

Western Oregon University

Digital Commons@WOU

Student Theses, Papers and Projects (History)

Department of History

5-31-2005

"Chilean Economic Expansion and the Effects of the Forest Industry on the Environment"

Andrew Erickson

Follow this and additional works at: <https://digitalcommons.wou.edu/his>



Part of the [Latin American History Commons](#)

Andrew Erickson

History 352

5/31/2005

Dr. Rector

“Chilean Economic Expansion and the Effects of the Forest Industry on the Environment”

South America has been a hot bed of revolutions and military coups for many years and the economic stability of the countries has paralleled that instability. Chile has managed to achieve something that no other country on the continent has been able to do, they have managed to stabilize their economy into a constant state of growth. This came from their new emphasis on the free market economic agenda the country adopted under the military rule in the early 1970's.

This economic system adopted the timber industry as one of its major exports. The change created a new economic system but also created new more complex social and environmental problems that have caused major conflict within the country. The conflict is over a compromise of interests in keeping the current economic success but with more sustainable environmental practices. They want to preserve the old economic structure but have to reconcile how it has fallen short. To do this, an understanding of the newer democratic ideas needs to be incorporated into the economic strategies. These two competing ideas of the proper way to run a sustainable economic and environmental policy have been the central focus since the election of 1989. The Chilean Timber industry has been a great economic boost nationally but has caused the central conflict in the country, making it the key to solving the conflict.

Why is the Forest industry so intriguing to the Chilean Government. The introduction of the Monterey pine made the forest industry possible in Chile. The Monterey pine had the perfect blend of qualities that make it a viable product to produce. The Monterey pine grows exceptionally fast, the demand for the soft woods is wide spread, and is usable in many different wood products, they reproduce easily, and they are a pioneer species so their natural predators and parasites do not exist in sub tropical

regions. Another major advantage they provided was their ability to germinate in very inhospitable soils and root in severely eroded soils.¹ The trees grow fast with little maintenance and have very few predators to limit them which made it the perfect choice to grow in the region.

The tree was first introduced in 1890 by Arturo Junge who owned a plant nursery in Concepcion. He received the seeds from Germany, and planted them around the area. When the seeds were successful a man named Federico Albert distributed the seeds to the other plantation owners in the coastal areas. The pine was to be used for mine construction in the hills, but it was too weak and Eucalyptus replaced it. The pine however was quickly developed for paper and other purposes. The government started to recognize it as a budding industry and started supporting it as a new industry, and by 1935 there were 25,000 hectares of planted land. The plantation growth followed with 15,000 hectares planted in 1940, and by the 1980's there were almost 80,000 hectares of plantation land.²

The economic efficiency of the timber farms have made it extremely profitable to replace their agricultural land to plant the foreign trees. In 1995, 85 percent of the countries wood production was produced by tree farms when they only accounted for 15 percent of the total area of land.³

All of this development also has an effect on the environment around it. The plantations eliminate all vegetation early on in plantation life because the seedling trees have shallow roots. Then as the trees grow the pine needles that cover the ground

¹ Clapp pg 1-5

² Clapp pg 5

³ Clapp pg2

contributes to the inability of other plants to grow there. The trees are relatively fast growing the reach peak height between 18 -24 years so they carefully prune and thin the trees to get the best quality tree. The pruning is done to interrupt the trees natural knot making response to branch decay. The trees also grow best in sunlight so pruning and clearing the less desirable trees help with sun light absorption. Later in the second decade of growth the trees perspire more than agricultural field or native forests, making the ground drier contributing to low stream and river flows in downstream areas. One of the few secondary products obtained from the trees are mushrooms. The mushrooms merge with the tree roots and for mycorrhizae which aid in the absorption of minerals in the soil.

4

The major Ecological damage from the trees comes from the deforestation of the native trees to make room for the Pine. In 1995 of the 850,000 hectares of plantations on the coast regions, 50,000 hectares were established directly after forest clearing. This provides a direct danger to one Chilean species of tree, called *bosque maulino*, which only resides intact in small pockets in parks south of Constitution. This is so detrimental because they also have four of the six species of Chilean flora in danger of extinction dwelling inside.⁵

The large scale plantations had other effects on the people of Chile. The large scale mono plantation reduced the need for tenant farmers. The farmers were displaced and large migrant worker camps and shanty towns emerged. The other group greatly affected are the Mapuche Indians who have battled with the Chilean Government for years, under

⁴ Clapp pg6

⁵ Clapp pg7

countered this trend was gradually opening certain sectors of their economy, which forced them to modernize to compete in a world market. The slow discretionary opening up of the economy took a few years but was generally successful, because the whole economy did not suffer a depression.⁸ The average tariff in Chile in 1974 had fallen from 105 percent to 57 percent, along with the nearly elimination of import licensing, prior deposits, and other import fees. They tried to expand industries but still remained biased toward their own manufacturing of finished goods. The tariffs were lowered significantly more on inputs and capital and not as much for finished manufactured goods.⁹

The Government was trying to transition to an open market system gradually. The next step was major change which came in 1975. The government started restructuring the economy. The support shifted from protection to allowing the industries to collapse that were not competing and the capital was then funneled in to the natural resource export industries the government was trying to develop. The tariffs were eventually lowered to an even 10 percent. This eliminated the protection of local manufacturing almost entirely, the economic policy was almost totally neutral making imports and exports supported equally.

10

All of this was trying to take the Chilean economy and reestablish it as free market system. The restructuring was very successful without any large scale depression because the government was still favoring certain industries like the Forest industry. The way they did this was with a law in 1974. Law 701, provided massive subsidies for planting and starting forest crops, it also made all land forested under this law exempt from taxes. The

⁸ Kurtz pg4

⁹ Kurtz pg4

¹⁰ Kurtz pg4

the terms of their surrender they were not permitted to sell their land. The military government then took their land holdings and divided them up into individual plots. The government made them a limited time claims. Then in the 1990's the land started to come up for transfer, displacing more people in the rural areas. ⁶(table 1a)

The Mapuche Indians were especially resistant to the military government. They however, were defeated and accepted their terms of transfer of land. They were forced to move out of the forest hills onto the valley flatlands, so the trees could be cut and plantations replacing them. The land they were moved to was more agriculturally acceptable, but the Mapuche were not given any support or technology to help them start a previously unknown agrarian lifestyle to them. After they were not given any representation in congress, one representative, they rebelled and in the late 1990's there were episodes of violence. They started forest fires in areas where forestry was going on, and they destroyed some logging machinery. The Mapuche were attacking to people who had taken their homes.⁷

All of this was due to the change in economic structure in Chile. The rapid economic expansion in Chile was during a time of Military government, between 1973 and 1975. This would have seemed like it wouldn't have been good based on the economic performance of other Latin American Countries. But the key to the expansion was the rate at which the economy was opened to the world markets. The government probably saved it's economy, the total opening up of the Chilean economy to the world market could have made it collapse because it could not have competed. The way they

⁶ Clapp pg 13

⁷ *Economist* pg2

subsidies were up to 75 percent of the start up costs. Which led to massive expansion in the forest industry. In the following 20 years the export dollars went from 130 million to 1.45 billion dollars in 1994. Table 2a shows the massive increases in forest products during this period.¹¹

The progressive economic structure of the military started a debate that involved the type of development the newly democratic country wanted for its economy. The elections in 1990 ushered in the Democratic era of modern Chile, the ways of the old conservative military were being questioned and the country had to decide which direction it wanted to go in. Two different ideals were coming onto the scene. There were the old economists that wanted to keep the economy running the same as the Military did, then there were the people who wanted economic reform. The peasants that were displaced by large plantations, and Indians who had their land sold to the large timber plantations who were silent during the Military rule because of the fear of reprisal. The environmentally minded scientists and naturalists were also taking advantage of the new freedoms to speak out about how poor the situation of the environment was.

The general economic goals of Chile after 1990 were a major factor in where their economy would go, which determined the direction of the Timber industry. The conflict over the style of economy caused a lot of conflict. The two ideas were the sustainable market economy and the idea of community goals of the same industry.¹² Or the economic minded plantation owners opposite the lower class people and environmentalists.

The sustainable market economists had three important areas to assess their

¹¹ Kurtz pg14

¹² Silva pg 458

policies. They were economic strength, social equality, and environmental health. These three ideas were the gauges of whether their policies were going to be effective. Their economic policies were set up to meet these three basic societal conditions.¹³ This approach of economic development used the ideas of large corporate expansion that concentrated on rapid development of sustainable industries. The economist said that the effect of large plantations were a good sustainable option because they provide key economic support for general social development in Chile. It was the "Trickle Down Effect", the large Timber plantations made lots of money, provided jobs for people in the area and invested in the area. This followed the idea that these companies did a job more efficient than small farmers or the government could have done. They considered the Timber fields as contributing to the forest sustainability. Making their plantations sound like forest that they were restoring. They also included the person property rights as social development. This train of thought made property rights more democratic than government ownership, which was less oppressive to the people. The other effect of having a democratic government was the people organizing in non governmental organizations. This allows the people to put pressure on the government to monitor the Timber Industries. So in a way they indirectly support the policing of themselves.¹⁴

The counter argument to these economic ideas in Chile was the idea that lower class small development could be better and that the timber Industries should be controlled more. The counter argument for the wage labor dispute is that the large companies start wage competitions the small farmers can't compete with driving the

¹³ Silva pg 459

¹⁴ Silva pg 460

working wages lower, putting them out of business. The response that the large company is better suited to run the industry is also refuted because of positive effects small farmers could have at the same industry. The positive effects would be the community organizing for harvesting and industrialization would have better effected the farmers raising profits which would go directly into the communities that earned them, rather than other foreign investors and people not living in the area¹⁵. The biodiversity would have also been served better because the smaller farms would have used less timber and non timber products to produce the same products.¹⁶

These two approaches came out of the freedom of the democracy under president Patricio Aylwin. The new freedoms were letting them voice there opinions over this issue. In 1992 the president sent a piece of legislation that was environmentally minded and slightly restrictive the Timber Industry. The bill proposed subsidies to support native forest management , which incorporated plantations. It also made the incentive highly available to lower and middle size landowners. The other stipulation was that it protected native forests from clear cutting for industrial interests, and was very specific where and when clear cutting could happen.¹⁷

This bill was so controversial the Timber Industries Special interests in the Congress got the Industrialists peak association to support them and held out a vote on the bill, which suspended the vote forever. the special interest groups for the conservative Timber industries had enough influence from the economic success they could sway the congress and even malevolently passed a timber development that would have been

¹⁵ Uribe

¹⁶ Silva1 pg461

¹⁷ Silva pg 468,469

prohibited by the president's bill.¹⁸

What all of the controversy and the conflict over the topic of environmental forest protection comes down to follows the wood chip production industry. The wood chip industry has paralleled the fight over the native forests and the negative effects of the plantation forests in Chile. The wood chip industry since 1990 has become Chile's largest timber product by volume. (Table 3a) In the years between 1990 and 1995 the annual increase of 40 percent.¹⁹ This is alarming because this market has opened up the logging of previously unusable timber in native hardwoods. The new chips take almost any tree and are extremely profitable. The lack of use of foreign species and large growth in the product makes the logging of native trees very prevalent.²⁰

The demand comes from the Japanese markets that make it extremely profitable. The large demand combined with the high prices in Japan for wood make it an excellent export. The other effect that makes the Chilean wood chip market so successful is the lack of competition in other countries who have stopped logging their native forests. Malaysia, Indonesia, most of Latin America (except Chile), New Zealand, and Australia have all been large unprocessed wood exporter but have cut back their exports for environmental or economic reasons. Making Chile one of the only open hardwood chip market.²¹

The country has not totally ignored the problems. The forest law in Chile has a mandate for an approved management plan for any cutting of forests. The Corporacion Nacional Forestal (CONAF) is so under funded they do not have enough staff and

¹⁸ Silva pg 469,470

¹⁹ Clapp pg 5

²⁰ Clapp Pg 18

²¹ Clapp pg 18

investigating forest cutting is not a high priority. Even when they do investigate they often meet resistance from local police and judges that do not want to enforce the laws. In a 1993 study only about 30 percent of the management plans were being followed that were submitted.²²

The laws are not enforced creating an almost uninhibited cutting of any forest that is desired. This creates all kinds of environmental and social problems that need to be taken care of. The 1974 decree 701 expired in 1994 and the two sides have been fighting each other over a proposed compromise to make a new law. The environmentalists have used an report that was leaked to the press in 1995 that said that between 1984 and 1994 between 5 and 15 percent of Chile's native forests were cleared. This just added more fuel to the fire and nothing has been done. The Chilean government needs to take control of the situation and there needs to be an end to the destruction of Chile's native forests. There is a sustainable way to use eucalyptus tree instead of the native forest. The conflict will keep going until the Government decides who they support, whether the especial interest of the economy will rule their government or they will take control of the forest industry and make them obey their policies .

²² Clapp pg 19

Bibliography

- Arnaldo Jelvaz, et al." A Profile of the Chilean forestry Sector," Center for the International Trade of Forrest Products, University of Washington,(1988)
- Eduardo Silva , "The Politics of Sustainable Development: Native Forest Policy in Chile, Venezuela, Costa Rico and Mexico" *Journal of Latin American Studies*,29, No.2 (1997):457-493
- Eduardo Silva, "Democracy, Market Economics, and Environmental Policy in Chile" *Journal of Interamerican Studies and World Affairs* 38, No.4, (1996): 1-33
- Marcus Kurtz "State Development without a Developmental State: The Public Foundations of the "Free Market System" in Chile" *Latin American Politics and Society* 43, No.2, (2001):1-25
- Oscar Barros, Andres Weintraub, "Planning for a Vertically Integrated Forest Industry" *Operations Research* 30, No.6 (1982):1168-1182
- Roger Alex Clapp, "Waiting For the Forest Law: Resource-Led Development and Environmental Politics In Chile" *Latin American Research Review*, 33, No.2 (1998):3-36
- Roger A. Clapp, "The Unnatural History of the Monterey Pine" *Geographical Review*, 85, No.1 (Jan.,1995):1-19
- None. "A New Twist to an Old Tale" *The Economist* 352,Is.8135, (1999):40
- Kathrine Uribe, Sabrina Frazee "Chilean Wood Exports and Subsidy" *TED Case Study*, (dec. 1996)