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## VIOLATION OF ECOSYSTEM IN THE DEVELOPING COUNTRIES DUE TO THE RELOCATION OF HARMFUL MANUFACTURES INTO THEIR TERRITORIES

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Among the number of global problems related to the processes of economic development, to the most critical and major problems are included depletion of natural resources, pollution and rapid population growth. Nowadays the major trend of world development is globalization of international economic relations, and therefore one of the distinctive features of the world economy is its transnationalization. One of the key subjects of global transformation of the world economic field became transnational corporations, which significantly affect violation of ecosystems of various countries, due to the relocation of harmful manufactures into their territory [3].

The purpose of the study is to determine the causal relations concerning environmental pollution, which is caused by the relocation of harmful manufactures of TNC.

TNCs are agents of the global economy and have a huge production potential, they direct their investments to new branches, spheres, scientificand-technological development, that has lead to the increase of pressure on the environment.

The development of TNCs without taking into account environmental requirements leads to the conflict between two important areas: ecology and economy. There is one aim: safety of the environment or economic growth. When one goal is reached, another is not [4].

Mistakes in TNC strategies caused a double negative impact on the environment. The direct impact associated with the proximate use of natural resources by companies, failure to comply with environmental safety norms when building their enterprises in the territory of the host country. Indirect impact includes foreign trade, companies' purchase of 'exotic products', infraction of law in natural recreational area and others [5].

Currently, there is the harmful impact of production on the ecosystem almost in every country. However, there are such cities which are lifethreatening. The US Environmental Fund Blacksmith Institute has compiled a list of such cities. In the early 20th century in Kabwe were found huge deposits of lead and cadmium. There were built large enterprises for the processing of these metals. These days air pollution with heavy metals is four times higher than the permitted limit. Infected people whose number exceeds 250,000 suffer acute blood poisoning. We can observe the same situation can in Peru in La Oroya. 95% of the 35,000 people are infected with serious diseases due to the high content of lead in the blood. There are American plants which deal with the extraction of minerals such as lead, copper, zinc in this area. Not better situation can be observed in India in the Sukinda city. There are situated the world's largest chrome mines and there live more than 2.5 million people. The majority of companies' wastes are thrown into the water of rivers and lakes. About 90% of the population is susceptible to cancer. Tianjin is one of the most polluted cities in the country where the lead is produced. The concentration of the lead in the air and in the ground is almost 10 times higher than the permitted limit. The content of lead in crops is 24 times higher than normal. In the city of Sumgavit in Azerbaijan children are born with genetic deviances such as mental retardation and bone diseases. All this is due to the location of chemical industry of former Soviet Union [1].

At present, the largest environmental polluters are companies that are engaged in the fuel industry. The famous American researcher Thomson Reuters investigated this topic for a long time and published a top 12 transnational corporations that have the greatest emissions. Number one is the 'Gazprom' - 1 260 million metric tons of actual emissions equivalent to the emissions of carbon dioxide. The second is 'Coal India' - the company for the extraction of coal, emits 820 million metric tons of actual emissions equivalents to the emissions of carbon dioxide - 7%. The third is the Anglo-Swiss raw material trader 'Glencore Xstrata' - the world's largest company involved in the mining industry, its revenue amounted to 220 billion dollars by 2014, and emissions - 811 million metric tons of actual emissions equivalent to the emissions of carbon dioxide - 6.9 %. [2]. The list also includes British Petroleum; Shell Oil, which, in fact, occupied Nigeria in Africa; Exxon Mobile - the spill of 11 million gallons of oil near the coast of Alaska; Procter & Gamble - use animals for experiments, each year about 50 thousand of animals are killed; and others.

However, transnational corporations have begun to take various codes and measures aimed at improving the ecological state of the environment. Among them are: the publication of the recommendations and 'codes of behavior' with a help of the Responsible Care Program, the role of environmental audits is growing, implementation of more stringent tax system on emissions, transnational corporations began more frequent contributions to various funds of environmental protection, hoping to increase their reputation and obtain tax or other benefits. In 2015 70 international investment companies with total assets valued at \$ 3 trillion initiated a unique project on renewable energy sources, which is coordinated by experts of Ceres and Carbon Tracker organizations. According to the EIR Center for almost 60% of large transnational corporations of the Fortune Global set ambitious goals of transferring their businesses to renewable energy sources to reduce greenhouse gas emissions [6].

Consequently, the activities of TNCs in 20 years increased their impact on the environment. Transnationals use the 'environmental benefits' placing their investments in different countries, but in turn, they themselves the most actively influence the environmental situation of the host countries. The activity of TNCs has 2 different contradicting sides. The negative impact became the result of traditional and outdated strategies, but with the transition to a strategy of lasting development identified the new approaches and methods of management of the TNC's activity, that in the future will guarantee environmental and economic balance.

## **References:**

1. *Brudna diuzhyna: reitynh naibilshykh zabrudniuvachiv u pałyvnii promyslovosti.* [Dirty Dozen: Rating of major polluters in the fuel industry]. Retrieved from: <u>http://www.climateinfo.org.ua/eng/node/1330</u>

2. *TNK perevodiat biznes na VDE*. [TNK transferred their business to RSE]. Retrieved from: <u>http://eircenter.com/news/majzhe-60-tnk-planuyut-perevesti-svij-biznes-na-vde/</u>

3. Prokhorova, M. (1999). *Evoliutsiia ekolohichnoi polityky na suchasnomu etapi*. [The evolution of the environmental policy at the present stage]. Actual problems of international economic relations. Collection of scientific works, (16<sup>th</sup> ed., part I).Kyiv National University. p. 149–159.

4. Prokhorova, M. (1998). *Nehatyvnyi vplyv diialnosti TNK na navkolyshnie seredovyshche*. [The negative impact of transnational corporations on the environment]. Actual problems of international economic relations. Collection of scientific works, (16<sup>th</sup> ed., part III). Kyiv National University, p. 167–176.

5. Lazebnyk, L. (2001). *Mizhnarodna ekonomika: Kurs lekcii*. [International economy: lectures]. Irpin, State Tax Service Academy of Ukraine, 219 p.

6. *10 mist svitu, kudy ne varto yikhaty*. [10 cities in the world, which one should not visit]. The world of facts. Retrieved from: <u>http://mirfactov.com/10-gorodov-zemli-kuda-ne-stoit-ehat/</u>

## ECONOMICS AND ENVIROMENTAL PROTECTION IN THE INDUSTRIAL REGION

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Formation of regional environmental and economic policies must be accompanied by a rise in the role of environmental factors in the development of individual regions that are in crisis, given the integrated assessment of natural assimilation of anthropogenic emissions and waste, available natural resources, the level of development of productive forces and geographic location. Condition of ecology in some industrial cities that are situated in the central and eastern regions of the country, continues to deteriorate as a result of depreciation of fixed assets and nature and lack of funding for environmental protection.

Dniprovsky industrial region is one of the most polluted in Ukraine. Emissions from industrial enterprises exert a significant impact on the environment. The most severe contamination observed in Dnipropetrovsk, Dniprodzerzhynsk and Kryvyi Rih. Dniprodzerzhynsk has a special place, where in the area of 152 km<sup>2</sup> and the number of residents 252.0 thousands people, emissions of harmful substances are >490 kg / human., which is 25 times more than in the Dnipropetrovsk region.

One of the most effective ways of solving environmental problems of the city is fundamental renewal of existing production facilities, commissioning of new modern technological equipment including in him the aspiration-gas treatment devices.

Iron&Steel Works is the main pollutant of the city, with the number of emissions 110 thousand tons/year (93% of the citywide) of which 76,7 tonnes/year takes sinter plant.

Sinter plant is the largest polluter of the environment by emissions (82% of all emissions in the plant) and therefore the most attention in the