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CONSEQUENCES OF THE ROLE OF THE CHINA NATIONAL PETROLEUM
CORPORATION (CNPC) IN THE SOCIAL AND ENVIRONMENTAL
DEVELOPMENT OF THE WAORANI AND ZÁPARA TERRITORIES OF
ECUADOR

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ABSTRACT

The current role of China National Petroleum Corporation (CNPC) represents an important factor for the social and environmental development of the communities inhabiting the territory where the CNPC operates: Waorani and Zápara. Therefore, this paper contributes to the studies about the social and environmental risks and consequences of the CNPC's performance for the communities living in blocks 14, 17, 31, 43, 79, 83. In order to have material for this analysis, this paper presents: a brief account of Ecuador's oil history, a background of the CNPC's performance in the world, the CNPC's relationship with the Ecuadorian state oil companies, the oil issues involving the company, and a brief allusion to the economic impacts of the company's presence in Ecuador. The analysis is based on surveys, interviews, direct observation, field trips, literature, and online references.

The research identified the need for concessions to foreign companies in general, and CNPC particularly, as long as they are under fair terms, taking into account the opinion and idiosyncrasies of indigenous people, and ensuring high environmental protection with equitable distribution of benefits.

INTRODUCTION

Human lives, plants, and animals could be modified by capitalist interests of giant international corporations and their activities for economic growth. There is special emphasis on the experiences of indigenous peoples worldwide, who have their own cultures, traditions, and languages. Those who settle in territories with vast natural resources, such as the Waorani and Zápara.

The Ecuadorian indigenous have a social struggle to maintain their physical territory, its health, diversity, and the survival of the spiritual relationship between their territory and people, along with other essential areas of human survival, such as food and health.

Internationally, the legal norms defend the indigenous and ensure maintenance of their cultures, traditions, lifestyles, practices, ancestral knowledge, and territory. For example, the Declaration on the Rights of Indigenous Peoples (UN) is a basis for industrial practices of transnational corporations and governments to operate without affecting the welfare of human beings.

In this context, this thesis proposes the addition of information to the studies on the social and environmental impact that the fourth largest company in the world (Fortune Global) the China National Petroleum Corporation, has over the Waorani and Zápara territories in Ecuador. Additionally, there is a brief account of the oil history of Ecuador, and the background of the CNPC in the world. Its relationship with the Ecuadorian state oil companies and the oil aspects it is involved in: investment, extraction, and commerce, including a short reference to the economic impact of its presence in the country. These provide material for a brief analysis of the relationship between the Corporation and the Ecuadorian Government, the Waorani, the Zápara and the environment.

The following chapter briefly introduces the worldview of the Waorani and Zápara peoples, discusses the history of the oil industry in Ecuador and states the concept of the CNPC and its globalization. Which includes real cases of the transnational in China, Myanmar, Chad, Venezuela, Peru, and Brazil that will lead to a conclusion on the homogeneous trends identified from each case.

CHAPTER 1: CHINA NATIONAL PETROLEUM CORPORATION

a. Background

i. Waorani and Zápara



Photo by the author

Waorani, a word known as *Auca* in quechua which means *wild* in Spanish, is the name of an indigenous population of Ecuador which is located between the Napo and Curaray rivers. Traditionally, they have survived by hunting, orcharding, and fishing. Its official language is Wao, which has two dialects: wao tededo and wao tiri, a language very little known among city dwellers (High). Ivan Narvaez, an expert in Amazonian studies, records that the Waorani are a free and warlike people, who fully believe in the supreme (17).

During most of the twentieth century, the Waorani killed as a form of revenge or to defend their interests. Such genocides harmed foreigners who came to their territories as missionaries to establish initial contacts. Their way of killing was based on the use of spears, and it is because of these events that these people became known as the Aucas, enemies, or wild. These terms were used to describe them in stories, films, texts, etc., giving the state the role of peacemaker (High).

For the Waorani, their territory is very important because their relationship with the forest is not just physical, but it is part of their social life and culture. Based on this, they have developed a survival system based on what land provides them of, always respecting nature. Also, its territory has been instrumental in the rescue of important plants and ancestral knowledge that reveal healing, spiritual, material, and social benefits (Omene).

Something similar happens with the Zápara indigenous group, which for its language and culture is part of the *Representative List of the Intangible Cultural Heritage of Humanity*. The Zápara are located between Ecuador and Peru, in the Amazon jungle. These people, according to data released by UNESCO, are in danger of extinction. In 2001 Ecuador had only 100 Zápara indigenous, and Peru only 200. From these, only five speak the original Zápara language.

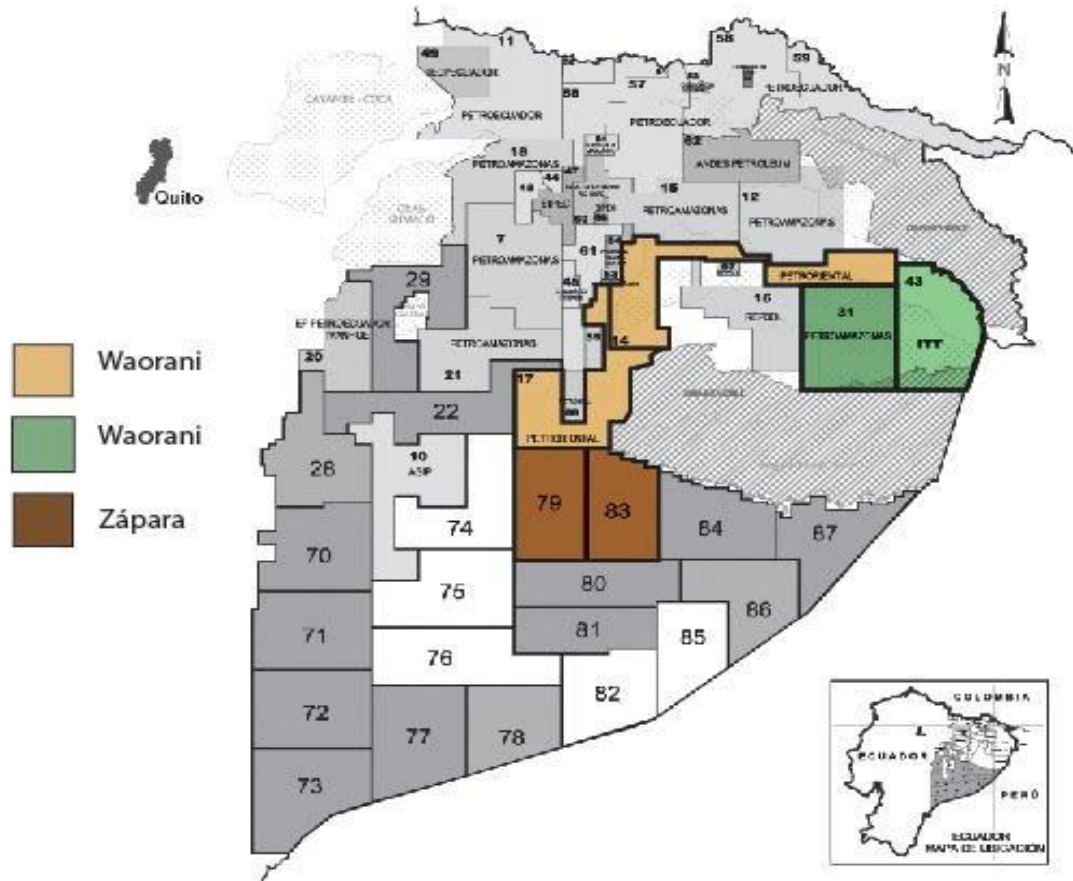
The events that have taken place during the last few centuries, such as diseases, epidemics, conquests, wars, deforestation, among others, have created the current situation of the Zápara: their extinction risk.

The cultural heritage mentioned above is due to their natural experience, knowledge about their territory's flora and fauna, their wisdom about herbal medicine and medicinal plants of the forest, wisdoms expressed through their oral

culture and language, which also expresses myths, traditions, spirituality, rituals and ancestral memories (UNESCO).

The map below shows the blocks where these indigenous communities are settled:

Map 1: Waorani and Zápara



Source: Author's edition on the map from the Ministry of Non-Renewable Natural Resources.

ii. Brief History of the Oil Industry in Ecuador

Exploration for oil in Ecuador began in the 1920s; however, this action did not have a significant economic impact until the mid 60s, when the giant Texaco Petroleum Company struck oil near the Amazon jungle (Widener 10). This led to the immediate contract of the William Brothers Company, a Texaco contractor, to build the first *Ecuadorian - Transnational Pipeline System* (SOTE as known in Spanish), which was finished in 1972, and started operating under the military regime headed

by Rodriguez Lara, who led one of the best economic booms in the nation's history: the oil boom (Ayala Mora 107), which ended the banana days.

Five years after the SOTE operations began the government took 62.5% of the project shares, and in 1977 the first national refinery originated: the State Esmeraldas Refinery (REE as known in Spanish). During this time the country experienced a major development and bet with a new natural resource to a promising future in which the debts owed to international bodies, such as the International Monetary Fund, World Bank, and foreign countries, would be easily paid thanks to the high oil prices, which also led to the creation of new jobs, more and better education, low taxes, and new roads among others (Carriere and Gerlach said in Valdivia and Benavides 72).

In the 1980s, when the oil boom reached its zenith, the Ecuadorian neoliberal period started. This was exemplified by the restructuring of the *Corporación Estatal Petrolera Ecuatoriana* (CEPE as known in Spanish) into a holding, Petroecuador, moving some of the CEPE's activities to independent subsidiaries, and opening the oil industry to international investment proposals (Valdivia and Benavides).

After this, a long period of protests, strikes, petitions and demands, which were carried out by workers, residents, organizations, communities, and others who found the people's interests affected, began. The protests developed to defend oil, one of the nation's greatest assets, and tried to prevent its privatization, inquiring proposals to improve the situation of the state and its relationship with oil, without giving Ecuador's most profitable fields to foreigners as a gift (Interview to a FETRAPEC leader quoted in Benavides and Valdivia 8).

The conflict between the government, oil companies, and the population has continued since then, and has remained during the presidency of Rafael Correa, who began his governmental administration in 2007. He, during his campaign, used motivational slogans as "*la patria vuelve*" (our motherland is back), and "*pasión por la patria*" (passion for our motherland), promising that the oil fields would be 100% for the Ecuadorian people (Cano et al. 2009 quoted in Valdivia and Benavides 9).

On January 15, 2007, the economist Rafael Correa was sworn in as President of Ecuador, and a year later the new Constitution (2008) was approved. The 2008

Constitution came to be considered a milestone internationally. It protects the nature and stands for the right of communities, peoples and indigenous nationalities to enjoy the natural resources of their territories and to defend them (Art. 74). This situation happens in the context of the *National Plan for Good Living* (Buen Vivir as known in Spanish), *Sumak Kawsay* or *Vida Plena*, which contributes the worldview of the indigenous for the knowledge of common people. For the indigenous there is no development because the future is unknown to the limited human minds, while the past is the wealth that we currently have, "we see it, we know it, it constitutes us, and this is what we walk with, a path in which our ancestors are with us, become one with people, with the community and with nature, (...) beings that live and are a part of humans" (National Plan for Good Living 32).

What has been explained above is supported by the 71st article of the seventh chapter of the 2008 Ecuadorian Constitution, which emphasizes on the rights of nature and protection of the *Pacha Mama*:

The Nature or Pachamama, where life is reproduced and fulfilled, has the right to have its existence and the maintenance and regeneration of its vital cycles, structure, functions, and evolutionary processes, be fully respected. Any person, community, or nationality could require the public authority to enforce the rights of nature (...). (Article 71)

The new government strategy from 2007 appeared to contribute to development and progress, respecting each of the elements of earthly life; however, after a few years of the entry into force of the 2008 Constitution, an extractive model began. This originated a new financing model from non-traditional bodies, replacing aid from the International Monetary Fund (IMF) and World Bank (BM as known in Spanish), and opening international investment from corporations such as the CNPC which performs in Ecuador through its subsidiaries: Andes Petroleum, PetroOriental, and PetroChina (The Guardian). These subsidiaries currently operate in blocks 14 and 17, and will operate in the new granted concessions: blocks 79 and 83.

Additionally, the CNPC aims to other areas in the country to perform there by providing them of new technology, development, and financing. Among such areas

are the Sacha and Auca territories owned by Petroamazonas, the Pungarayacu field operated by Ivanhoe, and the CNPC's possible intervention in the construction of the Pacific Refinery (Araujo).

Alberto Acosta, Ex-Minister of Energy and Mines (2007), in a personal interview, sustained in Yasunidos' messages, said:

The Constitution is now an issue that bothers the President. Unfortunately He, who said that this constitution would last 300 years, that it is a hymn to life, that it is the best constitution in the world, no longer respects it.

Taking into account the location of the oil fields, the use that will be given to them, the level of transparency of the Ecuadorian government and Chinese corporations involved in these processes, the current life in the territories with large natural wealth, the material developed by the current government for the protection of life and nature, and the new extractive decisions, this thesis will add information to the discussion about whether the Ecuadorian development based on the oil dependence, a nonrenewable natural resource, is or is not socially and environmentally sustainable.

b. What is the CNPC?

The China National Petroleum Corporation (CNPC) is the world's fourth largest oil company, the largest oil corporation in the People's Republic of China, and is part of the 500 most successful companies worldwide (YPFB Oil and Gas). The CNPC carries out different oil projects in several countries at three levels: upstream, midstream and downstream.

Several countries have opened their doors to this giant, such as Latin American Nations: Ecuador, Venezuela, Peru and Brazil. Also, other African and Asian countries, such as Chad, Myanmar and China. Many international representatives, as the current President of Ecuador, support the CNPC's activities and consider them necessary for the development of their countries.

As part of the important process of globalization that this Corporation goes through, the CNPC provides *in-house* services, such as financial aid, valuation of assets,

and loans among others, through its subsidiaries and affiliates. In Ecuador, for example, it has 55% of shares of Andes Petroleum Ecuador Ltd. and PetroOriental SA, and plans to finance 36.26% of the *Oleoducto para Crudos Pesados* (Andes Petroleum Ecuador Ltd.), while its subsidiary, PetroChina, gave a billionaire financial aid to PetroEcuador in exchange of oil (Gallagher et al).

Regarding the organization of the Corporation, although it does not have a department specialized to handle complaints and specific environmental policies and does not require from its subsidiaries to have environmental control and management systems, PetroChina, as an exception, has set these policies and made them public through reports about its performance and care for nature (Matisoff 13).

Zhou Jiping, president of the China National Petroleum Corporation, publicly stated that "the natural environment is humankind's most precious resource, and environmental impact is the greatest risk facing the oil and gas industry" (2). Moreover, the logo of the Corporation itself, through its floral presentation demonstrates the commitment of the CNPC to ensure harmony between energy development and the environment (China National Petroleum Corporation 4). However, the Corporation does not show enough information about its environmental performance, which has led to Chinese media to issue public criticism about the role of the CNPC in the grow of pollution (Matisoff 24).

c. Introduction of the Role of the CNPC in Ecuador

The oil industry has become a key factor for the country's future. Given the global expansion of the CNPC, the fact it is immersed in the oil industry of a country rich in this non-renewable natural resource is not a surprise. The power of the world's largest economy (Pardo) increases, thus its search for resources increases too, reaching places that are small geographically, but have an immense natural wealth, such as Ecuador and the Amazon within it.

According to coverage by Amazon Watch, China has achieved amazing goals, such as most of Latin American's financing control and extraction of the continent's resources.

In this context, the Ecuadorian government has promised reciprocity to China, as shown by a statement from the Ministry of Economy presented in a special report by Reuters, about the presentation that this ministry conducted for Rafael Correa

and its team in 2009, pledging to "do its greatest effort to support PetroChina and Andes Petroleum", subsidiaries of CNPC, "in the exploration of the ITT fields" (Schneyer and Mora). While at the same time the Ecuadorian President was being praised and admired by the Ecuadorian community for his brilliant, but later failed, initiative to keep the ITT oil underground in exchange for financial contributions from the international community (Government of the Republic of Ecuador).

A year earlier, during the *Ronda del Sur*, Ecuador received offers from Andes Petroleum to operate in blocks 79 and 83, where the Zápara community lives. In 2013 China had provided Ecuador with 61% of its financial needs at an interest rate higher than 7%, in exchange for the lender to receive most of Ecuadorian oil. The loan agreement stated that PetroEcuador must sell oil to PetroChina, which could take for itself the assets of any oil company operating in Ecuador if the country defaults on the debt acquired with China (Amazon Watch 1, 5).

In contrast to what has been stated above, the reaction of those who inhabit the territories of ITT and blocks 14, 17, 79 and 83, where the CNPC executes its operations through its subsidiaries, or through its influence over Ecuadorian Companies, Pentí Baihua, coordinator of the movement *Ome Gompote Kiwigimoni Waorani*, from a personal interview, gives the following message:

Now we tell the Ecuadorian government that this territory is life. The territory is life, it is culture. If our parents had not defended this territory, then what would there be? You know what we still have, what our parents, grandparents, great-grandparents defended, and so the Yasuni still exists (2014).

d. Repeated Stories

i. China

Currently, China is the most populous country with a growing economy that has made it the largest consumer and producer of energy and a major piece in the global energy markets (e.i.a. 1). According to the Energy Information Administration of the United States (e.i.a), since 2014 China has become the largest importer of oil, and its National Corporations are an important part of China's oil industry (5).

The CNPC is the main operator of gas and oil pipelines in China. Among its projects the Jing and Zhongwei Shan (e.i.a 5) stands out. It also implements notable refinery projects, such as: Pengzhou, Urumqi, Huabei, Anning/Yunnan, Karamay, Chongqing, Jiangsu/Taizhou, Lanzhou Lianhua, Tianjin, Shangqiu/Henan and Guangdong/Jieyang (e.i.a. 14). The last project mentioned is performed along with the Venezuelan state company, PDVSA, in order to utilize the refinery to process oil that comes from Venezuela for Chinese use (BBC). Also, the CNPC, through its subsidiary PetroChina, operates one of the largest oil fields in the country, Changqing, which provides natural gas to more than ten cities, among which are Beijing, Tianjin and Shijiazhuang (PetroChina).

The potential of the CNPC to execute large projects and manage them avoiding the greatest risk faced by oil companies, the social and environmental impact, has proved to be inefficient in China considering that several accidents have been caused by the activities of the Corporation: the explosion of a petrochemical plant in Jilin Province in 2005, which resulted in eight deaths; millions affected by the pollution of the Songhua River; the Chishui oil pipeline spill in Shaanxi Province in 2009, which contaminated the Yellow River severely; the Liaoning Province's pipeline explosion, which caused a massive fire and a large oil spill in the Bohai Sea in 2010; and the burning of the CNPC refinery, located in Liaoning Province, in the same year (Lin et al 152).

ii. Myanmar (Old Burma)

The Shwe (*golden* in Burmese) project was to develop a dual pipeline, oil and gas, to transport oil from the Middle East, and gas from the Shwe bay of Myanmar, China, since September 2013 (Matisoff 44). CNPC has served the largest extractive Myanmar Project, which will generate \$54 billion dollars for the Burmese government in 30 years from the date when the operations start (Shwe Gas Movement).

Before the project started, and a few months after operations began, several claims about the environmental risks that this project generates have been reported. There have also been protests over the social problems that the construction of these pipelines generate. "We protest because we want to show the world that this project has not improved the lives of local residents, but has made them worse," said Tun Kyi during the construction, according to the official website of the Shwe

Gas Movement. Activists of this movement have declared that the Chinese working in the project have treated local residents unfairly, taking away properties, discontinuing the creation of job opportunities for locals, and threatening to kill them if they enter the fields where the CNPC works.

Likewise, there are complaints about the environmental risks that this project has generated, such as deforestation for the construction of corridors (Matisoff 45); lack of food: "we cannot even feed ourselves since the CNPC has thrown waste in our rivers" said Kyi, who is from the Burmese town where most inhabitants are farmers or fishermen; and lack of electricity: "although we have lots of gas we only receive two hours of electricity in Sittwe," Aye Tha Aung said.

iii. Chad

Chad hosts a project of three components: expansion of oil fields, pipeline construction, and construction of a refinery. It started in July 2009 under an alliance between CNPC and the Chadian government and meets the following goals for the two countries: to allow China vary its sources of oil in Chad, and to give the country an opportunity to increase their partners (Vliet and Magrin). This is known as the Ronier project.

When the project began, the possible damage that could be generated by the operations of the companies in charge had not been considered, and it was thought that the environmental and social impact would be low. However, it was estimated that it would generate few job opportunities, that it would create inconvenience to local residents, and that it would lead to degradation of areas rich in elephants, antelopes, and plants as the *bérbéré*, or the vast acacia, according to the analysis led by Vliet and Magrin.

Such appraisals were confirmed when the same year, 2009, a child suffered a fatal accident drowning in Koud Alwa in a quarry used by the CNPC, due to inadequate monitoring, in addition to air pollution, noise, and illnesses generated from dust (Lin et al. 174).

According to The Wall Street Journal, in 2014 Chad was preparing to re-auction the license for oil extraction which had been withdrawn from the CNPC because of the

serious environmental damages caused by the Corporation, as the oil spills in several places close to a forest (Stevis and Flynn). The auction was going to take place if the CNPC did not pay \$1.2 billion to the government to compensate the damage. Soon after, the Corporation paid \$400 million to the government of the African country which made the partners come to a new agreement (Reuters).

iv. Venezuela

As in the previous countries, CNPC has also invested in Venezuela. An important project in which the Corporation invests, in partnership with the state oil company of Venezuela, PDVSA, is the one taking place in Block 4, Junin, in the Orinoco Belt, an area with high biological diversity (Matisoff 31). Through this project, 400 thousand barrels of extra-heavy oil would be produced and processed since 2016 (PDVSA).

This alliance seeks to carry out not only oil production, but also to add to the process the marketing and transportation stages. To give more added value to the extracted product, it will be processed in the refineries being built in China by the same alliance, in order to satisfy the Asian market's need for oil. This generates the same social and environmental changes noted above (PDVSA).

v. Perú

CNPC has operated in Peru since 1993, when it won its first auction to work in oil production of blocks 6/7, a project that represented its first expansion abroad (Feng et al).

In December 2005, SAPET, the branch of the CNPC in Peru, which has operated in the southern country since 1993 (SAPET), signed an agreement with Perupetro, Peru's state oil company, to conduct oil exploration in *Madre de Dios*, a region where a group of uncontacted Indigenous live, taking into account that Peru has approximately 15 out of the 100 native tribes who have lived in voluntary isolation in the world (Matisoff 38).

It was considered that the exploration to be carried out by the Chinese -- Peruvian alliance would expose these indigenous to violence and diseases, knowing that

generally during the initial contact between these tribes and the outside world it is common to see at least half of the tribe die. In addition are the risks that this contacts represent for the workers of the Corporation, as has been seen in cases of loggers who have perished in the hands of uncontacted tribes during violent encounters (Ibid).

Adina Matisoff, in her book *Crude Beginnings*, explains the concern of the Chinese branch in Peru on the social and environmental impact that its activities would generate in the area, so after a consultation developed by FENAMAD, a local Peruvian organization that works to protect indigenous communities, SAPET proudly pledged not to conduct such exploration, removing the area from the PerúPetro oil blocks map (39).

On the other hand, the commitment of SAPET in *Madre de Dios* is not what always happens, as shown by a study made by Jorge Manco Zaconetti, researcher of the National University of San Marcos, who has determined that the company has undervalued stocks, in addition to miserable pay for workers (3).

CNPC is currently concessionaire of Lot X in Piura, and Lot 58 in Cusco, which previously belonged to Petrobras and were acquired, along with all the assets of the Brazilian company in Peru, by the China Corporation in November 2014 (El Comercio).

vi. Brazil

Brazil, another country in Latin America, the world's fifth largest country with a megadiverse Amazon, has huge oil and gas reserves, which draws the attention of major international corporations such as the CNPC that seeks to take advantage of these natural resources and of the income that the estimated production of one million barrels per day would generate, starting in 2017 (Institute of the Americas).

Libra is the country's largest oil deposit with 12,000 million barrels of oil, which was auctioned by the government. Facing this auction, several students, professionals, leftist politicians, activists, environmentalists, and others, have sparked protests demanding that the Libra field be exploited by Brazilian companies, so that the country's heritage is respected and granted to its people, to whom the oil belongs.

Before operations began, during the negotiations for the concession of this field to a consortium of multinational giants, among them the CNPC, there have been strikes and injured people. Libra has been concessioned to a consortium comprised of the Brazilian company, Petrobras; the Anglo – Dutch company, Shell; the French company, Total; and the Chinese companies, CNPC and CNOOC (Cardenas). The China National Petroleum Corporation also intends to acquire all the assets of the Brazilian company *Barra Energia do Brasil Petroleo e Gas Ltda* (Jelmayer).

e. Homogeneous Trends

Chinese interference in Latin America has not come only from international corporations such as the CNPC, but also from the support of financial institutions that represent the new pillar of financing in Latin America in exchange for oil and gas, such as the China Development Bank (CDB) with which the CNPC has established an ongoing relationship.

With regard to the cases described above, the study has identified that the trend on social and environmental consequences generated by the activities of the CNPC, its subsidiaries and affiliates, has been repeated several times as the Corporation has generated opposition, and has deteriorated the well-being of peoples.

In contrast to the paragraph above, in Peru the Chinese branch SAPET held a positive attitude to respect the rights of indigenous communities living in voluntary isolation.

About the other cases, there is no knowledge about prior consultations, fair negotiations or activities in accordance with indigenous interests, their cultures, traditions, beliefs and lifestyles. This goes even against an International Declaration created by the member countries of the UN, without considering the views of those affected.

Following this context, the subsequent chapter will detail the role that CNPC has had specifically in Ecuador, the relationship of the Corporation with Ecuadorian oil companies, and the aspects on which the CNPC performs in the country. It will also introduce the role of the CNPC over the main communities where CNPC operates: Waorani and Zápara.

CHAPTER 2: THE CHINA NATIONAL PETROLEUM CORPORATION IN ECUADOR

a. History

Fernando Villavicencio, researcher about oil topics and renowned journalist, has described the current position of Ecuador as a path "from the Banana Republic to the Republic of China's kick" (87). This assertion could be considered a strong insult to the country; however, it is based on facts that Ecuador has experienced in recent years.

For Villavicencio, China has become a distributor of dollars in Latin American countries including Ecuador, in exchange for the many natural resources that the region has: oil, copper, and gold, among others (87). Chinese investment in Ecuador will be better studied later; however, this section will show the "China's kick" expressed by Villavicencio.

It is important to remember the Yasuni ITT initiative, praised by the international community and by all Ecuadorians due to its goal of saving the Yasuni National Park. According to a special report from Reuters, the Ministry of Economy in 2009, the same year of the initiative against the exploitation, committed to support PetroChina, a subsidiary of the CNPC and its public arm in Ecuador, and Andes Petroleum, another subsidiary of the Chinese Corporation, to explore the Yasuní ITT and Block 31 (Schneyer and Mora). The 245644 wikileaks cable from January 26, 2010, also shows China's interest in the ITT (El Universo).

Ten days after the government's decision to drop the Yasuni ITT initiative, Ecuador received \$1.2 billions from China to be paid with oil (Amazon Watch 5). In this way a new business with China began, and the role of the CNPC in Ecuador started to increase. This Company currently operates in blocks 14 and 17, home to indigenous Waorani, under the name of PetroOriental.

According to Roque Sevilla, former chairman of the Negotiating Committee for the Yasuni ITT initiative, China has been a major piece in the decision to abandon the conservation initiative, because of the role that the CNPC plays in the construction

of the Pacific Refinery, which is valued at approximately \$10 billion (Amazon Watch 5), financed in a 30% by the CNPC (El Universo).

From the government's view, the lack of solidarity of the developed world caused the drop of the Yasuní ITT initiative. Since the initiative started it was suggested not to exploit Yasuni oil if the international community assumed a value of \$ 3,600 to compensate the earnings that Ecuador would not receive by leaving the oil underground. The condition was not met which forced the beginning of the pre-exploitation operations (Mena).

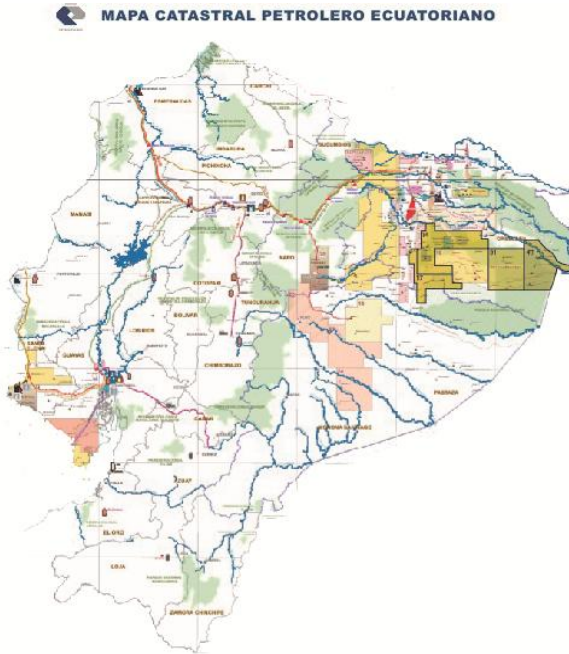
During a personal interview with the former shift manager and coordinator of the pumping station of the Esmeraldas Refinery, he explained that the refinery where he worked, currently processes approximately 85 thousand barrels, while the new Refinery will have the capacity to process a hundred thousand barrels of oil, although the government has publicly stated that the refinery will process 200 thousand barrels per day. Where will the oil come from for the Refineries to keep functioning? At this point the comments made by Sevilla about the Chinese influence in the abandonment of the Yasuni ITT initiative make sense: the oil to be refined in this new Refinery will come from the Yasuni ITT, blocks 43 and 31.

Furthermore, on November 28th, 2013, Ecuador received new offers on the blocks that were promoted during the *Ronda del Sur*. The offers came from the CNPC through its subsidiary in Ecuador, Andes Petroleum. Andes was interested in blocks 79 and 83, where the Zápara and Kichwa peoples live (Amazon Watch 5).

Similarly, the influence of the Corporation has changed the oil map of Ecuador. In 2011, PetroOriental extended the border of Block 14 to facilitate the exploitation of the ITT reserves (Amazon Watch 5).

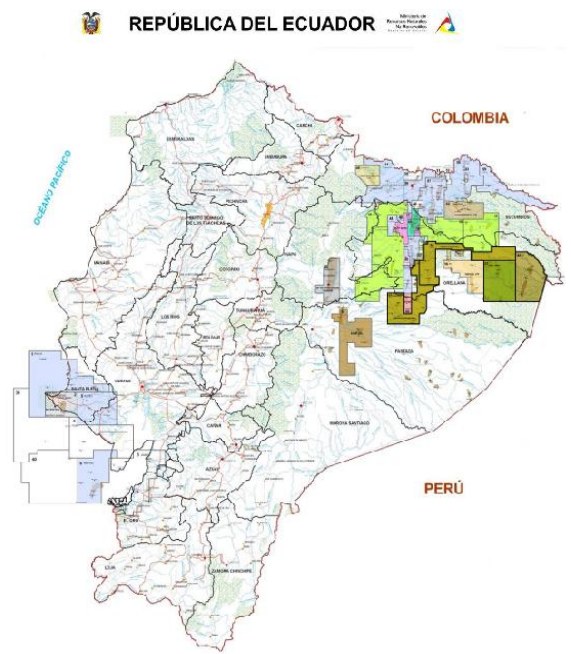
Maps before and after the border was extended are shown below:

Map 2: Before



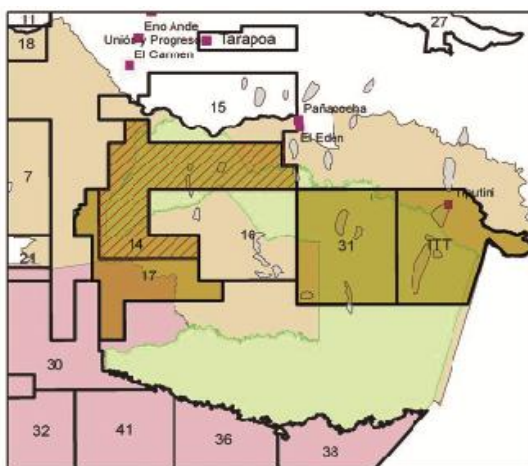
Source: Author's edition from the Map in EP PetroEcuador

Map 3: After



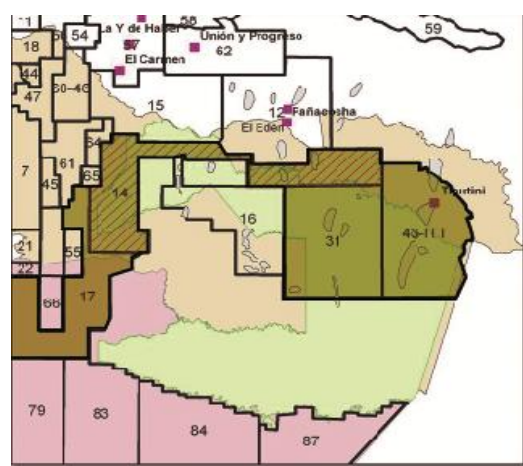
Source: Author's edition from the Map in the Ministry of non – renewable Natural Resources.

Map 4: Before



Source: Author's edition from the "Mapa Catastro Petrolero 2010" shown in "Agencia Minta Waorani"

Map 5: After

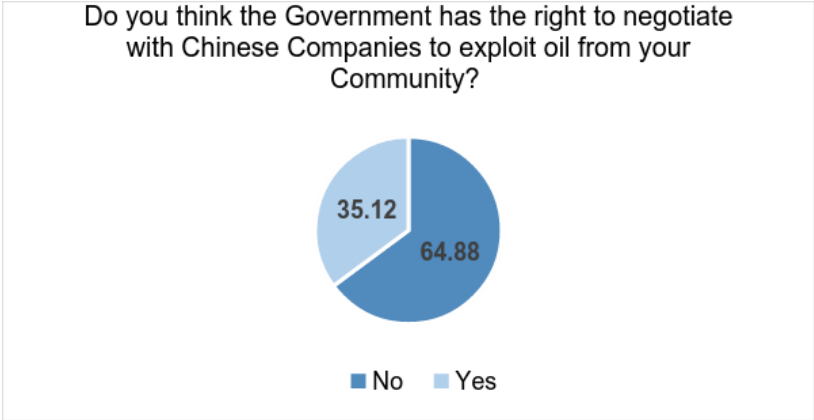


Source: Author's edition from the "Mapa PetroEcuador 2012" shown in "Agencia Minta Waorani"

To know the opinion and view of the communities involved in this research, and given the lack of secondary information, it was used primary information from different researches conducted by the author of this thesis, co-authored by Adam Chimienti, and supported by Samuel Oguima -indigenous Waorani, collecting interviews and surveys of the following Waorani communities: Tiquino, Batado, Miguaguno, Tobeta, and Yawepare, located in territories 14 and 17, and specific questions for this research were added. The surveys¹ gave the following results:

As for the first question, 64,88% from 131 Waorani respondents answered NO, while 35.12% answered positively.

Graph 1:

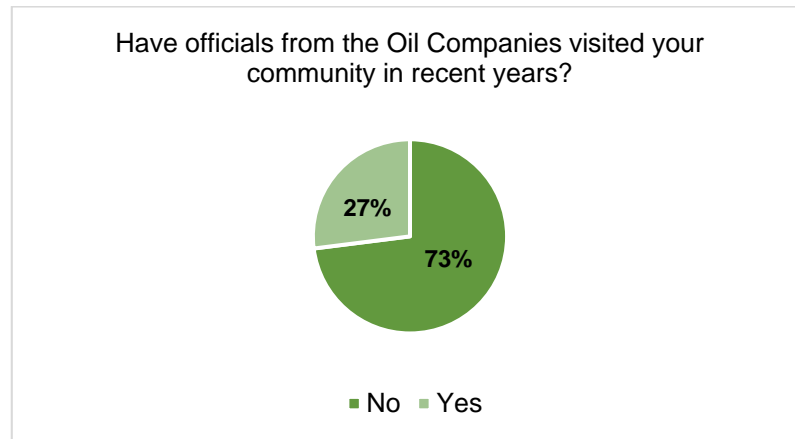


Even though the majority is against oil exploitation in the mentioned territories, the border for the exploitation of oil has increased significantly as shown on the maps.

On the other hand, there was the following doubt: Have the indigenous been consulted to give their consent for exploitation? This question can be answered based on the response given to the following question:

¹ The sample includes men and women of different ages. The formula to determine the level of reliability of the sample is shown in the annexes.

Graph 2:



If more than 70% of people have not even been contacted, it can be concluded that they have not been consulted either.

The role of the CNPC in Ecuador is also related to the Latin American country's debt with China. The current Ecuadorian President said this should not be considered public debt since this represents only advance oil sales. The CNPC is an essential piece of this loans: the Chinese Corporation through its principal subsidiary, PetroChina, will receive the extracted oil as a form of payment. According to Marcos Lopez, former director of the Central Bank, incidents like this "reveal a change from US imperialism to Chinese imperialism" (El Universo), and responds to the statement of Villavicencio about "China's kick".

b. Relationship with Ecuadorian State Oil Companies

In recent years China has become the biggest creditor of Ecuador after Rafael Correa's decision of not to use the IMF and World Bank's credits, because of their conditions that attempt against national sovereignty.

To receive loans from China has been an easy task. The relationship of Asian investors with the South and its state enterprises has been developed almost immediately. Alberto Zambrano, chief audit of *Cardo Caminosca*, a consultant company that provides the *Corporación Eléctrica del Ecuador (CELEC)* of management and audit services for hydroelectric projects, during a personal interview asserted that the IMF and World Bank credits are cheaper than Chinese

loans, but the Ecuadorian government, after seeing its relationship with these agencies damaged, goes to China where " the agreements are signed after only a couple of visits and a few cocktails" (Zambrano).

These loans in exchange for oil involve different actors: the China Development Bank (CDB), the Ecuadorian government and its oil companies, and the Chinese oil companies. The procedure is as follows: CDB lends money to Ecuador, the latter pays by delivering oil to the Chinese companies on the current international market price: a part of the payment goes to an account of the CBD to repay the given loan, and the balance is for Ecuador (Gallagher et al cited in Ray and Chimienti).

In this context, the following sections will address the relationship that the China National Petroleum Corporation has had with Ecuador's state-owned oil enterprises: Petroamazonas and Petroecuador.

i. Petroamazonas

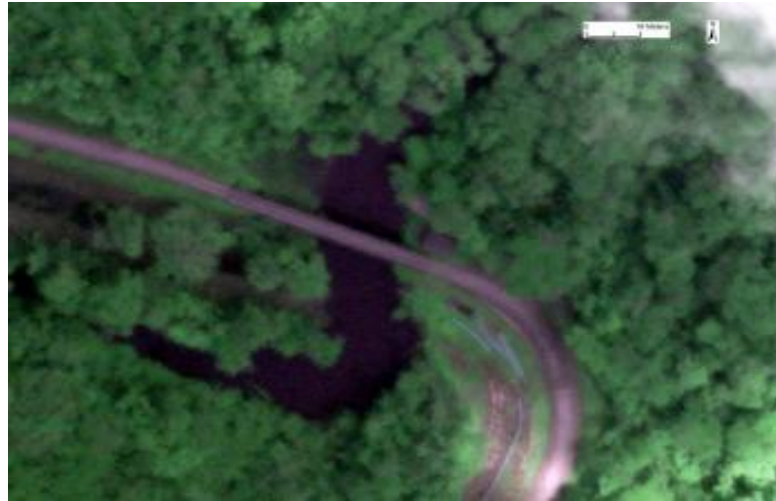
Petroamazonas operates 20 blocks in Ecuador. Among those are blocks 31 and 43, located in the heart of the Yasuni National Park. Block 43 represents 25% of the total oil reserves of this state-owned company (Petroamazonas EP11). Blocks 31 and 43 are home to the Waorani people (See Map 1) and two uncontacted indigenous groups: Tagaeri and Taromenane. The main blocks to be analyzed in this section are the Waorani territories.

Petroamazonas, since 2007, has had an environmental license to operate in block 31. Once ten wells are drilled, it is estimated that the production of only one of the fields in this block would exceed 6,370 barrels of oil per day. As for the block 43, since August 2014 the construction of the *Zona de Embarque Miranda* to enter the Tiputini field started. The Tiputini is an area rich in coffee, fruits, plants, and wildlife. Also the construction of an ecological trail access has begun, and it is estimated that Tiputini will start producing in 2016 (Petroamazonas EP 1).

Several scholars have questioned the construction of roads in this territory. Among various studies on the subject, one conducted by a group of Italian researchers at the University of Padova, through satellite images, has questioned the commitment of Petroamazonas to build only a small ecological trail in Block 31, since the results

displayed appear to be a road fully developed to transport oil. Also vehicles and a large truck were identified.

Photographs of the roads are shown below:



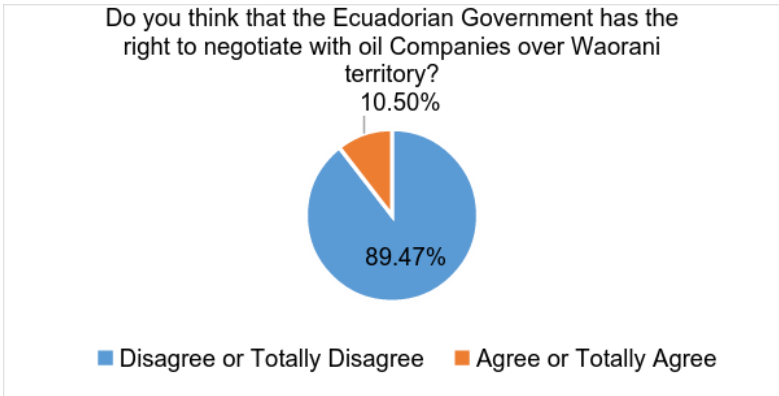
Source: Finer et al. 7

The Ecuadorian President does not accept the Italian study results arguing that there is an environmental permit for the construction of an ecological path, and that is all that has been built (The Epoch Times).

Regarding permits, the Ministry of Environment is the competent authority to issue an environmental license to perform oil activities. This is done based on environmental impact studies and after consulting the communities (Ministry of Environment). The 57th article of the current Constitution of Ecuador prohibits extractive activities in the territories of uncontacted peoples or those in voluntary isolation and forces to conduct a consultation to the inhabitants of the communities before developing extractive activities on their territories.

Through the field research indicated above, conducted by Chimienti and this paper's author, five communities located in the heart of the Ecuadorian Amazon were visited: Ñoneno, Conanaco Chico, Omakaweno, Wanamo y Bameno, and 39 members of them were surveyed.² The result from one of the questions included for this research was as follows:

Graph 3:



From the 39 respondents, 89,47% disagree or strongly disagree about the right of the Ecuadorian Government to negotiate with Asian companies on its territory, while 10.50% accept it. Most of the Waorani refuse to have oil companies manage the extractive industries of Ecuador, and do not believe oil and minerals can provide health, education, and dignity. However, as discussed above, this oil is needed for the new refinery to function and to pay the Chinese loan that would

² The sample included men and women of different ages. *NOTE:* the level of reliability of this sample, according to the analysis detailed in the Annex, is 86%. This is warranted due to various constraints during the investigation: distance between communities which are only reached through canoe, lack of confidence of indigenous peoples when answering the questions, difficulties to access to the communities, limited financial resources, limited time; however, despite not being the subject of this investigation the statistics but the environmental and social area, the sample was increased by conducting subsequent surveys in blocks 14 and 17. The level of reliability of the new sample is 95%, as detailed in the analysis of the annexes, and the questions were similar to the initial sample.

allow the Country to develop faster than it has. To this, Pentí Baihua, coordinator of Ome Gompote Kiwigimoni Waorani, states that:

There are Waorani that live with the oil companies and others that live in their territory. Some Waorani want to be with the oil companies, but there are Waorani who live in their own territory and want to defend it.

On the other hand, in an Open Letter to Petroamazonas EP, Yasunidos discusses the oil spill that took place in Cuyabeno. This spill can be considered the largest in the last twenty years according to the locals: Cofan, Kichwa, Siona-Secoya (Yasunidos). Based on these disasters, there is a serious concern about the management of resources in blocks 31 and 43, where the same company operates. Petroamazonas, however, indicates that the technology to be used in these blocks will be the most modern and will cause the least possible environmental impacts.

ii. PetroEcuador

It is 22 years since the Chevron-Texaco case began. Twenty two years ago a group of indigenous people of the Ecuadorian Amazon sued the oil company in the Federal Court in New York, United States, due to the environmental damage this Company caused, affecting the health and economy of hundreds of indigenous. Chevron, the US oil company, bought Texaco in 2001. Texaco worked in Ecuador since 1964, when the exploration in the northern Ecuadorian Amazon started. In 1993 the Texaco concession ended in Ecuador and Petroecuador became the only owner of the fields that Texaco was operating (Perez).

PetroEcuador has a deplorable environmental record. Between 2000 and 2008 the company had responsibility of 1,415 oil spills. Pablo Fajardo, lawyer for the plaintiffs, announced that "since Texaco left Ecuador, Petro has produced more damage and more disasters than Texaco had." (Juicio Crudo).

This oil company has received Chinese loans to help finance the development of Ecuador, in exchange of oil. The chart below lists the oil facilities on which the primary borrower from China has been Petroecuador. Other loans gotten from China are not shown in this chart.

Chart 1:

LOANS IN WHICH THE BORROWER IS PETROECUADOR				
Year	Lender	Borrower	Amount (USD \$b)	Purpose
2009	PetroChina	PetroEcuador	1	Advance Oil Sales
2010	CDB	PetroEcuador	1	20% Advance Oil Sales – 80% discretionary
2011	PetroChina	PetroEcuador	1	Advance Oil Sales

Source: Gallager and Myers, and Grautigam and Gallager, cited in Ray and Chimienti. The data has been verified by the Chinese embassy (15).

In 2009, PetroEcuador and PetroChina signed an agreement under which China would lend money to Ecuador in exchange for oil. That year the administration of Rafael Correa accepted its first loan from China for a billion dollars at an interest rate of 7.25%, agreeing to sell 96, 000 barrels per day to PetroChina to cover the loan.

On August 31, 2010, the "Four Party Agreement" between Petroecuador, the Ecuadorian Ministry of Finance, PetroChina, and the CBD was held. Through this agreement the CBD provided the Ministry with a loan of \$1 billion for a term of four years with an interest rate of 6.5%. To pay, PetroEcuador had to sell no less than 36 thousand barrels of oil and/or fuel per day to PetroChina, and the southern country must continue to seek ways to strengthen cooperation between the two nations.

Article 15 of this agreement allows China to seize the assets of Ecuador if the country fails to repay the loan and demands that Ecuador "irrevocably and unconditionally" renounce to its rights to assert its immunity in any proceedings against it or against its assets (Four Party Agreement). Moreover, another condition of the Agreement was to use the borrowed money on energy and infrastructure projects in which Chinese companies must be involved (El Comercio).

In mid-2011, Ecuador received a new loan of \$1 billion in exchange for 96,000 barrels per day with an interest of 7.08% (El Comercio).

Not only has PetroEcuador negotiated with China, but also the Ecuadorian government has received loans from Chinese banks. In 2012, Marco Calvopiña, General Manager of Petroecuador, negotiated in China a loan of \$2 billion, which conditions Ecuador to sell oil to China until 2020. Ortiz believes that these loans

detract Petroecuador conditions making it difficult for Ecuador to negotiate with other creditors (Schneyer and Medina 6). Rafael Correa bases his decision on the benefits that this investment generates for Ecuadorian development: schools, universities, scholarships, and roads, among others, without selling national sovereignty.

The chart below shows the borrowings from Chinese banks updated to June 2015:

Chart 2:

LOANS TO ECUADOR FROM CHINESE BANKS				
Year	Lender	Borrower	Amount (USD \$b)	Purpose
2010	Export - Import Bank of China	Government	1,7	Coca Codo Sinclair Dam (CCS)
2010	Export - Import Bank of China	Government	0,6	Sopladora Dam
2011	China Development Bank	Government	2	Renewable Energy
2012	China Development Bank	Government	2	Discretionary
2013	Export - Import Bank of China	Government	0,4	Minas San Francisco Dam, highway
2013	Bank of China Deutsche Bank	Government	0,3	Naranjal Dam, Cañar
2014	Export - Import Bank of China	Government	0,5	Transmission system for the CCS Dam
2014	Bank of China	Government	0,3	Roads

Source: Gallaguer and Myers, and Grautigam and Gallaguer, cited in Ray and Chimienti. The data has been verified by the chinese embassy (15).

Schneyer and Medina in their report "China's Power Play in America's backyard" refer to a memorandum of Petroecuador in which the following reminder appears: "The Chinese loans will be linked to most of the oil income of the Republic of Ecuador for medium and long term sales" (6). Thus, this is the relationship of Ecuador with the Chinese oil companies, loans in exchange for oil, with interest rates higher than those from the IMF and World Bank, but maintaining national sovereignty.

The following sections will study the relationship of the CNPC with Ecuador in three areas: investment, extraction, and trade.

c. Oil Aspects

i. Investment

In 2007 the current Ecuadorian President began its administration. In his speech he put the American superpower away from the South and outlawed much of the external debt. This reduced the financing possibilities of Ecuador. Thus, China became the main financier of Ecuador through the China Development Bank, the Commercial Bank of China, Bank of China Exports and Imports, and corporations such as the CNPC.

The Chinese investment pattern in exchange for oil has been explained above. On the other hand, the Chinese leadership for its internal development has created an imperative model based on the search for oil and other energy forms abroad, which has been key to strengthening credit relations between China and Latin America (Arriagada et al 9). In this context, the Ecuadorian – Chinese relationship has also been strengthened; however, the Asian financing is not fully shown in the General Government Budget as external debt (Ministry of Finance). The Finance Minister, Fausto Herrera, explains that the balance corresponds to the advance oil sales but does not represent debt (EP Petroecuador).

To this date, CNPC has invested in Ecuador 2.5% of the total investment made abroad. The chart below shows the CNPC investment in the world and in Ecuador:

Chart 3:

CNPC investment by Country between 2005 - 2014	
Country	Amount (USD \$b)
Kazakhstan	\$ 14.540,00
Iraq	\$ 11.610,00
Canada	\$ 7.130,00
Niger	\$ 4.990,00
Cuba	\$ 4.500,00

Mozambique	\$ 4.210,00
Turkmenistan	\$ 3.730,00
Australia	\$ 3.480,00
United Arab Emirates	\$ 3.290,00
Peru	\$ 2.600,00
Singapore	\$ 2.180,00
Ecuador	\$ 2.030,00
Syria	\$ 1.770,00
Iran	\$ 1.760,00
Russian Federation	\$ 1.440,00
Kyrgyzstan	\$ 1.400,00
Brazil	\$ 1.280,00
Myanmar	\$ 1.240,00
Venezuela	\$ 900,00
Vietnam	\$ 690,00
Chad	\$ 670,00
Uzbekistan	\$ 620,00
Saudi Arabia	\$ 560,00
Britain	\$ 510,00
France	\$ 510,00
Tanzania	\$ 500,00
Afghanistan	\$ 400,00
Algeria	\$ 390,00
Sudan	\$ 260,00
USA	\$ 180,00
Indonesia	\$ 150,00
Madagascar	\$ 150,00
TOTAL:	\$ 79.670,00

Source: made by the author with data from "The Heritage Foundation – China Global Investment Tracker" (2014) ³

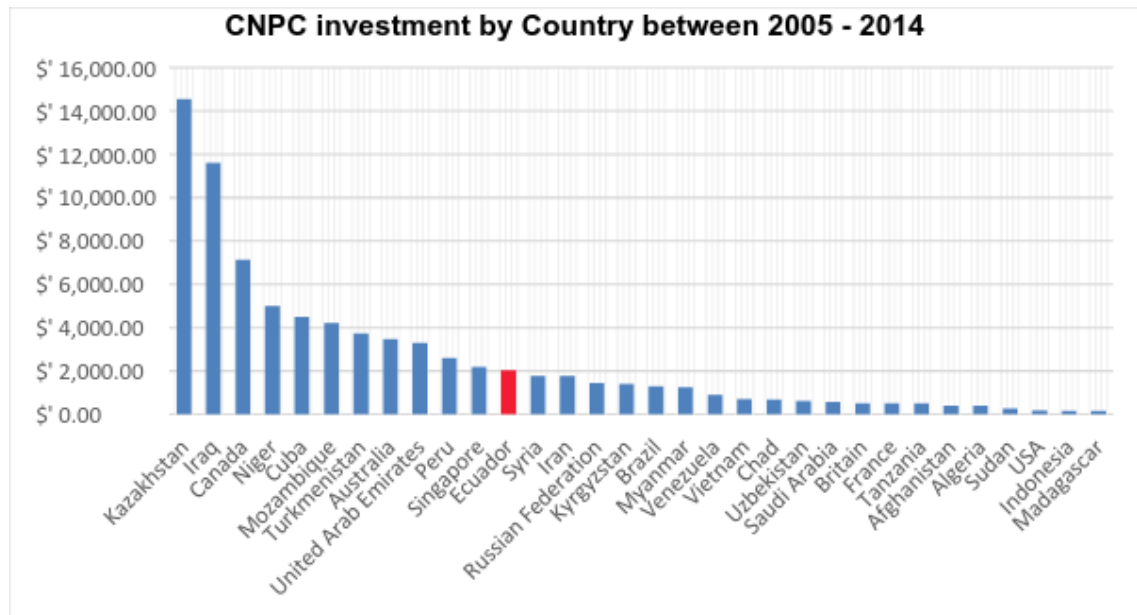
³ The investment in Brazil was in partnership with CNOOC in 2013, and the investment in Ecuador was in partnership with SINOPEC in 2005 and 2010.

During the course of the investigation, the official website of the CNPC was consulted. It does not include data on investment abroad so it was necessary to consult other sources such as the International Energy Agency, the Inter-American Dialogue, and the Heritage Foundation.

According to the data from The Heritage Foundation, between 2005 and 2014, the CNPC has invested mainly in Kazakhstan and Iraq. Ecuador is ranked 12th, two places after Peru, among more than 30 countries that have received investment of the Company worldwide.

The graph of the investment is shown below for a better analysis:

Graph 4:



Source: made by the author with data from "The Heritage Foundation – China Global Investment Tracker" (2014)

Brazil and Venezuela are the South American countries after Ecuador in the list of the CNPC investment. These data represent a "win-win" strategy between the countries of the "South" where even though China does not set rules on social spending from the investment, it does force Ecuador to "hire Chinese Companies, Chinese equipment, and Chinese labor" (Garzón 11), a condition very similar to the IMF rules, that forces borrowers to hire labor from developed countries.

About the Ecuadorian case and the investment in this country, the Undersecretary of Planning of SENPLADES, Andres Aruaz, in a personal interview co-authored by Adam Chimienti, said that Ecuador has proposed a new business model based on partnership with foreign public companies, which allows the country to "take on the classic role of financing without banks, reaching agreements with contractors of those countries", as the Ecuadorian case and its relationship with the CNPC. Aruaz considers that the country that has most readily accepted this new role of investment in Ecuador is the People's Republic of China, and emphasizes that Ecuador does not receive loans for oil, but on the contrary, financing is granted under an agreement of oil sales, therefore, the loans are not covered with oil but with money (2014).

ii. Extraction

According to an analysis by Ray and Chimienti, Chinese investment in Ecuador has been concentrated mainly in the extractive sector, having 63.4% of these been aimed at mining and oil extraction. The CNPC subsidiaries are a main part of this; Andes Petroleum and PetroOriental together handle about a quarter of the country's total oil output (20).

Blocks 14 and 17 were concessioned to Andes Petroleum (Waorani territory) in 2008. At the time of this research these blocks are in the extraction phase. The total production of block 14 will be 15.6 million barrels to 2018, from which the Government will receive 3.9 million (25% share). The total production of block 17 will be 10.04 million barrels, from which the Government's share is also 25%: 2.6 million barrels (Author's analysis according to the ECB data).

As for blocks 31 and 43 concessioned to Petroamazonas, according to Wilson Pastor, former Minister of Non-Renewable Resources and Ambassador of Ecuador in Austria, the maximum production will be of 200,000 barrels in four years, and according to Yasunidos, the ITT's proven reserves reach 846 million barrels. ⁴

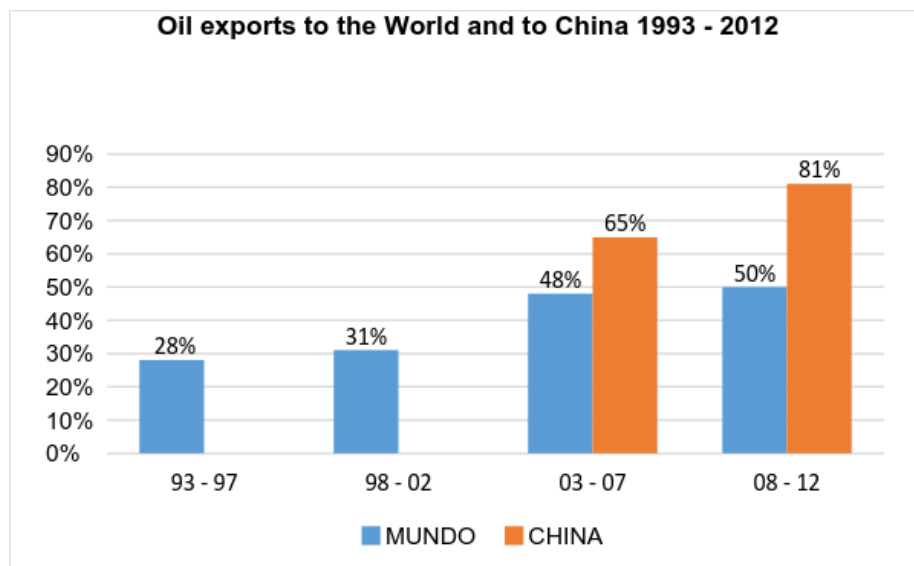
⁴ As for the blocks 79 and 81 there are no reported numbers of barrels to be extracted since these are new concessions.

iii. Trade

China has become the largest consumer of energy worldwide. In 2011 it consumed 21.3% of the world's energy, while the United States consumed 18.5%. These two powers consume about 40% of the total primary energy globally, and demand 32% of the world's oil (Arriagada et al. 3). Also, oil trade between Latin America and China has intensified in recent years. According to an ECLAC report on Latin America and the Caribbean, oil exports from Ecuador to China were virtually nothing in 2000 (see Chart 6), while in 2010 they ranked first (ONU 59).

The following chart shows the percentage of Ecuadorian oil exports to the world compared with the percentage of exports to China, between 1993 and 2012:

Graph 5:



Source: Author's analysis based on data from the UN COMTRADE showed in Ray and Chimienti.

Chinese firms operating in Ecuador in 2010 received approximately one third of Ecuador's oil exports while in 2013 received 83%, from which around 60% is managed by PetroChina (Schneyer and Medina 2).

This issue of oil sales to China through the CNPC's subsidiary has been controversial. Experts like Fernando Villavicencio and Clever Jimenez indicated that the oil sold to pay the loans, does not go to the Chinese refineries as its final destination, but to the United States. Fernando Villavicencio, in his book "Ecuador

Made in China" reveals this incongruity and indicates that the Ecuadorian oil has been sold to China with a difference of 3 less dollars per barrel than the market price which represents large economic losses (Villavicencio 59). On this, Villavicencio submitted to the State General Comptroller an important request based on a demanding research, bank transfer documents, and information compiled on the case to determine if the Ecuadorian oil has been brokered.

The General Comptroller has shown that the oil is effectively intermediated, which reduces the Ecuadorian opportunity to sell its oil in other international markets (Villavicencio); however, to this the Government responds that the advance oil sales have been important for the development projects that the Country is in need of.

According to Villavicencio and an analysis by Reuters, PetroChina teamed up with private intermediaries as Taurus Petroleum, the oil company that loads PetroChina's oil in Balao-Esmeraldas. This oil does not go to Chinese refineries, but to the US market where every barrel is sold for two or three more dollars, approximately \$1.5 million per month. Taurus deposits this money in the Naparina Corp Chain account, a Company owned by Mr. Enrique Marin, who has been subject of a judgment followed by the ECB corruption (Immediate Ecuador).

This intermediation situation currently is legal; however, in 2009 this would have represented a violation against the "Business Management Rules of Petroecuador," which state that:

The Deputy Manager of International Marketing, will verify that the destination of oil covered by the contract are the refineries or their facilities listed in the offers, which will be shown through the bill of lading for each shipment, and reported thereon to the Management Marketing office (96).

After 2009, the terms of trading for the advance oil sales changed. The unique and exclusive destination of Ecuadorian oil as payment of the borrowings from China are not only the Asian refineries, but PetroChina is allowed to resell the oil in any market (Schneyer and Medina 6).

After doing this analysis on oil issues that link the CNPC with Ecuador and the Waorani and Zápara territories, the following section presents a brief study about the importance of this situation in the Ecuadorian economy in the short and medium term.

d. Importance for the Ecuadorian Economy in the Short and Medium Term

The Armed Forces Government, headed by General Rodríguez Lara since 1972, carried out a major economic boom of the Ecuadorian history: the oil boom. During the oil boom Ecuador experienced economic improvements. However, there was no change on the productive matrix, but the sell of commodities has remained until today, being oil the main product of Ecuadorian exports (Mora 107). To 2014, the exploitable oil reserves have reduced from 8084 million barrels to 2680 million barrels. According to studies, if this trend continues oil reserves will be depleted in 11 years, including the ITT reserves (Fundación Mil Hojas 1).

In recent years Ecuador has enjoyed high oil prices, between 70 and 100 dollars, reaching peaks of \$140. However, since 2014 to today, a sudden fall in the oil price at the international level has been recorded (June 2015), changing the Ecuadorian economy. If we add to this the Ecuadorian situation about the management of a foreign currency (the American dollar) which has been appreciated in the last years, making exports more expensive and imports cheaper, Ecuador faces a worrying formula for the economy (Fundación Mil Hojas 1).

Alberto Acosta and John Cajas conducted a study about the situation the Country faces due to this oil crisis, comparing the ratio of the number of oil barrels needed to import one barrel of derivatives.

Chart 4:

Number of Oil Barrels vs. One Barrel of Derivatives		
Year	Oil Barrels	Derivatives Barrels
2009	2,16	1
2010 (third quarter)	1,75	1
2010 (fourth quarter)	0,9	1
2011 (first quarter)	0,63	1
2011 (second quarter)	0,59	1
2012	0,59 ; > 0,59	1
2013 (first quarter)	1,05	1
2013 (fourth quarter)	1,3	1
2014 (fourthquarter)	2,1	1

Source: Author analysis with data from Acosta and Cajas.

In 2009 the ratio was 2.16 barrels of oil for one of derivatives. In the third quarter of 2010 the ratio increased to 1.75 -1. The relationship of this period is logical since the price of derivatives is usually higher than the unit (1 barrel of crude). In the fourth quarter of 2010, the relationship took a different course: 0.9 barrels of oil for one barrel of derivatives. In the first quarter of 2011 the ratio dropped to 0.63 barrels of oil, and in the second quarter it reached 0.59 barrels of oil. This atypical situation continued during 2012, increasing the amount of barrels of oil a little but always below the unit. In the first quarter of 2013, the ratio varies: 1.05 barrels of oil for one barrel of derivatives. In the fourth quarter of 2013 the ratio reached 1.3 barrels of oil, and in the fourth quarter of 2014 the oil price collapse began, changing the ratio to 2.1 barrels of oil imported by one barrel of derivatives.⁵

Between 2010 and 2014 oil prices were around \$100, according to the ECB; however, in June 2015 the price went down to \$59.92. This has a serious impact on the Gross Domestic Product (GDP) of Ecuador and on its social investment, particularly in health and education, areas that are funded primarily with oil revenues (Acosta and Cajas). Not only the oil prices have dropped but also the production costs have risen between 2012 and 2014, from \$9 to \$27 per barrel, according to Oswaldo Madrid, Petroamazonas Manager (Fundación Mil Hojas 2).

⁵ This atypical situation may have occurred, according to Acosta, Cajas, and expert economic analysts, due to speculative effects about what would happen with the oil supply at a time of conflict in important points for the oil market: Egypt, Libya, and Syria.

Acosta considers that this must have been expected after analyzing the irregular behaviour of the oil prices. Ecuador should have taken actions, such as generating reserves with the excess money of oil during the boom years for the “lean times”.

Recalling the words of economist Rafael Correa in 2009 about "treason" for giving Ecuadorian oil to private companies that do not contributed to the Ecuadorian economy (Ecuador Inmediato), six years later I wonder whether or not what happens now with the Ecuadorian oil reserves concessioned to transnationals represent treason, too. The Yasuni ITT protected area, if Ecuador continues with this serious trend, could really be saved?

Ecuador started the oil business with China in 2009, committing Ecuadorian production, granting to Chinese companies the Zápara and Waorani territory to pay the debt with China. Being these loans made in exchange for oil, the country must face the crisis by providing more barrels, which, coupled with the intermediation of oil sales, reduces Ecuadorian competitiveness to be in other foreign markets and to receive surpluses that can be allocated to social investment.

The next chapter will show the relationship between the CNPC and the main actors in this research: government, communities, and the environment, followed by the risks and consequences of the CNPC actions in the Zápara and Waorani territory.

CHAPTER 3: RELATIONSHIP OF THE CNPC WITH THE MAIN ACTORS

a. Relationship with the Government

“Physical or cultural extermination of peoples in voluntary isolation can never be accepted as a mean to obtain the needed resources for the development processes to benefit other Ecuadorians.”

The final chapter of this research is introduced echoing the words of the current President of the Republic of Ecuador about its initial policy, which generated a significant support from indigenous peoples, activists, environmentalists, and people in general, thanks to a revolutionary speech that promoted the rights of nature and of indigenous peoples, and the *“Good Living”*.

The relationship that the Ecuadorian government has with the China National Petroleum Corporation has been shown in previous sections: advance sale of oil in exchange for financing, new grants of oil blocks, open borders for Chinese workers and technology, extraction of oil that is under mega diverse territories, and authorization to trade Ecuadorian oil in China's interest markets, among others.

Also, the Yasuni ITT initiative should be recalled. While Ecuador was being praised internationally due to its initiative, the Chinese sought closer relations with mega diverse Latin American countries, including Ecuador. In 2013 the initiative ended, while a year earlier, Cai Runguo, former Chinese ambassador to Ecuador, said that the Ecuadorian – Chinese relationship was going through a "period of honeymoon" (El Universo), to which, Rafael Correa answered: "China, with a drop of its reserves can finance the development of Ecuador, and with a few more drops the development of Latin America," and indicated that "they have funding, we have profitable projects, we have hydrocarbons which is the Achilles heel of China, they lack of energy" (Embajada del Ecuador en la República Popular China).

On August 15, 2013, the Executive Order No. 74 for oil extraction in blocks 31 and 43 is issued. This decision was meant to "eradicate poverty, to have an equitable and supportive redistribution of wealth, and especially to fight against poverty of communities, indigenous peoples, and nationalities in the Ecuadorian Amazon" (Vera). The effects of this decree may have been seen in the 2014 elections when

Cuenca, Guayaquil, Quito and Manta elected representatives that are not from the current President's party. Several experts have linked this situation to the decision to exploit the Yasuni ITT blocks (Ray and Chimienti, 35).

From the interviews conducted by the author and Chimienti during the field visits, Conan, member of the Waorani community, said:

We want the government to let us live in peace. Look at the kids, I want them to reach my age. In Curaray, now there is nothing to see. When I was a kid there were trees, parrots...

This section on the relationship that the China National Petroleum Corporation has had with the Ecuadorian government finishes mentioning the recognition in the encyclical of our Holy Father Francisco about caring for our planet, for our "common home":

The myopia of power politics delays the inclusion of a far-sighted environmental agenda within the overall agenda of governments. Thus we forget that (...) we are always more effective when we generate processes rather than holding on to positions of power. True statecraft is manifest when, in difficult times, we uphold high principles and think of the long-term common good. Political powers do not find it easy to assume this duty in the work of nation-building (Papal Encyclical, 2015).

b. Relationship with the Communities

"We must regain the conviction that we need one another, that we have a shared responsibility for others and the world, and that being good and decent are worth it."

From the words of the Holy Father it should be understood the urgent need the world has to care for one another, to work in line with the realities of a territory through which thousands of humans, environmental lives, and plants, pass. Beside the words of the Pope, Cabodevilla and Aguirre express that:

The Ecuadorian State, over the years, for incompetence, inaction, or perhaps in purpose, has created there an explosive area, full of landmines that will surely take lives, but above all, exploits the hidden groups. That is to say, we have confined the indigenous peoples to the backyard of their former large property and there they are being annihilated under the impassive gaze of who stripped them from almost everything. Ecuador lives from their oil, as the President of this Nation always says, but in decades it has not found an effective way to even save their lives (42).

To preserve material interests, generally causes confrontation from those who do not share the primary thoughts of material accumulation, and this even leads to forms of cruelty that prevent Ecuador from developing a culture of social and environmental protection. According to Paul Cisneros, researcher on mining issues for the Institute of National Studies of Ecuador, China has not developed such a culture, but instead, "Chinese corporations have worse social and environmental policies than other mining and oil companies" (Natural Resource Governance Institute).



Photo by the author

i. Waorani

The Waorani are an Amazonian tribe whose form of organization is based on principles of reciprocity and redistribution. They prefer the welfare of their parents, children, siblings, grandparents, neighbors, who live from nature and are reciprocal to it. For them, the relationship between people and land as one is the vital foundation of their existence, in addition to practicing spiritual, ethical, and care for nature values, and living to constantly defend their territory.

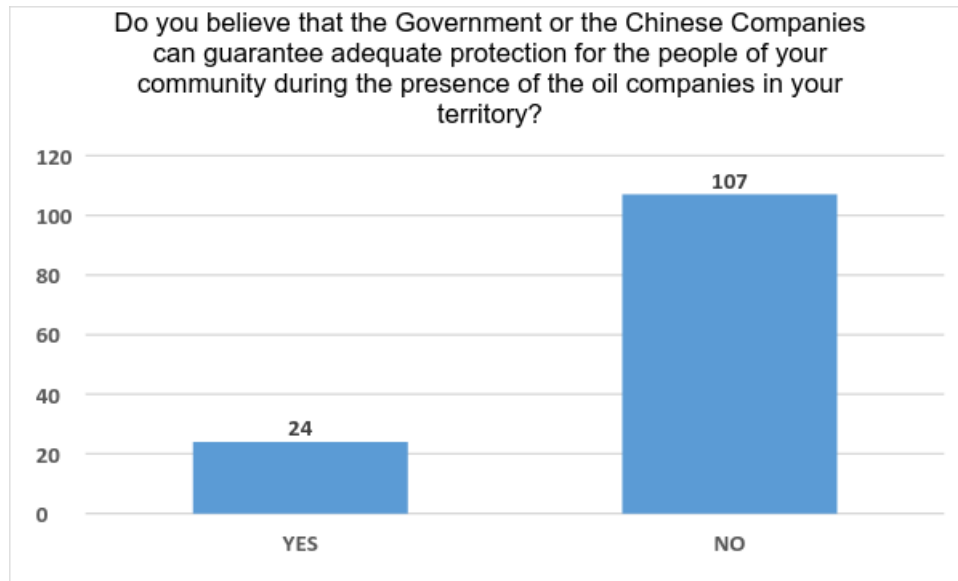
Having introduced the Waorani care for their home, this section studies the relationship between the CNPC and these natives. In the Waorani and uncontacted peoples lands (blocks 31 and 43), there are constant fights that occur due mainly to territory boundaries. This reality can be fueled by the oil industry, since it will affect their habitat originating the seeking of new territories thus, increasing confrontations. Also, in August 2009, in block 17, three settlers were wounded with spears as they walked on a new road being built for petroleum activities (Kimerling).

The expansion of the oil frontier leads to pollution, loss of food, the disappearance of animals that flee from the noise that the oil machinery generates, and the destruction of agricultural sites. This set of situations reduces the habitat of indigenous nationalities and forces them to move to different territories, where clashes with new tribes are generated and end in violence. This is a consequence of the Ecuadorian development model, which gains strength by concessioning new territories to national and international companies.

Blocks 14 and 17, home to indigenous Wao, are being operated by a subsidiary of the CNPC, PetroOriental, while blocks 31 and 43 are operated to make the production of the new refinery effective (CONAIE).

On the CNPC – communities relationship, the survey indicated before conducted in blocks 14 and 17 found that 81.67% of the people do not believe that Chinese companies can provide them adequate protection during the presence of the oil companies (see graph below).

Graph 6:



In addition, during the field research, comments from the natives about their territory were collected, showing the relationship they have with the oil companies:

"I could kill to defend my territory, as the elderly killed before."

"In the era of the conquerors this happened... My grandparents killed to defend their territory."

"There must be a change in history."

"The territory has life. We have eyes, mouth, breathing, feelings. When you cut down a tree, an eye of our territory is injured. When we hear the strong voice of a river, it shows that the earth feels. "

Being this said, the looming troubled relationship between the Waorani seated in blocks 14, 17, 31, 43, and the oil Company is evident. The indigenous will defend their home and families, if the government does not strengthen the environmental and social standards under which the CNPC, its subsidiaries, and the Ecuadorian oil companies must operate.

ii. Zápara

Blocks 79 and 83 concessioned to Andes Petroleum are inhabited by Zápara indigenous. As it's been introduced above, this territory is classified by UNESCO as Intangible Cultural Heritage thanks to their language and culture. They have expressed their disagreement about oil concessions through public letters about the violation of their rights. The Zápara considers that the mere presence of oil in its territory causes social division and kills nature.

In a letter to the President written in 2012, they assured him that they will not hesitate to apply justice for the damage caused in their territory by the oil companies, they will do this in their ancestral and traditional ways, and that the state will not be involved in their decisions. Also, they remind Ecuador about their territory's biodiversity and their people's vast oral culture, which could be extinguished through extraction (Ashiñwaka).

The Zápara, in the same letter, have placed themselves in a permanent alert status, reminding us that:

We have the knowledge of Naku - the forest - which is the abode of the spirits and of our ancestors who taught us to live in harmony respecting nature. We have developed another way of life. A life without oil.

In August 2012, a new open letter was made by this people on the Round XI. This denies the entry of oil companies and demands respect to the Zápara culture and to their decision to say "NO to the oil industry". They consider that the processes about oil issues are not transparent and do not respect their culture and traditions (Oil Watch). Klever Ruiz and Gloria Ushigua, leaders of this community have also submitted their complaint in the United Nations where they have expressed the danger to which their territory is exposed, while ratifying once again its position against oil exploitation (Hill).

It is a concern that the latest concessions made to the CNPC's subsidiaries have voided the Zápara's statement, which could lead to the defense of their territory through traditional ancestral violent means.

c. Relationship with the Environment

"We are conducting a gigantic experiment with life on the planet as if there was another planet to move to."

--Joan Martinez Alier

The historical impact that oil companies have had on the environment has shown consequences in several countries, especially in those rich in natural resources. Pan Gongsheng, Vice-Governor of the Central Bank of China, has commented on the serious environmental impacts that China has caused in its quest for development, diminishing natural resources and affecting ecosystems, creating a destroyed environment in which "a beautiful life" is not possible (IISCAL 9).

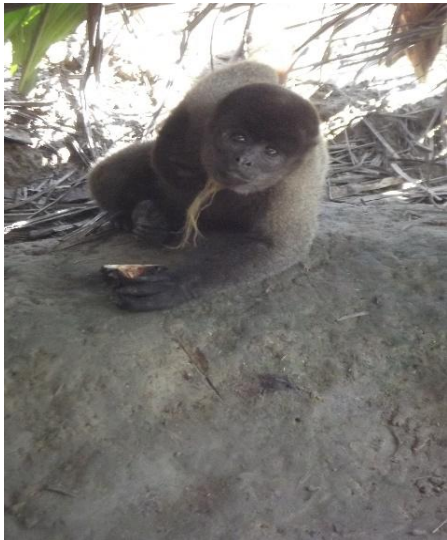
To prevent such negative effects, the Chinese government has set important guidelines. Paulina Garzón, in her Legal Handbook on Chinese Environmental and Social Regulations summarizes international treaties recognized by the Chinese state in terms of environmental issues, among which, for this section the following have been highlighted: "International Convention for the Protection of New Plant Varieties", "Convention on the Protection of Migratory Species and Wildlife", "Convention on Trade of Endangered Wild Flora and Fauna Species", "Convention for the Protection of Birds", and "Rio Declaration on Environment and Development", among others (19).

This involves the issue about the China National Petroleum Corporation and its role in the environmental impact of the territory in which it operates. The CNPC's performance in terms of environmental issues has not been transparent in spite of the multiple agreements to which the country has subscribed. The lack of information has made it impossible to quantify the actual environmental performance of the Corporation; however, several reports suggest that it and its subsidiaries have caused several environmental disasters (Matisoff 30).

For several experts, such as Santiago Espinosa from the Pontifical Catholic University of Ecuador, and conservationist Kelly Swing from Boston University and from the San Francisco University in Quito, the situation the CNPC lives in Ecuador is far away from improving, due to lack of institutional capacity to control extractive activities and the management of ecosystems (Ray and Chimienti 24). Federico Auquilla, former vice minister of mines and current advisor of Chinese enterprises

in Ecuador, in a personal interview corroborated this situation mentioning that "the Ministry of Environment still has much to improve; currently, it cannot face this situation, it still has to be trained". However, he believes the training will be effective and the role of extractive companies in the environment will improve.

Within the "Man and the Biosphere Program" of UNESCO, the Yasuni National Park is part of the World Biosphere Reserve as "the most biodiverse place in the Western Hemisphere" (Vallejo et al., 12). A single hectare of Yasuní contains about 644 different species of trees, over 300 species of plants and various animals and birds (Yasunidos).



Photos by the author

Oil companies, in this particular case the CNPC, cause effects on soil, air, and fauna and flora, that are impossible to control entirely. Marine species migrate, land animals leave, the shelter and food for wildlife (shrubs and bushes) are infected, birds are poisoned, other species die from suffocation, water is contaminated leading to diseases, allergies, cancers, food sources are destroyed, the ecosystem is affected.

Despite modern technology used by these companies, the former Shift Head of the Esmeraldas Refinery has expressed that:

There is nothing people can do to control nature. In Esmeraldas they built a huge pool, but that was not enough. It did not prevent the huge oil flow that was coming over in the winter which broke the pool. It was fatal

Moreover, De Marchi, in his analysis of block 31 indicates that according to the measures taken by his team, the road is 20 km long and 10 km wide, which means it is a road of 200km², which represents 10% of that block. On the other hand, the government estimates that the operation will affect only one of every thousand in the park since the technology to be used is the most modern.

This situation in words of Terapeña, Waorani from Bameno, is summarized in the following phrase: "The government does not realize that our food and water are there, without them we will be dying."

d. Risks and Consequences of the CNPC's role in Waorani and Zápara Territory

The risks and consequences of the China National Petroleum Corporation in Waorani and Zápara territory have been consistently described through this work; however, it is important to have a section to summarize what has been identified in the previous sections. Oil risks have always been latent, especially in mega diverse territories, and even more seriously in areas that have not been discussed above, the so-called "greenfield" as the blocks 31, 43, 79, 83, where the operations will start under the influence of CNPC.

The main risks for these communities, and the consequences that the oil industry will trigger has different spots: environmental, social, and economic; the social and environmental areas have been studied in more detail.

As for cultural diversity, to maintain this is very hard because of oil settlers that come in their territory and change their lifestyles, customs, traditions, and beliefs, which could lead to the extinction of these people's cultural life, who are the sole owners of unimaginable medicinal, natural, and spiritual knowledge.

About social relations, it has been described that these people are willing to fight as their "grandparents" did to save their territory. They would not care to kill, injure, cause riots, to prevent the loss of their territory. But, the social risk is not reflected only in death or strikes, but also in terrible deadly diseases, cancers, allergies, vomiting, nausea; diseases that do not affect only the indigenous groups settled directly at the point of extraction, but also the citizens outside the indigenous territory. Also, the positive and negative effects on the environment affect the entire planet, not just a neighboring area, according to Carlos Sandoval, an economic analyst, who cited the Peru's conference of preparation for the REDD + initiative in Ecuador in July 2014.

Even when trying to minimize the negative environmental impacts, the oil industry is very dangerous. As the former head of the Refinery said, nobody can deal against nature. PetroEcuador, for example, tries to avoid accidents; however, there have been cases of employees and residents of nearby communities that have become blind or have acquired diseases such as cancers and vomit. The Wao and Zápara know the power of their mother earth better than the westerns, so they fear the accidents that are very likely to happen during extraction.

These described effects, as well as being the result of several months of research, are also the result of study of other oil areas that have documented the consequences of oil. Environmental damage represents a definite risk: pollution, deforestation, poisoning, loss of animals, habitat alteration.

Having done this research and having determined the risks and consequences that the CNPC generates in Ecuador, it finishes with a section of conclusions and recommendations to reduce the oil risks.

CONCLUSIONS AND RECOMMENDATIONS

Having written this graduation work on the Consequences of the role of the China National Petroleum Corporation (CNPC) in the social and environmental development of the Waorani and Zápara Territories of Ecuador, I can conclude that Ecuador has been internationally recognized for its new development model described in the 2008 Constitution, which recognizes the rights for indigenous communities, tribes, the environment, and nature.

I consider that the concessions to foreign companies in general and the CNPC particularly, are necessary because the country does not have the resources, or technology to undertake oil exploration autonomously. Such concessions must be made on fair terms, taking into account the views and idiosyncrasies of the indigenous population living in the areas involved, ensuring the least amount of environmental effects and equitable sharing of benefits.

In Ecuador, the new concessions were granted without consulting the Waorani and Zápara located in blocks 14, 17, 31, 43, 79, 83. This continues with the historic Ecuadorian extractive model, even extending the oil frontier. On this, the China National Petroleum Corporation is involved directly due to the Ecuadorian - Chinese financing relationship in exchange for oil, which makes the CNPC part of the natural, environmental, and social damages.

The history of the CNPC on pollution and social problems has been replicated in African, Asian, and Latin American countries, so I can conclude that failure to take the necessary steps in Ecuador will reproduce these negative patterns in our country, rich in oil but socially and environmentally vulnerable. On the other hand, the relationship of the CNPC with Ecuadorian state oil companies has intensified the Ecuadorian extractive model. It will be necessary to extract more oil from the new blocks to compensate the lowering of prices, and to generate more barrels for the operations of the Pacific Refinery once it is constructed.

On this the Ecuadorian government has had a major role for letting extractive activities go on in territories whose population does not know the concept of material accumulation, but of values, cooperation, nobility, respect and care for nature and for the environment.

On the other hand, the lack of information from the CNPC does not allow Ecuador to develop a policy framework and other conditions for its operations. The availability of good information is vital for the society to carry out an effective control.

On these I recommend:

- To make way for actions of social and environmental sustainability carried out by the actors involved in this situation. National development, education, healthcare, housing, and welfare, are prevalent rights. However, they should be achieved with environmental and social awareness.
- Since the government's decision to exploit blocks 14, 17, 79, 83, 31, and 43, has already been taken, to finance the country's development; and knowing that there is no technology in the world that could prevent the intrinsic damage from exploitation, society must make sure the government fulfills its promise to use the most modern technology to minimize environmental effects, not to affect more than one of every thousand in the Yasuni ITT National Park, and other special deals such constructing only ecological trails and not larger roads, to bury pipelines, and not to make access roads to prevent colonization.
- Training of professional technicians and scientists on the subject, committed to the country to verify compliance with environmental standards.
- To require from the government and from the CNPC to let technicians verify compliance with the aforementioned rules.
- To consider the lives and values of the Waorani and Zápara peoples, and the uncontacted tribes living in the studied territory, in order not to affect them.
- To support the government's intentions to change the productive matrix to reduce dependence on natural resources and to develop manufacturing, services, and technological development, to reduce oil dependency.

- As collateral measures it is recommended to study the feasibility of adopting the options that have already been proposed by analysts to generate income that does not come from oil:
 - To develop ecotourism.
 - To increase taxes on groups that have been the biggest beneficiaries of the country's economic growth.
 - To nationalize cellular technology
 - To universalize awareness about the value of nature and a healthy environment.
 - To raise awareness about the territory – people's relationship to it and the benefits.

Finally, I wish to exhort all Ecuadorians that this, far from being a financial issue is an ethical and moral issue in which we are all involved. This is a theme of environmental and social awareness. It is imperative that the extractivism time comes to an end to be replaced by an era of new alternatives, debates, dialogues, with awareness about environmental care.

“Might there be a way, Don Quixote said, to avoid this slaughter? If the value of these cypresses incites you, I'll pay you for them. Then they may remain standing.

- That would go part and parcel with selling the land, which isn't what I have in mind, the owner said. Rather I am clearing it. Not so much to take advantage of these trees, which aren't worth a great deal, as to give the land itself over to farming.

- Cut, they are worth nothing, the knight replied. Alive and beautiful as they are, they are worth more than the pyramids of Egypt. And thus I entreat and strongly urge you to consider whether it's not better for you to change your resolution and make a gift to Mother Nature, who takes pleasure in her children's shade.”

--Don Quixote de la Mancha

ANNEXES

1. Question taken for this research from the surveys carried out in the Yasunni ITT:

- Do you think that the Ecuadorian government has the right to negotiate with oil companies over Waorani territory?
 - o Totally Agree
 - o Agree
 - o Disagree
 - o Totally Disagree

2. Questions taken for this research from the surveys carried out in blocks 14 and 17:

- Do you think the government has the right to negotiate with Chinese companies to exploit oil from your community?
 Yes No

- Have officials from the oil companies visited your community in recent years?
 Yes No

- Do you believe that the government or the Chinese companies can guarantee adequate protection for the people of your community during the presence of the oil companies in your territory?
 Yes No

3. Formulas developed to determine the samples for the surveys

The results below indicate that the sample of blocks 14 and 17 with 131 respondents is 95% reliable, and the sample of the communities in the Yasuni ITT, with 39 respondents, is 86% reliable.

Blocks 14 y 17		Yasuní ITT	
N	192	N	193
Z _a	1,96	Z _a	1,96
p	50%	p	50%
d	5%	d	5%
q	1 - p	q	1 - p
$n = \frac{N \cdot Z_a^2 \cdot p \cdot q}{d^2 \cdot (N-1) + Z_a^2 \cdot p \cdot q}$		$n = \frac{N \cdot Z_a^2 \cdot p \cdot q}{d^2 \cdot (N-1) + Z_a^2 \cdot p \cdot q}$	
$n = \frac{184,40}{1,44}$		$n = \frac{185,36}{1,44}$	
n = 128		n = 129	
Sample/Total Population 66,8%		Sample/Total Population 66,7%	

YASUNÍ ITT OFICIAL	
N	193
Z _a	1,96
p	50%
d	14%
q	1 - p
$n = \frac{N \cdot Z_a^2 \cdot p \cdot q}{d^2 \cdot (N-1) + Z_a^2 \cdot p \cdot q}$	
$n = \frac{185,36}{4,72}$	
n = 39	
Sample/Total Population 20,3%	

4. Photos from the Field Visit





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