



Disregarding the land is not just one theoretical choice among others; it emerges as a feature of the ideology of neoliberal society.

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Local indigenous communities and oil industry

Property rights of local indigenous communities and oil industries through lenses of environmental justice

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Abstract

This paper looks into the practices of oil industries and their effects on land and people living in these environments. The land belonging for centuries to these communities is being irreversibly changed and devastated. Not only the land, but also their lives are altered and changed forever as usually they are appropriated by force.

The paper is looking at the issue through the lenses of environmental justice as a concept which deals with unfair distribution of environmental risks and attempts to prevent environmental injustices.

This paper is based on the research utilizing case study approach, taking a look at three particular examples of oil exploitation and what are the impacts of this industry there. Principal focus is on issue of land ownership and rights to the land and how the oil companies and state governments approach this issue. The cases are studied through analyzing policy documents and official reports and papers of international NGOs and academics.

The first case study is from Central Africa and studies the project of Chad-Cameroon pipeline project. In order to ensure enforcement of human laws and to protect the environment, the World Bank was included in the project. The focus of this study is on local indigenous community of Bagyeli which should have been modernized during the period of this project, but the result was impoverishment and considerable decrease in quality of life.

The second case is from Niger Delta region. This area is oil extraction site since 1958 and unlike the first case, it depicts long-term effects of oil extraction. Indigenous community of Ogoni is observed and what were the effects on their land and life during this long period.

Last case study describes the vast area of Arctic North which is cursed by being rich in gas, oil and precious metals. The heaviest damage of environment took place in period of 1950s-1970s, but the effects are visible until today and are likely to continue in the future. Study regards the indigenous communities living here and mostly socio-economic impacts of oil industry on them during longer period of time, especially the aftermath of exploitation.

The paper aims at discussing the internalization of environmental externalities by their producers and other responsible parties (for example nation states who authorize the development), specifically how these externalities are treated in distant parts of countries which are inhabited by local indigenous communities. It is demonstrated by case of oil industry companies entering these distant locations with blessing of nation states (or directly national companies) and their practices of how they compensate the damage they create to the environment and to the inhabitants of these locations. Environmental justice is used as a tool to look at distribution of risks during the oil extraction processes and provides a solid framework for analyzing the impacts of oil companies on local communities.

The expected outcome of the paper is increased awareness about the impact of oil on the area it is extracted from and argues that it is an issue for politicians and planners, too. Another outcome is a discussion about the policy recommendations for decision makers on global level. The power of international NGOs is high and they can influence how oil companies behave. Indigenous communities have to be regarded not only as minorities, but their unique status has to be recognized and their rights have to be enforced.



Introduction

We truly are currently living in the age of oil. Fossil fuels account for 85% of energy in the world (Klare, 2008) and oil itself for 35% (Salter & Ford, 1999). It does not matter whether we are at, before or beyond the peak oil (a point in which maximum extraction of oil is reached (Hirsch, 2005)), it is more than clear that the world's oil reserves are decreasing (in spite of the new technological methods of oil extraction such as fracking, the reserves are not unlimited) and the road down the Hubbert's curve will be difficult (Martinez-Alier & Temper, 2007) and to access the remaining reserves the oil companies will have to be explored in more inhospitable and remote locations. The first oil was found in Pennsylvania in the United States in 1850s (Yergin, 1993) and during its more than 150 year long history it became the central element of western and later global development, "the single most controversial and influential commodity in the world" (O'Rourke & Connolly, 2007:26). This paper is going to look into the practices of oil industries when entering these distant territories, particularly the way the indigenous communities are treated during the process of the upstream phase of oil refining - exploration, exploitation, refining and transport.

The positives of oil and the derived products are numerous, other than transportation or heating there are more than 2000 other end products we use in our lives and it was also the first trillion dollar industry on Earth (O'Rourke & Connolly, 2007). On the other hand, oil is in the center of the most disturbing health, social and environmental problems of today (*ibid.*). These can be obvious, such as pollution in contemporary cities, mostly in cities of Global South, but also more subtle and not so obvious, in form of a wide range of climate change implications or health difficulties connected closely to oil products and their use.

However, using the end products is one thing, but the phases before we get our hands on these products is rather black-boxed and little is known about what it takes to get gas for our cars or how we can heat our homes. People imagine oil wells and tall oil towers, but very few of us can imagine either what this processes require or how these procedures impact the landscapes and people living in them. The paper is looking into these processes and how the people living in and around these sites are affected and treated from the side of oil companies and national governments who allow these processes to take place. It is not a black-and-white issue, it is impossible to say if it is good or bad, because the process on the one hand cannot be stopped or on the other hand that everything that is going on is ill-suited. The purpose of this paper is to raise awareness of these issues and provide analytical lenses for looking at them critically and hopefully slowly improve the status quo of affected communities. In doing so, authors use the concept of environmental justice and look into property rights and how these affect oil industry practices.

The study is based on literature review of environmental justice, its history and core points, trying to put the concept of environmental justice into debate of oil industry practices in third world locations and in indigenous communities, and looking at them through the lenses of property rights. The argument is that one of the core issues of environmental injustices lays in unclear ownership rights and their insufficient

enforcement and their disobedience and neglecting. Then the paper moves to exploring three cases studies from various parts of the world. This research is based on the research of available scientific literature. Each case is briefly introduced and the focus is on the practices the oil industry companies have in those locations. The final part is a discussion of what was going on in the examined sites and how came to the environmental injustices and paper concludes by a number of ways forward to challenge the status quo. As the paper is desk research based, it also outlines some ideas for potential future research.

Impacts of oil exploration

There are various social and environmental implications of the oil exploration. First of all, it is potentially vastly invasive to the ecosystems and causes harms to health of humans and animals as well. The alteration of the physical environment during the upstream phase is often greater than the destruction caused by larger oil spill (O'Rourke & Connolly, 2007). These changes to environment include "deforestation, ecosystem destruction, chemical contamination of land and water, long-term harm to animal populations" (O'Rourke & Connolly, 2007:8). According to the same authors, the impacts on human health are visible on local and wider scale and involve potential exposure to radioactive materials, toxic materials, chemicals, vibrations and noise. The landscapes are often considerably changed and the implications of oil production last for decades or more. Generally speaking, the ecosystems end up changed and the industrial production impacts the existing flora and fauna there (depending on location, for example in areas with extreme conditions with no flora, the impacts are on local fauna) while compensation for these changes are little and sometimes non-existent.

The social impacts on indigenous communities are harsh and the whole features of the people's lives are often irretrievably altered. Indigenous groups of people living in these sites for centuries are unique in many ways and their distinctive status is often overlooked. In many cases, their first contact with outer world is through the oil industry companies. These companies often have insufficient understanding of this and in some cases they simply care very little. These interactions are known as the *process of acculturation* (Swing et al, 2012) and are characterized by the mixing of clothing, housing or diet as well as bring new phenomena such as the idea of remoteness or poverty that were unknown within the indigenous communities. These people before lived isolated, but now are presented to a whole new world and their way of life and values are in question. These large scale impacts form a particular problem of environmental justice, which is connected to environmental externalities. These are hard to measure and even more difficult to include into the budgets and overall costs of industrial production and, moreover, the willingness of large companies to include these externalities is even lower. Later in this paper these clashes of civilizations are described on case studies from different parts of the world.

However, there is also another side of the coin, for instance when looking at people who can potentially benefit from the-

se developments, such as those who get jobs and who move there. There are risks for these people, too. In Caribbean area we could have witnessed in 2009 massive fire and explosion of petroleum tank on the coast in Bayamon, Puerto Rico, resulting in damage to 17 of 48 petroleum storage tanks. According to report published by the U.S. Chemical Safety and Hazard Investigation Board (2015), the petroleum products leaked into soil, nearby wetlands and waterways in the surrounding area. This led to damage of 300 homes and businesses up to 1.25 miles from the accident and it resulted in an emergency declaration for assistance from President Obama for impacted municipalities. This illustrates the utmost risks oil industry sites bring not only to actual industrial sites, but to its relatively large surroundings.

Environmental justice

Due to the number of dimensions that the environmental justice contains it is difficult to settle on a single definition. The following section attempts to outline the basic notions of the concept and a short history of the environmental justice movement.

The idea behind the environmental justice movement is to prevent and to resolve environmental injustices. Bullard and Johnson (2000) see environmental justice as the fair treatment and meaningful involvement of all people regardless of their race, color, national origin or income with respect to the development. One of important dimensions of the environmental injustice is the fair/unfair distribution of environmental risks (Ikporukpo, 2004). In other words, the aim is to avoid the environmental externalities being treated separately from the benefits e.g. pollutions located in poor neighborhoods so that the affluent users of society's assets are free from the pollution created in order to produce these goods. Environmental justice is composed of two main elements, the civil rights and ecological sustainability (Tsosie, 2007). It is often perceived as a human rights issue of equal access to society's natural resources and quality of environment too. It brings the focus of environmentalism back on humans (*ibid.*) as opposed to the traditional activism favoring the natural world – known as environmental fascism or misanthropic biocentrism (Shrader-Frechette, 2002).

However, what needs to be emphasized is that definition comes from the United States and their conditions, in which the environmental justice movement had developed as a response to people living in unsafe and dangerous environments. In the United States, the focus of environmental justice had been on parts of the cities which were exposed to environmental externalities and people who could afford it, left these districts. This rendered the exposed districts inhabited by mostly poor families who did not have an opportunity to relocate to healthier neighborhoods and it led to segregation and more importantly not solving the issue of environmental conditions in their living areas. In many cases, people of color or of low income have been suffering from externalizing environmental dangers to their neighborhoods, however, in case of oil industry sites and indigenous communities the situation is different. Indigenous communities inhabit distant locations, previously untouched by developed society for-

med in the national capitals and other industrialized parts of countries, and then they are approached by nation states and oil companies who come there to drill for oil or for other oil-related activity. The problem is that up until introducing the oil industry works, they were let alone and neglected and after the works began, their living conditions diminished and they obtained little compensations for it. Bullard and Johnson's (2000) definition also encompasses involvement of people in decision making, but in these cases the involvement is very little to none.

In comparison to earlier compensation ideas of 'polluter pays' the concept of environmental justice emphasizes "incommensurability of values" (Martinez-Alier, 2003:56) because such approach demonstrates that the destroyed environment can be financially redeemed. In the past, sectors such as the oil industry were operating in parts of the world where the economy is put above the value of environment or human life (Martinez-Alier, 2003) and environmental justice provides a framework to eliminate such practices. In these locations, local communities have little instruments to protect themselves as often national governments are engaged in maximizing profits from oil production.

The roots of the environmental justice movement are in the United States in 1980s. The document that began the journey to end the environmental injustices was a report produced in 1987 by The United Christ Church Commission for Racial Justice (Shrader-Frechette, 2002). The document provides the evidence of disproportionate deployment of toxic hazard waste sites – locally unwanted land uses - in regards to city layout and the low-income, ethnic and racial – mostly African-American, Latino and Native-American – communities that are bearing unreasonably higher environmental risks in comparison with more affluent parts of the city. In October 1991, in Washington D.C. the First National People of Color Environmental Leadership Summit took place and the declaration '17 principles of environmental justice' was agreed to (O'Rourke & Connolly, 2007). This document served as a background to the development on the movement in the United States and gradually across the world and encouraged many small groups of activists to enforce their rights. In February 1994, Clinton's Executive Order passed according to which "all federal agencies must identify and address disproportionately high and adverse health or environmental effects of their policies and activities" (Martinez-Alier, 2003:53) – notice a similarity to Strategic Environmental Assessment Protocol agreed by the EU in 2003, almost 10 years later. These were the two victories of environmental justice movement, however, only in the United States. Bullard sees the potential for these ideas all over the world as injustices like these occur everywhere and even small well-organized groups can relate their struggles to issues of civil and human rights, land rights and sovereignty, cultural survival, racial and social justice, and sustainable development (1993). This development took place mostly in the United States, but it soon found fertile ground in Latin America and further.

Shrader-Frechette builds the idea of environmental justice on Rawls' definition that justice entails "providing a standard by means of which society can assess the 'distributive aspects' of its basic structure" (2002:24). Distributive aspects here signify that technologies as well as risks of the society are fairly and

equally deployed. This means that justice is not in just distribution of benefits, but also the costs and these both need to be shared more equally. Costs here do not entail just financial costs, but also social and environmental costs.

Exploitation of the natural resources is in many cases divided from territorial sovereignty. Hofrichter perceives the exploitation of the resources in poor countries by developed nations as a form of "new colonialism" (2002:3). Many countries which are being exploited in this way have in common so-called 'resource curse' - countries with weak central governments such as Algeria or Nigeria are not prepared for large incomes from the industry and therefore result in further centralization and bureaucratization rather than investing into sustainable development for their future (Karl, 1997). For society it means social disharmony and large impacts on environment (Stammler & Wilson, 2006) and this way they are entering and being locked in vicious circle from which it is extremely difficult to go out.

Ensuring environmental justice in the developing countries is also a challenge for developed countries based on the ideas of democracy. Considering the notion of having the justice and the government that people deserve, developed countries have the duty to ensure that poorer nations achieve these assets as well (Shrader-Frechette, 2002). Another point of view on democracy in regards to environmental justice is the notion of protecting the rights of minorities, in this case indigenous groups, which are usually in very small percentages within the countries. Minorities can easily be neglected of their rights for clean environment as they are marginal in terms of number of people and their political power and therefore are easy target for environmental externalities to be deployed on them and environmental justice puts focus on their rights irrespective of their occurrence in society. They are part of nation and their rights need to be protected.

Property rights

Environmental justice is closely related to property rights, particularly to collective property rights and their infringement and non-recognizing collective rights to natural resources resulting in environmental injustices. Property and ownership rights are societal instruments to help with transactions and exchange of goods. It is a bundle of rights attached to physical property or service, but what determines the value of what is exchanged is the value of rights (Demsetz, 2002). Owning these rights grants the owner the consent of others to allow him to act in certain ways and he expects the society to prevent others from interfering with these rights and actions.

Therefore the primary function of ownership rights is to guide incentives to achieve a greater internalization of externalities (Demsetz, 2002). Costs or benefits associated with social interdependencies are externalities. Allowing transactions between parties increases the degree to which internalization takes place. This is the core issue at heart of environmental justice movement. In the cases below it is possible to see that these rights are often not granted to indigenous groups and they bear the significant portion of environmental and social externalities. Pigou (1920) perceives environmental problems

as externalities between agents for which no price is paid or compensation is obtained. Based on the premise that one of the main functions of property rights is the internalization of both beneficial and harmful externalities, their emergence is associated with issue of environmental justice.

What seems to be a problem in analyzing property rights in developing countries is the western view of these rights among scholars. The system of property rights found in western economies is a product of many years of economic and legal changes (North, 1981) and oftentimes similar system is presumed to be world-wide (Feder & Feeny, 1999).

There are several types of property rights and the differentiation can be based on several criteria. From the scale point of view, Demsetz (2002) distinguishes private ownership, community ownership and state ownership. Society recognizes private ownership as a right to exclude others from exercising one's private rights. In case of community ownership, all members of community exercise property right, for example over particular energy source. State ownership is a case of ownership in which state meaning national government owns property rights and consequent rights to manage and decide about the property. In analysis provided below, we will see that all the types of ownership are interrelated and have particular implications for specific situations.

Very close and crucially important for property rights are institutions as these developed in order to reduce uncertainty and increase efficiency in credit and in land markets (Feder & Feeny, 1999) and also enforcement of these rights. These institutions are crucial to developing countries and as we will see also in issue of environmental justice in case of oil production in these countries. There are three basic types of institutions which have impact on property right. These are constitutional order, institutional arrangements and normative behavioral codes (Feder & Feeny, 1999). Constitutional order means fundamental rules about society organization and meta-rules (rules of making rules). Institutional arrangements include laws, regulations and also property rights. These are created based on constitutional order rules. Institutional arrangements include mechanisms for defining and enforcing property rights, comprising of both formal procedures and the social customs concerning the legitimacy and recognition of property rights (Taylor, 1988). Paavola (2007) additionally suggests that institutions have the power to resolve conflicts over environmental resources and the choice of the institutions is a matter of social justice. Social justice as the objective of institutions is rather broader and more complex than economic winners and losers (Paavola, 2007). However, this holds true when these institutions are legitimate and their conduct is in line with doing the good for their citizens, which, as we will see, can be sometimes skewed in favor of hidden financial and power relations. Normative behavioral codes are cultural values and traditions and these in particular differ from western traditional views.

Case study 1: The Chad-Cameroon project

The first case study is from the Central Africa. In June 2000 the project of Chad-Cameroon Pipeline Project was approved by World's Bank Group (WBG). It is so far the biggest development project in Africa with project costs of \$4.2 billion that aimed to break the aforementioned resource curse. The project includes 300 oil wells and about 650 mile long pipeline from Chad to Cameroon coast. The basic data for this case study are taken from report elaborated by Horta et al (2007).

The WBG was directly involved in the project with two main objectives – to assure the oil revenues will be used for the well-being of all citizens mostly to fight the wide-spread poverty and to ensure that the project will be environmentally-friendly. It also contributed 3% of total project costs. Unfortunately, it seems as it failed on both accounts.

During the approximately a decade lasting project, Chad went from 167th position in Human Development Index to 173rd position. Moreover, both countries are currently in even larger debt than before the construction. In January 2001, the Chad government used \$25 million from oil incomes to purchase the weapons needed to secure the power and legitimacy of the regime; also problems such as corruption, cost-overruns or ghost projects are present in both countries.

Our focus here is on one of the indigenous groups living here called Bagyeli people. This community was in the past only partially incorporated into the society and lived in equilibrium with the nature for centuries. The oil company entered the community and promised the 'modernization' and economic improvements as part of the planned project. This is what happened eventually. The investors through the national governments promised jobs – in reality the community members were given the hardest jobs with low wages, great health risks and unfair treatment, moreover most of these jobs were available during the construction period only – these jobs were not sustainable for them; access to modern medicine was ensured by building a small clinic that is regularly under-staffed and under-supplied; access to education was assured by building a school that experiences similar problems as the clinic; the roads to access the local markets were build, however physical access to them does not mean financial access – with the amount of money they got for their work, they could not afford to buy from them; access to electricity and water was assured, however the process is expensive and slow and they often face pollutions from numerous oil spills.

Impacts on local populations do not end here, about 1 000 people were displaced and the health conditions worsened by environmental pollution, the life age expectancy is less than 50 years and children less than 5 years old have a danger of 1 to 5 to die (Jobin, 2003). As for compensations, \$10 million were given to the community which is when divided the population number less than \$50 per capita (*ibid.*). A pattern like this one is not unique and similar cases occur all over the world.

Although formally the land has been owned by the government, the real holder was Bagyeli community. For Bagyeli

people living on these lands for centuries, property rights were a new phenomenon and they did not have capacities to take more meaningful part in the decision making processes about their rights. It is highly unexpected for these indigenous societies to participate in decision making based on very little knowledge they have on the concepts of property rights. The actual results seem more like they were tricked and that the promised effects turned out rather different. It is difficult to say to what extent this development was from the early beginning the part of a strategy, and of whom, but the outcome is sad and the impoverishment of Bagyeli people lasts till today.

Case study 2: The Niger Delta region

The second case study is from Nigeria, also in Central Africa. Nigeria is the largest producer of oil in Africa, extracting oil since 1958 (Shrader-Frechette, 2002). Until 2002, about 1 000 indigenous Ogoni people were killed during the works on oil fields during refining oil and natural gas. Moreover, around 30 000 people lost their homes due to exploration, vast pollution and flaring of gas (*ibid.*).

The gas flaring is one of the biggest causes of environmental pollution in the country and significantly contributes to the global warming increasing the greenhouse gas emissions. Around 75% of gas is being flared in Nigeria while the world's average is 5% of total extracted gas (Ikporukpo, 2004). 30% of this gas is methane which is 64 times more potent contributor to global warming than carbon dioxide. Another crucial aspect of oil extraction in Nigeria is that it has the largest oil spillage record in history. Shell is one of the largest oil refining corporations in the world. 1953 was the year when international companies started looking for oil in Nigeria (Walker, 2009), Shell being one of the pioneering ones. They became the largest oil company operating in Nigeria. 40% of Shell's oil accidents occur here while only 14% of their portfolio is located in Nigeria (Ikporukpo, 2004) which has detrimental consequences on local flora, fauna, groundwater and humans. Additional contribution to the amount of oil spills is the condition of the pipelines. These should be replaced after about 15 years while almost a half of them (40% in 2004) are beyond this threshold (*ibid.*).

It is worth noting the collaboration of oil companies with Nigerian government. Nigeria has military dictatorship government that relies heavily on oil revenues to finance the dictator regime and to keep the power in their hands. It is the classic example of the resource curse where increased incomes and corruption led to over-centralization of government (Agbesse, 2000). However, the Nigerian government is not the only one to blame as when presented with proposal to extract oil from Nigeria for which they were given large revenues, it is hard to reject as they need the money to support their regime. What is often neglected is the role of true regulator of large companies – their own government, in this case the Dutch government which should be controlling operation of their companies as the taxes goes to Netherlands. Their role is not often mentioned and the responsibility is discussed mostly on the level of Shell and Nigerian government, neither of

which have interest to regulate the production for some higher values such as justice and good environmental conduct. There are also cases when Nigerians non-violently protested against the oil industry's actions and the company called the Nigerian military forces to suppress the protests. During one such protest in 1990, 80 Nigerian people were slayed by Nigerian army (Shrader-Frechette, 2002).

When the oil companies are confronted with their practices in countries like Nigeria, the usual response is that they simply obey the laws of the country (*ibid.*). Considering that Nigeria has no pollution control policies, their actions and behaviors are in legal terms justified and no fines are imposed.

Officially the people have the right for compensation for the crops, trees or animals that are lost as a result of exploration, however the actual compensations are very low to none in reality, particularly in relation to the lost land or water resources (Ikporukpo, 2004). Ikporukpo (2004) reveals a case when 60 000 naira (about \$120 000) were asked as a compensation for lost crop and in the end only 315,5 naira were received.

The pattern is very similar as in the previous case study in terms of ownership. The tragedy is in the involvement and conduct of Nigerian national government and control of foreign companies and the governments responsible for their conduct, in this case the Dutch government. Legally for Shell, everything is in line with the law and it is going on like this for decades. In Netherlands, Shell would have to respect more strict environmental and social policies and would have to compensate more damage than in Nigeria. Nigeria as a country is for a long time a victim of the curse of vast natural wealth, but institutions are failing and working against its citizens oftentimes. The ownership relations matter also only little as Nigerian is strong centralist state and will of the state is above all.

Case study 3: The Arctic North

The last case study is a 7 000 km wide area stretching across northern Russia known as the Arctic North, part of Russian Siberia, where heavy mineral exploitation took place in the second half of 20th century. This region is covered for the most part by permafrost and has the lowest resilience to human activities i.a. because the toxic substances are absorbed into the permafrost and can remain there for centuries (Saiko, 2001).

The region has been inhabited for more than 2 000 years, but the environmental degradation occurred only during the 20th century (*ibid.*) which indicates a clear connection between industrial activities and ecological impacts. The area is rich in oil, gas and mineral resources such as nickel, platinum or palladium.

The most damage to the environment in this area had been done between 1950s and 1970s during the post-war recovery and later intensive industrialization period (*ibid.*). It is suggested that the region is "on the threshold of a large-scale ecological catastrophe" (Saiko, 2001:31) and experiences almost desperate environmental situation.

The results of mineral and energy resource exploitation include consequences such as: rivers and lakes are polluted by oil products; soil and ground water are affected by heavy metals and other hazardous substances and also massive radioactive contamination takes place in large areas due to former nuclear testing (it is estimated that around 130 were performed here), nuclear waste dumping and the pollution from the explosion of Chernobyl nuclear power plant that is still present there (Saiko, 2001), although it happened 1986 and relatively far from here. It illustrates the accumulation effect of the arctic environment – even though the natural resource exploitation and the Chernobyl disaster occurred decades ago, the permafrost environment accumulated the chemicals and it up to today impacts the environment.

The area is being exploited for oil and natural gas since mid-1960s (Starobin, 2008). To transport the oil and gas to other parts of the country, kilometers of pipelines had been built which are operating till today. As well as in case study from Nigeria, the region experiences oil leaks from production sites and accidents on pipelines – in approximately 300 major and 11 000 minor accidents in volume of 3-10 million tons of oil are spilt in the production areas (Yablokov, 1996 in Saiko, 2001). It is also suggested that roughly a half of gas from Siberia reaches the consumer sites due to technical problems (Wolfson, 1994 in Saiko, 2001).

Although the region is only sparsely populated (population density is between 1-5 people per sq. km) the resource extraction has severe consequences on local indigenous people. Their main occupations for a long time have been hunting, fishing and reindeer grazing and due to the disturbances to the environment it is still more difficult to perform these traditional crafts (Saiko, 2001). The result is, among others, growing alcoholism, decline in standard of living and a migration from the region. Moreover, the 1990 crisis changed the relationship between these communities and the state as for decades they were supported with goods and now these institutions refuse to provide adequate support to them and they are literally held hostages as they cannot afford to move away as a result of inflation that left them with no savings (*ibid.*). All of this has severe health implications, for example the life expectancy in the last 3 decades went from 61 to 45 years (*ibid.*).

In this case study it is possible to clearly see the effects of strong national government which needed to extract the vast natural wealth of the area for its development. It is hard to argue if it was right or not, but what is worth noting are the impacts on nature and people living in these areas. In Soviet Union it was hard to talk about private ownership as everything belonged to people, in reality to state and voice of one person or one community was of very low weight. After the transformation, though, the situation arguably got even worse as the state before was at least up to some extent supporting the indigenous people living in these areas and now this support is gone. The people experienced shock and the extreme continues. When community lives in one way and suddenly it changes, it is very hard for people to respond and it is even harder to respond in Arctic conditions. Even if they are provided property right to these lands, they are not used to it and do not know how to respond and manage the territory.

The three case studies contain two basic types of governments, either weak governments where foreign powerful companies can operate with little limitations, and very strong totalitarian governments which operate without limitations on their own. Weak governments need money from foreign companies to support the regime and in the end care little about what is going on with the environment. Strong totalitarian governments in the end do the same and do not care much about the environment as oil production and similar activities are in national interest and there is no one to oppose. In both forms, majority of forms of protest are silenced by governments to keep the industry running as it brings profits. Moreover, the former Soviet Union was acting that all this is done in the name of progress and the objective was well being of its citizens, even for the price of environmental damage. In the end, the result is similar. From the point of view of environmental justice the situation is different, though. In case of weak governments, the focus is to make the foreign companies accountable. For strong governments where the governments are the oppressors, the question is how to make the powerful regime more environment-friendly and bring sustainable development for their citizens.

Conclusion and ways forward

As it is demonstrated on three case studies the practices of oil industries and the landscapes resulting from extensive oil exploitation often have very negative implications on indigenous groups of people. The question emerging from this is how to challenge and change the status quo and bring justice in environmental affairs, how to achieve fair distribution of environmental externalities. But maybe more apt is the question whether it is possible to regulate such a giant industry as oil and gas business that makes \$2 billion in daily transactions (O'Rourke & Connolly, 2003).

In many cases the countries that bear greatest environmental damages from oil industry are weak, failed and developing (Ikporukpo, 2004) with no regulation laws to take care of their environments and people. Hereby the regulation from higher – international - level and pressures from international NGOs, and also from democratic states where the oil companies originate, are necessary to control the activities as well as a gradual increase in environmental standards so that these regulations are realistic and industry can implement the measures to improve their performance. Shell is a Dutch company and the Dutch government does not regulate their production in Nigeria as it is not happening in Netherlands. It is question for Dutch government, too. As Salter & Ford (1999) and many large companies in Europe demonstrate, it is possible to be environmentally-friendly and still show profits and stay competitive. Staying competitive in field of oil industry lately seems more as a question, in the light of falling oil prices on international markets. Another question can be how much oil can we use and extract before we change our climate irreversibly.

On European level, in 2003 the Strategic Environmental Assessment protocol has passed that focuses on preventing the negative environmental consequences of strategic plans and groups of projects. This initiative was agreed to in order to

prevent the undesirable impacts of activities in earlier stage than individual projects and appears to be a positive step within the theme of this paper.

What is usually missing from the projects is often participation among the stakeholders. In most cases there are three main groups of them – the oil companies, the national/regional/local government and the indigenous groups. The fourth group, the governments responsible for the oil companies, in Shell's case the Dutch government, are often absent from these negotiations . If any form of involvement of indigenous people is performed, it ends so that they are being informed about the project and being told not to make problems, which renders them informed, but not involved. Moreover, even if they are involved, any forms of bargaining or negotiations are often new concepts to them. This was illustrated on Nigerian case study in which they were formally involved in the project development; however the result was not desired for them. Stammel & Wilson (2006) demonstrate the use of roundtable discussions as one form of stakeholder participation and suggest that in many cases it is possible to find a dialogue and common grounds so that the most damaging consequences can be prevented. It is one of the ways how to deal with the issue, but it is rather ineffective and not sustainable. Participative methods are effective in developed countries, but their effect is questionable in given conditions in Nigeria for example.

Stammel & Wilson (2006) also promote the idea of collective agency which builds on Ostrom (2000; 2002) who got a Nobel Prize for economy for her work on decision-making of common pool resources where she studied how small groups of people behave when distributing the common pool resources and she suggests that in some cases, such as when facing oil companies while trying to protect their livelihoods, maximization of common good stands above the individual benefits. Ostrom's theory of common pool resources is novel and effective method and a way of thinking about issue of natural resources and their management. However this method cannot function on its own, it needs to be combined with reforms in institutional settings and property rights.

This brings us into a kind of a paradigm shift necessary to challenge the current situation that is to focus on damage prevention rather than damage compensation. Here the incommensurability of values is expressed challenging the older 'polluter pays' where worsening of environment can be bailed out by economic improvements (Martinez-Alier, 2003). Some values can be compensated and restored, but there are also values which cannot be retrieved after being destroyed, they are unique and need to be protected.

It is also important to recognize the unique status of indigenous groups as opposed to conventional fashion of them being a very small minority within their country as these people possess 'indigenous identity' (Tsosie, 2007) that connects them with their land and the traditional lifestyles. This status would identify their human rights that would be enforced by institutions of international human law that is robust and influential (*ibid.*). For oil companies these groups are not unique and they are likely to perceive them as burdens for implementation of their interests and unless their status is internationally recognized and protected, indigenous

group will remain more vulnerable and exposed to interests of stronger international actors and strong totalitarian states.

The argument of the paper was that granting indigenous people property rights to their lands can help improve their situation and fight or at least better cope with interests of oil companies and national governments. However, as we could see in the case studies above, it is not enough. It can be seen as one of the initial steps. Formal property rights are one thing, but legal enforcement of these rights and their legal weight is something different. It is not only about rights and central states, but about institutions which are crucial as they are important actors mediating the dialogues between international companies and national governments. The Arctic North case study is a great example of this. In the early 1990s the political situation changed and state subsidies and other forms of help ended and people were left on their own. They have formal rights to these lands, but in reality this is not helping them in their situation.

These are hard debates as evidence is clear that the current situation is difficult and people have hard time coping with these issues. There is no single solution, no panacea for all. Raising awareness of these issues, though, is one of the steps towards improving the living conditions of these indigenous communities. It is possible to say that they pay for our comfort and now it is time for us to recognize this, acknowledge it and do something about their situation. Slow steps are required, more recognition is vital and help from other world is needed.

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