

# RURAL DEVELOPMENT AND THE AGRARIAN REFORM PROCESS IN CHILE

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## I. INTRODUCTION

It is generally assumed that equitable land distribution and the holding of legal title to such land is a precondition to the economic growth of impoverished agrarian systems of production. In Chile, as in much of Latin America, the agrarian structure of land distribution including *latifundios*<sup>1</sup> and *minifundios*<sup>2</sup> has long been characterized as unproductive and oppressive. This paper examines the agrarian reform process in Chile and its role in the evolution of Chile's agricultural sector; furthermore, it analyzes the various periods of agrarian reform according to the scale of the sector and its movement along the long-run average cost (LRAC) curve. It contends that the process of agrarian reform that commenced in the mid-1960s provided the basis for the economic success that the sector has recently experienced, and that the interruption of this reform process by succeeding political regimes has to this day hindered the economic development of agrarian communities and peoples in Chile.

## II. INITIATION OF THE AGRARIAN REFORM PROCESS

In Chile, the process of agrarian reform and, in particular, land reform was initiated when in 1964 the Christian Democrats, led by Eduardo Frei, introduced legislation to amend the constitution - legislation that included amendments to existing property rights. According to Stallings, the essential purpose of this constitutional change was to establish the legal basis for agrarian reform (1978, 100). The process was advanced in 1967 when the government introduced a land reform and union legislation law. “[The] law meant to modernize and consolidate the capitalist mode of production and obtain a base of political support for the Christian Democrat party from the peasantry” states Kay (1976, 79). It was with this political

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1. Todaro defines *latifundio* as “[a] very large landholding in the Latin American agrarian system, capable of providing employment for over 12 people, owned by a small number of landlords, and comprising a large proportion of total agricultural land” (2003, 801).

2. Todaro defines *minifundio* as “[a] landholding in the Latin American system considered too small to provide adequate employment for a single family. A *minifundio* is too small to provide the workers with levels of living much above the bare survival minimum” (2003, 802).

motive and legal basis that the Christian Democrats began to implement their plan for agrarian reforms. The reform plan had the following goals: 1) to increase production and productivity of the agriculture sector; 2) to create 100,000 new peasant proprietors; 3) to incorporate peasantry into the economic, social and political decision making process; and 4) to raise rural living standards (Kay, 1976).

Specifically, the reform process included the following mechanisms and conditions, described extensively in Kay (1976). First, the Christian Democrats restricted the capital inputs that could be expropriated. They did not provide for the expropriation of livestock or machinery; as well, they allowed for landowners to choose a parcel of good irrigated land equal to 80 hectares (ha) as a reserve. Second, the expropriated lands were managed by the state land reform agency, Corporación de Reforma Agraria (CORA), which established a form of rural co-operative referred to as an *asentamiento* consisting of local peasant households which farm the newly expropriated land. The *asentamiento* was developed as a transitional apparatus that was to last three-to-five years, during this time CORA maintained ownership of the land and capital and was responsible for major administrative decisions. After this period had passed the peasants would be able to divide the property into individual plots, or if the members agreed they could establish a mixed property arrangement.

Third, the government enacted a series of production promotion policies that served to increase the price of basic foodstuffs at the farm level and to promote agricultural sectors where it was identified that Chile had a comparative advantage. According to the Food and Agriculture Organization (FAO), “[t]he program[s] included the provision of long-term credit, technical assistance, public investment in basic food processing infrastructure, improved wine production, milk processing and cellulose plants” (1998, electronic copy). Fourth, the Government discouraged the seizure and expropriation of land by groups or individuals other than CORA. Finally, the government's willingness to withhold from expropriating land from *latifundios* that re-organized themselves to increase productivity encouraged these farms to subdivide and become more efficient.

The Christian Democrats' agrarian reform policy is remarkable in a number of respects. In the first instance, it was relatively effective in expropriating land from the wealthy *latifundios*. Frei's agrarian reforms provided for the expropriation of nearly one-third of Chile's *latifundios* between the years 1965-70. The FAO (1998) puts the total land area at 3.6 million ha or 12 percent of the country's agricultural land. In addition, there was a new incentive for *latifundias* to reform and increase their productivity, resulting in higher growth in the agri-

cultural sector. According to the FAO, growth in the gross value of production jumped from the sluggish 1.8 to 2 percent recorded since the 1930s to a sizeable 5 percent per annum. This growth was substantially aided by the government directed funds toward the establishment of an agrarian infrastructure.

### III. RADICALIZATION OF THE REFORM PROCESS

In 1970, Salvador Allende's Popular Unity coalition formed the government. It was the intention of this government to advance the nation's transition to socialism. They utilized the property rights legislation of the Christian Democrats to expand and accelerate the land reform process and, according to Kay (1976, 82), "one of the main aims of the agrarian reform policy was to expropriate all *latifundia*," which was defined as "every farm exceeding 80 ha in size, regardless of their efficiency." Another goal of the reform process was to reverse the traditional outflow of economic resources from the rural to the urban sector in order to augment rural investment and to raise peasant living standards. However, the government's eagerness to accelerate the land reform process, its failure to adequately supervise the expropriation of land, combined with other fiscal policy reforms such as the nationalization of the banking system, slowed productivity in the agricultural sector.

The numerous events and policies that compromised the success of the reforms under the Allende Government can be summarized as follows. First, the number of land seizures increased sharply; these seizures of land were not government authorized expropriations. This was particularly notable in the south of Chile where the Mapuche Indians began to seize land from *latifundia* (the Mapuche had long considered this land to be theirs). However, the willingness of the Popular Unity government to overlook this illustrates the shift in perspective of the Popular Unity government from its Christian Democratic counterparts which advocated that land seized by peasants and workers should not be expropriated. Furthermore, toward the end of the expropriation process, two of the six parties that constituted the Popular Unity Coalition<sup>3</sup> began endorsing further seizures from the *latifundistas*, including expropriation of all cattle and farm machinery. Additionally, they held that the *latifundistas* should not be left with any reserve land.

Another problem arose when land seizures expanded to include smaller holdings, encompassing farms smaller than 80 ha.. These

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3. The Popular Unity Coalition consisted of six groups: the Socialist party, the Communist party, the Radical party, the Movement of United Popular Action (MAPU), the Social Democratic party, and the Independent Popular Action party.

tended to be the more productive farmlands, benefiting from the modernization and fiscal supports provided by the Frei government. Initially the Popular Unity government did not want to expropriate land from these farms in the hope of maintaining unity among the middle and lower classes. Nevertheless, the point was soon lost as half of the land seizures occurred on farms smaller than 80 ha (Kay, 1976).

The *asentamientos* were soon replaced by alternative organizations. Two alternatives to the *asentamiento* were the Centro de Reforma Agraria (CERA), and the *comite* campesino, a type of reformed CERA. The CERA would, according to Kay (1976, 89), "bring together various neighboring farms to rationalize the use of infrastructure and capital equipment and to incorporate landless seasonal laborers who had traditionally worked on these farms." The *comite* had a role similar to the *asentamiento*, except that under the *comite* all differences between members are eliminated, extending equal rights in the running of the farm and in the distribution of production fringe benefits. The *comite* soon became the most widespread reformed unit; however, like the *asentamiento*, for the most part, it did not include seasonal workers and *minifundistas*.

Because the Allende government failed to regulate the adjustment process from *latifundio* to collective ownership, tensions between the nation's economic classes increased dramatically. Specifically, the government failed to provide the appropriate incentives for increased productivity, as the *anticipo* or stipend paid to collective workers was not based on the collective's performance. Rather, each member received an equal monthly wage regardless of the number of days worked or the various skills and efforts required by particular tasks (Kay, 1998). The government also failed to provide the necessary capital resources to allow the workers to properly exploit the land base. As a result, much of the expropriated land was left uncultivated. This shortcoming was largely due to the rapid pace of the land reforms, rendering it difficult for the government to allocate resources to all of the reformed units.

The resulting productivity slowdown was exacerbated by the emergence of a black market for agricultural produce. The development of state marketing agencies as the sole purchasers of the collectives' output meant that producer prices were often set well below the equilibrium price, and the peasantry soon began to misappropriate resources from the collective in search of higher returns through unofficial sales. Incentives for collective production dissipated. This development, combined with the above mentioned points, resulted in a "collapse in agricultural production, which fell by 4.8 percent per

annum between 1970 and 1973” (FAO, 1998). As the heavily subsidized agricultural sector became more and more unproductive class antagonism heightened, leading to the military coup of September 1973.

#### IV. REVERSAL OF THE AGRARIAN REFORM PROCESS

In September of 1973, a military coup led by General Augusto Pinochet ended the turbulent reign of the socialist Allende government. It is important to note that the military response was a reactionary one; according to Martinez and Diaz (1996, p.11), “[t]he military took power not in favor of a project of social recomposition but rather against what the Popular Unity government was trying to bring about.” However, the policies that ensued - the privatization of state operated entities (SOEs), price liberalization, trade regime reforms, liberalization of the domestic financial market, liberalization of the capital account, and reform of labor legislation - were clearly designed to ensure that socialism never returned to Chile.

The redistribution of agricultural land was pursued in conjunction with the other reforms mentioned above. This process of redistribution, or regularization, was completed or was near completion by 1979. This section details the redistribution of the seized and expropriated lands. According to both Meller (1992) and Martinez/Diaz (1996), the dictatorship returned approximately 30 percent of the 10 million ha of expropriated land to its former owners, and around 30 percent of the remaining expropriated land was allocated to peasants. Martinez and Diaz (1996) note that 10 percent of the land was reserved for the state, and approximately 30 percent as sold to new owners, whereas Meller (1992) attributes 20 percent auctioned land to purchases made by non-rural dwellers (see Table 1).

These estimates show that 60 percent of the expropriated land [a + c + e] was removed from the hands of the rural population that had previously benefited from the agrarian reform process. For these peasants and other benefactors of the land reform process, the loss was furthered, according to Meller (1992), by the curtailing of state programs that supported peasants through special credit lines and technical assistance. According to the FAO (1998), “the reduced support from the state and the high interest rates of the recently liberalized market (in some years reaching 60 percent in real terms) meant that these new owners did not have the means to farm their land properly and were forced to sell at very low prices.” Meller (1992) also notes that by the end of the 1970s about one-third of these peasants have had to sell their land and work as farmers for the new

TABLE 1: REDISTRIBUTION OF LAND BY MILITARY DICTATORSHIP ACCORDING TO SOURCE

Redistribution of Land by Military Dictatorship	Martinez and Diaz	Meller
Returned to former owners (a)	30%	30%
Allocated to peasants or former tenants (b)	29%	30%
Reserved for the State (c)	10%	n/a
Sold to new owners (d)	31%	n/a
Sold to non-rural dwellers (e)	n/a	20%
Total	100%	80%

owners. However, Meller's "one-third" figure is contradicted by other sources; the FAO (1998) estimates that by the mid-1980s, nearly 50 percent had sold their land despite the growing efforts of non-governmental organization (NGO) movements to maintain the level of services previously provided by the state.

According to the evidence provided above, it would seem that the *laissez faire* approach of the military resulted in the effective abandonment of the rural reform process, returning the rural peasantry to the margins of the Chile's agrarian society. Furthermore, economic conditions did not improve. The value of production between 1974 and 1984 returned to an average of merely 2 percent per annum of the 1930-1960 period, although considerable differences exist between the sub-sectors and regions (FAO, 1998).

This *laissez faire* approach continued until the 1982-83 debt crisis which forced the country to readjust its macro-economic policies. The readjustment, which included substantial currency devaluation, was part of an International Monetary Fund (IMF) adjustment program that focused on servicing the nation's external debt. More specific to agriculture, the dictatorship implemented a proactive agricultural policy that included a price band system, special credit programs, and technical assistance. The reintroduction of support policies to the agricultural sector resulted in immediate increases to the sector's productivity. According to the FAO (1998), production expanded by 7 percent per annum between 1983 and 1989.

A return to economic normalcy has allowed the agricultural sector to once again prosper, with production increasing at an annual rate of 4 percent during 1990-1996. However, apart from this, Chile has also inherited an agricultural sector that remains heavily segmented. According to the FAO (1998), Chile's small farm sub-sector accounts for 25 to 30 percent of total agricultural production but rep-

TABLE 2: HOLDINGS OF FARM ESTATES

Solely Held Farming Estates	Number	Area (Hectares)
Ownership	234,803	21,266,432
Tenant Farming	13,946	793,579
Sharecropping	4,497	79,375
As part of the wages	4,024	11,885
Informal Assignments	16,546	354,966
Squatting	3,000	124,125

Source: ODEPA, 1999 Chilean Agriculture Overview, based on INE data; VI Censo Nacional Agropecuario, 1997.

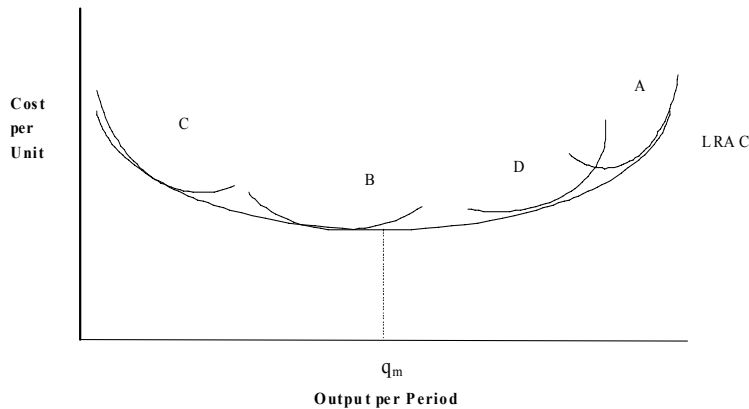
resents about 70 percent of all agricultural producers and owns about one-third of all agricultural land. Furthermore, this minifundio sub-sector which comprises a larger share of low-value traditional crop production and a lower share of high-value fruit and wine production, is concentrated on marginal lands and has outstanding legal title issues (see Table 2). The fact that, to this day, these issues remain a concern of the Chilean agricultural sector indicates a failure on the part of the Pinochet regime to adequately redistribute expropriated lands, and more specifically to address the issues of legal title and support for agricultural outreach service programs that target small farmers.

#### V. A COST-ANALYSIS APPROACH TO INTERPRETING AGRARIAN REFORM

This section will examine the agrarian reform process specifically as it pertains to the expropriation and/or re-allocation of capital (land) and in terms of movement of the short-run average total cost (SRATC) curve along the long-run average cost curve (LRAC) curve. The LRAC curve is an effective analytical tool for examining the various periods of Chile's agrarian reform process. Movement along the LRAC curve requires an adjustment in all factor inputs, for agricultural firms or farm units such an adjustment is made possible when a firm's land base is variable. Figure 1 documents changes in aggregate production according to the historical events previously discussed by depicting movements of the SRATC curve along LRAC curve for selected periods of Chilean agrarian reform, where the SRATC curve indicates scale of the agricultural sector for the respective period.<sup>4</sup>

4. Please note that the positioning of the SRATC curves along the LRAC curve is presented according to the historical evidence provided in the previous sections, or failing this with

FIGURE 1: SCALE OF THE CHILEAN AGRICULTURAL SECTOR DURING SELECTED PERIODS OF AGRARIAN REFORM



Curve A indicates the average scale of Chile's agricultural production during the Alessandri government. At this time, the sector was characterized by the concentration of the majority of the agricultural land holdings in the hands of a relatively few wealthy landowners. Todaro (2003, 431) notes that "[t]he economic and social ramifications of heavy land concentration in the hands of a few large landowners are compounded by the relative inefficiency of *latifundios* in comparison with other Latin American farm organizations." The large and inefficient size of the production unit in Chile is also supported by the empirically by the FAO (1998). For this reason, Curve A is positioned to the extreme right of the LRAC curve which indicates an inefficient level of production characterized by an increase in costs greater than the increase in output. This is largely the result of transaction costs including labor and management that are much higher for *latifundios* than *minifundios* or family farms. However, there existed according to Todaro (2003) a number of other reasons why *latifundios* were generally inefficient. First, landowners often valued these holdings not for their potential contributions to national agricultural output but rather for the power and prestige they bring. The land therefore tended to be farmed less intensively than under the *minifundios* arrangement.

Curve B corresponds to the scale of Chile's agricultural production during the Frei government. As discussed earlier, during

regard to general economic assumptions regarding the productivity of agricultural sector in Latin America, particularly as it applies to a system comprised of *minifundios* and *latifundios*.

this period the agricultural sector was undergoing a period of reform which provided for the redistribution of land to members of the rural lower class. In addition, the government had initiated programs that provided increased investment and support to the agricultural sector. Central to the productivity gains experienced by the agricultural sector, however, was the government's mandatory subdivision of the *latifundios* into smaller holdings. These reforms included the expropriation of 3.6 million ha of land (FAO, 1998) and effectively contributed to the development or further development of an agrarian middle class in the Chile agricultural sector through the development of a base of medium-sized farms. As a result, curve B is positioned at the base of the LRAC curve near output  $q_m$ , where  $q_m$  is defined as the lowest possible per unit cost of production for the given technology and factor prices.<sup>5</sup> The more efficient scale of production largely contributed to the productivity increases in Chile's agricultural sector, with the gross value of production rising to 5 percent per annum (FAO, 1998). Todaro (2003, 431) correctly observes that "[t]hese farms [family farms and medium-sized farms] use a more efficient balance between labor and land, and studies show they have a higher total factor productivity than either *latifundios* or *minifundios*, as the law of diminishing returns would suggest."

During the Allende government, the accelerated reform process involved the expropriation of some 6.4 million ha of land from both *latifundia* and medium-sized farms, re-organizing these lands into various forms of farmer collectives or state-run farms. However, these farms failed to increase the productivity of the agricultural sector as agricultural production fell by 4.8 percent per annum between 1970 and 1973 (FAO, 1998). Many of the peasants who worked on the collective reserved a small piece of land for household production, the product of which became an important commodity in the black market. The development of black markets, the misappropriation of collective resources, and the neglect of collective workers to fulfill their duties are all pertinent in accounting for the observed decrease in productivity and ensuing failure of the collective system.

The positioning of the SRATC curve corresponding to the Allende era is an important matter of discussion since, given the many factors attributed to the fall in the efficiency of agricultural production during this period, the role of scale is a point of contention. The reformed units being collectives could be characterized as having attributes similar to medium-sized or even large-sized agricultural

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5. Whether SRATC curve B is correctly indicated as lying to the left of  $q_m$  is difficult to determine; the positioning of SRATC curve B to the left of  $q_m$  is, in this discussion, a simplifying assumption.

firms. However, in Chile, not all of the reformed units included or incorporated the *minifundios* as it remained the decision of the collective members (who were primarily agricultural workers who had previously been employed by the latifundio) whether or not they would accept the inclusion of the minifundio to the collective. Thus, a large number of the minifundio remained as such. With the emergence of the black market and reduced incentives for collective production, a large proportion of the collective land base was either underutilized or not utilized at all. This meant that the actual productive area of these farms remained small as the workers favored to employ their labor on their own small household enterprise, often consisting of land areas too small to allow for the efficient use of capital and labour. As a final matter to consider, the rapid pace of the reforms translated into inadequate stocks of capital resources and technical and managerial support services to effectively farm collective holdings, explaining in part the lower productivity growth in this sector. Given the underutilization of collective land and the rise of unregulated, small-scale private production, Curve C corresponding to the Allende period is positioned at the extreme left of the LRAC curve

Curve D indicates the scale of Chile's agricultural sector during the Pinochet regime. The reversal of the land reform process meant that some 60 percent of the expropriated land was removed from peasant worker or collective production. Additionally, as noted by Meller (1992) and the FAO (1998), a large percentage (33 to 50 percent) of the peasantry that was provided or permitted to keep expropriated lands had to sell these lands as result of the discontinuation of support services or as a result of their inability to secure credit. Furthermore, the extension of land ownership rights to foreign entities and non-rural dwellers further marginalized the small land owner, and has been a likely source of inefficiency in the agricultural sector. However, the increased availability of agricultural inputs and the existence of an agricultural infrastructure (inherited from the Frei government) allowed the new land-owning class, particularly the middle to large-sized farms to more fully exploit the potential productivity of their land base. As a result, SRATC curve D is located toward the base of LRAC curve, to the right of  $q_m$ , but below SRATC curve A.

As mentioned above, between the years 1974 and 1984 the value of agricultural production in Chile returned to the 2 percent per annum growth experienced during the period 1930-1960. It later increased to 7 percent per annum growth between 1983 and 1989 (FAO, 1998). However, Figure 1 only presents one SRATC curve for the period of the Pinochet regime. Here, the assumption has been made that the

curve is positioned correctly; therefore, the growth in agricultural production that occurred during the second half of the Pinochet regime is explained by a movement along Curve D toward optimal production as represented by the LRAC curve. This movement toward optimal production can be attributed to a number of policy and program changes that occurred during this period, some of which are discussed below.

First, the de-valuation of the currency allowed Chilean farmers to become more competitive in the world market. One effect of an over-valued exchange rate is to penalize the traditional primary-product export sector due to artificially high prices of exports in terms of foreign currencies (Todaro, 2003). Second, the establishment of the price-band system for wheat, oilseeds, and sugarbeet allowed internal prices to follow the trend of international prices while at the same time preventing day-to-day fluctuations from causing large disturbances in domestic markets (FAO, 1998). Finally, the return of special credit and technical assistance programs allowed farmers to renew investment in their farm business and to actualize production benefits from investment in improved technologies and other capital resources such as seed and fertilizer. Thus, with the de-valuation of the currency combined with the moderating effects of a price band system and renewed investment in the agricultural sector, the reformed agricultural sector was finally able to make economic gains.

## VI. CONCLUSION

The regulated and moderately paced agrarian reforms of the Frei government, including the expropriation of land and government investment in sectors where it had been identified that Chile had a comparative advantage, provided Chile's agricultural sector with strong growth and a lasting infrastructure. Additionally, Frei's agrarian reforms put Chile's agricultural sector in a position where the sector's capital resources could be optimally employed. Analysis of the Chilean agricultural sector according to movement along the LRAC curve replicates this outcome. Although the agricultural sector later realized significant gains under the Pinochet regime, it is important to note that these gains came at high social and economic cost for Chile's agrarian peasantry which, to this day, has not fully shared in the development and success of the sector. With this in mind, an important first step toward improving Chile's redeveloped agrarian sector is for the current Chilean Government to address the lingering issues of land ownership. Specifically, to implement a mechanism that provides the country's approximately 3,000 squatters (see Table 2)

with some form of permanent status to their occupied land. This would mark an important first step in the recognition of this large and relatively unproductive part of Chile's agriculture sector, and provide a basis for further support and infrastructure development.

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