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Environmental and Social Impacts of Chinese Resource Extraction Activities

Supervisor

Ch. Prof. Daniele Brombal

Assistant supervisor

Marco Zappa

Graduand

Sofia Bernardi

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847936

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前言

21 世纪初以来，中拉关系经历了一次非同寻常的强化。这两个合作伙伴之间的贸易、投资和贷款额激增了，主要集中在采矿、碳氢化合物、农业和基础设施部门。事实上，中国对原材料的需求不断增长，以满足其发展中的工业需求，拉丁美洲是一个独特的合作伙伴，因为它拥有大量的能源、原材料和食品储备。

本文章的重点在确定拉丁美洲和加勒比地区各种自然资源开采（特别是采矿、农业工业、化石燃料开采）做法对环境和社会的影响，重点是中国在该地区的活动。这项工作被分为两个重要且广泛讨论的概念：可持续性和环境正义。这项工作有一些重要问题，特别是在第三章和第四章中。在这两个部分我们会分析自然资源开采活动在多大程度上是社会和环境可持续的，以及为什么在某些领域出现环境不公正现象。

批评人士指出，尽管这些活动在减贫和经济收益方面取得了重要成果，但却造成了广泛的生态破坏，也忽视了社会和政治权利。从一开始，自然资源采矿活动就成为当地社区、公司和政府之间冲突的根源。矿物和碳氢化合物的提取对环境和卫生有直接影响，如降解、河流中有毒重金属的释放和土壤污染、灰尘引起的呼吸系统疾病以及酸雨造成的植被破坏。这项活动还涉及到支持基础设施的建设，这是森林砍伐的最重要原因：公路、运河和铁路，以将这些产品运往港口。这些活动引起的领土转型过程导致了新的领土边界和圈地的划定、飞地经济的出现、专有使用权的征收、自然使用的非民主化。

拉丁美洲和加勒比是地球上生物多样性最丰富的地区，占世界生物多样性的百分之五十以上。拉丁美洲和加勒比包括六个世界上最巨大多样性的国家：墨西哥、委内瑞拉、哥伦比亚、厄瓜多尔、秘鲁和巴西。这些国家位于南美洲，并且那里位于亚马孙盆地和亚马孙热带雨林。大部分的盆地被亚马孙热带雨林覆盖。亚马孙热带雨林是地球上最大的雨林，它的面积为 550 万平方公里，也包括 8 个国家。拉丁美洲和加勒比地区是一个自然资源丰富的地区，各国高度依赖自然资源来提供其经济基础。自然资源的丰富性也与原材料开采密切相关，不可分割。在拉丁美洲和加勒比的历史上，采矿活动始于 15 世纪的殖民时期，当时该地区成为欧洲国家最重要的原材料供应商之

一。

在过去的三十年中，因为全球对农产品和矿产品的需求不断增长、一些新兴国

家的经济增长了、消费品的需求也不断增长了，所以全球对原材料的需求也不断增加。传统上，拉丁美洲和加勒比地区的右派政府促进了外国矿业投资，但如今，无论是什么类型的政府、左派、“革命的”、左倾的还是新自由主义的，都允许外商直接投资。因此，该地区在这一领域出现了大幅增长。大多数外国公司都来自北美，特别是加拿大、欧洲和中国。这些活动涉及到许多国家和不同的资源：智利、秘鲁、玻利维亚和阿根廷主要开采金属和矿产，如铜；玻利维亚的天然气；委内瑞拉、厄瓜多尔、哥伦比亚、巴西和墨西哥的石油开采；巴西和秘鲁的铁矿石。另外一个外商直接投资的行业是农业，特别是大豆的贸易和作物在巴西、玻利维亚、阿根廷、乌拉圭和巴拉圭的。另两个行业是牛肉和伐木来自巴西、阿根廷和玻利维亚。伐木也是拉丁美洲和加勒比地区开发大型木材资源的主要产业，尤其是在全球市场上具有较高价值的木材资源。

拉丁美洲最近的商品繁荣主要是由与中国的贸易和投资推动的。中国的工业和城市发展加剧了对原材料的需求。中国对拉丁美洲和加勒比地区的投资主要集中在石油、矿产开采和农业部门。但这些经济成分与环境退化和社会冲突有着密切联系。在此期间，中国的需求提高了，主要商品的一般价格水平方面发挥了作用，显著提高了整个美洲的贸易条件。从 2003 年到 2013 年，拉丁美洲经历了“中国繁荣”。在此期间，中国在拉丁美洲和加勒比地区出口中的份额从 4% 增长到 15%，而农业出口从 7% 增长到 15%。中国还为拉丁美洲政府提供了大量的基础设施、采矿和能源项目融资。根据中拉金融数据库自 2003 年以来，中国向拉丁美洲政府提供了大约 1190 亿美元的贷款和信贷额度。该地区的贷款通常由商品担保，这意味着贷款的价值与特定商品的价格直接相关，而每一笔石油贷款都由向中国石油和天然气公司转让原油所得收入担保。从 2009 年到 2013 年，中国向拉丁美洲和加勒比国家，尤其是厄瓜多尔、委内瑞拉和巴西，提供了超过 590 亿美元的贷款换油。

因为中国在拉丁美洲和加勒比地的外商直接投资和贸易在第一产业集中，所以它们比其他国家在拉丁美洲和加勒比地区的活动具有独特的社会和环境影响。它们的合作结果对环境更为敏感，因为它们的碳密集度更高、水密集度更高、通常位于土著居民居住的高度生物多样性地区。最后，它们也支持的就业机会比其他部门少。

全本分四章。第一章，给读者介绍论文中采用的主要概念：可持续性和环境正义。这两个概念在文章中特别重要，因为它们两是全本的观点。

第二章，关于中拉经济关系，探讨在该地区的中国繁荣，以及中国与拉美地区扩大贸易和投资关系背后的驱动力，重点关注能源和矿业等特定领域。

第三章，详加阐述了公司在拉丁美洲和加勒比的敏感地区启动开采项目。本章，重点介绍中国繁荣时以来的中国在拉丁美洲和加勒比的开采活动。第二个部分确定保护环境和社会免受采掘业影响的法律法规。将重视中国投资者和土著社区的主题及其参与决策过程。

第四章，也就是说最后一章节，描述的是六个研究案例。这一些研究案例分别是在采矿和石油开采中。这两个案例研究都是由中国领导的在厄瓜多尔的项目。厄瓜多尔案件的关联性是双重的。一方面，该国长期以来一直受到开发自然资源的负面影响。德士古公司在该国的业务提供了一个广为人知、备受争议的例子。尽管有现有的环境法，德士古公司还是做出了深思熟虑、削减成本的经营决策。28年来，这导致了一场环境灾难。有研究称，德士古公司倾倒了有毒的钻井副产品，并将六十八万桶原油泄漏到水道中；三万人受到该石油公司业务的影响。此外，厄瓜多尔集中体现了中国对四个不同物种群体和传统土著领土上生物多样性极高地区的主要投资的影响。其大部分石油储量位于亚马逊热带雨林，因此这是该地区可持续石油生产的一个障碍。

关于采矿的研究案例，最具象征意义的是“Mirador”项目。该项目由位于“Zamora 和 Chinchipe”厄瓜多尔的省。Ecuacorriente S.A.公司在康多尔山脉

上操作。自从该项目几年前开始实施以来，森林砍伐的进展已经非常显著。厄瓜多尔政府在该公司登记了行动计划中所写的 31 项违约行为后，于今年暂停了这项活动。

本章也，也将介绍五项研究案例关于石油勘探和原油开采。所有的研究案例在厄瓜多尔亚马逊雨林。两项研究案例位于亚苏尼国家公园（Yasuni National Park），地球上最具生物多样性的地区。这种石油开采被称为“生态灭绝”。中国石油天然气集团公司（CNPC）和中国石化集团公司（Sinopec）拥有的 PetroOriental 控制着 14 号和 17 号区块，而中化集团控制着 16 号和 67 号区块。它们的开采在境内的一个保护区重叠，从而造成了与社区和土著人民的冲突。

这篇文章采用了以下几种来源：第一章为了研究于可持续性和环境正义的概念，我们分析了不同的文章和文献。在第二章中，我们参考的来源主要包括两本书：

- Kevin P. Gallagher (凯文·加拉赫) 写的 “The China Triangle: Latin America’s China Boom and the Fate of the Washington Consensus”
- Eduardo Galeano (爱德华多·加莱亚诺) 写的 “Open Veins of Latin America: Five Centuries of the Pillage of a Continent”。这两本书是第二张发展的基础。

数据是从各方面搜集来的，比如 China-Latin America Financial Database (中·拉金融数据库)。报纸等数据库也发挥了重要作用。其他主要的信息来源是非政府组织，如 Accion Ecologica、Amazon Watch 和 Mongabay，尤其是为了写最后两章。

Introduction

Sino-Latin American relation experienced an extraordinary intensification since the beginning of the 21st Century. The amount of trade, investment, and lending between the two partners has had a surge, and has been mainly concentrated in the mining, hydrocarbon, agriculture, and infrastructure sectors. Indeed, China's growing demand for raw materials to feed its developing industry, found in Latin America a uniquely suited partner, due to its vast deposit of energy, raw materials and food.

The focus of this work will be that of identifying the environmental and social impacts of the various practices of natural resources extraction in Latin America and the Caribbean, with a focus on Chinese activities in the territory. The work has been framed into two important and widely discussed concepts – sustainability and environmental justice. It will be central then in this work, especially in the third and fourth chapter, to analyze to what extent these activities are environmentally and socially sustainable, and why environmental injustices arise in certain areas.

Critics have pointed that these activities, despite achieving important outcomes in terms of poverty reduction and economic gains, resulted in wide ranging ecological destruction, with disregard for social and political rights. Since its beginning, extractive activities have been a source of conflicts between local communities, companies and governments. The extraction of minerals and hydrocarbons have direct environmental and sanitary impacts, such as degradation, the release of toxic high metal in rivers and soil pollution, respiratory diseases caused by dust and vegetation destruction caused by acid rains. The activity also involves the construction of supporting infrastructures, which is the most important cause of deforestation: roads, canals and railroads to get those products to ports. The territorial transformation processes caused by the activities resulted in the drawing of new territorial boundaries and enclosures, the emergence of enclave economies, the imposition of exclusive use rights, and the de-democratization of the use of nature¹.

Latin America and the Caribbean (LAC) is the region with the greatest biodiversity on the planet, containing over 50% of the world's.² LAC counts with six of the world's most megadiverse countries: Mexico, Venezuela, Colombia, Ecuador, Peru and Brazil. These countries are located in South America, and are home to the Amazon Basin, drained by the Amazon River and its tributaries. Most

¹ Brand, U., Dietz, K. y Lang, M., 2016. *Neo-Extractivism in Latin America. One Side of a New Phase of Global Capitalist Dynamics*. *Ciencia Política*, 11(21), 125-159.

² United Nations Environment Programme, 2016. *Biodiversity in Latin America and the Caribbean. Elements for Session 2: Biodiversity in the 2030 Agenda*. Accessible at: http://www.pnuma.org/forodeministros/20-colombia/documentos/Background_Biodiversity_Document_26_02_16.pdf

of the Basin is covered by the Amazon Rainforest, the largest rainforest of the planet with an area of 5,500,000 km², which includes eight countries. Latin America & the Caribbean is a region with abundance of natural resources, and countries are very highly dependent on them to provide the basis of their economies. The wealth of natural resources is also strongly correlated and inseparably linked to raw-materials extraction. In the history of Latin America and the Caribbean, extractive activities began during the colonial period in the 15th century, when the region became one of the world's most important supplier of raw materials for European countries. In the past three decades, rising global demand for agricultural and mineral products, the economic rise of a number of emerging countries and the growing demand for consumer goods, globally increased the demand for raw materials. Traditionally, rightist administration in LAC have facilitated foreign mining investment, but nowadays, no matter what type of government, leftist, “revolutionary”, progressive, or neoliberal, allowed FDI across the continent.³ Therefore, the region has seen a significant surge in this sector. The majority of the foreign companies comes from North America, especially Canada, from Europe and China.⁴ These activities have seen many countries and different resources involved: Chile, Peru, Bolivia and Argentina principally exploit metals and minerals, such as copper; gas in Bolivia; oil extraction involves Venezuela, Ecuador, Colombia, Brazil, and Mexico; iron ore in Brazil and Peru. Two other industries involved in FDI are the agricultural one with soy from Brazil, Bolivia, Argentina, Uruguay and Paraguay and beef from Brazil, Argentina and Bolivia, and logging. The latter is also a major industry in the LAC region exploiting large timber resources, especially those with a high value on the global market.

Latin America's recent commodity boom was largely driven by trade and investment with China, whose industrial and urban development has intensified the demand of raw materials. China's investment in LAC is mainly concentrated in the petroleum, mineral extraction and agricultural sectors – sectors that, as stated above, are strongly linked to environmental degradation and social conflicts. Chinese demand played a role in increasing the general price level of major commodities during this period, significantly increasing the terms of trade across the Americas. Latin America

³ Observatorio de Conflictos Mineros de América Latina, 2017. “*Impactos de la Industria Extractiva en América Latina*”. Geraldine McDonald, published by International Cooperation for Development and Solidarity (CISDE), January 2009.

https://www.ocmal.org/wp-content/uploads/2017/03/impacto_estractivas_al.pdf

⁴ Observatorio de Conflictos Mineros de América Latina, 2017. “*Impactos de la Industria Extractiva en América Latina*”. Geraldine McDonald, published by International Cooperation for Development and Solidarity (CISDE), January 2009.

https://www.ocmal.org/wp-content/uploads/2017/03/impacto_estractivas_al.pdf

experienced a “China Boom” from 2003 until about 2013; in that period China’s share of LAC exports in extraction grew from 4 percent to 15 percent, while exports in agriculture grew from 7 percent to 15 percent⁵. China also provided and provides massive amounts of finance to Latin American governments for infrastructure, mining and energy projects. According to the China-Latin America Finance Database, since 2003 China has provided an approximate \$119 billion in loans and lines of credit to Latin American governments. Chinese lending in the region are usually ‘commodity-backed’ or ‘resource-secured’, which means that the value of the loan is directly related to the price of a specified commodity. The majority of these loans are secured is oil, and each *loan-for-oil* is secured by revenue received from transfers of crude to a Chinese oil and gas companies. In the four years leading up to 2013, China lent more than US\$59 billion repayable in oil to LAC countries, most notably to Ecuador, Venezuela and Brazil.

The concentration of Chinese FDI in LAC, and their trade pattern relation in primary sectors, gives them a unique social and environmental impact than LAC activities with partners from the rest of the world. They are environmentally more sensitive because are more carbon intensive, more water intensive, often located in highly biodiverse areas inhabited by indigenous peoples, and support fewer jobs than other sectors.

This work has been divided into four chapters. The first one provides readers with an introduction to two major concepts employed in the thesis, sustainability and environmental justice. The second one relates to the Chinese and Latin American economic relation, exploring the China Boom in the region and the driving forces behind China’s expanding trade and investments relations with LAC, with a focus on certain sectors, such as energy and mining.

The third chapter set out the problems that arise when companies start extraction projects in sensitive areas, with a focus on Chinese activities started at the beginning of the China Boom; it identifies the legislations and regulations aimed at safeguarding the environment and the society from the impacts of extractive industries. Importance will be given to the subject of Chinese investors and indigenous communities and their participation in the decision-making process. The fourth chapter introduces two case studies, in mining and oil extraction respectively, chosen for their importance and coherence with the overall theme. Both case studies are China-led projects in Ecuador. The relevance of the Ecuadorean case is twofold. On the one hand, the country has long been subject to negative consequences of the exploitation of natural resources. A widely known and debated example is the

⁵ Ray R., Gallagher K., López A., Sanborn C., 2017. *China and Sustainable Development in Latin America: The Social and Environmental Dimension*. Anthem Press

one provided by Texaco in the Lago Agrio oil field. Despite existing environmental laws, when Texaco started operations in 1972, it made deliberate, cost-cutting operational decisions for 28 years, that resulted in an environmental catastrophe. Studies allege that Texaco dumped toxic drilling by-products and spilled 680.000 barrels of crude into waterways; 30,000 people were affected by the oil company's operations. Moreover, Ecuador epitomizes the impact of major Chinese investments in areas with extremely high biodiversity in four different species groups as well as traditional indigenous territory. The location of most of its oil deposit is the Amazon rainforest, therefore this represents an obstacle to sustainable oil production in the territory.

Regarding the mining case, the most emblematic project is the 'Mirador' project operated by Ecuacorriente S.A. in the Zamora Chinchipe province, on the 'Cordillera del Condor'. Since the project started a few years ago the progress of deforestation is already significant; the Ecuadorian government suspended the activities in 2018, after the company registered 31 defaults written in the action plan.

The work reports five cases of oil exploitation in the Ecuadorean Amazon, two of which are located in the Yasuní Biosphere Reserve, with practices described as 'ecocide'. Rafael Correa's government authorized drilling activities in the area after the failure of the Yasuní ITT initiative in 2013, which sought contributions from the international community to keep the oil in the ground. PetroOriental controls block 62, also named Tarapoa, blocks 14 and 17, whilst Andes Petroleum operates in oil blocks 79 and 83. All of them overlap with protected areas, and are located in indigenous peoples' territories, therefore have been a major cause of conflicts with the community.

This work employs the following kind of sources: for the first chapter related to the concepts of sustainability and environmental justice, different articles and literature have been studied. For the second chapter the book *The China Triangle*⁶ and *Open Veins of Latin America*⁷ have been the basis on which the discourse has been developed. Databases such as China-Latin America financial databases and newspapers have also played a major role. Other central sources of information have been NGOs, like Acción Ecológica, Amazon Watch and Mongabay, especially for the last two chapters

⁶ Gallagher K. P., 2016. *The China Triangle: Latin America's China Boom and the Fate of the Washington Consensus*. Oxford University Press

⁷ Eduardo Galeano, 1973. *Open Veins of Latin America: Five Centuries of the Pillage of a Continent*. Monthly Review

1. An Introduction to Key Concepts Employed in this Work

The aim of this chapter is to introduce the key concepts employed in this work as a framework. These two concepts are sustainability and environmental justice.

Although sustainability is one of the most common words and ideas of our times, an agreed definition of the term is still missing. Sustainability and its derivatives (sustainable development), together with equality, freedom and liberty, have been called “essentially contested concepts” (ECCs)⁸, signifying that there is no clear and universal agreed definition of the terms. Sustainability cannot be considered as a univocal concept nor it is immediately understandable⁹, because it is recognized as interdisciplinary, related to more than one field – such as

the environmental, economic, social and cultural one. These are the fundamental components or principles of sustainability. Given its principles, often the concept is studied from one perspective, for example the environmental one, neglecting in part its other realms and aspects.

Two divergent aspects or approaches have also emerged within the sustainability discourse itself - that of strong and weak sustainability¹⁰.

The second key concept of this work is that of environmental justice. The concept revolves around the existence of inequity in the distribution of environmental bads. In the second section of the chapter, the concept will be analyzed in depth, trying to explain why it is essential that all communities have access to environmental justice.

1.1 A brief review over the concept of sustainability

The idea of sustainability has its roots in the German term *Nachhaltigkeit* (=sustainability), which is at the origin of the sustainable use of the forest, formulated by the miner Carl von Carlowitz¹¹ in the eighteenth century. The term was introduced to describe the maintenance of long-term productivity of the key resource of that time, timber, and to continuously provide construction poles for the mining industry¹². According to Carlowitz:

⁸ John R.Ehrenfeld, 2008. *Sustainability needs to be attained, not managed, Sustainability: Science, Practice and Policy*, 4:2, 1-3, DOI: [10.1080/15487733.2008.11908016](https://doi.org/10.1080/15487733.2008.11908016)

⁹ Valera L., 2012. *La Sostenibilità: un concetto da chiarire*. Firenze University Press

¹⁰ Julian Agyeman, Robert D. Bullard & Bob Evans (2002) *Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity, Space and Polity*, 6:1, 77-90, DOI: [10.1080/13562570220137907](https://doi.org/10.1080/13562570220137907)

¹¹ Environmental Society and Portal: Hans Carl von Carlowitz (1645–1714), who managed mining on behalf of the Saxon court in Freiberg. Available at: <http://www.environmentandsociety.org/tools/keywords/hans-carl-von-carlowitz-and-sustainability>

¹² Becker B., 1997. *Sustainability Assessment: A Review of Values, Concepts, and Methodological Approaches*. Published by The Consultative Group on International Agricultural Research (CGIAR)

“only so much wood should be cut as could be regrown through planned reforestation projects”.¹³

This use of the term related to poor resource management, then emerged in the 1960s, and was adopted as a common political goal in response to concerns about environmental degradation¹⁴ and in the wake of the criticism against the development model of the Western industrialized countries.¹⁵ As a result, the concept of *sustainability* was introduced for the first time during the first United Nations Conference on the Human Environment in 1972, also known as Stockholm Conference. The Conference led to the creation of the United Nations Environment Program (UNEP) in the same year, aimed at coordinating global efforts in the promotion of sustainability and protect the natural environment.¹⁶

It was during these years that people started realizing that the planet in which we live on is limited, and that once the quest for an unlimited growth in population and production will meet this limit, the result would be “*a rather sudden and uncontrollable decline in both population and industrial capacity*”.¹⁷ These were the conclusions drawn in the book “The Limits to Growth” published by the Club of Rome in 1972. According to the authors, changes in policies could have led to a sustainable state, an equilibrium scenario, where the annual regeneration of resources by the planet equals the consumption.¹⁸ The book pre-empted the concept of sustainable development, and represents a fundamental for the concept of sustainability. Although “The Limits to Growth” showed a sustainable path for growth in the ‘70s, it was only in 1987 that this path started to be undertaken. In that year, in the publication of the Brundtland Commission “*Our Common Future*” (WCED¹⁹ 1987), the pioneer definition of sustainable development was proposed as

¹³ Environmental Society and Portal. Available at: <http://www.environmentandsociety.org/tools/keywords/hans-carl-von-carlowitz-and-sustainability>

¹⁴ Stephen McKenzie, 2004. *Social Sustainability: Towards Some Definitions*. Hawke Research Institute

¹⁵ Brombal D., May –June 2015. *La Sfida della Sostenibilità in Cina*. OrizzonteCina VOL. 6, N. 3. P. 2-5. Available at <https://www.twai.it/wp-content/uploads/2016/07/orizzontecina-vol.-6-n.3-maggio-giugno-2015.pdf>

¹⁶ United Nations Conference on the Human Environment, Britannica <https://www.britannica.com/topic/United-Nations-Conference-on-the-Human-Environment>

¹⁷ Meadows D., Meadows D., Randers J., William W. Behrens III, 1972. *The Limits to Growth*. The Club of Rome. In this publication an international team of researchers at the Massachusetts Institute of Technology used a computer global model to developed a study that tracked the world’s economy and environment and the implications of continued worldwide growth until 2100. Their conclusion stated that the quest for an unlimited growth in population and production, eventually would have met the limits to growth on the planet sometime within a hundred years.

¹⁸ Meadows D. Speech <http://donellameadows.org/archives/perspectives-on-limits-to-growth-it-is-too-late-for-sustainable-development/>

¹⁹ World Commission on Environment and Development (WCED)

development that meets the needs of the present without compromising the ability of future generations to meet their own needs.²⁰

The concept of sustainability in this meaning, is related to the compatibility between the growth of economic activities and environmental safeguard, and is linked to sustainable development, implied as a process in which reasonable material needs are met within ecosystem limits.²¹ The document shows the necessity of reforming institutions and policies in the frame of sustainability, in order to face the challenges of the future with the purpose of achieving inter- and intra-generational equity.

With the Brundtland Commission the aim of sustainable development was clearly defined. Nonetheless, it was only in 1992 after the United Nations Conference on Environment and Development held in Rio, that sustainable development became the paradigm of development.

In the definition given by the Brundtland Commission, the three fundamental pillars of sustainability are evident: the environmental pillar; the economic pillar; the social pillar. However, in this work, culture, often analyzed within or as part of social sustainability, plays an independent role, and will be considered as the fourth pillar of sustainability.

The Four Pillars of Sustainability

Initially, the concept of sustainability was focused on and belonged to the field of ecology, referring to an “*ecosystem’s potential for subsisting over time, with almost no alteration*”.²² However, during the years it deeply evolved: from an ecological standpoint, it started to take into account and to embrace other dimensions too – such as the economic, social and cultural ones. These four pillars are considered to be in a synergic and systemic relationship, and combined can bring to a constant and increasing welfare, for the current and future generation.²³

Environmental Sustainability

Environmental sustainability requires maintaining natural capital; in particular its source and sink functions must be maintained unimpaired. In “source” we include renewable and non-renewable resources; whilst “sink” functions are referred to those activities of pollution and waste assimilation

²⁰ United Nations, 1987. *Report of the World Commission on Environment and Development: Our Common Future*. Available at:

²¹ Agyeman J., *Just Sustainabilities 2012*, <https://julianagyeman.com/2012/09/21/just-sustainabilities/> Pages 12 of 13

²² Jabareen Y. 2008. *A New Conceptual Framework for Sustainable Development*. *Environment, Development and Sustainability*, 10, n.2, pp. 179-192.

²³ Treccani: Definition of Sustainability <http://www.treccani.it/enciclopedia/sostenibilita/>

of the environment.²⁴

Natural capital – the natural environment – is defined as

the stock of environmentally provided assets, which provide a flow of useful goods or services, that can be renewable or non-renewable, and marketed or nonmarketed.²⁵

The stock Goodland considers is composed of soil, atmosphere forests, water, and wetlands.

From an ecological perspective, environmental sustainability requires a responsible interaction with the environment. This means to value and conserve the environment by avoiding depletion or degradation of natural resources, protecting biodiversity, to ensure a long-term environmental quality and the strengthening of resilience to disasters and climate change.

The practice of environmental sustainability helps to ensure that the needs of today's population are met, without jeopardizing the ability of future generations to meet their needs.

Economic Sustainability

Economic sustainability is the maintenance and the implementation of economic capital in a system of production, satisfying present consumption levels without compromising future needs.²⁶

According to Goodland, economic sustainability focuses on that portion of the natural resource base that provides physical inputs, both renewable (like forests) and nonrenewable (like minerals), into the production process.²⁷ Here, the production process is intended as a tool to analyze the cost-benefit relationship.²⁸ An act of the process will be economically sustainable if its benefits outweigh or equal its costs. According to Munro, economic sustainability is conditioned by the availability and cost of resources, by their extraction cost and/or treatment, and by the demand for the product.²⁹ In this perspective, the demands placed upon the environment by people and commerce should be met with a long-term and intergenerational perspective, and without negatively affecting the environmental, social and cultural aspects of the community.³⁰

²⁴ Goodland R., 1995. *The Concept of Environmental Sustainability*. Annual Review of Ecology and Systematics, Vol. 26. (1995), pp. 1-24; published by Annual Reviews

²⁵ Goodland R., 1995. P. 14

²⁶ Basiago A.D., 1999. *Economic, social, and environmental sustainability in development theory and urban planning practice*. The Environmentalist 19, 145 161 (1999); Kluwer Academic Publishers

²⁷ Goodland R., 1995. P. 2

²⁸ Valera L., 2012. *La Sostenibilità: Un Concetto da Chiarire*

²⁹ Munro D.A., 1995. *Sustainability: Rhetoric or Reality?* in Valera L. (2012). *La Sostenibilità: Un Concetto da Chiarire*

³⁰ University of Saint Mary Washington. Concept of Economic Sustainability. Available at: <https://sustainability.umw.edu/areas-of-sustainability/economic-sustainability/>

Hawken expressed this in his “golden rule” for the restorative economy:

leave the world better than you found it, take no more than you need, try not to harm life or the environment, make amends if you do.³¹

Social Sustainability

Since the beginning of the sustainability and sustainable development debate, policy makers have always prioritized the environmental and economic aspects. It is only in the late 1990s that social issues were taken into account in the sustainability agenda, and only later social sustainability has been considered as an independent dimension. ³²

Social sustainability is the maintenance of social capital, defined by Robert D. Putnam as “*features of social organizations, such as networks, norms and trust that facilitate action and cooperation for mutual benefit*”. ³³

Colantonio, stresses the importance of *how* individuals, communities and societies live together and plan to achieve the purposes of development models, which they have chosen for themselves also considering the physical boundaries of their places and planet earth as a whole. ³⁴

Social sustainability comprehends different aspects of social development, that McKenzie defines as indicators to measure the condition of this dimension of sustainability. According to the author, socially sustainable communities are equitable, diverse, connected and democratic, and provide a good quality of life ³⁵.

Most of the literature agrees on some fundamental aspects or indicators on which social sustainability is based - equity, public participation, safety, are only few of those that will be explained in the next paragraphs.

Equity is a central component of the social sustainability discourse and includes equal distribution and access to environmental beneficiaries - such as clean energy, clean air, water and other resources.

³¹ Meppem T., Gill R. 1998, *Planning for Sustainability as a Learning Concept, Ecological Economics*. New England Ecological Economics Group, Centre for Water Policy Research, University of New England, Armidale, Australia. P.123

³² Colantonio A. 2008. *Social Sustainability: An Exploratory Analysis of its Definition, Assessment Methods, Metrics and Tools*. Oxford Brooks University

³³ Social Capital Research & Training, April 24, 2015. *Putnam on Social Capital – Democratic or Civic Perspective*. <https://www.socialcapitalresearch.com/putnam-on-social-capital-democratic-or-civic-perspective/>

³⁴ Colantonio A., 2008

³⁵ McKenzie, Stephen & University of South Australia. Hawke Institute, 2004. *Social sustainability towards some definitions*. Magill, S. Aust : Hawke Research Institute, University of South Australia

Equity can also be related to access to key services, such as health, education, transportation, housing and recreation.

Equity includes the recognition of all members of the society, and according to McKenzie³⁶, in a socially sustainable community there is equal opportunity for all members, for Indigenous people, in relation to human rights, and in relation to disadvantaged members.

In the equity dimension, two additional fundamental aspects that we already discussed in the previous paragraphs are considered: those of intergenerational and intragenerational equity. Applied in the social sustainability dimension, the first one refers to fairness in allocating resources between current and future generations, whilst the second one refers to fairness in allocating resources between competing interests at the present time.

Participation is also of paramount importance in the social sustainability dimension. According to Goodland, social sustainability is only achieved by systematic community participation and strong civil society. Fraiser stresses the concept of parity of participation by saying that “*justice requires social arrangements that permit all (adult) members of society to interact with one another as peers*”.

³⁷ Participation also includes a meaningful involvement in environmental decision-making processes, and “*the production of a space based on the conception of the people concerned*”.³⁸ Eizenberg and Yosef Jabareen include safety in the social sustainability discourse, and refer it to the right of all individuals and groups, regardless of gender, age, health, and race to be protected in situations of vulnerability.³⁹

Cultural Sustainability

Several scholars have tried to integrate and understand the role of culture within the sustainability discourse. Soini and Dessein have argued that achieving sustainability goals depends on human accounts, behavior and actions, which are, in turn, culturally rooted.⁴⁰ While analyzing the culture-sustainability relation, they proposed three roles of culture in sustainability, defined as “representations”.

The first one considers culture as an independent pillar of sustainability, and has been defined as

³⁶ McKenzie, Stephen & University of South Australia. Hawke Institute. (2004)

³⁷ Eizenberg E., Jabareen Y., 2017. *Social Sustainability: A New Conceptual Framework*. Sustainability 2017, 9, 68; doi:10.3390/su9010068 Page 7

³⁸ Eizenberg E., Jabareen Y., 2017. Page 7

³⁹ Eizenberg E., Jabareen Y. 2017

⁴⁰ Soini K., Dessein J., 2016. *Culture-Sustainability Relation: Towards a Conceptual Framework*. Sustainability 2016, 8, 167; doi:10.3390/su8020167

culture in sustainability. What is recognized in this representation is the importance of the maintenance, conservation and preservation of cultural capital. Here cultural capital includes the distinctive ideas, customs, social behavior, arts, knowledge, heritage, and cultural diversity for the next generations. In the second representation, *culture for sustainability*, culture has a mediating role to achieve ecological, economic and social sustainability. The last representation is *culture as sustainability*. Here the other pillars of sustainability are enclosed in culture, which becomes the foundation for transformation toward sustainability.

In this work, the first representation of Soini and Dessein is employed. Indeed culture is a fundamental aspect of sustainability and since culture is present in different forms, this pillar can influence and can be influenced by the other three. Cultural resources for example can stimulate inclusive economic development by using material and resources that are locally available, creating jobs, promoting a certain community's unique tradition and heritage. It also helps including women and marginalized groups of a society. Culture provides a sense of belonging to a cohesive community, and for indigenous people in particular, help them maintaining close links to their roots and to the land, with which many identify. Local and indigenous knowledge systems and environmental management practices can help promote more sustainable consumption and production patterns. Culture is also a source of learning and inspiration.⁴¹ Many cultures do not get a fair run in the public arena.⁴² Respecting and safeguarding cultural diversity builds a tolerant environment and a more inclusive and stable society. It should not be valued and respected just because we are tolerant, but because a pool of diverse perspectives helps us survive, adapt to changing conditions, and embrace the future.

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Weak Sustainability and Strong Sustainability

That of weak and strong sustainability is also a frequently discussed debate within the sustainability discourse.

Weak sustainability assumes that natural capital and manufacture capital are substitutable and considered as there are no essential differences between the kinds of well-being they generate. What

⁴¹ UNESCO. *Culture in the Post-2015 Sustainable Development Agenda Why Culture is Key to Sustainable Development*. Accessible at: <http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/images/Post2015SustainableDevelopmentAgendaENG.pdf>

⁴² Hawkes J., 2001. *The Fourth Pillar of Sustainability: Culture's Essential Role in Public Planning*. Common Ground Publishing

⁴³ Hawkes J., 2001.

matters in weak sustainability is the *total* value of the aggregate stock of capital, which should not decrease or should ideally increase for the sake of future generations⁴⁴.

“It does not matter whether the current generation uses up non-renewable resources or dumps CO₂ in the atmosphere as long as enough machineries, roads and ports are built in compensation”. Such a position leads to maximizing monetary compensations for environmental degradations. From a weak sustainability perspective, technological progress is assumed to continually generate technical solutions to the environmental problems caused by the increased production of goods and services.”

In the strong sustainability perspective, natural capital is not viewed as a mere stock of natural resources to exploit; it is instead a set of complex systems that hold certain “critical” elements that provide some unique functions and contributions, non-substitutable by manufactured or human capitals.⁴⁵ Therefore, it is mandatory to conserve the irreplaceable « stocks » of critical natural capital for the sake of future generations.

In the strong sustainability discourse, certain human actions can entail irreversible consequences. This is the reason why this perspective of sustainability is important as a framework for the next chapters, especially for the last two, where focus will be on sustainability issues brought about by Chinese investment in Latin America and the Caribbean, and the environmental and social consequences of extractive activities in the region.

1.2 Environmental Justice

The second major concept employed in this work is *environmental justice*. The Environmental Justice discourse started in the 1980s in the United States, when a movement began in response to the disproportionate distribution of environmental ‘bads’. The concept was used to illustrate that environmental problems bear down upon not only poor communities, but communities of color as well.⁴⁶

The environmental justice debate has moved far beyond its original issues, broadening into new spheres such as labour movement, traditional environmentalists, immigrant rights groups, food justice and beyond.⁴⁷

⁴⁴ Pelenc J., Ballet J., Dedeurwaerdere T., 2015, *Weak Sustainability versus Strong Sustainability*. Brief for GSDR 2015 Available at: <https://sustainabledevelopment.un.org/content/documents/6569122-Pelenc-Weak%20Sustainability%20versus%20Strong%20Sustainability.pdf>

⁴⁵ Pelenc J., Ballet J., Dedeurwaerdere T., 2015.

⁴⁶ Schlosberg D., 2013, *Theorising Environmental Justice: The Expanding Sphere of a Discourse*. Environmental Politics, 2013 Vol. 22, No. 1, 37–55, <http://dx.doi.org/10.1080/09644016.2013.755387>

⁴⁷ Schlosberg D., 2013.

Millner, in *Access to Environmental Justice*, explained five elements of *Environmental Justice*.⁴⁸ In this work, those elements are referred as aspects to be respected in order to ensure Environmental Justice.

- 1) the **recognition** of human and environmental rights “*without discrimination on any ground such as sex, race, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth or other status*”;⁴⁹ and also the recognition of the expanded moral community that is affected by ecological risk.⁵⁰
- 2) **Participation** and access to decision-making and policy-making processes.⁵¹ One of the major causes of environmental injustice for the most socially and economically vulnerable sections of society is the lack of political power to resist dispossession, displacement, or exposure to environmental risks. Traditionally, companies locate their dirtiest businesses in areas of least political resistance;⁵² therefore, the costs of their economic growth and development are disproportionately borne by certain component of the society. It is important in this sense that the victims of environmental inequities enjoy participatory justice – speaking for themselves, or get a seat at the table.⁵³
- 3) **Precaution**. Laws and regulations should be correctly and fairly applied and enforced, to ensure the minimization of risk in relation to the larger community. It is worth mentioning two principles from two of the most important declarations on the environment. Principle 21 of the Stockholm Declaration in 1972:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction⁵⁴; and

⁴⁸ Millner F., 2011. *Access to Environmental Justice*. Deakin Law Review, [S.l.], v. 16, n. 1, p. 189-207

⁴⁹ Agyeman J., Bullard R. D., Evans B., 2002. P.7

⁵⁰ Millner F., (2011)

⁵¹ Agyeman J., Bullard R. D., Evans B. 2002

⁵² Agyeman J., Bullard R. D., Evans B. 2002

⁵³ Schlosberg D., 2013

⁵⁴ United Nations, Stockholm, 5-16 June 1972. *Report of the United Nations Conference on the Human Environment*. PDF Accessible at: <http://www.un-documents.net/aconf48-14r1.pdf>

Principle 2 of the Rio Declaration in 1992, that repeats the formulation of Principle 21 Stockholm Declaration, but adds the word *developmental* to provide the States its right to exploit their resources following their own environmental and developmental policies⁵⁵:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction⁵⁶.

Both Principles declare that States should act in accordance with their jurisdiction, preventing any type of situation that could affect third parties.

- 4) **Fair distribution** of resources, goods, and environmental risks among relevant parties. The main issue raised is around the fact that globally and nationally, the poor are not the major polluters, but are those who still mainly suffer from environmental pollution and degradation, caused by the actions of those in the rich high-consumption nations.⁵⁷ This aspect also puts attention on indigenous peoples' perspective on the relationship between human being, non-human nature and culture. The very first principle of environmental justice affirms the 'sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction'.⁵⁸ Riechmann in particular, identifies environmental justice with ecological justice, and stresses that the fair distribution of environmental goods and bads should not only be related to the human sphere, but between it and the entire living beings.⁵⁹ Both human beings and non-human beings depend on the integrity of the system for their own functioning; therefore, when we corrupt, interrupt, or defile the potential functioning of ecological support systems, we do an injustice to both dimensions.⁶⁰

⁵⁵ Oxford Public International Law, July 2008. *Stockholm Declaration (1972) and Rio Declaration (1992)*
<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1608>

⁵⁶ UNESCO, 1992. *The Rio Declaration on Environment and Development (1992)*
http://www.unesco.org/education/pdf/RIO_E.PDF

⁵⁷ Agyeman J., Bullard R. D., Evans B. 2002

⁵⁸ Environmental Working Group, Tuesday, October 2, 2007. *17 Principles of Environmental Justice*.
<https://www.ewg.org/enviroblog/2007/10/17-principles-environmental-justice>

⁵⁹ Riechmann J., 2003. *Tres Principios Básicos de Justicia Ambiental*. RIFP/21 (2003) pp. 103-120. Available at
<http://e-spacio.uned.es/fez/eserv.php?pid=bibliuned:filopoli-2003-21-1117&dsID=pdf>

⁶⁰ Schlosberg D., 2013

- 5) **Redress and compensation** for those parties who have been harmed by the effects of ecological problems.

Access to environmental justice is essential because it raises awareness between those communities affected by the trade-offs and risks carried out by existing or future activities. It is mandatory for decision makers to take into account the concerns of disadvantage groups, and attempt to address them. All communities should be informed and aware of the impacts and risks of the decisions - risks to their health, degradation of the environment, and loss of access to resources,⁶¹ and most importantly, the value of public participation should not be undermined.

⁶¹ Millner F., 2011

2. China and LAC: recent trends in economic relations

2.1 Latin America: region profile and economic history from Colonial Times until 2003

Latin America and the Caribbean (LAC) is a vast region consisting of 33 countries from the southernmost portion of North America, Central America, the Caribbean and the continent of South America. Latin America is usually considered as a unitary entity; however, diversities within the territory are great. This regional diversity is driven by several environmental factors, including a complex evolutionary history and highly variable geography, geology and climate. Differences are not only significant and evident between different countries, in fact, also within the same country exist more than one economic, social and cultural world, and are extremely varied. For instance, many parts of LAC are still populated by indigenous people, and the countries with the greatest proportion of indigenous people are Bolivia, Guatemala, Peru and Mexico. The region supports rich biological diversity, with around sixty per cent of global terrestrial life found within it,⁶² alongside diverse freshwater and marine flora and fauna. The LAC region's biomes extend from wetlands and coastal ecosystems to deserts, tropical forests, temperate forests, extensive savannah grasslands and high altitude Andean habitats. The lowland forests are amongst the most species-rich on Earth, and the mountain forests and moorlands (páramos) of the Andes host a wide range of endemic and narrow range species.⁶³ Latin America is also home to the world's most biodiverse habitat, the Amazon rainforest, that covers nine South American countries: Brazil, Peru, Colombia, Venezuela, Ecuador, Bolivia, Guyana, Suriname and French Guiana. Large areas of Latin America & the Caribbean remain in a natural or semi-natural state; however, there have also been considerable transformations of habitats to serve not only national and regional economies, but in a great part global ones.⁶⁴ Those transformations mainly occurred due to the region's abundance of natural resources, their extraction and export to the rest of the world. The next paragraphs explain Latin America's historical dependency on primary commodities' extraction and export, from the Colonial Times until the most recent commodity lottery, in large part driven by China. Latin America's economic history has been divided in five periods or eras: Colonial Times (mid 15th Century – 1820s circa); Commodity Lottery (1870s-1929); State-Led Industrialization (1930s-1980); Washington Consensus (1980-2002); China Boom (2003-2013).⁶⁵

⁶² UNEP, May 2016 *The State of Biodiversity in Latin America and the Caribbean: A mid-term review of progress towards the Aichi Biodiversity Targets*. UNEP-WCMC, Cambridge, UK

⁶³ UNEP, May 2016

⁶⁴ UNEP, May 2016

⁶⁵ The eras have been distinct by Kevin Gallagher in *The China Triangle: Latin America's China Boom and the fate of the Washington Consensus*. The first period has been added for this research, to explain the roots of the economic model of most Latin American countries.

2.1.1 Colonial Times, from the mid 15th century to the 1820s

In the late 15th Century the Spanish invasion in the territory marked the beginning of the Colonial Times. Gold and silver, accumulated in the Mexican plateau and the Andean plateau, were the main motivating force in the Conquest.

As Eduardo Galeano wrote in his masterpiece *Open Veins of Latin America*,⁶⁶ since the discovery of natural resources in the territory of Latin America, everything, from the soil to human resources, has always been transmuted into European—or later United States—capital, and as such has accumulated in distant centers of power. All that was needed, it was thought, were capital and skilled labor to unlock the fruits and mineral-rich depths in Latin America’s vast unexploited interior and unrestricted access to the wealthy markets.

Between 1545 and 1558, the abundant silver mines in Potosí⁶⁷ (what is now Bolivia), were discovered, and the mercury amalgam process, which made possible the exploitation of the lowest-grade silver, began to be used⁶⁸. Since their discovery, the mines became the largest silver, tin and zinc deposit and supplier in the world. Cerro Rico (literally “rich mountain” in Spanish) in Potosí, became the hub of the Latin American colonial life. Most of the economies, such as that of Chile, Peru and Argentina, revolved around it. Latin America used to produce around 80 percent of the world’s silver in the 16th through 19th centuries, fueling the monetary systems of not only Europe, but China and India as well. During the Colonial Times, from the metals stage to that of supplying foodstuffs, each region was identified with what it produced, and each produced what Europe wanted. Silver from Mexico,

⁶⁶ Eduardo Galeano: Uruguayan writer (born Sept. 3, 1940, Montevideo, Uruguay—died April 13, 2015, Montevideo), wrote histories of Latin America that were informed by leftist political and economic views and were widely admired for the literary elegance with which they incorporated anecdote and legend. His best-known work *Open Veins of Latin America: Five Centuries of the Pillage of a Continent*, 1973, established him as a hero of radical politics.

<https://www.britannica.com/biography/Eduardo-H-Galeano>

⁶⁷ The case of Potosí is emblematic because it highlights many of the common environmental and social problems with resource extraction in Latin America that directly and indirectly affect communities near extraction sites. Since the mines were found, the mining industry has been the base of Potosí’s economy, and still nowadays, there are people who depend on mine and continue with the mine, because there is no option. The city is no longer the rich metropolis it used to be during Colonialism. Once natural resources had been extracted, they did not stay in Potosí, leaving its population among one of the poorest Bolivia. Besides, the mountain is collapsing on itself, after 470 years of digging.

<https://www.britannica.com/place/Potosi-Bolivia>

⁶⁸ Zacatecas and Guanajuato in Mexico were also two mines of strategic importance for the exploitation of gold and silver. The height of mining came in the 18th century. The economic surplus drained from Mexico between 1760 and 1809—barely half a century— through silver and gold exports has been estimated at some 5 billion present-day dollars. (Galeano, 1997)

Honduras, Colombia, Peru, Bolivia and Chile; gold from Colombia and Brazil⁶⁹; sugar, the “white gold” from Brazil, the Caribbean islands-Barbados, Jamaica, Haiti, Santo Domingo, Guadeloupe, Cuba, Puerto Rico-and in Veracruz and the Peruvian coast; timber from Brazil; rubber from the Amazon; fruit from Brazil, Colombia, Ecuador and Central America.

2.1.2 The Commodity Lottery, from the 1870s to 1929

Although most Latin American countries won independence from their European rulers in the 1820s, their role as natural resource suppliers of those countries did not change. In fact, the commodity lottery period, started when Latin America’s geography once again met Western economic demand created by the Industrial Revolution. Great Britain, France, Germany, and the United States had an enormous specific weight in the world’s economy: by the end of the 19th century, they accounted for about 60 percent of the global exports and imports, and played a predominant role in the foreign trade of Latin America. The rise of industry had unleashed an unprecedented demand for old and new products, such as copper and iron from Peru and Chile; tin from Bolivia; beef and hides from Argentina; fertilizers from Peru; coffee from Brazil; sugar from Cuba; cocoa from Venezuela and Ecuador; tobacco from Colombia, and beyond.

The commodity lottery period is notable given that the region integrated with the rest of the world economy in terms of trade, investment, and migration. Furthermore, a few countries like Peru, Paraguay and Argentina became an example of successful commodity export diversification. Argentina, for instance, could benefit from the commodity lottery because the mechanics of export-led growth and the economic-policy environment were favorable: in the 1920s, it was among the twelve richest countries in the world.

On the other hand, in some countries, the introduction of new products did not necessarily lead to export diversification. On the contrary, the rise of new exports was often matched by the eclipse of traditional products, so export concentration remained extremely high and made countries very vulnerable to cycles in single-commodity markets.⁷⁰ The commodity lottery period locked Latin America into the commodity dependency that started during the colonial period and that continues to this day. Besides, some consider this period as the one that locked the region in grave levels of

⁶⁹ Gold in Brazil began to flow just when Portugal signed the Methuen Treaty with England in 1703. Ouro Preto, also known as the Potosí of Gold, was the quintessence of the gold civilization. Minas Gerais region entered history with a rush: the largest amount of gold ever discovered in the world until then was extracted in the shortest space of time. (Galeano, 1997)

⁷⁰ Bulmer-Thomas Victor, 2003. *The Economic History of Latin America Since Independence, Second Edition*. Cambridge University Press

inequalities, which makes it one of the most unequal on Earth. The Gini coefficient by 1920 reached 0.72.⁷¹

2.1.3 State-led industrialization from 1930s to 1980

According to many, in terms of economic growth and the diversification of the economy away from primary commodities, the State-led industrialization era was a great success. This period was highly influenced and supported by Latin America's northern neighbor, the United States, who provided long-term loans for industrial projects across the region, like steel mills in Brazil, and helped to create different and elaborate institutions, many of which survive to this day.

During this period, many countries in the region could manage primary commodities and limit their supply. In doing so, they could ensure that prices and profits remained relatively high and hoped to escape massive price drops that followed depression and war. The profits earned from primary commodities were invested in the creation of state-owned enterprises and supported private companies by providing cheap credit from central banks or newly established national development banks. To support and protect the industrialization effort from foreign competition, foreign direct investment was encouraged into strategic sectors, protecting the new ones. Furthermore, profits were steered back into productive sectors rather than allowing it to flow abroad. During the period, the region grew by 4.9 percent per year, with an outstanding performance from Brazil and Mexico, which grew their economies at 7 and 6.6 percent respectively.⁷²

At the end of this period, in the 1970s, new oil fields were discovered. Seeing endless profits from high oil prices, Mexico, Brazil and others went on a borrowing spree to fund state-led industrialization. Global banks, flush with petrodollars deposited by oil-rich nations in the Middle East making windfall profits from high process, were more than happy to accommodate. When the cost of borrowing shot up and prices for oil plummeted in the early 1980s, the region suffered a financial crisis that devastated Latin America.

From a political and social point of view, for many countries the state-led industrialization was also characterized by bloody dictatorship that suppressed workers and human rights in the name of power and industrialization.

⁷¹ GINI Coefficient: a statistical measure of the degree of variation represented in a set of values, used especially in analysing wealth distribution inequality. The Gini scale ranges 0 to 1, where 0 would imply a perfect equality and 1 perfect inequality.

⁷² Gallagher K. P., 2016. *The China Triangle: Latin America's China Boom and the Fate of the Washington Consensus*. Oxford University Press

2.1.4 The Washington Consensus, from 1980 until 2002

The Washington Consensus⁷³ period started in the 1980s, when Latin America was suffering from the financial crisis. Most countries in the region received financial help from the World Bank, the International Monetary Fund, the US Treasury and even the White House. However, the support they received had the condition that each country undergo a series of neoliberal reforms aimed at reducing the role of the state in economic affairs. These policies can be summarized in:

1. Creating economic stability by controlling inflation: central banks in the region kept their interest rates relatively high to reduce the money supply, and the government's budget had been reduced (fiscal conservatism).
2. Fully open capital accounts: nations fully liberalized all forms of foreign investment flows. They allowed multinationals to set up factories and financial firms to enter and exit stock, bond, currency, and later derivatives markets.
3. Floating exchange rate: Rather than fixing the value of a nation's exchange rate, nations allowed the exchange rate of their currency to be governed by the laws of supply and demand.
4. Free trade and deep integration in the global economy: many nations committed to free trade by joining the World Trade Organization.

On the one hand, the implementation of those new policies, helped Latin American countries to tame the deficits and inflation; eliminating external and budget deficits;⁷⁴ to engage with the world economy again;⁷⁵ and to improve many social indicators.⁷⁶ On the other hand, Latin America's economy experienced a long period of slowdown in its economic activity, labeled as the "lost decade".

⁷⁷

During the Washington Consensus era, economic growth was the slowest compared to the two previous ones, at 0.5 percent per annum. The growth that occurred did not produce the kinds of jobs

⁷³ Washington Consensus, "a set of economic policy recommendations for developing countries, and Latin America in particular, that became popular during the 1980s. The term Washington Consensus usually refers to the level of agreement between the International Monetary Fund (IMF), World Bank, and U.S. Department of the Treasury on those policy recommendations. All shared the view, typically labelled neoliberal, that the operation of the free market and the reduction of state involvement were crucial to development in the global South."

<https://www.britannica.com/topic/Washington-consensus>

⁷⁴ Moreno-Brid J. C, Pérez Caldentey E., Ruíz Nápoles P., 2004. *The Washington consensus: a Latin American perspective fifteen years later*. *Journal of Post Keynesian Economics* / Winter 2004–5, Vol. 27, No. 2 345

⁷⁵ Mexico signed the 1994 North American Free Trade Agreement with the US and Canada.

⁷⁶ Gallagher, 2016. "By the beginning of the XIX century more than 90 percent of Latin Americans had a primary education, and 70 percent had a secondary education. Ninety percent had access to safe drinking water, and the mortality rate of children under five was halved." P. 26-27

⁷⁷ Moreno-Brid J. C, Pérez Caldentey E., Ruíz Nápoles P., 2004

that give families security and boost domestic demand. Many jobs in the manufacturing sector were gone, reducing its share in the gross domestic product to 16 percent in 2002, and letting Asia become the hub for manufacturing. Inequality was accentuated: the GINI coefficient rose from 0.49 in 1980 to 0.53 in 2002.

Volatile growth rates, weak levels of investment and productivity, declining levels of industrialization and innovation, weak competitiveness, persistent inequality, and significant environmental degradation, were the result of the Washington Consensus.

2.2 Latin America's China Boom: overview on Latin America and China's economic relationship

The Latin American economic historical period after the Washington Consensus has been, once again, an era of commodity boom, largely driven by China this time. Therefore, from now on we will refer to this period as *The China Boom*.

The China Boom, which spanned from 2003 until about 2013, is a period in which China and Latin America tighten their economic relationship. This relationship has been characterized by a surge in trade and investment between China and Latin America, and has been concentrated in the petroleum, mineral extraction and agricultural sectors.

The driving forces behind this expansion of their relationship were: Latin America was an emerging market for China's manufactured products; the Chinese Government geopolitical and strategic interests in the region, which include the search for allies that support China's position in international negotiations; but more importantly, China's lack of natural resources to feed its industry and a modernizing nation, especially since the beginning of its "going out" strategy in the late 1990s.

Latin America with its abundance of raw materials had everything to fulfill this need, and started to become a strategic asset to the now awoken dragon of Asia. China came to the rescue, at least for many South American countries, but how could China return to its status of the leading economies on the planet?

Like Latin American countries during the state-led industrialization, from 1950 to the end of the 1970s China engaged in an inward-looking heavy-industry-priority development strategy.⁷⁸ Later, like Latin America during the Washington Consensus, China has been opening its economy to global market forces since the late 1970s and early 1980s. Unlike Latin America however, China could do so on its own terms.

China's was a globalization centered around the saying of its great reformer, Deng Xiaoping

⁷⁸ Barry Naughton, 2007. *The Chinese Economy: Transition and Growth*. Massachusetts Institute of Technology

“crossing the river by feeling the stones”⁷⁹. Instead of diving head first into globalization as Latin America did, China took a more managed and gradual approach by sequencing the liberalization of some sectors of its economy by fostering other sectors until they were ready to compete on a global basis. China’s strategy paid off: it grew at over 10 percent per year for over 30 years, the fastest and the strongest growth ever recorded.

China’s managed and gradual approach to globalization can be summarized in five core policies: Public investment in infrastructure and strategic industry; direct credit toward structural transformation; selectively open capital account; fixed competitive exchange rate; free trade.⁸⁰

China adopted free trade policies by joining the World Trade Organization in 2001 and started purchasing and selling with the rest of the world at a breakneck pace as well. It became the largest trader in the world, with the largest amount of imports and exports. By joining the WTO, many foreign companies flocked to the Chinese market, and had access to the world’s largest workforce that could work intensively at lower costs, and a brand-new export platform. China not only attracted and let investors expand their businesses on the mainland; it also took a leading role investing abroad with a massive overseas capital outflow.

Beijing’s accession to the WTO made things easier and “safer” for foreign countries, especially considering that it now allowed them to trade under the WTO rules and act against China through its mechanisms, if necessary. Latin American countries were no exception: the Sino-Latin American relations experienced an inflection point in 2001, which initiated an unprecedented process that intensified the relationship. During this time, China became a major contributor to one of Latin America’s best growth spurts in decades: LAC economy grew by 3.6 percent per year. This return to economic growth brought a rise to an emerging middle class in many Latin American countries: incomes grew in the region by 2.4 percent annually⁸¹

China’s demand for Latin American commodities had double impact, however. Because China’s consumption of these goods made those goods more scarce, the prices of such goods went up in the global marketplace, allowing the region to enjoy a massive commodity boom. What is more, for the first time in a century Latin American governments started to put a dent in rising inequalities: in setting up and bolstering programs that reduced poverty and inequality. During the China Boom, Latin American inequality declined by as much as it had increased during the Washington Consensus.

⁷⁹ 摸着石头过河. Gallagher, 2016. *The China Triangle*. P. 6

⁸⁰ Gallagher, 2016

⁸¹ Gallagher, 2016. P. 43

According to Nora Lustig,⁸² two were the leading reasons for reduction in inequality. The first one was an increase in worker incomes during the period. Income rises were in part driven by commodity exports to China and beyond, but also due to skill level rises in some countries and hikes in minimum wages, as in the case of Brazil. The second one was an increase – in scale and strategy – in government antipoverty programs. The countries that decreased inequality the most were among the most unequal to begin with. One of the innovative programs pioneered by Brazil and Mexico that has swept across Latin America and the developing world, is called Conditional Cash Transfer, or CCTs.⁸³ Antipoverty programs like these were bolstered by income windfalls from the China Boom, especially in South America.

Chinese demand was a big lift, that also allowed the region to be less hard hit by the global financial crisis. As figure 1 shows, the China Boom is the period of the greatest per capita growth rate in over a hundred years. Nonetheless, the state-led industrialization period saw 4.9 percent in absolute growth.⁸⁴

Figure 1: Latin America’s Growth Record

Period	GDP growth	GDP per capita growth
Commodity Lottery (1870–1929)	3.4%	1.5%
State-led industrialization (1930s–1980)	4.9%	2.2%
Washington Consensus (1980–2002)	2.4%	0.5%
China Boom (2003–2013)	3.6%	2.4%

Source: Gallagher, 2016

The Latin American commodity boom, brought windfall profits to the region, and the increasing

⁸² Nora Lustig: Nora Lustig is Samuel Z. Stone Professor of Latin American Economics and Director of the Commitment to Equity Institute (CEQ) at Tulane University. Professor Lustig’s research focuses on economic development, poverty and inequality, and social policies in developing countries.
<http://www.noralustig.org/>

⁸³ Gallagher, 2016. “Under a CCT households are given funds on condition that they send their children to school and get regular check-ups. Not only does such an approach help the poor immediately, but it helps build a healthy and more skilled workforce for tomorrow.”

⁸⁴ Gallagher, 2016

terms of trade for Latin America, helped the region accumulate more foreign exchange reserves, which help boost investor confidence and provide insurance in case of pressure on their exchange rates.

By the mid-2000s, the Latin American economies started to be tightly linked to the fate of the Chinese economy. By 2007, the co-movement of the economic activity between Latin America and China notably began to intensify, and then started to move in lockstep after the financial crisis. Indeed, Latin America's economy is now so connected to China's, that even small changes in the Chinese economy affect Latin American currencies and capital markets.

2.3 Latin America and China's trade flow during the China Boom

As we mentioned above, Chinese consumption boomed and imports rose. According to Elizabeth Economy and Michael Levi, between 1980 and 2010, oil and coal consumption both doubled roughly every dozen year, reflecting the structural shift in China's economy towards energy-intensive heavy industry and infrastructure investment. From 2000 and 2010, copper used more than tripled. The demand of iron ore increased as the production of steel quintupled, China leapfrogged past traditionally dominant importers to become the number one importer of iron ore. Natural gas use doubled roughly every five years between 1995 and 2010. Agriculture imports rose by 23 percent annually from 2001 and 2010. By 2009 China became the largest importer of soybeans, and by 2014 it accounted for 70 percent of global imports of soy.⁸⁵ For all these commodities, Latin America became a uniquely important source of supply for China.

According to Kevin Gallagher, at the turn of the twenty-first century, Latin American trade with China was only 1 percent of total Latin American trade, \$12 billion; by 2013, it was \$289 billion. China became the number one trading partner for many of Latin America's biggest economies like Brazil,⁸⁶ Peru, Chile, and others.

As figure 2 shows, iron ore is at the top of the list, and Brazil won the iron ore lottery for the region during the China Boom. China's largest supplier of iron ore remains Australia, however it gets one-third of all its imported iron ore from Latin America, and almost all of it from Brazil. Other countries involved are Chile and Peru, and for a small share Argentina and Venezuela.

⁸⁵ Economy E. and Levi M, 2014. *By All Means Necessary: How China's Resource Quest is changing the World*. New York: Oxford University Press

⁸⁶ Finance.eastmoney.com, January 3, 2019 *Zhōngguó 2018 nián jìxù chéngwéi bāxī zuìdà màoùyì huǒbàn 中国2018年继续成为巴西最大贸易伙伴 (China will continue to be Brazil's largest trading partner in 2018)*. Available at: <http://finance.eastmoney.com/a/201901031018835593.html>

Besides staple crops, China has become a major importer of soy from Latin America as well. During the China Boom, soy exports to China were the region's second largest export to China. Brazil has the largest share of soybeans exports to China, whereas Argentina is the largest exporter of oils. Colombia, Bolivia, Paraguay export soy as well, but their share is smaller. In 2009, 58 percent of all Chinese imports of soybeans came from LAC, mostly from Brazil. In the same year, 95 percent of China's imports of soy oil came from Argentina, representing 73 percent of that country's soy oil exports. ⁸⁷

Copper is Latin America's third largest export to China: 54 percent of China's copper imports come from Chile and Peru. Copper in China accounts for 40 percent of global demand, and it is not only used as a building material, or as a key transmitter of electricity, copper is also used as collateral for credit or as hedging device. ⁸⁸

Lastly, Venezuela, Colombia, Brazil, Ecuador, and Mexico together provide Latin America's fourth largest export to China – petroleum. In 2013, China consumed 10.7 million barrels of oil per day but produced less than half that amount. In 2015, China became the largest importer of oil in the world. ⁸⁹ More than half of China's oil imports come from the Middle East, however 10 percent come from the Americas, with Venezuela and Brazil being the largest providers.

Between 2008 and 2012, 86.4 percent of Latin American exports that went to China (over 15 percent of total from the region) were in the primary commodities sectors, and 13.3 percent in manufacturing.

⁹⁰

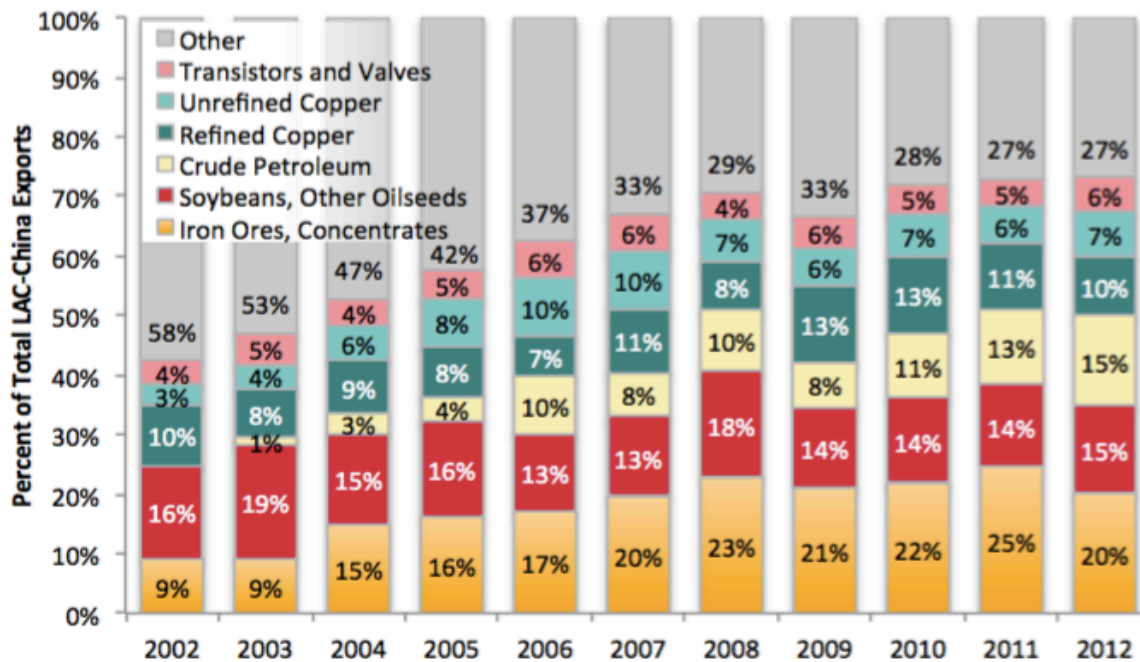
⁸⁷ Gallagher, 2016

⁸⁸ Chinese collateral financing deal, “*in a typical copper financial deal, an importer puts down nearly the full value of the copper in yuan as a deposit to a bank for a letter of credit. The importer resells the copper into the domestic market to raise cash that can be used for other investments or other asset classes such as real estate. In other cases, the importer can purchase the copper and store it in a bonded warehouse in China or overseas in return for a loan from a foreign bank.*” <https://www.reuters.com/article/copper-financing/copper-miners-blind-spot-chinese-collateral-financing-deals-idUSL6N0N158020140416>

⁸⁹ Time, May 11, 2015. *China Has Become the World's Biggest Crude Oil Importer for the First Time*. Author, Kevin McSpadden. Available at: <https://time.com/3853451/china-crude-oil-top-importer/>

⁹⁰ Gallagher, 2016.

Figure 2: Distribution of LAC-China Exports Among Major Commodities, 2002-2012



Source: Ray and Gallagher 2013

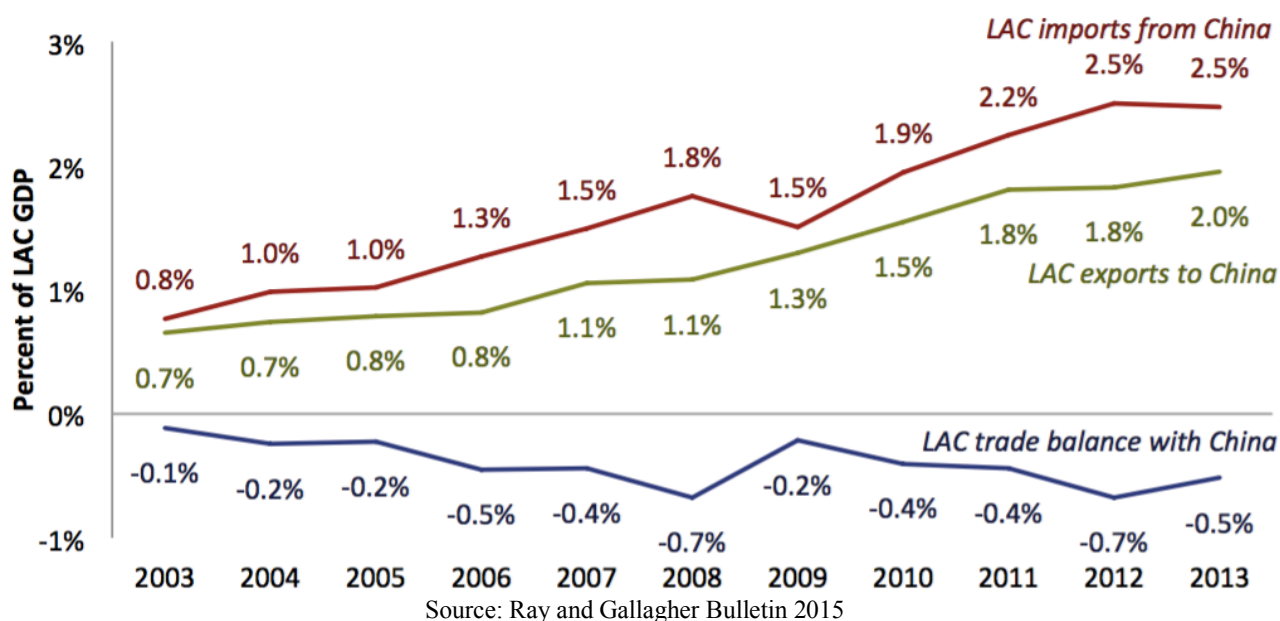
LAC exports to China have soared since 2000: from 2006 to 2011 the average annual export growth to China was 23 percent. In 2012, commodity prices were falling and the related slowdown in economic growth in China caused a considerable slowdown in the exports growth rate, growing by only 7.2 percent in real dollar terms.⁹¹ In the same year, the region sent US\$130.9 billion exports to China.

In 2013, Latin America and the Caribbean sent China US \$112 billion in goods (equal to a record 2.0% of regional GDP). In the same year, China overtook the United States as the top export destination, buying 14% of South American exports, compared to 12% for the United States. The US still has a dominant market share of 69% in Mexico, Central America, and the Caribbean, where China bought only 2% of exports.

Of course there was and there is more to trade than just exports. Imports from China have been just as remarkable as exports to China for Latin America. As in the case of exports, imports have grown by a factor of 20 since 2000, whereas imports from the rest of the world only grew by a factor of 2. Their value has grown at a slightly faster pace than LAC exports to China, opening a LAC trade deficit in goods with China in 2011 and 2012.

⁹¹ “In 2012 commodity prices fell by 3.2 percent and the Chinese economy slowed to 7.7 percent”. Source: Ray R. and Gallagher K.P, 2013. *2013 China – Latin America Economic Bulletin*. BU Global Economic Governance Initiative. Page 4

Figure 3: LAC Trade in Goods with China, 2003-2013



The structure of trade between China and Latin America has been increasingly characterized by the center-periphery type of relation, with Latin America exporting primary products and resource-based manufactures in exchange for Chinese manufactured goods and refined petroleum. As figure 4 shows, Chinese exports to LAC are more diverse than LAC exports to China, with a heavy emphasis on electronics and vehicles.

Figure 4: Top Five Exports between LAC and China from 2009 to 2013

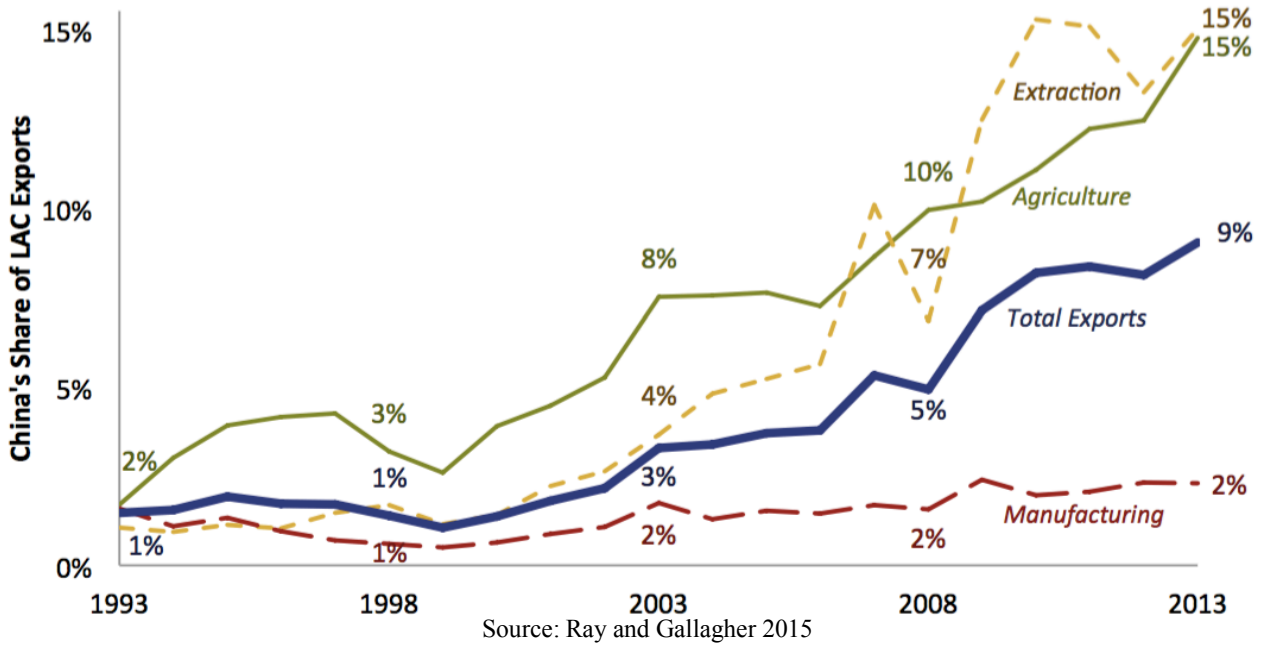
Top LAC Exports to China		Top Chinese Exports to LAC	
Item	Share of total	Item	Share of total
1. Iron ore and concentrates	20%	1. Telecom equipment, parts	10%
2. Soybeans and other oilseeds	18%	2. Data processing equipment	4%
3. Copper	14%	3. Ships, boats, floating structures	4%
4. Copper ores, concentrates	10%	4. Optical instruments	3%
5. Crude petroleum	9%	5. Refined petroleum products	3%
Total of top 5	69%	Total of top 5	23%

Source: Ray and Gallagher 2013

China remains a unique export market for Latin American goods, but limited to primary sectors. China has been an important driver of growth in LAC's agricultural and extractive sectors. For agriculture, the share has doubled in the last five years, and risen by half for extraction, but it has barely moved for manufactured goods. As figure 5 shows, in 2013 China bought 15% of LAC's

agricultural and extractive exports, but just 2% of LAC manufactured exports.

Figure 5: China’s share of LAC goods exports, by sector



If LAC does not differentiate its export basket to China, its products would be vulnerable to world price swings, or to changing Chinese demand. Diversifying out of commodities, is of extreme importance for Latin America, to be less dependent on the booms and busts of commodity markets.

2.4 Chinese Investment in LAC: OFDI and Lending

China not only attracted and let investors expand their businesses on the mainland, it also took a leading role investing abroad with a massive overseas capital outflow. According to Kevin Gallagher, former Chinese Presidents Jiang Zemin (1993-2003) and Zhu Rongji (1998-2003) both championed the globalization of Chinese investment and lending.⁹² In 1998, then President Jiang Zemin claimed that China should have taken advantage of the big markets and the abundant resources that developing regions, such as South America and Africa, had to offer. A few years later, then Chinese Premier Zhu Rongji was fostering Chinese companies to invest abroad as part of the Tenth Five-Year plan (2001-2005). These were his words:

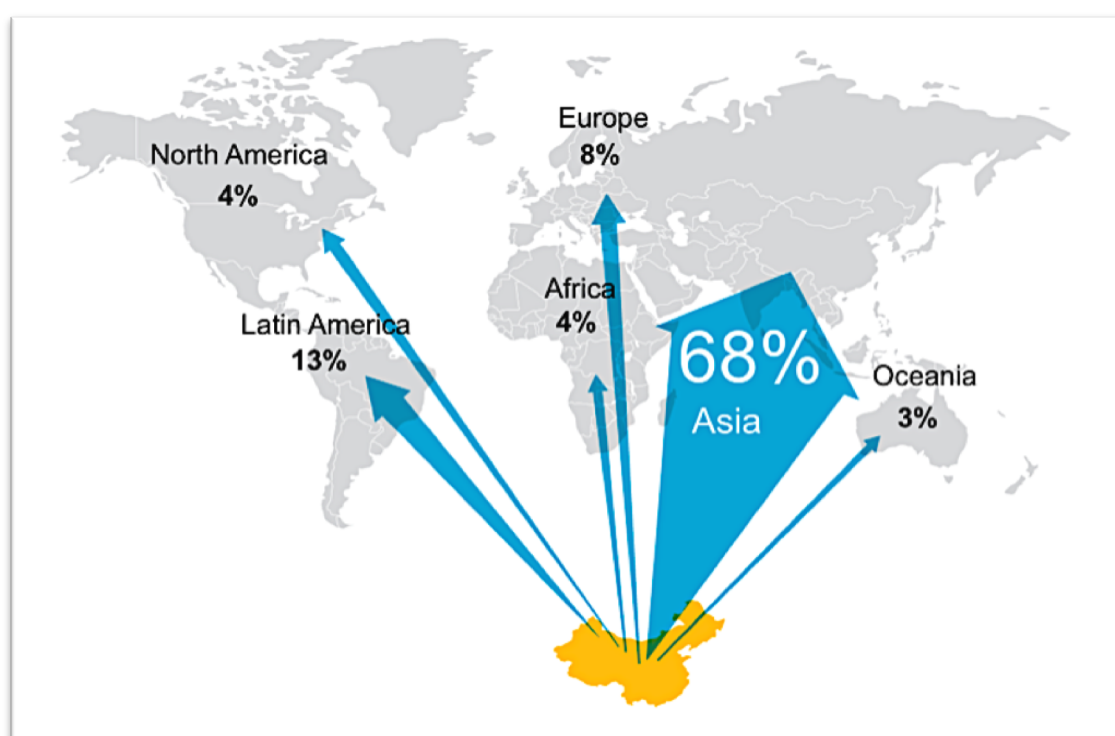
We need to implement a “going outside” strategy, encouraging enterprises with comparative advantages to make investments abroad, to establish processing operations, to exploit foreign resources with local partners, to contract for international engineering projects, and to increase

⁹² Gallagher K. P., 2016

the export of labor. We need to provide a supportive policy framework to create favorable conditions for enterprises to establish overseas operations.⁹³

The strategy did deliver quick results. According to China's Ministry of Foreign Commerce (MOFCOM), China's outward foreign direct investment (OFDI) flows boosted from less than \$1 billion in 2000 to \$57.9 billion in 2010. The stock of OFDI grew from roughly \$27 billion in 2000 to over \$296 billion in 2010.⁹⁴ According to Ryan Berger⁹⁵, in the same year, China was already the third largest foreign investor in Latin America, following the US and the Netherlands; in 2013, the region became the second largest recipient of Chinese overseas FDI, receiving 13% of China's Outward Foreign Direct Investment. ⁹⁶

Figure 6: World's Distribution of China's OFDI in 2013



Source: Zhou and Leung, 2015

⁹³ Kevin P. Gallagher, 2016. P.

⁹⁴ World Resource Institute, May 7, 2011. *Emerging Actors in Development Finance: A Closer Look at Chinese and Brazilian Overseas Investments*. By Xiaomei Tan

<https://www.wri.org/blog/2011/06/emerging-actors-development-finance-closer-look-chinese-and-brazilian-overseas#fnref:9>

⁹⁵ Americas Quarterly, Winter 2012, *The Fast Ramp-Up: The Economics Of The China–Latin America/Caribbean (Lac) Relationship*. By Ryan Berger. Accessible at:

http://www.americasquarterly.org/charticles/charticle_winter2012/Charticle_winter2012.pdf

⁹⁶ World Resource Institute, January 28, 2015. *China's Overseas Investments, Explained in 10 Graphics*. By Lihuan Zhou and Denise Leung. Accessible at: <https://www.wri.org/blog/2015/01/china-s-overseas-investments-explained-10-graphics>

Although Chinese official statistics show a certain amount of OFDI from China, it is worth mentioning that they might not fully reflect the final destinations of the investment. As many companies from different countries, some Chinese firms firstly invest in tax heavens or offshore financial centers, such as Hong Kong, The British Virgin Islands and Cayman Islands. Then, subsidiaries from these offshore financial centers reinvest the same money in other destinations, for example in what could be a major merger and acquisition in Latin America. Official Chinese OFDI statistics only indicate the first destination of the investments. In 2011, the Financial Times⁹⁷ and Reuters both reported that China Petroleum and Chemical Corporation (SINOPEC) acquired 30 percent of Galp Energia (Brazil) for \$5.2 billion through its Hong Kong subsidiary, Sinopec International Petroleum Exploration and Development Corporation (SIPC). The deal would be recorded as OFDI in Hong Kong, rather than in Brazil.⁹⁸

Through OFDI and lending, Chinese investments play an important role in the development of different Latin American sectors. The pattern of Chinese investment in Latin America largely tracks that of trade, therefore it is concentrated among some countries and in the energy, mining and food sectors, in contrast with other foreign investors, that prefer to invest into manufacturing and services. Another characteristic of Chinese investments in Latin America is that they are dominated by state-owned enterprises, rather than by private sectors firms or multinationals. OFDI is largely financially supported by Chinese banks. Later in this chapter, we will deepen this argument.

Outward foreign direct investment in Latin America contains two major components: Greenfield Investments and Mergers and Acquisitions (M&A).⁹⁹ Greenfield projects from China to LAC have grown since 2003, however they remain relatively small and are highly concentrated. Actually, they make up less than half of total FDI flows, but are perhaps more significant, as they involve growing the region's capital stock. They amounted to US\$3.7 billion in 2012, or about 5.4 percent of all greenfield inflows (US\$68.3 billion). As figure 7 shows, Chinese greenfield FDI has become increasingly concentrated among five major industries. These five sectors, made up over 95 percent of all Chinese greenfield inflows: food and tobacco; automotive OEM; metals; coal, oil and natural

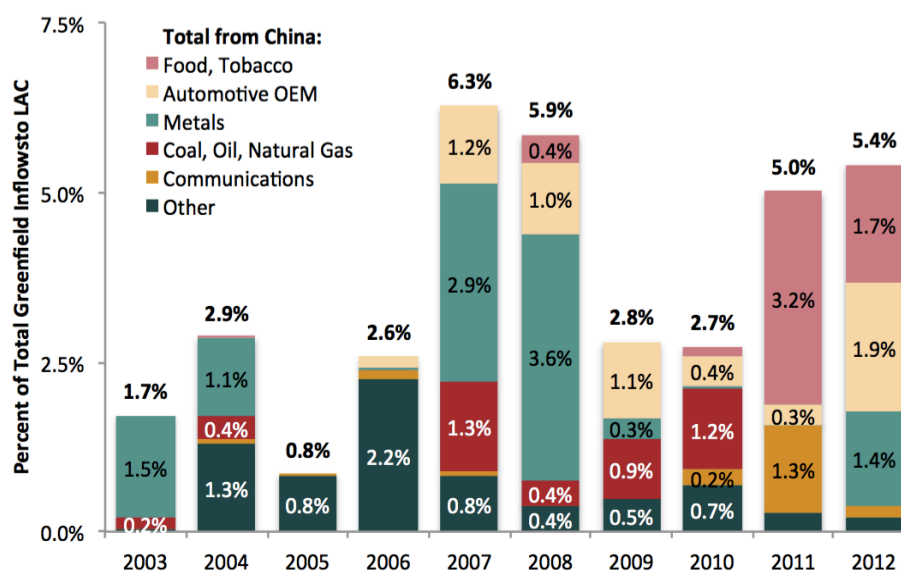
⁹⁷ Financial Times, 2011. *Sinopec Buys Stake in Galp's Brazil Assets*. Accessible at: <https://www.ft.com/content/520de826-0c3e-11e1-8ac6-00144feabdc0#axzz3Q2chGPKz>

⁹⁸ Reuters, November 11, 2011. *Sinopec Signs \$3.5 Billion Deal for Galp's Brazil Oil Asset*. By Judy Hua, Wan Xu, Ken Wills. Accessible at: <https://www.reuters.com/article/us-galp-brazil-sale/sinopec-signs-3-5-billion-deal-for-galps-brazil-oil-asset-idUSTRE7AA0ZF20111111>

⁹⁹ Foreign direct investment (FDI) is an investment made by a firm or individual in one country into business interests located in another country. Generally, FDI takes place when an investor establishes foreign business operations (Greenfield Investment) or acquires foreign business assets, including establishing ownership or controlling interest in a foreign company (Merger and Acquisition).

gas; and communications. The shifts between the industries shown in figure 7 are due two different investments operated by Chinese companies through the period shown.¹⁰⁰

Figure 7: Chinese Greenfield FDI in LAC, by Sector, as a Share of Total LAC Greenfield Inflows

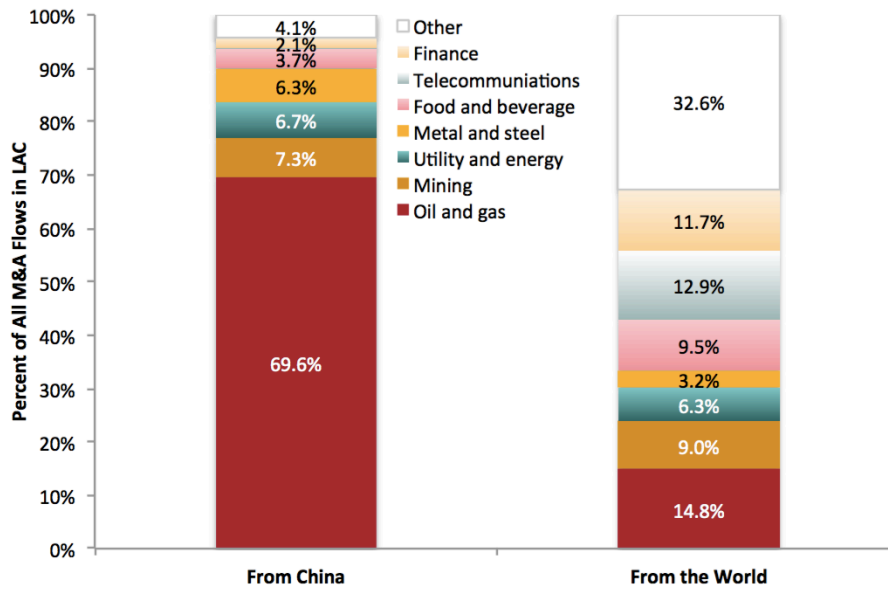


Source: Ray and Gallagher 2013

Mergers and acquisitions (M&A) investments are distributed among the same industries as greenfield FDI. Compared to other M&A inflows to LAC, they are different, as figure 7 shows, where the five sectors we mentioned above, make up over 95 percent of M&A inflow from China, and mostly in oil and gas.

¹⁰⁰ Investments: major agreements changed the distribution of FDI: in 2011 a US\$2.5 billion project by the Chongqing Grain Group growing and processing soybeans in Bahia, Brazil and an agreement of over US\$1 billion by Heilongjiang Beidahuang raising grain and oilseeds in Rio Negro, Argentina. In 2012 automotive replacement parts (OEM, for “original equipment manufacturer”) started five smaller projects in Brazil and Paraguay. In 2012, another deal by the Chongqing Grain Group of over US\$1 billion in Argentina.

Figure 8: Inflows from mergers and acquisitions, by Industry, 2008-2012



Source: Ray and Gallagher 2013

China’s most important large state-owned firms – China National Petroleum Corporation (CNPC), China National Offshore Oil Corporation (CNOOC), and China Petroleum and Chemical Corporation (SINOPEC), dominate investments in hydrocarbons. All of them are financially backed by China Development Bank (CDB), which is one of the key engine of the Going Out strategy. Firms in the energy sector are more apt to M&As in order to develop familiarity with the local market and regulations.

Regarding the oil and gas sector, Argentina and Brazil are the recipients of the majority Chinese investment: in 2010 SINOPEC acquired 23 oil fields operated by Occidental Petroleum (US) in the Argentinian Provinces of Santa Cruz, Chubut, and Mendoza. At the time of the acquisition, the proven reserves had already reached 393 million barrels and they represented 6.4 percent of Argentina’s total oil production. In 2012, SINOPEC’s exports from Argentina were \$1.2 billion.¹⁰¹ Regarding Brazil, in 2010, SINOPEC purchased 40 percent stake in Repsol YPF Brazil S.A. for \$7.1 billion.

Colombia, Ecuador, Peru, and Venezuela are also important destinations for oil and gas sector. For example, in 2012, SINOPEC purchased 9 projects including 20 percent equities of Ecuador 16/T Block.

Related to the mining sector, the largest M&A project was in 2011 when to grant access to natural resources, CITIC Group, Shougang Corp., Baosteel Group Corp., Taiyuan Iron and Steel (Group) Co. Ltd., Anshan Iron and Steel Group Corp, all Chinese state-owned enterprises, purchased a 15 percent

¹⁰¹ Gallagher, 2016

stake in the Brazilian mining firm Companhia Brasileira de Metalurgia e Mineracao for 2 billion dollars. Ecuador and Peru are perhaps the main destinations of Chinese investment in mineral resource extraction. In Peru, Chinese companies engaged in at least eight major projects, like the Shougang iron mine. According to Shougang CEO and GM, since 1993 to date the corporation has invested \$2 billion in Peru.¹⁰² Related to the energy investment, the electricity sector is mainly driven by China's State Grid Corporation. It is the largest electricity company in the world, and is the fourth largest energy transmission company in Brazil. Besides purchasing seven national electricity transmission companies and twelve transmission lines, in 2010 was responsible for the acquisition of Expansión Transmissão Itumbiara, for \$1.7 billion.

The agricultural sector is also a recipient of Chinese investment. China agricultural expansion in Latin America to gain food security involves plantations of oil seeds, vegetables and cotton; harvesting and shipping of timber; and ocean fisheries. Bolivia, Argentina, Brazil and Chile are the main countries involved in transactions. Chongqing Grain Group is one of the key players of the development of this sector in LAC.

Together with increased volumes of OFDI, China has also become a major provider of loans to Latin American countries. According to the China-Latin America Finance Database, since 2005 Chinese policy banks have provided more than \$150 billion in loan commitments to Latin American and Caribbean (LAC) countries and state-owned firms. The two banks responsible not only for these lending, but also for finance sponsoring most of the projects mentioned above, are China Development Bank (CDB), and China Export-Import Bank (CHEXIM). Chinese policy banks have become an important alternative for Latin American countries, especially for those that have been disqualified from receiving funding from traditional investors and multilateral institutions, such as the World Bank (WB), and the International Monetary Fund (IMF). CDB and CHEXIM lending to LAC governments tend to be lines of credit or loans at commercial rates.

In addition, it seems that Chinese banks lend money, regardless of the political stability situation in the country. Since 2005 to date, the largest amount of Chinese lending in Latin America, were concentrated more in South America and saw different countries as recipient: Venezuela has received \$67,2 billion; Brazil, \$28,9 billion; Ecuador, \$18,4 billion; Argentina, \$16,9 billion, 53 loans all together. Forty of them were in the energy sector and twelve went into infrastructure.¹⁰³

¹⁰² Andina, Agencia Peruana de Noticias, July 7, 2018. *Peru: Shougang Expansion to Increase Iron Production* <https://andina.pe/Ingles/noticia-peru-shougang-expansion-to-increase-iron-production-719527.aspx>

¹⁰³ China-Latin America Finance Database. accessed in January 2019 https://www.thedialogue.org/map_list/

The two policy banks were founded in 1994 after a series of reform of the China's financial sector, to support the government's policy objectives with loans. The CDB mainly supports energy and infrastructure projects focusing on eight sectors of development: electric power, coal, road construction, railway, petroleum and petrochemical, postal and telecommunications, agriculture and related industries, and public infrastructure. It focuses on project finance, export credits, and loans to Chinese firms at home and for their overseas investments.¹⁰⁴ In the last few years it provided loans to more than 140 foreign companies and foreign governments, such as Ecuador, Brazil, and Venezuela. In countries where China mainly invests to get access to natural resources, the loans are commodity-backed, which means that the value of the loan is directly related to the price of a specified commodity. In Ecuador, Brazil, and Venezuela, lending is secured in oil, and each loan-for-oil¹⁰⁵ is secured by revenue received from transfers of oil, in this case, to a Chinese oil and gas company. Some of these loan-for-oil deals have also facilitated National Oil Companies' and other state-owned firms' involvement in the host countries, involving infrastructure projects, for example in Ecuador, upstream contracts for Chinese firms, in Brazil, and some to the purchase of Chinese equipment, mainly Venezuela and Brazil.

Another type of financial support operated by CDB are equity funds.¹⁰⁶ Examples of these funds are the China-Africa Development Fund established in 2007 to boost Chinese investments in the region.

The second major Chinese policy bank is the China Export-Import Bank. Its mission is to:

facilitate the export and import of Chinese mechanical and electronic products, complete sets of equipment and new-and high-tech products, assist Chinese companies with comparative advantages in their offshore contract projects and outbound investment, and promote Sino-foreign relationship and international economic and trade cooperation.¹⁰⁷

¹⁰⁴ Kevin P. Gallagher, 2016

¹⁰⁵ China's loans-for-oil generally combine a loan agreement and an oil-sale agreement that involves two countries' state-owned banks and oil companies. "For example, a Chinese bank grants a billion-dollar loan to an oil-exporting country like Ecuador. Ecuador's state oil company, Petroecuador, pledges to ship hundreds of thousands of barrels of oil to China every day for the life of the loan. Chinese oil companies then buy the oil at market prices and deposit their payments into Petroecuador's CDB account. CDB withdraws money directly from the account to repay itself for the loan. The majority of Chinese loans-for-oil in Latin America are therefore linked to market prices, not quantities of oil." <http://ase.tufts.edu/gdae/Pubs/rp/GallagherChineseFinanceLatinAmericaBrief.pdf>

¹⁰⁶ An equity fund is a mutual fund that invests principally in stocks. It can be actively or passively (index fund) managed. Equity funds are also known as stock funds.

¹⁰⁷ Eca Watch, *China Export-Import Bank* <https://www.eca-watch.org/ecas/exim-bank-china>

CHEXIM main business scope is to function as China's exports credit agency, hence it exports and imports credit, lends loans for offshore contracts and overseas investment. It also offers other forms of trade finance providing letters of guarantee, letters of credit and forfeiting.

Both banks lend loans primarily to public-sector and state-owned firms, however some private firms of strategic importance such as Huawei and ZTE (telecom) signed financing deals with the CDB; Huawei has a \$30 billion credit line and ZTE has \$15 billion.

Although CDB and CHEXIM lack of transparency and do not habitually and methodically publish their annual global disbursement, the China Global Energy Database at Boston University's Global Development Policy Center¹⁰⁸ tracks data on overseas activities and the international financing to governments by the CDB and CHEXIM.

The majority of Chinese loans are CHEXIM's non-concessional loans and CDB overseas loans in regions that are usually destinations of concessional lending. The volume of those granted as commercial loans by MOFCOM or Sinosurecovered is not as large as that of the policy banks, and account for a limited share of the total development-finance credit. These loans also have the characteristic to be lend to developing countries that are strategically important areas or have abundant resources.

Chinese contractors that aim to participate in international bids must acquire several documents from government organs, such as the Minister of Commerce (MOFCOM) and the National Development and Reform Commission (NDRC). The first one regulates banks' lending process and has the right to veto projects after a series of evaluation on the job, the company's experience and professionalism and the risk level of the country. The Minister of Commerce also sets guidelines and Regulations for the behavior of overseas companies.

The NDRC supervises Chinese firms' outward direct investment and often publishes a list of allowed and encouraged investments overseas.

The risk for these loans are high, however some of the loan structures are relatively flexible and since the main lenders are China's policy banks, which are state owned, the cost of their capital is determined by the state rather than the market. In addition, these loans are highly political in nature and therefore, depending on the political and diplomatic climate, could allow for deferred repayment schedules when needed (Venezuela, Ecuador).

¹⁰⁸ China Global Energy Database: <https://www.bu.edu/gdp/>

The bulk of commodity-backed Chinese finance to these countries is for oil exploration and extraction. This, in addition with mining activities sponsored in Peru, the deforestation of the Amazon for soy cultivation, several dam projects, like Coca Codo Sinclair in Ecuador¹⁰⁹ and all the infrastructure projects related to these investment, has created and is still creating controversy in Latin America, and among the international community, between investors, governments and indigenous communities. 110

The main issue is that countries in the region are still highly dependent on the extraction and the export of primary commodities. Thus the economic development and related activities promoted until now, not only by China, involve sensitive sectors, which are strongly correlated to environmental degradation and social conflicts. They involve high biodiverse areas and indigenous communities. In the next chapter, we will examine the impacts of extraction activities in the region, with a focus on the environmental and social aspects.

¹⁰⁹ The New York Times, December 24, 2018. *It Doesn't Matter if Ecuador Can Afford This Dam. China Still Gets Paid.* By Nicholas Casey and Clifford Krauss. Accessible at: <https://www.nytimes.com/2018/12/24/world/americas/ecuador-china-dam.html>

¹¹⁰ Gallagher K.P., 2016

3. Sustainability issues brought about by Chinese investments in the region

The previous chapter explained how since the Colonial Times, exploitation of natural resources have been at the heart of many economies in Latin America and the Caribbean (LAC)¹¹¹, being a key for trade and economic growth in almost every country of the region.¹¹² LAC natural resource wealth, has continuously attracted foreign countries' attention too, who during the years have developed numerous projects in different extraction sectors, in the rainforest of Brazil, Ecuador, and Peru; in the mines of Bolivia; and beyond. According to Paulina Garzón, exploitations led by foreign companies follow an emblematic model, in which the investor is the dominant economic beneficiary and the natural capital of the borrowing countries is rapidly depleted.¹¹³ Although extractive activities are well known for their imposition of costs on the environment and nearby populations, they have been largely justified by different governments – like those of Ecuador, Bolivia, and Venezuela – as a necessity to fight poverty and social inequality,¹¹⁴ since an expansion of extractive activities is the easiest and most immediate source of government revenue.¹¹⁵ Energy and natural resource extraction has long been carried out with inadequate respect for the environment and has been endemic to social conflicts across the Americas.¹¹⁶ The forest cover has been depleted, rivers and lakes have been polluted, and dangerous chemicals have entered the soil and the food chain.¹¹⁷ In particular, the Amazon Basin – shared by Venezuela, Colombia Ecuador, Peru, Brazil and the Guianas – home to the world's largest and most important reserves of tropical rain forests, are facing constant risks. Its destruction, is affecting regionally and globally, being a major contributor to global warming and to the greenhouse effect.¹¹⁸

¹¹¹ Toscani F., 2017. *The Impact of Natural Resource Discoveries in Latin America and the Caribbean: A Closer Look at the Case of Bolivia*. IMF

¹¹² Gallagher, 2016

¹¹³ Paulina Garzón, 2015. *Legal Manual on Chinese Environmental and Social Guidelines for Foreign Loans and Investments: A Guide for Local Communities*. Centro de Derechos Económicos y Sociales

¹¹⁴ Brand, U., Dietz, K. y Lang, M. (2016). *Neo-Extractivism in Latin America. One Side of a New Phase of Global Capitalist Dynamics*. *Ciencia Política*, 11(21), 125-159.

¹¹⁵ Edgardo Lander, 2013. *Extractivism and Protest Against it in Latin America*

¹¹⁶ Gallagher, 2016. P. 118

¹¹⁷ Victor Bulmer Thomas, *The Economic History of Latin America Since Independence, Second Edition, 2003*

¹¹⁸ Victor Bulmer Thomas, *The Economic History of Latin America Since Independence, Second Edition, 2003*

3.1 Consequences of extractive activities in LAC: focus on Chinese activities and environmental and social aspect

Among the most relevant economic partners and investors in Latin America and the Caribbean there is China, who since the beginning of the XXI century, grew its participation and presence especially into the extraction and agricultural sectors, as well as in several projects linked and aimed to support and facilitate trade and investment, as new infrastructures and the construction of dams.¹¹⁹ In particular in Ecuador, according to Paulina Garzón, nowadays the number of Chinese companies is dominating the oil, mining, and hydroelectric sectors.¹²⁰ In Peru, there are approximately fourteen Chinese mining companies, the largest ones are the consortium Minerals and Metals Group (MMG), Aluminium Corporation of China (Chinalco), Shougang Corporation, and Zijin Mining Group.¹²¹

Given the current pattern and bulk of China-Latin American trade and investment being mostly directed to sensitive sectors, they are endemic to environmental degradation, high carbon emissions, and social conflicts.¹²² Various operative and planned projects cut right across some of the region's biodiversity hotspots, national reserves, national parks, and places where indigenous communities earn their livelihoods. Estimates by the World Bank show that the economic costs of natural resource degradation in LAC already increased considerably during the China-led commodity boom. Rightly or wrongly, Chinese deals and firms are increasingly perceived as the face of a new environmental destruction,¹²³ rolling back indigenous peoples rights and undermining some countries sovereignty and democracy.¹²⁴ In Ecuador, these deals are also increasing the country's dependence on Amazonian oil, instead of keeping it in the ground to help combat climate change.¹²⁵

In *The China Triangle*, Gallagher states that according to the United Nations, during the China Boom, Latin America would annually lose 0.46 percent of forest – more than three times the global rate per annum. This is alarming given that Latin America and the Caribbean is among the world's most

¹¹⁹ Paulina Garzón, 2015.

¹²⁰ Paulina Garzón, June 7, 2019. Telephone interview

¹²¹ Interactive Documentary, *Inversiones Chinas en Peru – Chinese Investments in Peru*, 2018. Published by Inversiones Chinas en Peru. <http://inversioneschinasperu.org>

¹²² Ray R. and Chimienti A., 2015. *A Line in the Equatorial Forests: Chinese Investment and the Environmental and Social Impacts of Extractive Industries in Ecuador*. BU Global Economic Governance Initiative

¹²³ Gallagher, 2016. P. 118

¹²⁴ Amazon Watch, March 18, 2014 *China's Presence Grows in Ecuador: New report analyzes threats to Ecuador's sovereignty and rainforest*. Paul Paz y Miño <https://amwt.ch/3237>

¹²⁵ Amazon Watch, March 18, 2014 *China's Presence Grows in Ecuador: New report analyzes threats to Ecuador's sovereignty and rainforest*. Paul Paz y Miño <https://amwt.ch/3237>

biodiverse regions in the world “housing 21 percent of the world’s land, 22 percent of the world’s marine ecosystems, and 16 percent of the world’s freshwater ecosystems”.¹²⁶

3.1.1 The Environmental Sphere

Oil exploration, drilling and extraction have been refereed by experts as “upstream” phases of the oil production cycle. One of the first impacts of oil extraction is habitat fragmentation, largely caused by seismic lines. Seismic lines are straight paths of one to twelve meters wide, drawn before the extraction takes place. Between 1970 and 2010, there have been examples that make up to more than 104,000 km seismic lines cut only in the Peruvian Amazon.¹²⁷

Deforestation, due to the clearing of areas in remote zones, and the moving of large equipment and machines into those areas, are among the upstream environmental and social impacts.

Once drilling and extraction activities begin, they cause oil spills. These oil spills contain compounds like benzene, which are invisible and quickly dissolve in water and spread throughout the aquifer and downstream waterways. Even after some remediation efforts, the water used by neighboring communities can still carry powerful toxins, making traditional livelihoods unsafe.

In Ecuador, activities from the two largest Chinese oil companies, Andes Petroleum and PetroOriental, caused oil spills.¹²⁸ The two companies operate in different oil blocks in Ecuador, located in the Ecuadorean Amazon Rainforest – block 62, 79, 83 (Andes Petroleum), 14 and 17 (PetroOriental). The contexts where these operations are located are environmentally and socially fragile, since the area is completely covered by traditional indigenous territory. Block 62 or Tarapoa is in part located within the protected area of the Cuyabeno National Park, whilst all the other oil blocks, involve the Yasuní Biosphere Reserve and Yasuní National Park. In particular, exploitation developed in block 14 and 17, caused biodiversity loss, loss of landscape, soil pollution, deforestation and loss of vegetation cover, and surface water pollution.¹²⁹ Further attention will be given to those five blocks listed above in the next chapter, not only as cases

¹²⁶ Gallagher, 2016. P. 121-122

¹²⁷ UNEP-WCMC (2016) The State of Biodiversity in Latin America and the Caribbean: A mid-term review of progress towards the Aichi Biodiversity Targets. UNEP-WCMC, Cambridge, UK

¹²⁸ Acción Ecológica, November 15, 2016. *Xi Jinping in Ecuador Episode 4: Socio-environmental record of Chinese oil companies in Ecuador*. Accessible at: <http://www.accionecologica.org/component/content/article/417-cuento-chino/2053-2016-11-15-21-54-52>

¹²⁹ Environmental Justice Atlas, 2015. *Yasuni National Park - ITT oil extraction, Ecuador*. Last update 27/10/2015. <https://ejatlas.org/conflict/yasuni-national-park-itt-oil-extraction-ecuador>

of unsustainable environmental and social practices, but also as representative cases of environmental injustice.

However, China is involved in the exploitation of crude from Yasuní, directly and indirectly. Indeed, according to different sources, Ecuador's debt to China, and loans-for-oil seem to be the reason behind the failure of the Yasuní ITT initiative, one of the most innovative approaches to conservation in the world.¹³⁰ The initiative launched in 2007 by Ecuador former President, Rafael Correa, who promised to prevent the drilling of oil in the Ishpingo-Tambococha-Tiputini (ITT) fields in Yasuní National Park, in exchange for money raised from the international community. As soon as the initiative collapsed, oil companies were ready to extract oil from block ITT (or block 43).

In Bolivia, the company BGP Bolivia, subsidiary of CNPC, operates in the Nueva Esperanza project, located in the Madre de Díos river basin, where the Tacana indigenous people are the inhabitants of the territory. Although the Tacana opposed oil exploration, the Bolivian Government imposed the project, and in 2015 carried out a consultation process.¹³¹ The Tacana finally approved the project under a series of conditions that ensured the least impact on the forests and biodiversity, as well as the protection of the indigenous peoples in voluntary isolation that inhabit that territory, the Toromona.¹³² Nonetheless, during the seismic exploration phase, BGP ignored the agreements and caused environmental damage affecting their livelihoods, including their biggest source of income, the chestnut trees. The agreement was to avoid damaging the trees, affecting water sources, hunting or fishing within the territory. However, 1500 workers occupied the territory and left the chestnut trees mutilated; water sources were used; the workers of the Chinese company hunted and fished. As a result, the animals of mount fled from the zone; rivers and streams have lost their flow; the fish have disappeared.¹³³

In the Nueva Esperanza block, oil exploration activities by BGP have generated impacts in approximately 1,008 km of forest.¹³⁴

¹³⁰ The Guardian, August 16, 2013. *Ecuador Approves Yasuni National Park Oil Drilling in Amazon Rainforests*. By Jonathan Watts. <https://www.theguardian.com/world/2013/aug/16/ecuador-approves-yasuni-amazon-oil-drilling>

¹³¹ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH). P.13 <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

¹³² Mongabay, December 12, 2018. *Inversiones chinas en Bolivia: informe denuncia daños ambientales en territorio indígena*. <https://es.mongabay.com/2018/12/inversiones-chinas-bolivia-danos-ambientales/>

¹³³ Mongabay, December 12, 2018.

¹³⁴ China Ambiente y Derechos, 2019. *Incumplimiento de Obligaciones Extraterritoriales de China en Bolivia* <http://chinaambienteyderechos.lat/bolivia/>

In mining almost every step of the production process can have a significant environmental footprint, that ranges from direct impacts to indirect impacts.¹³⁵ Direct impacts of large-scale mining methods are visible since the first operations - the processes of exploration and predevelopment. These impacts are usually moderate and short term, but include diverse potential impacts such as removal of vegetation for the construction of access roads to the site, drill holes and test pits, and site preparation. Other impacts have been listed by De La Torre, Sinnott, and Nash, as follows “*airborne dust from road traffic, drilling, excavating, and site clearing; noise and emissions from diesel equipment operation, blasting, and traffic; disturbance of soil and vegetation, streams, drainage, wetlands, groundwater aquifers, cultural resources, religious resources, and historic resources; and conflicts with other land uses*”.¹³⁶

After the exploration and predevelopment phase, exploitation is the one that follows. Impacts caused by this phase become larger and involve indirect ones as well, which result in long-term damages - such as discharges of contaminated mine water impacting downstream water users; failure of containment and discharge of waste rocks and tailings materials; use of scarce surface and groundwater aquifers for processing; disruption and contamination of ground-water aquifers. During this phase, explosives are often used to extract minerals. That can stress wildlife and farm animals, while the subsequent dust can cause respiratory problems in people and wildlife alike. Environmental concerns in surface mining include immediate concerns about flying particulates from road traffic, blasting, excavation, and materials transport; air emissions from various point sources; and noise and vibrations from heavy equipment and blasting.¹³⁷ With regard to the mining sector, one major environmental problem are water crisis and shortages. In Bolivia, the south of Potosí, where the Canutillos mine project operated by Chinese company Jungie SRL is located, already suffers from a serious water shortage, impacting on agriculture and drinking water.¹³⁸ In Ecuador, the community affected by El Mirador copper mine, also reported different impacts on

¹³⁵ UNEP-WCMC (2016) The State of Biodiversity in Latin America and the Caribbean: A mid-term review of progress towards the Aichi Biodiversity Targets. UNEP-WCMC, Cambridge, UK

¹³⁶ Augusto de la Torre, Emily Sinnott, John Nash, 2010. *Natural resources in Latin America and the Caribbean: beyond booms and busts?* P. 52

¹³⁷ Augusto de la Torre, Emily Sinnott, John Nash. *Natural Resources in Latin America and the Caribbean : Beyond Booms and Busts?* P. 52

¹³⁸ Saravía Lopez A., Rúa Quiroga A., 2015. *An Assessment of the Environmental and Social Impacts of Chinese Trade and FDI in Bolivia*. BU Global Economic Governance Initiative.
<http://www.bu.edu/pardeeschool/files/2014/12/Bolivia1.pdf>

the environment, such as water pollution.¹³⁹ According to the testimonies, water can no longer be used for agriculture and livestock activities, even less for human consumption.¹⁴⁰ The population also reported that the Chinese firm Ecuacorriente (ECSA) diverted the course of the Tundayme River, to ease the transit of dump trucks in the area.¹⁴¹ The development of the project also caused deforestation and loss of biodiversity. The total amount of deforestation from 2009 to the end of 2017 is estimated at 1,307 hectares.¹⁴² One of the greatest concerns of the local population regarding forest deforestation is the loss of forest fauna, which is an important part of the food sovereignty of the communities, especially for the Shuar population.¹⁴³ The community also denounced air and noise pollution due to vehicle traffic.¹⁴⁴ In Peru, the Río Blanco copper and molybdenum mine operated by Rio Blanco S.A,¹⁴⁵ affects the fragile Paramo and cloud forests ecosystem. The company failed to comply with environmental obligations, such as: (a) lack of canals and sedimentation wells for drainage; (b) discharge into the environment of acid drains with pH, copper and zinc concentrations, which exceed the maximum permitted limits; (c) deficiencies in the management of solid waste and final disposal of the waste.¹⁴⁶

Environmental impacts associated with agricultural activities are different, but typically include air and water pollution from production and processing, as well as issues associated with unsustainable utilization of land resources and loss of natural habitats. Land conversion, often for the cultivation of soy or for cattle, threatens biodiversity because requires clearing of forests. However, the carbon stored in trees is released into the atmosphere, accelerating global climate change.¹⁴⁷ Other damages resulted from agricultural activities are the overuse of chemicals, that impact water and irrigation capabilities, or over-exploitation of scarce water resources.¹⁴⁸ Major threats linked to agricultural activities are present in places like Brazil, Bolivia and Paraguay.¹⁴⁹

¹³⁹ Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017. *La Herida Abierta del Condor. Vulneración de derechos, impactos socioecológicos y afectaciones psicosociales provocados por la empresa minera china Ecuacorriente S.A. y el Estado ecuatoriano en el Proyecto Mirador.*

¹⁴⁰ Interactive Map, July 28, 2018. Impactos del Proyecto Minero “Mirador” en Amazonía. <https://maaproject.org/mirador/>

¹⁴¹ Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017.

¹⁴² Interactive Map, July 28, 2018. Impactos del Proyecto Minero “Mirador” en Amazonía. <https://maaproject.org/mirador/>

¹⁴³ Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017. P.127

¹⁴⁴ Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017. P. 128-129

¹⁴⁵ Rio Blanco S.A: owned by the consortium Zijin Mining Group Co. Ltd. Tongling Non-Ferrous Metals Group Holdings Co. Ltd., and Xiamen C&D Inc.

¹⁴⁶ Interactive Documentary, *Inversiones Chinas en Peru – Chinese Investments in Peru*, 2018. Published by Inversiones Chinas en Peru,. <http://inversioneschinasperu.org>

¹⁴⁷ Gallagher, 2016

¹⁴⁸ Augusto de la Torre, Emily Sinnott, John Nash, *Natural resources in Latin America and the Caribbean : beyond booms and busts?* The World Bank

¹⁴⁹ Gallagher, 2016. P. 121

In particular, soy production has been associated as one of the main drivers of deforestation and the destruction of biodiversity in South America. Its effects increases risk of flooding, soil degradation, and the loss of crucial biodiversity.¹⁵⁰

Soy cultivation is overwhelmingly concentrated in the Brazilian Cerrado, the largest savanna region in South America, essential for balancing the country's ecosystem. This ecoregion includes the states of Goiás, Mato Grosso do Sul, Mato Grosso, Tocantins and Minas Gerais.

The State of Mato Grosso, is one of the main targets for Chinese investment and is the source of most of Brazilian soybeans.¹⁵¹ Between 2013 and 2017, China bought 42% of Brazil's soy, tripling the quantity purchased by the European Union. During those years, Chinese imports of soy from Brazil have caused the deforestation of 223,000 hectares¹⁵², an area equivalent to twice the size of New York City.

Chinese demand for Brazilian soy has spiked in 2018, as a result of the US-China trade war.¹⁵³

A group of scientists warned that the trade war could cause a devastating surge in deforestation in Brazil, as the country is trying to absorb Chinese soy demand.

Another environmental damage connected to all the activities presented above is the expansion of access roads and other infrastructure projects to facilitate extraction and cultivation as well as trade and transportation. The development of infrastructure into remote areas causes loss and fragmentation of habitats, because of land clearing, moving heavy equipment, generation of waste, and an increase in fires. Some ecologists also argue that access roads from extraction projects are considered to be the single largest cause of Amazonian deforestation.¹⁵⁴

Ray, Gallagher, and Sanborn in their study *Standardizing Sustainable Development? Development Banks in the Andean Amazon*, wrote that the Andean Amazon is currently facing a surge in

¹⁵⁰ Carbon Disclosure Project (Cdp), March 21, 2019. *Soy: China's Deforestation Dilemma*. By Pietro Bertazzi and Sabrina Zhang. Accessible at: <https://www.cdp.net/en/articles/forests/soy-chinas-deforestation-dilemma>

¹⁵¹ Fearnside Philip M. & Figueiredo Adriano M.R., 2015. *China's Influence on Deforestation in Brazilian Amazonia: A Growing Force in the State of Mato Grosso*. Working Group on Development And Environment in the Americas, 2015-3. BU Global Economic Governance Initiative. Available at: <http://www.bu.edu/pardeeschool/files/2014/12/Brazil1.pdf>

¹⁵² Diálogo Chino, April 16, 2019. *Tracking China's Soy Footprint in Brazil. New Report Connects Brazilian Soy Exported to China with Deforestation in Specific Municipalities*. Author, Thais Lazzeri. Available at: <https://dialogochino.net/25882-tracking-chinas-soy-footprint-in-brazil/> <https://dialogochino.net/25882-tracking-chinas-soy-footprint-in-brazil/>

¹⁵³ Diálogo Chino, October 19, 2018. *Trade war alarms Brazilian environmentalists: US-China trade hostilities increase demand for Brazilian soybeans and could drive deforestation*. By Manuela Andreoni. Available at: <https://dialogochino.net/12051-trade-war-alarms-brazilian-environmentalists/>

¹⁵⁴ Ray R. and Chimienti A., 2015. *A Line in the Equatorial Forests: Chinese Investment and the Environmental and Social Impacts of Extractive Industries in Ecuador*.

infrastructure projects.¹⁵⁵ According to the Boston University study, between 2017 and 2020, more than \$70 billion worth of infrastructure projects, supported by both development banks and the private sector, are planned for the Amazon Basin region. Roughly one third of the development financial institutions (DFI) infrastructure projects currently planned, has been financed or is expected to be, by CDB and CHEXIM.¹⁵⁶ The projects include the San Gabán III dam in Peru (CDB), and the Rurrenbaque-Riberalta highway in Bolivia (financed by CHEXIM). One more aspect related to infrastructure projects is the facilitation of the movement of other people and settlers, putting further pressure on water supplies, biodiversity, land, local communities, and indigenous peoples.¹⁵⁷

Other projects linked to extractions for their support as electricity suppliers, are hydroelectric dams. These projects are often source of environmental damage and the displacement of numerous people. An emblematic case financed by CHEXIM bank is that of the Coca-Codo Sinclair hydroelectric dam in Ecuador. The dam is considered to be the largest investment in Ecuador, a \$2 billion deal signed between the Ecuadorian state hydroelectric company Coca Sinclair and China' Sinohydro in October 2009.¹⁵⁸ An initial project had actually been rejected decades before the 2009 contract was signed under the Correa Government. The new contract required Ecuador to use Chinese companies in construction, and ended up being located under the Reventador volcano.¹⁵⁹ Dam construction has been marred by controversy. It principally had strong social impact for two reasons. Primary, widespread displacement of local communities was inevitable as dam construction proceeded. Second, during the construction of the dam, deficiencies of health and safety for workers were evident. In December 2014, a landslide killed 14 workers and 12 were injured. The office of the Prosecutor opened an investigation into the presumption of culpable homicide, which was shelved after considering the case a natural disaster.¹⁶⁰ During the following years, the company also violated

¹⁵⁵ Ray R., Gallagher K. P., and Sanborn C., 2018. *Standardizing Sustainable Development? Development Banks in the Andean Amazon*. Published by the Boston University Global Development Policy Center, Center for China and Asia-Pacific Studies- Universidad del Pacífico.

<http://www.bu.edu/gdp/files/2018/04/Development-Banks-in-the-Andean-Amazon.pdf>

¹⁵⁶ Ray R., Gallagher K. P., and Sanborn C., 2018.

¹⁵⁷ Gallagher, 2016.

¹⁵⁸ Amazon Watch, 2014. *Beijing, Banks and Barrels: China and Oil in the Ecuadorian Amazon*.

<http://amazonwatch.org/assets/files/2014-beijing-banks-andbarrels.pdf>

¹⁵⁹ The New York Times, December 24, 2018. *It Doesn't Matter if Ecuador Can Afford This Dam. China Still Gets Paid*. By Nicholas Casey and Clifford Krauss. Accessible at:

<https://www.nytimes.com/2018/12/24/world/americas/ecuador-china-dam.html>

¹⁶⁰ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

labour rights. Ecuadorian workers have frequently gone on strike after mistreatment, lack of health care, food, fair wages, and poor working conditions.¹⁶¹

The project has been carried out scantily, as technicians reported 7,648 cracks in the dam's machinery¹⁶², that will be repaired by a different Chinese company, Harbin Electric starting from May 2019.¹⁶³

3.1.2 The Social Sphere

Several Chinese projects in Latin America have presented an immediate and grave threat to the rights and quality of the lives of local communities, indigenous peoples, and rural populations, who live in areas where projects for oil operations, mining, the agro-industry and the construction of dams are located.¹⁶⁴ Chinese extraction projects in Latin America are mainly located where these people earn their livelihood. Indigenous communities in particular, have always lived of anything the Earth has provided them, and consider the territory where they live, their ancestral land. Consequently, when their land is put at risk by exploitation of natural resources or infrastructure projects, they are affected economically, socially, culturally.

Edgardo Lander, in *Extractivism and Protest Against it in Latin America*, identifies the most common social impacts of the extractive industry in “*Expulsion of peasant and indigenous people and communities from their ancestral territories, destruction of vital headwater*” and the contamination of their land.¹⁶⁵ Social consequences include the appearance or aggravation of existing social problems such as alcoholism, drug addiction, crime and prostitution. Besides, there have been cases where not all the members of the community were against extractive projects. In these cases, governments and companies can create or take advantage of inter-community tensions related to different opinions regarding the advantages and disadvantages of projects, often by differentiating compensation mechanisms and job offers. These economic and social consequences also have a strong influence on mental well-being.¹⁶⁶ In the following chapter, will be presented a case regarding

¹⁶¹ Amazon Watch, 2014. *Beijing, Banks and Barrels: China and Oil in the Ecuadorian Amazon*.

<http://amazonwatch.org/assets/files/2014-beijing-banks-andbarrels.pdf>

¹⁶² Casey N., Krauss C. December 26, 2018.

¹⁶³ El Comercio, May 17, 2019. *La Empresa China Harbin Inicia la Reparación en el Coca Codo Sinclair*. Available at: <https://www.elcomercio.com/actualidad/empresa-harbin-reparacion-coca-codo.html>

¹⁶⁴ Paulina Garzón, 2015

¹⁶⁵ Lander E., 2013. *Extractivism and Protest Against it in Latin America* https://rosalux.gr/sites/default/files/edgardo_lander_extractivism_and_protest_against_it_in_latin_america_draft_.pdf

¹⁶⁶ Observatorio de Conflictos Mineros de América Latina, 2017. “*Impactos de la Industria Extractiva en América Latina*”. Geraldine McDonald, published by International Cooperation for Development and Solidarity (CISDE), January 2009. https://www.ocmal.org/wp-content/uploads/2017/03/impacto_estractivas_al.pdf

the Sápara indigenous community, who suffered internal division during the 11th Oil Bidding Round in Ecuador.

There have been different mining cases, like in the Río Blanco mine or San Carlos Panantza copper project in Ecuador, where due to gender relations and sex-specific responsibilities, the burden of water shortages and contamination borne by women was greater than that borne by men. In these communities, women are responsible for providing water for the household, as well as for the health care of their families.¹⁶⁷

“*The Ecuadorean Resistance*” an article from the South China Morning Post, reported an interview of Luis Tiwiram, a Shuar leader. He claimed that in 2016 his house was one of the first to be demolished by the authorities to make room to the Panantza-San Carlos mine project in the province of Morona Santiago in Ecuador. The mine is operated by the Chinese company Explorcobres S.A. (EXSA), a subsidiary of the Chinese company Ecuacorriente S.A. (ECSA).¹⁶⁸ Tiwiram actually tried to negotiate with the authorities by asking 5,000 hectares of pure jungle. Proving his attachment to the land, he stated that he refused to negotiate with money, arguing that the territory belonged to the whole community. From his point of view, who arrived into his community’s land is an “*invader*”.

The case of oil drilling in Yasuní National Park, where Chinese companies are also involved, has having major social and cultural impacts, such as increase in corruption, displacement, land dispossession, loss of livelihood, lack of work security, loss of traditional knowledge and practices, loss of landscape and sense of place.¹⁶⁹

In November 2018, the International Federation of Human Rights (FIDH) and Colectivo sobre Financiamiento e Inversiones Chinas, Derechos Humanos y Ambiente (CICDHA)¹⁷⁰ submitted a report to the United Nations, during the China’s Third Cycle of the Universal Periodic Review (UPR).¹⁷¹

The report is an initiative undertaken by several civil society organizations from South America, and it presents eighteen projects in Argentina, Brazil, Bolivia, Ecuador and Peru, supported by fifteen

¹⁶⁷ Environmental Justice Atlas, 2017. *Panantza - San Carlos, Ecuador*. Available at: <https://ejatlas.org/conflict/panantza-san-carlos-ecuador>

¹⁶⁸ South China Morning Post, May 25, 2019. *The Ecuadorean Resistance*. By Raquel Carvalho. Available at: <https://multimedia.scmp.com/week-asia/article/3011618/beijing-conquest-latin-america/chapter03.html>

¹⁶⁹ Environmental Justice Atlas, 2015.

¹⁷⁰ In English: Collective on Chinese Financing and Investment, Human Rights and Environment.

¹⁷¹ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

Chinese consortiums and at least six Chinese banks. The cases involve mining and oil industry, and the hydroelectric sector. Moreover, the projects involve fifteen affected indigenous territories; eleven of the projects are located in natural protected areas, and five in natural and cultural heritage of humanity recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO); twelve correspond to the Ecuadorian, Bolivian and Brazilian Amazon Rainforest.¹⁷² When examining the cases, we can observe a systematic violation of human rights. In particular,

- (a) violations of the Right to Participation and Consultation; (b) violation of the Right to Land, Territory and Adequate Housing; (c) Violations of the Right to Integrity, Liberty and Security of the Person, and of the Right to Peaceful Assembly and Association; (d) Violation of the Right to Live in a Healthy Environment; (e) Violations of Workers' Rights and the Right of Association.¹⁷³

Of the cases presented in the report, we only presented those related to mining and oil extractions, and the Coca Codo Sinclair dam in Ecuador,

Human Rights Violations Observed in Bolivia, Ecuador and Peru

Case	Violation of the Right to Participation and Consultation	Violation of the Right to Land, Territory and Adequate Housing	Violation of the Right to Integrity, Liberty and Security of the Person, and of the Right to Peaceful Assembly and Association	Violation of the Right to Live in a Healthy Environment	Violation of Workers' Rights and the Right of Association
Mirador, Ecuador	x	x	x	x	x
San Carlos Panantza, Ecuador	x	x	x		
Rio Blanco, Ecuador	x		x	x	x

¹⁷²Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

¹⁷³ Regional Report, 2018

Oil Block 79, Ecuador	x	x	x		
Oil Block 83, Ecuador	x	x	x		
Nueva Esperanza, Bolivia	x	x		x	
Toromocho, Peru			x	x	
Las Bambas, Peru			x	x	x
Oil Block 14, Ecuador				x	x
Oil Block 17, Ecuador				x	x
Oil Block 62, Ecuador				x	x
Shougang, Peru				x	x
Río Blanco, Peru			x	x	x
Hydroelectric Project Coca Codo Sinclair					x

Source: Author's analysis based on the Regional Report published by FIDH and CIDHA¹⁷⁴

¹⁷⁴ Regional Report, 2018

The report demonstrates that the violations on human rights violations committed by Chinese companies are not isolated cases, nonetheless show a recurring pattern of behavior, characterized by:

- 1) disrespect for fundamental rights and internationally recognized economic, social and cultural rights, non-compliance with international standards and a lack of accountability for human rights violations;
- 2) continued and knowing engagement in behavior that violates human rights;
- 3) failure to monitor and examine the human rights due diligence for projects in other countries; and
- 4) failure to adopt and implement effective measures for fulfilling China's extraterritorial obligations with respect to its international commitments as a state party to the ICESCR.¹⁷⁵

During The Third Cycle of UPR of China, out of the 346 recommendations received, China had accepted 284 and noted 62.¹⁷⁶ Among those accepted, two were from the diplomatic missions of Peru and Ecuador.¹⁷⁷

A report published by *Coalición Regional* (Regional Coalition) contains a few emblematic cases about the violation of indigenous rights in the Amazonian Basin by companies with Chinese capital and managed by the PRC.¹⁷⁸ Two fundamental rights have been undermined: the Right to life, that involves the right to live in a healthy environment; the right to equality and non-discrimination, linked to the right of participation. The cases will be explained below.

- 1) Colombia, El Nogal Oil Block: located in Caquetá, operated by the company Emerald Energy PLC Colombia, subsidiary of the Chinese Sinochem. The Chinese company ignores the environmental wealth of the region and the presence of five indigenous communities, and avoids carrying out a consultation process. Although the indigenous communities reported the case, dialogue is not an option for the Colombian Government, and responded with violence and repression during the protests of indigenous and peasants communities.

¹⁷⁵ Regional Report, 2018

¹⁷⁶ United Nations, March 15, 2019. *Human Rights Council adopts the outcomes of the Universal Periodic Review of Belize, Chad, China and Malta*. Available at:

<https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=24344&LangID=E>

¹⁷⁷ China Ambiente y Derechos, March 19, 2019. *China Commits to the United Nations Human Rights Council to Respect Human Rights in its Foreign Investments*. <http://chinaambienteyderechos.lat/china-commits-to-the-united-nations-human-rights-council-to-respect-human-rights-in-its-foreign-investments/>

¹⁷⁸ Coalición Regional (Regional Coalition), 2018. *Vulneraciones A Los Derechos De Los Pueblos Indígenas En La Cuenca Amazónica Por Inversiones Chinas*. Published by Coordinadora De Las Organizaciones Indígenas De La Cuenca Amazónica - COICA

https://Coalicionregional.Net/Wp-Content/Uploads/2018/11/Informe_Epu_China_-Vulneracion_Derechos_Humanos_-_Pueblos_Ind%C3%Adgenas-Cuenca-Amazonica.Pdf.Pdf

- 2) Venezuela, Arco Minero: a region located in the Venezuelan Orinoco, exploited from more than 100 firms, exploiting coltan and gold. Two Chinese companies are involved in the project: Camc Engineering Co. Ltd. and Yankuang Group Co. Ltd. (Yankuang). The companies refused to recognize and consult the 13 indigenous communities that inhabit the area, as denounced by ORPIA, the Regional Organization of Indigenous Peoples of the Amazon. In parallel to the protests of the communities, human rights violations were committed by the police and the mafias that coexist with illegal mining in the region. The communities denounced the harassment of the public forces, the murder of native leaders and the scarce environmental studies, since the environment and indigenous cultural practices will be affected by deforestation and pollution caused by mining exploitation in the Orinoco River, their only source of water.
- 3) Peru, Block 58: located in the Cusco region and home to 15 indigenous communities, Block 58 is managed by China National Petroleum Corporation (CNPC), the biggest Chinese producer and supplier of oil and gas, for the exploration of natural gas. The company opened four wells and is ready to begin exploitation, but denies the right of prior consultation to the communities that inhabit the lot, in violation of the Peruvian Constitution and article 6 of the ILO Convention 169. The demands from the communities, also affected by pollution, concerns compensation from the company, plus consultation with the Government on the new phase of the project.

As some cases show, when ancestral lands and fundamental rights are violated, who is affected often publicly oppose the activities.

There are a large variety of forms struggles, such as popular assemblies, road blocks, occupation of the disputed territories, public denounce to international or local NGOs, requests of interruption of the activities to Chinese Policy banks or Chinese embassies.

Regarding the cultural sphere, the most endangered aspect are: the loss of ancestral knowledge, practices and customs; potential disappearance of indigenous groups. Current operations at the Chinese Andes Petroleum-run oil blocks 79 and 83 in the Ecuadorean Amazon, have also sparked fears about the potential disappearance of indigenous groups – the Sápara and the Shiwiar – together with their dialects.

3.1.3 China-LAC Trade Impacts

The previous chapter shows that the bulk of Chinese trade with Latin America is in iron ore and copper mining, petroleum extraction, soybean farming and processing, and beef exports as well, as in new infrastructure projects to facilitate the trade. Therefore, not only Chinese FDI in the region have a large environmental and social footprint, but China-LAC trade plays an important role as well. According to Ray, due to their heavy concentration in primary goods, coming from agriculture and extractions, LAC exports to China have a larger environmental footprint and support fewer jobs than other LAC's trade with the rest of the world.¹⁷⁹ Raw material production is more environmentally intensive than manufacturing. Rebecca Ray examined the extent to which China-Latin America trade contributes more to global climate change than does Latin America's non-China-related economic activity.

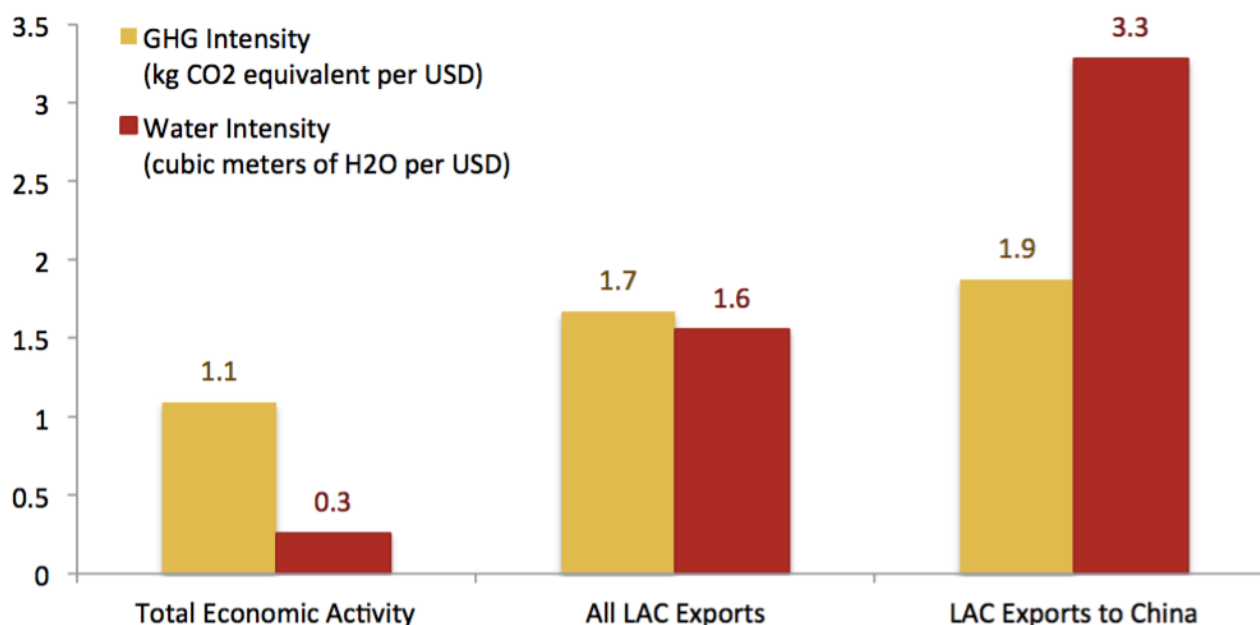
Currently available data does allow analysis of two important aspects of environmental performance: greenhouse gas (GHG) emissions from China-LAC trade are responsible for about 12% more net greenhouse gas emissions.¹⁸⁰ The second aspect is water use, where China-LAC trade is about 50% more water-intensive than overall LAC exports¹⁸¹. Exporting to China then has a greater impact for climate change.

¹⁷⁹ NACLA, September 28, 2014. *Latin America's Risky China Boom*. By Rebecca Ray, <https://nacla.org/article/latin-america%E2%80%99s-risky-china-boom>

¹⁸⁰ Ray R. and Gallagher Kevin, 2015. *China-Latin America Economic Bulletin 2015 Edition*. BU Global Economic Governance Initiative

¹⁸¹ Rebecca Ray, September 28, 2014

Figure 9: Environmental Impact of Overall LAC Economic Activity and Exports



Source: Ray and Gallagher 2015

Furthermore, extraction, cultivation, and production of primary goods, are all sectors that create less jobs than the manufacturing one does. Consequently, the outsized importance of primary products in LAC-China exports also implies that those trade flows support fewer jobs than other LAC exports.¹⁸²

3.2 Policies and Regulations: Safeguarding the environment and indigenous communities from extractive activities

The majority of Latin American countries, do have quite strong environmental and social legal frameworks. Especially over the last decade, Andean governments in particular, have enacted legislations that seek to improve the environmental and social sphere affected by new development projects.¹⁸³ Nonetheless, in certain cases, such as the ones presented above, when dealing with powerful investors, regulations and laws are not enforced.

An important tool, widely in place in Latin America, used to identify the environmental, social and economic impacts of a project prior to decision-making, is the Environmental Impact Assessment (EIA).¹⁸⁴ Its aim is that of predicting the impacts before the project is developed, in order to shape

¹⁸² Ray R. and Gallagher Kevin, 2015

¹⁸³ Ray R., Gallagher K. P., and Sanborn C., 2018. *Standardizing Sustainable Development? Development Banks in the Andean Amazon*. Published by the Boston University Global Development Policy Center, Center for China and Asia-Pacific Studies- Universidad del Pacífico.

<http://www.bu.edu/gdp/files/2018/04/Development-Banks-in-the-Andean-Amazon.pdf>

¹⁸⁴ Convention on Biological Diversity. *What is Impact Assessment?* Available at:

<https://www.cbd.int/impact/whatis.shtml>

them to suit the local environment and present the predictions and options to decision-makers. Governments have the responsibility to ensure that the EIA, evaluated by independent agencies, are carried out before initiating any extractive activity. The results of such studies should be published at an early stage, and should be accessible and understandable to local populations. This means, for example, that if in one area are spoken multiple languages, then they should all be included in the EIA.

In most cases, companies are responsible for preparing their own environmental management plan. It is the responsibility of national governments to ensure that these plans adhere to international standards, that they are applied in a timely manner, and that the provisions regarding environmental protection are binding.¹⁸⁵

For impact evaluations to be scientifically valid, correct and adequate, it is important that data on the environment and health are available before the start of extractive activities. This way, the comparisons before, during and after the activity can be carried out. It is the responsibility of the relevant government entities to ensure the availability of these data.¹⁸⁶

Two outstanding examples regarding the protection of the environment, are given by the new Constitutions of Ecuador (2008) and Bolivia (2009), where the roles assumed by environmental conservation and sustainable development are key for the central governments. Ecuador's Constitution was the first national Constitution to recognize the rights of nature. Chapter 7 is dedicated to the Rights of Nature, article 71 reads as follows:

Nature, or Pachamama, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes.

All persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature. To enforce and interpret these rights, the principles set forth in the Constitution shall be observed, as appropriate.

The State shall give incentives to natural persons and legal entities and to communities to protect nature and to promote respect for all the elements comprising an ecosystem.¹⁸⁷

The article allows the parties to sue on behalf of nature in case of environmental degradation.

¹⁸⁵ Observatorio de Conflictos Mineros de América Latina, 2017. "*Impactos de la Industria Extractiva en América Latina*". Geraldine McDonald, published by International Cooperation for Development and Solidarity (CISDE), January 2009. https://www.ocmal.org/wp-content/uploads/2017/03/impacto_estractivas_al.pdf

¹⁸⁶ Observatorio de Conflictos Mineros de América Latina, 2017.

¹⁸⁷ Constitution of the Republic of Ecuador 2008, Art. 71

Peru could also be an example for other countries in the region. In 2007, the country joined the Extractive Industry Transparency Initiative (EITI), and nowadays there are five regions in the country implementing the initiative. Peru is using EITI mainly to address key community concerns, and to improve transparency and accountability in the use of the revenues flowing from the mining activities to other sectors, as Chinese mining firm Chinalco has done in Peru.¹⁸⁸

The EITI allows the public to trace oil and mining revenues from firms to the central government, and back to local governments.¹⁸⁹

Regarding the rights of indigenous communities, Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, and Venezuela and have all ratified the International Labour Organization Convention 169, the Indigenous and Tribal Peoples Convention of 1989.¹⁹⁰ ILO 169 enshrines indigenous communities' rights to

decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development¹⁹¹

It requires governments to “consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly.”¹⁹²

Bolivia, Ecuador, and Peru all incorporated ILO 169 into their own public laws.

Furthermore, the majority of those countries also approved the 2007 United Nations Declaration on the Rights of Indigenous Peoples, which states that

¹⁸⁸ Ray R. and Chimienti A., 2015. *A Line in the Equatorial Forests: Chinese Investment and the Environmental and Social Impacts of Extractive Industries in Ecuador*. BU Global Economic Governance Initiative

¹⁸⁹ Sanborn C, Chonn, V., 2015. *Chinese Investment in Peru's Mining Industry: Blessing or Curse?* Boston University Global Economic Governance Initiative. 2015-8. Available at: <https://www.bu.edu/pardeeschool/files/2014/12/Peru2.pdf>

¹⁹⁰ ILO, *Ratifications of C169 - Indigenous and Tribal Peoples Convention, 1989 (No. 169)* https://www.ilo.org/dyn/normlex/en/f?p=1000:11300:0::NO:11300:P11300_INSTRUMENT_ID:312314

¹⁹¹ ILO Convention, Art. 7.

¹⁹² ILO Convention, Art. 6.

Indigenous peoples shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent [FPIC] of the indigenous peoples concerned and after agreement on just and fair compensation and, where possible, with the option of return.¹⁹³

These two rights—prior consultation and FPIC—play a crucial role in national treatment of indigenous rights regarding extractive and infrastructure projects. Bolivia legally recognized the right to prior consultation in its Political Constitution of 2009

Prior, informed consultation and participation in the benefits from the use of non-renewable natural resources in their territories.¹⁹⁴

Ecuador's 2010 Citizen Participation Law requires the national government to consult with indigenous, Afro-Ecuadorean, and coastal Montubio communities regarding all decisions before allowing new oil and mining projects.¹⁹⁵

Peru's 2011 Prior Consultation Law is the most complete in this regard, since the consultation is laid out on a seven-step process.¹⁹⁶

Article 11 of the ICESCR (International Covenant on Economic, Social and Cultural Rights) recognizes the right of everyone to

an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions.¹⁹⁷

This right refers in particular to women who usually take charge of ensuring an adequate standard of living for their families.¹⁹⁸

¹⁹³ United Nations 2007 Declaration on the Rights of Indigenous Peoples, (Art. 10).

¹⁹⁴ Constitución Política del Estado (CPE) (7-Febrero-2009). Art. 403

¹⁹⁵ Ray R. and Chimienti A., 2015-6. *A Line in the Equatorial Forests: Chinese Investment and the Environmental and Social Impacts of Extractive Industries in Ecuador*. BU Global Economic Governance Initiative

¹⁹⁶ Ray R., Gallagher K. P., and Sanborn C., 2018. *Standardizing Sustainable Development? Development Banks in the Andean Amazon*. Published by the Boston University Global Development Policy Center, Center for China and Asia-Pacific Studies- Universidad del Pacífico.

<http://www.bu.edu/gdp/files/2018/04/Development-Banks-in-the-Andean-Amazon.pdf>

¹⁹⁷ United Nations, *International Covenant on Economic, Social and Cultural Rights*, 1976. Available at:

<https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx> Art. 11

¹⁹⁸ Observatorio de Conflictos Mineros de América Latina, 2017. *“Impactos de la Industria Extractiva en América Latina”*. Geraldine McDonald, published by International Cooperation for Development and Solidarity (CISDE), January 2009.

https://www.ocmal.org/wp-content/uploads/2017/03/impacto_estractivas_al.pdf

Article 12 recognizes the right of everyone to “*the enjoyment of the highest attainable standard of physical and mental health*”.¹⁹⁹ The right to live in a healthy environment is implicitly stated in that article.

The signatory countries of the ICESCR have the responsibility to ensure compliance with these rights. However, in Latin America, in the field of mining and other extractive projects these rights are stubbornly violated.²⁰⁰

For countries like China the host country regulatory environment makes a big difference.²⁰¹ Indeed, Chinese firms tend to perform better in countries when they are given the right incentives and regulatory framework. However, the potential for a positive development impact is limited by a weak institutional capacity and political will.²⁰² In an interview published by Diálogo Chino, Dussel Peters claimed that:

It is not that they by definition implement low standards, they are very well able to implement very high or very low standards. That depends on the host country.²⁰³

China has also taken important steps aimed to encourage Chinese investors to act with corporate social and environmental responsibility. The Communist Party of China (CPC), State Council, and various government agencies have issued policy guidelines for the social and environmental impact of its projects overseas.²⁰⁴ These guidelines apply to banks and state-owned contractor businesses and, in a few cases, to private Chinese companies. Although there are several ones that offer specific procedures and requirements, the majority of them is not binding.²⁰⁵ - 《对外投资合作环境保护指南》 - Guidelines for Environmental Protection in Investment and Cooperation Overseas, issued in 2013 by the Ministry of Commerce and the Ministry of Environmental Protection (MOFCOM). They establish all Chinese companies operating overseas to

¹⁹⁹ United Nations, *International Covenant on Economic, Social and Cultural Rights*, 1976. Available at: <https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx> Art. 12

²⁰⁰ Observatorio de Conflictos Mineros de América Latina, 2017. “*Impactos de la Industria Extractiva en América Latina*”. Geraldine McDonald, published by International Cooperation for Development and Solidarity (CISDE), January 2009.

https://www.ocmal.org/wp-content/uploads/2017/03/impacto_extractivas_al.pdf

²⁰¹ Americas Quarterly, 2011. *Do Chinese Mining Companies Exploit More?* Kotschwar Barbara, Moran Theodore and Muir Julia. Available at: <https://www.americasquarterly.org/do-chinese-mining-companies-exploit-more> [Accessed on 24th March 2019]

²⁰² Gallagher, 2016. P 11

²⁰³ Diálogo Chino, November 24, 2016. *Ignorance of China has big costs for Latin America*. <http://dialogochino.net/ignorance-of-china-has-big-costs-for-latin-america/>

²⁰⁴ International Cry, July 25, 2018. *Can The Law Prevail Over Chinese Investments In Ecuador?* Picq Manuela. Available at: <https://intercontinentalcry.org/can-the-law-prevail-over-chinese-investments-in-ecuador/>

²⁰⁵ Paulina Garzón, 2015

conduct EIAs, requires them to engage with local communities, and publish their environmental information.²⁰⁶

- 《绿色信贷指引》 - Green Credit Guidelines, issued in 2012 by the China Banking Regulatory Commission (CBRC).²⁰⁷ They establish banks' accountability in managing environmental and social (E&S) risk, and improve their own E&S performances. Article 4 of the Green Credit Guidelines, encourages banks to identify, assess, monitor, control or mitigate E&S risks in business operations, and develop E&S risk management systems.²⁰⁸

Nowadays, the Chinese guidelines are only on paper.²⁰⁹ Indeed, having an advanced set of environmental and social guidelines, has not meant that Chinese projects are better managed. Nevertheless, while these guidelines are rarely followed, they demonstrate that China is concerned about the environmental and social impact of its investments abroad.²¹⁰

Beyond these guidelines, China also ratified different international treaties and instruments: Universal Declaration of Human Rights; International Covenant on Economic, Social and Cultural Rights; UN Declaration on the Rights of Indigenous Peoples; Rio Declaration on Environment and Development; United Nations Framework Convention on Climate Change.

During a local court to shut down the Río Blanco mine in Cuenca, Ecuador, run by the Chinese private corporation Junefield/Ecuagoldmining, the environmental lawyer Zhang Jingjing, reminded the words of the Chinese delegation at the 13th Session of the UN Permanent forum on Indigenous Issues, in 2014

the international community is duty bound to fully meet the legitimate requests of indigenous peoples, to promote and protect their basic human rights and freedoms, to safeguard the natural environment and resources on which their survival depends” and

²⁰⁶ Duiwài tóuzī hézuò huánjìng bǎohù zhǐnán 对外投资合作环境保护指南 (Guidelines for Environmental Protection in Investment and Cooperation Overseas), 2013. Zhōnghuá rénmin gòng shāng hé guó shāngwù bù 中华人民共和国商务部 (Ministry of Commerce of the People's Republic of China)

<http://www.mofcom.gov.cn/article/zhengcejd/bq/201302/20130200039938.shtml>

²⁰⁷ Lǜsè xīndài zhǐyǐn 绿色信贷指引 (Green Credit Guidelines), 2012

http://www.cbrc.gov.cn/govView_EE92ECB77DB049C095838BFCCA48EF50.html

²⁰⁸ Lǜsè xīndài zhǐyǐn 绿色信贷指引 (Green Credit Guidelines), 2012

http://www.cbrc.gov.cn/govView_EE92ECB77DB049C095838BFCCA48EF50.html

²⁰⁹ Paulina Garzón, September 2018. *Manual Sobre Lineamientos Ambientales Y Sociales Chinos Para Los Préstamos E Inversiones En El Exterior. Una Guía Para Las Comunidades Locales*. Published by China Latin-America Sustainable Investments Initiative. Accessible at:

https://bankinformationcenter.cdn.prismic.io/bankinformationcenter%2F19966a96-6bb8-43a8-b2a4-573a324aa552_iiscal+manual+chino+3+2018+.pdf

²¹⁰ The New York Times, June 2017. *China's Other Big Export: Pollution*. By Garzón Paulina and Salazar-Lopez Leila <https://www.nytimes.com/2017/07/21/opinion/china-climate-pollution-global-warming.html>

China “firmly supports the promotion and protection of the basic human rights and fundamental freedoms of all indigenous peoples around the world.”²¹¹

3.3 Chinese Investors and Indigenous Communities

Various sources evaluated how Chinese companies interact with local and indigenous communities, and what they should improve to maintain a long-term presence in the region of Latin America. Civil society in Latin America has a long tradition of engaging in grand scale projects and in defining development policies. However, national participation spaces have been neglected by the secretive and excluding models surrounding Chinese investments. Local communities and civil society organizations usually report on the impossibility of knowing basic information about the projects impacting them, and even of contacting the Chinese companies.²¹² Researchers from the Natural Resources and Environment Foundation (FARN) in Argentina are concerned about a series of issues:

the lack of information regarding contracts between Chinese companies and Argentina's state oil and gas company, the direct award of infrastructure projects to Chinese actors without tender, and the proliferation of Chinese investments in energy sectors which have high social and environmental impacts.²¹³

In addition, they also reported that there is a general trend in the region to lower standards of environmental protection and to weaken safeguards by financial institutions.

Environmental lawyer Zhang Jingjing, found common characteristics between Chinese firms operating in projects that have generated environmental and social conflicts. What she claimed is that Chinese companies lack of transparency and are hard to communicate with.²¹⁴ Carolina Viola claimed that generally Chinese actors have made little effort to interact with their hosts, and that firms tend to underestimate the community, and do not consider it a valid interlocutor, as the government is.²¹⁵

²¹¹ Intercontinental Cry, July 25, 2018. *Can The Law Prevail Over Chinese Investments In Ecuador?* Manuela Picq. Accessible at: <https://intercontinentalcry.org/can-the-law-prevail-over-chinese-investments-in-ecuador/>

²¹² Regional Report, 2018

²¹³ <https://www.theguardian.com/environment/andes-to-the-amazon/2015/may/19/li-keqiang-latin-america-respect-rights-environment>

²¹⁴ Diálogo Chino, December 27, 2017. *China needs urgent oversight of investments' social and environmental footprint.* By Zhang Chun. <https://dialogochino.net/10158-china-needs-urgent-oversight-of-investments-social-and-environmental-footprint/>

²¹⁵ South China Morning Post, May 25, 2019. *China in Latin America: partner or predator?* By Carvalho Raquel. Accessible at: <https://multimedia.scmp.com/week-asia/article/3011618/beijing-conquest-latin-america/index.html>

Lack of communication is a major issue according to lawyer Natalia Yépez as well. To her, it is unclear how to approach the firms, who to refer to, and which international mechanisms can be used to address these problems. In many cases, several groups have tried to report first-hand what was happening to local Chinese embassies or policies banks backing the projects, however none of them received a proper response.²¹⁶ According to Po Chun Lee, only a few Chinese people visit the nearby villages. Usually, they have no contact with local communities, and tend to do not integrate into the local culture. They bring Chinese chefs to cook on their settlement, and separate the workers into Chinese camps and local camps.²¹⁷

According to Paulina Garzón, however, communities in Ecuador do have contact with Chinese firms locally, but at the international level, there is not much space for dialogue, and the communities do not know who to address to, sometimes also due to language barriers.²¹⁸

Cesar Padilla from the Latin American Observatory on Mining Conflicts, stressed that Chinese mining companies in Chile, lack of transparency and the civil society struggles to hold them to account. In addition, he also confirms

When we have problems with Western companies, we go to the UN, or the Inter-American Commission on Human Rights, or the OECD, although almost always without the hoped-for results". "When it's Chinese companies, we don't know who to turn to, we don't know who they answer to or what their principles of responsibility are. We don't know if they even have them."²¹⁹

Interestingly, Padilla claimed that, in terms of operations, he did not perceived any difference between Chinese companies and others. His experience is that mining companies do not respect their rights. Padilla also stated "*Chinese companies increasingly present on our continent behave in the same way as other companies, imposing projects on our territories without consulting us and without respecting the fact that we're opposed to mining. If Chinese companies want to invest in our territories, we don't want it imposed on us. What we want is an open dialogue fully respecting our wishes.*"²²⁰

Several problems could be resolved by negotiating, for example by offering a bit more land, as the Shuar leader Luis Tiwiram requested, or by investing a bit more in the community needs.²²¹ A

²¹⁶ Americas Quarterly, April 23, 2019. *China and the Environment: A Struggle for Change in Latin America*. By Soutar Robert. Accessible at <https://www.americasquarterly.org/content/china-and-environment-struggle-change>

²¹⁷ South China Morning Post, May 25, 2019.

²¹⁸ Paulina Garzón, June 7th 2019. Telephone interview

²¹⁹ The Guardian, May 19, 2015. *Dear Li Keqiang: 'Please respect our rights and environment'*. By Hill David. Accessible at: <https://www.theguardian.com/environment/andes-to-the-amazon/2015/may/19/li-keqiang-latin-america-respect-rights-environment>

²²⁰ The Guardian, May 19, 2015

²²¹ Diálogo Chino, December 27, 2017

positive example seem to come from the Chinese State Grid Corporation, which in its operation in Brazil has hired local managers, has invested in local communities and even sponsored local events.²²²

What is compulsory for Governments and companies is to respect essential indigenous peoples' rights. Social conflicts are increasingly common, and become particularly heated when natural resource extraction and infrastructure projects are undertaken without adequate prior consultation with the indigenous or tribal communities that could be affected, or without the free, prior, and informed consent of those communities where required.²²³ Despite the progress made with respect to constitutional and legal recognition of indigenous rights, they still suffer persistent marginalization. Their exclusion is often visible when no prior notice or consultation is given to those who come up against projects that are already underway or about to be implemented in their territories. Often, language barriers and unfamiliarity with the legal actions that could protect their rights, make them extremely vulnerable and unable to take a significant role in the decision-making process.²²⁴ In some processes, consent is not only the aim of the consultation, but also a right in and of itself, and an essential prerequisite for implementation or suspension of the proposed measure. A full enjoyment of the right to prior consultation are often obstructed by different factors. Extreme poverty; social exclusion; illiteracy of indigenous and peasant communities; lack of political will; lack of genuine participation by ethnic groups in the regulation of prior consultation; difficulties reaching agreements in consultation processes. In Colombia, a critical human rights situation also contributes to a general lack of awareness concerning the right to prior consultation.

There have been progressive cases, such as Bolivia's implementation of the community consultation process in Agua Dulce, Villa de Yocalla, and Chinese companies in Peru joining the EITI program.²²⁵ These successful approaches to the local community and public relations, could be replicated by

²²² Viscidi L, Myers M. and Noon C., September 28, 2015. *China's Strategy in Brazil & the Southern Cone, the leadership for the Americas* <https://www.thedialogue.org/analysis/the-dragons-mysterious-latin-designs/>

²²³ Oxfam. The Right of Indigenous Peoples to Prior Consultation. The Situation in Bolivia, Colombia, Ecuador, and Peru Accessible at: <https://www.oxfamamerica.org/static/media/files/the-right-of-indigenous-people-to-prior-consultation-exec-summary.pdf>

²²⁴ Oxfam. The Right of Indigenous Peoples to Prior Consultation. The Situation in Bolivia, Colombia, Ecuador, and Peru Accessible at: <https://www.oxfamamerica.org/static/media/files/the-right-of-indigenous-people-to-prior-consultation-exec-summary.pdf>

²²⁵ Ray R., Gallagher K. P., Lopez A., Sanborn C., 2015. *China in Latin America: Lessons for South-South Cooperation and Sustainable Development*. Boston University, Centro de Investigación para la Transformación, Tufts University, and Universidad del Pacífico

Chinese firms struggling to build a positive image in the region, and could also be useful for other firms starting projects in sensitive zones.

Labor-related concerns are virtually entirely focused on local workers, not Chinese ones. A number of China's main commercial partners in South America have strict laws against importing foreign labor. For instance, Chinese FDI in Chile is negligible, and so is the number of Chinese laborer in that sector.²²⁶ The Caribbean plays an exception, where host countries are much more likely to accept Chinese finance, materials, and labor.²²⁷

The next chapter will be focused on the concept of environmental justice applied to six Chinese-run projects in Ecuador, one related to the mining industry, the Mirador open-pit copper mining project in the Cordillera del Cóndor, and five regarding hydrocarbons extractions in the Ecuadorean Amazon Rainforest.

²²⁶ China Files, December 13, 2017. *Is Chinese Investment Good for Workers?* Matt Ferchen <http://www.chinafile.com/conversation/chinese-investment-good-workers>,

²²⁷ China Files, December 13, 2017.

4. Case Study: Ecuador

4.1 Ecuador – Country Profile and Economic History

Ecuador is a country located in North-West South America. It borders Colombia to the north, Peru to the east and the south, and the Pacific Ocean to the west. It includes the Pacific archipelago of the Galapagos Islands.

The Ecuadorean mainland is divided into four main physical regions. The Costa (coastal region), composed of lowlands that extend eastward from the Pacific Ocean to the western foothills of the Andes Mountains. The Sierra (highland region), where the Ecuadorean Andes are located. It consists of two main ranges - Central and Western Cordillera. Most of Ecuadorian cities are set in the Andean valleys, including Quito, Riobamba, and Cuenca. Numerous rivers originate in the mountains and flow either west to the Pacific coast or east to the Amazon River.

The Oriente or Amazon region (eastern region) extends westward from the East of the Andes to the tropical rainforest of the region. The last physical regions are the Galapagos Islands.

The political-administrative division establishes twenty-four Provinces that are home to 17,072,359 people. The majority of the population is constituted by the mestizos; minority groups include sixteen indigenous groups settles in the Amazon Rainforest: Waorani, Kichwa of the East, Shuar, Achuar, Cofán, Siona, Secoya, Shiwiar, Andoa and Zápara; in the Sierra: Quichuas with sixteen villages; on the Coast: the Awa, Chachis or Cayapas, Tsáchilas and Huancavilcas. In addition, there are Afro-Ecuadorian and Montubian populations.²²⁸

²²⁸ Iván Narváez Q. , Massimo De Marchi and Salvatore Eugenio Pappalardo, 2013. *Yasuní, Zona de Sacrificio: Análisis de la Iniciativa ITT y de Los Derechos Colectivos Indígenas* . FLACSO, Sede Ecuador. P. 31

Figure 10: Map of Ecuador



Source: Encyclopædia Britannica, 2001

Ecuador is one of the seventeen megadiverse countries of the planet²²⁹. Its biodiversity richness is determined by its geographical, atmospheric and climatic location and conditions²³⁰. Despite its relatively small size, 10% of the world's biodiversity is hosted in Ecuador²³¹. By incorporating the concept of Sumak Kawsay, an ancient Quechua word meaning “Good Living”²³², in the 2008 Constitution, Ecuador was the first country to acknowledge nature as a Subject of Rights. The Rights of Nature articles recognize that nature “has the right to exist, persist, maintain and regenerate its vital cycles”, and the people have the authority to enforce these rights.²³³

²²⁹ Convention of Biological Diversity, Ecuador-Country Profile. Available at: <https://www.cbd.int/countries/profile/default.shtml?country=ec>

²³⁰ UNEP, *The Biodiversity finance initiative (BIOFIN), Ecuador*. Available at: <http://www.biodiversityfinance.org/ecuador>

²³¹ Fauna & Flora International. *Ecuador: An Equatorial Treasure Trove*. <https://www.fauna-flora.org/countries/ecuador>

²³² Pachamama Alliance, 2019. *Sumak Kawsay: Ancient Teachings of Indigenous Peoples* <https://www.pachamama.org/sumak-kawsay>

²³³ Global Alliance for the Rights of Nature (GARN), 2019. *Ecuador Adopts Rights Of Nature In Constitution*. https://therightsofnature.org/ecuador-rights/?cli_action=1558564687.882

4.1.1 Historical Background, from the Colonial Times to the China Boom

When the Spaniards invaded South America, the Inca Empire was at its peak, spreading over what we now know as Peru, Bolivia, and Ecuador, taking part of Colombia and Chile, and reaching Northern Argentina and the Brazilian rainforest²³⁴. The Inca Empire collapsed in 1534. In that year Quito was already taken by the Crown, but it took two decades to establish a standard system of colonization²³⁵. Gold and silver, were the main motivating force in the Conquest, and also Ecuadorian metals played their part. The origin of mining in Ecuador actually dates back to the pre-Columbian cultures²³⁶. New towns and mining encampments appeared around the 1550s, like Zaruma and Nambija, famous for their rich gold deposits.²³⁷ During the Colonial times, the Spanish introduced cattle breeding and banana plantations, still very important for the economy nowadays. On the coast, especially after the second half of the XVII century, the production and export of cocoa boosted²³⁸. These two products, together with flowers and shrimps, became the historical foundation of the Ecuadorian export basket²³⁹. Ecuador gained full independence from the Spaniards in 1830, becoming a Republic. Since then it developed new strategies to enter the global economy, focusing on its comparative advantage, which consisted on its natural resource endowment and fertile soil. During the first years of the Republic, agriculture was playing a major role in the Ecuadorian economy. Indeed, several other industries, such as mining or manufacturing, did not have much possibility to develop. The *obrajes*²⁴⁰ disappeared and agriculture became fundamental. In the first two decades of its republican existence, Ecuador laid the foundations to become the main supplier of cacao globally, in particular for Great Britain²⁴¹. The demand from European countries also included coffee, tagua, rubber and leather.²⁴² It was in these years that the commodity lottery period started, a period in which countries in Latin America and the main European powers had a relationship characterized by

²³⁴ Eduardo Galeano, 1973. *Open Veins of Latin America: Five Centuries of the Pillage of a Continent*. P.42

²³⁵ Ecuador Explorer. *Las Conquistas Inca y Española*. (The Inca and Spanish Conquest). Available at: <http://www.ecuadorexplorer.com/es/html/las-conquistas-inca-y-espanola.html>

²³⁶ María Isabel Aillón Vásquez, 2016. *Evolution of Mining laws in Ecuador*. Perez, Bustamante & Ponce <https://www.pbplaw.com/en/historia-de-las-normas-mineras-en-ecuador/>

²³⁷ María Isabel Aillón Vásquez, 2016.

²³⁸ Enrique Ayala Mora, 2008. Resumen de Historia del Ecuador,

²³⁹ Christian S. Rodas Saá, 2018. *Ecuador's Trade and Investment Relationship with China Under the Correa Administration*. Center for International Studies of Ohio University

²⁴⁰ Obrajes, definition: “a single enterprise that incorporated most, if not all, of the processes of wool cloth manufacture: dyeing, carding, spinning, weaving, fulling, and finishing”.

<https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/obraje>

²⁴¹ Acosta, A. 2006. Breve Historia Económica del Ecuador. Quito: Corporación editora nacional. Second Edition. ISBN 9978-84-289-6

²⁴² Acosta, A. (2006). P 44

dependency, where LAC countries were producers and exporters of primary goods for their Western counterparts.

The first symptoms of the cacao crisis began in 1914. When the World War I began, the port of Hamburg was closed, through which a significant part of the Ecuadorian cacao entered Europe. It was during these years that the United States became the first trading partner with Ecuador. After the WWI, North American capital, present in the region of Latin America for years before, began to occupy the positions of the British investments and loans, and of other European countries. The Ecuadorian dependency accentuated its external vulnerability by concentrating once again, and to a greater extent than before, its export and import in only one country: the United States.

The bilateral relationship between the two countries grew through trade and investment and expanded to different sectors over the years, but the main trade products were cocoa and banana. *American companies did invest in Ecuador's oil reserves during the 1930's, but the amount of extracted oil was not substantial at that time, therefore, investment focused on products like bananas.*

It is important to mention that it was during those years, at the beginning of the XX century, that some foreign companies started relatively ambitious agricultural and mining projects in Ecuador. In the thirties there were already several mining and oil contracts. International investors – such as Anglo Ecuadorian Oilfields Limited, Carolina Oil Company, and International Petroleum Company - originally focused their investments on the peninsula of Santa Elena, on the coast. Regarding the Amazon region, it was only at the end of the 1930s that the Anglo Saxon Petroleum Company Limited affiliated with the Royal Dutch Shell, began works in the *Oriente*. However, their work was abandoned some years later because they could not find any crude.

It was not until the 1970s that large quantities of oil were found in the country. After years of searching for oil in Ecuador, the US company Texaco discovered large reserves in the Ecuadorian Amazon. This discovery marks the “oil boom” period, that completely changed the Ecuadorian economy – from an agro-export model to an oil-export model.

An era of economic prosperity began, this “boom” generated a revitalization of the economy. In 1972 Ecuador was included in the Organization of Petroleum Exporting Countries (OPEC), allowing the country to increase its participation as an oil supplier in the international market.

In 1978, the government launched the first Hydrocarbons Law, which increased oil revenues for the Ecuadorian administration. In 1989, Petroecuador, Ecuador's major public oil company, was created and the government gained ground in oil production. Since then, oil production has been managed through Petroecuador and multinational corporations.²⁴³

²⁴³ Christian S. Rodas Saá, 2018.

The amount of total exports grew from almost 190 million dollars in 1970 to 2,500 million dollars in 1981: an increase of more than thirteen times.²⁴⁴

However, the oil revenues and also the international financing that Ecuador was receiving in those years, were not managed properly.²⁴⁵ Instead of creating sustained development through policy changes, oil profits made the nation vulnerable to external sources of lending, and to international market fluctuations. In fact, the Ecuadorian economy went through a period of a significant slowdown, that has been defined “Two Lost Decades”, of the 1980s and the 1990s. What triggered the economic crisis were, either exogenous and endogenous factors, and the lack of strong economic policies. To be more precise, the main reasons were - the volatility of oil prices, excessive external indebtedness, and the earthquake of 1987, that broke the trans-Ecuadorian oil pipeline and forced oil production to stop for about half a year.²⁴⁶ As Rodas Saá writes, during the “Two Lost Decades”, GNI per capita stagnated, devaluation of the currency (still Sucre in those years) increased to extraordinary stages, real wages fell, and levels of unemployment and poverty affected more than 75% of Ecuadorians.²⁴⁷

In 1999, Ecuador suffered the most severe economic decline in Latin America.²⁴⁸ During those years, the country also experienced the most rapid impoverishment in the history of Latin America. After the Ecuadorian economy collapsed, the country adopted the US dollar as the official currency in 2000, described by Acosta and Guijarro as an extreme measure taken by the government. Ecuador was not only unstable on the economic side, but also politically. In less than ten years, the country had changed eight presidents, until Rafael Correa was elected president in 2006, the alternative to the neoliberal model that ruled the economy in recent years.²⁴⁹ Correa’s proposal was a development model based on the “Socialism of the 21st century”, promoting a higher involvement of the government in the economy, a strong opposition to the United States, trying to regain the sovereignty of Ecuador. In this political and economic climate, Ecuador and China started to strengthen their relationship.

²⁴⁴ Acosta, A. (2006). P. 120

²⁴⁵ Christian S. Rodas Saá, 2018. P

²⁴⁶ Acosta, A. (2006). P. 176

²⁴⁷ Christian S. Rodas Saá, 2018

²⁴⁸ Acosta A., Guijarro J.C., 2018. *Una década desperdiciada: Las Sombras del Correísmo*. P. 11

²⁴⁹ Christian S. Rodas Saá, 2018

4.1.2 Ecuador's China Boom: an overview on Ecuador and China's economic relationship

The relationship between Ecuador and China is one of the fastest growing among all LAC countries. 2006 was the year of change in the economic relationship of the two countries, when CNPC and Sinopec jointly purchased \$1.42 billion for the Ecuadorean assets of the Canadian firm Encana,²⁵⁰ including rights to Ecuadoran oil fields and the OCP pipeline²⁵¹. Through this acquisition, the Chinese market began to obtain access to significant amounts of crude. The investment translates into 218,200 barrels of oil per day, and the capacity to transport 450,000 barrels of oil per day along a 500 km pipeline.²⁵²

When Rafael Correa, former President of Ecuador, entered office in 2007, his politic took distance from the influence of the United States, trying consolidate South-South Cooperation, rather than North-South Cooperation. His politic channeled Ecuador's diplomatic relations towards a regional, anti-liberal and anti-Washington development trend.

What also helped creating distance from the North countries, was Ecuador's defaults on \$3.2bn worth of debt in 2008, that alienated the country from foreign markets, and made it virtually impossible for the nation to receive international loans, in particular from the IMF and WB.²⁵³ Correa's plan and the need of finance and investors, found in China a political and economic ally. Ecuador started formalizing its commercial relations with the globally emerging China. As a consequence of the closer relations between the two countries, China is currently Ecuador's foremost lender and contractor, especially in the hydrocarbons, mining, infrastructure, waterworks, communications and finance sectors²⁵⁴. To date, the amount of loans received by Ecuador, only from CDB and CHEXIM bank, is up to \$18,4 billion, distributed into 15 loans.²⁵⁵

To China, the proximity of Ecuador to the Pacific Ocean, its petroleum resource abundance and its physical separation from other politically unstable oil-endowed countries (i.e. Venezuela) are the

²⁵⁰ Cnpc.com.cn, Zhōngguó shíyóu 中国石油 China National Petroleum Corporation. *Company Profile*. Available at http://www.cnpc.com.cn/cnpc/Ecuador/country_index.shtml

²⁵¹ Evan Ellis, Jan 23, 2014. *China's Role in Ecuador's Oil Sector*. The Dialogue, Leaderships for the Americas <https://www.thedialogue.org/blogs/2014/01/chinas-role-in-ecuadors-oil-sector/>

²⁵² Thomas P. Narins, 2012. *China's Eye on Ecuador: What Chinese Trade with Ecuador Reveals about China's Economic Expansion into South America*. The Global Studies Journal

²⁵³ Amazon Watch, 2014. *Beijing, Banks and Barrels: China and Oil in the Ecuadorian Amazon*

²⁵⁴ Sofía Jarrín Hidalgo, March 2018. *Desarrollismo con Características China. Inversión Pública y Financiamiento Chino en América Latina: Megaproyectos, Condicionales e Impactos*. Coalición Regional por la transparencia y la participación.

²⁵⁵ China-Latin America Finance Database. Available at https://www.thedialogue.org/map_list/

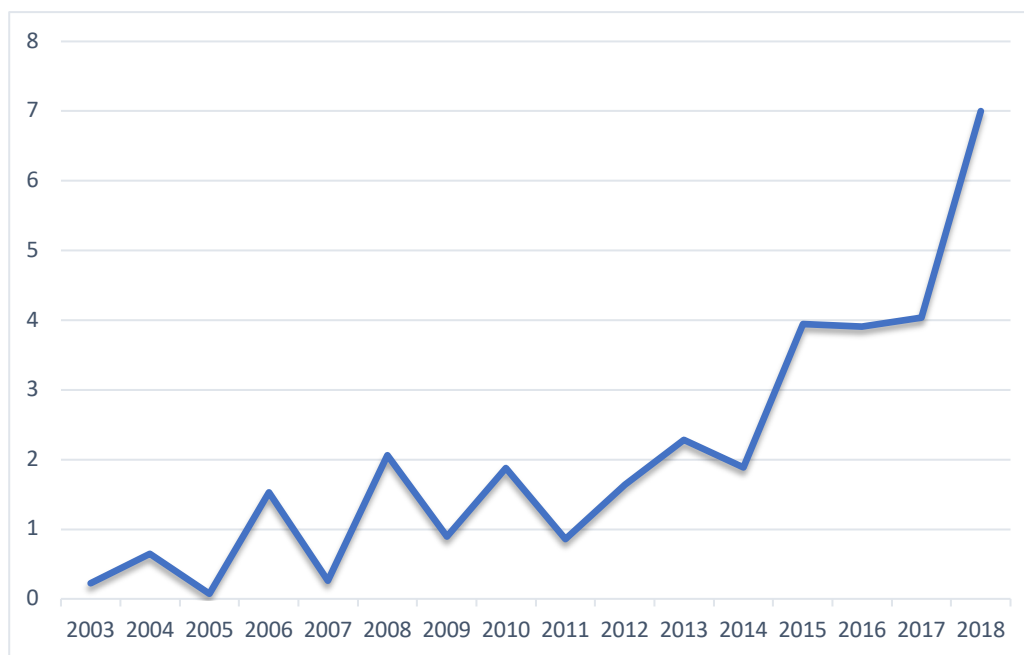
main reasons that attract Chinese investors interested in finding new sources of trade-related investment opportunities and markets.²⁵⁶

In the next paragraphs, the relationship will be explored under three main economic aspects – trade, foreign direct investment (FDI) and loans, considering the period of the China Boom and current times.

4.1.3 Ecuador and China as Trading Partners

China plays only a minor role in Ecuador’s export market. As figure 11 shows, during the China Boom, the share had fluctuated between 0.5% and 2.20%, it decreased by 1.90% in 2014, and then increased particularly in 2015, reaching 7% in 2018.

Figure 11 Ecuador - China Export Share (%)



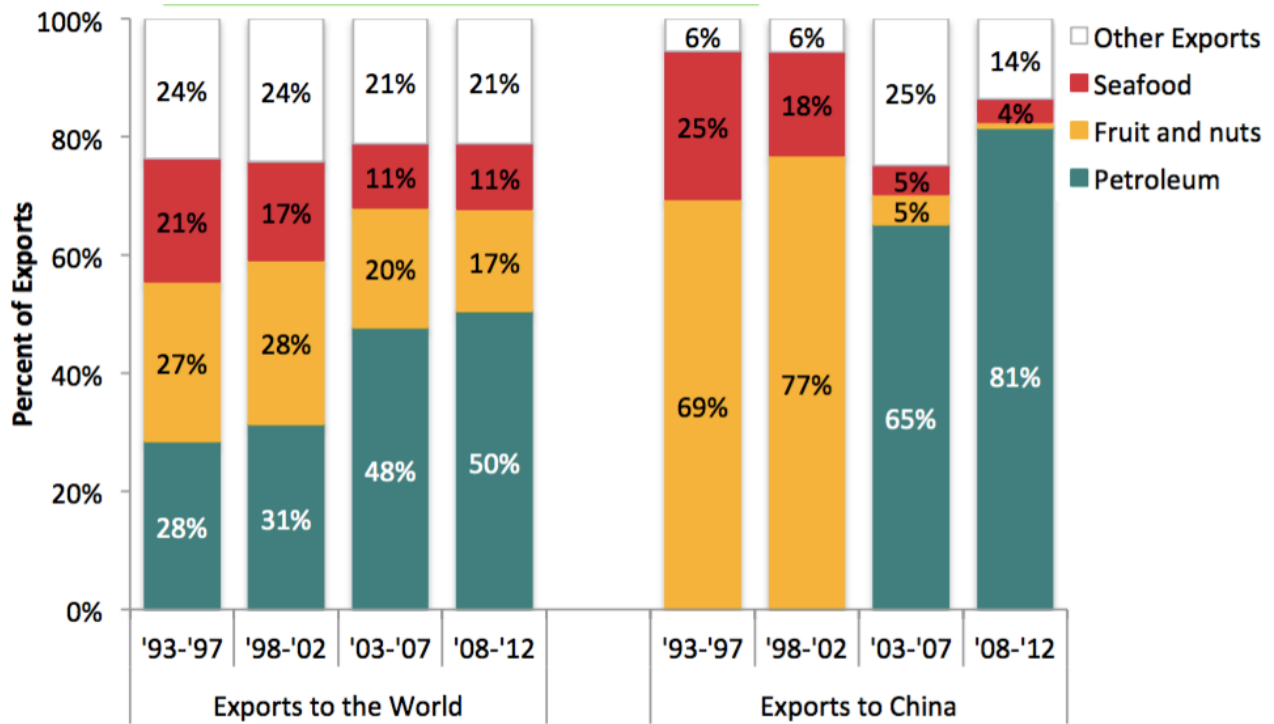
Source: author’s analysis based on UN COMTRADE, IMF DATA, WITS

As Figure 12 shows, Ecuadorean oil was the most exported products to China during the China Boom. As of the first oil shipment to China, and then particularly after China acquired Encana in 2006, petroleum has played an important role in the bilateral relation, reaching over 80% of Ecuador’s exports to China from 2008 to 2012²⁵⁷.

²⁵⁶ Thomas P. Narins, 2012.

²⁵⁷ Ray R. and Chimienti A., 2015-6. *A Line in the Equatorial Forests: Chinese Investment and the Environmental and Social Impacts of Extractive Industries in Ecuador*. BU Global Economic Governance Initiative

Figure 12: Ecuador Export Basket Composition

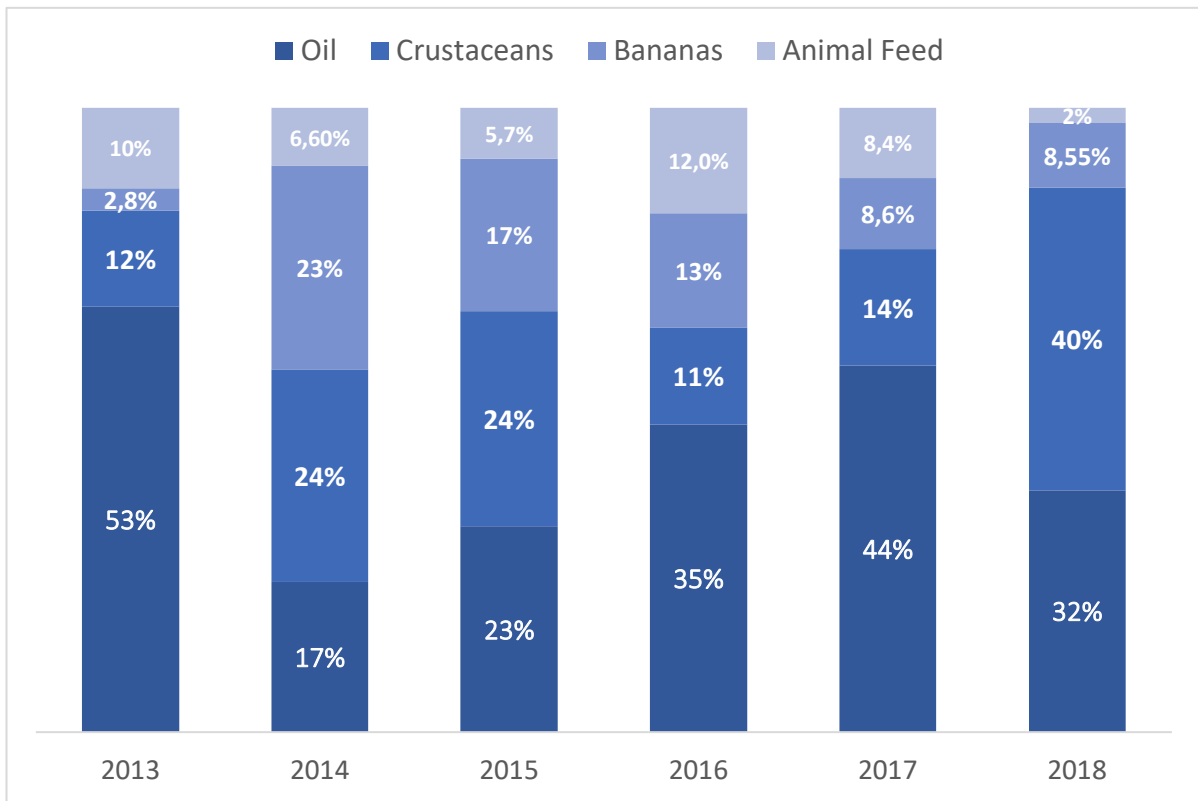


Source: Ray and Chimienti 2015-6

In recent years, crude remained the most exported product to China, nonetheless its share has decreased, especially in 2018. Ecuador’s export basket to China is expanding, raising shares of other few products. As figure 13 shows, from 2013 to 2018, only four products made up around 70-75% of the export basket – crude petroleum, crustaceans, bananas and animal feed. Another 12% was made up of the exports of precious metal ore, sawn wood and scrap copper.

Crustacean exports skyrocketed from \$72,410 in 2003 to \$598,174,526 in 2018. Similarly, banana exports also has surged, from \$10,256,288 in 2003 to \$127,887,502 in 2018.

Figure 13: Ecuador Export Basket Composition from 2013 to 2018

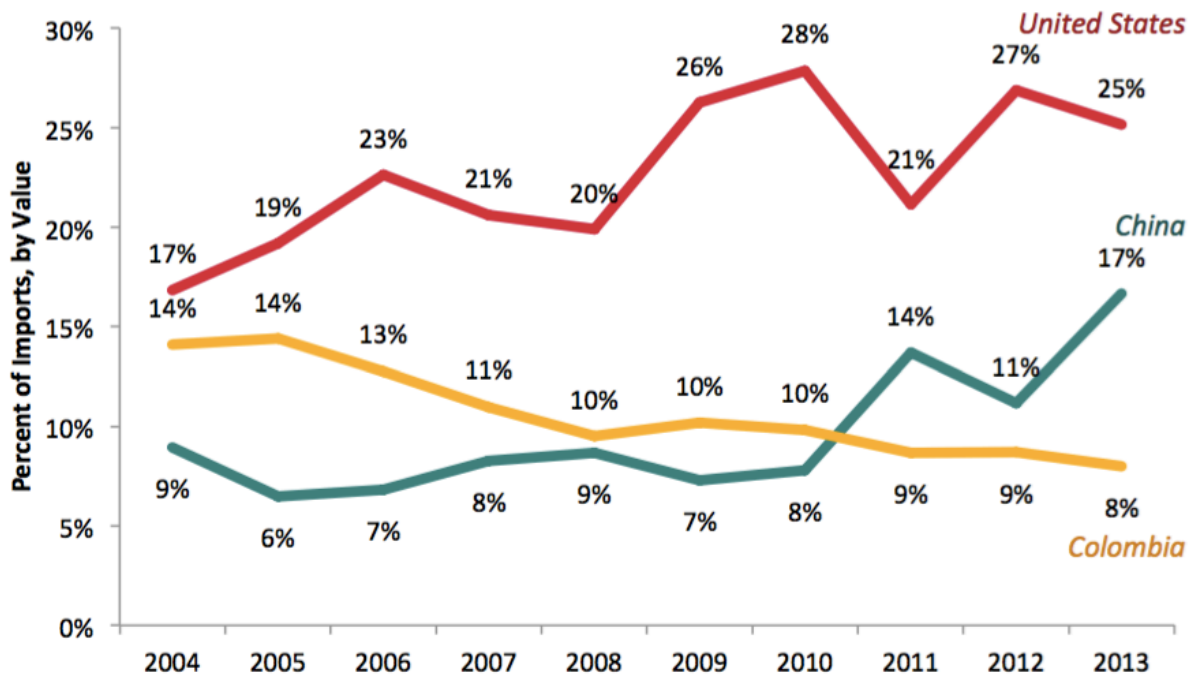


Source: author's analysis based on UN COMTRADE, IMF and WITS DATA

Concerning imports, Figure 14 shows that the United States during the China Boom still led in shipments to Ecuador—25 percent in 2013—however China has unseated Colombia since 2011, becoming the second most important source of imports, at 16.7 percent²⁵⁸.

²⁵⁸ Ray R. and Chimienti A., 2015-6. P. 11

Figure 14: Ecuador Imports – Top Three Sources from 2004 to 2013



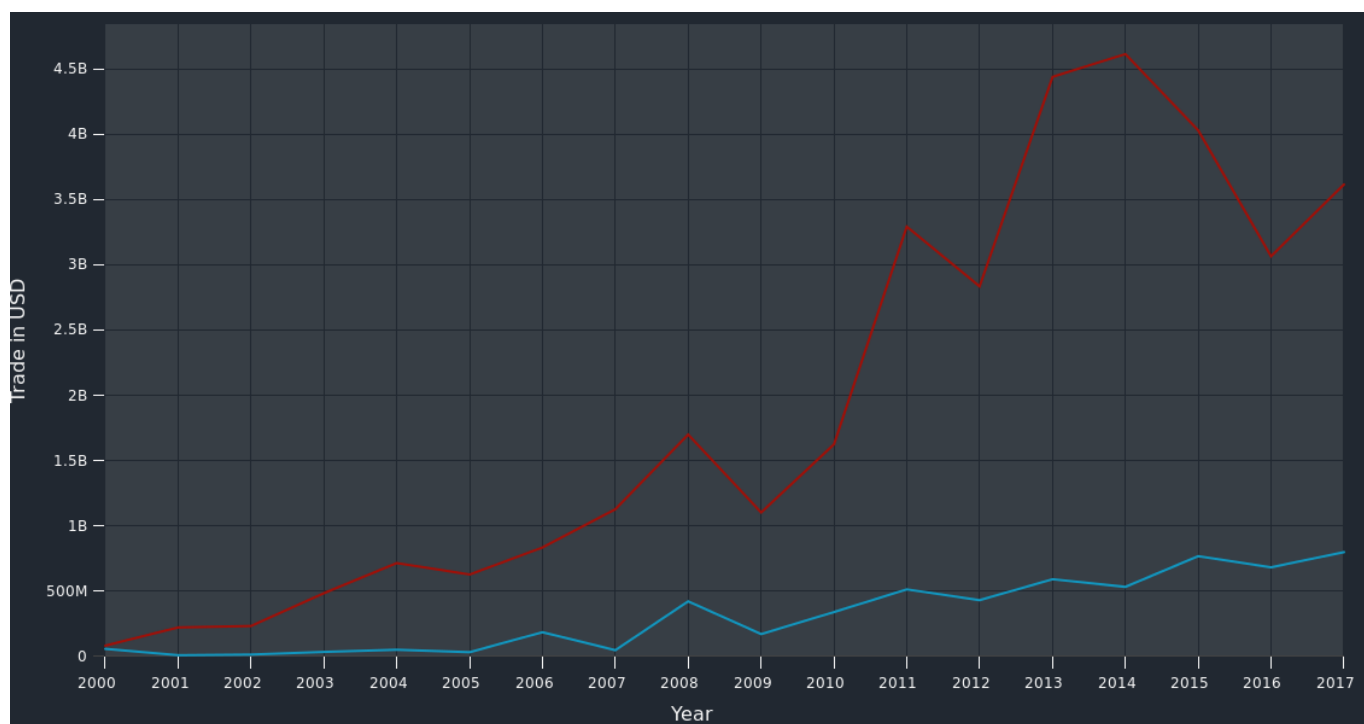
Source: Ray and Chimienti 2015-6

China exports basket to Ecuador is made up of a wide number of manufactured products. In 2004, computers were the most imported product with a share of only 5,9%. In 2007, motorcycles were the top imported product, but again, the share was low, 3.6%. what Ray and Chimienti have evaluated is that the heavy concentration in natural resources flowing from Ecuador to China is not matched by China’s exports to the Latin American country. From 2008 to 2012, the top five imports from China made up 22.8% of the total, while during the same period the top five exports to China made up 91.9%. From 2013 until 2018, computers, telephones, and broadcasting equipment have all been the top import from China, however, none of those product’s share had reached 10% of the total share.

In other words, Ecuador’s imports from China are diverse and spread over many sectors, what is more, the top five imports are all manufactured good. Whilst Ecuador’s export to China do not spread over many sectors, and the top five exports are dominated by natural resources. This disparity brings two major disadvantages. First, crude oil is much more prone to price swings than are manufactured goods, so when oil prices fluctuate worldwide, it will affect one side of this trading relationship much more than the other, creating instability in the trade balance between the two countries. Secondly, the imbalance leaves Ecuador with low value-added exports, which require little technology and support few well-paying jobs.

Another evident and significant issue is the asymmetry in the trade relation, shown in the trade balance deficit since 2000²⁵⁹. Ecuador’s exports are considerably smaller compared to the imports from the country.

Figure 15: Ecuador – China Trade Balance Deficit



Source: The Observatory of Economic Complexity²⁶⁰

4.1.4 Loans – Ecuador’s most important creditor, China

Ecuador did not receive much Chinese investment until 2009, after the default. In that year, the Correa administration accepted its first loan from Beijing. Part of the loan was between PetroEcuador and PetroChina, the listed arm of state-owned parent China National Petroleum Corp (CNPC), and stipulated that the first company sold crude to the second one. Finances amounted for \$1 billion at an interest rate of 7.25%.²⁶¹ Ecuador was relying solely on China for new external finance until 2014, when the country re-entered international finance markets, issuing its first traditional public bond since the \$3.2 billion default.²⁶²

²⁵⁹ Christian S. Rodas Saá, 2018

²⁶⁰ The Observatory of Economic Complexity

<https://atlas.media.mit.edu/en/visualize/line/hs92/show/ecu/chn/all/2000.2017/>

²⁶¹ Amazon Watch, 2014. *Beijing, Banks and Barrels: China and Oil in the Ecuadorian Amazon*

²⁶² Ray R. and Chimienti A., 2015-6

Data obtained from the China-Latin American Finance Database, show that to date, China’s policy banks, CDB and CHEXIM bank, have granted \$18,4 billion to Ecuador. According to Acosta and Guijarro, Chinese loans have not been tied to letters of intent or "structural adjustment programs” as is the case with other traditional financiers, the International Monetary Fund (IMF) and the World Bank (WB). Rather, loans issued by the two banks are mostly directed towards certain sectors – infrastructure, oil, mining and energy projects. In addition, these credits became less complex to obtain compared to those of the institutions aligned to the Washington Consensus.²⁶³

Among the projects, the Chine Ex-Im bank’s sponsored the hydroelectric dams Coca-Codo-Sinclair, one of the most important ones, as discussed in the previous chapter. Two other dams were financed by China during the years - the Sopladora hydroelectric dam and Minas-San Francisco hydroelectric dam. Coca-Codo-Sinclair and Sopladora hydroelectric dam have boosted the government’s goal of producing some 93.5 % of its energy needs by the year 2021 via hydroelectric sources, and have the added benefit of providing power for the large-scale Chinese extraction projects in Ecuador.²⁶⁴

Figure 16 shows a completed list of loans from CDB and China Ex-Im bank to Ecuador

Figure 16: China Development Bank and China Export-Import Bank loan commitments to Ecuador

DATE	TYPE	PURPOSE	LENDER	AMOUNT
June 2010	Energy	Coca-Codo-Sinclair hydroelectric dam	China Ex-Im Bank	\$1.7B
July 2010	Energy	80% discretionary, 20% oil	China Development Bank	\$1B
December 2010	Energy	Sopladora hydroelectric dam	China Ex-Im Bank	\$571M
July 2011	Energy	Renewable energy development	China Development Bank	\$2B
December 2012	Other	Finance 2013 budget deficit	China Development Bank	\$2B
February 2013	Infrastructure	Road to Quito airport	China Ex-Im Bank	\$80M
April 2013	Energy	Minas-San Francisco hydroelectric dam	China Ex-Im Bank	\$312M
October 2014	Energy	Finance Coca-Codo dam transmission system	China Ex-Im Bank	\$509M
January 2015	Other	Transportation, education, and health care projects	China Ex-Im Bank	\$5.3B
January 2015	Other	Finance 2015 Annual Investment Plan	China Development Bank	\$1.5B
January 2015	Other	Replace kitchen stoves	China Ex-Im Bank	\$250M
February 2016	Other	Yachay education complex	China Ex-Im Bank	\$198M
April 2016	Other	Non-discretionary and infrastructure	China Development Bank	\$2B
December 2018	Other	Development assistance	China Development Bank	\$900M
December 2018	Infrastructure	Reconstruction projects	China Ex-Im Bank	\$69M

Source: China-Latin America Finance Database

²⁶³ Acosta A., Guijarro J.C., 2018. *Una década desperdiciada: Las Sombras del Correísmo*

²⁶⁴ Ray R. and Chimienti A., 2015-6. P. 14

Typically, Chinese loans demand high interest rates, between six and eight percent²⁶⁵, with a short repayment deadline.²⁶⁶ Besides, many of these loan deals are to be paid by the sale of barrels of crude oil, or fuel, from Ecuador's state-run Petroecuador to PetroChina International Co., which commit much Ecuadorian crude to Beijing until 2024.²⁶⁷ As Ray and Chimienti explained, loans-for-oil involve China Development Bank (CDB), Ecuador, and Chinese oil companies, and proceed as follows: “ the CDB lends money to Ecuador, which in return gives a prescribed amount of oil to China's oil companies. The companies pay for the oil at the current market rate: part of their payment goes to an account at the CDB to repay Ecuador's loan, and the remainder is paid to Ecuador.”²⁶⁸ This complicated structure, might be affected by two risks. The first one, is the possibility of an sudden drop in the world oil price, which would require more barrels of crude to repay the loan. The second one, is an unexpected drop in Ecuador's oil production. In these two risks, lies the reason behind the short-term nature of these arrangements - around 8-9 years - that reduces the risk of a drop in world oil prices. What could affect Ecuador's oil production are technical or community problems. Substantially, this means that ensuring the steady output of oil must be even more of a top national policy priority.²⁶⁹

These contracts ensure China to secure long-term oil supply, establish itself as a major oil trader, and positions it as a dominant creditor in the region. In addition, this repayment system drastically decreases Ecuador's ability to market itself as a major global petroleum source.²⁷⁰ The oil that Ecuador sells to Chinese firms can be traded anywhere, and most of it is sent to the United States, predominantly by PetroChina, where it is refined.²⁷¹ By April 2010, Chinese firms were receiving around a third of Ecuador's export oil. A year later the volumes had nearly doubled. By mid-2013, Chinese SOE were allocated 83% of Ecuador's oil exports.

Over the past decade, loans, investment in infrastructure and advances on crude oil purchases to China, indebted Ecuador. According to Reuters, by December 2018, Ecuador's debt to China amounted \$6.5

²⁶⁵ Liam Timmons, June 2, 2017. *Sino-Ecuadorian Economic Interaction Exploits Natural Resources and Indigenous People*. Council on Hemispheric Affairs

²⁶⁷ Diálogo Chino, February 23, 2017. *China's Amazon footprint gets scant attention in Ecuador's election*. Kevin Koenig <https://dialogochino.net/8562-chinas-amazon-footprint-gets-scant-attention-in-ecuadors-election/>

²⁶⁸ Ray R. and Chimienti A., 2015-6. P. 15

²⁶⁹ Ray R. and Chimienti A., 2015-6

²⁷⁰ Liam Timmons, June 2, 2017

²⁷¹ Reuters, November 23, 2013. *Special Report: How China Took Control of an OPEC Country's Oil*. Joshua Schneyer, Nicolas Medina Mora Perez <https://www.reuters.com/article/us-china-ecuador-oil-special-report/special-report-how-china-took-control-of-an-opeccountry-s-oil-idUSBRE9AP0HX20131126>

billion.²⁷² The main cause of the debt has been the decline in oil prices. Moreover, some developments financed by the lends, including hydroelectric plants, are not producing the revenue that was estimated. In particular, the Coca Codo Sinclair dam, has been considered overpriced and of poor quality.²⁷³ According to many, including Amazon Watch, Ecuador's outstanding debt to China, is the driving force behind the expansion of oil drilling in Yasuni National Park.²⁷⁴

4.1.5 Foreign Direct Investment - China as a Source of Investment

Chinese companies have had a major presence in Ecuador since 2006 when a CNPC and Sinopec took over the assets of the Canadian firm Encana. The oil sector, as this acquisition evidences, as well as the mining sector, have been dominant for Chinese investors, who during the years, have played a central role in the development of Ecuadorean oil fields and mines.²⁷⁵

Chinese Greenfield foreign direct investment (GFDI) into Ecuador, have represented a small percentage of the total (4%) from 2003 to 2012.²⁷⁶ The dominant sector of Chinese GFDI is the extractive one - oil extraction, mining and drilling - representing 63.4%. This heavy concentration stands in stark contrast with all GDFI into Ecuador, were the same sector share was 29.8%.

²⁷² Reuters, December 6, 2018. *Ecuador Seeks to Renegotiate China Debt, Does not Rule Out IMF - Moreno* <https://www.reuters.com/article/ecuador-china/ecuador-seeks-to-renegotiate-china-debt-does-not-rule-out-imf-moreno-idUSL1N1YB1YZ>

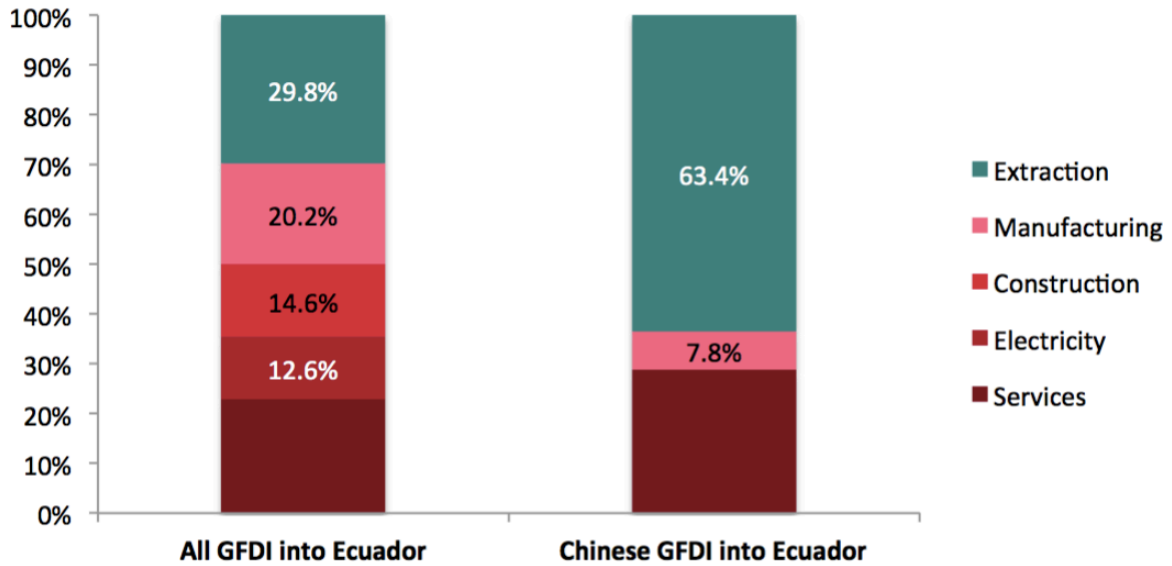
²⁷³ Los Angeles Times, December 10, 2018. *Ecuador Faces a Huge Budget Deficit Because of Loans it Received From China*. Chris Kraul <https://www.latimes.com/world/la-fg-ecuador-loans-china-20181210-story.html>

²⁷⁴ Amazon Watch, April 6, 2016. *Drilling Towards Disaster: Ecuador's Aggressive Amazonian Oil Push*. Kevin Koenig <https://amazonwatch.org/news/2016/0406-drilling-towards-disaster-ecuadors-aggressive-amazonian-oil-push>

²⁷⁵ Ray R. and Chimienti A., 2015-6

²⁷⁶ Ray R. and Chimienti A., 2015-6

Figure 17: Greenfield FDI Inflows to Ecuador



Source: Ray and Chimienti 2015-6

Concerning mergers and acquisitions (M&A), the other category of foreign direct investment, from 2003 through 2012, China represented nearly half of all M&A inflows into Ecuador, and 100% of those inflows went into extraction. In contrast, extraction represented only about 20% of M&A inflows into Ecuador from other countries during those years²⁷⁷.

Regarding oil investment, China has differed from most other investors in two ways. First of all, although Ecuador in 2007 and 2010 had implemented two major oil reforms, each of which increased the state's revenue from oil production, Chinese oil companies have remained in the country. In contrast, many other foreign oil companies – Petrobras, Perenco and City Oriente – have left Ecuador. Second, rather than merely produce the crude and refine it once it reaches China, or sell to the United States, the Asian country has also tried to support downstream industry linkages in Ecuador. Ecuador is losing out of money, technology and jobs by importing refined products, however the country was trying to address this imbalance through a new refinery on the coast near the port of Manta. The project was already in work for several years as a project between Ecuador and Venezuelan oil SOE PDVSA, when CNPC acquired a 30% stake in 2013. This project is of paramount importance for Ecuador, since the amount of oil that stays in Ecuador, could support more local jobs, and allow a technology transfer from China as well.

²⁷⁷ Ray R. and Chimienti A., 2015-6

The Refineria del Pacifico (RdP), name of the refinery, was supposed to start operations in 2017²⁷⁸. However, it is still unclear whether operations have started, and if PDVSA is still a partner. Chinese firms, besides trading Ecuadorian oil, taking part to the refinery project, also undertake great public projects of exploration and exploitation of oil fields. In the previous chapter, the attention was focused on the issues brought about by Chinese investments, and their major social and environmental impacts in LAC. In addition, in the previous paragraphs, we also explained how these investments, mostly through the Correa Government, affect the economic sphere of Ecuador, tying the country in a dependency relationship with China and putting it into a deep debt.

The next two paragraphs will present different study cases, one related to the open-pit copper mine, El Mirador Copper, in the province of Zamora Chinchipe, and different ones concerning several oil blocks the exploration and extraction of oil in the ancestral territories of the Ecuadorean Amazon Rainforest.

4.2 Environmental Injustice Case: El Mirador, Copper

El Mirador (the Mirador) is an open-pit copper, silver and gold mine project located in Southeast Ecuador, in Zamora Chinchipe region. This region is located on the Condor Mountain Range (Cordillera del Condor), a mountain range connecting Ecuador's southern Andes with the Amazon. Zamora Chinchipe is widely considered to be one of the most biodiverse regions in the world, and of extreme environmental fragility²⁷⁹. It is a hot spot of singular ecological wealth; it is important for the regulation of water for the whole region, being a major source of water for the wider Amazon watershed to the East.²⁸⁰

What is known is that the Condor breathes with more than 4,000 vascular plants and flowers, and it had been calculated that the Highland is home to 16 different ecosystems and of 300-400 Bryophytes, a type of algae²⁸¹. It is home to hundreds of endemic species of animals, such as birds, reptiles, amphibians and mammals.

²⁷⁸ Guancha.Cn, January 24, 2014. *Zhōngguó jiāng xiàng èguāduō'ěr liànyóu chǎng zhùzī 100 yì měiyuán yǔ wēi nèi rui lā gòngtóng yùnzuo* 中国将向厄瓜多尔炼油厂注资 100 亿美元 与委内瑞拉共同运作 (China Will Invest \$10 Billion into Ecuador's Refineries and Cooperate with Venezuela). Available at https://www.guancha.cn/Third-World/2014_01_24_202034.shtml

²⁷⁹ EJA, 2017. *Mirador, Cordillera del Condor, Ecuador*. <https://ejatlas.org/conflict/mirador-cordillera-del-condor-ecuador>

²⁸⁰ Amazon Watch, February 10, 2013. *To Get the Gold, They Will Have to Kill Every One of Us*, Alexander Zaitchik. Available at: <https://amazonwatch.org/news/2013/0210-to-get-the-gold-they-will-have-to-kill-every-one-of-us>

²⁸¹ William Sacher, 2011. *Revisión crítica parcial del "Estudio de Impacto Ambiental para la Fase de Beneficio del Proyecto Minero de Cobre Mirador" de la empresa Ecuacorriente*, Ecuador.

The Condor is also ancestral home to the Shuar indigenous people, the most storied warrior tribe in the annals of colonialism in the New World. The Shuar have always lived from the use of the resources of the Amazonian forest practicing agriculture, hunting, fishing, gathering, and raising animals as main activities for their subsistence. They also maintain a close physical and spiritual relationship with rainforest. The Shuar Arutam community is made up of 10,000 people, belonging to the Shuar nationality²⁸².

Originally El Mirador was owned by the Canadian company Corriente Resources. In 2010 the two Chinese state owned enterprises China Railway Construction Company (CRCC) and Tonlgong Nonferrous Investment Co. Ltd. (TNMC) acquired 96% of the shares of Corrientes Resources for an amount of USD 655 million, and established the Chinese consortium Ecuacorrientes (ECSA), the largest Chinese owned mining company in Ecuador²⁸³. ECSA is the company that directly operates the Mirador project.

Figure 18 and 19: Location of the project



Source: William Sacher²⁸⁴



Source: AIDC²⁸⁵

²⁸² Luis Sánchez Shiminaycela, Vicente Numi Tsankip March 2018. *Chinese Companies in the Ecuadorean Mining Sector: The Cases of El Mirador and San Carlos Panantza Projects*,

²⁸³ Luis Sánchez Shiminaycela, Vicente Numi Tsankip, March 2018.

²⁸⁴ William Sacher - Revisión crítica parcial del “Estudio de Impacto Ambiental para la Fase de Beneficio del Proyecto Minero de Cobre Mirador” de la empresa Ecuacorriente, Ecuador, 2011

²⁸⁵ Alternative Information & Development Centre <http://aidc.org.za/lenin-moreno-new-chapter-ecuador/>

In March 2012, the Ecuadorean government, through the Ministry of Non-Renewable Natural Resources, awarded Ecuacorriente an environmental license to begin open pit exploration and exploitation of copper and any minerals found by the company. The contract gave ECSA access to 5 billion pounds of copper and the possibility to process 60,000 metric tons daily as well as invest US\$1.4 billion in the first five years. In exchange, the Ecuadorian government will receive 52 percent of the profits, which includes a 12 percent value added tax, rent, utility and royalties²⁸⁶.

The project includes 11 blocks in an area of 9,928 hectares ²⁸⁷ (24,532.62 acres). According to the Environmental Impact Study, or Environmental Impact Assessment (EIA), done by *Walsh Consultant, a company hired by ECSA*, three slagheaps, one tailings channel, one beneficiation plant and one pit (crater) with a 5 km perimeter and a depth of 1.25 km (0.77 miles) for the processing of 30,000 tons/day ²⁸⁸ were planned to be constructed for the project. However, it is expected that after five years, the mineral processing will reach 60,000 tons/day with a mine life of 30 years²⁸⁹. At the end of the productive life of the mine, ECSA expects to recover a total of 2,208 million pounds of copper and 535,500 ounces of gold.

In 2015 the construction of the mine started. According to *El Comercio*, ECSA had planned to start testing extraction activities in 2019. However, in May 2018, the schedule had been delayed, and the amount to be invested had been reduced²⁹⁰. This is due to a suspension of 40% of the project by the Ministry of Environment²⁹¹, because of 31 environmental non-compliance, and for carrying out activities without the respective license in the smelting plant, where minerals are processed, and in the waste deposit²⁹². Among these observations, were the lack of revegetation of slopes and affected areas, the improper storage of fuels, the transport of material without protective cover and the maintenance of machinery in unauthorized sites²⁹³.

²⁸⁶ Latinamerica Press, February 2, 2014. *Rebuilding Communities: A Type of Resistance*. By Luis Angel Saavedra. Available at: <http://www.lapress.org/articles.asp?art=7080>

²⁸⁷ Interactive Map, July 28, 2018. Impactos del Proyecto Minero “Mirador” en Amazonía. <https://maaproject.org/mirador/>

²⁸⁸ Interactive Map, July 28, 2018.

²⁸⁹ Interactive Map, July 28, 2018.

²⁹⁰ *El Comercio*, July 5, 2018. *La Para en Mirador Reducirá la Inversión* (The suspension in El Mirador will decrease the investment) Available at: <https://www.elcomercio.com/actualidad/mirador-reducira-inversion-proyecto-minas.html>

²⁹¹ Amazon Conservation, Monitoring of the Andean Amazon Project, Impactos del Proyecto Minero “Mirador” en Amazonía Ecuatoriana.: <https://maaproject.org/mirador/>

²⁹² Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

²⁹³ <http://www.ecuadorenvivo.com/economia/23-economia/91827-proyecto-cuprifero-mirador-tiene-un-avance-del-75.html>

Ecuacorriente presented a plan to solve those issues. In February 2019, Carolina Zurita, Vice Minister for the environment, explained to *El Comercio*, that the majority of the non-compliances were remedied

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Ecuacorriente has planned to start the exploitation test in July 2019, while in December of the same year the production should start.

Although these are the official plans for both the Ecuadorean government and ECSA, El Mirador had been and is being strongly contrasted and opposed by the indigenous population of the Shuar, who, as we mentioned above, is the ancestral inhabitant of the region where the project is located. El Mirador is famous for being a contested project, due to the significant social and environmental impacts it caused, such as violation of indigenous rights, labor rights, and rights of nature. Since the beginning it has been target of protests, lawsuits and resistance from communities and organizations concerned about the mine's impact on the community, water and biodiversity. One of the main reasons why the community started to raise its voice, is the violation of the right of indigenous peoples to Prior, Free and Informed Consent, contemplated in the ILO Convention 169, the United Nations Declaration on the Rights of Indigenous Peoples, and the 2008 Ecuadorean Constitution²⁹⁵. In particular, the concession process, the granting of environmental permits and the signing of the contract, were conducted without any procedure of prior or environmental consultation²⁹⁶.

Another problem arose when ECSA occupied the peasant and indigenous' land to build the facilities of the project. The CASCOMI community²⁹⁷ publicly reported that the company used questionable methods to occupy the land - land's price manipulation, eviction of families, and the destruction of public recreation spaces²⁹⁸. According to Luis Sanchez Shiminaycela, indigenous leader of the CASCOMI community, since 2001 until 2016, 50 families had been forcefully evicted from their land by members of ARCOM²⁹⁹, the police and private guards³⁰⁰. The most critical situation happened

²⁹⁴ *El Comercio*, *El proyecto cuprífero Mirador tiene un avance del 75% (The Mirador copper project has a 75% advance)*. By Evelyn Tapia. <https://www.elcomercio.com/actualidad/proyecto-mirador-mineria-avance-concesion.html>

²⁹⁵ China Ambiente y Derechos, September 28, 2018. *Incumplimiento de obligaciones extraterritoriales de China en Ecuador*. <http://chinaambienteyderechos.lat/ecuador/>

²⁹⁶ China Ambiente y Derechos, September 28, 2018. *Incumplimiento de obligaciones extraterritoriales de China en Ecuador*. <http://chinaambienteyderechos.lat/ecuador/>

²⁹⁷ CASCOMI: Comunidad Amazónica de Acción Social Cordillera del Cóndor Mirador - Amazon Community for Social Action Cordillera del Cóndor <http://cascomi.blogspot.com/>

²⁹⁸ China Ambiente y Derechos, September 28, 2018. *Incumplimiento de obligaciones extraterritoriales de China en Ecuador*. <http://chinaambienteyderechos.lat/ecuador/>

²⁹⁹ ARCOM: the State regulator of the mining industry in Ecuador. <https://www.bnamericas.com/company-profile/en/agencia-de-regulacion-y-control-minero-arcom>

³⁰⁰ Centro de Derechos Económicos y Sociales, CDES, 2016. *La consulta libre, previa e informada en el Ecuador*- Quito. By López Abad.

in the Tundayme parish, in the San Marco town, which on May 12th 2014 almost entirely disappeared after the destruction of the church and the school by workers from ECSA, accompanied by some 50 police officers³⁰¹. Seven months later, the murder of Jose Tendetza signed another crucial point in the conflict. On December 3rd, 2014 Jose Isidro Tendetza Antún was found dead in the canton The Pangui, where the mine is located. He was a Shuar leader, active defensor of his territory³⁰², and prominent critic of President Rafael Correa's government, which he accused of making an U-turn on its pledge to respect nature and indigenous lands, by approving mega-projects, including large-scale mines and hydroelectric dams – mostly in Chinese hands³⁰³. Jose Tendetza is speculated to have been assassinated for opposing the Mirador project. As originally planned, on December 5th 2014, the leader was supposed to submit a complaint against Ecuacorriente company in front of the International Rights of Nature Tribunal, at the Peoples' Summit in Lima, Peru. The case of Tendetza was brought to trial, and two workers of ECSA had been processed. However, in January 2017, they had been absolved and the case ended in impunity³⁰⁴.

El Mirador Copper Mine Project represents a case of violation of labor rights as well. Workers of the project reported abuses, illegal dismissals and foreseeable accidents in the workplace³⁰⁵. In May 2014 Ecuacorriente dismissed eleven workers and technicians in retaliation for their labor claims. In July 2018, a truck driver died in the mine after a landslide³⁰⁶. According to the report published by CICDHA, the incident was mainly due to the removal of land in an area of high rainfall, such as the Condor Highland. This episode then is directly linked to the environmental impacts the project *has, impacts that put in serious danger the Rights of Nature*, recognized by the Ecuadorian Constitution.

According to *The Rights of Nature*³⁰⁷, El Mirador will remove all the vegetation and the superficial soil layer of the mined area: it will eliminate 4,000 species of vascular plants, and over 6,000 hectares

³⁰¹ Latinamerica Press, February 2, 2014

³⁰² planv.com.ec, December 4, 2014. *Who Killed Jose Tendetza?* Available at: <http://www.planv.com.ec/historias/sociedad/quien-mato-jose-tendetza>

³⁰³ The Guardian, 2015. *Was this indigenous leader killed because he fought to save Ecuador's land?* Collins Dan. <https://www.theguardian.com/world/2015/jun/02/ecuador-murder-jose-tendetza-el-mirador-mine-project>

³⁰⁴ La Hora, 2017. *The murder of José Tendetza continues in impunity (Translated from Spanish)*. Available at: <https://www.lahora.com.ec/zamora/noticia/1102119580/el-asesinato-de-jose-tendetza-sigue-en-la-impunidad>

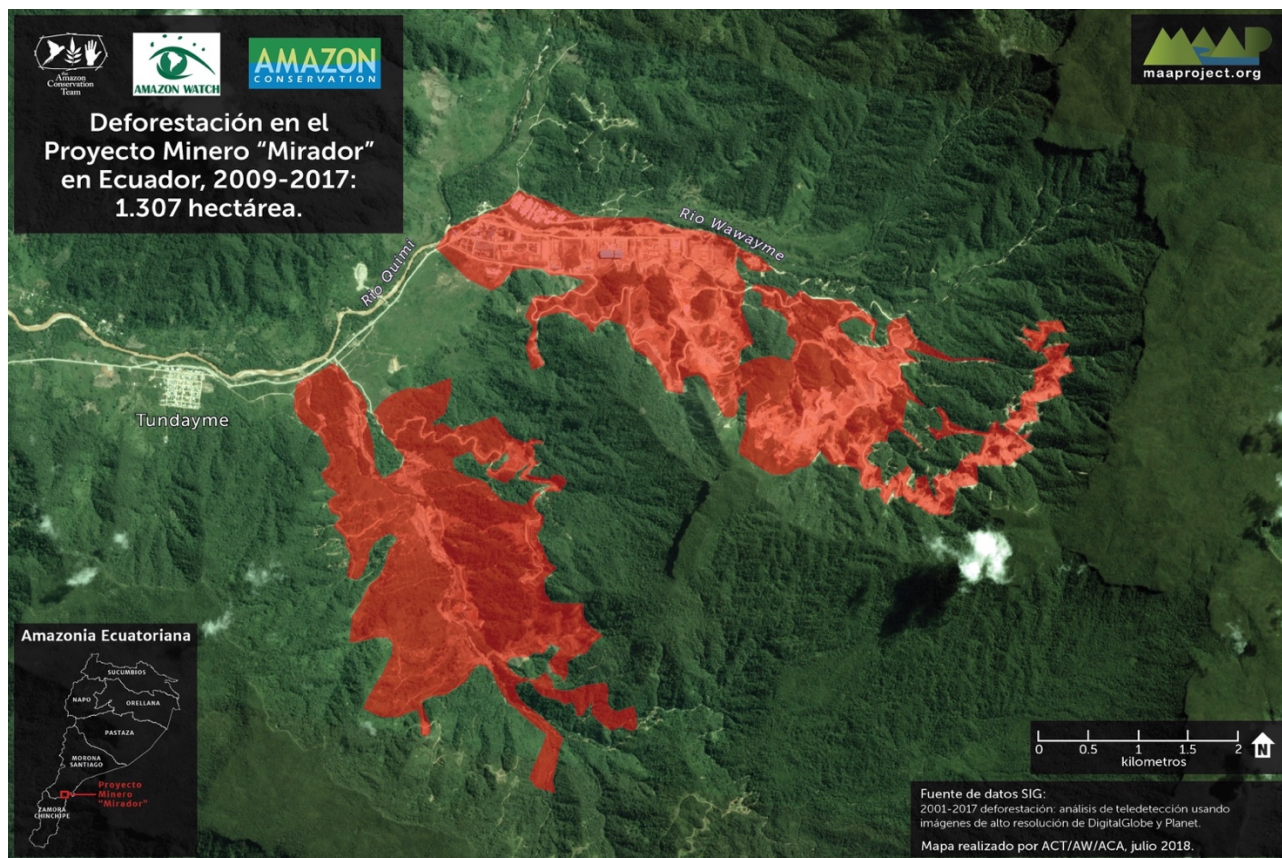
³⁰⁵ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

³⁰⁶ EL COMERCIO, July 25, 2018. *Driver of a dump truck died in the Mirador mining project (Translated from Spanish)*. By Evelyn TAPIA. Available at <https://www.elcomercio.com/actualidad/conductor-volqueta-proyecto-minero-mirador.html>

³⁰⁷ The rights of Nature, February 26, 2013. *The Case For Rights Of Nature In Face Of The Mirador Open Pit Copper Mining Project*. <http://therightsofnature.org/the-case-for-rights-of-nature-in-face-of-the-mirador-open-pit-copper-mining-project/>

of the Protected Forest of the Condor Highland will be disturbed. According to Carlos *Mazabanda*, Ecuador Field Coordinator of the nonprofit organization Amazon Watch, the main impacts are due to high levels of deforestation. Because of the opening of routes and of dump sites, where the waste that is generated when building the crater of the mine is placed³⁰⁸, there are more than 1,300 deforested hectares in the area. Figure 20 shows the deforested area in 2017.

Figure 20: Deforested Area



Source: MAAP

The Environmental Impact Assessment done by Walsh Consultant confirmed that there are some endemic species, threatened of extinction, due to the fragile habitats where their lives depend on; in particular three species of amphibians, *pristimantis phodostichus*, *allobates kingsburyi*, and *pristimantis incomptus*, and a reptile, *enyalioides rubrigularis*³⁰⁹. What could also disappear are the ecosystems that allow the existence of these species.

³⁰⁸ Observatorio de Conflictos Mineros de America Latina (OCMAL), 2018 <https://www.ocmal.org/la-deforestacion-del-proyecto-minero-mirador-en-el-sur-de-la-amazonia-de-ecuador/>

³⁰⁹ The rights of Nature, February 26, 2013. *The Case For Rights Of Nature In Face Of The Mirador Open Pit Copper Mining Project*. <http://therightsofnature.org/the-case-for-rights-of-nature-in-face-of-the-mirador-open-pit-copper-mining-project/>

This means a direct violation to the Rights of Nature (Art. 71-73 of the Ecuadorian Constitution), and an effect on life itself³¹⁰.

Impacts on the environment include pollution of water sources and aquifers as well, in particular of the rivers Wawayme, Tundayme y Quimi. As the EIA reports, the project is located in the basin of the Zamora river, in the sub-basin of the Quimi River, specifically in the micro-basins of the rivers Tundayme and Wawayme, which start at the foothills of the Condor Highland³¹¹. According to the EIA, ECSA will have to pump 140 liters of water per second from the rivers Wawayme and Quimi, to be used for the chemical treatment of the rock and other services. After the use of the water, it will be mixed with the chemicals and the acid rock to be stored in the landfills for solid wastes and in an enormous tailing pond³¹², located at just half a mile from the Quimi river³¹³.

One of the worst consequences caused by mining activity is the Acid Mine Drainage (AMD) and the leachates from tailing ponds, which happen when the rocks that have been taken from the subsoil to the surface get in contact with water or air. This creates the oxidation of sulphurated minerals. The AMD can irreversibly affect the quality of superficial waters and underground aquifers in the affected basins, and can be lethal to all life forms and the eco-system³¹⁴, killing entire species of fish and becoming a danger to human consumption. Especially in a distinctive place like the Condor Highland, with intense rains and seismic danger, this Project becomes the perfect formula for an environmental disaster³¹⁵.

Contaminated rivers highly affected the environment and whose lives depend on it – local communities. Rivers are not only vital as a fundamental element for agriculture and fishing, activities that provide the basis of the livelihoods of families, but also work as important spaces that sustain ways of socialization between communities, who now, had been altered by water pollution³¹⁶.

³¹⁰ The rights of Nature, February 26, 2013. *The Case For Rights Of Nature In Face Of The Mirador Open Pit Copper Mining Project*. <http://therightsofnature.org/the-case-for-rights-of-nature-in-face-of-the-mirador-open-pit-copper-mining-project/>

³¹¹ William Sacher - Revisión crítica parcial del “Estudio de Impacto Ambiental para la Fase de Beneficio del Proyecto Minero de Cobre Mirador” de la empresa Ecuacorriente, Ecuador, 2011

³¹² Website: <http://therightsofnature.org/the-case-for-rights-of-nature-in-face-of-the-mirador-open-pit-copper-mining-project/>

³¹³ <https://www.theguardian.com/world/2015/jun/02/ecuador-murder-jose-tendetza-el-mirador-mine-project>

³¹⁴ <http://protectecuador.org/adverse-ecological-effects-of-the-mirador-open-pit-copper-mine-2/>

³¹⁵ <http://therightsofnature.org/the-case-for-rights-of-nature-in-face-of-the-mirador-open-pit-copper-mining-project/>

³¹⁶ Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017. *La Herida Abierta del Condor. Vulneración de derechos, impactos socioecológicos y afectaciones psicosociales provocados por la empresa minera china Ecuacorriente S.A. y el Estado ecuatoriano en el Proyecto Mirador*.

The tailing dam mentioned above, represents a serious risk for the ecosystem. Dr. Steven H. Emerman, hydrology professor at Utah Valley University, internationally recognized expert on tailings dams and their structural integrity, decried the likelihood of the collapse of the waste impoundment³¹⁷. He points out that the current design of tailings dams is not adequate for the natural conditions of the area of the project. Usually, tailings dams are the only barrier that protects nature from the toxic waste generated by mining operations. However, in this case, it is a serious and imminent threat of around 100 million tons of highly toxic waste, which will be discharged directly into the surrounding rivers, if the structure will collapse³¹⁸. On March 1st 2019, two UN Rights of Nature experts, David Dene and Julio Prieto, presented a request to the Ecuadorian court to suspend the construction of the dam, because it might cause a disaster, such as that of Minas Gerais in Brazil³¹⁹.

In order to defend their rights, local communities always contested and opposed the project El Mirador. In 2012, CONAIE, the Confederation of Indigenous Nationalities of Ecuador, the Zamora Chinchipe Prefect, and Salvador Quishpe³²⁰ were leading the two week march across the country against plans for large-scale mining projects in Ecuador. At that moment, the Government had just signed the agreement with Ecuacorriente to develop El Mirador. The demonstrators set off right from the town of El Pangui to march to the Capital, Quito³²¹.

Since 2014, Acción Ecológica and other local organizations tried to contact those Chinese banks that finance the mining project, to inform them of the situation and to ask them to stop backing the Consortium (CRCC and Tongling Nonferrous Metals) that controls El Mirador.

In March 2018, also CASCOMI organization and the Organization of the Pueblo Shuar Aruntam wrote an open letter to Chinese authorities with the same purpose³²². This letter or report, explained in detail the two Chinese projects El Mirador and San Carlos Panantza. The latter is located in the parishes of San Miguel de Concha and Santiago de Panantza, in the canton of San Juan Bosco and Limón Indaza, in the province of Morona Santiago.

³¹⁷ MONGABAY, 2017. *Indigenous communities resist Chinese mining in Amazonian Ecuador*. Nathanson Max. Available at: <https://news.mongabay.com/2017/09/indigenous-communities-resist-chinese-mining-in-amazonian-ecuador/>

³¹⁸ THE RIGHTS OF NATURE, 2019. *Condor Mirador Case– Press Release – Rights of nature*. Global Alliance for the rights of nature (GARN). Available at: <http://therightsofnature.org/condor-mirador-case-press-release-rights-of-nature/>

³¹⁹ THE GUARDIAN, 2019, Brazil dam collapse: 10 bodies found and hundreds missing. PHILLIPS, Dom <https://www.theguardian.com/world/2019/jan/25/brazil-dam-collapse-news-latest-mining-disaster-brumadinho>

³²⁰ EJA, 2017. *Mirador, Cordillera del Condor, Ecuador*. <https://ejatlas.org/conflict/mirador-cordillera-del-condor-ecuador>

³²¹ BBC NEWS, 2012. *Ecuador indigenous protesters march against mining*. Available at: <https://www.bbc.com/news/world-latin-america-17306228https://www.bbc.com/news/world-latin-america-17306228>

³²² Shiminaycela Luis Sánchez and TSANKIP Vicente Numi, Ecuador, May 2018. Local communities continue to oppose mining projects in Ecuadorian Amazon backed by Chinese companies, Business and Human Right Resource centre <https://www.business-humanrights.org/en/ecuador-local-communities-continue-to-oppose-mining-projects-in-ecuadorian-amazon-backed-by-chinese-companies>

The main purpose behind these actions is to present to Chinese authorities the lack of implementation of the Chinese guidelines, promulgated to steer the environmental and social behavior of banks and Chinese companies when granting financing or developing projects abroad. The guidelines are not mandatory, but they contain highly relevant principles and recommendations that were “broken” in both cases El Mirador and San Carlos-Panantza projects.

At the moment, the Chinese Guidelines have not been taken into account by the Chinese financiers of these projects³²³, nor by the Chinese contractors TNMC and CCCRC. The last report selected some articles of the Green Credit Guideline; the Guidelines on Environmental Protection in Investment and External Cooperation; the Social Responsibility Guide for Chinese Contractors and the Corporate Social Responsibility Guidelines for Mining Companies Abroad³²⁴.

Legal actions have also been undertaken by CASCOMI community. In order to defend its rights, the community filed a Constitutional protection proceeding. In January 15th 2019, the Judge Carlos Dávila denied the proceeding in favor of the Amazonian community³²⁵. He determined the legality of the project, which had been challenged by the Amazonian indigenous people due to its unconstitutionality³²⁶.

³²³ Financiers: Development Bank of China, the Bank of China, the Bank of Exports and Imports of China and the Industrial and Commercial Bank of China.

³²⁴ Luis Sánchez Shiminaycela, Vicente Numi Tsankip. March 2018.

³²⁵ La Republica, 2019. *Judge denies protection action against copper mine in Tundayme (Translated from Spanish)*. Available at <https://www.larepublica.ec/blog/sociedad/2019/01/15/juez-niega-accion-proteccion-contra-mina-cobre-tundayme/>

³²⁶ ACCION ECOLOGICA, 2019. *There are judges and judges (Translated from Spanish)*. <http://www.accionecologica.org/editoriales/2347-hay-juecesy-jueces>

Environmental Justice

To insert the Mirador case into the Environmental Justice discourse, a table that contains the EJ principles explained in the first chapter of this work had been drawn.

Principle	El Mirador
Recognition	x
Participation	x
Precaution	x
Fair Distribution	x
Redress and Compensation	x

Recognition: this first principle affirms the recognition of human and environmental rights, and the recognition of the expanded moral community that is affected by ecological risk. The project goes against this principle by violating the Right of Nature, Labor Rights, Indigenous Rights, and Human Right to Water. It also violates “*the right of everyone to the enjoyment of the highest attainable standard of physical and mental health*” recognized by article 12 of the International Covenant on Economic, Social and Cultural Rights³²⁷.

Opponents also claim violations of the 2008 Constitution’s protections for indigenous lands and nature³²⁸.

Participation: and access to decision-making and policy-making processes³²⁹. The Shuar, since the beginning of the project, have claimed that they haven’t been previously informed and consulted, a right largely recognized by the ILO Convention 169, *United Nations Declaration on the Rights of Indigenous Peoples*, and the 2008 Ecuadorean Constitution.

Precaution: Environmental laws and regulations should be correctly and fairly applied and enforced, to ensure the minimization of risk in relation to the larger community. In particular, article 73 on Rights of Nature of the Ecuadorian Constitution, demands the State to apply “*precautionary*

³²⁷ United Nations, *International Covenant on Economic, Social and Cultural Rights*, 1976. Available at: <https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx> Art. 12

³²⁸ MONGABAY, 2017. *Indigenous communities resist Chinese mining in Amazonian Ecuador*. Nathanson Max. Available at: <https://news.mongabay.com/2017/09/indigenous-communities-resist-chinese-mining-in-amazonian-ecuador/>

³²⁹ Agyeman J., Bullard R. D., Evans B. (2002)

measures and restriction to activities that can lead to the extinction of species, the destruction of ecosystems or the permanent alteration of natural cycles". However, this direct prohibition is eluded when the activity is accepted by the State, being aware that the contaminating pollutants will end up in rivers and ecosystems, permanently altering the natural cycles and the genetic heritage.

Fair Distribution: this principle refers to the fair distribution of resources, goods, and environmental risks among relevant parties, both the human and non-human sphere. El Mirador is another case where indigenous communities are the most affected from Governments' decision and foreign companies' operations in their territory. This project weakened the community, making it more vulnerable to environmental risks.

Redress and Compensation: compensations only take into account the calculation of the value of the land for the time of exploitation of minerals and do not consider other material and immaterial losses. Therefore they do not execute an integral reparation from the perspective of the exercise of human rights. Besides, evicted families could not create inventories of what they had lost³³⁰.

The first material loss of the displaced people occurred because neither the State nor the company considered giving financial compensation for the loss of values related to livelihoods (work tools, crops, pastures, animals, aqueducts). The compensation provided also did not include values for immaterial losses, such as the investment of time in the care of the land and animals, the clean water that they used to consume, the protein they previously obtained from fish, and all the psychosocial impacts that face. These unforeseen losses affect equally all persons subject to evictions caused by administrative processes for the constitution of mining easements; and therefore, it does not constitute an integral reparation in relation to the violation of human rights that they must face.³³¹

The families whose interviewed are reported on La Herida Abierta del Cóndor, claimed that during the eviction they faced other material losses, among them, the loss of important documents, possible theft of money, destruction, damage or loss of work tools, animals, cooking utensils, appliances and other goods that make up household goods.

In a nutshell, people and families of San Marcos faced the loss of livelihoods that have directly affected their right to live with dignity, and with it their human rights to property, private, work and

³³⁰ Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017

³³¹ Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017

housing, mainly. There have been no inventory or recognition processes regarding these losses, let alone comprehensive reparations for the damages suffered.³³²

4.3 Environmental Injustice Cases: Chinese oil companies in Ecuador

China National Petroleum Corporation (CNPC) and China Petroleum and Chemical Corporation (Sinopec), are two major Chinese state-owned oil and gas firms. CNPC and Sinopec operate in Ecuador under the names of Andes Petroleum and PetroOriental, two of the most successful foreign oil companies in the country³³³.

In 2003, China has taken its first step to enter the Ecuadorean oil sector through the acquisition of the oil block 11 by CNPC. The company had purchased the rights to operate in a 200,000 hectare area, operated by the Ecuadorian Lumbaqui Oil, located in the Sucumbíos Province³³⁴. According to the local population, the company entered the area without the respective mandatory permits, and started new seismic exploration. Acción Ecológica reported that the company used questionable methods to obtain the Environmental License relative to those activities. The seismic exploration carried out, affected more than 30.000 hectares, in a protected area. CNPC operated in block 11 until 2010.³³⁵

In 2006, CNPC and Sinopec jointly purchased the Ecuadorian assets of the Canadian Encana³³⁶, including three oil concessions in the Provinces of Pastaza, Sucumbíos and Orellana, as well as a stock of 32.3% of the Heavy Crude Pipeline (Oleoducto de Crudos Pesados, or OCP) project³³⁷. By buying Encana's assets, they also inherited the company's uneasy relationship with community leaders and environmentalists, mostly regarding the OCP pipeline. However, Andes and PetroOriental were able to maintain a more positive relationship with the civil society and the government than the previous firm had.

Regarding the concessions in the Sucumbíos Province, operated by Andes Petroleum, one of the reasons why the firm enjoys a comparatively peaceful company-community relationship, might be

³³² Colectivo de Investigación y Acción Psicosocial, Ecuador, 2017

³³³ Ray R. and Chimienti A., 2015.

³³⁴ Acción Ecológica, (2006). Atlas Amazonico: *Bloque 11: China National Petroleum Corporation (CNPC - China)*. Author: Maldonado Adolfo <http://www.accionecologica.org/images/2005/petroleo/documentos/10-Atlas-BLOQUE%2011-CNPC.pdf>

³³⁵ Acción Ecológica, (2016). *Xi Jinping in Ecuador Episode 4: Socio-environmental record of Chinese oil companies in Ecuador*. Available at: <http://www.accionecologica.org/component/content/article/417-cuento-chino/2051-xi-jinping-en-ecuador-entrega-4-prontuario-socioambiental-de-las-petroleras-chinas-en-ecuador>

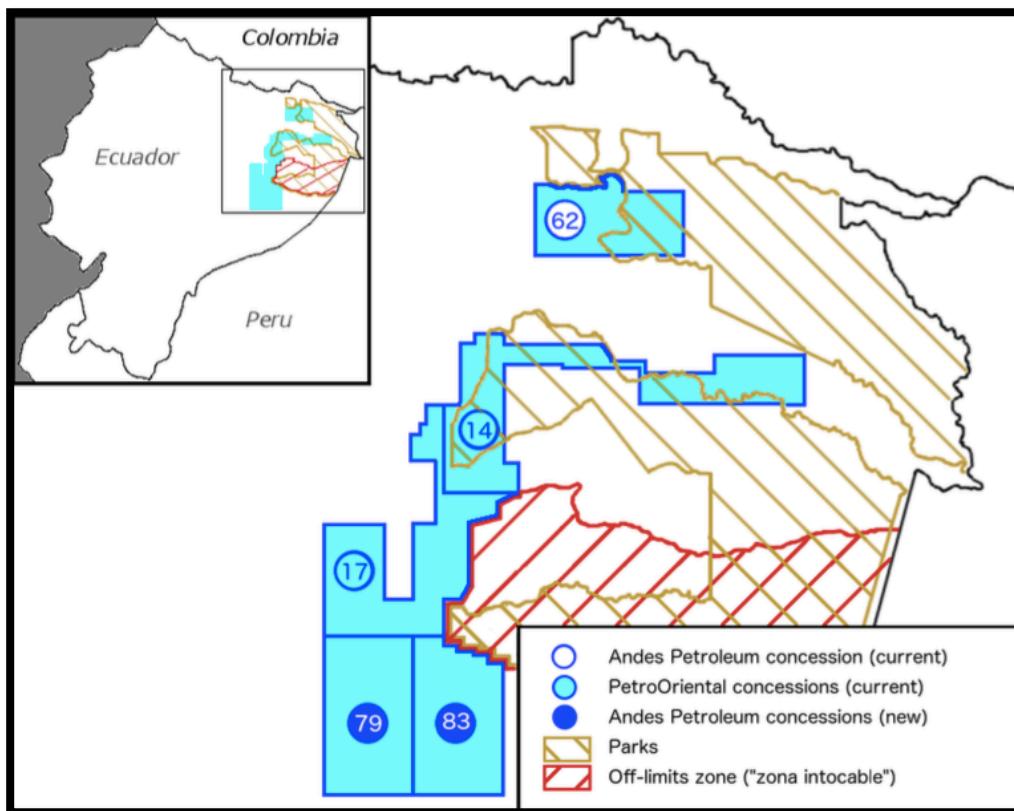
³³⁶ Encana Corporation: Canadian company engaged in hydrocarbon exploration <https://www.encana.com/>

³³⁷ Ray R., Gallagher K., López A. and Cynthia Sanborn, 2017. *China and Sustainable Development in Latin America: The Social and Environmental Dimension*. P. 123

the turbulent past that the Province had to go through previously. Sucumbíos has been home to large scale agricultural and oil development for decades, including Texaco’s original oil fields. The contamination left by Texaco’s operations, prevents a return to traditional livelihoods, thus the community’s best available option would be more investments in the oil extraction sector. According to Local community leader Javier Piaguaje, some residents of San Pablo de Katetsiaya, actually hope that oil fields are discovered in the area. If Andes Petroleum finds oil and set up operations, it would invest in the town and would be able to secure local support³³⁸.

Besides some cases where exploration and exploitation activities are welcomed by local communities, five case studies of environmental justice will be presented in the following paragraphs. The concessions discussed are either managed by Andes Petroleum or PetroOriental. Figure 21 shows the location of the cases discussed.

Figure 21: Map of Ecuador, with Andes Petroleum and PetroOriental holdings shaded



Source: Rebecca Ray and Adam Chimienti

³³⁸Ray R., Gallagher K., López A. and Cynthia Sanborn, 2017. P.125

Block Tarapoa/62 – Andes Petroleum

The first case regards Block Tarapoa or Block 62, located in the northeastern province of Sucumbíos and managed by Andes Petroleum. Part of the concession is located in the protected area of the Cuyabeno National Park, and in the Siona and Secoya indigenous territories³³⁹. Originally the block was owned by Encana firm, which sold it to Andes in 2006. What Andes Petroleum inherited by purchasing this concession, was an extremely difficult and troubled oil block, with very high levels of pollution.³⁴⁰

One of the first problems arose, is the location of the project - the protected area of the Cuyabeno Wildlife Reserve, considered unconstitutional. It is important to refer briefly to Article 407 of the Ecuadorian Constitution, which reads as follows “*activities for the extraction of non-renewable natural resources are forbidden in protected areas and in areas declared intangible assets*”³⁴¹.

As Pixley-Fink and Maldonado wrote in 2005, when Encana sold Block Tarapoa to Andes Petroleum, it was one of the dirtiest blocks of the country. The local communities were not only affected by the previous activities, but also by the current ones, operated by the Chinese firm. The affected communities have filed complaints to the Ministry of the Environment about contamination of water, soil, air, loss of biodiversity and deforestation³⁴².

According to CICDHA, labor disputes have been registered to for lack of payment of profits to workers and forgery of signatures. In 2009, the Constitutional Court of Ecuador ruled in favor of the workers and sanctioned Andes Petroleum and PetroOriental. The conflicts with ex-workers are maintained to date.³⁴³

³³⁹ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

³⁴⁰ Acción Ecológica, 2005, Atlas Amazonico, *Bloque Tarapoa: Encana Corporation (Canadá)*. Authors: Elizabeth Pixley-Fink and Adolfo Maldonado. Document translated from Spanish by the author. <http://www.accionecologica.org/images/2005/petroleo/documentos/05-Atlas-BLOQUE%20TARAPOA-Encana.pdf>

³⁴¹ Constitution of the Republic Ecuador, Art. 407

³⁴² Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

³⁴³ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH). P 19 <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

Environmental Justice

To insert block Tarapoa case into the Environmental Justice discourse, a table has been drawn to show which principles are being violated when carrying out these activities.

Principle	Block 62/Tarapoa
Recognition	x
Participation	
Precaution	x
Fair Distribution	x
Redress and Compensation	

Recognition: this principle affirms the recognition of human and environmental rights, and the recognition of the expanded moral community that is affected by ecological risk. The concession of Block 62 to Andes Petroleum fails to comply with this principle by violating human rights and labor rights. This case fails to comply with article 407 of the Constitution of the Republic of Ecuador, that we mentioned above.

The concession also fails to comply with article 12 of the International Covenant on Economic, Social and Cultural Rights. This article recognizes *“the right of everyone to the enjoyment of the highest attainable standard of physical and mental health”*³⁴⁴.

Regarding labor rights, Article 23 of the UDHR and Articles 7 and 8 of the ICESCR protect the right to enjoy fair and satisfactory working conditions, the right to found and join trade unions, freedom of association and the right to strike. Likewise, China has ratified 26 Conventions of the International Labor Organization (ILO) that include four of the eight ILO conventions on the fundamental rights of workers.

Precaution: the principle of Precaution regards the correct and fair application of environmental laws and regulation, in order to minimize the risks related to the larger community. This principle is eluded

³⁴⁴ International Covenant on Economic, Social and Cultural Rights, Art. 12
<https://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>

when the State accepts activities like those carried out in Block 62, which clearly put in serious danger a protected indigenous area located in the Ecuadorian Amazon. In particular, we refer to the loss of biodiversity and oil spills, as reported by the Environmental Organization *Acción Ecológica*³⁴⁵.

Fair Distribution: this principle refers to the fair distribution of resources, goods, and environmental risks among relevant parties, both the human and non-human sphere. In this case, oil extraction activities make local communities more vulnerable and expose them to environmental risks.

Block 14 and Block 17 – PetroOriental

As for the case of block Tarapoa, also block 14 and 17 had been purchased in 2006 by CNPC and Sinopec from Encana, a Canadian Oil Company. However, these two blocks are managed by PetroOriental S.A., a subsidiary of Andes Petroleum Ecuador LTD.

Block 14 is located in the Province of Orellana, whilst block 17 is located in between the Provinces of Orellana and Pastaza. Both concessions are situated in environmentally and socially fragile contexts – the Yasuní Biosphere Reserve. This geographical area comprehends the Yasuní National Park, continental Ecuador's largest protected area³⁴⁶, and the land-titled of Waorani territory (known as Waorani Ethnic Reserve), and was included in the Biosphere Reserve Network in 1989 by the United Nation's Agency UNESCO. It was added in the Man and Biosphere Program in order to prioritize and to conciliate biodiversity conservation with sustainable development in the territory planning

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In 1999 and 2007, two presidential decrees created the “No-Go-Zone” called Intangible Zone or

³⁴⁵ Acción Ecológica, Alexandra Almeida, Article, 2006: “*Oil Spill in the Cuyabeno Reveals Critical Situation on which the Protected Areas are Located*”. Translated from Spanish.

<http://www.accionecologica.org/petroleo/reporte-de-monitoreo/661-derrame-de-petroleo-en-el-cuyabeno-revela-critica-situacion-en-que-se-encuentran-las-areas-protegida>

³⁴⁶ Yasuní National Park: “*it covers a large part of Ecuadorian Amazonia and it is home to one of the highest levels of biodiversity in the world, as well as indigenous non-contacted communities. The Park includes in fact the ancestral territory of the indigenous Waorani, Kichwas, Shuar, as well as the Tagaeri, and Taromenane people, who make up the last two known indigenous groups living in voluntary isolation in Ecuador. The Ecuadorian Amazon area has been historically divided into oil exploration blocks so that local administrations could ideally grant oil extraction licenses for limited areas. The Yasuni park is divided into six different lots (blocks 14, 15, 16, 17, 31 and ITT) with as many as eight oil concessions. Despite strong opposition from local communities, oil companies such as Repsol, OXY-Occidental Petroleum and Encana have been exploiting oil reserves in blocks 14, 15, 16 and 17 for years.*”

Source, Environmental Justice Atlas. <https://ejatlas.org/conflict/yasuni-national-park-itt-oil-extraction-ecuador>

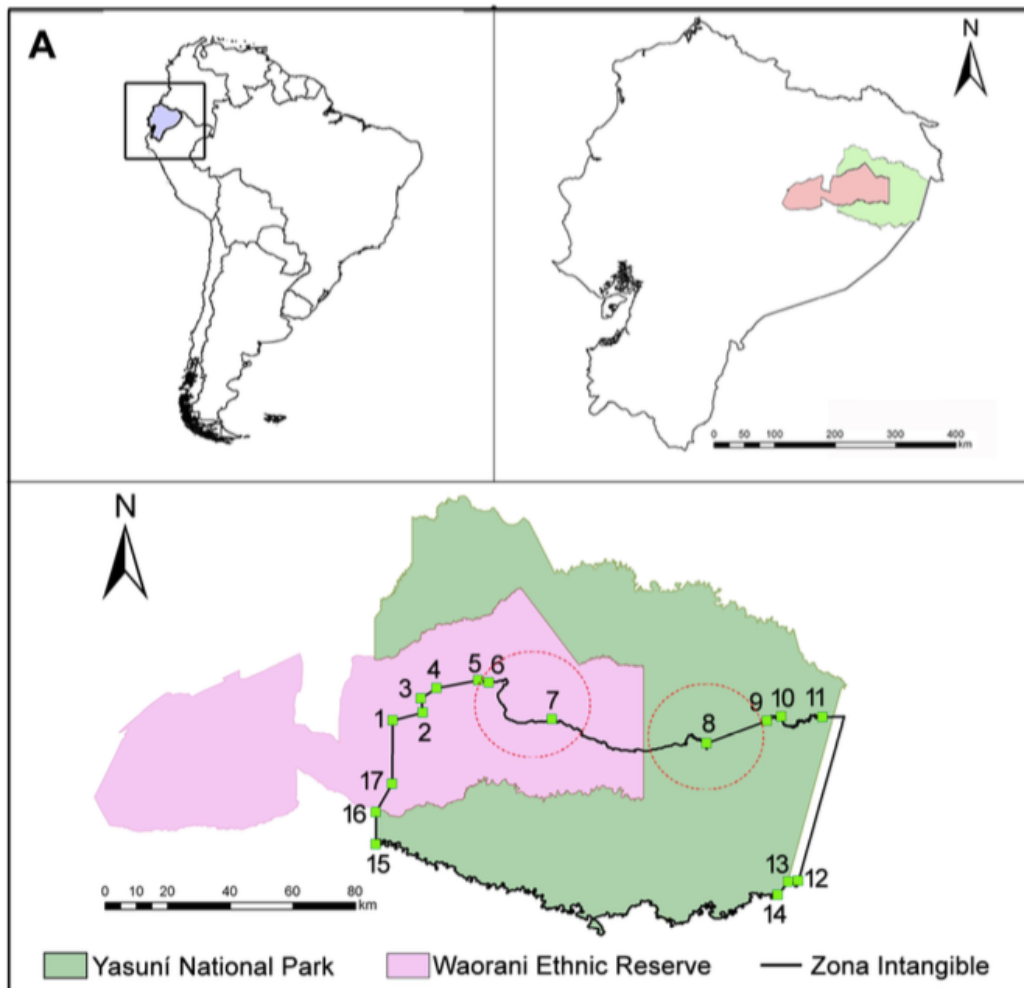
In 1979 Yasuní was declared National Park. Source El Telegrafo, August 26, 2013.

<https://www.eltelegrafo.com.ec/noticias/masqmenos/1/la-disputa-por-el-yasuni-empezo-hace-70-anos>

³⁴⁷ Pappalardo S. E., De Marchi, M., Ferrarese, F. (2013) *Uncontacted Waorani in the Yasuní Biosphere Reserve: Geographical Validation of the Zona Intangible Tagaeri Taromenane (ZITT)*.

Zona Intangible Tagaeri and Taromenane (ZITT) within the Yasuní Biosphere Reserve³⁴⁸, with the purpose of protecting the Tagaeri and Taromenane People, two indigenous groups belonging to the Waorani first nation, living in voluntary isolation in the Napo region of the Western Amazon Rainforest.

Figure 22: Map of the Intangible Zone



Source: Pappalardo, De Marchi, Ferrarese 2013

By creating the Intangible Zone, the Ecuadorean State also designated that zone as a conservation area, thus off-limits to oil extraction, mining and logging³⁴⁹.

Chinese Capitals is actually present in the Yasuní in various forms. Block 16, otherwise known as the Repsol block, has changed ownership in recent years. Stakeholders currently include Repsol YPF Ecuador S.A., with 35%, the Taiwanese state-owned Overseas Petroleum and Investment

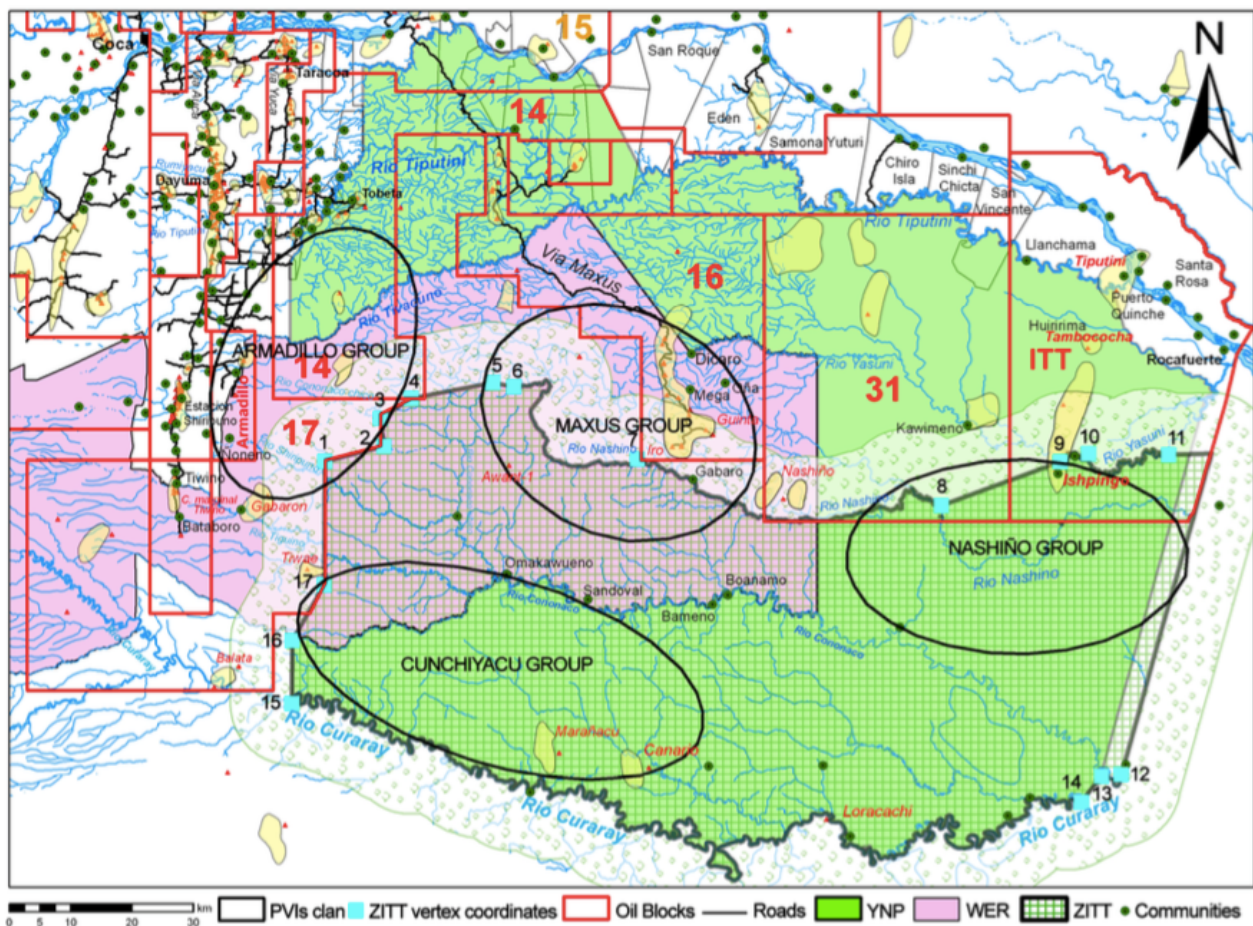
³⁴⁸ Pappalardo S. E., De Marchi, M., Ferrarese, F. (2013), p. 1

³⁴⁹ The Huaorani Intangible Zone, <https://huaoraniintangiblezone.wordpress.com/about/>

Corporation (OPIC), with 31%, Tiptop Energy Ltd (Sinopec), with 20% and the state corporation of the People’s Republic of China (CRS Sinochem) with 14%³⁵⁰.

As Figure 23 shows, oil blocks 14 and 17 overlap the ZITT boundaries, and are located in protected and indigenous areas.

Figure 23: Location of Oil Blocks 14 and 17



Source: Source: Pappalardo, De Marchi, Ferrarese 2013

Concerning block 14, a large part of it is in the protected Yasuni National Park and inside the Waorani Ethnic Reserve. Originally the limits of block 14 were more narrow. However, in 2011 PetroOriental S.A and the Ecuadorean Government, changed the shape of the block, so that it would extend to the

³⁵⁰ Diálogo Chino, 2015: *Yasuni: A Silent Investment* <https://dialogochino.net/1152-yasuni-silent-investment/>

border of the Ishpingo, Tambococha, Tiputini (ITT) blocks, specifically to the Tiputini area³⁵¹, a field ready for exploitation.³⁵²

According to Alexandra Almeida, member of the Ecuadorean organization Acción Ecológica, the Waorani community living within block 14, is surrounded by oil wells and contamination. She also reported to Mongabay, that the community did not have food and that the oil industry does not give them much work, compared to the old employer Encana Corporation. To her, this shows how oil companies have replaced the Ecuadorean State in certain territories, and how “*indigenous communities continue to lose their relationship with their forests*”.³⁵³

As shown in figure 23, oil block 17 besides being located in the Yasuní Biosphere Reserve, is also located within the Waorani Ethnic Reserve.

According to CICDHA, also in oil blocks 14 and 17 labor disputes have been registered for lack of payment of profits to workers and forgery of signatures³⁵⁴. In 2009, the Constitutional Court of Ecuador ruled in favor of the workers and sanctioned Andes Petroleum and PetroOriental. The conflicts with ex-workers are maintained to date.

As shown in the case *Yasuni National Park - ITT oil extraction, Ecuador* presented by the Environmental Justice Atlas, activities in the 6 lots of the National Park (blocks 14, 15, 16, 17, 31 and ITT) caused visible environmental impacts, such as “*biodiversity loss (wildlife, agro-diversity), Loss of landscape/aesthetic degradation, soil contamination, deforestation and loss of vegetation cover, surface water pollution / decreasing water quality*”.³⁵⁵

On the socio-economic dimension, it caused “*an increment in corruption of different actors, displacement, lack of work security, labour absenteeism, firings, unemployment, loss of livelihood,*

³⁵¹ Fernando Villavicencio, 2013: *Ecuador Made in China (Spanish Edition)*

³⁵² This move is important, because it weakened the Yasuní-ITT initiative. Promoted by the Correa Government, the Yasuní-ITT initiative was launched in 2007, with the promise to leave the blocks of Ishpingo, Tambococha, Tiputini, located inside the Yasuní National Park, untouched. The initiative would have worked out on the condition that Ecuador could raise half the expected profits from drilling for oil (US\$ 3.6 billion). The international community pledged around US\$ 330 million, although as little as US\$ 13 million had been deposited when Correa scrapped the initiative in August 2013. According to many, like Amazon Watch, a major factor in Ecuador’s decision to expand drilling in Yasuní, is the country’s outstanding debt to China.

³⁵³ Interview to Alexandra Almeida, 2018. Source: <https://news.mongabay.com/2018/06/ecuador-tribe-sees-how-oil-industry-affects-forest-on-toxic-tour/>

³⁵⁴ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH). P. 19

<http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

³⁵⁵ EJA, 2015: *Yasuni National Park - ITT oil extraction, Ecuador* <https://ejatlas.org/conflict/yasuni-national-park-itt-oil-extraction-ecuador>

loss of traditional knowledge/practices/cultures, violations of human rights, land dispossession, loss of landscape/sense of place”.³⁵⁶

Activities also had health impacts, such as “*Exposure to unknown or uncertain complex risks (radiation, etc...), and Deaths*”³⁵⁷

Environmental Justice

To insert Oil Block 14 and 17 cases into the Environmental Justice discourse, a table has been drawn to show which principles are being violated when carrying out oil extraction activities in those areas.

Principles	Block 14	Block 17
Recognition	x	x
Participation		
Precaution		
Fair Distribution	x	x
Redress and Compensation		

Recognition: this principle affirms the recognition of human and environmental rights, and the recognition of the expanded moral community that is affected by ecological risk. The concession of oil blocks 14 and 17 to PetroOriental is located in the protected Yasuní Biosphere Reserve, thus it fails to comply with article 407 of the Constitution of the Republic of Ecuador³⁵⁸. Article 407 reads as follow “*activities for the extraction of non-renewable natural resources are forbidden in protected areas and in areas declared intangible assets*”³⁵⁹.

³⁵⁶ EJA, 2015: *Yasuni National Park - ITT oil extraction, Ecuador*

³⁵⁷ EJA, 2015: *Yasuni National Park - ITT oil extraction, Ecuador*

³⁵⁸ Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

³⁵⁹ Constitution of the Republic Ecuador, Art. 407

Article 57 of the Constitution of the Republic of Ecuador prohibits extractive operations in the intangible zone within Yasuní National Park for the protection of isolated people³⁶⁰. This article reads as follow “*The territories of the peoples living in voluntary isolation are an irreducible and intangible ancestral possession and all forms of extractive activities shall be forbidden there. The State shall adopt measures to guarantee their lives, enforce respect for self-determination and the will to remain in isolation and to ensure observance of their rights. The violation of these rights shall constitute a crime of ethnocide, which shall be classified as such by law [...]*”³⁶¹. By keeping carrying out oil exploration and extraction activities, the company PetroOriental is putting in danger the lives of those ancestral groups living in the territories of the concessions³⁶².

The concessions also fail to comply with article 12 of the International Covenant on Economic, Social and Cultural Rights. This article recognizes “*the right of everyone to the enjoyment of the highest attainable standard of physical and mental health*”³⁶³.

Regarding labor rights, Article 23 of the UDHR and Articles 7 and 8 of the ICESCR, protect the right to enjoy fair and satisfactory working conditions, the right to found and join trade unions, freedom of association and the right to strike. Likewise, China has ratified 26 Conventions of the International Labor Organization (ILO) that include four of the eight ILO conventions on the fundamental rights of workers.

Fair Distribution: this principle refers to the fair distribution of resources, goods, and environmental risks among relevant parties, both the human and non-human sphere. In this case, oil extraction activities make local communities more vulnerable and expose them to environmental risks.

Blocks 79 and 83 - the 11th Oil Bidding Round and Andes Petroleum

Since 1985 until 2012, eleven oil bidding rounds have been carried out, in which the Secretariat of Hydrocarbons of Ecuador (SHE) has divided the country into oil blocks to be offered to the highest bidder among national and foreign companies, whether state or private.

In November 2012, the Ecuadorian Government announced the 11th oil bidding round. Originally the Government had sought to concede 21 oil blocks, located in the Ecuador’s Southern Amazon. The

³⁶⁰ AMAZON WATCH, August 25, 2013. *Rights and Responsibility: The Failure of Yasuni-ITT and What it Means for Ecuador’s Indigenous Peoples*. ZUCKERMAN, Adam. Available at: <https://amazonwatch.org/news/2013/0825-rights-and-responsibility-the-failure-of-yasuni>

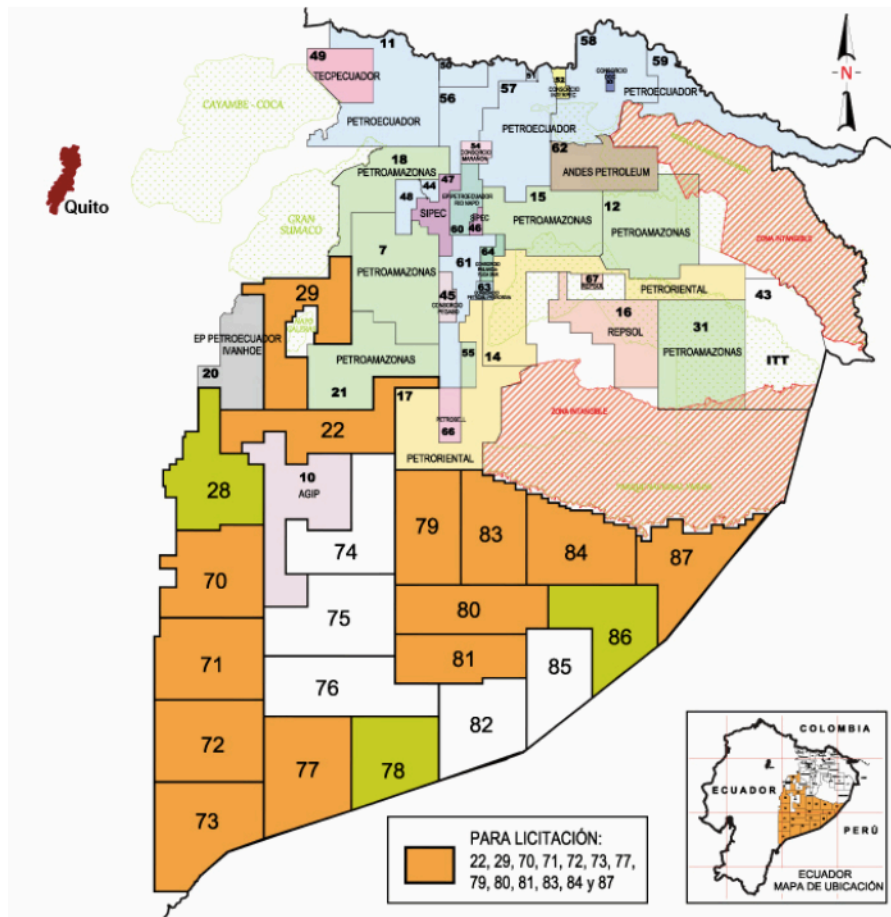
³⁶¹ Constitution of the Republic Ecuador, Art. 57

³⁶² Regional Report, 2018. *Informe Nacional Alternativo de La Sociedad Civil*. Colectivo sobre Financiamiento e Inversiones Chinas, Derecho Humanos y Ambiente (CICDHA), International Federation of Human Rights (FIDH) <http://chinaambienteyderechos.lat/wp-content/uploads/2018/10/Informe-Regional.pdf>

³⁶³ International Covenant on Economic, Social and Cultural Rights, Art. 12 <https://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>

project includes the provinces of Pastaza, Morona Santiago, Napo and Orellana. The number of oil blocks was then reduced to 13 (blocks 22, 29, 70, 71, 72, 73, 77, 79, 80, 81, 83, 84 and 87) shown in figure 24. The Round covered 3,6 million acres of rainforest in Ecuador's Southern Amazon, home to seven indigenous nationalities - Achuar, Andoa, Kichwa, Sápara, Shiwiar, Shuar and Waorani³⁶⁴ - who have vowed to resist all oil drilling on their traditional territory³⁶⁵.

Figure 24: Ecuador's Oil Blocks



Source: Amazon Watch

By November 2013, the Ecuadorian State only received offers for four blocks. Two of them were bids submitted by Andes Petroleum on blocks 79 and 83, located in Pastaza Province. The social context in which the two concessions are located is different from block Tarapoa, the one where Andes Petroleum already operates. Indeed, the new southern concessions are entirely inhabited by the indigenous Sápara, Shiwiar and Kichwa people of Sarayaku³⁶⁶. The zone is rich in water resources, primary source of subsistence of the indigenous communities, whose affectation would not only cause

³⁶⁴ Carlos Mazabanda, 2013. *Consulta Previa en la Décimo Primera Ronda Petrolera: ¿Participación Masiva de la Ciudadanía?*

³⁶⁵ Amazon Watch (2014): *Beijing, Banks and Barrels: China and Oil in the Ecuadorian Amazon*

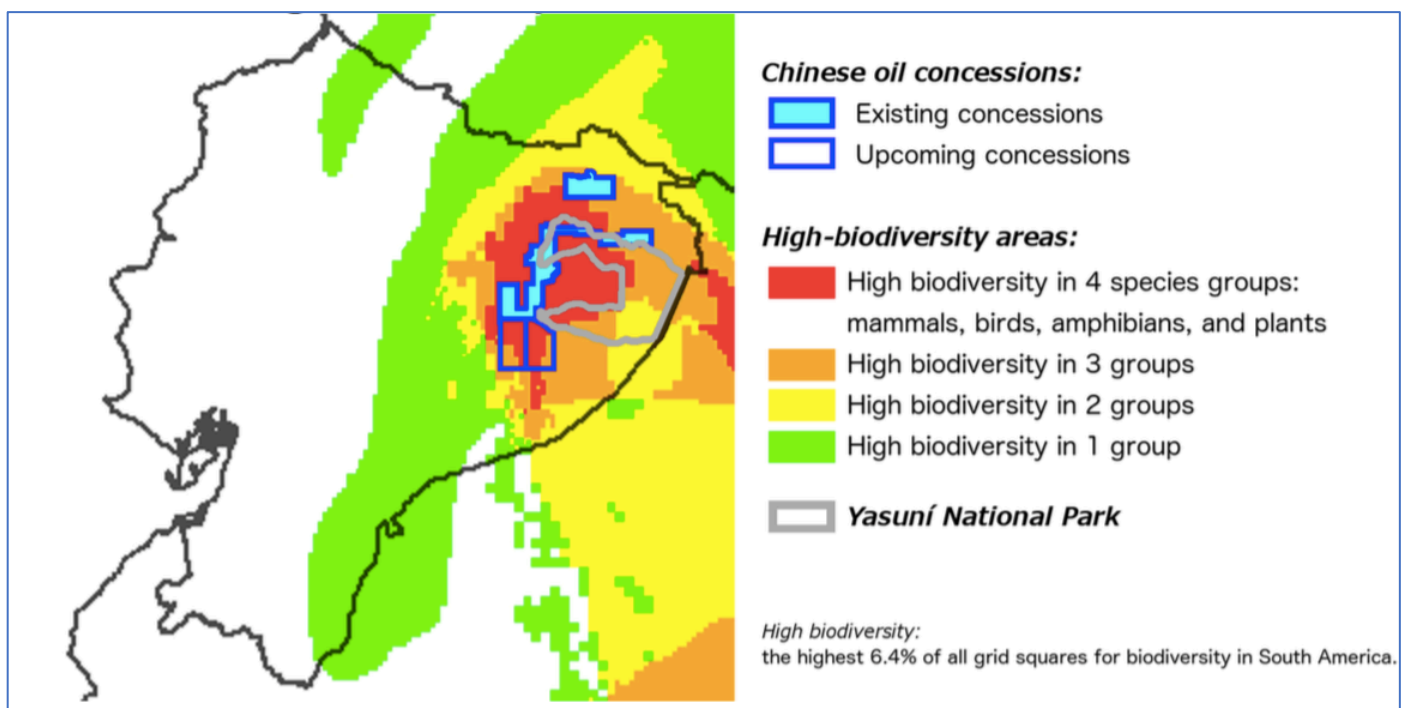
³⁶⁶ Luzuriaga, M. F., (2017), p. 9

a detriment to the materiality of its existence, but would also affect its fundamental community and spiritual values.³⁶⁷

The Sápara comprehend less than 600 people, living in 25 communities.³⁶⁸ In 2001, UNESCO issued the Declaration of the Oral Heritage and Cultural Manifestations of the Sápara people as “Intangible Heritage of Humanity” and in 2008 inscribed them on the Representative List of the “Intangible Cultural Heritage of Humanity”.³⁶⁹ The Kichwa People of Sarayaku are around 1200 inhabitants and occupy a territory of 135,000 acres.³⁷⁰

The two sites will be greenfield projects just outside of the Yasuní National Park, in an area covered with extremely high biodiversity in four major categories: birds, amphibians, mammals, and plants³⁷¹.

Figure 25: Map of High Biodiversity Areas in Ecuador



Source: Ray and Chimienti 2015-16

³⁶⁷ Luzuriaga, M. F., (2017), p. 9

³⁶⁸ Indigenous Environmental Network May 1, 2017. *Amazonians at United Nations*,: *Chinese Oil Company Will Cause Genocide* <https://www.ienearth.org/amazonians-at-united-nations-chinese-oil-company-will-cause-genocide/>

³⁶⁹ UNESCO <http://www.unesco.org/culture/ich/en/RL/oral-heritage-and-cultural-manifestations-of-the-zapara-people-00007> and [3.COM](http://www.unesco.org/culture/ich/en/RL/oral-heritage-and-cultural-manifestations-of-the-zapara-people-00007)

³⁷⁰ The Kichwa indigenous community in Sarayaku:

<https://www.arcgis.com/apps/MapJournal/index.html?appid=e96a01a0426344cdb08d67e0408b24d0>

³⁷¹ Ray R. and Chimienti A., 2015. *A Line in the Equatorial Forests: Chinese Investment and the Environmental and Social Impacts of Extractive Industries in Ecuador*. BU Global Economic Governance Initiative, p.24

On February 4, 2014, SHE announced that the offer submitted by the Chinese company for Blocks 79 and 83 had been accepted. On January 25, 2016, Andes Petroleum signed an oil exploration and production contract with the Ecuadorian Government.

The type of contract signed between the Secretary of Hydrocarbons, Ivonne Fabara, and the President of Andes Petroleum Ecuador, Zhao Xinjun, is “Service Provision”, and it is based on two stages – exploration and exploitation³⁷². The sum invested for the first phase amounts to \$72 million, and will last for four years. Exploration activities refer to “*geological, geochemical, geophysical investigations, well drilling and any other operation accepted by the petroleum industry for exploration in order to investigate the area and evaluate existing structural or stratigraphic traps³⁷³ or that are discovered*”.³⁷⁴ The contract established that whether the company obtained positive results from the exploration phase, then exploitation would begin, with a period of 20 years, depending on the economic viability and the technical conditions of the blocks. If not, the contract would end.

The investment is at total risk of the Chinese consortium, which assumes the whole economic responsibility.³⁷⁵

Conflicts and Opposition

The 11th Oil Bidding Round had been firmly contested by the indigenous communities affected, local NGOs and the international community³⁷⁶. Conflicts raised since the very beginning of the Round. The Ecuadorian government through the SHE, promoted the realization of prior, free and informed consultation, directed by the Executive Decree 1247. However, in August 2012, the CONAIE, CONFENIAE and the heads of the NASE, María Ushigua and Gloria Ushigua, denounced that the SHE created a division inside the Sápara Nation, by not respecting the regular channels for the prior consultation process³⁷⁷. Mazabanda writes that due to “intrusion” and “manipulation” of some leaders³⁷⁸, the Nation experienced a deep division, resulting in the existence of a front opposed to the drilling, and other residents who welcome the oil exploration. Indeed, the Sápara President at the time, Basilio Mucushigua, signed an agreement allowing oil exploration in exchange for \$2.4 million in local public investment. However, the signature of this agreement was conducted neglecting the

³⁷² Luzuriaga, M. F., (2017): *Inversiones Chinas en el Ecuador: Andes Petroleum y los bloques 79 y 83*. CDES.

³⁷³ Stratigraphic Trap: A variety of sealed geologic container capable of retaining hydrocarbons

https://www.glossary.oilfield.slb.com/en/Terms/s/stratigraphic_trap.aspx

³⁷⁴ Luzuriaga, M. F., (2017)

³⁷⁵ Luzuriaga, M. F., (2017)

³⁷⁶ Ray R. and Chimienti A., (2015-6). P. 24

³⁷⁷ Carlos Mazabanda, (2013)

³⁷⁸ Carlos Mazabanda, (2013)

majority opinion, so not enacting the Executive Decree 1247 as required. Gloria Ushigua and Klever Ruiz said in interviews that they never saw or heard any of the advertisements required by Executive Decree 1247. The Decree requires a widely advertised public comment period; it allows for comments to be submitted either through community meetings or individually at local consultation offices; it provides that the offices are extensively advertised through local press, government, or community leaders³⁷⁹. President of the Association of Sápara Women Gloria Ushigua and current Sápara President Klever Ruiz, both insisted that SHE never sought approval from the majority of the Sápara nation.

According to the SHE, the prior consultation did have a "massive citizen participation", nevertheless studies and data showed that only 7% of the population and 39% of the communities in the affected area participated in it³⁸⁰. Besides, indigenous communities should have been consulted since the first steps of the development agenda of the project, carried out in 2010. Nonetheless, according to Carlos Mazabanza, they only participated starting from April 2012, and it was carried out in a period of only six months.

All Nations involved rejected the agreement. Both the Sápara and Kichwa people have appealed internationally, with leaders representing them in the People's Climate March in New York in September 2014. At preparations for the March, Ushigua publicly stated: *"We are ready to fight with all the strength of our ancestors against the companies and governments to protect the land from which we came, a land that must remain free from oil exploration"*.³⁸¹

Manari Ushigua, also publicly rejected the agreement between Ecuador and Andes Petroleum³⁸². *"Andes Petroleum is posed to commit genocide against the Sápara People and the uncontacted peoples who are our neighbors."* *"Andes Petroleum must cancel the contract immediately and Ecuador must desist from any other form of resources extraction because it threatens our survival."*³⁸³

On January 28, 2016, the Sápara, Achuar, Shuar nationalities and the Kichwa people of Sarayaku, through a press release and a press conference at the headquarters of the Confederation of Indigenous Nationalities of Ecuador (CONAIE), rejected the signing of the agreement for exploration and exploitation of Blocks 79 and 83³⁸⁴. Félix Santi, Sarayaku leader, indicated that 6,700 hectares are

³⁷⁹ Ray R. and Chimienti A., (2015-6). P 31

³⁸⁰ Carlos Mazabanda, (2013)

³⁸¹ Ray R. and Chimienti A., (2015-6). P. 32

³⁸² Luzuriaga, M. F., (2017)

³⁸³ Manari Ushigua's declarations, source: <https://www.ienearth.org/amazonians-at-united-nations-chinese-oil-company-will-cause-genocide/>

³⁸⁴ Luzuriaga, M. F., (2017). P. 10

part of its territory in Block 79, which would be affected by seismic exploration activities, warning of a violation by the Ecuadorian State to the sentence issued by the Inter-American Court of Human Rights, which interdicts new oil exploration in their territories.

Environmental Justice

To insert the case of oil blocks 79 and 83 in the Environmental Justice discourse, a table has been drawn to show what principles were violated and *how*.

Principles	Block 79	Block 83
Participation	x	x

Participation: and access to decision-making and policy-making processes. This principle was not followed by the Ecuadorean Government, as it did not comply with: ILO Convention 169; Article 57 of Ecuador 2008 constitution; Article 19 United Nations Declaration on Indigenous Peoples; the Inter-American Court of Human Rights ruling "Sarayaku versus Ecuador".

Ecuador is one of the 22 signatories to ILO Convention 169 (1989), which calls for governments to consult with indigenous communities prior to planning new extraction project or to developing subterranean mineral deposits below tribal fishing, hunting, or otherwise traditional land. In this case the government violated article 6 of the Convention:

- (a) consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly;
- (b) establish means by which these peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in elective institutions and administrative and other bodies responsible for policies and programs which concern them;
- (c) establish means for the full development of these peoples' own institutions and initiatives, and in appropriate cases provide the resources necessary for this purpose.

The consultations carried out in application of this Convention shall be undertaken, in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures.³⁸⁵

Article 57 of Ecuador 2008 Constitution also enshrines the requirement of ILO Convention 169, with the added note that if the affected community does not agree to the proposal, the government must follow additional steps detailed in the 2010 Citizen Participation Law, which states that

if ... a majority opposition emerges in the respective community, the decision to undertake the project or not will be made through a resolution, adequately debated ..., which, in cases where it is decided that the project will be undertaken, must establish parameters that minimize the impact on communities and ecosystems; moreover, it must plan for mitigation, compensation, and damage repair; and where possible, it must include the members of the community in the labor force for the respective projects, in conditions that guarantee human dignity³⁸⁶.

This requires the government to seek communities' free, prior, and informed consent before allowing new oil and mining projects; though projects may still advance in the face of local opposition, they must meet higher environmental and social standards if they do, and work in finding a resolution to proceed in a limited impact way.

Article 19 of the United Nations Declaration on the Rights of Indigenous Peoples, which reads as follow “*States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them*”.³⁸⁷

³⁸⁵ ILO 169: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

³⁸⁶ Citizen Participation Law (Ley Orgánica de Participación Ciudadana), 2010: “*Si de los referidos procesos de consulta deriva una oposición mayoritaria de la comunidad respectiva, la decisión de ejecutar o no el proyecto será adoptada por resolución debidamente argumentada y motivada de la instancia administrativa superior correspondiente; la cual, en el caso de decidir la ejecución, deberá establecer parámetros que minimicen el impacto sobre las comunidades y los ecosistemas; además, deberá prever métodos de mitigación, compensación y reparación de los daños, así como, de ser posible, integrar laboralmente a los miembros de la comunidad en los proyectos respectivos, en condiciones que garanticen la dignidad humana*”. Translated by Ray R. and Chimienti A., (2015-6), p. 30

³⁸⁷ United Nations Declaration on the Rights of Indigenous Peoples, art. 19.

"Sarayaku versus Ecuador"³⁸⁸ is a 2012 ruling of the Inter-American Court of Human Rights, that prohibits new oil exploration in the territory of the Sarayaku Nationality³⁸⁹.

³⁸⁹ Inter-American Court Of Human Rights. *Case of the Kichwa Indigenous People of Sarayaku V. Ecuador Judgment Of June 27, 2012*

Conclusions

Since the beginning of the 21st century, the relations between Latin America and China have been transformed. China's expanding industries were greedy for Latin America's energy and raw materials, and by 2010 China took the place of the US as South America's largest trade partner, as well as the region's biggest investor. China is financing a series of eye-catching projects in the region, related to the extraction and trade of natural resources and food, and mega infrastructure projects. Nonetheless, the previous chapters presented different cases where Chinese-run projects have caused environmental and social conflicts between the government, companies, and local communities. In particular, the projects discussed, have caused serious damage to the environment, and have affected several groups on the economic, social, and cultural dimensions. Therefore, these activities seem to stand in stark contrast with the definition of sustainability, and environmental justice, expressed in the first chapter.

Indeed, if environmental sustainability includes a responsible interaction with the environment, then unfortunately, it is clear how those Chinese-run projects are not developed in a sustainable way. The impacts caused by extraction activities could irreversibly affect the quality of soil, superficial waters and underground aquifers, representing a significant threat to animal species and humans. For the campesinos communities and indigenous groups, environmental damages have an impact on the economic aspect, including a loss of livelihoods, as well as a threat to food security, as a result of the displacement of populations from their lands (and reduced access to water), often without or inadequate or late compensation. The presence of Chinese companies and subsidiaries has resulted in serious socio-environmental impacts that have resulted in conflicts of great intensity. Among these impacts are the systematic violations of human rights, expressed in: the violation of the right to prior consultation and participation of local communities; displacement and forced eviction of entire communities; the criminalization of the social protest of indigenous leaders; the disrespect for the intangibility of ancestral territories; violations of workers' rights; environmental pollution of areas whose natural wealth is invaluable, such as the Yasuní National Park and the Cordillera del Cóndor.

The cases presented, also show how social sustainability is often undermined. Colantonio, stresses the importance of *how* individuals, communities and societies live together and plan to achieve the purposes of development models. In this sense, community participation and strong civil society play a paramount role in the achievement of social sustainability. Unfortunately, in almost all the cases presented, the right to participation has been violated, and has been one of the main trigger of social conflicts. Despite the progress made with respect to constitutional and legal recognition of indigenous

rights, some communities still suffer persistent marginalization, which make them vulnerable and unable to take a significant role in the decision-making process.

The cultural dimension is also undermined when cultural capital instead of being conserved and preserved, is put at risk by extraction activities, and is almost lost. In particular, the new projects operated by Andes Petroleum in the oil blocks 79 and 83 in Ecuador, have sparked fears about the potential disappearance of indigenous groups – the Sápara and the Shiwiar – together with their dialects.

Latin American people have welcomed the new Chinese schemes of cooperation, “South-South cooperation and win-win relation”, different from the abusive and traditional financial model of multilateral banks, and the international finance markets. Nevertheless, reality is more complex. Indeed, after a decade of Chinese investments and finance, Chinese institutions have not yet demonstrated a social and environmental responsible behavior towards the impacted communities. Different sources, such as Gallagher in *The China Triangle*, argued that Chinese firms do not perform uniformly worse than other domestic counterparts or international firms operating in the same sectors and territories.³⁹⁰ However, other sources, such as Paulina Garzón, claimed that at the moment, there are not scientific data to prove that Chinese companies perform worse or better than others.³⁹¹ What she could observe is that when companies take care of their reputation - they talk to the media, they have public relations teams, they have and publish high environmental and social standards, they have mechanisms of accountability and for the treatment of complaints - tend to behave better. Unfortunately, these elements are often absent among most Chinese companies.³⁹²

Even though at the current time it is not possible to evaluate Chinese operations compared to their counterparts, we can assert that there are some gaps to be filled related to Corporate Social Responsibility. As explained in the third chapter, different sources stated that companies lack of transparency and it is often difficult to hold them to account. Local communities and civil society organizations usually report on the impossibility of knowing information about the projects impacting them, even as basic things as getting the information contact of Chinese companies and banks’ staff in China. The possibility of a true South-South cooperation and mutually beneficial relations between China and Latin America has to include showing an honest commitment with the wellbeing of local

³⁹⁰ Gallagher K. P., 2016. *The China Triangle*

³⁹¹ Paulina Garzón, June 5, 2019. Personal email interview.

³⁹² Paulina Garzón, June 5, 2019. Personal email interview.

communities, and supporting an investment model that respects nature and human rights. In addition, what misses is also a space to confront on the international level.

Conflicts could grow in the coming decades, as China and the governments in the region have agreed on a series of regional and bilateral long-term agreements, that prioritize cooperation in the infrastructure sectors and in the development of extractive projects.³⁹³

Latin America has been embedded in China's vision of the global future, even by including different countries in the region into the Belt and Road Initiative.³⁹⁴ The story that China tells is about mutual benefits and win-win strategy. For this reason, it will be of paramount importance from the Chinese side to prioritize a few recommendations: (a) the implementation of existing social and environmental guidelines and making the results of them more transparent for governments, civil society, and representatives; (b) participating in transparency programs in the host countries, such as the EITI program; (c) learn local regulations and customs.³⁹⁵

Chinese firms are very flexible and able to adapt to new environments, and studies reveal that Chinese companies have very different experiences under different regulatory regimes and with different regulations. This means that the company will be following environmental and social rules in a country with strong regulations, while in countries with weak regulations in many cases the governments turned a blind eye to the company's performance. In this sense, to better cooperate with Chinese companies, governments could: (a) enforcing and upgrading existing environmental and social protections; (b) encourage Chinese firms to join the Extractive Industries Transparency Initiative; (c) implementing the ILO Convention 169, and enforcing requirements for prior consultation of indigenous peoples; (d) they could also develop mechanism for Latin American Governments, the Chinese government, and civil society to collaborate and promote a more sustainable path. Further progress is essential to build more fair and equitable societies, while continuing to consider biodiversity and ecosystems in the decision-making process. This is a challenge for the future development and conservation of the region.

³⁹³ Paulina Garzón, September 2018. *Manual Sobre Lineamientos Ambientales Y Sociales Chinos Para Los Préstamos E Inversiones En El Exterior. Una Guía Para Las Comunidades Locales*. Published by China Latin-America Sustainable Investments Initiative. Accessible at: https://bankinformationcenter.cdn.prismic.io/bankinformationcenter%2F19966a96-6bb8-43a8-b2a4-573a324aa552_iiscal+manual+chino+3+2018+.pdf

³⁹⁴ World.people.com.cn, April 28, 2019. "Qidài yīdài yīlù" tuīdòng lāměi shíxiàn gāoxiào de hùlián hùtōng 期待“一带一路”推动拉美实现高效的互联互通 (Expect "one belt and one road" to promote Latin America to achieve efficient interconnection). Available at: <http://world.people.com.cn/n1/2019/0428/c1002-31054816.html>

³⁹⁵ Ray R., Gallagher K. P., Lopez A., Sanborn C., 2015. *China in Latin America: Lessons for South-South Cooperation and Sustainable Development*. Boston University, Centro de Investigación para la Transformación, Tufts University, and Universidad del Pacífico

Concerning Ecuador, during the recent years the country have strengthen its legal and institutional framework for sustainable development, including aspects that guarantee indigenous rights, specific legislations that requires oil projects to conduct EIAs, hire Ecuadorean workers, and a constitution that includes protection of its rich biodiversity, by recognizing the rights of nature.

This framework, if properly enforced and strengthened at the level of local governments, could be a model for other natural-resource producing and exporting countries worldwide.

Nonetheless, it does seem that China is taking major steps in order to improve its performance and image in Latin America. According to Paulina Garzón, one of the reasons is related to the economic aspect.³⁹⁶ Indeed, when a conflicts arise between civil society and the firms, they may cause the suspension of the projects, and this would be a significant expenditure for the company. - One recent positive example comes from China's Third Cycle of the Universal Periodic Review, where the PRC took a progressive position on human rights and the environment, by accepting 284 of the recommendations received from several countries. Among those accepted, two were from the diplomatic missions of Peru and Ecuador.

Another positive news, regards the Waorani indigenous community. In April 2019, they had won a landmark legal case against the Ecuadorian Government, after the latter failed to adequately consult the Waorani people before putting 500,000 acres of their rainforest up for oil extraction.³⁹⁷

In the light of the current situation, China has more than one reason to improve its performance in Latin America. China is trying to position itself as the world's climate leader, pledging to cooperate with other countries to build an "eco-civilization." Therefore, many of the extraction projects that are located in sensitive and fragile areas, like the Amazon Rainforest, must be preserved for fighting climate change, and it mandatory for China to improve its environmental and social footprint in the region.

³⁹⁶ Paulina Garzón, June 7, 2019. Personal Telephone Interview.

³⁹⁷ Al Jazeera, April 27, 2019. *Indigenous Waorani win landmark legal case against Ecuador gov't*. By Kimberley Brown. Accessible at: <https://www.aljazeera.com/news/2019/04/indigenous-waorani-win-landmark-legal-case-ecuador-gov-190426221504952.html>

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