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Investigación original

Land grabbing of farmland: the food security of the world in the hands of a few

Acaparamiento de tierras de cultivo: la seguridad alimentaria del mundo en manos de pocos

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Abstract: The practice of “land grabbing”, or the large-scale hoarding of fertile lands in developing countries by rich countries, transnational corporations and individuals, in order to grow food beyond their borders, is today reaching historically unparalleled figures. Although the dominant discourse vindicates this process as an opportunity for the countries that are recipients of these practices, numerous voices warn about the role played by this phenomenon in the (re-) emergence and development of global and local problems. The objective of this work is to demystify the theoretical, political and historical proposal endorsed and promoted by international organizations such as the International Monetary Fund and the World Bank in the light of conflicts over the use and ownership of land. Together, food security, impacts on small and medium-sized local farmers and migration are generating the current model of international land grabbing.

Keywords: agriculture, development, food security, land grabbing, migration, responsible investment.

Resumen: La práctica del “acaparamiento de tierras”, o el acaparamiento a gran escala de tierras fértiles en países en desarrollo por parte de países ricos, corporaciones transnacionales e individuos, con el fin de cultivar alimentos más allá de sus fronteras, está alcanzando hoy cifras históricamente incomparables. Aunque el discurso dominante reivindica este proceso como una oportunidad para los países que son receptores de estas prácticas, numerosas voces advierten sobre el papel desempeñado por este fenómeno en la (re) aparición y desarrollo de problemas globales y locales. El objetivo de este trabajo es desmitificar la propuesta teórica, política e histórica respaldada y promovida por organizaciones internacionales como el Fondo Monetario Internacional y el Banco Mundial a la luz de los conflictos sobre el uso y la propiedad de la tierra. Juntos, la seguridad alimentaria, los impactos en los pequeños y medianos agricultores locales y la migración están generando el modelo actual de acaparamiento internacional de tierras.

Palabras clave: agricultura, desarrollo, seguridad alimentaria, acaparamiento de tierras, migración, inversión responsable.

Introduction

According to data provided by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (DESA), the world population reached 7,631 million inhabitants in 2018. The World Population Outlook, presented by

the same organization, in its 2012 Report pointed out that the world population will increase by almost one billion people in the next twelve years, going from 8.1 billion in 2025, to 9.6 billion in 2050 and 10.9 billion in 2100 (DESA, 2013, p. XV). Inevitably, there will be variations in the exact figures. However, if the forecasts are accurate in general terms, there will be many difficulties for us to overcome. Among others, Reuter and Richter (1941) already warned in the middle of the last century of the numerous national and international conflicts that will arise or intensify around the redistribution of land and resources. Eight decades later, to the still relevant social and political concerns they pointed to, we must add a sustained environmental concern that transcends ecological factors and, not only makes the risks indicated years ago more evident, but also warns of a magnitude and plurality of dimensions to consider that would have been unthinkable less than a century ago.¹ As numerous recent studies point out, “even as we tighten our grip on the environment, the extension of anthropogenic actions destabilizes long-standing ecological balances” (Galvani, Bauch, Anand, Singer & Levin, 2016, p. 14502). An example of this is in the intensification of extreme weather events such as large storms, droughts and floods that are increasingly severe and cause considerable direct destruction that is evident at the time they occur and has medium and long-term consequences whose repercussions are not always evident.² Due to the current distribution of wealth, these varied consequences affect most those who have the least capacity to recover from them. Thus, we observe the risk and real instances of generalized food insecurity, the increase in the transmission of infectious diseases and the economic instability that follow, for many years, these natural phenomena.

Such risks, conflicts and tensions are putting the survival of some cultures and the lives of millions of people at risk. As we have already advanced, one of the main challenges we must face is the current, and future crisis in food security.³ In other words, we must ensure - as indicated by the Committee on World Food Security (CSA) - that “all people, at all times, have physical, social, and economic access to sufficient safe and nutritious food that meets their food preferences and dietary needs for an active and healthy life” (CSA, 2014, p. 9).

The Food Security, Agriculture, Forestry and Environment Report” prepared for the Brundtland Commission⁴ went a little further at the end of the last century and pointed out that, as a species, the main challenge to be solved will be “food security on an ecologically sustainable basis. (Harriss, 1988, p. 3)

The key to our success will depend, says the text, on our ability to increase “the security of sustainable livelihoods.”⁵

Hope was then placed, just as it is now and has been in the past, in the development of a highly technical scientific agriculture. Such trust is well justified. The extraordinary increase in agricultural production that has been taking place since the end of the 19th century to date has been mainly due to scientific and technological development.⁶ Wheat

is a good example of this since the introduction of irrigation alone has increased its yield between 20 and 40% (Alanís, 1985, p. 163).⁷

Institutions such as the Organization for Economic Cooperation and Development (OECD) are very clear in regarding the adoption of technologies as the best and most important strategy for the economic development and Food security of developing countries:

Agriculture has the potential to make a unique and central contribution to a more sustainable society. Not only can it guarantee the continuous development of an environmentally sound food supply to meet the needs of the rapidly expanding world population, but it can also guarantee the conservation of the rural environment with its natural habitat, genetic biodiversity, landscapes and cultural traditions. (OECD, 2001, p. 24).

The Green Revolution is a clear example, if not necessarily the principal one, that occurs in these circumstances. Only 50 years ago, the OECD notes (2001), wheat yields in Europe averaged about 2 tons per hectare, while today the average is 7, although it is not uncommon for some farmers to produce 10 tons of wheat per hectare. Thanks to the Green Revolution, as Harriss notes (1988) per capita cereal production has increased 0.5 % per year.

There are many studies and indicators that show impressive advances in agricultural production. Advances mainly due, as we have mentioned, to scientific and technological development. However, despite the improvement in productivity achieved, population growth and per capita food consumption have led many countries to exceed the capacity of their territories to sustain their way of life in the long term (Trápaga, 2012). In recent decades, in order to guarantee food supplies in the quantity and quality demanded by their markets, there has been a constant search for new lands, a “tendency to increase the inventories of lands wherever they may be” (Trápaga, 2012, p. 74, 90). This obsession with the search for new lands is not new, but what is distinct is the magnitude and way in which it is carried out today, as we shall see later.

An example of this is found in the Mexican case. A significant factor in the increase in agricultural production achieved in Mexico during the first decades of the twentieth century was due to the geographical displacement of corn and wheat.⁸ However, the lack of access to sufficient land in more developed countries, which are usually in the temperate-cold climate zones, led to the expansion of their agricultural models to desert and arid areas, such as Mexico, in the mid-20th century⁹. It was in these regions¹⁰ that the Green Revolution was developed, an irrigation agriculture, of high hydraulic, commercial and technical development. Once the desert was “domesticated,” the main availability of new lands was found in tropical and subtropical areas.

The expansion of the agricultural model into these new regions was not easy. It encountered the same problems as in desert areas decades before. One of the most important was the application of scientific knowledge hitherto obtained to new local conditions (such as climate, biota and soil type) in addition to the logistics of cultivation. These variations were not necessarily cumulative, experience showed that the effects of two

factors applied independently was different from the effect produced by the simultaneous application of the two factors (Turrent-Fernández & Cortés-Flores, 2005, p. 267).

As a result, the need for the practical application of scientific knowledge in each specific agricultural region became evident, requiring on-site scientific research.¹¹ However, until relatively recently, agricultural research has focused mainly and originally on regions with temperate-cold climate and, subsequently, on regions with a desert climate. Those works of research implemented in tropical areas have been (we insist, until recently) very limited and with very low budgets. The main reason for this has been the source of funding which is governments of very poor or developing countries.¹²

The challenge was issued: to overconsumption and increased demand for food in developed, urbanized and capitalized countries was added the need to develop agriculture in the tropics. An agriculture, whose main source of research was governments of very poor countries, also required that the new agricultural production model allow exports while supporting a constantly growing local population.

Although, as we already pointed out, the solution was put back first and foremost in the hands of science and technology, it was now done so in the light of a whole series of questions: to what extent could science and technology help to improve agricultural production rates in these regions? What kind of science and technology? Would it be necessary to implement other types of strategies? The opening of more farmland, especially in Africa and Latin America, emerged as one of them. However, how to do it? How to establish those new lands and manage them? Who should do it?

Authors such as Méndez (2012) point to the search for international investors as the first step. International institutions and organizations such as the Food and Agriculture Organization of the United Nations (FAO), the United Nations Conference for Trade and Development (UNCTAD), the International Fund for Agricultural Development (IFAD) and the World Bank responded. All of them not only bet on, they also encouraged and promoted a “responsible agricultural investment”¹³. “The Principles for Responsible Investment in Agriculture and Food Systems,” approved by the Committee on World Food Security (CSA) on October 15, 2014, cannot be clearer in this regard. The first paragraph is already a clear statement of principles:

Responsible investment in agriculture and food systems is essential to improve food security and nutrition and support the progressive realization of the right to adequate food in the context of national food security. Responsible investment contributes significantly to the improvement of sustainable livelihoods, especially for small producers and members of marginalized and vulnerable groups, through the creation of decent employment for all people working in agriculture and food, the eradication of poverty, the promotion of social and gender equality, the elimination of the worst forms of child labor, the promotion of social participation and inclusion, the increase of economic growth and, therefore, the achievement of sustainable development. (CSA, 2014, p. 3).

This approach, dominant today and espoused by international organizations such as those mentioned (especially the World Bank and FAO), claim responsible investment as an opportunity for recipient countries (Trápaga, 2012). The adoption of the new technology that would come with the investment promises not only an increase in agricultural productivity, but also the development of new sources of employment and the securing of income thanks to exports (Trápaga, 2012). Méndez points out in this regard:

The increase in investment can bring benefits at the macroeconomic level (GDP growth, higher government revenues), and create opportunities to raise local living standards. Investors can contribute capital, technology, know-how, infrastructure and market access, and can play an important role as a catalyst for economic development in rural areas. (Méndez, 2012, p. 21).

This investment, therefore, is not only positive at the global level, it is also (and intends to be principally) a support instrument for regional or local development (FAO, 2009), and a key to the growth of those economies. Of course, it is pointed out that respect for human rights in investment agreements is imperative and fundamental (Carroccio, Crescimanno, Galati, & Tulone, 2016).

It is via this discourse that numerous governments have been pressured since the 1980s, by international financial institutions such as the World Bank and the IMF and organizations such as the United Nations (UN), to encourage foreign investment as a strategy to promote development. Many of these governments have finally accepted such foreign investment as an instrument through which to create jobs and build infrastructure (Carroccio et al., 2016). The main areas around which they have concentrated this investment have been tourism the extraction of natural resources and agriculture. In the latter case, contracts with rich countries have emphasized the assurance of the food demands of their own populations (Spielfeld & Murphy, 2009). However, beyond these official or original reasons - such as the increase in demand for food and energy (Vandergeten, et al., 2016; Carroccio et al., 2016), or the promotion of local or national economic development- we must add other values, assets and interests that have fueled land ownership changes through concessions, long-term leases and property transfers. One of them has been the high volatility of the prices of basic agricultural products¹⁴, with which we have to relate, in part, – to the interest in the production of biofuels and climate change.

It is necessary to add to all of this the appearance in recent years of new actors, with new logics and interests. These are, among others, the financial sector, among which we find private investment funds, large pension funds (GRAIN, 2012) and even universities such as Harvard, Spelman or Vanderbilt (Méndez, 2012). These new actors and their logics of action are giving rise in recent decades to a phenomenon of land grabbing that is without parallel in history. In 2008 alone, numerous negotiations took place between governments and private companies trying to create agreements on long-term leases or land sales in developing countries (Spielfeld & Murphy, 2009).

Although the public data available is never accurate due mainly to the opacity that exists around these practices (Méndez, 2012), the numbers provided by institutions such as the FAO and NGOs such as GRAIN, allow us to gain an idea of the dimension of the problem. Regarding that issue, Cotula and his collaborators document in research done for the FAO, the International Foundation for the Development of Agriculture (IFAD) and the International Institute for Environment and Development (IIED) that, in just five countries (Sudan, Ethiopia, Madagascar, Mozambique and Tanzania), at least 2,492,684 hectares were allocated between 2004 and 2009, not including concessions of less than 1,000 hectares (Cotula, Vermeulen, Leonard & Keeley, 2009). In contrast, GRAIN denounces in its 2012 report that, as a result of the permissiveness towards this type of practice, and even invitation and promotion, between 2006 and 2012 more than 35 million hectares of land have been monopolized by foreign investors for food crop production (GRAIN, 2012; Madeley, 2012) ¹⁵ . Although this figure illustrates quite well the great dimension of the problem, it is far less than the nearly 50 million hectares that Méndez (2012) claims were bought or rented by foreign investors in 2009.

If it is true that this phenomenon is global (GRAIN points to 66 affected countries), it is extremely serious in Latin American, Asian and Eastern European countries, but particularly acute in Africa, the main target for national and transnational investors.

Based on the data published by GRAIN on March 26, 2016, the acquisition or grabbing of land has been distributed as follows (table 1, fig. 1):

| Region | Hectares |
|---------|------------|
| AFRICA | 16,253.679 |
| AMERICA | 5,247.844 |
| ASIA | 3,668.900 |
| EURASIA | 3,041.213 |
| EUROPE | 1,236.115 |
| OCEANIA | 5,355.693 |

Table 1

Distribution of hectares of land by continent.

Source: compiled by author based on data obtained from GRAIN, 2016.

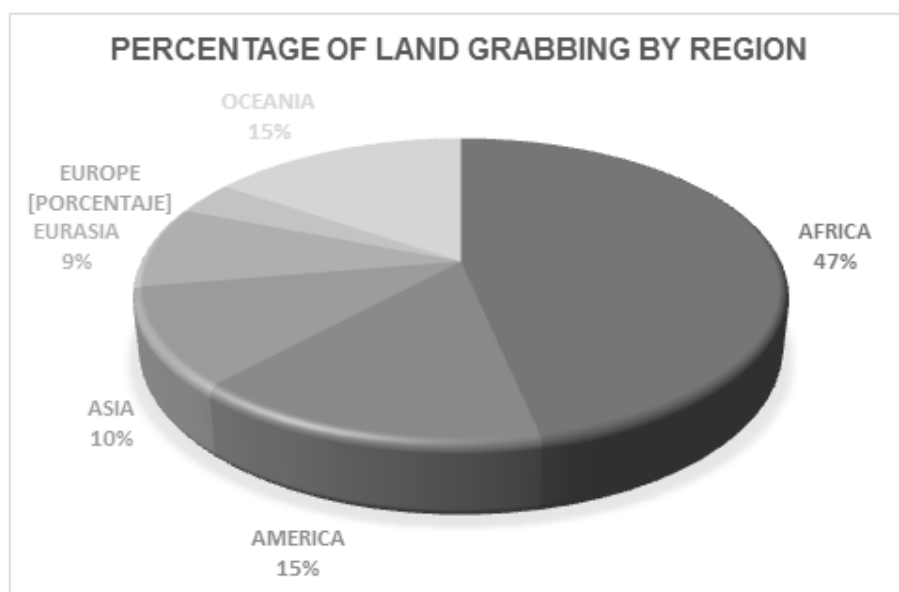


Fig. 1

Distribution of hectares of land by continent.

Source: compiled by author based on data obtained from GRAIN, 2016.

If we examine these figures more closely, we can appreciate that, of the developing countries, sub-Saharan land is most desired by investors due to its low price (Stedjan, 2015; Grain, 2012).¹⁶ In either case, authors such as Collier and Dercor (2015) argue that the economic and social development of Africa depends, to a large extent, on their ability to learn and assimilate the historical experiences of rich economies and recent Asian economies. In both cases, the authors point out (Collier & Dercor, 2015, p. 1), success has been related to:

- a) A significant decrease in people dedicated to agriculture.
- b) A large increase in urban and coastal population.
- c) A reduction in the size of the rural population that lives far from urban and coastal areas.
- d) An increase in agricultural labor productivity.
- e) A significant increase in general agricultural production.

Following these principles would mean adopting a new production model that would allow - or at least promise - a significant improvement in agricultural yields. It forces, on the one hand, to leave behind a production dominated to date by small farmers, with low yields, limited marketing, a lot of land-related workforce and very low productivity growth. On the other hand, it obliges the variation of crops and the directing of attention to those crops that allow for the use of a wide variety of technologies (Collier & Dercor, 2015).

Not all authors agree with this strategy or the consequences of adopting them. At present, there is a vigorous debate between those who see great development opportunities in these financial transactions and those who are seriously concerned about the impact that they can have to the detriment of rural life and the food security of citizens in

developing countries (D'Odorico, Rulli, Dell'Angelo & Davis, 2017). Thus, opposing those who consider that international investments in agriculture are required, at almost any price, there are those who see in this phenomenon an unprecedented looting that has and will have very serious consequences (D'Odorico et al., 2017).

Even the FAO itself recognizes that the hoarding that is taking place is predominantly in “the best possible predatory style” and is leading, among other things, to widespread unemployment among local agricultural workers. In most cases, the workforce is brought from the same investor country in order to guarantee the quality or standardization of the processes (Deininger, 2008; Trápaga, 2012). The main criticisms of the phenomenon of hoarding that we are experiencing focus on the negative impacts upon local populations and the environment. In the first case, these mainly refer to the food insecurity that is still observed in several regions of the world¹⁷, the frequent permanence of fallow land (which prevents the fulfilling of one of the promises made with respect to the generation of jobs) and large food exports to investing countries (D'Odorico et al., 2017). We will now focus on three of the consequences of these practices: the emergence of conflicts over land use and ownership; the migration phenomena it produces; and the growth of agrarian social movements.

Conflicts over Land Use and Ownership

The access of the local population to the land, and therefore to the resources that it requires, is inversely proportional (as seen in the work of Méndez, 2012) to the increase in interest in markets for available land and the willingness of governments to negotiate with those interests as the price of the land increases.¹⁸

This is not, as we have already noted, a completely new phenomenon. On the contrary, it responds and is largely a consequence of the practices carried out during British colonialism. Ramutsindela and Sinthumule (2017) point out how the double ownership of land was then promoted and, with it, the traditional African systems of their tenure were transformed. These systems gave indigenous farmers rights to use and not property. This double tenure of land meant, in practice, that white people possessed land as private property and, black people as communal lands. This situation was inherited by the democratic state. The agrarian reforms directed by the market during the twenty years that followed independence were a disappointment (Pilososof, 2016) since most areas of Africa, says Boix (cited in Bernal, 2016), are governed, even today, by customary law, so that the lands have neither title nor deed. Without deeds, the land is the property of the State and it sells it to investors. The peasants do not have the money to process the title of the property and, therefore, lose the land.

Singer (2013) states that this may even happen when the residents comply with the requirement of being the legal owners; the extreme poverty in which many of them live, leads them to accept the money that

investors offer them. The author questions whether the fact of owning the land is enough to protect these people from poverty.

Impact on Local Communities

As a result of all this, one of the main effects that has reached a significant part of the population has been evictions. Many of them have been carried out in a violent and repressive manner (Vidal, 2012). This, together with the fact that a large part of the population is dedicated to agriculture, has led to serious episodes of unemployment, hunger and poverty (Boix cited in Bernal, 2016).

On the other hand, the positive impacts that these foreign appropriations have had on local development are much lower than those promised (Zoomers, Gekker, & Schäfe, 2016; Zoomers, Noorlos, Otsuki, Steel, & Westen, 2017). One of the reasons for this is the exclusion that the majority of the local population feels with respect to the many jobs produced. This has led to a proportion of the local population migrating. In addition, as the authors cited above maintain, those who obtain employment do so in conditions of exploitation and poverty.

D'Odorico, Rulli, Dell'Angelo and Davis highlight three of the consequences and implications that lie behind land grabbing:

- a) The appropriation of water from other countries.
- b) The increased risk in rural populations of falling into conditions of food insecurity.
- c) The considerable effect on the environment as a result mainly of deforestation, habitat destruction, greenhouse gas emissions and soil erosion (D'Odorico et al., 2017).

An important part of the justifications used to continue with the current large-scale model of land acquisition relies, in good measure, on their designation as vacant, unused land. However, these lands are usually forests that bear fruit, firewood and game for a significant population.

Proposals by Way of Conclusions

At this point, it can be concluded that, although the increase in population and per capita food consumption obliges a search for new farmland, new alternatives for both production and financing in research and development must be sought. Although the solution initially proposed by institutions such as the FAO or the World Bank based on the promotion and creation of responsible investment frameworks, was not without logic, the real consequences produced from the land grabbing it favored, mean we are forced to look at other options. Lipton and Saghai (2017) claim that in order to minimize the consequences of the current land grabbing model, it is necessary to carry out a more equitable distribution of land and an agrarian reform that allows the State to address the urgent problem of food insecurity.

The active integration of the population of poor or developing countries in the development of lands acquired or rented by large corporations is a fundamental strategy to increase employment in the communities. The agreements must include benefits for all parties and these must be present under the conditions that governments establish in the acquisition agreements. Likewise, these governments must promote the enactment and enforcement of environmental protection laws.

Parallel to this, it is important to support studies on the real situation of African countries, assess the impact of land investments on economic development and agricultural production, in order to provide different governments with information and tools that allow them to make the right protectionist decisions for their population.

There is much to do from different levels and perspectives. A fundamental aspect is that of education and awareness. An awareness that, as Zimdahl and Holtzer (2016) point out, reminds us that every society has a value system based on beliefs and motivations; that food production is, from our origins, a central value for every society. Agriculture, its meaning as a constitutive civilizing activity, the role it plays in each culture and what it represents for those who participate in agronomic projects, forces us, we understand, to attend to the philosophy, concept and meaning of agronomy and agriculture for each agent or community that participates in its development (Serrano & Rivas, 2014).

However, as Zimdahl and Holtzer (2016) point out, the curricula of most US agricultural institutes do not offer courses that examine this central value or the role that new models of large-scale agricultural production and land grabbing are playing. The ethical implications and problems that are occurring must be addressed on the basis of a knowledge of what is happening in the world, and also, from the knowledge and application of ethical concepts for the benefit of people generally.¹⁹ That is why the education of agricultural ethics must be offered in the universities that train people who in the near future can contribute, from a value system based on ethics, to the welfare of human society. As we have seen, merely trusting in a better use of arable land would be insufficient since it already implies a considerable increase in forest clearing and use of fresh water that exacerbates the already scarce water supply in multiple regions of the world. Technology, as Trápaga (2012) reminds us has not been able to create large-scale farming of high productivity, nor have perfect substitutes been developed to date that would allow us to realistically cover current food needs.

It is therefore necessary to work on awareness of the social responsibility of all those involved (Zimdahl & Holtzer, 2016) and, above all, to do so with a view towards the most unprotected. It is essential, the authors conclude, to promote ethical awareness and the participation of every citizen within their own field of action.

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Notes

1 In fact, today there is talk of a Human System-Coupled Environment (or Human and Natural System Coupled, CHANS for its acronym in English) characterized by the bidirectional dynamic interactions that occur between different human systems (e.g. social, political or economic) and natural (e.g., atmospheric, biological, geological or hydrological). This coupling forces us to consider that the development and transformation of social and environmental systems can no longer be treated as individual isolated systems.

2 Galvani et al. (2016) set the example of Hurricane Matthew in 2016. They confirm how a few weeks after its passage through Haiti there was a dramatic increase, among other devastating repercussions, in the number of cholera cases (20 p. 14502).

3 There are many voices, says Yolanda Trápaga (2012), who agree in predicting a scenario of global food shortage by 20.

4 This report was published as: Food 2000: Global Policies for Sustainable Agriculture, Report to the World Commission on Environment and Development, Zed Books, London, UK, 1987.

5 The report states in this regard: “‘Livelihoods’ is defined as adequate reserves and food flows and cash to meet basic needs. Security refers to secure ownership of, or access to, resources and income earning activities, including reserves and assets to offset risks, ease shocks and meet contingencies. [And] sustainable refers to the maintenance or enhancement of resource productivity on a long-term basis” (Harriss, 1988, p. 266).

6 It is recommended that those who are interested in knowing in some detail how during the nineteenth and twentieth centuries scientific thought was introduced into agricultural practice consult the works of A. Turrent-Fernández & J.I. Cortés-Flores (2005) “Science and technology in Mexican agriculture: I. Production and

sustainability", Tisdale and Nelson (1975) "Soil fertility and fertilizers" and I. Asimov (1989) "Asimov's chronology of science and discovery".

7 A local example is found in the Mexican case (we take this as the cradle of the Green Revolution). The distribution by the Comisión Nacional de Maíz (within the framework of the Mexico Agricultural Program) of 2,500 tons in 1948 and 3,000 tons in 1949 of improved corn seeds, allows us to see that they offered a yield 25% higher than that given by common varieties (Alanís, 1985, p. 162).

8 In the case of corn, the crop yield was 10 % higher in the period 1945-1948 than 20 years before (Alanís, 1985, p. 161) and, in the case of wheat, 17 % (Alanís, 1985, p. 162).

9 Those who are interested in this phenomenon of expansion or export of the agricultural production model have an extensive bibliography at their disposal. This includes the work of D. Fitzgerald (1986) "Exporting American Agriculture: The Rockefeller Foundation in Mexico, 1943-53" and J. Cotter (1994) "The Origins of the Green Revolution in Mexico. Continuity or Change?"

10 First in Mexico, then in India and Pakistan.

11 It is true, and we must consider, that the work of N. Borlaug partially broke the barrier of genetic non-extrapolability. The development of varieties that contained the most suitable alleles in a single plant, allowed the exportation of varieties developed in Mexico to other regions of the world with similar latitude. Among these were densely populated areas suffering great famine in Asia and Africa (Turrent-Fernández & Cortés-Flores, 2005, p. 267).

12 It is the case of Africa. Turrent-Fernández and Cortés-Flores point out in this regard the scant investment that has been made in agricultural research, its teaching and the dissemination of applied scientific knowledge by the [mainly sub-Saharan] states (Turrent-Fernández & Cortés-Flores, 2005, p. 267).

13 "The purpose of the Principles is to promote responsible investment in agriculture and food systems that contribute to food security and nutrition and, therefore, support the progressive realization of the right to adequate food in the context of national food security" (Committee on World Food Security – CSA, 2014, p. 5).

14 Above all, it has been since 2008 that the increase in food prices worldwide has been historic (Kugelman & Levenstein, 2009; Demissie, 2014). An increase that had been preceded by a strong upward trend since 2005. According to the FAO Food Products Price Index, these increased by 12 % between 2005 and 2006, 24 % in 2007 and about 50 % between January and July 2008 (FAO, 2009). For its part, the WB notes that, during 2006-2008, it was the staple foods that suffered the greatest increases in their prices. The price of wheat increased by 130 %, soybean by 87 %, rice by 74 % and corn by 31 % (Trápaga, 2012, p. 73).

15 See the collection of data and the interactive map published by GRAIN on 26 March 2016 (<https://www.grain.org/es/article/entries/4481-grain-publica-conjunto-de-datos-con-mas-de-400-acaparamientos-de-tierra-agricolas-a-nivel-mundial>).

16 It is no accident, as the authors point out, that the report already referenced by Lorenzo Cotula and his collaborators (2009) focuses on to five countries in this region.

17 According to the FAO, from 2006 to 2009 the number of people living with hunger in the world increased by more than 100 million (thus reaching the figure of 1,200 million) (Spielloch & Murphy, 2009, p. 39). The International Atomic Energy Agency (IAEA) denounces for its part on its website that, despite producing more food in the world today than ever before, about 800 million people still suffer from chronic malnutrition That translates into "serious food insecurity in many regions of the world" (IAEA, s.f., p. 1).

18 In a footnote, A. Mendez herself points out by way of example that in 2007 the price of arable land increased by 16% in Brazil and 31% in Poland.

19 To this lack of interest shown in the curricular programs, we must add what we already did within the specialized academic world. In a paper published in 2014, the academic community was invited to join the philosophical investigation of the current agricultural phenomenon (Serrano & Rivas, 2014). Although since then production has increased, we understand that it is not enough in light of the ethical and social implications.

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