

## **Was the Agrarian Reform a good instrument for the rural and integral development of Bolivian agriculture?**

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### **ABSTRACT**

This article will address a socio-economic phenomenon whose weight has definitively changed the course of Bolivian history, this phenomenon still continues to have specific weight since it has transformed the country as a whole.

To specify what the Agrarian Reform has meant, we can refer, for example, to the impact on the transformation of rural and urban life, generating an accelerated growth of urban centers and the aspects inherent to this process that has caused unproductivity, food insecurity, environmental impact, increase in migratory flows from the countryside to the city, among others.

To explain these phenomena of unproductivity and other aspects that an Agrarian Reform entails, I will begin by explaining the four Agrarian Reforms that were implemented in Bolivia. This in-depth development can be found in my sabbatical year research (Quevedo, 2021, p. 225)

Organically, in the history of the country, four agrarian reforms have been carried out: the first that vindicated the statement that "the land is for those who work it", the second "the land is for those who can buy it", through the commodification of agricultural land, the third that proposes the "recognition of the ancestral right of the original indigenous peoples to decide on their destiny". And the fourth reform is implicit in the so-called incendiary laws issued in various government administrations: "the land belongs to those who can burn it, expand the agricultural frontier and enable it for agricultural and/or agro-industrial use."

**Keywords:** Unproductivity, Food insecurity, Environmental impact, Rural-urban migration.

### **INTRODUCTION**

The effects of the Agrarian Reform (RA) on agricultural production and productivity become complex disaggregation formulas, due to the fact that statistical and historical data have not been seriously worked on, however, higher rates of agricultural activity for the export of products can be perceived in some regions.

What is possible to say is that large and medium-sized properties were more productive compared to smallholdings as a result of AR. (FAO, 1992) Although it is true that the FAO affirms about the intensification of production in medium and large properties, experiencing growth prior to the reform in the Bolivian case, but under the protection of the Law its decree and the chaos generated by its application, agricultural production fell indiscriminately, vandalism and political actions were added to this to impose its application. In that period, agricultural GDP,

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which before the RA registered a growth of more than 32%, with the application of the law fell to less than 27% in 1955. With the following reforms, the situation in agriculture was no different, with the exception of latitudinary properties, most of the lands of the West suffered a drop in agricultural productivity.

An examination of the situation of Bolivian agriculture in the last half of the twentieth century and the first quarter of the twenty-first century, in general, reveals a recurrent phenomenon to date, food insecurity, a product of the presence of two totally different types of agriculture: a) a fairly efficient agriculture or also called entrepreneurial and specialized agriculture, in which the production capacity of the product per agricultural worker allows a small number of productive units to produce what is necessary to feed large groups of the population and export the surpluses, this typology of agriculture is found in eastern Bolivia, an area where the AR did not arrive or could not be applied, in this region soybeans are produced, sugar cane, cotton, rice on large plantations, etc. b) the western region valleys and altiplano of inefficient agriculture or also called peasant or traditional subsistence in which the products of the land can barely sustain the peasant family, even at a minimum level of subsistence, with the production of corn, potatoes, vegetables, quinoa, soybeans, sugar cane, rice, etc., this being the region where the AR was applied.

Regarding the environmental impact generated by the RA laws, it can be observed that, being a law enacted, it was not able to obtain the expected effects, for example, a bank of native and improved seeds and a fertilizer supply system, with a view to facing sustainable and sustainable rural development based on developed and large-scale agriculture. in order to initiate an export cycle and generator of foreign exchange in the sector, it would have eliminated from history the introduction and implementation of transgenic crops, as one of the examples of the environmental damage caused by AR, resulting in damage to their non-transgenic species equivalents both by the use of glyphosate and others to fauna, the soil, the species of microorganisms, genetic contamination, the loss and contamination of pollen, etc.

Another negative effect of the application of the RA law was rural-urban migration, and the conversion of agricultural soils. Although one of the central elements of the RA was the democratization of access to land tenure through expropriation and confiscation for distribution and redistribution, this process lasted throughout the second half of the twentieth century, which was accompanied by the so-called conversion, that is, the transformation of agricultural production lands into land for urban use and speculation.

The AR directly affected the agricultural soils that existed prior to the reform, which constituted a cordon of food security, causing the displacement of sectoral activities and

affecting the country's productive potential in terms of food production, that is, urban expansion was carried out on the most fertile soils with the greatest agricultural potential. these were the soils near the cities.

## 1.1 THE PROBLEM

The RA has meant the abolition of the latifundia and the dispossession for its discretionary distribution, anarchic and without a support of legal security, with the purpose of achieving rural development in capitalist terms, which is not precisely noted for its consequence, to the extent that it dispossesses a property to cede to another or other private owners.

To guide this research, the following general question is raised: **Has AR in Bolivia achieved its general objectives in its application, or has it generated greater unproductivity, food insecurity, environmental impact, rural-urban migration, among other phenomena?**

## SPECIFIC OBJECTIVES

- Disaggregation and Systematization Data on unproductivity, food insecurity, environmental impact, rural-urban migration, all these phenomena and the effects of AR have been worked on in its first 3 versions.
- To analyze the results of the data obtained in order to clarify the true negative impact that the application of AR has had on Bolivian agriculture
- From the data obtained, to arrive at conclusions and recommendations pertinent to the analysis of the results.

## THEORETICAL FRAMEWORK

RA AS AN INSTRUMENT OF BRAKE FOR THE INTEGRAL AND HARMONIOUS DEVELOPMENT OF BOLIVIAN AGRICULTURE SPECIFICALLY AND FOR THE BRAKE ON SUSTAINABLE AND SUSTAINABLE DEVELOPMENT AT THE NATIONAL LEVEL

If we analyze the stage prior to the RA, it can be asserted from the data generated by the Majority Report of the Commission appointed by the Third Congress of the Inter-American Confederation for the Defense of the Continent, held in Santiago de Chile in 1957, that the Bolivian State owned a third of the national territory, with an area of close to 40 million hectares. Bolivia has 1,099 million km<sup>2</sup>, in this sense it could have 1/3 of the surface of the national territory for agricultural activities and distribution if necessary. Today, with the laws that authorize clearing and land fires, around 7 million hectares are being devastated, according to reports from the different affected sectors.

Therefore, it had enormous possibilities for the use and planning of the national territory, leading an RA along a less painful, simpler, practical, efficient and visionary path of development than the path it chose with Decree Law 3463 of 2-8-53.

The wide margin offered by the enormous extension of reserves of fertile public lands that it possessed opened up a panorama of easier, safer and fairer solutions, which would have avoided the bleeding and destruction of an already existing productive structure that the RA left in its wake, what I mean is that. Those who adopted this measure were aware that if the path of distribution of public lands was chosen, an adequate support base would have to be built in terms of transport infrastructure, communications, irrigation works, reservoirs, dams and canals. The easiest thing then was to get hold of private investments prior to the reform and confiscate properties in an abusive and violent manner through the use of force, with results such as unproductivity, food insecurity, environmental impact, high migration from the countryside to the city, accompanied by the conversion of agricultural land to urban land.

## **METHODOLOGY**

### **MATERIALS AND METHODS**

This article is based on the research work that has been developed during the sabbatical, rescuing the empirical experience of years of study and reflection of this economic and social phenomenon that has changed the life and reality of Bolivians.

This evidence seems to be a sufficiently solid argument to explain the interest in the study of the evolution of agriculture in Bolivia, in its long-term trend modified in each of the 4 reforms and their cycles or stages that it marks. Contemporary agriculture has been in the past, is in the present and will continue to be in the future one of the most important economic activities, for its contribution to the generation of employment and that it responds to a growing population, as well as for its contribution to the country's GDP and the guarantee of food security without contradicting the conservation of the environment.

Therefore, what is intended in this article is to establish the role of AR in rural economic development and capitalism in Bolivian agriculture, its impact on food security and the mutation of the peasant labor force in its insertion into the sphere of urban mercantile circulation.

On the basis of this claim, the following correlational model has been developed (Manuel Arriaza Balmón - University of Cordoba, 2000):

$$R = a + z * b \quad (1)$$

$$C = b - a \quad (2)$$

$$Z = c/b \quad (3)$$

Where:

$R$  = level of income that responds to the expectations of migrants in the new circumstances of destination

$a$  = level of per capita income of the rural agricultural sector almost always lower than the level of urban per capita income

$b$  = level of per capita income in urban sectors always higher than rural per capita income

$C$  = size of the gap between the largest urban per capita income and the lowest rural per capita income

$Z$  = coefficient of adjustment between urban and rural lower income, which means that rural lower income must grow at a rate  $z$ , so that rural per capita income is at least equal to urban per capita income. The rural migrant will no longer have a stimulus to be part of rural-urban migration.

Raising the production and productivity of rural labor will therefore be the key that explains the possibility of closing the gap and the meaning and reason ex post of the AR.

Income is understood to be the total sum of the remuneration available in the hands of individuals for consumption and savings

If  $a < b$  there are rural/urban migratory flows

If  $a = b$  the migration slows down

If the migratory flow is reversed at  $a > b$ , the city-countryside return takes place

In the model "a" it must reach "b", with the adjustment coefficient in order to curb the migratory flow.

In this case  $R = b$ , where  $R$  is the expected income, equivalent to the urban income

There is no doubt that the decisions of these agricultural units, structured by the RA, depend on the following situations:

If  $P < C$  (product less than consumption, then this farmer is a potential migrant)

If  $P = C$  (product equals consumption, then it will have migrations in critical seasonal or seasonal periods)

If  $P > C$  (product greater than consumption, then the producer tends to remain in the agricultural sector and requires the development of a system of support networks or support system)

## AR RESULTS

Labor productivity is defined as the value of agricultural production achieved by the labor

of each agricultural producer in each unit of labor time applied in agriculture, the magnitude of its value is determined by the amount of labor involved in agricultural production; but the magnitude of the labor time necessary for each agricultural production is modified by changing the productivity of labor, the productivity of labor is therefore expressed in the amount of production achieved in each unit of labor time (hour/work, day/work). An increase in the productivity of labour is therefore understood as any change in the process of rural labour, which reduces the investment of labour for each unit of agricultural production.

Therefore, the higher the productivity of labor or the more production is achieved in a period of work time (agricultural cycle), the lower the value of the agricultural product and therefore the greater the competitiveness of the agricultural production unit, consequently, it will require less agricultural area and conversely, the lower the productivity of labor, the greater the value of the product and will have greater difficulties of competitiveness. the lower the productivity, the greater the need to expand the agricultural frontier.

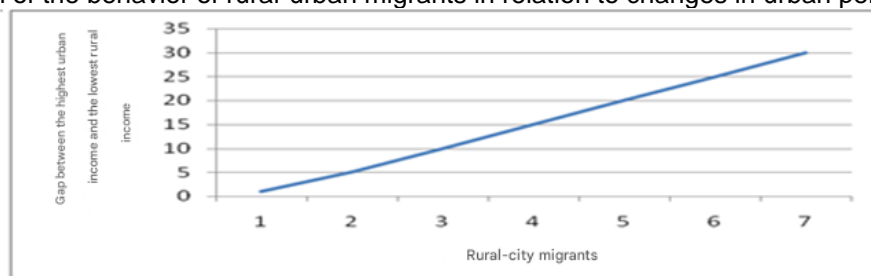
This preceding relationship determines a direct relationship in the first case and an inverse relationship in the second case, with social food security. Therefore, AR would make sense if it had been aimed at increasing the productivity of agricultural work, generating an economic surplus, improving the well-being of the producer, increasing his disposable income, without significantly affecting the environment and guaranteeing the food security of society. The starting point, as is logical, should be that the set of measures implemented by an AR should increase the productivity of agricultural work, this is achieved with any change in the agricultural work process, which reduces the investment of labor for each unit of agricultural product obtained. This means changes in agricultural production methods, technological changes used in agricultural production, biotechnological changes, changes in inputs that raise yields per unit of land, labor and unit of livestock, in short, labor yields more, etc. in addition to the infrastructure in the production support system. Changes in inputs with high yields, introduction of irrigation, natural fertilizers and pesticides and others.

It should be noted that in the preceding relationship there is no mention or inclusion of the change in land tenure or ownership, considering this variable to be indifferent to the productivity of labor, in other words, it is indifferent to land ownership and tenure. In the Bolivian case, the RA has devoted all its resources and efforts to modifying land tenure, with the consequent consequences of setbacks in agricultural development and postponing rural development.

If labor productivity grows, it will contribute to closing the gap between the higher urban per capita income and the lower rural per capita income, which will determine that as the gap closes, the flows of rural/urban migrants will decrease, or vice versa.

Fig. 1 explains how as the gap between rural per capita income and urban per capita income increases, the migratory flow grows.

Fig. 1 Diagram of the behavior of rural-urban migrants in relation to changes in urban per capita income



Source: Prepared by the authors

If  $p > c$  that economic surplus translates into the food security of the rest of society, with that surplus the agricultural producer (peasant) can consume goods and services that he does not produce, resort to medical care and therefore that surplus impacts the health sector; The surplus allows you to improve your housing, affecting the construction sector, the same surplus allows you to consume industrial products and therefore influences the growth of industry, in turn allows you to meet your fiscal obligations (taxes) that translate into government investments: construction and improvement of roads, dredging of rivers, irrigation works, construction of collection systems and in this way a deep cooperation between the sectors of the economy and the market is unleashed, changing the vicious circle into a virtuous circle.

In the same way, this surplus allows it to access the financial system to guarantee future investments and innovations applied to the production of agriculture and transform the peasant, the settler or the community member into a farmer.

Therefore, the principle that guides the first agrarian reform: "the land is for those who work it" lacks any economic meaning if it is not accompanied by that virtuous chain of productive support, becoming solely and exclusively a slogan of speculation and political demagoguery. Only in this way could the vicious circle of the subsistence peasant economy be transformed into a virtuous circle, an aspect that the agrarian reform did not contemplate and condemned rural development and with it agricultural development to setback and stagnation.

In any phase or stage that the productive agricultural units that derive from the agrarian reform find themselves, they must solve three basic fundamental problems:

## WHAT AND HOW MUCH TO PRODUCE?; HOW TO PRODUCE? AND FOR WHOM TO PRODUCE?

The different agrarian reforms have had an impact on the same premises of unequal land tenure, with results that did not substantially modify rural development, a basic hypothesis that the study handled, is that the majority of producers in the agricultural sector evidently want to operate their own productive units and they are the ones who determine and decide on the productive matrix in the way they consider optimal, that is, the how, when and why they are combined in this way.

At the same time, they are the ones who opt for the combination of factors and if these respond to criteria from their optimization logic based on the two resources that are within their reach: land and work, at the same time, they are the ones who establish how much of the product obtained will be used to reproduce the family and how much will go to the market. These decisions are not necessarily in themselves synonymous with successful agriculture, nor are they directly related to the increase in production resulting from agricultural growth and the increase in agricultural productivity, which is the primary objective of rural development. Any agrarian reform should be geared towards and directed towards better results.

The different authors who have dealt with Bolivian RA in the second half of the twentieth century completely exempt the responsibility that the State had to carry out these measures until the rural development of the time was achieved, providing for the new actors means of communication and transport, promoting technological innovations, providing agricultural credit, to establish programs of specialization and training of economic agents, in addition to providing them with the most basic services, education, health, etc., and not to see the events of 1953 as a simple measure: "liberation of the peasant and a measure of social justice" without taking into account that these dramatic events led to the shaking of the foundations of the structure of agricultural production in force until then, many of them also mistakenly considered the shared opinion that the Bolivian RA was the cradle of the great transformations of rural development.

The Bolivian RA destroyed the agricultural structure in force until then and accumulated for many years and made a chaotic and anarchic distribution of everything, without sufficient means to order and organize the chaos, lacked the sources of financing for the introduction of adequate administrative and organizational methods to face the new historical stage. to introduce the training of peasants to transform them from simple producers into farmers, accessible to technological changes and innovations, the introduction of credit, collection systems, marketing systems, introduction of high-yielding species and crops, construction of irrigation works, canals, dams, reservoirs and an adequate transport and marketing



infrastructure, structuring a close and deep cooperation between town and country, between industry and agriculture.

Private property, peasant land, small property, medium property, indigenous community property, cooperative agricultural property and agricultural enterprise are recognized. These aspects turn out to be irrelevant since the productivity of labor, the yield per unit of land and livestock do not depend on these aspects, focusing attention on land tenure as structured by the ideologues of the reform did not ensure the development of agricultural production and with it, the development of capitalism in agriculture, one of these aspects being the sustenance of the development of surplus production. This surplus constitutes food security, which is also linked to agro-industrial production, because this surplus is also constituted as raw materials to develop industrial production, this surplus allows us to feed a mass of workers, miners, so that they can transform primary goods. If the agricultural producer, the subject of agrarian reform, continues in subsistence conditions or barely reaches subsistence, when what he produces is for his own consumption, he cannot ensure the food security of the rest of society for anyone. Endowing the land for this makes the effort useless and even more so if this measure becomes a dispossession towards regression.

The problem is whether this "wonderful panacea", called AR, can really lead to the desired goal, to improve welfare, that is: to increase agricultural production and productivity and to contribute to agricultural growth, rural development and to guarantee the food security of society, maintaining the balance of the environment.

It can be said that the Agrarian Reform has meant in the agricultural sector a factor of consolidation of an agricultural structure of low productivity and, on the other hand, a factor of disincentive to introduce the credit system, technology and the market of goods and services to producers, significantly affecting the sovereign food security of the Bolivian people. a fact that is indifferent to the possession of land.

Table 1. Bolivia: Evolution of agricultural production, yields per hectare. And cultivated area. Selected items Census periods 1950, 1984 and 2013

PRODUCTS	1950			1984			2008			2013		
	Sup. Has	Prod. (Tn.)	Rto. Tn/Ha	Sup. Has	Prod. (Tn.)	Rto. Tn/Ha	Sup. Has	Prod. (Tn.)	Rto. Tn/Ha	Sup. Has	Prod. (Tn.)	Rto. Tn/Ha
MAIZ	104.300	124.000	1.2	220.295	335.287	1.6	408.705	1.000.385	2.4	390.667	845.981	1.8
PAPA	84.900	140.000	1.6	133.087	645.920	4.9	179.407	935.862	5.2	173.168	612.768	3.5
TRIGO	75.900	41.000	0.6	90.203	70.635	0.8	134.795	161.553	1.2	61.491	147.195	2.4
ARROZ	12.500	14.400	1.2	105.641	197.666	1.5	178.533	435.960	2.4	181.497	392.523	2.1
CANA DE AZUCAR	-	-	-	75.000	2.920.000	38.8	151.139	7.458.808	49.3	150.537	8.088.316	53.7
ALGODON	-	-	-	11.000	4.000	0.4	4.500	2.480	0.5	625	-	-
SOYA	-	-	-	72.000	150.000	2.1	835.039	1.225.885	1.5	1.276.344	2.628.108	2.1
QUINUA	-	-	-	39.471	20.296	0.5	50.356	28.809	0.6	105.390	34.054	0.3
TOTALES	277.600	319.400		746.997	4.343.804		1.942.474	11.249.474		2.339.719	12.748.945	

Fuente: Elaboración propia en base a Datos del Informe de la Comisión Interamericana de defensa del Continente, 1957 -Encuestas 2008 y 2013 INE - Censo Nacional Agropecuario 1950 - 1984 INE - UDAPE 2004. [Andin Information Network](#) 2011 (informe sobre la situación de la quinua 1950 - 1960).

Table 1 shows the behavior of the production of selected items that represented to a certain extent the basic elements of the country's popular diet, to which were added those items that were incorporated as an emergency of the birth of agro-industrial companies that required an important production of inputs from the sector, such as that the production of corn, potatoes, rice and wheat, which until 1950 constituted the indispensable element that ensured calories and nutrients for the Bolivian population, which had a drop in crop production in the first 3 years of the RA from 319,400 to 212,500, representing 34% of the lower and continued this decline until the end of the 50s, to later begin a process of growth in 31 years from 319,400 to 549,226 tons, that is to say that in 31 years the growth was from 1 to 1.3, that is, that the real growth, after having replaced the value achieved by the production of the sector for 1950 to 1984 reached 229,826 tons. For the following 30 years, the third census period, the real growth of these same products reached 1,349,241 tons of production, that is, production had reached a satisfactory ratio, almost 1 to 3, this surplus undoubtedly only in a period of more than 1/2 century encouraged the possibility of food security.

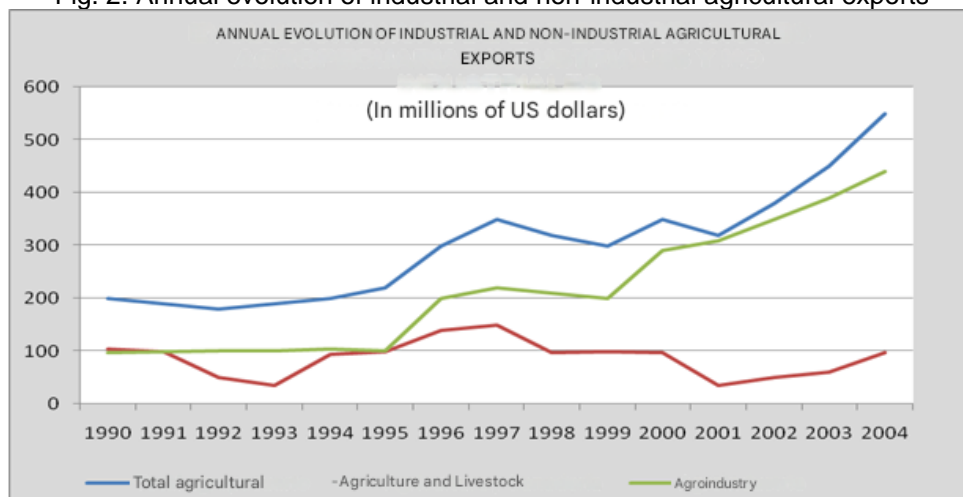
#### 4.2 70 YEARS OF AR AND RURAL DEVELOPMENT IN BOLIVIA – WHAT'S NEXT?

An examination of the situation of Bolivian agriculture in the last half of the twentieth century and the first decades of the twenty-first century, in general, reveals the presence of two totally different types of agriculture: 1) fairly efficient agriculture or also called entrepreneurial and specialized agriculture, in which the production capacity and the product per agricultural worker allows a small number of productive units to produce what is necessary to feed large populations and export the surpluses: production of soybeans, sugar cane, cotton, rice in large plantations, etc.; 2) Inefficient agriculture or also called peasant or traditional agriculture in which the products of the land can barely sustain the peasant family, even at a minimum level of subsistence, with a production of: corn, potatoes, vegetables, quinoa, soybeans, sugar cane, rice and others depending on the region.

The disparity between these two types of agriculture is immense, as revealed by statistics, the disparity in labor productivity has disproportionate figures that reach more than 20 to 1 and even greater gap depending on the product and the regions.

The sources of information to analyze and know directly the family productive units have predominantly been the national agricultural censuses of 1950, 1984 and 2013.

Fig. 2. Annual evolution of industrial and non-industrial agricultural exports



Source: INE. Note: Agricultural and livestock exports include unroasted coffee, cocoa beans, soybeans, beans, flowers, quinoa, uncarded or combed cotton, flowers, raw hides, cattle, and other agricultural products. On the other hand, agro-industrial exports include cocoa, sugar, processed coffee, hides and leather manufactures, soybeans and soy products.

Any process of agrarian reform means a reallocation of factors of production in agricultural development, this is especially manifested in the allocation of the land factor in productive units or areas of colonization and community, the allocations of capital, technological assistance, water for irrigation, improved seeds, fertilizers, credit, etc. replenishment of the environmental impact, among others, fundamental aspects that were not addressed, nor was it the center of attention, but that were the factors that determined the failure of the reform.

## BURNING, DEFORESTATION AND EXPANSION OF THE AGRICULTURAL FRONTIER – THE ULTIMATE CONSEQUENCE OF AR

The epilogue of the failure of the Bolivian AR finds its most complete expression in the last two decades and that manifests itself in the most dramatically harmful and criminal expressions against an integral, balanced and harmonious rural and agricultural development, which threatens not only the sector but also the security and food sovereignty of the current and future generations of the country and calls into question whether a country like Bolivia with Enormous agricultural and livestock potential can look to the future with optimism, with legal provisions aimed at legalizing their own destruction. The history of this barbarism, which in this research I call the fourth reform, begins with Decree 26075 of February 26, 2001, which in its articles 4 and 5 states:

"Article 4 Clearing and burning on Permanent Forest Production Lands is prohibited, under penalty in accordance with the provisions of Article 42, paragraphs IV and V of the Forestry Law."

"Article 5 In the Department of Santa Cruz de la Sierra, deforestation is permitted on private lands subject to the approval of the Property Management Plan by the Agrarian Superintendence, in accordance with Article 5 of this Supreme Decree, and the Deforestation Plan approved by the Forestry Superintendence. In this department, burns are allowed in accordance with the Special Regulation of Deforestation and Controlled Burning, R. M.131/97 of 07/9/97, in the areas classified by the PLUS that allow it."

This decree, which marks the beginning of a primitive and savage form of expansion of the agricultural frontier in response to the demand of agro-industrial production, is the first trial balloon of a policy of agricultural exploitation of the minimum effort and "last minute", the result of a failed RA, marking the return to the starting point. because it is, in short, a matter of authorizing the expansion of the agricultural frontier through "controlled burns" that allow an increase in the percentage of the cultivated area of GMOs, effectively with respect to the area registered or owned, resulting from this provision, publications such as the one stated by PROBIOMA where it is established that Bolivia has lost 300 thousand hectares. per year from Supreme Decree 26075 of 2001, to 2015, deforesting more than 4 million hectares. ranking in this period as the fifth most predatory country in the Americas, after Brazil, the United States, Argentina and Paraguay.

Of the 4 million hectares, according to the Forest and Land Authority – ABT, between 1998 and 2018 it recognizes that 1,518 have been cleared. 669 hectares. legally, and have shown a sharp rise for the year 2013, with an increase of 200% in deforestation.

The main culprits of this deforestation process are mainly located in the large territorial possessions of eastern Bolivia (latifundia), as a "belated" recognition by the RA that large-scale production is the only surplus, agro-industrial, exporting and foreign exchange-generating agricultural production.

The latifundia that was demonized in Law 3464 of August 2, 1953, reconfirmed with Law 1715 – INRA of October 18, 1996 and ratified with Law 3545 of November 28, 2006, shows the double standards of the RA and its ideologues, which for 67 years has exposed, allowing its contradictions to emerge to the surface in subsequent legal provisions.

On September 30, 2015, Law 741 was enacted, which approved the expansion of deforestation from 5 to 20 hectares. by community, as a result of the approval of Law 1098, which authorizes the "production, storage, transport, marketing and mixture of additives of vegetable origin, in order to gradually replace the import of Additive Inputs and Diesel Oil, safeguarding food and energy security with sovereignty". This provision is linked to Law 741 and Supreme Decree 3973 in order to overlap the true background of the provisions that authorize

indiscriminate clearing and burning and for this purpose they endorse with Supreme Decree 3973 of July 9, 2019, which literally expresses the following in its article 5:

"In the departments of Santa Cruz and Beni, deforestation for agricultural activities on private and community lands is authorized, which is part of the Integrated and Sustainable Management of Forests and Land, in accordance with the specific management instruments approved by the Authority for the Inspection and Social Control of Forests and Land – ABT, and its current Land Use Plans. In both departments, controlled burns are allowed in accordance with current regulations, in the areas classified by the PLUS (Land Use Plan) that allow it."

This Decree gave rise to the uncontrolled proliferation of forest fires in the Chiquitanía, giving the green light for the departments of Santa Cruz and Beni to clear areas beyond all control, through the "controlled burning" of forests for agricultural activities on private and community lands. The Decree, which is also said, modified DS 26075 of 2001, in its article 5, linking this to DS 3973 camouflaging illegal actions that tend to erase with the elbow what is done with the hand, or in other words, throw the stone and hide the hand. These actions were aware that a treacherous blow was being dealt to our immense biodiversity, as a result of these events and the development of uncontrolled burning, now protected under DS 3973.

When the fires reached an out-of-control point, and close to 5.3 million hectares. the protests against the "pyromaniacal" DS were not long in coming, warning about the threat it represented against natural wealth and biodiversity, demanding the repeal and annulment of the Decree. Faced with this were those who promoted the rule to carry out the burning, who justified as follows:

"... the questioned regulations are well thought out and well elaborated, safeguarding the sustainability of the environment and the productive development of the country; they should not be repealed. Let's not kill the goose that lays the golden eggs," said the president of the Federation of Cattle Ranchers of Santa Cruz (FEGASACRUZ), José Luis Vaca, at the ceremony of the first shipment of 48 tons of beef to China.

Likewise, the president of the Association of Oilseeds and Wheat Producers (ANAPO), Marcelo Pantoja, said that "we cannot attack the progress of the country; agriculture and agriculture in general can be a great engine of growth for all of Bolivia."

These expressions signify the recognition of the authorship of the fires "by confession of the party, release of evidence" and uncontrolled burnings in the very spirit of the DS, as well as in the authorship of its execution. To make use of a legal expression: A confession of parties, release of evidence.

When the fires reached their maximum intensity and threatened to wipe entire towns off

the map, on March 30, 2019, in the town of San Miguel de Velasco – Santa Cruz, "around 1000 people gathered who felt threatened by the arrival of people from outside the place who arrived with authorization from INRA so that 69 communities settle in 130 thousand hectares of the Chiquitanía. The impotence of the inhabitants was denounced when they saw that these people killed their livestock and burned their lands. Óscar Hugo Dorado Flores, mayor of San Miguel, said that he did not authorize any of that. Aida Gil, leader of the Chiquitana Indigenous Organization (OICH) is accused of promoting what for the locals is a subjugation" punishable by law.

These events do nothing more than confirm that the fires were mixed with one of the most lucrative illegal businesses in recent years and that it moved powerful criminal organizations such as illegal subjugation and the commodification of land on the black market, which had the complicity of government authorities, sectoral organizations, intercultural and judicial authorities.

By mid-2019, forest fires in the country had reached a whopping 5.3 million hectares. Reducing to dust and ash all the biodiversity that covered it, it is estimated that the Amazonian forests have an intrinsic equivalent value between 7000 and 10,000 dollars/ha (biodiversity of flora and fauna, microorganisms, etc.) exploiting it rationally and contemplating all the rules that guarantee its use, sustainability, validity and continuity, if it is considered that more than 60% of these fires reached eastern Amazonian soils. With this burning, the country saw an estimated value of 22,400 million dollars pulverized that benefited no one, the paradox arises "a country in need of resources, pulverized 22,400 million dollars in three months" (conservative figure).

In these circumstances and the way in which it justifies its authorization, DS 3973 resembles the attitude adopted by Emperor Nero when he ordered Rome to be burned to persecute Christians. DS 3973 is protected and covered in innocence to justify itself in a previous DS, it modifies it according to its conveniences and what makes a fetishism of the RA of 53, now the same, authorizes the consolidation of latifundia with the justification of expanding the agricultural frontier, increasing production, guaranteeing food security and exporting surpluses. when we are all aware that this agricultural industry produces more for the international market than for the national one.

Complementing the cocktail, with the authorization of the use of GMOs.

A country like ours, whose three main RAs justified the grabbing of land tenure by large landowners and the low proportion of its use with the cultivation area, it is unusual to authorize through legal provisions methods that are so destructive but accessible to anyone, it is enough to have a match and be emptied of awareness about the damage that is being caused to the country and the planet. This attitude has fostered the massive mobility of land traffickers from all

social classes in which they participate: intercultural, peasants, settlers, community members, politicians, agricultural entrepreneurs, land traffickers, public and judicial officials.

In 2013, the Ministry of Environment and Water, through its General Directorate of Forest Management and Development, classified nine types of forest existing in Bolivia, such as: Amazonian with 37.8%, Chiquitano 16.8%, dry inter-Andean, Bolivian Tucuman, Chaco 17.6%, floodplains, pantanal, yungas and Andean.

The departments that have 80% Amazon forest are located in the departments of Santa Cruz, Beni and Pando. The balance of 20% is located in the eastern mountain range of the Andes, in the inter-Andean valleys and in the highlands.

According to El País, more than two million hectares of forest are burned in Bolivia in two months, the fires are intentional and are intended to add arable land, this year (2024) more than one million hectares have been burned in the eastern region and throughout Bolivia more than two million hectares. (Fernando Molina, 2024)

The causes of the fires are the fires that serve to prepare farmland, called chaqueo and that have mainly affected the Chiquitanía region of the department of Santa Cruz, part of eastern Bolivia where agribusiness is located, where there is an increase in productive areas for soybeans and other products such as sugar cane. from 260,000 to 3 million, this has generated and continues to generate excessive pressure to expand the agricultural frontier. Likewise, the current government is looking to promote the production of agricultural fuel, biodiesel and ethane, as a change in the energy matrix of hydrocarbons.

El País also supports data such as that Bolivia in 2021 the country had 11 million hectares destined for agricultural use, representing 291%. As a result of this unplanned growth and the absence of a Land Use Plan, Bolivia is one of the countries with the highest deforestation in the world, going from 63 million hectares of forest in 1985 to 55 million hectares. in 2022. In the same year, up to 800,000 hectares of forest were lost.

## CONCLUSION

The various agrarian reforms applied in Bolivia have had similar consequences on its economic/social results, leading to the emergence of pernicious tendencies for the future development of the sector and have not managed to resolve the asymmetries in productivity and land tenure, only boosting the mobility of productive factors and putting food security at risk. these vary according to the regions and geographical areas of the country, reaffirming that productivity is indifferent to land ownership and tenure.

The RA of 1953 had profound and diverse consequences that belie the inconsistency of

the different authors who deal with and dealt with the subject, reducing it to the mere abolition of serfdom and the destruction of the latifundia, there is no doubt that with Decree Law 3464, servile and free work on the haciendas was put to an end and the latifundia was declared abolished. but, together with these dramatic events, the AR led to an accelerated growth of Bolivian cities whose population multiplied rapidly on the basis of the rural population, simultaneously, the weight of the rural population rapidly decreased, a strange paradox arose: The measure that underpinned the demographic liberation of the countryside to leverage rural development, it unleashed at the same time a spontaneous migratory pressure from the countryside to the "free and voluntary" city.

In 1950, Bolivian cities were home to only 26.2% of the population, at the same time, the countryside had 73.8%. In 1976, 23 years after the AR still constituted 58.7% of the population is rural, in the population and housing census.

In 1992 only 42.5% and in 2012 only 32.7%. From this it can be deduced that the countryside transferred human resources to large cities and urban centers, multiplied by the per capita product of 2012, representing a transfer close to 18,000 million dollars.

The crucial events that took place after the enactment of the reform throughout the period of its historical evolution, after which they confined the Bolivian countryside to the situation of an agricultural appendage of the mining sector, which had become a huge economically backward space for a long period and which totally modified the economic/social situation of the country, proclaiming that the measure adopted with the RA constituted a real leap in the social, political and economic development of the Bolivian countryside, even though its promoters knew that the measure was not distinguished by its consequence and entrepreneurial significance and economic prosperity. On the contrary, the reform became a primary and routine factor, the work that culminated in the snatching of the land from the landowners and invading the haciendas, seeing themselves lost, the latifundistas and landowners proceeded to abandon their territorial possessions en masse; This implied a radical modification of the social relations of production that had existed until then, in accordance with the general tendencies unleashed by the reform itself.

It was evident that the RA democratized access to and tenure of land, simultaneously it also democratized the generalized poverty of the countryside, where peasants, community members and later settlers constituted new subsistence UPA's, where they lived to work and not work to live better.

In more than 70 years, they have not been able to create successful, highly productive, competitive and high-yield UPAs, with exportable surpluses and converted into taxpayers and



generators of foreign currency for new investments, which by simultaneously enriching themselves enrich the country and thus transform the vicious circle of poverty into a virtuous circle of economic prosperity.

At this point, the following questions should be asked: Why was it that, with three attempts and systematic burning, in a period of a little more than half a century the failure of the AR? What was the reason for its failure?

To the Bolivian situation of the period of the RA, one can apply without any correction an ancient and pleasant Chinese poetry that the poet Kuan-Tsu said 26 and 1/2 centuries ago: "if your projects are for a year, sow grain. If they are for ten years, plant a tree. If they are for a hundred years, instruct your people.

Sowing grain once, you will reap once. Planting a tree, you will harvest ten times. By instructing a people, you will gather a hundred times."

And he summed it all up in a more concise formula: "If you give a man fish, he will feed once. If you teach him to fish, he will feed himself for a lifetime."

The RA gave the land to the peasants, community members and later settlers, but it did not transform them into farmers "it gave them fish and did not teach them to fish, because the State avoided the responsibility of accompanying the expropriations, the distribution and the endowments with actions and resources that transformed them into successful UPA's, for this it was necessary to create a productive infrastructure of transport and communications, energy, irrigation works with dams, reservoirs and irrigation canals, agricultural credit systems, technological innovations, with a bank of improved high-yield seeds in addition to basic services, so that they "live well", ensuring sustainability and sustainability with the care of the environment.

The inability of the governments in power in the course of the four reforms determined their consequent failure.

## REFERENCES

1. Albo, X. (1995). Bodas de plata o réquiem para la reforma agrária. CIPCA.
2. Arriaza Balmon, M. (2000). Correlational model. University of Cordoba.
3. Asociación de Instituciones de Promoción y Educación. (2001). La sociedad civil y el estado boliviano: Crisis y posibles soluciones. Autor.
4. CIDES, UMSA. (2016). Desarrollo rural en Bolivia: Visiones sociales e institucionales. Plural Editores.
5. Colque, G. (2007). Debate agrario. Tierra, (42). Fundación Tierra.
6. Constituyente Soberana. (n.d.). Constituyente Soberana. Retrieved April 16, 2025, from <http://www.constituyentesoberana.org>
7. Deininger, K. (2003). Land policies for growth and poverty reduction (Policy Research Report). World Bank.
8. Eforo Bolivia. (n.d.). Eforo Bolivia. Retrieved April 16, 2025, from <http://www.eforobolivia.org>
9. Food and Agriculture Organization. (1992). The effects of agrarian reform on agricultural production and productivity in Bolivia. United Nations.
10. Garcés, E. (2000). Bolívia: El estado neoliberal y la economía campesina (1985-1993). Revista Semestral Instituto de Estudos Sociais e Econômicos - IESE. Editorial Búsqueda.
11. Gonzales, E. (1984). Economía de la comunidad campesina: Una aproximación regional. Instituto de Estudios Peruanos.
12. Guzmán Torrico, I., Colque, G., & Urioste, M. (2008). Saneamiento de la tierra en seis regiones de Bolivia (1996-2007) (Cuadernos de Investigación, 69). Centro de Promoción e Investigación del Campesinado - CIPCA.
13. International Land Coalition. (n.d.). Land Coalition. Retrieved April 16, 2025, from <http://www.landcoalition.org>
14. Jiménez, L. (2001). Desarrollo sostenible y economía ecológica. Editorial Síntesis.

15. Latin American Journal of Economic Development. (2005). Desarrollo económico. Soipa Ltda.
16. Lenin, V. I. (1947). La cuestión agraria. Talleres MACLAND SRL.
17. Ley 1715. (2000). Ley INRA (Edição atualizada). Editorial CJ Ibáñez.
18. Ley 3545. (2007). Modificações à Lei 1715 de Recondução Comunitária da Reforma Agrária. Viceministerio de Tierras - Instituto Nacional de Reforma Agrária.
19. Molina, F. (2024, August 21). Más de dos mil hectáreas de campos y bosques quemados en Bolivia en dos meses. El País, p. 1.
20. Pacheco, D., Urioste, M., & Colque, G. (2003). La tierra en los valles de Bolivia: Apuntes para la toma de decisiones. Fundación Tierra.
21. Paz Ballivian, D., Colque, G., & Urioste, M. (2003). Tierra, campesinos e indígenas. Fundemos.
22. PIEB. (n.d.). PIEB. Retrieved April 16, 2025, from <http://www.pieb.com.bo>
23. Quevedo, F. A. (2011). La reforma agraria y la emergencia de una renta diferencial. Universidad de Barcelona.
24. Quevedo, F. A. (2021). Agrarian reform in Bolivia, agricultural productivity and food safety. Sabbatical Year - Universidad Mayor de San Andrés.
25. Salazar, F. (2000). Disputa y conflicto por el acceso al agua en el Valle Central de Cochabamba. Revista Semestral Instituto de Estudos Sociais e Econômicos - IESE. Editorial Búsqueda.
26. Salinas Hernaiz, J. (1997). Uso de la tierra: Procedimientos administrativos agrarios (manual técnico). Fundación Tierra.
27. Sanjinés, A. (1939). La reforma agraria en Bolivia: "La tierra para todos como el sol". Editorial Renacimiento.
28. Sud América Rural. (n.d.). Sud América Rural. Retrieved April 16, 2025, from <http://www.sudamericarural.org/download.php>
29. Urioste, F. de C. M. (1989). La economía del campesino altiplánico en 1976. CEDLA.

30. Urioste, F. de C. M. (2001). Las tierras bajas de Bolivia a fines del siglo XX: Tenencia, uso y acceso a la tierra. PIEB Foundation.
31. Urioste, F. de C. M. (2007). Los nietos de la reforma agraria. Fundación Tierra.
32. Vargas, J. (2003). Proceso agrario en Bolivia y América Latina. CIDES-UMSA.
33. Vargas, J. (2004). La reforma agraria desde las regiones: Tierra y territorio. Universidad Mayor de San Andrés, CIDES.
34. Vargas, J., Urioste, M., & Colque, G. (2003). La reforma agraria abandonada: Valles y altiplano. Miguel Urioste F. de C.
35. Wil de Jong. (2004). Retos y perspectivas del nuevo régimen forestal en el norte amazónico boliviano. Center for International Forestry Research.
36. Zeballos, H. (1988). Agricultura y desarrollo económico. Editorial Bolivia 2000.