#### Tesis

# LA REPÚBLICA SOJERA: ORIGINS AND CONSEQUENCES OF THE SOYBEAN AGRO-EXPORT BOOM IN ARGENTINA



## LA REPÚBLICA SOJERA: ORÍGENES Y CONSECUENCIAS DE LA AGROEXPORTACIÓN DE LA SOJA EN ARGENTINA

Mercurio, Nicole

Nicole Mercurio nicole.mercurio@studio.unibo.it Alma Mater Studiorum, Italia

Estudios Rurales. Publicación del Centro de Estudios de la Argentina Rural
Universidad Nacional de Quilmes, Argentina
ISSN: 2250-4001
Periodicidad: Semestral
vol. 11, núm. 24, 2021
estudiosrurales@unq.edu.ar

Recepción: 02 Agosto 2021 Aprobación: 01 Noviembre 2021

**URL:** http://portal.amelica.org/ameli/jatsRepo/181/1812552015/index.html

Abstract: The soybean agro-export boom and the consequent expansion of agricultural frontiers profoundly changed the Latin America society and the South American rural world, with specific forms and implications in each territory. The productivist attitude perpetrated since the 1970s had negative consequences in environmental, economic, and social terms, which spilled over to the most fragile territories for whom export-oriented agricultural economy is the key to their structural development. Soy, increasingly a staple of animal feed, become an essential crop in recent decades, and the expansion of intensive livestock farming led to a growing demand for it. The case study considered in this thesis is Argentina, a territory in which the expansion of the agricultural frontier and the prominence of multinational agribusiness corporations resulted in the deforestation of fragile ecological areas, the destruction of biodiverse environments of the Pampas and led to the eviction of indigenous communities that inhabited these spaces for centuries. The Argentinean political context, with its contradictions and its complexities, shaped a political scenario in recent decades that favoured this process. Critical analysis is built in this work through the study and consultation of scientific essays, documents from the European Commission and the Argentine government, in order to implement a well-founded examination about the contradictions of the current agricultural production model, based once again on a vision and division of the world into centre and periphery.

**Keywords:** Argentina – Soybeans - Agribusiness - Rural economy - Environment - Indigenous communities.

Resumen: El auge de las agroexportaciones de la soja y la consiguiente expansión de las fronteras agrícolas cambiaron profundamente la sociedad y el mundo rural suramericano, con formas e implicaciones específicas en cada territorio. La actitud productivista perpetrada desde la década de 1970 tuvo consecuencias negativas en términos ambientales, económicos y sociales que impactaron los territorios más frágiles para quienes la economía agrícola orientada a la exportación es la llave de su desarrollo estructural. Alimento básico para la alimentación zootécnica, la soja se convirtió en un cultivo esencial en las



últimas décadas y la expansión de la ganadería intensiva a provocado un aumento de la demanda de soja. El caso de estudio considerado en esta tesis es Argentina, un territorio en el cual la expansión de la frontera agrícola y el protagonismo de las multinacionales del agronegocio provocaron la deforestación de áreas ecológicas frágiles, la destrucción de los entornos biodiversos de la Pampa y la consiguiente expulsión de las comunidades indígenas que habitaban estos espacios durante siglos. El contexto político argentino, con sus contradicciones y sus complejidades, configuró un escenario político en las últimas décadas que favoreció este proceso. El análisis crítico se construye en este trabajo a través del estudio y la consulta de ensayos científicos, documentos de la Comisión Europea y del gobierno Argentino, con el fin de implementar un examen bien fundado sobre las contradicciones del modelo de producción agrícola actual, basado una vez más en una visión y división del mundo en centro y periferia.

Palabras clave: Argentina - Soja - Agronegocios - Economía rural - Medio ambiente - Comunidades indígenas.

#### 1. Historical chronology of agro-export policy in Argentina, from its origins to Macri

Argentine history is closely intertwined with the agro-export of raw materials, produced in the Pampa region which embraces the fertile plains in the centre of the country which were the cradle of this type of agrarian economy export-oriented since the end of the 19th century.

The north of Argentina, unlike the Pampas, has historically been inhabited by the descendants of indigenous peoples and its regional agricultural production was oriented towards the internal market rather than global trade.

At the end of the 19th, the state promoted agro-industrialization through the sugar, tea and tobacco productions in the various regions and implement a land privatization policy.

These agro-industries were controlled by regional elites, but they also employed rural workers and purchased the crops grown by small farmers and peasants. Through this process, the indigene populations and the workers underwent a process of interbreeding and campesinización[1], phenomenon that contributed to the homogenization of the different rural ethnic identities.

During national industrialization period, the dominant agrarian elite became the favourite target of the popular project led by Juan Domingo Peròn, who took power in 1946.

The Perón administration established a monopoly on agro-export and founded the Argentine Institute for the Promotion of Trade, which bought the country's agricultural production and sold it on international markets, using the surplus to provide credit to the domestic industry. These policies won the support of rural laborers and agricultural industry workers who initially placed great trust in the project.

However, he never completed the policies aimed at favouring rural work and peasants.

Indeed, in the post-war context Perón administration became conciliatory towards the ruling agrarian classes and the government did not intervene in any way to improve the stagnant income of rural workers. Furthermore, he did not carry out his project of the land redistribution.

The 70s', plays a crucial role in Argentine history, especially in light of Peròn's death in 1974. Despite his policies, during the military dictatorship of Videla of 1976 - 1983, the financial and proprietary class regained its dominance. The architect of the dictatorship economic policies, José Martínez de Hoz, minister

of economics, promoted policies to liberalize financial markets by eliminating state controls on credit and by suspending the "retenciones", i.e., taxes on agricultural exports, while the military detained, tortured and murdered union leaders and peasant leagues who were fighting against the process of privatisation of the country's agrarian economy.

In the period of the Videla dictatorship soybeans, came to occupy more than half of the available agricultural area. This process takes the name of sojizaciòn. The consequence, however, was, with the intensification of the soil exploitation and the abandonment of traditional agricultural practices, greater pressure on natural resources and towards the 1980s yields began to decline due to soil erosion and subsequent desertification[2].

The solution to this problem, which allowed the explosive take-off of soybean cultivation in the 1990s, was the introduction of the first genetically modified seed in the country, the RoundUp Ready soybean produced Monsanto. The main property of RR soy is that it is resistant to glyphosate, a broad-spectrum herbicide that kills all weeds at any stage of the cycle without affecting the soy plant, which means significant cost savings by eliminating the work associated with the application of pre- and post-emergence selective herbicides. The consequences of these solutions became tangible in the 90s, the decade of the explosive take-off of soybean cultivation.

Under the administration of President Carlos Menem (1989-1999), the Argentinean government retaken the neo-liberal socio-economic project only partially implemented during the dictatorship.

In this context the production of agricultural export products expanded geographically and socially. In 1996, at the request of the Multinational Nidera, owner of the license granted by Monsanto, the Ministry of Agriculture approved the marketing and release into the environment of RR soybeans through Resolution No. 167 of SAGPyA (1996)[3].

This phenomenon, as the following chapters shows, had deleterious effects on the country, which still today pays the price of policies that didn't consider the long-term economic, social, and environmental damage that these choices would have promoted.

The policies that during Menem's government favoured deregulation and unrestricted trade hit hard the northern regions of Argentina, by the dismantling of regulatory agencies that supported the agri-food industries oriented towards the internal market. The geographical and economic inequalities introduced by the neo liberalisation of the 1990s led to the process of invisibilization of peasant populations in the national past and in rural policies (Barbetta, Domínguez and Sabatino, 2012).

It is important to underline that in the 1990s the State, while persevering in its neo-liberal project of opening to the agri-food multinationals, created programs to protect the local peasant class. These apparently contradictory tendencies reflect the dual role of the State in the processes of neo liberalisation. Since the government, in fact, manifested its willingness to support small local agricultural enterprises, without never renouncing to the privileged relationship with the agro-industrial multinationals. However, these projects were guided by an orientation to "assist" economically the most disadvantaged class of rural areas, without ever initiating a structural transformation that would really favour this segment of the population in the long term (Manzanal, 2000).

After 20 years of openness to the rules of the global market, public debt reached its peak, the peasant and small landowner class was on its knees and social discontent was growing exponentially.

In 1999, President Fernando de la Rúa took power, leading a coalition that pursued the same liberal policy line as the previous government. At that point, however, this model began to show the first signs of failure.

Due to the neoliberal economic policies carried out by De la Rùa, the situation in the country worsened visibly in 2001, aggravating the economic and social crisis, which took on the guise of a political and institutional crisis, the worst in the history of Argentina in the 21st century. Failing in his attempt to manage the situation, President de la Rúa resigned earlier.

The resignation of the president triggered an institutional crisis and a succession of presidents.

A turning point came with the 2003 elections and the win of Néstor Kirchner, one of the Peronist candidates. Néstor Kirchner tried to differentiate his government from neoliberal principles, supporting a policy of macroeconomic change to stimulate economic growth and promote social mobility and adopting the policy of Keynesian neo-development (Féliz, 2015).

Néstor Kirchner did not really address the issue of agribusiness and the image of a govern that faces large foreign companies and defends small producers against the expansion of the agro-business frontier has never had a real impact in practice.

On the political front, the Kirchner administration rebuilt a hegemonic project under the banner of a "national-popular government", through which close relations were established between the government and social movements from below.

Thus, most peasant movements supported the Kirchners, and some leaders were asked to occupy important government positions. This strategy is in line with Nèstor K.'s theory that social movements are the bridge between government and civil society. The main problem hidden behind the good intentions, however, was that although citizens were given space to express their needs, the decision-making process was still in the hands of the government, following a top-down dynamic.

At the end of 2007, Néstor Kirchner was replaced by his wife and former senator, Cristina Fernández de Kirchner. Cristina's government was ideologically in line with the previous one, thus carrying forward the ideals of the Peronist left and the rejection of economic neoliberalism.

In 2008, the government proposed an amendment to the export tax on soybeans and other crops, which would adapt the tax to the variability of prices in the international market. Agri-food associations and farmers interpreted the measure as a further inter-wind of the state against them, and soon organized demonstrations to protest this measure (Fairfield, 2011; Giarracca and Teubal, 2010).

The conflict eroded the previously undisputed ability of the national government to present itself as the sole promoter of the nation's interests. In Gramscian terms, the situation has redefined the relationship of political forces and updated the hegemonic capacity of agrobusiness in Argentina (Newell, 2009).

Following protests, the proposal was rejected in the senate. The vote symbolically marked the fate of the Kirchner's transversal policy and represented a turning point where the national government abandoned the idea of building its political support through a pluralist form of hegemony, in favour of a top-down, organicist hegemony[4].

As Pablo Lapegna (2016) argues, the passive revolution of Kirchner's administrations is clearly analysable in the dynamics between discourse and politics. While the government dealt politically and discursively with the question of agribusiness in the public sphere, its policies towards agribusiness actors were clearly ambivalent.

Cristina Kirchner's administration has also strongly encouraged the use of GM seeds and the global companies in charge of their development. In just 6 years, between 2008 and 2013, 18 new GM crops were released in Argentina, in contrast to the 11 transgenics approved between 1996 and 2007.

Furthermore, the process of capital accumulation through the expropriation of land in favour of disposals to multinational soy corporations worsened and the quality of life in rural areas, drastically decreased. Considered in political terms, these policies suggest an institutional structure that requires a widespread consensus, but which serves interests, a concept that embodies the very essence of hegemony. (Levy & Scully, 2007, p. 980)[5].

With the end of Cristina Kirchner's government, the Peronist decade came to an end and a new wave of neo-liberalism was on its way. Mauricio Macri won the presidential elections in 2015.

Macri, newly installed, announced the lifting of export taxes on most agricultural products and the removal of exchange controls, decisions that aim to signal an important shift of position towards a new liberalist perspective.

These measures were taken to benefit and promote the agricultural export sector and further expand soybean production. The production of this legume in Argentina in the period 2017\2018, occupied 17.3 ha, amounting to 37.8 million tons[6]. These are decisions and actions with significant territorial consequences such as the increasing deforestation; expansion of the use of herbicides and transgenic seeds; dependence on transnational agro-industry companies and expulsion and persecution of the native rural population. In conclusion, this analysis shows how the government of Mauricio Macri, despite being ideologically detached from Kirchnerist policies, persevered in the work of political invisibilization of certain sections of the population, through a process of strengthening the economic and political power of a few companies, leading the country into the abyss of a social, economic, and environmental crisis from which, even today, has not been able to free itself.

#### 2. Case Study Monsanto Company

The biohegemony of the agro-business multinationals in Argentina has been and still is predominant in the country, regardless of the political orientation of the parties that governed over time.

What is taking place throughout the Southern Cone, especially in Argentina through the production of soybeans is a process of concentration of agricultural property, resulting in the displacement of small producers from their plots, crushed by competition.

This movement produces an anthropological and morphological change from the countryside, subject to a process of standardization and a progressive impoverishment in terms of social and trust relationships. (Stefano Liberti, 2016).

The case study considered to understand this phenomenon is the Monsanto Company, in order to study its penetration in the Argentinean agro-economic fabric and its relationship with local businesses and the Argentine government.

In 1956, Monsanto opened its first plastic production in Zárate, Buenos Aires province. In the mid-1990s, when the company decided to devote itself to the agrochemical sector, Argentina approved in 1996 the introduction of Monsanto OGM RR soybean[7].

Between about 1985 and 1990, Monsanto was looking for a local partner and this is how the Nidera company, a key player in Monsanto's entry into the territory, presents itself. The latter sold the RR soybean license to Nidera, which began producing it and attracting the attention of other local farms interested in the high yield of this product[8]. Monsanto has not registered patents on RR soybean in Argentina and the company's rights to GM seeds are limited by the national seed law[9]. The company's de facto monopoly meant that farmers could buy seeds for personal use, but were not allowed to market them, so they couldn't benefit from the high yield of RR soybean.

It was therefore through a local company that Monsanto entered the country. Argentina was the first key country for Monsanto's infiltration into the continent, but RR Monsanto soybeans managed to make their way throughout the Southern Cone, even in countries where transgenic soybean cultivation was not legal.

n fact, the huge expansion of RR soybean cultivation is linked with the "illegal" sale of the seed through the so-called bolsa blanca[10]. This illegal route expanded the cultivation of RR soybeans, so called "Maradona beans", in Brazil, Paraguay and Bolivia, where GMOs are banned.

According to the Argentine Association for the Protection of Plant Varieties (ARPOV), in 2002 only 23% of the soybeans planted were certified[11].

The impact of the company on biodiversity, indigenous peoples, food sovereignty, the conditions of rural workers and the local agricultural industry, has been devastating and can be defined through the UN regulations on Corporate Social Responsibility and Other Businesses Regarding Human Rights, some of which have been violated by Monsanto during its life cycle in Argentina[12].

There are several UN standards that the company has violated, first by establishing a de facto monopoly on the seed market in Argentina, the key to the entire chain, thus crushing the food sovereignty of the country.

Furthermore, the U.S. company's production model violated the U.N. regulation on CSR, which concerns the company's responsibility to ensure the protection of the environment and biodiversity.

The complaints of contamination registered already in the early 2000s in almost all Argentine provinces, are numerous.

Among the latter, in several municipalities in the province of Cordoba, as in the case of the Ituzaingó district in 2004, several chemical agents traceable to Round-up Monsanto, used for fumigation in soybean fields, were found. In domestic water tanks have been detected the presence of agrochemicals such as Endosulfan and Heptachlor and heavy metals such as lead, chlorine, arsenic. In the same period examined, in that territory there was also an exponential increase in diseases such as cancer, lupus, violet, hemolytic anemia and respiratory and skin allergies[13].

Soybean plantations devastated ecosystems, ruined thousands of small producers and put an end to the country's traditional wealth and biodiversity. The defence of the interests of Monsanto soybean agrobusiness created a model of systematic violence against rural and indigenous populations that results in evictions, arrests, persecution, and threats to those who resist. The pressure to leave their lands is translated into harassment ranging from intentional contamination of water sources to theft or killing of livestock. The intensive use of chemicals for agriculture has therefore caused the contamination of the territories of the surrounding population, crops, animals, and water sources[14].

The presumed production efficiency achieved was based on the natural subsidy granted by the fertile Argentine pampas.

It is not easy to investigate Monsanto's work and the consequences of glyphosate and its harmful products, as the company, in the face of countless complaints over the past 20 years, always denied its responsibility and besmirching the evidence. Recently, one of the last and toughest attacks received by Monsanto came in 2017 from a report by Le Monde, through which the newspaper told of the attack that the IARC, WHO Institute for the cataloguing of carcinogens, has had and is still suffering from Monsanto, after having demonstrated in its Monograph No. 112 of 2015 the carcinogenicity of glyphosate, the main component of Monsanto's RoundUp herbicide. The information on which Le Monde built its investigation is part of the Monsanto Papers, internal documents made public in the United States in early 2017 as part of legal proceedings. The IARC considers the most widely used herbicide in the world genotoxic (i.e., capable of damaging DNA), carcinogenic to animals and "probably carcinogenic" to humans.

The spectacular increase of this product between the '70s and today, is due to the widespread adoption of genetically modified seeds to tolerate this substance, the so-called Monsanto Roundup Ready seeds.

So, when IARC announced that glyphosate is "probably carcinogenic," Monsanto reacted with unprecedented violence, questioning the reliability of the IARC data. In the same year, Hollingsworth, Monsanto's law firm sent a letter to the IARC, ordering them to hand over all files related to monograph 112. This is just one of the tools of intimidation used by the firm to escape serious allegation by the IARC.

The event had a great resonance and hence complaints against the company increased exponentially, with 3,500 reports in which American citizens blame the fumigation of the Monsanto herbicide as the cause of the circulating non-Hodgkins lymphoma, a rare blood cancer. Given the context, Le monde brings to light a second part of the investigation, which brings to light a media scandal against Monsanto, the accusations of ghostwriting[15]. The experts enlisted by the multinational, under remuneration, signed articles not written by them, but by Monsanto employees. These were scientific papers published in specialized journals, through which the company defended itself against accusations about the negative effects of glyphosate on the environment and health[16].

This global debate is still going on but the relevance of Le Monde's investigation lies in having brought the Monsanto's responsibilities to light, showing the negative consequences brought by a company which

is founding part of a production model that endangers biodiversity, concentrates the land ownership, and produces the loss of autonomy by local agricultural producers, crushed by the weight of insurmountable competition and the ecological crisis now no longer sustainable.

### 3. The dark side of the soy frontier expansion: environmental consequences and RURAL CONFLICT

The agricultural production model established in Argentina allowed the country to enter the global agricultural market but at a very high price. The price was paid by conflicts over land, loss of food sovereignty, irreparable damage to the Argentinean ecosystem and local communities.

This model has important ecological and social consequences, such as the acceleration of deforestation, the appearance of glyphosate-resistant weeds, air contamination, soil erosion, loss of biodiversity, concentration of land and production factors and conditioning of rural and urban migration dynamics.

The deforestation is one of the main consequences of the process, and according to data from the National Secretariat of Environment and Sustainable Development (2020), in the period 2004-2012, 2.501.912 hectares of native Argentinean forests such as Chaco and Yunga were razed, the equivalent of 124 times the area of Buenos Aires.

Corruption, the misuse of the Forest Law of 2009 and the sale of land to the soybean market are certainly the main causes.

The services and environmental benefits provided by native forests are uncountable and, in addition, this process caused the displacement of communities that developed their economy and social model on the resources and spaces of the native forest, therefore, the deprivation of their habitat is violence.

Deforestation also led to the progressive impoverishment of the soil, causing a decrease in its productive capacity, which has often resulted in desertification.

The Pampa's ecosystems with multiple productions, are now unproductive green deserts, since the intensive cultivation reversed their ecological balance.

Soil is essential for any community, it is the most useful non-renewable resource, and is therefore the basis of many rural indigenous social groups.

Indeed, one of the soil erosion consequences was the migration of the local population, witnessing the basis of its social and economic structure damaged.

Due to the expansion of soybeans weeds resistant to glyphosate, the main ingredient of the Roundup herbicide, producers were forced to increase the amount of herbicide used, aggravating the environmental damage to the Argentinean ecosystem.

Since the dawn of 2000, journalists and NGOs started reporting cases in which agrochemicals spread by fumigation helicopters on soybean fields had disastrous effects on the lands and on the health of inhabitants, livestock, and watercourses [17].

The unscrupulous consumption of herbicides and pesticides and the lack of ecological criteria occurs in all agricultural activities in Argentina and is related with the current production model.

The silence, the lack of interest by the established authority and the underlying economic interests, however, did not stop the struggles for change implemented by local communities, peasants and citizens, who despite the difficulty of living in a polluted, complex and often impenetrable context, did not cease to live their territory as a space of political militancy.

The rural indigenous communities that inhabited the Argentine territory for centuries, have suffered the effects of the soybean agrobusiness boom for decades. However, it is necessary to highlight how during the years of the Kirchner administrations, the process of accumulation by expropriation (Cáceres, 2014; Harvey, 2003) become stronger and life in the countryside worsened for populations exposed to the effects of the agro-food industry expansion.

First, the expansion led to an increase in demand for arable land. When the availability and Pampa's land price reached their limit in the early 2000s, agribusiness expanded in northern Argentina. This demand for land soon resulted in violence and conflict, which led to the deaths of several indigenous farmers and activists in northern Argentina[18]. For those populations that have not been evicted from the land, the extensive production caused the runoff of agricultural chemicals into watercourses and air contamination, endangering the health of rural populations. (Arancibia, 2013; Binimelis, Pengue, & Monterroso, 2009; Leguizamón, 2014).

The conflict is directly related to the different forms of perceive the territory, which is, for the communities that live the space, a struggle to preserve their identity. An explanatory case study is the community Qom Potae Napocna Navogoh, called La Primavera, residing in Chaco and the process of territorial conflict between the community on the one hand and the National Government and the Province of Formosa on the other. The community faced them with scarce material resources but with solid symbolic and political resources. One of the peculiarities of the case is the way in which the Qom of Potae Napocna Navogoh and its leader Félix Diaz, capitalized on the different political experiences they have lived through dynamically reconfiguring their strategies[19].

Potae Napocna Navogoh is a rural indigenous community located 174 km from the city of Formosa, in the most fertile area of the province.

Although the people of Qom have been persecuted and pushed for decades to abandon their ancestral lands since the dawn of colonial times, their situation worsened when the soybean frontier reached Formosa and Chaco, and the land increased in value exponentially.

Since 2010, the Qom people's struggle begun to assume greater public impact, due to the strong community response to Kirchner's policies, which instead of implementing a real change against land grabbing, expanded the network of agreements with agribusinesses. The introduction of the Law n. 26.16052, promulgated at the end of 2006 produced a general enthusiasm. It potentially allowed the provincial government to "demand" a solution to the historical problem of the ancestral territory. But that enthusiasm turned into disappointment because of the articulation difficulties between the national and provincial levels of government. At the provincial level, indeed, the rights of indigenous people met with the usual pitfalls: land occupation, violent evictions, police repression, judicialization of the complaint [20].

In 2007, the province decided to subdivide the land of Qom Potae and assigned 609 hectares to the National University of Formosa. So, in mid-2010, the community led by Félix Díaz began the roadblock of the national highway 86 that crosses the province of Formosa, to prevent the construction of the headquarters. On November 23, the intervention of the provincial police led to a violent repression that caused the death of Qom Roberto López. What was the basis of the dispute of November 23, 2010? The events were the culmination of a series of processes of expulsions, submissions and overlapping measurements. The culmination of a decade of transfers of Qom land to Argentinean and foreign companies caused by the Government and the Province itself, which remained silent seeing the territories more and more limited to the indigenous population and suppressing in violence every action of claim. Never in two hundred years indigenous peoples reached the centre of political power in Argentina so strongly. And the affirmation, unequivocal and powerful, is the same as in the last two centuries: land, rejection of the companies that evicted them, respect for their ancestral culture and justice in the face of past and present abuses.

The indigenous Argentinean history of the 21st century, deals with the usurpation of the territory, unreachable competition, uncontrolled agribusiness, irreparable environmental damage, and adaptation to the marginal role attributed by the Government and Argentinean society.

#### 4. THE EUROPEAN ENVIRONMENTAL PARADOX

GMO production, the increasing demand for soybean products and the use of glyphosate, are gaining a prominent place in the world debate and not only in Argentina. The Argentinean phenomenon is part of a global situation in which the expansion of intensive livestock farming requires more and more quantities of soybeans, especially GMOs, for animal feed. The production in Argentina is mainly devoted to export and the expansion of the agro-business frontier to produce this crop is directly related to the increase of its demand from the US, the EU and China. It is therefore interesting in this context to analyze the regulation of production and import of this crop in the European Union. More precisely, it is necessary to examine them through the CAP rules, the EU Common Agricultural Policy.

The production of vegetable proteins like soybeans, stimulated the political debate at EU level, given the growing difference between supply and demand for this product, which forces the EU to import more and more soybeans, mostly GMO, from abroad. Among the main soybean producers, together with France and Romania, there is Italy. In Italy, according to Istat data, the cultivated area has more than doubled from 153 thousand hectares in 2012 to 318 thousand in 2017. With these data, Italy is the first European producer but despite this, Italian self-sufficiency is only 20%. In the same way, the EU self-sufficiency rate, in the case of soybean is 5%, so we need to import the remaining 95% from Brazil, Argentina and the USA.

Europe, except for some cases such as Spain and Portugal, does not produce GMO crops but is authorized to market them, following the directives that the 2001 Declaration on GMOs in Europe states.

Among the most recent innovations with respect to the increasing openness of the European Union to the GMO issue is the approval in October 2020 of the import and marketing within the EU borders of a variety of GMO soybeans produced by Bayer-Monsanto for food and feed.

t is necessary for the research purposes, to understand why EU perseveres with this closure to products that continue to be imported in increasingly quantities and what are the consequences on the territories outside the European border of this type of agricultural system import oriented.

The increasing openness to imported GMO soybean and to foreign multinationals that produce it, reduced the costs of the Union, but is at the same time symptomatic of strong contradictions with European policies to protect the environment and mitigate the effects of climate change, starting from the most recent and important measure, the Green Deal.

The European Green Deal was approved by the European Parliament on January 15, 2020, and is the pact through which Europe expresses its aim to bring the economy of its countries in line with the Paris Agreements, in order to contain the rise in temperatures within two degrees. Among the proposals of the European Commission there is a new way of producing and circulating and the attempt to make climate and environmental challenges opportunities for growth and not limits.

The Green Deal, however, may not be as green as it appears, and underlying contradictions can be hidden behind this pact. In an article published in Nature, written by three researchers at the Karlsruhe Institute of Technology, Germany, the authors reveal that the deal could result in the export of their environmental damage to other countries[21].

The Green Deal does not set rules on what is imported, and this leaves a legal hole in the plan. Imports come from countries where environmental protection laws are looser than in Europe and trade agreements do not require imports to be produced with sustainability criteria (Fuchs et al. 2020, Nature).

An example comes from the trade agreement signed in 2019 between Europe and Mercosur, the common market of South America, in which the main economic players are Argentina and Brazil. From 1986 to 2016 the European demand for oilseeds, mostly used in animal feed and biodiesel, doubled. The largest supplier of oilseeds is Brazil, one of the countries most affected by the environmental, political, and social effects of the agricultural frontier expansion, and whose production is almost entirely destined to western demand. According to Garmisch researchers, since 1990 European agricultural imports have been responsible for one

third of deforestation linked to global trade. It is estimated that 9 million hectares were deforested from 1990 to 2008, most of them in the Brazilian Amazon and Cerrado, the Brazilian tropical savannah, to meet European demand for oilseeds. If from 1990 to 2014 European forests have witnessed an expansion of 9%, in the world 11 million hectares have been deforested to meet European consumption demand (Fuchs et al. 2020, Nature). Three-quarters of this deforestation is associated with oilseed crops, produced in Brazil and Indonesia, regions overflowing with biodiversity and with the highest carbon dioxide absorption capacity in the world. The thesis of the Garmisch researchers is therefore that Europe takes the credit for home-grown green policies, but in the global sustainability report it outsources environmental damage.

The Green Deal, and in particular the Farm to Fork initiative, are set to transform European agriculture in the next decade. Fertilizer use will be reduced by 20 %and pesticide use by 50 %; a quarter of the land will be planted with organic crops by 2030 and 3 billion trees will be replanted. These are ambitious and opportune objectives but there are no adequate laws criteria to check that sustainability standards are also met by imported products[22].

Regarding pesticides, the EU applies double standards about the use of some varieties of products such as glyphosate, often prohibited or not used within the European Union border but imported from abroad from territories where the use is allowed.

The debate on the toxicity of the product is still open in the EU arena and several studies have been carried out over time. Among these, in 2017, in response to the initiative of 1,070,865 EU citizens entitled "Banning Glyphosate and Protecting People and the Environment from Toxic Pesticides", the European Commission produced a report in which it communicates the EU's position on the matter. The initiative invites the European Commission to propose to the EU Member States to:

"1. Banning herbicides based on glyphosate; 2. Ensure that the scientific evaluation of pesticides for EU regulatory approval is based on published studies scientific; 3. Set mandatory reduction targets for pesticide use at EU level"[23]. The European Commission's response to this issue is important for the understanding of the EU position on the use of herbicides and glyphosate. The Commission's first response explained that current EU rules on pesticides ensure that only safe active substances and plant protection products are approved in the EU. These rules also promote low-risk active substances and non-chemical alternatives and require measures to ensure the sustainable use of pesticides.

About the issue of glyphosate, the Commission explains that its use has been authorised since 1 July 2002 following its first scientific review under Directive 91/414/EEC12, which was later repealed by the current PPP Regulation.

From 2012 to 2017, glyphosate has undergone scientific evaluation to verify if it continues to meet the safety criteria of EU legislation. About the effects of glyphosate on human health, the rapporteur Member State, Germany, carried out an assessment of all available data and was subsequently peer reviewed by all other EU Member States and EFSA.

In March 2015, IARC, the World Health Organization's Agency specializing in oncology and the detection of carcinogens, published its Monography 12 on glyphosate, concluding that glyphosate should be classified as probably carcinogenic to humans.

Consequently, the Commission asked EFSA to consider the IARC monography. Regarding the assessment of carcinogenicity, EFSA concluded that "it is unlikely that glyphosate poses a cancer threat to humans". About the ecosystem damage, the EU assessment did not provide any evidence that glyphosate causes ecosystem degradation when used in line with good agricultural practices. However, since the use of glyphosate is the elimination of competing plants, there may be an impact on trophic nets, as the Commission itself admits.

Considering this scientific evaluation carried out, in November 2017 the Commission submitted to Member States a draft implementing regulation for the renewal of the approval of the substance for a period of 5 years. The Commission therefore concludes that it doesn't have the elements to present to the legislators a proposal to ban glyphosate. However, Member States have the obligation to evaluate all authorisations of plant protection products containing glyphosate and may decide to introduce restrictions for some of them if justified by data relating to the conditions in their territories. So, entrusting the large part of responsibility to individual countries.

It is necessary to remember how the IARC study is accompanied by thousands of complaints from citizens who have suffered the negative effects of this substance, addressed to companies such as Monsanto, supplier of GMO crops to the EU. Analysing the critical points of the European Commission's Report on this issue, first, The Commission defines the ban on aerial spraying of herbicides, due to the preservation of citizens and limits the use of pest killers in ecologically sensitive areas, implicitly admitting the potential harmfulness of the product.

The contradiction that lies in these prohibitions is that such restrictions are required only for production in Europe. In fact, there is no rule that products from outside the EU must be grown within the constraints of the internal context.

In the meantime, EU continues to import products from countries whose production does not respect the ecosystem and local population protection criteria, feeds an agricultural context, such as South America, in which the expansion of the agricultural border suitable for export, causes massive damage.

In conclusion, it is necessary that environmental and social indicators consider in their balance sheet not only the negative consequences caused by domestic production, but also those that are projected outside the borders and affect fragile spaces and territories. The processes described in this work, reveal some of the critical points of modernity, from the control of natural resources to the crisis of the role of the nation-state as guarantor of sustainable management of territories and those who live them daily.

The lack of attention to ecological criteria and social dynamics in the territories that are victims of the expansion of the agricultural frontier is related to the current prevailing productive model.

A model based on the exclusion of local actors, the expulsion from the economic dynamics of producers and communities that live in the spaces and the impoverishment of the life conditions and work of the workforce. In the final analysis, the contamination of territories and the outsourcing of environmental and social damage are part of a precarious and deficient system that applies double standards based on the degree of relevance that each territory assumes in the rules of the global market. A logic that, through the study and critical analysis of the underlying contradictions behind this model, must be overcome.

#### REFERENCIAS

- C. Caillabet (2004) Intervista a Adolfo Boy sugli obiettivi della Monsanto nel paese. Rivista Rel-Uita
- Communication from the Commission on the European Citizens' Initiative "Ban glyphosate and protect people and the environment from toxic pesticides". Strasbourg, 12.12.2017 C (2017) 8414 final.
- Delvenne P, et al., The "soy-ization" of Argentina: The dynamics of the "globalized" privatization regime in a peripheral context, Technology in Society (2013)
- Domínguez, D. y Sabatino (2006) Con la soja al cuello: crónica de un país hambriento productor de divisas, en Alimonda, H: Los tormentos de la materia. Aportes para una ecología política latino-americana. CLACSO, Buenos Aires.
- Lorena Cardin (2013). La comunidad qom Potae Napocna Navogoh (La Primavera) y el proceso de lucha por la restitución de su territorio.
- Ministero de agricoltura, ganaderia y pesca, 2019
- P. Lapegna (2016) Soybeans and power: Genetically modified crops, environmental politics, and social movements in
- P. Lapegna (2019) The political economy of the agro export boom under the Kirchners: Hegemony and passive revolution in Argentina. Journal of Agrarian Change.

- Richard Fuchs, Calum Brown & Mark Rounsevell. Europe's Green Deal offshores environmental damage to other nations. 26/19/20, Nature
- S. Perez Garcia (2008) INFORME DE INVESTIGACIÓN SOBRE LAS OPERACIONES DE MONSANTO EN ARGENTINA, report n°5.
- Stéphane Foucart e Stéphane Horel (2017). « Monsanto papers », désinformation organisée autour du glyphosate. In the edition of 2 june 2017, Le Monde.

#### **Notas**

- [1] It is a set of processes that promote the homogenization of the different ethnic, cultural, economic, and social identities of rural populations, under the "peasant" category.
- [2]Domínguez, D. y Sabatino (2006) Con la soja al cuello: crónica de un país hambriento productor de divisas, en Alimonda, H: Los tormentos de la materia. Aportes para una ecología política latino-americana. CLACSO, Buenos Aires. Pág. 256
- [3] Domínguez, D. y Sabatino (2006) Con la soja al cuello: crónica de un país hambriento productor de divisas, en Alimonda, H: Los tormentos de la materia. Aportes para una ecología política latino-americana. CLACSO, Buenos Aires. Pag. 254
- [4] P. Lapegna (2016) Soybeans and power: Genetically modified crops, environmental politics, and social movements in Argentina. Pag. 325
- [5] P. Lapegna (2019) The political economy of the agro export boom under the Kirchners: Hegemony and passive revolution in Argentina. Journal of Agrarian Change. Pag. 325
- [6] Ministero de agricoltura, ganaderia y pesca, 2019
- [7]ONG Grain (2004). Monsanto y las regalías semilleras en Argentina.
- [8] C. Caillabet (2004) Intervista a Adolfo Boy sugli obiettivi della Monsanto nel paese. Rivista Rel-Uita
- [9] Ley de Semillas 20247, http://infoleg.mecon.gov.ar/txtnorma/34822.htm
- [10]ONG Grain (2004). Monsanto y las regalías semilleras en Argentina.
- [11] Delvenne P, et al., The "soy-ization" of Argentina: The dynamics of the "globalized"
- [12]S. Perez Garcia (2008) INFORME DE INVESTIGACIÓN SOBRE LAS OPERACIONES DE MONSANTO EN ARGENTINA, report n°5. Pag. 5
- [13]S. Perez Garcia (2008) INFORME DE INVESTIGACIÓN SOBRE LAS OPERACIONES DE MONSANTO EN ARGENTINA, report n°5. Pag. 11
- [14] S. Perez Garcia (2008) INFORME DE INVESTIGACIÓN SOBRE LAS OPERACIONES DE MONSANTO EN ARGENTINA, report n°5. Pag 12
- [15] It consists in acting as a ghost author.
- [16] Stéphane Foucart e Stéphane Horel (2017). « Monsanto papers », désinformation organisée autour du glyphosate. In the edition of 2 june 2017, Le Monde.
- [17]P. Lapegna (2016) Soybeans and power: Genetically modified crops, environmental politics, and social movements in Argentina. Pag. 43
- [18]P. Lapegna (2019) The political economy of the agro export boom under the Kirchners: Hegemony and passive revolution in Argentina. Journal of Agrarian Change. Pag. 325
- [19]Lorena Cardin (2013). La comunidad qom Potae Napocna Navogoh (La Primavera) y el proceso de lucha por la restitución de su territorio. Pag. 5-6
- [20]S. Soria (2015) Políticas indigenistas en la Argentina kirchnerista. Íconos, Revista de Ciencias Sociales. Pag. 3-4

NICOLE MERCURIO. LA REPÚBLICA SOJERA: ORIGINS AND CONSEQUENCES OF THE SOYBEAN AGRO-EXPORT BOOM IN ...

[21] Richard Fuchs, Calum Brown & Mark Rounsevell. Europe's Green Deal offshores environmental damage to other nations. 26/19/20, Nature

[22] Richard Fuchs, Calum Brown & Mark Rounsevell. Europe's Green Deal offshores environmental damage to other nations. 26/19/20, Nature

[23] Communication from the Commission on the European Citizens' Initiative "Ban glyphosate and protect people and the environment from toxic pesticides". Strasbourg, 12.12.2017 C (2017) 8414 final.