

New Division of Labour in Agricultural Foreign Trade: Turkey

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Abstract

From the early 1980's until today, the foreign trade deficit of agricultural raw materials in Turkey has continued increasingly. In this process, there is an increase in exports of processed agricultural and food products. However, coverage ratio of deficit in raw material trade with processed agricultural products and the export of food products is progressively decreasing. The main point here is not only the increasing obvious position of Turkey in terms of exports, but also its new position determined by multinational corporations in new global division of labour and chain of exploitation.

Keywords: Division of Labor in Agriculture, Agricultural Foreign Trade, Agricultural Markets, Agricultural Policies

JEL Classification: Q10, Q13, Q17, Q18

1. Introduction

Monopolization in agricultural product and food markets since 1980's has gained a great acceleration. This monopolization process has been going through both on the basis of agricultural production input and international agricultural merchandise trade.

This monopolization process taking place in agriculture is not independent from the international division of labour in agricultural production. In other words, the new international division of labour and the domination of international corporations have been working on hand in hand. Now, while developed countries are concentrating on the production of massive raw material and in particular seed production, which entail advanced technological investment and accordingly large-scale capital, underdeveloped countries are in a transition, from exporting conventional agricultural raw material to a position of exporting processed agricultural products. The main determinant of this division of labour is wage differentiation that the disparity of development has caused. The cost advantage due to the fact that low-wage level generated in crop processing provides the ultimate determination of products at a low price, and the import of these products can be used as a way to repress wages in developed countries (Sönmez, 1985; Yenal, 2001). Accordingly, the main goal of this study is to make general analysis through statistical datum specific to Turkey, in accordance with the monopolization process in agriculture that takes place in the framework of new global division of labour, which is also working against underdeveloped countries. Transformation in the global system since 1980's could also be observed in Turkey, and indications of the transformation can be followed through changes in agricultural foreign trade.

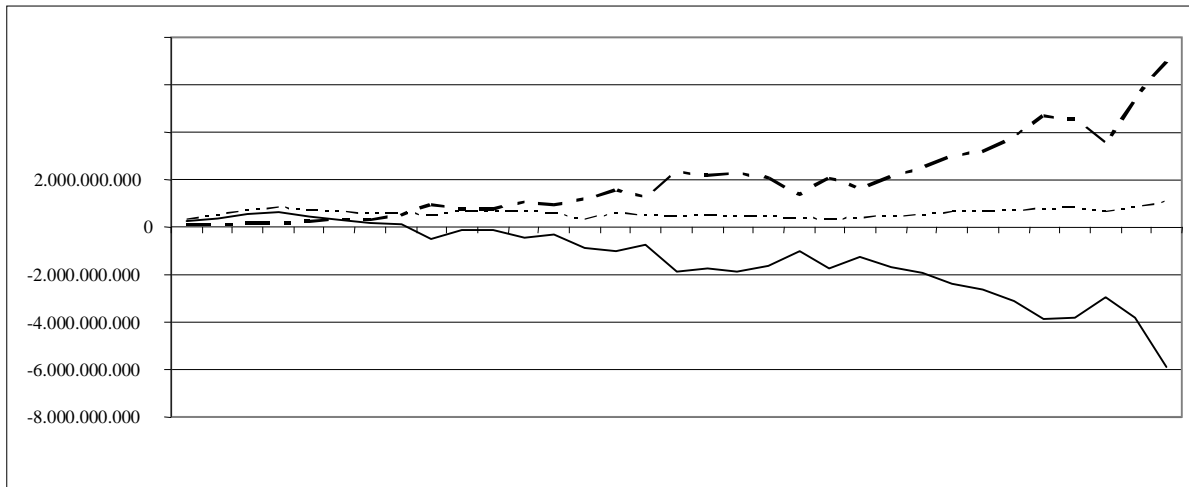
2. Change in Agricultural Division of Labour of Turkey

There are two different classification methods used in the determination of foreign trade figures in respect of the determination of the transformation of foreign trade.

The first method which is being used is ISIC Rev. 3 (International Standard Industrial Classification of all Economic Activities, Revision 3), and the second one is SITC Rev. 3 (Standard International Trade Classification, Revisions 3). The main difference between two classification methods is that, there is not possibility for examining separately the processed food stuff and agricultural raw within total foreign trade of agriculture material in ISIC Rev.3, which SITC Rev. 3 had (Günaydın, 2009: 208).

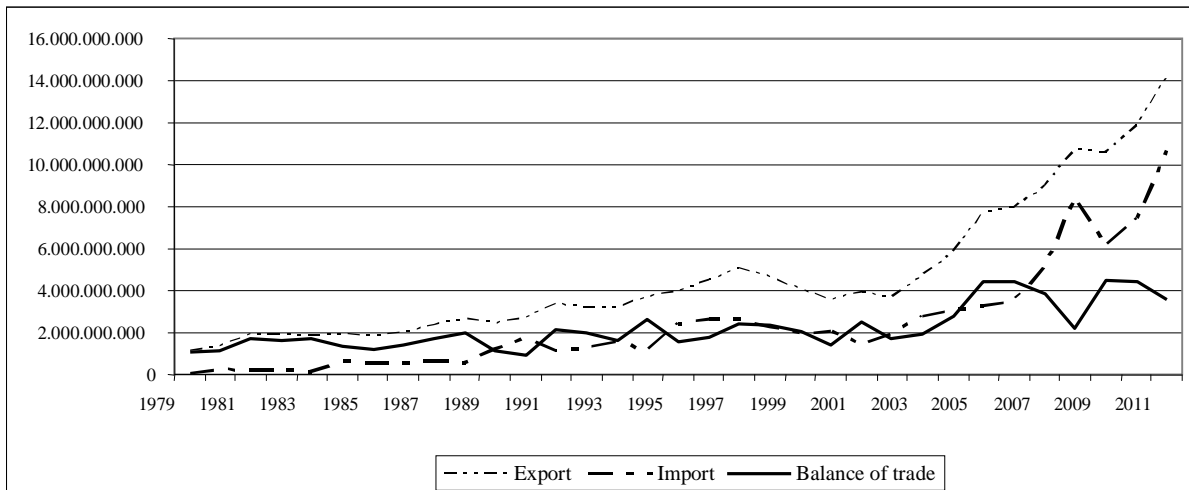
As one could see in Graphic 1, Graphic 2 and Graphic 3, the deficit of agricultural raw material in foreign trade have led off since early 1980's, and have been gradually increasing, while foreign trade of processed agricultural products and, even if it does not exactly overlap, food products have surplus. However, general balance sheet shows that the capacity of compensating the deficit in raw material trade with the surplus of agricultural products trade is less and less decreasing. In other words, it is possible to say that position in the export of net agriculture products is increasingly strengthened. Given the fact that determinants of division of labour are developed countries; it is not misleading to see this as a natural result.

Graphic 1: Agricultural Raw Material of Turkey



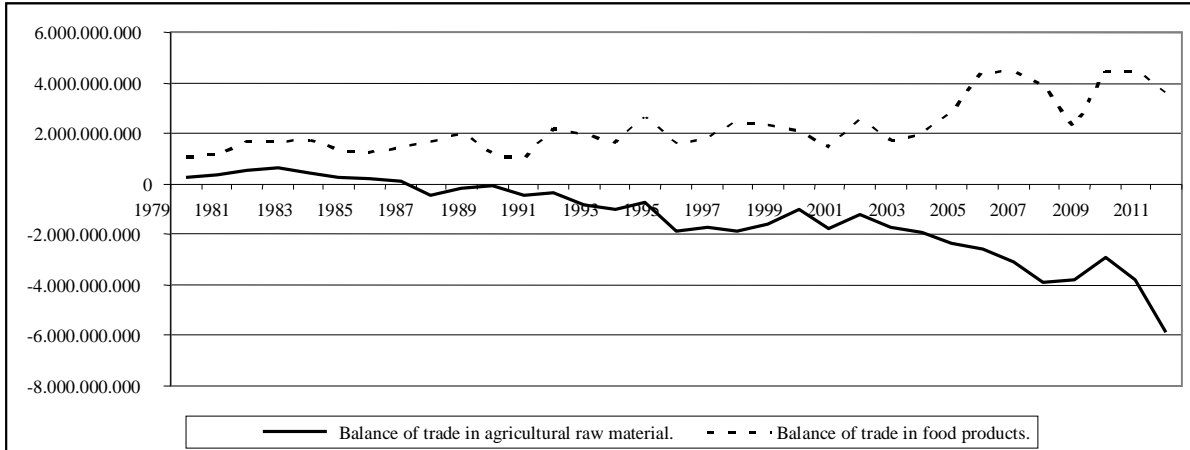
Source: Turkish Statistical Institute

Graphic2: Processed Agriculture Products in Foreign Trade of Turkey



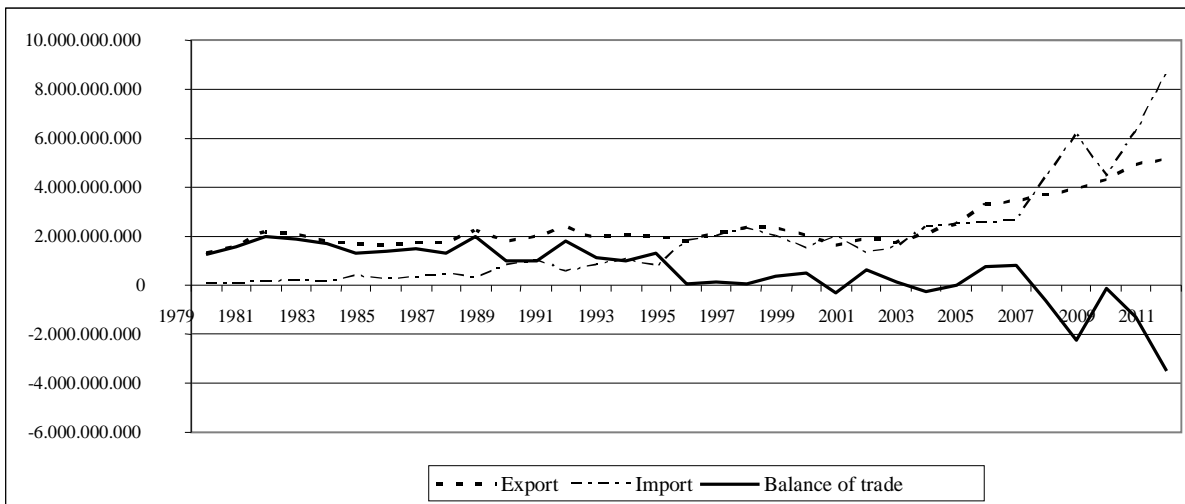
Source: Turkish Statistical Institute

Graphic3: Balance of Trade In Respect Of Main Groups



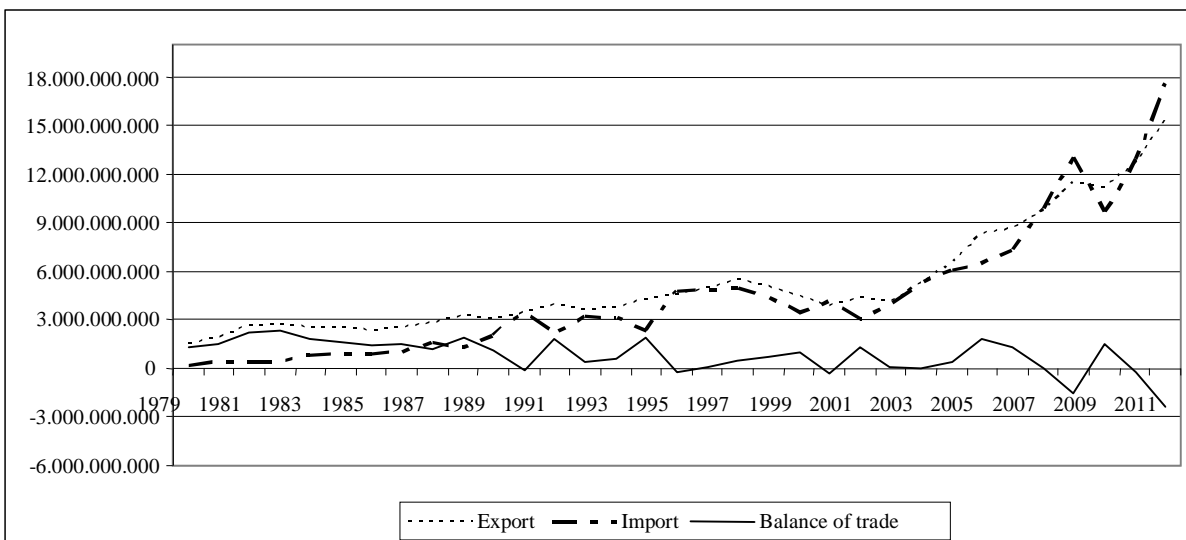
Source: Turkish Statistical Institute

Graphic4: Agricultural Foreign Trade According to ISIC Rev.3



Source: Turkish Statistical Institute

Graphic5: Agricultural Foreign Trade According to SITC Rev.3

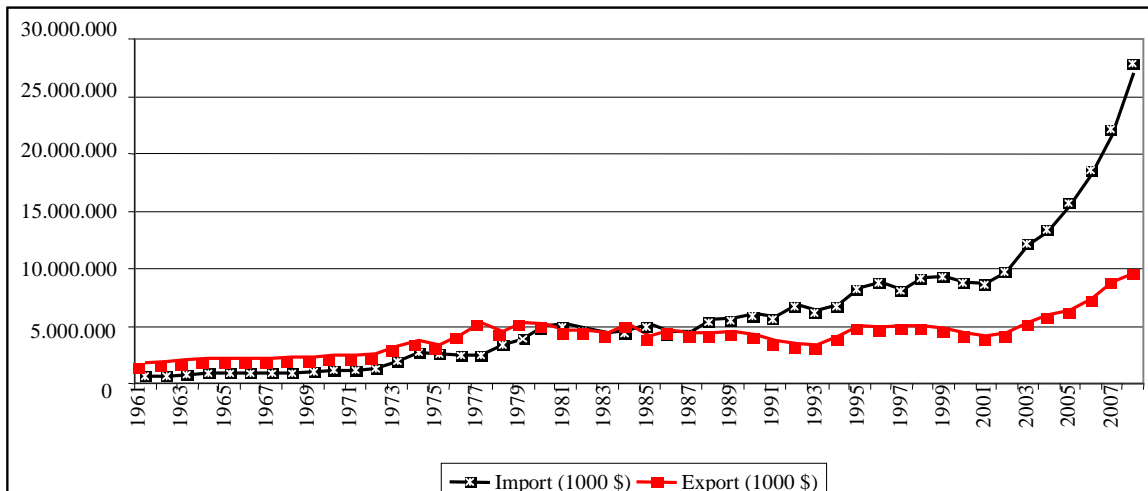


Source: Turkish Statistical Institute

Turkey have had a budget deficit in foreign trade of agricultural raw material since early 1980's, and the inclination shows that this upward trend in deficit would continue. There is a surplus in foreign trade of proceeded agricultural products that is in compliance with division of lab our, and due to the current world economic crises there has been a decrease in this surplus. When trade classification is taken into account, there occurs parallel conclusions in the foreign trade of total agricultural products which is in line with the developments in main groups. The period of crisis causes a decrease in the trade of proceeded agriculture products on the one hand and in the surplus of given proceeded agriculture products on the other (Graphic 4). While the industry classification is taken into account, in which an important part of proceeded agriculture products are manufacturing industries, current division of lab our is not noticed. Thus, while making analysis it is important to take both classifications into account. Driven merely by an industrial classification, one can establish a serious decay in Turkey's agriculture, whereas, when commercial classification is taken into consideration, one can see how international division of labour has evolved and how agricultural production is transformed (Graphic 4, Graphic 5).

The new division of lab our brings about alike results not only in Turkey, but also in all underdeveloped countries, and this transformation triggers for a substitution of countries from an obvious exporter position to an apparent importer position in agriculture (Graphic 6). This process, on the one hand, unleashes the domination of multinational corporations in raw materials trade, while simultaneously making it possible for multinational corporations to have control over the trade of processed agriculture products.

Graphic 6: Agricultural Foreign Trade in Underdeveloped Countries (1000 \$)



Source: FAOSTAT, (2011)

Note: The change in the balance of agricultural foreign trade includes 49 underdeveloped countries.

3. Monopolization in Agriculture

Transformation of agricultural trade in Turkey and in other underdeveloped countries is a result of interdependent and mutually complementary practices and regulations. One of the regulations is contractual production model and its continuance in relation to seed market.

This model which is rather an ex-implementation for sugar production in Turkey has undergone a set of regulations by 1990's and has turned into a structure that totally excludes the mediation and regulatory role of public.¹ In addition to new relations of exploitation the model generated, the effects it called into being in seed market are qualifications that might make Turkey a market for seed monopolies in recent future. Certified use of seed in tune with contractual production model, which initially stands out as a subject of preference, has now become a necessity in contracts.

¹ The first regulation about contractual production in Turkey was made in 1996, 30th of June, through the publication of decree number 22682 in Official Gazette, which was enacted in "Statement About Procedures and Principles Regarding Contractual Agricultural Product Cultivation."

Scope of the process, which starts with exportation of certificated seeds by Contractual Production Model and local extensions of multinational corporations, was extended and consolidated by the decree number 5553 of “Seed Growing Law” in 2006. In fact, the basis of the law legislated in 2006 was prepared by decree number 5042 “Law Regarding The Protection of Plant Breeders’ Right in Respect of New Diversities of Plant”. The process that started with contractual production, and which made a room by decree number 5042 in 2004, was completed by decree number 5553 in 2006. By becoming a member of UPOV (International Union for the Protection of New Diversities of Plants), the structuring gained an international extension. In decree number 5042 the section for beneficiaries includes an emphasis on persons having the right of petition under the provisions of UPOV agreement (article 4), by which one can make connections among so-called regulations. Considering the fact that UPOV membership application was made in 2007, reference to a structure that does not have any membership in a law dated 2004 makes sense in this context.

Regulations, which have already been made, dominates the formation of seed market. The first change is manifested under articles 5 and 7 belonging to The Seed Growing Law: Article 5 says that “the ministry only allows for the production of seeds that are registered in variety, which are determined for herbal and agricultural features. Article 7 includes the following expressions “only registered varieties of seeds in domestic are available for trade.” And article 12 regulates the sanctions for those who do not comply with so-called articles.²

The main question that these articles expose is that by whom those registered seeds are going to be provided. The reply to this question is put forward with “Law Regarding The Protection of Plant Breeders’ Right in Respect of New Diversities of Plant” dating 2004. The seventeenth article of the law is regulated as following: “... Farmers, besides the harvest that they had as a result of their production made in their own lands, have authority to use multiplication of any material, except hybrid and synthetic diversities, which is also a protected variety for new production in their own land to be cultivated. The article explicitly means that farmers, in no circumstances, can give or sell seeds for planting in a land other than the one of his own. This also amounts to that, one cannot use hybrid or synthetic seeds which are put aside from the planting on his own land. That is to say, farmer has to buy his conventional seed from the firm that registered it on itself.

Nearly ninety percent of the companies in Turkey, which make seed improvement, are multinational corporations. As for worldwide seed growing, there are six big monopolies that retain the control of it (Table 1). These are Novartis, Monsanto, Cargil, Dupont, ADN and Bayer. They have associations with seed growing firms in Turkey on the basis of shares or dealerships. The way for these firms to appropriate seeds of Turkish farmers and to have possession of intellectual property and patent right has been given in conjunction with decree number 5042 law. Rights of companies would be under the assurance of law. *Another obstacle has been removed by applying decree number 5042, “Law Regarding The Protection of Plant Breeders’ Right in Respect of New Diversities of Plant”, alongside Turkey’s becoming a member of UPOV in 2007. UPOV has been constituted by seed companies under the domination of six European countries, which would blossom after 1960. It had 20 members until 1990’s. But although there was no necessity, institutions such as IMF, World Bank, World Trade Center, and super states, enforced developing states to participate into UPOV, which claimed to protect intellectual property rights for plant diversities. Compelling states to be integrated with UPOV means accepting the whole further provisions that is guarding developed countries, which is called as TRIPS-plus (Yılmaz, 2001; Özkaya, 2007).*

² The law set forth 5 years for transition process and duration predicted for it expired in October, 2011.

Table-1: Intensification of Corporations under National and International Agriculture-Food Markets

<p>1) Seed and agrochemicals:</p> <ul style="list-style-type: none"> • Six TNCs – BASF, Bayer, Dow, DuPont, Monsanto and Syngenta – now control 75-80% of the global pesticides market, down from 12 corporations in 1994. • DuPont and Monsanto together dominate the world seed markets for maize (65%), and soya (44%). • Monsanto controlled 91% of the global genetically modified (GM) seed market in 2001 and took over 60% of the Brazilian non-GM maize seed market in the space of two years (1997-1999). • Bayer controls 22% of the Indian pesticide market.
<p>2) Bulk Commodity Trading</p> <ul style="list-style-type: none"> • Two US TNCs, Chiquita and Dole Foods, control almost 50% of the world trade in bananas. • Archer Daniels Midland (ADM), Barry Callebaut and Cargill dominate Côte d'Ivoire's cocoa processing industry, where 95% of processing capacity is controlled by TNCs. • Fyffes, the largest fresh produce distributor in Europe, is the sole exporter of bananas from Belize and Surinam. • Three companies – ADM, Cargill and Zen Noh – handle over 80% of US corn exports.
<p>3) Food manufacturing and processing</p> <ul style="list-style-type: none"> • The top ten food processing companies account for 37% of sales by the largest 100 companies in the industry. • Three companies control 85% of the world's tea market, and Unilever is the world's biggest tea supplier. • Nestlé has established a virtual monopoly of the UHT milk market in Pakistan, 21 and controls around 80% of Peru's milk production. • Four companies, including Cargill and Tyson, control 81% of the US beef packing industry. • Six international companies meet 50% of world's chocolate sales. • Four international companies hold 61% of grain processing terminals and 60% of flour production facilities and handle over 81% of world's maize export and 49% of ethanol production of US.
<p>4) Food retailing</p> <ul style="list-style-type: none"> • The 30 largest food retailing corporations account for around one-third of all world grocery sales, with the top 10 amassing combined sales of US\$649 billion in 2002. • Wal-Mart controls 40% of Mexico's retail sector. • Thirty-six per cent of all food sales in Thailand are now channelled through TNC retailers, where Tesco had 48 outlets and sales of around US\$1.2 billion in 2003. • Asda Wal-Mart, Safeway, Sainsbury, and Tesco account for 75% of food sales in the UK..

Source: Action Aid (2005) Power Hungry: six reasons to regulate global food corporations. Action Aid International, Johannesburg. January 2005

4. Agriculture and Intellectual Property Rights

Discussions made on intellectual property rights, beginning with 1980's, have been one of the most basic points for debates on international trade. Repressions on underdeveloped countries in terms of improving intellectual property rights intensified with especially TRIPS, which is one of the foundational agreements of World Trade Center. Those countries that hold 97 percent of patents until today in worldwide, compelled underdeveloped countries, which hold 3 percent of patents, bring their own patent systems into conformity with theirs. When TRIPS was signed in 1995, developed countries were already ahead of in fields that was related to intellectual property such as computer software, microelectronics, chemicals, drugs, leisure industry and biotechnology. According to the World Bank datum, after TRIPS, developed countries gain on average 45 billion dollars in a year over underdeveloped countries by means of compulsory licence patent payments (Yıldız, 2009).

Increased level of intellectual property rights was drastic and problematic for most underdeveloped countries. There are serious quarrels on intellectual property rights concerning the usage of genetic plant materials and informations, particularly in agricultural industry in the so-called countries.

Some of the studies point out that improvement of intellectual property rights ensured the rise of expenditure for research and development works in private sector within underdeveloped countries, while others emphasize that it is a different extension of economic exploitation mechanism through which intellectual property rights provides, and imply that there is an important rise in exploitation by this way (Lele, Lesser, Wesseler, 2000).

Studies of UNEP lay stress on two negative impacts of intellectual property rights for agriculture. The first one is that growing investments help industry to be reshaped on a larger scale. It is impossible to allure products, which need big investment, into market without protecting intellectual property rights though. On the other hand, it is clear that only big firms can survive in this market that needs major investment, and today the domination of big companies over the market, in particular in seed sector, is a sign for this. In order to strengthen their positions in market, international firms increasingly buy small-scale firms. Thereby, since there would be less price competition among rest of the firms, it is possible that there would be an increase in the price of products such as seed which rely on intellectual property rights (UNEP, 2000). The second negative effect is that, instead of conventional products, farmers incline to high productive seeds which is improved by international firms. Whereupon this leads to a decrease in genetics diversities of cultivated species. An indication of this is that, with encouragement for the usage of seed diversities, which are known as more durable and more productive against pests and diseases, farmers are gradually removed from conventional seeds along with the "Green Revolution." Not only incentives that were supplied for international seed firms to improve new diversities, but also intellectual property rights were significant factors for the decrease in diversities (UNEP, 2000).

Thus, it is not wrong to say that intellectual property rights and protection caused three major effects, and these effects, by the same token, are a sign of violation of human rights. Firstly, intellectual property rights give rise to monopolization by restricting access to information. Secondly, it allows international agriculture corporations for the modification of genetics belonging to seed diversity. While it increases profits of international corporations, which they gained from technological innovations, it restricts seed diversity and access to seed as well. Thirdly, by encouraging farmers for product cultivation, which is a commercial value, instead of subsistence farming, intellectual property rights system supports commercialization of agriculture and monoculturalization in farming. Besides opportunities and preservations intellectual property rights provide for big international corporations, the restrictive impact of it on public interest have subversive effects on human rights in accordance with access to food and conventional protection of information. Another important question is environmental impacts that new division of labour created in underdeveloped countries.

By playing with genetics of species the system, which opens the way for commodification of endemic plant species, accelerates not only economical but also ecological destruction of many underdeveloped countries which are exporters of agricultural product. Biopiracy has been expanding everywhere like an epidemic, and genetic resources are being appropriated in the interest of a few big medical corporations. Rapid consumption of our common environmental values (soil, air, water), and environmental deterioration which capital intensive production techniques caused within the globe bring about an overall commodification of nature (Harvey, 2004). Biological diversity does not make any sense for the system. Before capital intensive production in agriculture, consultation to the diversity of product was on the ground of bad climatic conditions, instability of markets, and for the protection against the disease which comes with pest. However with transition to capital intensive agriculture, the link between ecology and agriculture was over (Altieri, 2002).

As seen in Table-1, TRIPS, which gives way to multinational corporations to be in a position of main determiner as a monopolist power in world agricultural production and trade, functions as a means of new protectionism in foreign trade of developed countries with underdeveloped countries? The attempt within the framework of agriculture markets to expand certificated seed usage by way of TRIPS, and liberalisation of foreign trade of seed, rendered farmers of underdeveloped countries dependent to big multinational seed corporations.

One of the diversities that Monsanto and Cargill produced and launched is "hybrid" seed, called "terminator" and, thanks to a gene placed into, it makes the plant destroy itself by preventing it to burgeon again after its mellow. This sort of seed generated by hybridization, prevents farmer to accumulate ovary from the harvest, and makes farmer constantly dependent to seed merchant (Luneau, 2001). However extension of ecological danger is more serious. New seeds generated by their modification of genes, both have the potential to increase plant/product diseases globally and restrict possibilities of next generations to cultivate. As the usage of infertile seeds expands, it seems that access to food for future poor generations is impossible.

With the expansion of agriculture that depends on mono-culture, monotype seed usage becomes widespread in underdeveloped countries, which have high genetic diversity, and as conventional endemic types disappear, seeds under threat are transferred into gene banks of developed capitalist countries through International Agricultural Resource Centers –IARC (Foster, 2002).

5. Conclusion

New division of labour that gained importance in foreign trade as of 1980's took place in agricultural raw material and production of processed agricultural products on the hand, while it brought about a monopolist power of multinational corporations over international trade of these so-called goods in both fields. This exploitation mechanism through monopolization becomes in one respect a means of exploitation of environment. Finally, by transferring production into underdeveloped and peripheral countries, multinational corporations avoid possible oppositions in fields which environmental consciousness has raised.

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