Introduction: Land Use in the Latin American Anthropocene from 1950 to the Present

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From the middle of the twentieth century to the present, Latin America has faced highly complex structural problems and challenges, which are, in turn, deeply rooted historically in the ongoing destructuring produced by the conquest. Despite the enormous potential of its natural and human systems, most countries in the region still live in a context of extractive natural resource overexploitation, as marked by the long history of colonial dispossession. This model, which, with nuances, has been repeated for centuries, emphasizes the special importance of the use, appropriation, and transformation of land. The socio-cultural and territorial inequalities, the unfair distribution of income, the concentration of wealth, and the corruption present in the majority of the states in the region are unavoidable frames of reference when it comes to understanding the structural problems associated with the use of the land in Latin America.

Between the 1930s and 1960s, Latin American societies followed the development path of the capitalist centers, promoting the industrialization of the economy. In the 1960s, the Green Revolution positioned agriculture transversally in the Great Acceleration. Neoliberal adjustment programs inserted the economies of the region even more into world markets, causing a true "reprimarization" of the economy in many countries (Pádua 2024: 55). The enormous growth in global demand for raw materials, especially in China and other emerging economies, has led to a massive expansion of extractivism, or a commodity boom, since the late 1990s (Cálix and Blanco 2020; Svampa 2019). In general terms, the region has played a secondary role in relation to the global economy, which has made it resort to its natural advantages to secure a minimum portion of global wealth through a) the massive extraction of raw materials for export purposes; b) the provision of a cheap and relatively abundant workforce in low-skilled activities within global value chains; and c) lax environmental, fiscal, and labor regulations to be able to compete following the logic of "downward competition" – a product of globalization, free trade, and economic deregulation. "The first and third of these "advantages" are observed in nearly the entire

Latin American subcontinent; the second, on the other hand, is gaining strength in the countries with greater geographical proximity to the United States" (Cálix 2021).

Even countries that managed to integrate into global manufacturing production chains do not stop promoting extractivist policies. Both strategies contribute maliciously: they are incapable of generating important quality jobs and have few links in their internal markets, while investments are highly concentrated in a few business groups. This process does not exclude countries that, due to their demographics and purchasing power profile, have more favorable conditions for the development of their internal market since, in them, there is a notable concentration of productive sectors in the most profitable activities. The rest of the population competes for the precarious world of the informal economy, whether in agriculture – for countries that still have about a third of their population employed in that sector – or in the growing expansion of low-productivity urban services (Cálix 2021).

In turn, in the last four decades, this deepening of the cycle of natural asset exploitation has multiplied socio-environmental conflicts. Local populations – especially Indigenous and rural women – have been excluded from the decision-making processes on projects undertaken in the territories where they live. These extractive projects come into conflict with the worldview and life practices of the populations located there. Added to this is the historical contempt against these populations and, due to their role in supporting their communities, women are particularly at risk faced with new forms of appropriation of income from natural assets. Violence, the division of communities, and displacement are consequences of an economistic vision that seeks unlimited capital accumulation (Cálix and Blanco 2020).

In the context of land use, industrial agriculture or agribusiness has become the dominant model of agricultural development. International organizations and the agro-industrial lobby present this model as a key instrument to combat poverty and hunger in the world, and, consequently, promote it. Highly mechanized, specialized, and capital-intensive, the model – controlled by large corporations – is oriented toward large-scale monoculture and relies heavily on external industrialized inputs, such as agrochemicals, seeds, and machinery. The neoliberal principle of comparative price advantage and selective integration in the world market promote agricultural production's specialization for export. This takes place through complex and highly competitive global chains of primary products that are controlled by only a few multinational consortiums (Sandwell 2019).

The industrial transformation of agriculture in Latin America – first, through the Green Revolution; then, through the dissemination of hybrid and genetically modified seeds, as well as the agrochemicals adapted for them – has fundamentally changed not only land use but also labor exploitation and the appropriation of biological production. Continuing the ideas of Goodman, Sorj, and Wilkinson (1987), one can speak to a form of "appropriationism." This refers to a productive model in the agricultural sector that is constituted by industrial capital – and now financial

capital. In the process, the importance highlighted before of nature in rural production is continually reduced and technically controlled. This paradigm of agricultural production reduces – unacceptably – the great complexity of nature in order to achieve the necessary standardization of agriculture and silviculture for the industrial model. However, said biological simplification and appropriation require intensive and large-scale use of land for controlled monocultures and, therefore, cause the biophysical destruction of local ecosystems.

In this period of the Anthropocene in Latin America, farmers are increasingly dependent on genetically modified seeds, agrochemicals, and machinery. Financial industrial capital has captured agriculture, destroying the natural production process and its material base, considered incompatible with capital accumulation (Goodman, Sorj, and Wilkinson 1987: 156). However, all this biophysical elimination carries hidden costs that affect rural livelihoods, human health, and the environment. These surreptitious costs call into question a model that boasts of its supposed efficiency in corporate and political discourse. It is also a model that requires large territorial extensions, accelerating a process of deforestation and destruction in many biomes of the region. In the emblematic case of the Brazilian Amazon, the rainforest still retained 99 percent of its initial coverage in the early 1970s, but in the few decades that followed lost 20 percent (Pádua 2024).

Capital's transformation of agriculture, silviculture, and livestock in these decades has changed not only land use and ecosystems but also the social relations of production, property, and power in the rural world. Mechanization, standardization of labor processes, and the increasing use of external inputs have reduced the need for manual labor considerably. Small farmers have lost their lands and have been integrated into global supply chains of basic products through contract agriculture. This last is a new and subtle way of indirectly controlling land, labor, and natural resources on the part of agroindustrial consortiums (McKay, Fradejas and Ezquerro-Cañete 2022: 18). This production model was introduced by the so-called Green Revolution in the 1960s, during a time of agrarian reforms that modernized agriculture, and was deepened in the 1990s through transgenic crops and their agrochemical inputs. (Neo-)extractivism – the endemic evil that devastates Latin America – has been described as a mode of appropriation that points to the different ways of taking over diverse natural resources (physical materials, energy, and ecological processes) for capital accumulation in specific social and environmental contexts (Gudynas 2015).

If capitalism is understood as a form of social reproduction – not only as a productive form but as a framework of societal relations that necessarily course through the metabolism of man-nature relations – it is found that this same civilizational form of capital carries within it a contradictory form of reproduction. In other words, capital cannot reproduce itself without undermining the material bases of its own reproduction. The metabolic rift that Foster (2000) – with a refer-

ence to Marx – points out is the inherent condition of its own development (Pineda 2016: 204).

At the same time, the dismantling of non-capitalist forms of communal interaction relations (extremely important in the Latin American subcontinent) and other models of similar socio-environmental relations seems to be indispensable for the capital's unlimited expansion. These processes of separation, new enclosures, and monopolization are the form of concentration that allows domination over nature as a resource, the same nature that, in the hands of non-capitalist communities, is a means of survival and material and cultural reproduction. And at the same time, they represent an important obstacle, because, on countless occasions, communities, towns, and collectivities face the process of dispossession.

The land problem in Latin America is far from being solved, as it is the region with the highest concentration of land in the world. The agrarian reforms of the 1960s and 1970s have not fundamentally improved this situation, and since the 1990s, peasant and Indigenous movements have been involved in land ownership conflicts in many countries of the region. As a consequence of structural change in the agricultural sector, peasants have lost their land, and many families are now affected by extreme poverty, unemployment, and underemployment. In addition, the exploitation of natural resources and the destruction of ecosystems, as well as the contamination of soils and rivers, has advanced. Many essential strategies have been formulated to develop rural areas and combat poverty. However, an essential condition for development is the reorganization of agrarian property – not to confront an archaic system that is already extinct, but to enhance the productive capacities of the population and rationally take advantage of the available natural resources.

Finally, it is worth asking about the nature of the crisis: are we in the presence of the same critical situation for the entire planet? Of course, the Anthropocene is a global concern, since no region can avoid the current climate crisis, but it is also undeniable that each region faces different challenges. Latin America presents special particularities, given its historical trajectory of dispossession and destruction, and faces a challenge as an exporting region of natural resources plagued by social conflicts.

The land has been put at the service of the extractive model again and again, in the past as well as in the present. Extraction has not only created biophysical damage to the land where it occurs – whether in mining or agriculture – but has also had a proven brutal and harmful impact on populations, especially among the poorest and most marginalized. In this way, reflecting on the future of Latin America involves reflecting on the development models implemented and the effects of the Anthropocene on societies. From there, we must rethink the strategies and possibilities of facing the crises, to which we are and continue to be subjected.

Beyond the issue of agribusiness, urbanization and, the expansion of the material infrastructures of modern capitalist societies are important factors in the Great

Acceleration. With a massive rural-to-urban migration and notable demographic growth, Latin America is one of the most urbanized regions in the world. In the decades between the 1940s and the 1960s, megacities sprung up in all the major regions discussed here. Demands from urban populations for energy, infrastructure, consumption, etc. have had a significant impact on the socio-ecological metabolism of the different localities. The technosphere has also expanded due to infrastructure projects, especially highways. Also, a massive increase in the use of hydroelectric power in Latin America since the 1950s has vastly modified land use through the construction of enormous dam systems. Land use, in this sense, has fundamentally and comprehensively changed since the beginning of the twenty-first century, characterized now by transformations towards a supposedly green capitalism. In addition to hydropower, this shift includes wind and solar energy parks, as well as sugar cane plantations and similar crops for biofuels. Argentina was the first country in the world – after the United States – to introduce national parks, followed by Chile, Brazil, and Bolivia. (Kaltmeier 2021) Particularly since the late 1960s, there has been a boom in nature reserves in the whole region, especially in peripheral areas, which have significantly changed land use in terms of quantity and quality.

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