesting much of the growing wool market.<sup>86</sup> Australia was however relatively unique in the relocation of its wool auction market. Other smaller producers such as “New Zealand, South Africa, Argentina, and Uruguay continued to rely more heavily upon a mixture of the London market and local sale by private treaty”<sup>87</sup> as outlets for their production.

Peru was one of those cases, especially since it had only recently joined the international wool market. Frank William Taussig describes how U.S. producers preferred to import cheap wool from places like Peru and focus on the high-quality, expensive wool production instead. The imposition, abolition and re-imposition of American tariffs on wool between 1894 and 1897 determined the dramatic variation in the demand for wool imports.<sup>88</sup> Regardless of the relatively small role Peru played in the international plain, its production was crucial to places like the United States.

Actual prices for international wool market auctions are not readily available, yet anecdotal evidence on the Peruvian case from different sources help to sort out the details. First, there was an increase in the volume of alpaca and sheep wool exports, rising from a low average of 2,624 metric tons in the 1900s to a peak of 5,286 metric tons

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<sup>86</sup> Simon Ville, “The Relocation of the Market for Australian Wool, 1880 – 1939,” (working Paper, University of Wollongong, 2002). The quote comes from page 1.

<sup>87</sup> Ibid, p.2.

<sup>88</sup> Frank William Taussig, *Some Aspects of the Tariff Question* (Cambridge: Harvard University Press, 1915). See Part IV, Chapter XIX.

in the 1910s.<sup>89</sup> The wool trade proved to be very profitable, though very unstable in terms of prices. For instance, there was an incredible boom in the wool market in the first decade of the 20th century only to see wool prices plummet after 1917. The price “paid for top-grade Peruvian sheep wool fell from 50.5 pence per pound in 1918 to 39.5 pence in 1920 and to 11.5 pence in 1921.”<sup>90</sup> This drop in prices had serious repercussions in the Andean region, as the landed elites tried to ride out the drop in prices by passing the losses on to the already impoverished peasants, driving them to the brink of rebellion.

Even though the price of wool fluctuated during the late 1800s and at the beginning of the 20th century, Peru experienced a very specific change: the opening of the market for wool. Wool had been traded for a long time in the international markets, especially by Britain, but Peruvian producers entered the market late in the game. Therefore, even with a fluctuation of the price of wool, this was a brand-new opportunity that proved more profitable than other opportunities to sell goods being produced in the Andean region that did not have a wide international demand as wool. In fact, wool was said to make up 73 percent of exports in the southern Andean region of Peru.<sup>91</sup> It is the appearance of this opportunity, brought about by the opening of Peruvian production to international markets that led the abusive landed elite to further repress the indigenous communities and encroach on their lands.

*Coffee: The Growth of an International Market*

The market for Peruvian wool remained strong into the 1950s, and so did the value of land. A second shock to the Andean economy occurred after World War II when

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<sup>89</sup> Klarén, p.207.

<sup>90</sup> Klarén, p.245.

<sup>91</sup> Klarén, p.263.

the price of coffee soared 1,200 percent from 1.2 soles in 1945 to 14.8 in 1954.<sup>92</sup> The production of coffee beans increased steadily and grew from 1 percent of total agricultural exports in 1948 to 30 percent in 1970 (see table 1).<sup>93</sup> The table shows that sugar and cotton comprise the larger share of exports in the Peruvian economy, yet these are coastal crops and have little direct effect on the Andean economy or its politics. On the other hand, coffee and wool are traditionally crops from the Andean region.

**Table 1: Principal Agricultural Exports as a Percentage of Total Agricultural Exports 1948-1970<sup>94</sup>**

YEAR	EXPORT			
	<i>Sugar</i>	<i>Cotton</i>	<i>Coffee</i>	<i>Wool</i>
1948	43	53	1	2
1949	—	—	—	—
1950	28	64	0	7
1951	25	63	0	10
1952	28	67	2	2
1953	32	60	5	2
1954	29	57	6	7
1955	30	52	7	5
1956	24	63	7	6
1957	35	48	9	7
1958	26	57	12	5
1959	28	53	12	7
1960	32	50	13	5
1961	36	46	13	4
1962	29	52	13	5
1963	33	48	13	6
1964	31	45	18	6
1965	26	40	21	8
1966	28	50	17	5
1967	36	35	19	6
1968	42	24	21	9
1969	29	35	23	8
1970	39	23	30	3

<sup>a</sup> United Nations Statistical Office, *Yearbook of International Trade Statistics and World Trade Annual and Supplements*.

The changes in the price of coffee in international markets and the resulting expansion of the domestic production of coffee translated into a direct increase in the

<sup>92</sup> Klarén, p.313.

<sup>93</sup> Klarén, p.207: “Also incentivized by strong international demand, coffee exports quadrupled between the end of the War of he Pacific [1884] and 1902.” This is an earlier expansion in the coffee market though. Not sure of its effect on land value and conflict probabilities.

<sup>94</sup> Table printed in Paige, p.129.

value of land. As predicted by the theory of contracting for property rights, the change in relative prices of a coffee created the incentive to renegotiate contracts for land.

As will be shown in the following section, the landed elite chose to repeat the strategy it employed during the wool boom in the 19th century and encroach on the land of indigenous communities. However, the landed elite was not as powerful in the latter half of the 20th century, limiting its ability to avoid proper renegotiation of land and instead grab indigenous property. Moreover, there is evidence that peasants were becoming small-scale capitalists during the expansion of the coffee market in the 1950s and had organized into political bodies.

### *Contract Renegotiation*

#### *Wool: Land Encroachment*

As producers in the Andean region responded to the advent of the market for wool in Peru the use of land-intensive primary product exports expanded considerably.<sup>95</sup> Thus, “encroachment on these [communal] lands increased to create new haciendas, especially if these could provide new export commodities, such as alpaca wool, or provide access to the new railroads.”<sup>96</sup> Land encroachment is not a surprising consequence of the increase in the relative value of land, yet it warrants an explanation. As outlined at the beginning of this chapter, Harold Demsetz studied a similar case to that of wool in Peru: the opening of the market for furs to European demand. This in turn created the incentives

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<sup>95</sup> Matos Mar argues the capitalist development in the Andean region lead to a higher concentration of lands in the hands of the *hacendados*, p.22-3: “a finalizar la década del 50 la estructura agraria ofrecía un perfil complejo y heterogéneo, definido por la coexistencia de tres regimenes productivos, disímiles aunque estrechamente articulados: capitalismo, servilismo y producción parcelaria.”

<sup>96</sup> Albó, p.19. See also Cotlear p.43 “la mayor parte de las grandes haciendas de la sierra se formaron durante el “boom” de la lana a fines del siglo XIX. En ese momento, la población había crecido y la tierra ya no era tan abundante como antes. Las haciendas crecieron mucho apropiándose de las tierras de las comunidades vecinas en un episodio doloroso y a menudo violento que reforzó en las comunidades la tendencia hacia la escasez de tierra causada por factores demográficos.”

for the evolution of the Native American's land tenure system, taking a decisive step toward private property wherever the price and demand for furs rose. As Libecap later identified, the first of the possible factors that can motivate a renegotiation of contracts, a change in relative prices, is present both in the fur case as in the case for wool in Peru in the 1880s. However, the crucial difference is the presence of a powerful and abusive landed elite and insecure property rights in the latter case.

The option to renegotiate contracts is a much more complicated endeavor and only small advances were made toward more privately held property in the hands of the indigenous population. The direct effect of the elite's encroachment on communal lands was a loss of land among the relatively weak peasants. Nelson Manrique argues that the War of the Pacific from 1879 to 1884 significantly weakened peasants, as they saw much of their manpower and agricultural output decreased as it was commandeered for war.<sup>97</sup> Thus, Klarén concludes that "as a result, many communities were left vulnerable to land encroachment by *latifundista* [landowner] competitors during the postwar recovery, which was led by sharply rising wool exports."<sup>98</sup>

For instance, the *ayllu* began to disappear as the powerful landowner elite took over more lands and fueled conflicts related to the competition for the access to land and raw materials.<sup>99</sup> As the size and breadth of the wool market expanded, the landed elites initiated a "process of land consolidation, which saw the transfer of land from smallholders to *hacendados* and a corresponding increase in the number of tenants on

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<sup>97</sup> Nelson Manrique, *Las guerrillas indígenas en la Guerra con Chile: campesinado y nación*, (Lima: Centro de Investigación y Capacitación, 1981), p.197.

<sup>98</sup> Klarén, p.207.

<sup>99</sup> See Paige, p.129-130. Paige argues this is the case during the coffee boom.

large estates.”<sup>100</sup> In fact, the number of haciendas in Puno increased from 705 to 3,219 from 1876 to 1915.<sup>101</sup> In 1887, *Hacienda Tucle* held 12,000 titles to land and increased its holdings to 103,000 by 1915.<sup>102</sup>

The landed elite’s tactics to encroach on the peasants’ lands included the early foreclosure of debts, purchase of indigenous lands and accumulating parcels of land around their haciendas.<sup>103</sup> Corruption in government agencies also contributed to the concentration of lands in the hands of the elite. Eric Hobsbawm documents the “shamelessness” of government procedures, such as in the case of communal land in Chimbote (northern Peru) being auctioned off by the state to the higher bidder in 1870.<sup>104</sup>

In the Peruvian case, the landed elite realized that, given its advantage over power and violent means, a strategy of encroaching on the land of the less powerful and unorganized peasants would yield the best result at the lowest cost. Research done by Constantin Sonin on the so-called Russian “oligarchs” provides evidence “that in Russia, as well as in some other transition economies, rich agents are the main beneficiaries of poor protection of property rights.”<sup>105</sup> As in the Peruvian case, the powerful group in society can secure a larger profit by investing in the private protection of property rights and appropriative measures, such as encroachment and rent-seeking activities. The larger implication of Sonin’s study is that the poor protection of property rights results in the diversion of productive resources to the private protection from appropriation, leading to

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<sup>100</sup> Klarén, p.175-6.

<sup>101</sup> Nelson Manrique, *Yawar Mayu: Sociedades terratenientes serranas 1879-1910*, (Lima: DESCO/IFEA, 1986).

<sup>102</sup> Juzgado de Tierras, Huancayo: Expediente 70/1385/2 C, fj 468, 469.

<sup>103</sup> Klarén, p.207.

<sup>104</sup> Eric Hobsbawm “Peasant Land Occupations,” *Past and Present*, no.62 (Feb, 1874), p.12.

<sup>105</sup> Constantin I. Sonin, “Inequality, property rights, and economic growth in transition economies: theory and Russian evidence,” (working paper no. 2K/02, Moscow: Economics Education and Research Consortium), p.4.

slow economic growth, such as in the Andean region. The landed elite's choice to appropriate will be explored in more detail in the following chapter.

*Coffee: Land Grab and Land Invasions*

Similar to the wool episode, the response to the relative increase in the price of coffee was a massive “land grab” this time by the peasants and the landed elite. For example, *hacendados* in the Andean region turned to policies of “restricting or even evicting *colonos* from their plots.”<sup>106</sup> The landed elite, trying to repeat their previously successful strategy of encroachment on the lands of the indigenous communities, found themselves in a far less favorable situation than half a century earlier. The landed elite on the coast, producing the more important sugar and cotton crops, had garnered most of the political and social power in the country and had no intention of sharing it with the Andean elites. Moreover, the peasants were more powerful this time around. They had been organized by the political left and resolved collective actions problems that meant they gained power through numbers.

A second type of renegotiation of contracts appeared in the Andean region as a result of the change in relative price of coffee: subcontracting of land. Originally, a *colono* would rent and work a piece of land from the landlord. As the expansion of the demand for coffee fueled the interest in increased production of the commodity, the *colono* understood there was a profit to be made from increasing productivity of his parcel of land. Thus, to take the most advantage of the rise in prices he rented out a piece

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<sup>106</sup> Klarén, p.293.

of the land he worked to another peasant.<sup>107</sup> In most cases these were landless peasants from neighboring communities, called *suballegados*. This new strategy, resulting from “the economic possibilities of increased coffee production made it possible for the *arrendire* [similar to *colono*] to find ways to spend more time on his own plot and less time working for the *hacendado*,” effectively transforming peasants “into small businessmen.”<sup>108</sup>

### *Conclusions*

This chapter presents two case studies in Peruvian history that show an increase in the relative price of an export commodity—wool and coffee—and the subsequent valuation of land in the Andean region. Moreover, it documents the response taken by the peasants and landowners to capitalize on the profit opportunity presented by the advent of the wool market in Peru and the post-war rise in the price of coffee. The peasants decided to invest small amounts in their lands and become small capitalists by renting out some portions of their land, whereas the landed elite decided to use its coercive power to encroach on communal lands.

Both case studies show that a change in the relative price of an export commodity created a motivation for the renegotiation of contracts over land and constituted a major

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<sup>107</sup> Several scholars have noted this. See Jose Carlos Fajardo, *Organización y participación política en el Perú, antes y durante el gobierno de Juan Velasco Alvarado*, (Lima: Editorial Universitaria, 2009), p.171. On colonos subcontracting their land to suballegados, see Gustavo Palacios Pimentel, “Relaciones de trabajo entre el patrón y los colonos en los fundos de la Provincia de Paucartambo,” *Revista Universitaria del Cuzco* no.112, (1967): 174. On the decomposition of the traditional hacienda, see Camilo Cevallos, *Dos haciendas latifundio típicos en el Departamento del Cuzco*, (Thesis, Universidad Nacional San Antonio de Abad, 1975). On peasants becoming *hacendados* themselves, see Francois Bourricaud, *Changements a Pun: Etude de Sociologie Andine*, (Paris: Institute des Hautes Etudes de l’Amerique Latine, 1962). On Andean social stratification and the bourgeois peasant, see Carlos Samaniego and Bryan Roberts, *El Significado de la SAIS en la parte alta de la sierra central del Peru* (Lima: CISE, Universidad Nacional Agraria La Molina, 1976).

<sup>108</sup> Paige, p.178-9.

catalyst for institutional change from the bottom up. The semi-feudal system in place in the Andean region was not efficient and eventually lost out to new institutions and a general push toward private property fueled by economic factors.<sup>109</sup> The following chapter considers the scenario when the renegotiation of contracts breaks down because of costly enforcement of property rights and the opportunity created by lower transaction costs.

Some other exogenous shocks had a major impact on the politics of the area. For example, an increase in population in the Andean region exacerbated the conflict over land as scarcity over this resource became apparent. After WWII, the increase in the price of coffee heightened the competition over arable land and led peasants to invade lands the *hacendados* had encroached upon. However, several *comuneros* chose to migrate to mining areas, cities and plantations, which helped to mitigate the scarcity of land. Moreover, the appearance of a market economy also brought along a set of important changes that affected the structure of property rights, such as specialization, trade, competition, and a stronger state. Finally, droughts and other natural disasters were also responsible for some of the strain on the region, as they caused sharp drops in output and income.<sup>110</sup>

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<sup>109</sup> For a relevant comparison in Europe, see Douglass North and Robert Paul Thomas, "The rise and fall of the feudal system: A theoretical model," *Journal of Economic History* 31, no.4: 777-803.

<sup>110</sup> Klarén, p.311.

## Chapter 4: Failure to Renegotiate Contracts

This chapter addresses the breakdown in the renegotiation of contracts over land due to insecure property rights. Further, this chapter documents the actual conflicts—the rebellions and land invasions—defined at the beginning of this essay as the puzzle to be solved. The first section considers Collier’s *feasibility theorem* and the *paradox of power* in the economics of conflict to address Libecap’s third question, “what can go wrong in contracting?”<sup>111</sup> The final section offers an in-depth analysis of the conflict scenarios in Peru that can be qualified as failures to deal with the increase in the relative price of wool and coffee because there was no efficient long-term change in the allocation of land.

### *Breakdown*

Why do we observe rebellion in the early 1900s and in the 1960s? First, land became more valuable because of a change in the price of wool and coffee, and this in turn created the motivation to renegotiate contracts over land. This section reviews two possible explanations of the emergence of conflict situations following a change in land value. The following two subsections review Collier’s *feasibility theorem* and explore certain insights from the economics of conflict literature to determine if these theories are applicable to the Peruvian case. The emerging picture in this chapter shows the link between property rights and conflict. The dearth of alternatives for renegotiation in an environment of weak enforcement and insecure property rights led to the emergence of conflict in the case of wool and coffee.

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<sup>111</sup> See chapter 1 and footnote 28: Libecap, p.12.

### *Feasibility Theorem*

Paul Collier presents the *feasibility theorem* in his most recent paper on civil war:

“Hirshleifer (2001), who pioneered much of the analytic research on conflict, proposed the Machiavelli Theorem, that no profitable opportunity for violence would go unused. Our variant of this theorem, the feasibility hypothesis, proposes that where rebellion is materially feasible it will occur.”<sup>112</sup>

The assumptions made within Collier’s model are reasonable, including that individuals are rational, respond to profit incentives, and are bounded by the resources they can access. Collier’s work, however, explores this claim as an empirically testable hypothesis, limiting its explanatory power to a superficial level of general comparisons across countries.

The strength of Collier’s approach, and its applicability to the Peruvian case, is his introduction of the feasibility measurement, in addition to the previous greed and grievance proxies for motivation to engage in conflict. The economic shock introduced by the advent of the wool market and the relative increase in the price of coffee can be understood as factors behind the creation of a feasible scenario for rebellion to occur. In a sense, the palpable potential profits that could be derived from the wool or coffee trade constitute clear incentives to risk rebelling and engaging in a strike, rebellion or land invasion.

### *The Paradox of Power*

The economics of conflict literature is especially useful to incorporate weak property rights to a scenario of cooperation or conflict. This literature parts from analyses that do not consider the consequences of unenforceable contracts or economic actors who

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<sup>112</sup> Collier Hoeffler and Rohner, “Beyond greed and grievance: feasibility and civil war,” p.3.

resort to appropriation as a form of wealth acquisition. Harold Demsetz's story of a progression toward private property as the resources become more valuable is correct, yet his is an example of a relatively straightforward progression without major complications.

However, property rights are not as simple and an enforced and protected property right is a rare occasion. In the Peruvian case, the interesting story emerges as we zoom in and look at the process of the evolution of attempts at the establishment of property rights. As it turns out, it is very common to have areas where property is constantly contested and snatched from their momentary owners. This sub-section attempts to explain the emergence of conflict over a valuable resource and the apparent choice of lower productivity by peasants and landowners as a response to the weak enforcement of property rights and the *paradox of power*.

The property rights structure of Peruvian feudalism prevented development in the Andean region. In chapter 2, the *colono* and the *hacendado* were described as displaying low productivity in their management of the land and production of export commodities, such as wool and coffee, in modern Andean Peru. The question posed was "why do they adopt sub-par technology and remain inefficient?"

As mentioned in chapter 2, if both the *colono* and the *hacendado* decide to modernize, the *colono* would lose out to machinery, whereas the *hacendado* would lose because of an increase in the salaries if the colonos are allowed to join a union. The situation in the Peruvian Andes is an example of the paradox of power. Incomplete or poorly defined property rights and the enforcement of contracts can lead to a situation where "whoever is relatively more productive will have a smaller chance of enjoying the

output she produced with her opponent.”<sup>113</sup> In the case of the Peruvian Andes, the *hacendado* emerges as “the agent who is less effective in useful production” and thus specializes in appropriating resources, meaning he “will be the more powerful agent, in the sense that she has the greater chance of emerging as the winner of the conflict to take sole possession of total output.”<sup>114</sup>

To avoid the paradox of power, property rights must be secure. If this is the case, the *hacendado* can modernize and expand his export production while the *colonos* can improve their productivity and get a higher yield out of their crops to sell on the global market. However, if *colonos* invest in their skills and in their land without the guarantee that they’ll keep the land, they will be once again prey to the landed elite. Paige argues that the payoff of quiescence vs. rebellion was of great importance to peasants:

“The marginal economic position of the *colono* made him unwilling either to risk mass economic action or to aid those who had attempted it and suffered the consequences. Even if a strike were successful, however, the gain to the *colono* would be slight.”<sup>115</sup>

However, it is not simply the extreme poverty of the peasant, where starvation is a likely outcome that explains why he would be so risk-averse. The *colonos* must act in an environment of insecure property rights and poorly enforced contracts. It is well known that peasants from indigenous communities and *colonos* often hold nominal titles to their land, yet they find they are ultimately subject to the political and economic power of the *hacendados*, who make indiscriminate use of violence and abuse to take over less powerful people’s land.

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<sup>113</sup> Garfinkel and Skaperdas, "Economics of Conflict: An Overview," p.17.

<sup>114</sup> Garfinkel and Skaperdas, "Economics of Conflict: An Overview," p.16.

<sup>115</sup> Paige, p.173.

Put simply, the potential of a successful outcome is low in itself, given the level of subsistence in which most peasants live, added to the uncertain probability of actually cashing in on the deal. Therefore, the lack of clearly defined and protected property rights heavily curtails the peasant's interest in investing in his land or human capital improvements. It also means that they do not want to take risks, like trying out new seeds that could possibly boost their productivity. A common saying from the area helps to illustrate the point: "A man who paints a board which is not his own loses both the paint and the board."<sup>116</sup> Nevertheless, there are possible exogenous changes that are capable of shaking the outcome pay schedule as well as the enforcement of property rights.

The opening to the wool market and the 1,200 percent increase in the price of coffee created a new game strategy for both the *colono* and the *hacendado*. The peasants found a new employment alternative, catering to international markets rather than the abusive landed elite and the landowners found realized the opportunity to profit from international demand for their products. Under a system of secure property rights, cooperation and productivity improvements can make both the *colono* and the *hacendado* better off. In reality, the *colono* had to rebel to secure his right over the lands he worked because the *hacendado*'s strategy was to intensify his abusive campaign to appropriate communal lands.

During the first change in economic factors brought about by the advent of the wool trade, the *hacendados* had the upper hand in methods of appropriating resources. As described in chapter 3, the exponential growth of the number of haciendas in the southern Andes and the disappearance of the *Ayllu* as communally held land are evidence that the landed elite controlled negotiations. They were the most powerful players at that time.

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<sup>116</sup> Cited in Paige, p.171.

Nevertheless, the heightened interest in land, the encroachment and the violent abuses of the landed elite would contribute “to the outbreak of a wave of violent peasant revolts that swept through the southern highlands during the second decade of the twentieth century,”<sup>117</sup> discussed in the following section.

In the case of the price of coffee after WWII, not only were payoffs for renegotiating contracts increased dramatically, motivating peasants to take a chance with a new crop like coffee, but the power relationship between the serf and the landowner had begun to shake and cave in at the base, as peasants gained more political power to defend and enforce their property rights. Now, the battle between poor and rich, weak and strong, was no longer fought on such uneven grounds of massive inequalities and discrimination. Even though violence remained “the economic tool of the *hacendados*, (...) the market economy [became] the revolutionary instrument of the peasants.”<sup>118</sup>

### *Conflict in Andean Peru*

#### *Wool: Rebellion in the Highlands*

The result of the landowners’ encroachment on communal lands resulted in a small wave of rebellions, which began with the Rumi Maqui Rebellion of 1915–16. The rebellion was made up of several hundred peasants led by Jose Maria Turpo, who decided to violently invade haciendas in Puno. The movement was known to be inspired by the Bolshevik revolution in Russia, making it distinctively proletariat-centered and driven by a political agenda. The purpose of the rebellion was to stand against the landowners’ terrible habit of grabbing communal lands, as well as an uprising against the “abusive

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<sup>117</sup> Klarén, p.209.

<sup>118</sup> Paige, p.181.

local authorities who sought to monopolize the production and commercialization of wool at the expense of the peasant communities.”<sup>119</sup> The Rumi Maqui rebellion was a failure, with the death of 10 to 132 peasants and the execution of the leader, Turpo. The landed elite at the beginning of the 20th century was very powerful and commanded its own miniature army of heavily armed estate employees who served as soldiers in times of trouble to fend off the troublesome peasants.<sup>120</sup>

Regardless of the failed rebellions at the turn of the 20th century, the indigenous community had successfully begun a social movement. As the boom in the price of wool came to an end, and the price of wool plummeted after 1917, the pressure in the southern highlands increased. The conflict between the peasant and the landowner was no longer over land, since the value of this had decreased, but it was over the landed elite’s abuse of the indigenous communities. The drop in prices economic hardship for the landed elite, who in turn tried to pass on the costs of the readjustment in prices to the indigenous communities, who were also suffering from the decrease.

This created the social conditions under which a slightly different type of revolution formed. This one was characterized by “local demonstrations, confrontations, and small-scale actions,”<sup>121</sup> which were disregarded by the landed elites. In fact, the *hacendados* went to great lengths to convince the government and the public that the manifestations were “an incipient peasant revolution aimed at abolishing all property rights and exterminating whites.”<sup>122</sup> As exaggerated a claim as this is, it evidenced the

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<sup>119</sup> Klarén, p.229.

<sup>120</sup> Klarén, p.228.

<sup>121</sup> Ibid, p.245.

<sup>122</sup> Ibid, p.245.

landed elite's agenda of control over the indigenous population and their intent to continue with their land grabbing strategies.

The abuses of the landed elite and the worsening living conditions of the indigenous community circled around the unstable property rights structure in the central Andes. Thus, addressing property-rights issues and recognizing rights of the indigenous communities in general became a central public-policy concern for the government, resulting in the *Indigenista* movement in the urban area. For the first time, the Constitution of 1920 included an “official recognition of Indian communities” and gave the government the power to act as “the intermediary in property disputes between landlords and peasants” creating some leverage between the two conflicting parties—peasants and landowners.<sup>123</sup>

Nevertheless, the advancements of the *Indigenista* movement were soon brought to a stop by the Leguía government because it “became alarmed over signs of spreading peasant mobilization and militancy of the peasants, which in some cases were beginning to degenerate into acts of violence.”<sup>124</sup> Peter Klarén believes the “climax of the peasant movement occurred in late 1923 in the community of Huancho in the province of Huancane in Puna.”<sup>125</sup> This was an attempt by the local *comuneros* and *colonos* to boycott the landed elite's control over wool markets by establishing “autonomous” markets. According to Klarén, the idea of a “free” route for the wool trade, bypassing the power and abuses of the landed elite, became a popular tactic, spreading from the province of Huancane to Azangaro. The peasants were fairly well organized and

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<sup>123</sup> Klarén, p.247-8.

<sup>124</sup> Ibid, p.249.

<sup>125</sup> Ibid.

managed to repel the forces of the landed elite, but succumbed to the power of the Peruvian army, resulting in the death of “perhaps 2,000 community peasants.”<sup>126</sup>

There was no clean continuation in government regulation protecting indigenous communities and the high number of casualties in the rebellions weakened the indigenous movement. The price of wool recovered after 1923 and the economic “break” calmed the waters for the peasants and the landed elite. For the following 30 or so years the Andean region would return to its peaceful and quiet quiescence, interrupted only shortly and abruptly by banditry and cattle rustling, which had become “endemic forms of social protest in the region”<sup>127</sup> and resistance to the surge in power enjoyed by the landed elite. However, the peace would not last for long in the mountains.

#### *Coffee: Rebellion and Land Invasions*

In the 20th century, the division of land in Peru was mostly concentrated in the hands of an oligarchy, which had social and political power over the peasant population.<sup>128</sup> According to table 2 below, 61 percent of all hectares were in the hands of 0.1 percent of the population, whereas 83.1 percent of the population shared 5.7 percent of all hectares.

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<sup>126</sup> Klarén, p.249.

<sup>127</sup> Ibid.

<sup>128</sup> See Klarén, p.323: “Sociopolitically, Peru, at the beginning of the 1960s, had arguably the worst concentration of wealth and income of any country in South America. For example, the top 5 percent of the population received 48 percent of the national income. Even more striking, 19 percent of the national income went to only 1 percent of the population. By contrast, the bottom two deciles received only 2.5 percent.”

**Table 2: Land Concentration in Peru, 1961**

Size of Holdings (hectares)	Number of Units	Percent of All Units	Hectares	Percent of All Hectares
1	290,000	<b>34.1</b>	127,869	<b>0.7</b>
1-5	417,357	<b>49.0</b>	926,851	<b>5.0</b>
5-20	107,199	12.6	879,385	4.7
20-100	24,628	3.0	980,058	5.3
100-500	8,081	0.9	1,624,643	8.7
500-1,000	1,585	0.2	1,065,157	5.7
1,000-2,500	1,116	0.1	1,658,636	8.9
>2,500	1,091	<b>0.1</b>	11,341,981	<b>61.0</b>
All holdings	851,057	100.0	18,604,500	100.0

Source: Comité Interamericano para el Desarrollo de la Agricultura (CIDA), Tenencia de la Tierra y Desarrollo Socio-económico del Sector Agrícola en el Perú, Washington, D.C., Pan American Union, 1966. Reprinted in Cleaves and Scurrah (1980, p.32), cited in Powelson and Stock (1990, p.272).

According to Cynthia McClintock, before the 1969 agrarian reform more than 30 percent of day laborers, sharecroppers, and migrant workers owned no land.<sup>129</sup> Income inequality in the Andean region was painfully obvious with *hacendados* earning 100 times the incomes of their employees.<sup>130</sup> Moreover, the indigenous population was often discriminated against and mistreated, as well as effectively barred from voting in the national elections since literacy used to be a requirement to participate in the elections.

The social and economic development of the indigenous people was kept at a minimum by the elites<sup>131</sup> until a grassroots social movement of organized peasants decided to take back ex-communal lands by invading and squatting on *haciendas*. The factor behind this sudden change in strategy from decades of quiescence to rebellion was the rise in the price of coffee by 1,200 percent after WWII.

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<sup>129</sup> Cynthia McClintock, "Peruvian 'Revolution from Above' (1968-1975)," in *The Encyclopedia of Political Revolutions*, ed. Jack A. Goldstone (Congressional Quarterly Inc., 1998): pp. 394-395.

<sup>130</sup> Klarén, p.324.

<sup>131</sup> Leslie Bethell, "The Cambridge History of Latin America," (New York: Cambridge University Press, 1984), p.355.

In the first case study, the change in the demand and price for wool at the turn of the 20th century was cause for some revolts in the southern highlands as a response to the encroachment of lands by the abusive *hacendados*. These rebellions were crushed and dissipated by the landed elite's private army and the Peruvian military. However, half a century later in the late 1950s, the situation in the Peruvian Andes was completely different. This time around, the spike in the price of coffee resulted in relatively successful land invasions<sup>132</sup> in haciendas commanded by organized (and politicized) *comuneros* and their families.

Peasants became politicized as leftist political parties got organized in the country and overcame a number of collective-action issues, allowing them to successfully take back land from the landed elites in a peaceful process (in terms of victims of violence).<sup>133</sup> Peasants began to organize as early as 1952, creating unions of colonos in haciendas of the southern Andes. The progress of the union and their spread and influence was slow; however in 1958, several unions began to take shape in the Andean region. In the provinces of La Convencion and Lares, a crucial union formed, called the Federacion de Trabajadores Campesinos (FTC). They would spearhead the land invasion that began in 1959. The FTC had influence and connections that no peasant union had ever enjoyed before, receiving support from "radical lawyers in Cuzco and established ties to the

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<sup>132</sup> Land invasions: According to Hobsbawm, there are 3 types worth considering. 1) the recuperation of their own land, 2) land is owned by no one – squatting develops and "invasion" happens when there is a dispute over the land title (usually with the government), and 3) the land clearly belongs to someone and peasants knowingly expropriate. The latter case should not be confused with cases when a tenant wants to claim the land he rents, which is not properly an invasion. Hobsbawm deals with the first case of land invasions, which he believes is the prevalent case in Peru in the 20<sup>th</sup> century. See Hobsbawm, p.120-122.

<sup>133</sup> Land Invasion as a Non-Violent Strategy of Peasant Rebellion: Some Cases from Latin America  
Author(s): Gerrit Huizer Source: Journal of Peace Research, Vol. 9, No. 2 (1972), pp. 121-132.

Communist-controlled Cuzco Labor Federation,” so that the federation grew to comprise “130 unions with a total membership of 11,000 campesinos.”<sup>134</sup>

Parallel to these developments, several unions were organizing in Cerro de Pasco and being activated politically by leftist members of the American Popular Revolutionary Alliance (APRA). Genaro Ledesma, a schoolteacher, migrated from the coast to Cerro de Pasco and managed to build an unlikely coalition, tying “the grievances of the miners with those of *comuneros* who were seeking the distribution of company ranch lands.”<sup>135</sup> When Ledesma’s political undertakings failed to progress, the *comuneros* divorced themselves from the FTC movement and decided to take matters into their own hands by invading *haciendas*. However, Ledesma did manage to create “a more favorable climate for the peasants’ land actions” with his appointment as mayor of Cerro de Pasco, which he used to found the Pasco Federation of Communities.<sup>136</sup>

The idea of land invasions spread like wildfire, with unions and communities in Cerro de Pasco joining boycott’s on wealthy *hacendados*, blocking trade routes and setting up “autonomous” markets, just like in the previous century during the wool boom. The high relative change in the price of coffee had given the peasants the motivation (or feasible scenario in Collier’s terminology) to engage in rebellious actions.

Back in La Convencion and Lares, an important political figure emerged: Hugo Blanco. Very well connected and with a clear political agenda (Bolshevik), Blanco provided the leadership necessary to coordinate and amplify the effect of the otherwise isolated strikes and uprisings throughout the Andean valley. Under his guidance “the

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<sup>134</sup> Klarén, p.313.

<sup>135</sup> Klarén, p.312. On coalitions, see Mancur Olson, *Rise and Decline of Nations: Economic growth, stagflation, and social rigidities*, (Yale University Press, 1984).

<sup>136</sup> Klarén, p.312-313.

peasants took de facto control of their plots.”<sup>137</sup> Moreover, by 1962 they had “succeeded in seizing 40 of the 380 haciendas”<sup>138</sup> in the central Andean region. In the case of coffee, political organization allowed peasants to solve collective action problems, effectively lowering the transaction costs of renegotiating contracts and possibly accounting for the success and wider participation in the rebellions.

### *Conclusions*

This chapter argues that the costly enforcement of property rights and contracts can lead to a breakdown in the renegotiation of contracts over a resource, such as land. The lesson in this chapter warns against a move toward more private property without the appropriate channels to process the conflicting motivations to acquire more resources and secure contracts. If agents wish to negotiate access and decision rights to parcels of lands, a communication channel is required for a Coasean bargain to be struck between parties. If the opportunity to renegotiate titles is affected by a skewed balance of power and insecure property rights, then the impossibility of solving this issue via a peaceful reallocation of property rights and compensation might lead individuals to engage in appropriation, leading in this case to conflict and rebellion.

The rebellions at the beginning of the 19th century following the advent of the wool market were crushed by state powers controlled by the elite, as well as the elite’s private coercive force. This is an example of an uneven playing field for both economic actors to renegotiate contracts. The landed elite’s abuse of indigenous communities limits the latter’s available options to secure their property and benefit from the economic

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<sup>137</sup> Klarén, p.313

<sup>138</sup> Klarén, p.313

shock, which could ultimately lead peasants to choose rebellion, even if this is a less preferable option than the peaceful renegotiation of contracts.

In the first case, the increase in the relative price of wool and the subsequent increase in the value of land prompted peasants to renegotiate contracts by creating social movements that rebelled against the landed elite. The second case, an increase in the price of coffee, had a similar effect in the populace, creating the incentive to renegotiate contracts even through rebellion. However, by the time the second economic shock affected Andean politics, indigenous communities were not the same. Politicized by a new, active political left, the indigenous communities successfully participated in a series of carefully planned and executed land invasions. These rebellions were originally peaceful, in terms of no violence or bloodshed involved, even though they qualify properly as appropriation.

The politization of peasants is an exogenous factor that was not present in the first case. It affected the outcome of the rebellions of the 1950s, as it allowed the indigenous communities to organize and solve collective action problems. This factor effectively reduced the transaction costs peasants faced when they attempted to renegotiate contracts with the landed elite through political protests or conflict. The more favorable situation available to peasants in the 1950s gave them an advantage and contributed to the relatively successful land invasions. This scenario is the opposite of the failed rebellions and high casualties the indigenous movement suffered while fighting for land during the wool boom.

## Chapter 5: Policy Lessons and Conclusion

This policy essay explores a pattern of rebellion and conflict over land in Andean Peru from the 1880s until the 1960s. It studies the property rights structure in the region, both historically and at the time of the rebellions. Further, this research focuses on the link between a change in the relative price of export commodities—and the subsequent value of land—with the motivation to renegotiate contracts. Finally, the argument is that where property rights are insecure and contracts are poorly enforced or abused, the negotiation of contracts can break down and lead to violent conflict. The property rights structure in the Andean region in the period of time studied was not conducive to investment or cooperation because of a skewed distribution of power favoring the landed elite over indigenous communities, which prevented the efficient reallocation and use of resources. The costly enforcement of property rights in the Andean region results in lower productivity and provides an example of the *paradox of power*.

Chapter 2 told the story of the evolution of property rights in the Andean region and proved that it is something that cannot be planned. A mix of individuals responding to incentives and historical accidents caused a fluctuation in the type of property rights system from communal towards private. Changes in preferences for different tenancy systems are an important element within an institution that allows for contracts to be renegotiated in order to allocate resources efficiently. The institutional framework in the Andean region was not conducive to peaceful bargaining but rather to an expensive and violent renegotiation of contracts. More importantly, a malfunctioning institutional setting can fail repeatedly to produce an efficient economic outcome, thus slowing growth throughout the region.

The third chapter discusses the possible factors that can motivate individuals to renegotiate contracts. The study focuses on Demsetz's insight that changes in the relative price of a resource can create an incentive to develop a system of private property rights. The advent of the wool market and a 1,200 percent increase in the price of coffee are studied as two cases in Peruvian history where a change in the relative price of a resource prompted changes in the land tenure system. Moreover, this chapter discusses the different strategies adopted by peasants and landowners in order to benefit from a renegotiation of land contracts.

The fourth chapter presents a situation where a change has occurred and the parties involved attempt to renegotiate contracts. However, the costly enforcement of contracts and insecure property rights contributed to the break down in the renegotiation of contracts over land. The increase in the relative price of wool and coffee led to an increase in the value of land, creating a feasible scenario for peasants to fight for land, according to Collier's feasibility theorem. Furthermore, the relationship between indigenous communities and the landed elite reveals that insecure property rights and institutions that allow for appropriation render both the peasant and landowner inefficient and wasteful of productive resources. Finally, this chapter documented the actual rebellions and land invasions that occurred in the late 1800s and the 1960s.

This policy essay does not present sufficient evidence to make claims on the probability of conflict between a landed elite and indigenous communities over land. Nevertheless, the paradox of power and the feasibility theorem seem to point toward conflict when the balance of power is skewed and the motivation to appropriate a resource is large enough. There is a high chance that a powerful and landed elite will

encroach on land and break down the renegotiation of contracts. Opening markets in Peru created the incentive for indigenous communities to stand up and fight back abusive landowners. The result was bloody conflict and slow progress toward a better property rights system and higher productivity. However, the Peruvian case, like other developing countries, is an example of social change in progress—emerging unplanned and changing according to economic incentives. For other developing countries with powerful elites, bad political environments and recent openings to international markets, the Peruvian case offers policy lessons to hopefully avoid the breakdown and conflict over land.

Policy lessons should focus on what can be done to avoid the breakdown in the renegotiation of contracts. For example, a leveled playing field for peasants and landowners to renegotiate contracts is a necessary pre-condition. If the government is skewed in favor of the landed elite, as in the case of wool and to some extent in the 1960s, then government officials should not be given the responsibility of monitoring the renegotiation of contracts to ensure fairness and equal treatment. A second policy lesson is that indigenous communities need legally recognized rights in order to use and manage the lands they work. Many peasants held nominal titles to their lands in Andean Peru, yet *de facto* the landed elite disregarded these rights and encroached on their land. Therefore, government recognition of land titles is a first step, with a working enforcement mechanism as a necessary second step towards land tenure security.

During the 1980s, economist Hernando de Soto and his team influenced Peruvian public policy in order to undertake comprehensive land tenure reform. De Soto's team claimed that 99 percent of claims had been adjudicated and resolved.<sup>139</sup> Nevertheless, the advances toward a secure land tenure system had a limited reach and in most cases had

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<sup>139</sup> Hernando de Soto, *The Other Path*, (Lima: Sudamericana, 1992), foreword (images).

little or no effect on the economic and political organization of most Andean communities. Hence, a decentralized dispute resolution mechanism that is accessible to the Andean people is more useful and efficient than an ambitious land tenure reform conducted far from the Andean region.

Finally, allowing land markets to evolve from an initial dispute resolution mechanism is an optimal policy outcome because it ultimately gives peasants the alternative to trade out of land and into other economic activities. However, assessing the achievements de Soto's land titling efforts had twenty years later reveals that the land markets political leaders hoped would emerge to solve contracting problems did not come to fruition. Most individuals holding titles given in the 1980s did not bother to update their records as they sold properties or land was inherited. The policy advanced in the 1980s did not survive the high costs of holding a legal title. The Peruvian government imposes a high tax burden on its citizens, which in turn has created a black market of corrupt government officials offering a cheaper way to overcome bureaucratic requirements. Therefore, policies that create the right setting for land markets to emerge must go hand-in-hand with a favorable institutional environment with a low burden and high benefits of legal land tenure.

In conclusion, this policy essay understands rebellion and conflict in the Andean region as a property rights phenomenon. The policy lessons from these case studies apply to developing nations opening to international markets. In fact, the developing world is especially vulnerable to changes in economic factors. These young markets have complicated sets of property rights that serve as the most important safety valve for the

pressure for profits both peasants and landed elites experience as the relative prices of export commodities and land steadily increase.

**Glossary** (Several of these words are in Quechua, not Spanish.)

Ayllu: “Endogamous kin groups” whose function was to manage grazing lands communally and to grant members of the *ayllu* conditional rights to arable land in proportion to family size (see page 21).

Mingas: Modern-day *ayllus* that survive today in the Andean region.

Encomienda: A “trusteeship granted by the crown over large numbers of Indians as a reward for services rendered in the conquest and colonization of the New World”<sup>140</sup> (see page 23).

Encomenderos: Spanish colonizers who received an *encomienda* from the Crown.

Reducciones: Enclosures.

Comuneros: Inhabitants of indigenous communities.

Colonos: Hacienda workers in the highlands who received usufruct to small garden plots in return for various non-wage tasks on the estate.<sup>141</sup> I use this word somewhat interchangeably with peasant.

Contribución Indígena: Tax on the Indian population.

Mistis: Non-Indians (whites).

Audiencia: A hearing (like in a court) for indigenous people.

Curaca: Head of the village.

Yanaconaje: Sharecropping (seasonal industry like cotton).

Hacendado: Used indistinctively with “landowner” or “patron.”

Patron: The boss.

Hacienda: “The socioeconomic institution organized for the exploitation of the land on a grand scale, based on subordinated labor and a system of relations of domination”<sup>142</sup> (see page 24–5).

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<sup>141</sup> Klarén, p.41

<sup>141</sup> Klarén, p. 293

<sup>142</sup> Matos Mar and Mejia, p. 23.