Mining-induced displacement and resettlement in Colombia

Socio-economic and cultural consequences of resettlements of campesinos and indigenous people - The case of the Cerrejón open pit mine in La Guajira

Masterarbeit

vorgelegt von
Benedikt Hora

bei
Univ. Prof. Dr. Martin Coy
Universität Innsbruck
August 2014

Masterarbeit

Mining-induced displacement and resettlement in Colombia

Socio-economic and cultural consequences of resettlements of campesinos and indigenous people – The case of the Cerrejón open pit mine in La Guajira

Verfasser

Benedikt Hora B.Sc.

Angestrebter akademischer Grad

Master of Science (M.Sc.)

eingereicht bei Herrn

Univ. Prof. Dr. Martin Coy

Institut für Geographie

Fakultät für Geo- und Atmosphärenwissenschaften

an der Leopold-Franzens-Universität Innsbruck

Eidesstattliche Erklärung

Ich erkläre hiermit an Eides statt durch meine eigenhändige Unterschrift, dass ich die vorliegende Arbeit selbstständig verfasst und keine anderen als die angegebene Quellen und Hilfsmittel verwendet habe. Alle Stellen, die wörtlich oder inhaltlich an den angegebenen Quellen entnommen wurde, sind als solche kenntlich gemacht.

Die vorliegende Arbeit wurde bisher in gleicher oder ähnlicher Form noch nicht als Magister-/Master-/Diplomarbeit/Dissertation eingereicht.

_____

Innsbruck, August 2014 Unterschrift

CONTENTS

PREFACE

While on a geography excursion in Northern Colombia in 2012 I saw trains more than 100 wagons long filled with coal, heading to Caribbean harbours. On the shores of Santa Marta huge bulk carriers could be seen on the horizon waiting to get loaded with black coal. Since then I have wondered about the impact of coal on Colombia and its people. This has driven my curiosity and inspired me to undertake this research.

A review of literature has revealed that Colombia's coal exports have skyrocketed since the mid 1990's. Prior to the 1970's the Colombia's coal exports were virtually nil, yet today Colombia is the fifth largest black coal exporting nation in the world. This coal is extracted in immense open pit mines in the coastal departments of Cesar and La Guajira in Northern Colombia.

Further research presented a challenging topic, as extraction of natural resources is supposed to be the major strategy for economic growth in the political climate of Colombia. However, these development strategies have not always had met their objectives. Communities in coal mining areas have to be resettled for the expansion of the open-pit mines. As a result the less affluent, in particular indigenous people are at risk of further impoverishment and cultural desolation through dispossession. This research implements socio-economic and socio-cultural analysis of the consequences of mining-induced resettlements of indigenous Wayuú people and other campesinos (peasants) in the Cerrejón mining region in the department of La Guajira.

ACKNOWLEDGEMENTS

This work would not have been possible without the help of many people who have assisted me at various stages. I would like to thank Prof. Dr. Martin Coy in Innsbruck for his continuous administrative and scientific assistance and guidance. I am grateful for the KWA-grant I received from the International Office of the University of Innsbruck.

I would also like to thank Dr. Astrid Ulloa Associate Professor at the Universidad Nacional de Colombia in Bogotá for her aid and support. Furthermore thanks to Leonardo González from the NGO Indepaz in Bogotá, who gave me crucial contacts for the fieldwork in La Guajira. Also, the collaboration with the NGO Ask from Switzerland has been invaluable to this project. Special thanks must be extended to the family Ortíz in Hato Nuevo, where I was able to stay during my fieldwork trips for several weeks.

Furthermore, I am in deep gratitude to my parents, who gave me moral and financial support throughout my studies. I am especially grateful to Dr. Carla Marchant from the Universidad Austral de Chile/ Valdivia, who has supported me at all the times during the writing of this thesis.

There are many others who have assisted me in proofreading, especially Dr. Michael McCluskey international media and broadcast consultant in Newcastle/ Australia. While there are too many to list here, their contribution has been invaluable, and I extend my heartfelt thanks to all who have given assistance and support.

1 INTRODUCTION

In the past decades, Colombia has been given attention in the international press because of insecurity, cocaine trafficking and civil war. As the country has become safer in the recent years and economic growth has trended regularly above 4 percent (DANE 2014), extractivism has become an important topic. Primary industries and especially the mining sector significantly contribute to this economic boom (DANE 2013a). Since colonisation by the Spaniards in the 16th Century, extraction of raw materials has been an important economic activity in the territory, which now constitutes the Republic of Colombia (Fierro-Morales 2012). With the beginning of colonisation a socio-cultural identity of extractivism and mining developed in Colombia. The search and exploitation of natural resources remains until today an important factor in Colombia's politics and economy (Poveda 2005). Since neoliberal changes in the mining sector under President Alvaro Uribe in the early 2000s, transnational corporations have increasingly become more involved in the Colombian raw materials market while the scale of mining activities has grown tremendously. In 1995 the mining sector only contributed to 25.7% of Colombian exports, yet by 2012 it had grown to 56.9% (DANE 2013a). The area which is under mining concession in Colombia increased from 10,000 km² in 2002 to 84,000 km² in 2009 (Rudas 2011). Colombia's raw material boom is mainly based on gold, crude oil and black coal (PBI Colombia 2011 p.5). High demand of these materials in the global market has facilitated this boom (Nötstaller 2009). Black coal production has seen exceptional growth, predominantly for export. From 2002 to 2012 exports more than doubled to 81 million tons of black coal (SIMCO 2014).

Textbox 1: Definition of extractivism

Acosta (2013 p.62) defines the term extractivism as follows: […]"we will use the term extractivism to refer to those activities which remove large quantities of natural resources that are not processed (or processed only to a limited degree), especially for export. Extractivism is not limited to minerals or oil. Extractivism is also present in farming, forestry and even fishing."

This immense growth in the extractive sector has led to many social and environmental consequences, especially in the regions where exploitation activities are carried out. Cerrejón, in the southern part of the department La Guajira, is one of the largest black coal open pit mines in the World and the largest in Latin America. In 2009 the mine accounted for 40.6 percent of Colombia's coal exports alone (Cerrejón 2011b). The actual mining activities comprise around 114 km², which is around 16% of the 690 km² of the concession area granted by the government to carry out black coal extraction in the region (Cerrejón 2006; Cerrejón 2011a p.10). Since 2006

property of the mine has been equally shared between the transnational corporations Xstrata, BHP Billiton and Anglo American (Cerrejón 2011 p.13). The great expansion of mining areas in Southern Guajira made resettlement necessary. Rural communities of Roche, Patilla, Chancletta, Las Casitas and the indigenous Wayuú community of Tamaquitos II were in a resettlement process from 2011 onwards. The Wayuú are the biggest indigenous people within Colombia, residing mainly in the La Guajira department and in the bordering department Zuila in Venezuela (Mininsterio de Cultura 2010). Since 2011, the total number of people resettled as a result of this process has reached 914 (Cerrejón 2011 p.69). Many more people left the area without an organized resettlement scheme. Now most of the resettled people live in newly constructed houses south of the municipality of Barrancas. Experience of development induced involuntary resettlement around the world has shown that if unmitigated, they may lead to severe economic, social and environmental risks to the affected community, which can lead on to impoverishment (Cernea 1997). Empirical evidence can be found in most developing countries. In India 20 million people were involuntarily resettled from the 1950's to 1980's due to development projects, but only 25% have been "rehabilitated" (Fernandes 1991). Dam construction projects for hydropower in Brazil from the 1970's to 1990's have led to marginalization and impoverishment of hundreds of thousands through the course of community resettlement (Kohlhepp 1998).

These risks may lead to impoverishment due to the following reasons: dismantling of productive systems, their productive skills may be less applicable in the new environment and competition for resources is greater, community institutions and social networks are weakened, family ties are dispersed and cultural identity, traditional authority is weakened (World Bank 2001 p.1). Recently the Cerrejón mine has attempted to carry out well-organized and agreed resettlements with these communities. The badly organized and finally forceful displacement of the Tabaco settlement in 2001 drew a bad light on the company (Chomsky et al. 2007). Therefore, these recent resettlements are trying to be a showcase of good management, in which the Cerrejón company hopes to gain a good reputation. Cerrejón has incorporated social and environmental performance standards of the International Finance Corporation (IFC; belongs to the World Bank) including involuntary resettlement standards in 2008 in their corporate social responsibility (CSR) strategy (Cerrejón 2014c). Different Colombian and international NGOs (Indepaz/Colombia; CAJAR/Colombia; Ask!/ Switzerland among others) are helping the resettled people with juridical advice and support, in order hold the company to account for their responsibility policies to mitigate resettlement issues. Furthermore, public interest and reporting of journalists have brought this issue to a broader audience, especially from those countries in which black coal from Cerrejón is consumed. Some examples are: ZDF (2013): ZDFzoom: Böse Mine – gutes Geld (video)/ Germany; Die Zeit (2012) Blutige Kohle für

deutschen Strom/ Germany; DanWatch (2010): The curse of coal/ Denmark among other NGO's based and newspapers based in the Netherlands, Germany, Switzerland and Chile and other countries.

Research questions

Large scale and ongoing extractivism has led to displacement and resettlement of many communities in developing countries. This can lead to risk of impoverishment in many of these communities. This research uses the following questions to better understand this phenomenon in the case of the Cerrejón mine.

Who are the actors of the resettlement and how do they interact?

Is it possible to identify social and cultural changes in the studied resettlements?

How are socio-economic changes affecting the people in resettled communities?

Hypotheses

This thesis is based on following two hypotheses:

1. Development-induced displacement and resettlement of land based and indigenous communities can lead to impoverishment and social disarticulation, if they are not compensated adequately by the provision of land offering similar or improved productive qualities, than was available to them in their pre-resettlement communities.
2. The development project of the Cerrejón mine has resulted in an expansion of land area used for mining, encompassing land that was previously sparsely populated and difficult to access. Expansion in mining has brought these land areas into the national and global economy. The ancestral population of the region, Afro-Colombian campesinos and indigenous Wayuú people, are under increasing pressure to adapt to urbanized environments and modern work routines and lifestyles.

Research Objectives

- Characterize and contextualize extractivism in Colombia, with a focus to the Cerrejón mining region in La Guajira.
- Investigate the social, economic and ecological impacts of the Cerrejón mine to the surrounding region. Identify and characterize communities affected by mining induced displacement and resettlement by the Cerrejón mine.

- Conduct in depth studies about two sample communities, which were recently resettled. Discuss similarities and differences of the two communities and contextualize them with other comparable examples.

Thesis overview

The history of extractivism in Latin America and in Colombia will be explained and introduced. Contemporarily many countries in this region see extractivism as an important economic strategy. Following this introduction Colombia's abundance of coal reserves will be contextualized with its importance in the global market and its geological setting. The problems concerning large scale open pit mining will be discussed, with a focus on the displacement and resettlement phenomenon. Mitigation measures recommended by the World Bank to avoid impoverishment risks caused by resettlement will be outlined. An overview of how the Political Ecology can be used as an analyzing tool will be given, before the methodology of the research will be outlined. The selected resettled communities will be introduced with an explanation of the survey which focused on their socio-economic and socio-cultural situation. The residents of the selected resettlements will be asked about their opinions relating to their new living and working situations. The result of the case study will be presented and interpreted. The thesis will be finalized by a critical discussion, offering different perspectives of the results.

2 CONTEXTUALIZING EXTRACTIVISM

2.1 HISTORICAL PERSPECTIVE OF EXTRACTIVISM IN LATIN AMERICA

As noted in Textbox 1, extractivism can be understood as those activities that exploit natural resources for direct export with minimal processing (Acosta 2013 p.62). As the geographical distribution of the demand and supply of raw materials is often very distant, the trading of these goods represents one of the earliest forms of internationalisation and globalisation (Nötstaller 2009). To this extent, Latin American countries, which have typically supplied raw materials globally, have had three historical periods of policy making. Each country has had a slightly different development, so these phases provide a general regional overview: From 1870 until 1929 the export-import-model dominated. Industrialised countries in Europe and North America placed high demand on raw materials, causing a boom in the export of commodities from Latin America in this epoch (Boris 2009: 27ff).

The 1929 world economic crisis and the consequent drop in demand of Latin American raw materials initiated a shift in policy. Countries introduced policies that factored in an import substitution model. The motivation of these policies was to assist each country to become more independent from expensive industrial imports and overcome the unfavourable terms of trade. Tariffs and taxes were introduced in order to protect their own non-competitive industries. Economic modernization that was inwardly directed was preferred (Bultmann 2007 p.43). In many countries nationalisation of mineral resources was one expression of this policy (Crude oil and natural gas: Bolivia 1937; Mexico 1938; Brazil 1953; Peru 1968; Ecuador 1974; Venezuela 1976). However, structural problems such as, internal markets being too small, negative current accounts and a technological backlog, hindered the success of these policies. Moreover, in the beginning of the 1980s raw material prices were very low yet national debts were very high, which triggered a policy change (Schmalz 2013 p.49ff).

The third period was marked by realignment towards the free market, privatisation and deregulation (Burchhardt 2004 p.37ff). This policy is commonly referred to as neoliberalism. In 1973, the first country in Latin America to introduce such a policy was Chile following the military coup d'état. Ironically, copper mining remained in public hands in Chile. Since the mid-1990s there has been a substantial boom in raw material extraction in Colombia, as in other Latin American countries and worldwide. This boom was triggered by the high demand from the rapidly rising economy of China, in order to boost their economic growth (Strüver 2007). The scarcity of new natural resource sources and the technical difficulties of exploiting new mining areas for energy producing raw materials like coal, natural gas and crude oil, lead to high prices on the global raw material market. For this reason transnational corporations (TNCs) are on a

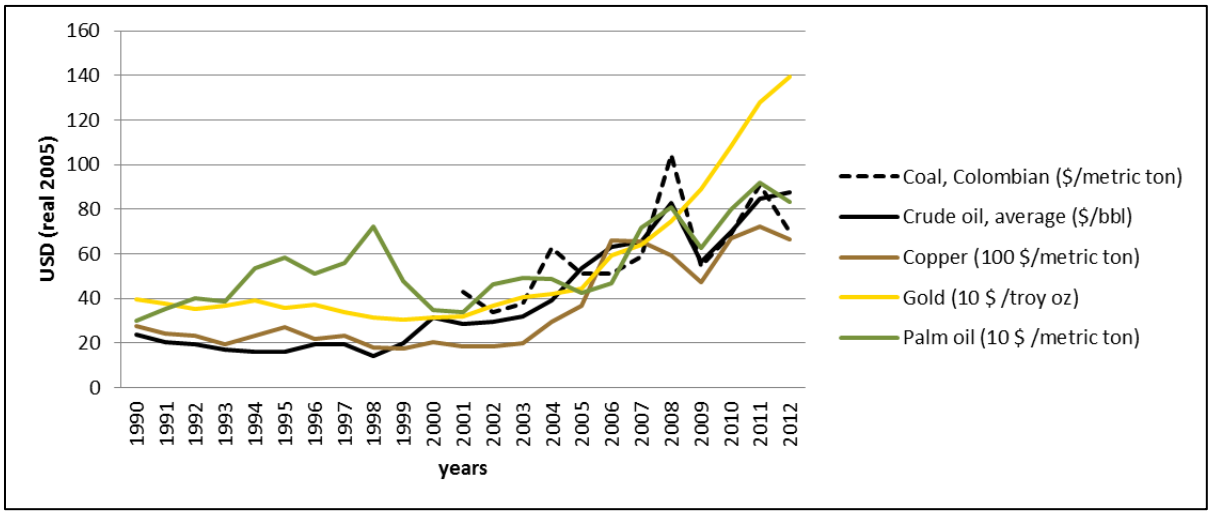
worldwide quest for finding new lucrative exploitation areas (PBI Colombia 2011, Schmalz 2013). Other commodities like agricultural products, metals and minerals, fertilizers (phosphate, etc.) and precious metals (gold, silver, platinum) also showed a general increase in their prices.

Textbox 2: Transnational Corporations

The United Nations has introduced the term transnational corporation (TNC) for enterprises which simultaneously act with direct investments in at least two countries' markets. The introduction of this term was supposed to be an alternative to the negatively connoted term multinational corporation (Springer Gabler Verlag 2014). The differentiation between international and multinational corporations is difficult to measure. Therefore, transnational enterprises are considered corporations which consist of a mother company with international subsidiaries. A corporation is considered transnational, if the mother company holds at least 10 percent of its shares in a country other than its country of origin, in which case it is considered internationally owned (Gebhardt et al. 2007 p.846). These definitions alone are not sufficient to define a TNC. The following properties are also relevant: high market value (billions of US-Dollars), economic power, a global player and national subsidiaries.

Figure 1 below shows the price development of different commodities on the world market. Bebbington (2009 p.8) summarizes the raw material boom since the mid-1990s as follows: "While the post-1970s return to private sector-led extraction did not lead to an immediate boom in extractive activities, since the mid-1990s, the mineral and hydrocarbon sectors have seen rapid geographical and economic expansion reflecting technological change, price increase and policy reforms (Bridge 2004; Bebbington et al. 2008). Growing volumes of foreign (as well as domestic) direct investments have driven an expansion of the extractive frontier into new areas at the same time as intensifying extraction in many areas with long traditions of mining and hydrocarbons. Increasingly, this has involved not only North American, European and Australian resource extraction corporations, but also Chinese, Russian, Indian, Brazilian and Southeast Asian companies each looking for a bit of the action."

Figure 1: Real prices (US-Dollar 2005) of important commodities



Source: B. Hora derived from World Bank 2012

2.2 Extractivism in Colombian politics

In the Colombian Constitution of 1991 Title 12, Chapter 1, Article 332 it is written, that "the state is the owner of the subsoil and of the natural, non-renewable resources, without prejudice to the rights acquired and established in accordance with prior laws" (Alcaldía Bogotá 2013). The Mining Code, the official legislation in mining, considers in its first and thirteenth article that mining is an activity of public interest (Law 685, 2001: Art. 1; Art. 13) (Congreso de Colombia 2011). Furthermore, the constitution states in Article Title 2, Chapter 2, Article 58, modified by Legislative Act No. 1 of 1999, that "for reasons of public benefit or social interest as defined by the legislator, expropriation may happen by the sentence of a court after prior compensation (Alcadia Bogotá 2013). With this mining friendly legislation, the centre-right Uribe (2002 – 2010) and Santos (2010 to present) presidential administrations promoted mining as the engine driving Colombian national development. As we will see later this law in 2001 has promoted transnational corporations (TNC) buying state or semi-state owned open pit coal mines operating in the departments of Cesar and La Guajira.

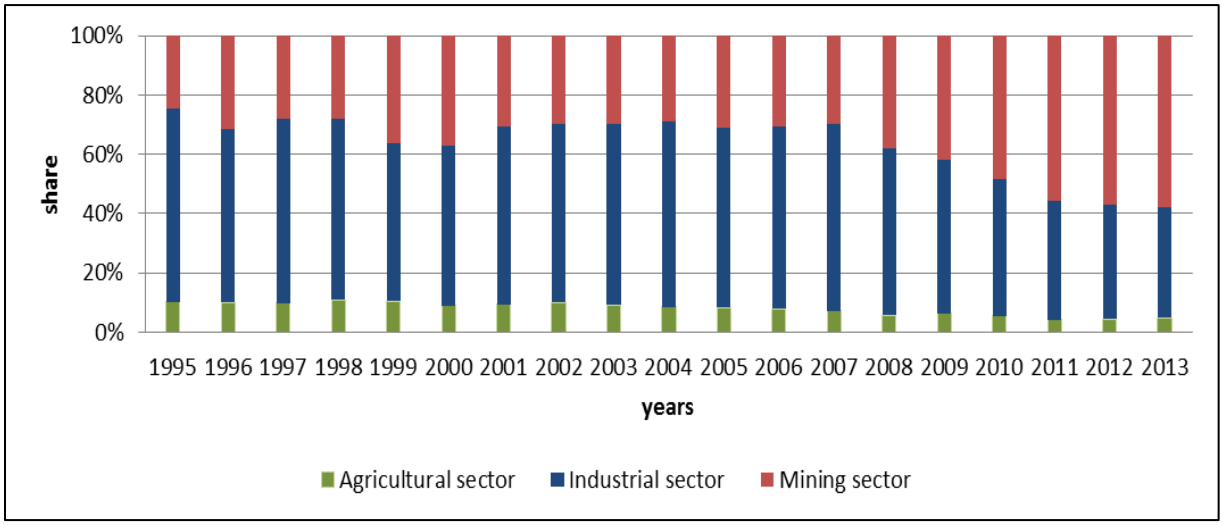
This surge in mining in Colombia can be described by examining the numbers: between 2002 and 2009 the area covered by mining increased from just over 10,000 km^2 to 84,000 km^2 (Rudas 2011). In the Plan Nacional de Desarrollo Minero (UPME 2009) the government's intention is for Colombia's mining industry to expand until the year 2019, which would make it one of the most important in the whole of Latin America. This Plan includes the following goals:

- Increase the export of carbon to 100 million tons annually
- Increase the export of gold four times of the actual production
- Increase the basic geological exploration across the national territory

The mining and hydrocarbon sector is expanding constantly, relative to the other sectors contributing to the GDP of Colombia (2007: 5.7% 2012: 7.6%). With a significant percentage of GDP from mining and fossil fuel commodities, Colombia is similar to other Latin American economies. For example Colombia's reliance on mining and hydrocarbons comes after Venezuela with over 20% of GDP, Bolivia with over 10% and Chile at 10% (Contraloría General de la República 2013).

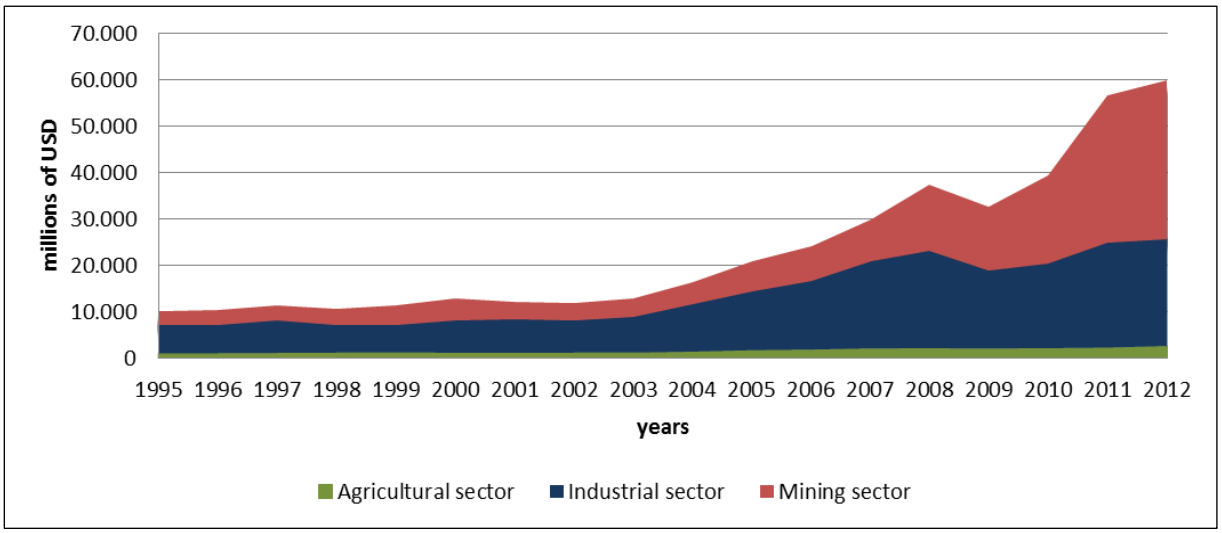
With respect to exports, it is obvious that Colombia has an expanding extractive economy. In 1995 the mining sector only contributed to 25.7% of the economy, but this increased to 56.9% in 2012 (Fig. 2). However it has to be taken into account that there has been a total increase of the export volume from around 10 billion USD to nearly 60 billion USD in 2012. Therefore there has been an increase in exports in all sectors, but the mining sector has experienced by far the biggest increase. Since 2003 industrial sector exports have been growing steadily (Fig. 3).

Figure 2: Proportions of the mining, industrial and agricultural sector of Colombian exports



Source: B. Hora derived from DANE 2013 a

Figure 3: Total exports of the mining, industrial and agricultural sector of Colombia

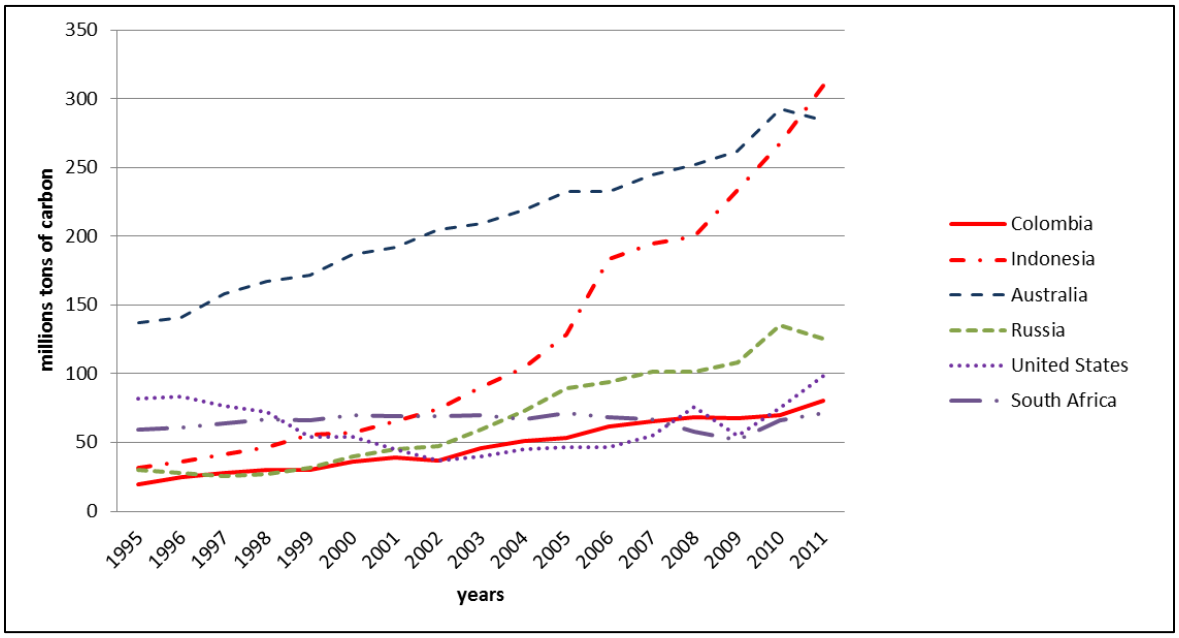


Source: B. Hora derived from DANE 2013 a

2.3 Colombia – An emerging player in the coal market

In 2011 Colombia was the fifth largest coal exporter in the world (EIA 2011). While their own coal consumption is relatively low, as most of the energy production is based on hydroelectric plants (80.1 % in September 2010) the export is booming and growing in an astonishing manner (Ministerio de Relaciones Exteriores 2011). In 1995 annual exports were 18 million tons, yet this increased steadily to 81 million tons by 2011 (DANE 2013b). Not many coal exporting nations can boast about such strong growth in their coal exports. Figure 4 shows important coal exporting nations and the volume since 1995. As we can see Indonesia and Australia have exceptionally high export rates. Indonesia had the highest growth rate in the observed time period (10 times). However, the Colombian exports have increased fourfold over the same time period, which focuses the attention of transnational companies on the country (Coal International 2013). In general, the exported coal is thermal black coal for power plants. Coking coal only plays a minor role and brown (lignite) coal is not worth transporting long distances.

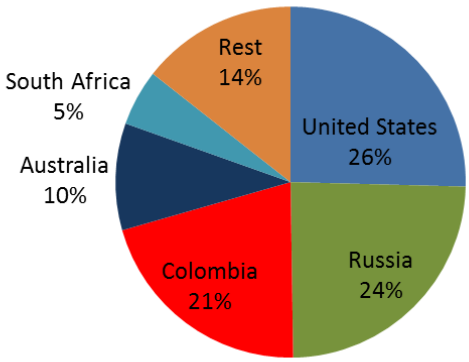
Figure 4: Absolute carbon exports of the six most important black coal export nations



Source: B. Hora derived from EIA 2011

The main importers of black coal in 2011 were located in Asia and most of the Australian and Indonesian exports went to Asian markets. Other major importers are located in Europe, where most of the coal comes from USA, Russia and Colombia (EIA 2011, Destatis 2013). The example of Germany reveals that the import contribution of Colombian black coal for electricity production in the domestic power plants is the third biggest after US and Russian imports (Fig. 5). Coal (black 18.5% and brown coal 25.7% of in 2012) still plays a major role for the electricity production in Germany. With limited use of its own black coal resources, Germany's imports are going to grow over coming years (Arbeitsgemeinschaft Energiebilanzen 2013). Moreover, the share of nuclear energy has decreased steadily due to the nuclear power phase-out in Germany, yet generally favoured renewable energy sources have not been developed to the stage where they are able to provide stable, base-load electricity supply.

Figure 5: Relative contribution to coal imports in Germany 2012



Source: B. Hora derived from Statistisches Bundesamt Deutschland 2012

Numerous articles from a range of authors have been published in trade magazines dealing with the coal boom in Colombia: “Colombia has a low cost to production and very high quality metallurgic coal, this is drawing interest to Colombia from all over the world” comments John Campo, president of VSUS Technologies (Coal International 2013 p.15). Leon Teicher, former CEO of the Cerrejón mine stated: "Expansion is part of our DNA. In terms of road, rail and port, our mine's infrastructure was originally designed for 15 million tons per year of coal exports. At the time, that was the largest operation in the world." Now the infrastructure is able to export 32 million tons of coal per year (Engineering & Mining Journal 2011 p.104).

Another factor contributing to the coal export boom in Colombia is an effect of trade globalisation. Nötstaller (2005 p.273) describes this effect as follows: “The extension of sea trade through bigger oil tankers and bulk carriers has contributed decisively to this development [global trade intensification]. The average size of a new built bulk carrier more than doubled between 1980 and 2005. In the raw material sector globalisation has effects on both the demand and supply side. With the growth in ship volumes connected size degression effect at the commodities has increased the international competition between raw material mines. The location advantages of mines that were close to consumers, with high extraction cost have been eliminated for that reason. The biggest loser of this new competition is the coal mining in Western and Central Europe. It has decreased from 300 million tons to about 50 million tons.” This statement supports the idea that the world trade of coal and other commodities is favoured for cheaper exploitation of the resources, rather than geographic proximity to the consumer, predominantly because the cost for transporting commodities on ships has fallen significantly. Therefore, large open-pit mines, with coal layers close to the surface, and close to sea harbours, are booming in this new trade regime.

2.4 EXTRACTIVISM IN NEIGHBOURING COUNTRIES

Left winged governments in the Andean region like the Rafael Correa (Ecuador) or Evo Morales (Bolivia) administrations have comparable policies to Colombia with regards to their extractive sectors. They see these activities as one of their most important growth generators (Humphreys Bebbington & Bebbington 2012). However, the mining legislation in Ecuador contains more stringent environmental and social controls, since Correa took power in 2007. This resulted in rescinding many concessions, which were granted in the 'long neoliberal night' in the 1990s and early 2000s. Prior to 2007 the state had to grant mining concessions, whenever there was a request from a private party. At this time of neoliberal expansion a large scale of the central-southern highlands and Amazonian lowlands of Ecuador came under concessions. Also a series of exploration projects were frozen until irregularities were addressed, which also resulted in the creation of a state mining company (Bebbington & Humphreys Bebbington 2011 p. 136). However on June 13th 2013 the Ecuadorean congress passed a law, with a ceiling at 8% on previously open-ended royalties. Furthermore concessions requirements were eased once again. Correa took this decision, because Ecuador's direct foreign investment per capita was the lowest in whole Latin America (The Economist 2013).

These pragmatic policies used neoliberal ideals to promote growth under a left wing government. One of the most well known examples of an alternative extraction policy failing recently occurred in Ecuador. The Yasuní ITT initiative aimed to raise funds, financed by developed affluent countries, to leave crude oil in the subsoil of the environmentally sensitive Amazon forest of the Yasuní National Park in the Ecuadorian Amazon lowlands. The area is inhabited the Waroani indigenous tribe who live in nearly total isolation (Finer et al. 2010). In the beginning of October 2013 the Ecuadorian Congress approved oil drilling in the Yasuní Basin, because the project only received around 10 percent of its initial 3.6 billion USD funds that it sought. According to Correa the potential earnings of the oil reserves are estimated to be 22 billion USD (Unsleber 2013). This example shows us that the so called post-neoliberal administrations like in Ecuador try different ways of handling extractivism, but economic constraints make it hard for them. A quote of Rafael Correa about this problem is characteristic: "It's absurd to be sitting on top of hundreds of thousands of millions of dollars, and to say no to mining because of romanticisms, stories, obsessions, or who knows what" (Rafael Correa, President of Ecuador, 11.08.2008).

In Bolivia, natural gas extraction has a long history of inequality in distributing the benefits, costs and risks. As well the capacity to influence these gains has been very unequal of the different actors. This circumstance provoked social movements, which have been partly successful in the last years: Property and the level of royalty and tax payments and benefit

distribution have changed in this industry. Nevertheless those predominantly indigenous movements in the lowlands, which are directly affected by the gas extraction facilities, were unsuccessful. The struggle for their livelihoods and territory in the vicinity of the extraction fields in the Bolivian Chaco prevails, as the question stopping the expansion of these activities is obsolete. In the new economic regime, the income generated by natural gas is crucial for the Bolivian governmental budget (Humphreys Bebbington & Bebbington 2010). These two examples show that in many cases the environmental impacts of mining activities are played down by enterprises and governments. The political orientation doesn't seem to make a big difference in this respect. In Peru, with a right wing government, this ignorance of impact reached scandalous levels, where the highly contaminated mining city of La Oroya, was not listed in the contamination sensitive sites list of the Health Ministry (Gudynas 2010 pp.63-64).

2.5 Is the Cerrejón megamining project following the same path?

As a result of the issues discussed in the previous chapter, extractivism has become a topical issue in the Colombian and Latin American context. Growth in mining activities always creates a fundamental social and environmental change in the regions where they are carried out. Especially when the growth extends mining activity into a region that has never previously been an area of extractivism, the environmental and socio-economic changes can be immense. These changes depend on how the ancestral flora and fauna is constituted and how the area was settled by humans before the mining activities started. Open pit mining consumes more area than for instance oil-drilling or underground mining. However, all mining activities come with infrastructure developments and an influx of mining workers. This can completely change a formerly remote area, from an ecological and socio-economic perspective. The social, economic and environmental impacts of Cerrejón mining project on the region are discussed in detail in Chapter 5 and 6.3.

2.6 COLOMBIA'S COAL – LOCATION AND GENESIS

Colombia had the 12th biggest reserves of black coal in the world, with around 6.366 million tons of anthracite or black coal of proved recoverable coal reserves in 2008 (BP 2012 p.30). The portion of subbituminous and lignite coal is very low. Nevertheless this only makes a total share of 0.8% of the world's reserves of coal. If the extraction would continue at the same rate, the now known reserves would only last 76 years. For instance the USA with the highest proven reserves of 237.295 million tons has a reserves-to-production-ratio of 257 years (BP 2012 p.30). Most of Colombian coal reserves are located in the costal departments of Cesar and La Guajira, where around 80% of the coal is situated (Tab. 1).

Textbox 3: Proved reserves

Generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known deposits under existing economic and operating conditions (BP 2013 p.30).

Thermal coal from these two areas is dedicated for exports. The coal originating from these two departments is accounts for nearly 100% of Colombia's coal exports. The map below shows the national distribution of Colombia's coal reserves (Fig. 6).

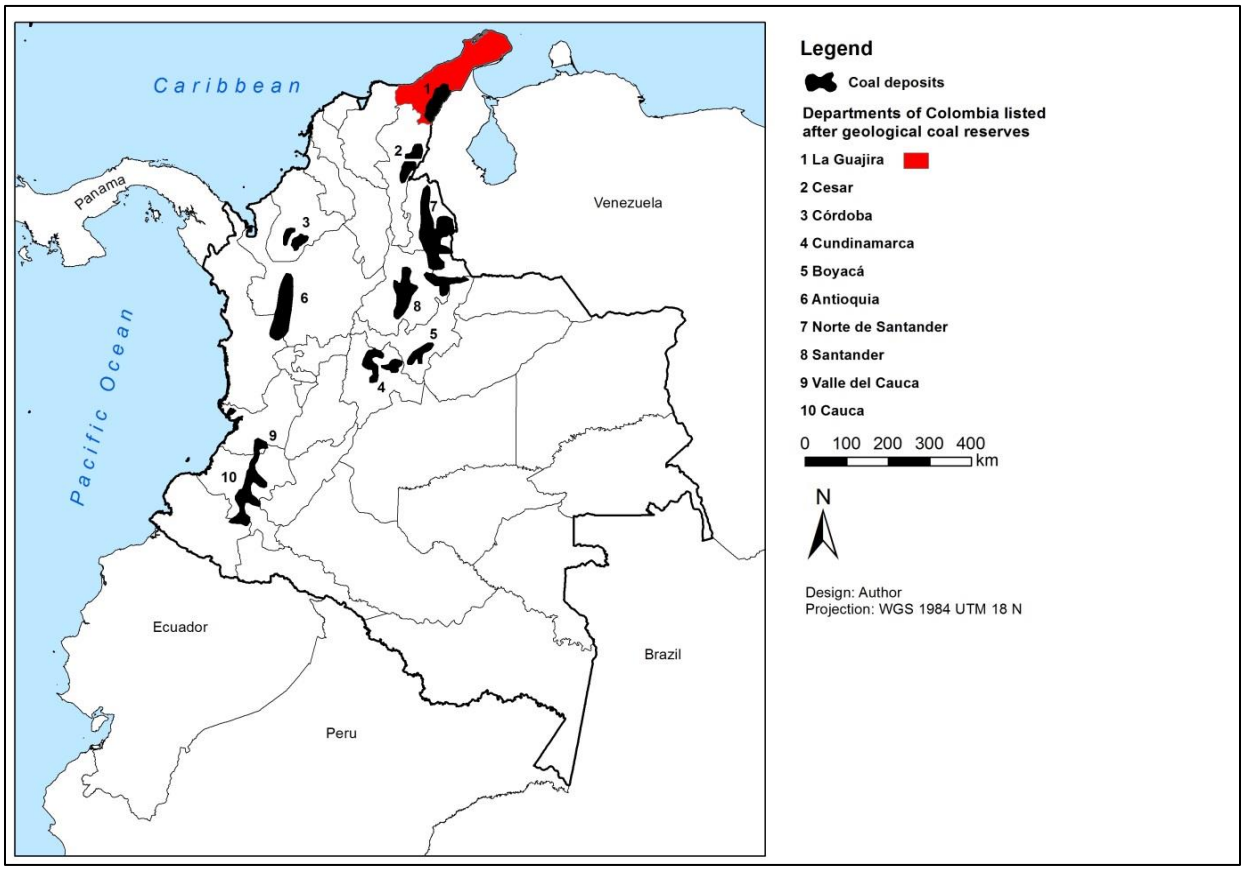
Table 1: Geological reserves of carbon in Colombian departments

Carbon zone	Rank	Reserves in Mt	Type of coal
Guajira	1	3670	T
Cesar	2	1933	T
Córdoba	3	381	T
Cundinamarca	4	242	T-C-A
Boycacá	5	170	T-C-A
Antioquia	6	90	T
Norte de Santander	7	65	T-C
Santander	8	57	T-C-SA
Valle del Cauca	9	20	T
Cauca	10	16	T
TOTAL		**6645**	

T= thermal, C=coke able A=anthracite SA=semianthracite

Source: B. Hora derived from Banco de la República (1998)

Figure 6: Coal deposit distribution in Colombian department



Source: Ministero de Minas y Energía 2004 p.28; GADM

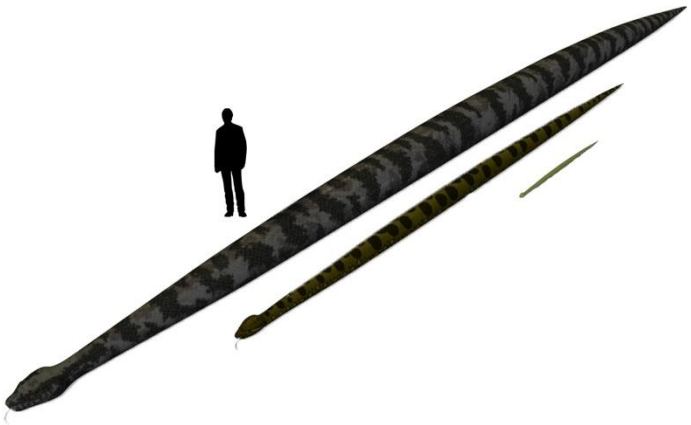
Genesis and paleontology of Colombian coal deposits

In comparison to black coal deposits formed in North America and Europe in the geological Carboniferous period in the Paleozoic era (around 250Ma) (Dones et al. 2007 p.1), the genesis of Colombian coal took place in a relatively recent geological time. The economically crucial Cerrejón Formation in the department of La Guajira was formed in the Middle to Late Paleocene (ca. 60-58 Ma). Palynological investigations suggest an estuarine-influenced coastal plane at the base and to a fluvial-influenced coastal plane at the top (Jaramillo 2007 et al).

The Cerrejón Formation is also of special interest in the disciplines of paleobiology and biogeography, because fossils found there are the earliest records of a Neotropical rainforest (Wing et al 2009). The most spectacular discovery in the same deposits was the remains of the extinct Titanoboa cerrejonensis (Fig. 7). It is estimated that this snake species was 13 m long and had a mass of 1135 kg, making it the largest ever known snake. It is argued that a snake with this body size would need a minimal mean annual temperature of 30-34 degrees Celsius to survive. This assumption is consistent with the hypothesis of hot Palaeocene neotropics (Head et al 2009). However other scientists doubt the direct correlation of hot tropic temperatures and size

of the snake: The metabolic heat of the body would have been so big, that the snake would have died of overheating at these temperatures (Denny et al 2009). It is also argued the scarcity of large predatory reptiles today might be a function of competition with mammalian carnivores, rather than a function of modern temperatures (Sniderman 2009).

Figure 7: Comparison between human (1,80m), Titanoboa cerrejonensis (extinct) (13m), Green anaconda (Eunectes murinus) (8m), Boa constrictor imperator (2m)



Source: B. Hora derived from http://ancestorsrelic.deviantart.com/art/Titanoboa-and-Sucuriju-186137389 accessed 27.01.2014

3 THEORETICAL FRAMEWORK

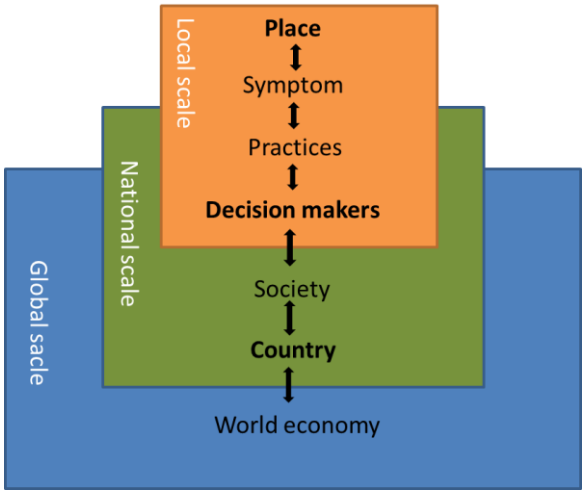
3.1 POLITICAL ECOLOGY

As the focus of this work lies on social impacts and environmental change and conflicts associated with mega-mining, the "concept of the Political Ecology" introduced by Piers Blaikie and Harold Brookfield (1987) offers a suitable framework.

Environmental conflicts are not the result of inadequate technology, etc., rather their origins have social causes. Environmental problems always have to be seen in their historical, political and economic context. Interests, power structures and the discourse of the participating stakeholders are central in the political-economic discourse (Krings & Müller 2001).

The focus is not on "the environment" itself, but more accurately society's appropriation of the environment, in the form of basic human needs like dwelling, mobility, health, reproduction and people's materialistic and symbolic production and consumption. This discourse is driven by social division of labor, price trends, political frameworks and the orientation on an attractive life (Hummel 2008). Therefore the Political Ecology assumes a complex, historically changeable relation between society, individual and nature (Becker & Jahn 2006, Becker et al. 2011, Görg 2003). So environmental change or degradation only becomes a problem to society, when it is perceived as such (Bryant & Baily 1997 p. 31). Blaikie (1995) identified, that in a politically, socially and economically globalizing world, local environmental issues (symptoms) have to be seen in a broader national and global context (Fig. 8). The analyzing concept of the Political Ecology applies to the ever changing dialectic between economy, society, political systems, international political relations and natural resources (Krings 1998).

Figure 8: Scale of the Political Ecology context



Source: B. Hora derived from Blaikie 1995

In the case of developing countries environmental problems can be seen as a result of structural inequalities between rich and poor nations and rich and poor within the relevant country. As mentioned above the Political Ecology opens a path, where environmental changes are not only seen in a physical view, but also link these phenomena to social aspects. This connection also implies that the "environment", which has been a long time domain of natural sciences, becomes a scientific object to social scientists. This leads to the consequence, that natural science concerning the environment cannot be understood without political critique (Krings 1998, Krings & Müller 2001).

The term "environment" is in the conflict factor between different perspectives. The Political Ecology sees the environment as a "social construct, which is shaped by interests" (Kings & Müller 2001 p. 95). Therefore to avoid a subjective perspective of a situation, the Political Ecology demands an interest orientated deconstruction of the used environmental term. The environmental activities are carried out by stakeholders, which can be united in stakeholder groups, which act in common interest. Generally these groups can be divided in endogenic "place-based-stakeholders" (small farmers, fisherman, local NGOs) and exogenic non-place-based-stakeholders (ministries, head of state, decision-makers of international economy, politics and finance). The influence of supra-regional (national or international) stakeholders becomes important, as they can develop into local events, and therefore become local stakeholders. But these different stakeholders possess different power positions, perceptions and consequently interests to change the environment.

Summarizing this concept, the "Political Ecology blends a focus on the relationship that people have with their environment with attention to the political economic forces characteristic of the society in which they live that shape and condition that relationship. Political Ecology largely focuses on the conflicts that emerge over rights to access ownership and disposition of resources and environments for which different social groups, often characterized by widely differing socio-cultural identities and economic adaptation forms, contend" (Oliver-Smith 2001 p.32). According to Robbins (2004 p.14) the Political Ecology has four big theses, on which this concept is founded. These are outlined in (Tab. 2):

Table 2: Four theses of Political Ecology and the things they attempt to explain

Thesis	What is explained?	Relevance
Degradation and marginalization	Environmental change: why and how?	Land degradation, long blamed on marginal people, is put in its larger political and economic context
Environmental conflict	Environmental access: who and why?	Environmental conflicts are shown to be part of larger gendered, classes, and races struggles and vice versa
Conservation and control	Conservation failures and political/economic exclusion: why and how?	Usually viewed as benign, efforts at environmental conservation are shown to have pernicious effects, and sometimes fail as a result
Environmental identity and social movement	Social upheaval: who, where and how?	Political and social struggles are shown to be linked to basic issues of livelihood and environmental protection

Source: Robbins 2004 p.14

Political Ecology approach of development induced displacement and resettlement

Oliver-Smith (2001 p.32) connects the Political Ecology framework with development induced displacement and resettlement (DIDR) conflicts, which emerge out of the contest over rights to access, ownership and disposition of resources of differing socio-cultural groups and economic interests. He argues that DIDR resistance involves conflicts over the complex relationships, involving sets of rights and risks that people have with a physical environment. This effort falls under the rubric of Political Ecology. In the following chapters the phenomenon of development-induced displacement and resettlement will be introduced and discussed. In the analysis Political Ecology will be used as a framework relating to the constellation of power and scale of the different actors in the case of the mining induced displacements and resettlements in the Cerrejón mining region.

3.2 DEVELOPMENT-INDUCED DISPLACEMENT AND RESETTLEMENT

Oliver-Smith (2009 p.3) draws in his essay an appropriate formulation about the phenomenon of DIDR: "The displacement and resettlement of people and communities by large-scale infrastructural projects is one of the most bitterly contested issue in the field of development today. Publicly and, increasingly, privately funded development projects are estimated to displace more than fifteen million people a year […]. Capital-intensive, high-technology, large-scale projects convert farmlands, fishing grounds, forests, and homes into dam-created reservoirs, irrigation schemes, mining operations, plantations, colonization projects, highways, urban renewal, industrial complexes, and tourist resorts, all in the name or regional and national development. Aimed at generating economic growth and thereby improving general welfare, these projects have all too often left local people permanently displaced, disempowered, and destitute. Resettlement has been so poorly planned, financed, implemented, and administered that these projects generally end up being "development disasters." The process of displacement becomes a "totalizing" phenomenon, affecting virtually every aspect of live."

Textbox 4: Development-forced displacement and resettlement (DFDR) and Development-induced displacement and resettlement (DIDR)

Until recently the term DIDR appeared in publications dealing with development induced displacement and resettlement. However Oliver-Smith and participants in the SAR (School of Advanced Research) seminary contested this term: "DFDR is more appropriate than the previous term DIDR. The reason behind this change is that induced is not an appropriate term for something that is determined by fiat, decided and planned in advance (Michael Cernea, personal communications, February 2007). Induced is inadequate also because it suggests that people may be convinced by arguments or rewards to be resettled. In such a case, involuntary resettlement becomes voluntary, not forced or imposed." (Oliver-Smith 2009 p.23) In this research the term DIDR will be used, to cover both development induced and development forced displacement and resettlement.

3.2.1 Reasons and scale of Development-induced displacement and resettlement

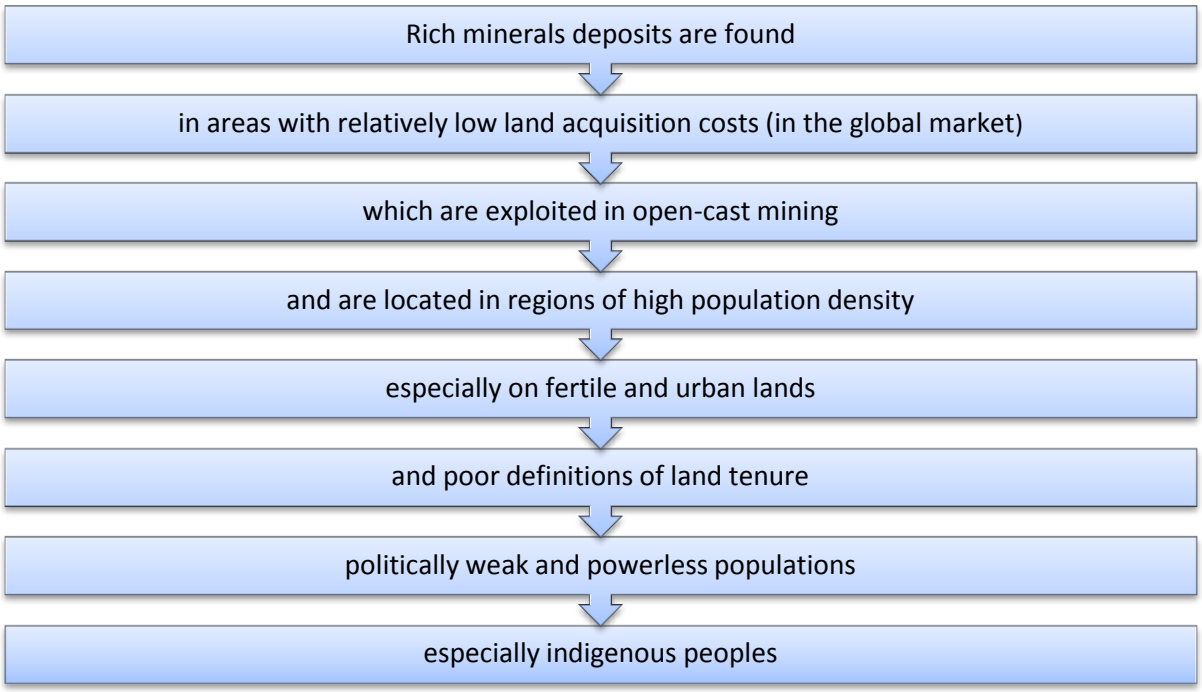
One of the most commonly known forms of resettlements are those caused by river dam constructions. Contemporary literature (Cernea 2000, De Wet 2006, McDowell 1996, Penz et al. 2011) dealing with development-induced displacement usually focuses on dam constructions, irrigation projects and artificial reservoirs. Approximately 40 to 80 million people worldwide have been forcefully resettled in recent decades following damn constructions (Kohlhepp 2002). However, it is difficult to estimate how many people have been displaced due to infrastructural projects in total. Roy (2002) for example estimates 50 million displaced people resulting from Indian dam projects alone. Coy & Geipel (2004), Geipel (2005) investigated the conflict of economic benefits of dams and social costs of resettling the ancestral population, with a case study of the Lajeado dam in Brazil. Recent prominent dam resettlement controversies include the already finished Three Gorges Dam in China and the Belo Monte dam project of the Rio Xingu in the Brazilian Amazon basin, which received significant global media attention in recent years. Worldwide 10 million people are involuntarily displaced or resettled each year to make way for development projects (Cernea 2000). In the 1990s 90-100 million people were displaced in total caused by worldwide infrastructural developments. The magnitude of this displacement is surprising – much greater than the total number of refugees from wars and natural disasters (Cernea 1997 p.1570). In the years following Cernea's research cited above, this phenomenon seems to have increased in the beginning of the 21st century.

3.2.2 Mining –induced displacement and resettlement (MIDR)

As black coal open pit mining has become a very important factor in the Colombian economic strategy, the social and ecological implications of these activities are of special interest. These mining activities are mainly carried out in the departments of Cesar and La Guajira in Northern Colombia (Indepaz 2011, Ronderos 2012). Open pit mining in populated areas usually leads to land use conflicts, as the growth in mining demands more land, where people are already or carry out agricultural activities.

The likelihood that mining-induced displacement and resettlement (MIDR) could become a significant issue for local communities increases when the following eight factors converge. In the Colombian context of the mines in Cesar and la Guajira these conditions are fulfilled (Fig. 9).

Figure 9: Eight factors MIDR becoming an issue to local communities



Source: Downing 2002 p.6

There is no global survey about MIDR assessments, but available evidence suggests the problem to be significant: The Tarkwa gold mines in Ghana forcefully removed 20,000 to 30,000 people (Coakley 1998). In South Africa a count in 2001 showed that over 37,000 people were displaced by mining over the preceding five years (Sonengberg and Münster 2001). India seems to be very affected by MIDR. It is estimated that over 2.55 million people have been displaced between 1950 and 1990, especially by coal mines in the state of Jharkhand. Other cases of mining-induced displacement can be observed worldwide. Particularly vulnerable to impoverishment due to MIDR are indigenous peoples, elderly and women in developing countries (Downing 2002). To contextualize MIDR with other development project induced displacements and resettlements, analysis of World Bank projects active in 1993 showed that it had a share of 4.8%. Displacements by dams, irrigation and canals (66.4%) and urban infrastructure, water supply and transportation (22.6%) were far more significant (Terminski 2013 p.183).

Mining-induced resettlement is not limited to developing countries. For example, in Germany and Poland there has been ongoing resettling taken place, because of the increase of area consumption of lignite open pit mine exploitation (Terminski 2013). Germany is the world leader in in lignite production (169.4 million tons in 2010), since the beginning of open pit lignite mining in the 1920s, 300 communities have been destroyed and 100.000 people have been resettled (Michel 2008). For example the Rhineland lignite-mining region with an area of

approximately 2,500 km² west of Cologne, where also the Garzweiler II open pit mine is located, 30,000 people have been relocated since 1948 (Mining Technology 2014). Effective legal institutions regulate the amount of compensation. This has tended to avoid resettlements in Europe becoming main social or human rights problems (Terminski 2013). The social losses and a general attitude against lignite open pit coal mining are more relevant topics in the German society (Fig. 10).

Figure 10: Protest sign of a community to be resettled near the open pit lignite mine Garzweiler II - Germany

Source: dpa

MIDR has comparable processes and features as other DIDR causes, which make resettlements necessary. However environmental impacts of the mining activities can make the close surroundings of the mine unattractive of even uninhabitable for people.

Health impacts of open pit coal mining

Open-pit coal mining activities like drilling, blasting, overburden loading and unloading, coal loading and unloading, road transport over unpaved roads, losses from exposed overburden dumps, coal handing plants and exposed pit faces generate significant amounts of dust (Chakraborty et al. 2002). Dust including particles smaller than 10 µm can lower the air quality significantly in open pit mining regions and are made responsible for diseases like silicosis, black lung (CWP) and increased mortality. The surrounding flora and fauna is affected and the visibility is reduced (Wheeler et al. 2000; NIOSH 2005). Besides the dust impact people living close to the pit can suffer from noises and vibrations originating from explosions, trucks and

heavy machinery. The impacts of dust and noises depend on the precipitation and the geomorphological setting of the mine and its surroundings.

3.2.3 DEVELOPMENT INDUCED DISPLACEMENT AND RESETTLEMENT RISKS

The high number of displaced people caused by development projects worldwide leads to a high risk of new impoverishment, especially in countries of the so called Global South.

Textbox 5: Global South and Global Fragmentation

The "Global South" is a concept of development studies and other fields referring to weak, dependent countries, often with a history of colonialism. The concept is based in a division of the world-system into a North-South divide, according to the level of their economic development and position in international relations. Presumably the World Bank has introduced this term in the late 1980s. This term is used to avoid pejorative expressions like "developing country" or "third world country". The geographer Scholz (2000) contests the classical north – south division of developed and non-developed countries. He argues that globalisation – in the sense of unbounded competition – leads to manifold processes of fragmentation. Everyone can participate everywhere in the new competition and may benefit from the new regulation regime. At the same time these prospects lead at least to as many processes of social and spatial exclusions. The blessings of global competition are only accessible in certain locations and regions to a certain section of inhabitants. Mining regions, where transnational corporations carry out activities are described as affected global places in Scholzs' model of global fragmentation.

Michael Cernea, who is the main contributor to the resettlement handbook by the World Bank (2001), is arguably the most prominent scholar concerning resettlement theory. He points out eight key risks that may occur resulting from displacement without compensation and mitigation measures. He states that "understanding the processes that cause impoverishment under development programs and ways to prevent them is crucial for mitigation the hazards intrinsic to displacement" (Cernea 1997 p.1570). These risks are justified with empirical examples around the world:

Landlessness

"Expropriation of land removes the main foundation upon which peoples' productive systems, commercial activities, and livelihoods are constructed. This is the principal form of decapitalisation and pauperization of displaced people, as they lose both natural and man-made capital" (ibid. p. 1572).

Joblessness

"Loss of wage employment occurs both in urban and rural displacements. Those losing jobs include landless laborers, enterprise or service workers artisans, or small businessmen. Yet creating jobs is difficult and requires substantial investments. Unemployment or under employment among resettlers often endures long after physical relocation has been completed" (ibid. p. 1573).

Homelessness

"Loss of housing and shelter may be only temporary for many displacees, but for some homeless remains a chronic condition. In a broader cultural sense, loss family's individual home is linked with the loss of a group's cultural space, resulting in alienation and deprivation as argued by students of "place attachment" (Low & Altman 1992). Families subjected to compulsory villagization schemes, argued by de Wet (1995) also experience a lasting sense of placelessness."

Marginalization

"Marginalization occurs when families lose economic power and slide on a "downward mobility" path: middle-income farm households do not become landless, they become small landholders; but shopkeepers and craftsmen downsize and slip below poverty thresholds. Many individuals cannot use their previously acquired skills at the new location and human capital is lost or rendered inactive, useless. The coerciveness of displacement also depreciated the image of self. Marginalization materializes also a drop in social status and in a psychological downward slide of resettlers' in society and self, a sense of in justice, a premise anomic behavior. Relative economic marginalization begins long before actual displacement, because of disinvestments and noinvestment in infrastructure and services in condemned areas" (ibid. 1574).

Increased morbidity and mortality

"Serious declines in health results from displacement-caused social stress, insecurity, psychological trauma, and the outbreak of relocation-related illnesses […] Depending on location on of the resettlement, this can mean parasitic diseases as malaria or dengue fever or epidemics resulting from poor water supply" (ibid. 1574).

Food insecurity

"Forced uprooting increases the risk that people will fall into chronic undernourishment […]. Sudden drops of in food crops availability and/or incomes are predictable during physical relocation" (ibid. 1575).

Loss of access to common property

"For poor people, particularly for the landless, and assetless, loss of access to common (non-individual) property assets that belong to relocated communities (forest lands, water bodies, grazing lands, burial grounds, etc.) results in significant deterioration in income and livelihood. Typically, loss of common property assets are not compensated by government relocations schemes […] Empirical evidence shows that fruits and other edible forest products – firewood and deadwood, common grazing areas, and public quarries – accounts for a significant share of poor households' income" (ibid. 1575).

Social disarticulation

"Forced displacement tears apart the existing social fabric: it disperses and fragments communities, dismantles patterns of social organization and interpersonal ties; kinship groups become scattered as well. Life-sustaining informal networks of reciprocal help, local voluntary associations, and self-organized mutual service arrangements are dismantled. […]" (ibid. 1575).

In the introduction of the handbook the World Bank acknowledges problems concerning resettlements by development projects: "Bank experience indicates that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social and environmental risks: productive systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost" (World Bank 2001 p. 1).

3.3. Mitigation measures in Colombia, the World Bank Guidelines and critique

The worldwide guideline published by the World Bank in the Operational Policies OP 4.12 (World Bank 2001) is basis for involuntary resettlements caused by development projects. The policy was designed as a guideline for development projects, in which the World Bank is involved as creditor. This policy paper is based on World Bank development project experiences.

The company carrying out developments is responsible to execute and to finance the resettlements.

There is no effective legislation dealing with resettlement compensation in Colombia. However the ministry of environment published a resolution in 2010, which was used for the resettlements in the Cesar mining region (Gonzáles 2011 p.9 ff). Development companies and NGOs use these guidelines for resettlement policies in recent years. The Cerrejón mine used the IFC (International Finance Coporation) guidelines for their group resettlement policy since 2008. The IFC is a branch of the Word Bank promoting and crediting private development projects in order to decrease poverty in developing countries. These guidelines are derived from the Word Bank Operational Policies OP 4.12.

The problem with these guidelines can be seen from a political perspective. The World Bank promotes neoliberal ideals in order to overcome poverty in the countries of the south. For instance the Washington Consensus, promoted by the World Bank and the International Monetary Fund embraced cuttings in public spending, deregulation and privatization of public enterprises among measures in order to overcome the debt crisis in developing countries, especially in Latin America in the 1980s (Kellermann 2006 pp.95-96). The World Bank hasn't changed much of its ideology since then. There is no space for alternative discourse concerning development-induced displacement and resettlement other than those recommended by the World Bank. In Colombia there is no doubt among the powerful decision makers (state and TNCs) that coal exploitation for exports is a viable economic activity. This is an approach which makes other interests subordinate.

The Resettlement Plan of the World Bank is used as a guideline for the Cerrejón mine to carry out resettlements necessary for the expansion of the mine (Cerrejón 2014c).

The elements of the resettlement plan specifically important to the research are: socio economic studies; institutional framework; site selection, site preparation, and relocation; housing, infrastructure and social services; environmental protection and management; community participation and integration with a host population. There are also other elements in the resettlement plan concerning, among others, legal frameworks.

4 METHODOLOGY

Bibliographic review

A literature search was carried out with the keywords: extractivism, indigenous people, resettlements, territorial conflicts, mega-mining and adjoining topics in the Latin American and Colombian context. Statistical data about demographic and economic developments in Colombia, mainly from DANE (Departemento Administrativo Nacional de Estadística) was sighted. This information already indicated the most crucial contacts and organizations which deal with mining induced resettlements in Colombia. In particular contacts were built to the NGO Ask! Arbeitsgruppe Schweiz-Kolumbien based in Switzerland and the Colombian NGO Indepaz (Instituto de estudios para el desarrollo y la paz) based in Bogotá. A contact was built with the anthropology professor Astrid Ulloa of the Universidad Nacional de Colombia.

Fieldwork

From the beginning of October to mid December 2013 fieldwork, with the support of a KWA-scholarship of the Innsbruck University, was conducted in Colombia. The first three weeks were used to network and carry out expert interviews in Bogotá. Crucial contacts were made for the fieldwork in the Cerrejón mining region. Then for four weeks fieldwork was carried out in the mining area. Different experts, who are involved in the resettlements, were interviewed. The experts interviewed are shown on following table. They are categorized in function and their current place of residence (Tab. 3):

Table 3: Names of interview partners

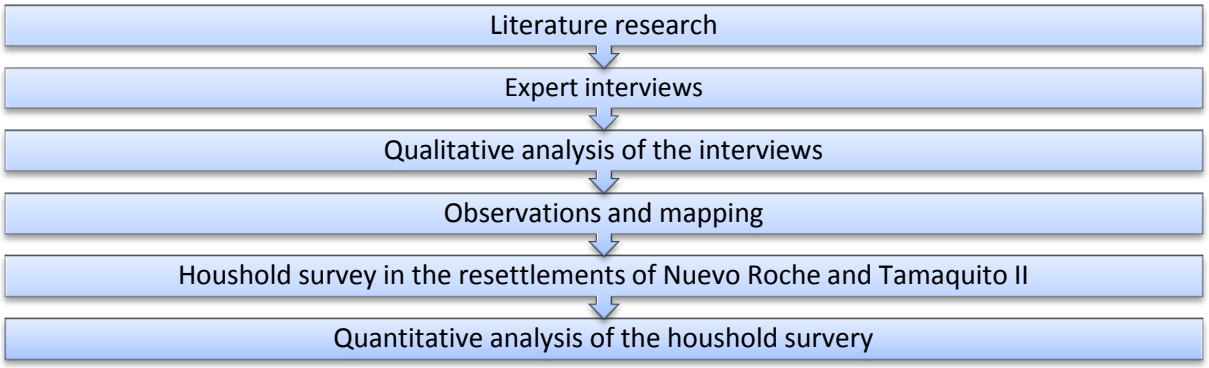
Name	Function	Place of residence
Dominique Rothen	NGO Ask! Arbeitsgruppe Schweiz-Kolumbien	Switzerland/ Colombia
Carlos Franco Echavarría	Department of Social Standards and International Engagement – Cerrejón mine	Mushaisa and Bogotá
Jairo Dionisio Fuentes Epiayu	Governor of indigenous cabildo	Tamaquitos II
Luis Emilio Guariyu	Governor of indigenous cabildo	Resgurado Provincial
Olivia de Jesús Clavigo	Law professor origination from La Guajira	Bogotá
Leonardo Gonzáles Perafán	NGO Indepaz	Bogotá
Betti Ortíz	Resettled in the 1980‘s	Hato Nuevo
Osiris Molina	Vicepresidente de la Asamblada Communal	Nuevo Roche

During the interviews notes were taken and they were recorded and afterwards transliterated. In the following chapters statements from the interviews that relate to the thesis argumentation will be used. Either, at the beginning of the chapter it will be declared from which person the following information originates, or it will be cited for example (Interview Rothen).

The expert interviews were crucial for a better understanding of the problems and phenomenon concerning resettlements in the Cerrejón mining region. Most interview partners were contacts received from the NGO Indepaz. The contact to Osiris Molina came during a visit Tamaquito II. The interview with Carlos Franco Echavarría, who is working for the Department of Social Standards and International Engagement of Cerrejón, was important in order to see the perspective of the mine about the resettlements. This interview was the last one, so own insights of the resettlement were used in the interview.

Out of literature research and the expert interviews a questionnaire was developed for a quantitative study. In the two resettlements of Tamaquito II and Nuevo Roche a household survey was carried out. Basic socio-economic questions about the households were asked, including opinions about the new location, housing and work possibilities. Basic biographic data, like gender, occupation and approximate age of the people surveyed was listed. The questionnaire is attached as an appendix. In Nuevo Roche 10 out of 17 inhabited households participated in the survey. In Tamaquitos II 20 out of 31 inhabited households participated. For the remainder of the households, nobody was at home at home on the day of the survey. One person per household was asked to nominate as the person in charge of household affairs. The survey in Roche took place on Saturday the 24th of November and the survey in Tamaquito II on Monday 26th of November 2013. Both surveys were conducted during the daytime. The results of the surveys are not completely representative, as some of the household representatives were not able to respond to all questions. However the, results offer a good overview of the opinion of the resettled people. The outcomes of the survey will underline the argumentation. The following figure shows the methods used in chronological order (Fig. 11).

Figure 11: Methods used in the research ordered chronologically



Source: B. Hora

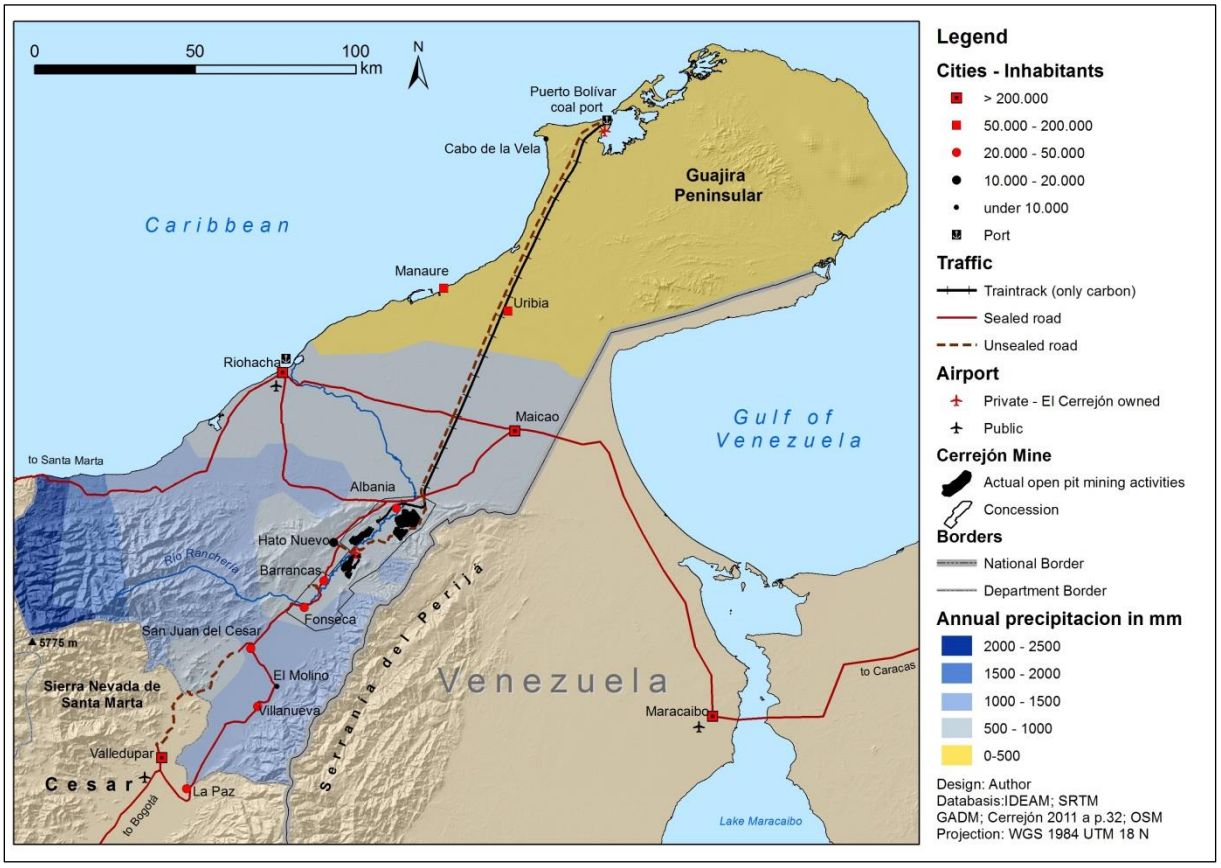
5 INTRODUCTION TO THE RESEARCH REGION – THE DEPARTMENT OF LA GUAJIRA AND ITS UNIQUENESS

The study was carried out in the municipalities of Albania, Hato Nuevo and Barrancas in the southern, more humid part of the Colombian department of La Guajira. The word La Guajira – is apparently derived from the aboriginal word "Waira" which means friend or brother. The northernmost continental department of Colombia, located N 10°23' and 12°28' latitude and W 71° 06' and 73°39' longitude, contains 20.848 km^2 of land surface, which is about 18% of the territory of Colombia. It adjoins the Bolivarian Republic of Venezuela in the east, the department of Magdalena in the west and the department of Cesar in the south. The department shares a long stretched shore line with the Caribbean (Fig. 12).

Geological aspects of La Guajira

During the early Cenozoic – Paleocene and Eocene 60 – 50 million years ago substantial tectonic movement occurred ending the Cesar-Ranchería valley's marine conditions. In this phase continental and carboniferous sediment environments formed the Cerrejón coal deposits. The major orogeny of the Sierra Nevada de Santa Marta and the Perijá mountain range took place in the early Quaternary period, only some 2 million years ago. Pico Simón Bolívar (5775m) located in the Sierra Nevada de Santa Marta is the highest peak of Colombia (Montes Veira et al. 2003).

Figure: 12 Overview of the department La Guajira



The Climate of La Guajira

La Guajira lies just north of the meteorological equator, therefore it has a equatorial climate. It is characterized by huge daily temperature amplitude, but nearly no change in seasonal temperatures (Borsdorf 2013 p.13). The tropical climate of La Guajira shows huge varieties in temperature vertically and precipitation horizontally and vertically. On the one hand there is a significant precipitation gradient going from dry, desert like conditions (below 500mm/a) on the Guajira Peninsular in the Northeast to humid condition in the Southwestern mountainous parts (up to 2500mm/a).

The geographic location of La Guajira makes it subject of prevailing Trade Winds coming from East - Northeast. The isolated Sierra Nevada de Santa Marta in the Southwest, the border range to Venezuela called Serrenía del Perijá and to some extend the La Macuira Hill Ranges on the Guajira Peninsular show a hypsometric change of temperature and precipitation (Montes Veira et al. 2003). The climate of La Guajira can be categorized in the Köppen climate scheme in classifications seen in Table 4.

Table 4: Climate types of the Köppen classification in the Colombian department of La Guajira

Climate type	Where	Vegetation and features
BWh hot desert climate	Dominating climate of the Guajira peninsular	Nearly no vegetation
BSh hot steppen climate	Transition zone between BWh and Aw	Thorny trees and succulents
Aw savanna climate	In the southern lowlands up to 2000 m	Tropical dry forest, humid savanna, gallery forest on riverbanks
H tropical high altitude climate	Areas above 2000 m	Possible frost, lower parts: fog forest, higher parts: páramos, rock fields, above 5000m: glaciers

Source: B. Hora derived from Borsdorf 2006, Borsdorf 2013

Small total annual rainfall and a concentration of precipitation at the time of low sun at 10 to 12 North latitude on the Guajira and Paranagua peninsular and the close Windward Island is abnormal. Normally higher annual precipitation and precipitations maxima on the time of high sun are expected in these latitudes. This anomaly can be explained with the following (Borsdorf 2006, Trewartha 1961):

- The area lies in in the roughly coast-parallel blowing Trade Winds
- They get accelerated by the increasing pressure gradient of the equatorial thermal low over the Andes
- In the area of the Windward Islands the warm South-Equatorial Ocean current merges into the even warmer Caribbean current. Due to the Coriolis effect the current gets a right deflection in this region and flows into offshore directions, resulting in upwelling of cold deep water. The following effect can be compared with classical coast deserts.

Settlement and transportation geography of La Guajira

The department La Guajira is the northernmost department of Colombia. It is isolated from Colombia's capital Bogotá and other important metropolitan areas. In 2012 there were 874.532 estimated inhabitants in the department of La Guajira (DANE 2005b). This means there is a relatively low population density of 41.95hab/km^2. The Guajira Peninsular is sparsely populated. The main settlements in the desert and semi desert landscapes are rancherías, small rural settlements inhabited by the Wayúu people. Some villages on the shoreline of the peninsular are tourist attractions, where the inhabitants and investors have adopted the infrastructure and functions to suit tourists needs - restaurants, small hostels and tourist offices.

One example is Cabo de la Vela, which is famous for solitude, kite surfing and the Wayuú handcrafts (Fig. 13).

Figure 13: Settlement of Cabo de la Vela on the Caribbean shoreline - In the background the semi desert

Source: Huber 2011

Further south, in the more humid lowlands the population density increases significantly. The departmental capital of Riohacha on the Caribbean shore and the border town Maicao are the two biggest urban centers of the department with well above 200,000 inhabitants (DANE 2010). Riohacha is the only city with a shopping mall and a public airport in La Guajira. Another concentration of settlements can be observed in the Ranchería valley, where the open pit mine is in operation and further South, following the alluvial plain between the mountain rims of the Sierra Nevada de Santa Marta in the west and the Serrenía del Perijá to the east.

The fertile Ranchería river area was already populated by mestizo people during the 17th century. The municipality Barrancas was founded in the year 1664. Trade connections between the harbor Riohacha and Valledupar went through the valley from the beginning of colonization (Alcaldia Municipal de Barrancas 2012 p.26). The mestizo colonization of the south-eastern slopes of the Sierra Nevada de Santa Marta only reaches an altitude of 700 to 800 m. The higher parts of the Sierra remained essentially indigenous territory (Reichel-Dolmatoff & Reichel-Dolmatoff 2013 p.9).

The autochthon Wayuú people were mostly displaced in the Ranchería valley. Only a few fragmented indigenous reserves indicate the former presence in the valley (Fig. 18). Its width is between 10 to 30 km and the cities and villages between Albania in the north and Valledupar in the south are distributed on the highway more or less evenly (Fig. 12). Albania, Barrancas, Fonseca, San Juan del Cesar and Villanueva all have more than 20,000 inhabitants (DANE 2010), and their urban centers deliver plenty of services to the city and hinterlands. Hato Nuevo is smaller and the municipality was created by administrative reform in 1999, in which Barrancas'

northern part was divided. Valledupar is the capital of the Cesar department with more than 400,000 inhabitants (DANE 2010) and plenty of services including hospitals, public and private universities, a public airport with four daily flights to Bogotá, two shopping malls and a pleasant city center. For the inhabitants the Ranchería valley is an important central place, to where many orientate.

Since the construction for Cerrejón mine in the 1970s there has been an influx of people working for the mine from all over Colombia. The rural characteristics of the Ranchería valley, where people mainly lived from cattle farming and small cultivations, changed into a well-connected and partially urbanized region (Fig. 14).

Figure 14: Center of the municipality Hato Nuevo

Source: B. Hora

The road network connecting the major cities is well paved and in good condition. La Guajira is linked with two highways to the rest of Colombia. The Ruta Nacional 88 leads south to the department of Cesar and the Ruta Nacional 90 following just about the shoreline to the west connecting the city of Riohacha with the city of Santa Marta and the rest of Northern Colombia. This highway proceeds to the Venezuelan border east of Maicao and connects La Guajira with the agglomeration of Maracaibo and the Venezuelan road network. The most significant catalyst for paving and improving the roads was the construction of the Cerrejón mine infrastructure. There is only one train track in La Guajira, which is the Cerrejón owned standard gauge track going from the coal mines to the coal port of Puerto Bolívar on the peninsula. The track is 150 km long and its main purpose it the transportation of coal to the port (Fig. 15). Before the development of the mining infrastructure in La Guajira the road connecting the department with

the Ruta Nacional 88 was not paved. The region was much more isolated in terms of traffic connections than it is today.

Figure 15: Coal train on the way to Puerto Bolívar

Source: B. Hora

La Guajira's economy – Smuggling and coal production

Besides the Cerrejón mining activities there are few other industries in La Guajira. The only other notable industrial enterprise is the salt mines in Manaure. Most of the rural population and the Wayuú lived from subsistence production prior to coal mining becoming important in the 1970's. La Guajira still is one of the poorest departments of Colombia. In 2012 58.4% of the Guajiros lived in poverty and 27.7% in extreme poverty. The Colombian average was 32.7% of the population living in poverty. In 2011 the poverty line was at 175,000 COP and the line of extreme poverty was 87,000 COP per person per month in La Guajira (DANE 2012b).[1] Looking at the high poverty rate it has to be taken into account that approximately 43% of the population of La Guajira is indigenous. Furthermore peasants producing for subsistence might earn less than these poverty lines suggest yet still have enough food and resources for a decent life (see next chapter).

Strong border economies can be observed, as Venezuela follows a socialistic ideology in contrast to Colombia: the Socialism of the 21th century, which tries to oppose neoliberal policies.

[1] The poverty line is defined by the minimal costs of a market basket (food and non-food) which guarantees a minimal level of an acceptable live within a determined geographic area. Extreme poverty is defined as cost of a market basket of food providing enough calories (DANE 2012b).

Venezuela struggles with a high inflation rate and their currency the Bolívar is not traded and has a fixed exchange rate to other currencies. On the black market the exchange rate for US-Dollars was 10 times higher in November 2013 than the official one (a range of 6.3 to nearly 60 Bolivars for $1.00 USD) (Los Angeles Times 2013). This currency inflation and the economic turndown is one of the reasons for the recent anti-government protests in Venezuela. Gasoline is strongly subsidized in Venezuela (1 US-Cent/l), whereas fuel is in very expensive in Colombia (1.10 US-$/l) (Bloomberg 2014). Gasoline is smuggled to border regions of Colombia to sell below the official prices. On the sides of many streets in La Guajira, gasoline from Venezuela is sold informally in canisters. All the petrol stations in this region are closed, as they could no longer compete with the informal street trade (Fig. 16). Also other products such as electronics, beverages and food are imported from Venezuela because the Colombian peso has huge value in exchange for Bolívars on the black market.

Figure 16: Smuggled gasoline from Venezuela is sold informally in La Guajira

Source: B. Hora

The border region of Venezuela is also prone to guerilla activities of FARC (Fuerzas Armada Revolucionarias de Colombia) units. They use Venezuela and the difficult to access Serranía del Perijá to retreat, hide away and participate in smuggling activities (Mertins 2004). The Cerrejón infrastructures have been attacked various times in recent years. On October 13th 2013 FARC rebels attacked the train track of Cerrejón with explosives and derailed 43 coal wagons (El Tiempo 2013a).

5.1 WAYUÚ – PEOPLE OF THE SUN, SAND AND WIND

The Wayuú are an indigenous people, who settled before the arrival of the Spaniards in the La Guajira region and the bordering Venezuelan department of Zuila. All the indigenous groups in in the lowlands of La Guajira use a variation of the Wayuunaiki language, which belongs to the Arawak language family (Álvarez 2005). The Wayuú people probably lived on the peninsular and surrounding areas for at least 1500 years (Oliver 1990). They resisted attempts of conquest during the colonial phase and maintained a cultural and political autonomy. The Wayuú introduced market-exchange, manufactured goods, and to some extent integrated the Spanish language into their society. They were good at adjusting their habits without losing their ancestral heritage (Hostein 2010). This process can be described as glocalization, as a hybrid form of culture emerges, which can be described neither as the original Western nor as traditional Wayuú culture (Ritzer 2003 p.193).

The first European settlement founded in La Guajira was in Cabo de la Vela in 1536, by the German explorer and merchant Nikolaus Federmann. The hostilities of indigenous tribes and the harsh climatic conditions of Cabo de la Vela made the Spanish change the location to the city now called Riohacha. It was founded in 1545 and was the first city in La Guajira which was inhabited permanently by colonists (Alcaldia Municipal de Riohacha 2012).

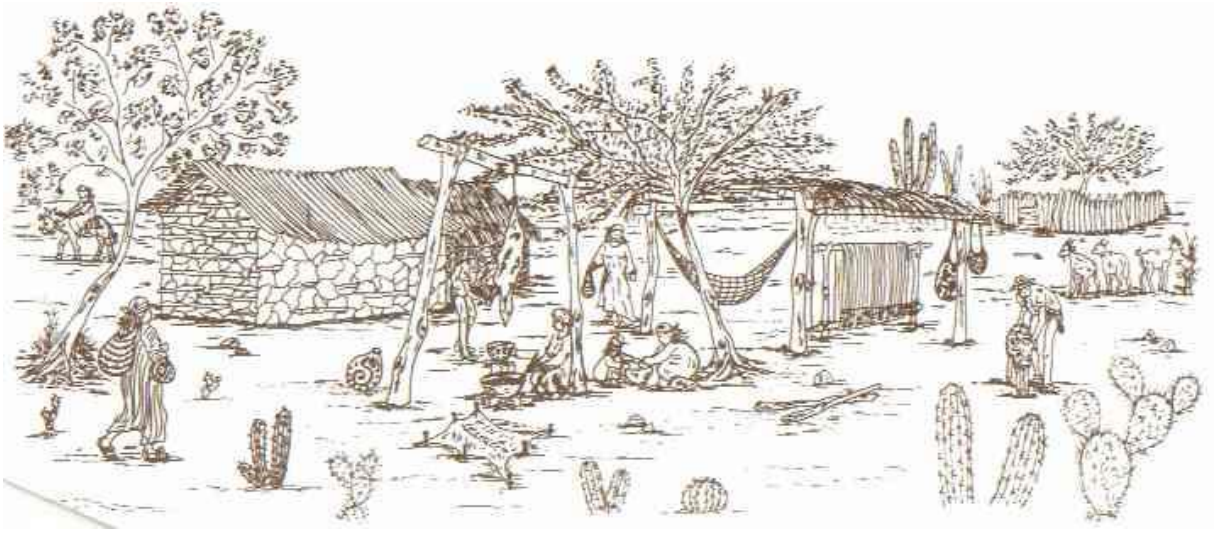
The reason for this failed assimilation might be that the Wayuú had never had a central political power structure as well as the lack of interest of Spanish conquerors to colonize this infertile desert like region, where no valuable resources were found. The Wayuú were able to adapt their alimentation and trade behavior to the European presence. Furthermore the Wayuú used the uncontrolled shorelines for smuggling activities with pirates (Hostein 2010).

The Wayuú have the reputation to be hard. The greatness of the Wayuú comes precisely from their capacity for survival in a hostile environment (des Roziers 1995 p.106-107). In pre-Columbian times the dwellers of the dry peninsular subsisted mainly by fishing, seashell collecting and hunting. The settlement location was shifted regularly. In the Ranchería valley people were sedentary and practiced maize and yuca (cassava) cultivation (Rueda & Becerra 2011; Ministerio de Cultura 2010).

When the goat was introduced on the peninsula by Europeans, the Wayuú domesticated them for their own alimentation. Now the chiva (goat) is part of the Wayuú and Guajiro identity and at festivals goat meat is usually served. Ethnographic studies revealed that the Wayuú consisted of 30 clans, with complex territorial and marriage interconnections (Goulet 1981). Today these clans are preserved in their last names. A characteristic of the Wayuú settlements is that the houses are well separated from each other. The concept of central gatherings was alien to the

Wayuú. Therefore entities like schools, churches or governmental institutions are missing in these settlements. The gathering place is the wind mill which pumps water out of the semi arid environment (Vergara Gonzáles 1990). The traditional house is called piichi or miichi, which is divided in two rooms (Fig. 17). Inside there are hammocks to sleep in and mochilas (bags), where belongings are stored. They are rectangular and sometimes formed in semicircle. The walls are made out of loam and the girder stabilizing sticks consist of wood found in the surrounding of the ranchería. The roofs are made out of yotojoro, the dry heart of a cactus. This style is called bahareque and is a common type of traditional construction in Latin America. In the last decades many roofs have been built with corrugated, galvanized iron and modern construction materials like cement is used more frequently (Parques Nacionales Naturales de Colombia 2014).

Figure 17: Traditional settlement of a Wayuú family



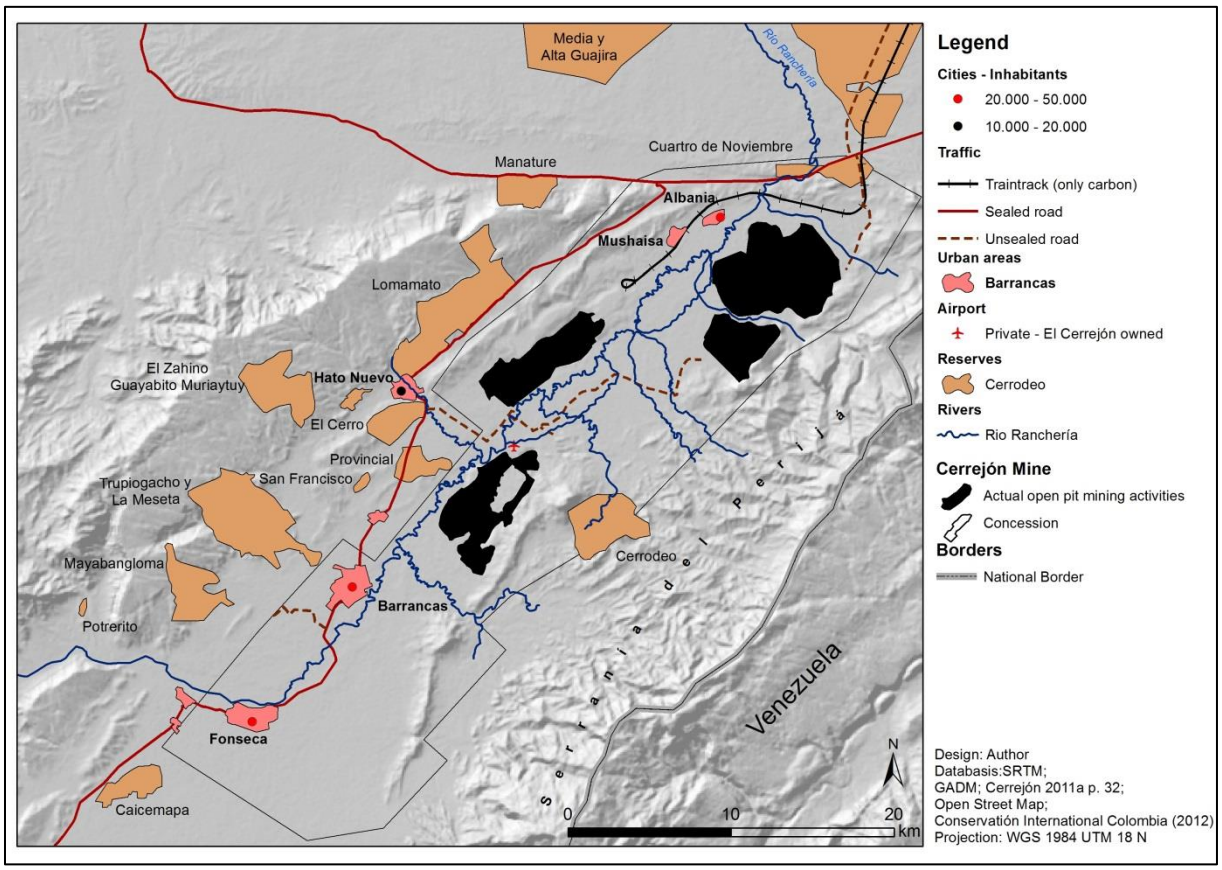
Source: Zapata & Pocaterra 1995

Demographics of Wayuú population and distribution of reserves

In the 2005 census 295,075 of the 681,575 inhabitants of la Guajira (43%) described themselves as Wayuú. In other parts of Colombia the portion of indigenous people is relatively low, so the Wayuú in la Guajira represent 20% of all indigenous in Colombia (DANE 2005a). There are 21 indigenous reserves in La Guajira. By far the biggest one is the Alta y Media Guajira (10.675 km^2) which comprises the main part of the peninsular down to Riohacha and Maicao. This reserve occupies more than 51 % of the whole department. The significant smaller reserves are located isolated from each other in the more densely populated southern part of la Guajira. The following map (Fig. 18) shows the fragmented reserves in the Ranchería valley and the

southernmost parts of the Media y Alta Guajira reserve. Their proximity to the coal mine and urban areas are notable.

Figure 18: Wayuú reserves in Southern Guajira



In the 2005 census, demographic indicators show that 85.25% speak Wayuunaiki, the analphabetism rate was 61.62 % and 36.50 % received basic education or more (Ministerio de Cultura 2010). Observations in the reserve El Cerro close to Hato Nuevo revealed that the infrastructure – elementary school, paved roads, water supply, modern housing - was in better condition than in most of the urban areas in the region. The Colombian government supports these indigenous reserves financially. The proximity to the cities has provoked a higher degree of cultural assimilation, compared to Wayuú people living on the peninsula. The inhabitants of the settlement Tamaquitos II, who didn't live in an acknowledged reserve, also have the status of indigenous tribe. In La Guajira the Wayuú are not the only indigenous people. There are the Yupka people and four ethnic groups in the Sierra Nevada de Santa Marta: Wiwa, Kogui, Arhuaco and Kankuamo. Their population is significantly smaller than the Wayuú (Gonzáles 2011).

Traditional cosmology and social fabric

In Wayuú cosmological belief system the god Maleiwa created their first ancestors in Wotkasainru, a place in Northern Guajira. Pulowi the husband and Juvá the wife were the first Wayuú from whom the all Wayuú originate. He is associated with hunting, she with the wind and aridity. Wanülü is representing sickness and death. For the Wayuú, marriage and death are crucial aspects of life (Programa Presidencial de Derechos Humanos y DIH 2010). Marriage is carried out between people of two clans. Occasionally polygamy is practiced by men. The spouse's brother, brother in law, intervenes in domestic and family affairs. The Wayuú women act independently in clan affairs. They are actively involved in the politics of their societies and female authorities represent people in public affairs (Ministerio de Cultura 2011 p.7). One example of a female organization is the Fuerza Mujeres Wayuu, which investigates human rights violation against their people in general and against Wayuú women in particular. They are well organized and receive international attention on platforms like Twitter (https://twitter.com/MujeresWayuu)

Central aspects of the Wayuú economic activities today

Their socio-economic situation has changed in recent decades, especially following the initiation of the Cerrejón mining project in the 1970s. During construction new people moved into the rather sparsely inhabited area and conflicts over territory erupted. It was the first time since the colonization of the region that this land was of economic interest to investors. Depending on the location of their settlements the inhabitants of the rancherías today, live from agriculture, cattle farming or artesian fishing. Maize, beans, yucca (cassava), pumpkins, cucumbers, melons are the basic food crops (Programa Presidencial de Derechos Humanos y DIH 2010).

Besides subsistence food production, which is carried out by men, women produce colorful handcrafted textiles, like mochilas (bags) and bracelets, which are sold on the roadside and in markets (Fig. 19). The most notable market for Wayuú textile products is located on the beachfront in Ríohacha, where many tourists buy these handmade materials. By selling these artesanías they are very well integrated in the monetary system of Western society. Men work as drivers and merchants in the cities during the dry season. Furthermore the Wayuú living close to the Colombian-Venezuelan border are very active in the gasoline smuggling (Gutiérrez 2007).

Figure 19: Women knitting a Wayuú mochila

Source: Zapata & Pocaterra 1995

5.2 CONSTITUTIONAL RIGHTS AND LIVING CONDITIONS OF INDIGENOUS PEOPLE IN COLOMBIA TODAY

In 1991 the new constitution of Colombia acknowledged that Colombia was a culturally, ethnically, linguistically and religiously diverse country. In the articles the state obliged itself to obey the principal rights concerning indigenous people within the Colombian territory. The articles are attached in the Annex (Presidencia de la República Colombia 2008; Confinder 2014). Summarizing the Constitutional rights indigenous people in Colombia have:

- The right of property of their territory, which is common property of the community
- The right of political, territorial and juridical autonomy, as long as they are not in contrary of other Constitutional rights of the Republic. For instance the death penalty is abolished in Colombia.
- The right of political, cultural, territorial and juridical autonomy
- The right of bilingual education in respect with their religion and cosmology
- The right of collective survival
- Acknowledgment of the indigenous reserves as municipalities, which integrates them in the public funding system of the state

This fundamental right of the constitution and following laws gives the indigenous people in Colombia a high degree of autonomy and governmental care and protection. They have the fundamental right of collective property of their reserves or land (Gonzáles 2011 p.28). Other advantages of indigenous people in Colombia are the release of the military service.

Furthermore, members are liberated from land taxes in their reserves. A special ID- card declares the status of an indigenous person. The decision to be part or not to be part of indigenous group is not very easy. Often indigenous people are stigmatized, and younger members tend to leave the reserves to study and work in the cities. In the case of the Coconuco people in the municipality Puracé in the department Cauca in Southern Colombia, members lose their status when they leave their community for more than ten years. If a couple, consisting of non-indigenous and indigenous partners, wants their children to have an indigenous status, they have to work three years for community charity (Facchini et al. 2011).

Cabildo and traditional authorities in indigenous reserves

Indigenous reserves have similar properties as municipalities in Colombia. This is guaranteed in Article 357 in the Constitution (see Annex 1) and therefore receives federal tax paybacks. The cabildo, a community council represents an indigenous reserve politically. This council is responsible for the treasury, administrative and fiscal issues of the reserve and represents the reserve externally. The governmental resources directly flow into the community capital. They have to sign a contract with the mayor of the municipality in which their reserve is situated. In the case of the reserve Provincial (Fig. 18), they had to confirm their territory with the municipality of Barrancas.

There is also a governor of the cabildo. By order of law a cabildo and its governor has to be reelected every year in December by means of a general community assembly. Besides the cabildo an indigenous community has a traditional authority (autoridades tradicionales). Usually this council consists of the elders. They act as spokesman and mediators in internal conflicts. According to (Interview Guariyu) an indigenous reserve in Colombia is based on these two structures. This new political status of indigenous people has come after prolonged political struggle of indigenous people in Colombia and other countries of the region and worldwide.

New perspectives

Formerly stereotyped as savages or grown-up children, indigenous people have struggled through political movements in recent decades, to transform how they are perceived from Western society in Colombia and worldwide. Ulloa (2005 p.1) states that “many Colombians and the international community now view the indigenous peoples as ecological natives who protect the global environment and give us all hope in the face of the environmental crisis brought about by western-style development. Consequently representations of indigenous peoples in the developed world have changed from the “savage colonial subject” to the “political-ecological agent”. This research demonstrates the new political position indigenous people have in the struggle for their human rights and cultural survival.

6 CERREJÓN MEGAMINING PROJECT

The coal mega mining project Cerrejón began in 1976. The Colombian government made a bid to develop the Cerrejón North Zone (320km^2). Carbocol, a state owned enterprise and Intercore, a subsidiary of Exxon, were contracted to develop the infrastructure for the mine. After four years of exploration, constructions began in 1980, including the port of Puerto Bolivar in the Bahía Portete on the Guajira Peninsular and an accompanying 10 m deep, 225 m wide, 4 km long channel. Furthermore a residential unit called Mushaisa was built to accommodate mining employees, and a 150 km train track connecting the mining areas with the port was constructed. Other infrastructure necessary for large scale coal mining was also constructed. In 1986 the first coal loaded vessel (23,000 tons loading) left the Puerto Bolívar dock. The infrastructure was in full operation and large-scale coal mining export had started. (Cerrejón 2014a; CAJAR 2006) The production grew steadily from around 4 million tons in 1985 to 32 million tons in 2008 (Cerrejón 2011a). Since 2008 the exportation has been stable at around 35 million tons annually, which makes Cerrejón the largest exporting open-pit coal mine in the world (Cerrejón 2011b p.9). Table 5 shows the equipment necessary to reach these export rates. Figure 20 gives an impression of the scale, how mining is carried out in Cerrejón.

Table 5: Principal equipment of the Cerrejón mine in 2006

Loading	Transportation	Plant	Railroad	Port
46 excavators from 12m³ to 43m³ bucket size	210 haul trucks from 172t to 290t capacity	2 crushing plants (2.900 t/h & 1,440 t/h)	13 locomotives; 447 coal wagons at 100t	discharge station 5000 t/h (2,2 h/train); ship loader 4,900t/h

Source: B. Hora derived from Cerrejón 2006 p. 8

Figure 20: Haul carrier getting loaded by an excavator

Source: B. Hora

In the 2000s a major change of the ownership in the Cerrejón mine took place. The state-owned Carbocol Company sold its share to Billiton, Anglo American and Glencore. Since then the company has been 100% privately owned. From 2006 on the Cerrejón mining operation has been owned one third by Anglo American, one third to Xstrata and one third to BHP Billiton (Cerrejón 2011 p. 13). In 2012 Xstrata merged with Glencore (Fig. 21).

All three enterprises are transnational mining corporations (TNCs) and in market value belong to the 10 biggest ones in this field. Table 6 shows those enterprises in profile, four indicators are listed: revenue market value rank, location of the headquarters and mining activities. Cerrejón is independently operated from its three owners and more than 99% of its nearly 10,000 direct and indirect employees are Colombian citizens (Cerrejón 2014b)

The UPME (2005) (Unidad de Planeación Minero Energética) a government institution evaluating of mining areas titles in the region, where the Cerrejón mine is located as Distrito minero Barrancas. In this research the term Cerrejón mining region is used, addressing the Barrancas mining district. The municipalities where coal mining is carried out in the northern part of the Ranchería valley are from north to south: Albania, Hato Nuevo and Barrancas.

Figure 21: History of the Cerrejón mine including major resettlement events

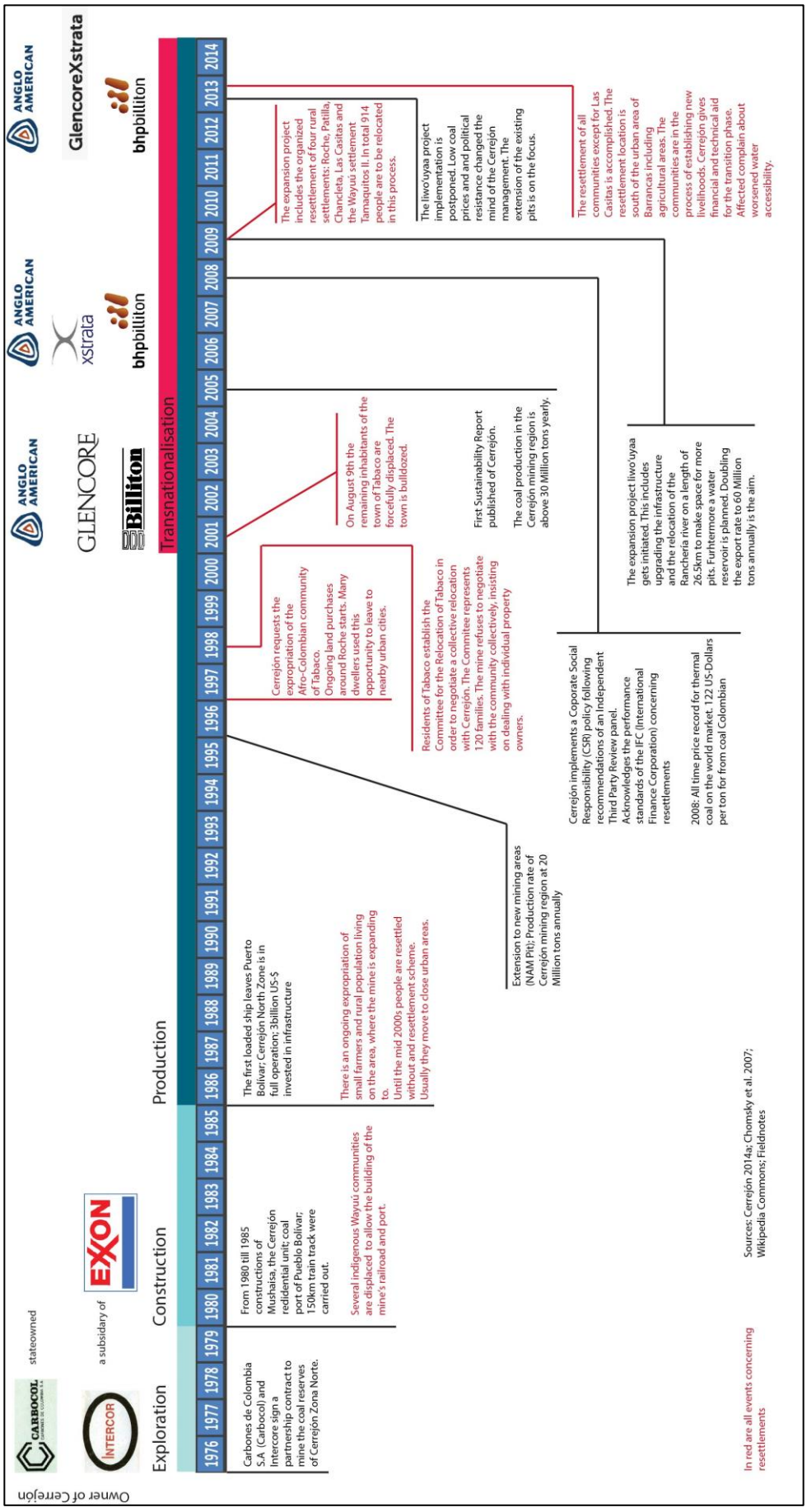


Table 6: Transnational Cerrejón owners and their profile

	GlencoreXstrata	bhpbilliton	ANGLO AMERICAN
Revenue (US-$ billions)	233 (2013) fusion 2013	66 (2013)	29 (2013)
Market value rank in the mining sector (2013)	1	2	5
Headquarters	Zug (CH), London (UK)	Melbourne (AUS), London (UK)	London (UK), Johannesburg (ZA)
Main mining activities (global)	Aluminum, Coal, Petroleum, Zinc, Lead, Copper, Cobalt	Aluminum, Coal, Petroleum, Copper, Iron, Manganese, Nickel	Base metals, Coal, Diamonds, Iron

Source: B. Hora derived from CAJAR 2005; Mineweb 2014; Indermühle 2011; BHP Billition 2013; GelencoreXstrata 2014; AngloAmerican 2013

Legal status of Cerrejón

Cerrejón refers to the two mining operations Carbones del Cerrejón Limited and Cerrejón Zona Norte S.A, which have a partnership to carry out mining in La Guajira. They run all the pits and infrastructure in the La Guajira, except the Caypa mine (Fig. 23).

Carbones del Cerrejón Limited, which emerged out of Intercore is foreign-owned and has its registered address in Anguilla, British West Indies. Cerrejón Zona Norte S.A has its headquarters in Bogotá. Both companies are subsidiaries of GlencoreXstrata, Anglo American and BHP Billiton. The Colombian state is not a shareholder of Cerrejón anymore (Cerrejón 2011b p.12). For better understanding Cerrejón is used in this research, concerning the whole mining corporation.

One reason for this complicated subsidiary system could be that transnational corporations are optimizing the taxation of their activities. Furthermore, looking at this issue from a corporate social responsibility (CSR) perspective, there may be other reasons for the construction of national daughter companies. NGOs representing the perspectives of displaced and negatively affected groups in mining areas argue that transnational corporations, like the owners of Cerrejón, use subsidiaries to wash away their responsibility for human rights abuses happening

in the wake of maximizing profits and maintaining stable production conditions (CENSAT Agua Viva 2010 p.30).

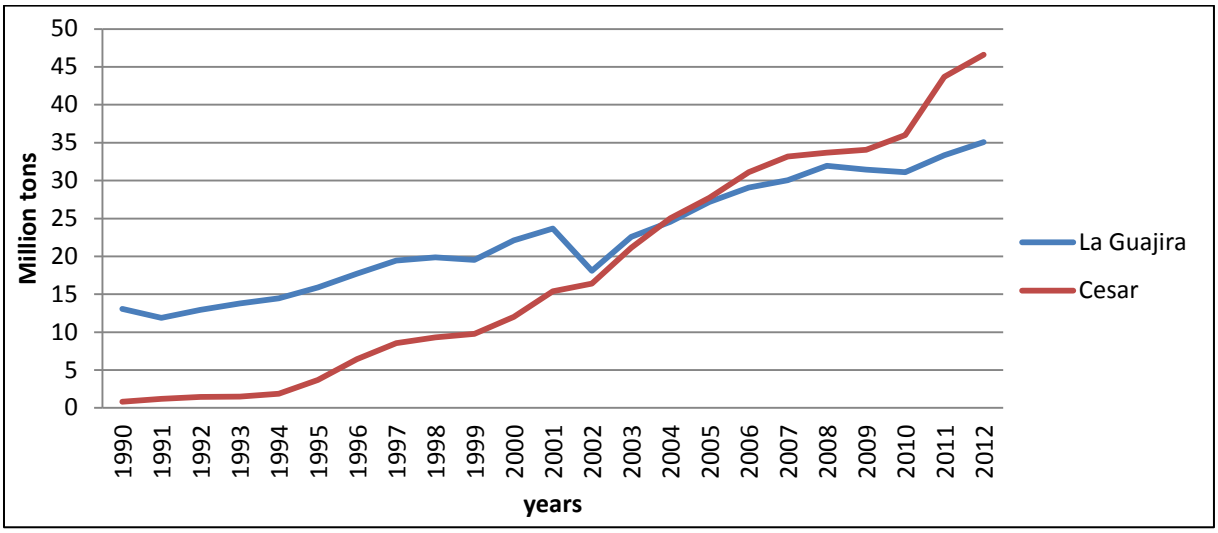
6.1 CERREJÓN COAL PRODUCTION – WHO IS PROFITING?

There are 5,300 persons directly and 4,300 indirectly employed in the Cerrejón mine. All the economic activities produced by the Cerrejón mine contribute to 41% to the GDP of La Guajira. (Cerrejón 2011a). This number seems very high for just one enterprise, but it should be taken into account that La Guajira is a sparsely populated department with no other industry of a comparable size. Coal mining is a capital-intensive business: 84% of the financial investment goes into exploitation and only 16% into labor costs (Indermühle 2011).

62% of the Cerrejón direct workforce comes from La Guajira (Cerrejón 2011 p.23). In 2011 La Guajira had an employment rate of 57.6% (DANE 2012a p.3). This means that only 0.7% of the Guajiro workforce is directly employed at Cerrejón. This shows a strong contrast to the 41% of the GDP contribution of Cerrejón in La Guajira. In Chapter 6.5 Critical perspectives on CSR of Cerrejón, the phenomenon of low employment rates of Cerrejón in the Guajira workforce is discussed in depth.

Figure 22 shows the increase of coal production from 1990 until 2012 in the departments of La Guajira and Cesar. In Cesar the growth in the last decades is faster than in La Guajira. In Cesar production rates of over 10 Million tons were reached in the early 2000s. In 2012 La Guajira exported 35 Million tons and Cesar around 45 Million tons. Since 2000 the all large scale mines in La Guajira and Cesar have been in transnational hands. The four companies operating large scale open pit mines in Cesar are: Vale, Coalcorp, Glencore and Drummond (Ardilan Beltrán et al. 2010 p.33). The location close to the Caribbean, the transport infrastructure – train tracks, coal bulk ports –facilitate the export (see chapter 2.6). In 2012 Cerrejón sold coal in the value of 2.9 billion US-$ (Cerrejón 2014f). In 2011 around 26% of the revenue stayed at the shareholders of Cerrejón (Cerrejón 2011 p.17).

Figure 22: Growth of coal production in the departments of La Guajira and Cesar



Source: B. Hora derived from SIMCO 2014

Colombia's coal has a share of 11.3% of the global market, 40.6% of Colombia's coal originates is Cerrejón coal. So 4.6% of the exported coal in the world comes from the Cerrejón mine. Since 2010 Cerrejón also exports to Asia (Cerrejón 2011b) Tab. 7 shows which world regions import Cerrejón coal.

Table 7: Import region of Cerrejón coal in 2011

Europe	Other mediterranean and Asia	Central and South America	North America
58%	21%	12%	9%

Source: Cerrejón 2011b

6.2 The royalty system in Colombia

Coal producing companies have to pay between 5 to 10% royalties and taxes to the government. The payment of royalties by mining companies is highly disputed among Colombian scholars. In 2012 the Colombian government introduced a new royalty system because the former system was prone to corruption and seen as ineffective. Before the reform the money was collected by the National Royalties Fund (Fondo Nacional de Regalías) and redistributed mainly to the municipalities and departments where resource extraction took place. Royalties paid contributed 0.6% in 2002 and 1.66% in 2012 to Colombian gross domestic product. 70% of the

generated money was paid to the departments of Arauca, Casanare, Cesar, La Guajira, Huila, Meta and Santander, where only 14% of the Colombian population resides (Bonet & Urrego 2014).

Now the royalties are collected and managed by the General Royalty System (Sistema Genereal de Regalías). The money is distributed in different funds for instance for Regional Development or Science among others (Ministerio de Hacienda y Crédito Público 2011). The money can be redistributed across the whole of Colombia to municipalities and departments, regardless of whether they are in an extraction region or not. Now only a small portion goes directly to the departments where resource extraction is carried out. In order to receive money the municipalities have to apply for projects, for which the money could be used. This has the consequence that municipalities directly affected by mining can end up with little or no money from royalties, if the public sector doesn't apply for projects. People living in Hate Nuevo for example see this as a problem for their municipality. Previously, they received money directly from the National Royalties Fund. A person living in Hato Nuevo describes the situation as follows:

> "Well this depends on the mayor and how they manage the resources. In Albania and in Barrancas they have had lots of investments in schools. The mayor here [Hato Nuevo] doesn't formulate good projects, they don't have the know-how."

Before the General Royalty System was introduced the municipalities of Albanía, Barrancas, Hatonuevo, Uribia and Maicao received 40% of their total income from financial contributions directly coming from the Cerrejón mining operation (Cerrejón 2011b p.16). It seems likely that corruption under the old system was more likely than under the new one.

One example of poor royalty management was a fund of 11 billion COP (today around 4.2 million €) to help the communities (Roche, Patilla, Chancleta, Las Casitas and Tamaquito II) in the process of displacement and resettlement due to the expansion of the Cerrejón mine. The money should have been invested into these communities, but was never used for that purpose (Ramirez 2010 p.3). It has to be taken into account that investing into an area, where no more people will live in the future doesn't make sense to public authorities. However, an organized resettlement program could have been promoted with these funds.

6.3 Social-spatial and environmental impacts of the Cerrejón mine

The mining operators received a concession of 690 km^2 for coal mining from the Colombian government in the Ranchería valley (Cerrejón 2011a p.10) Figure 18 shows the concession area, which comprises the main parts of the Ranchería valley. The contract is valid until 2033, when it

has to be renegotiated (Cerrejón 2011a p.15). Now, the actual operations and infrastructure occupy around 115 km^2, which is around 17% of the concession area. 28 km^2 are already rehabilitated areas, were the pervious vegetation is replanted. 200km^2 are in the property of Cerrejón (Interview Echavarria). Fig. 23 gives an overview of the Cerrejón mining area.

In total there are five open pits, where Cerrejón is operating today: Patilla, NAM (Tabaco y La Punent pit), Comunidad and Oregenal. In these five pits 475 million tons of carbon has been extracted since exploitation started in 1985 to 2011. There are 25 carbon layers of around 3 meters thickness in the Cerrejón Formation deposits. In order to access the 90,000 tons of coal daily 1,000,000 tons (in 2006) of other sediments have to be removed daily. These materials are dumped in already exhausted pits or huge artificial mountains are piled up (Cerrejón 2006). Coal reserves are found up to 300 m below the surface (UPME 2005 p.22).

There have been plans to extend the mining area massively. The project is called Iiwo'uyaa and was initiated around 2009 - 2010, when the coal price was above $100 US per ton. The goal was to nearly double the exports to 60 Million tons annually. In addition, expanding the transport infrastructure, relocation of the Ranchería River over the length of 26.5 km for new pits and the construction of a reservoir were planned (Cerrejón 2011a).

During the time of research Cerrejón had postponed taking further steps to realize the expansion project. The most important reason was the lowered coal price since the 2008 all-time high of more than $122 US. Colombian black coal was sold for $84 US in 2013 and made huge investments that were no longer worthwhile (World Bank 2013). Political resistance, for example, from the people of the Provincial indigenous reserve, who are fighting for a clean and water-rich Ranchería river for irrigation and fishing, and other affected communities further downstream, slowed down the expansion process. Now Cerrejón concentrates on expanding the already existing pits especially the Patilla, NAM and Original pits (Fig. 23).

Fig. 24 shows the Patilla open pit mine, part of Cerrejón, during mining activities. In Fig. 25 rehabilitated areas can be seen. The area is replanted with fauna of the transition zone between dense tropical dry forest ecosystems and savannah grasslands. Besides Cerrejón there is the Caypa mine, run by Coalcorp. It comprises only 3.8 km^2 mining area and coal transportation via trucks to the Santa Marta port. It is comparatively very small in scale and simple in infrastructure.

Figure 23: The Cerrejón open pit mine and its surrounding, including settlements and resettlements

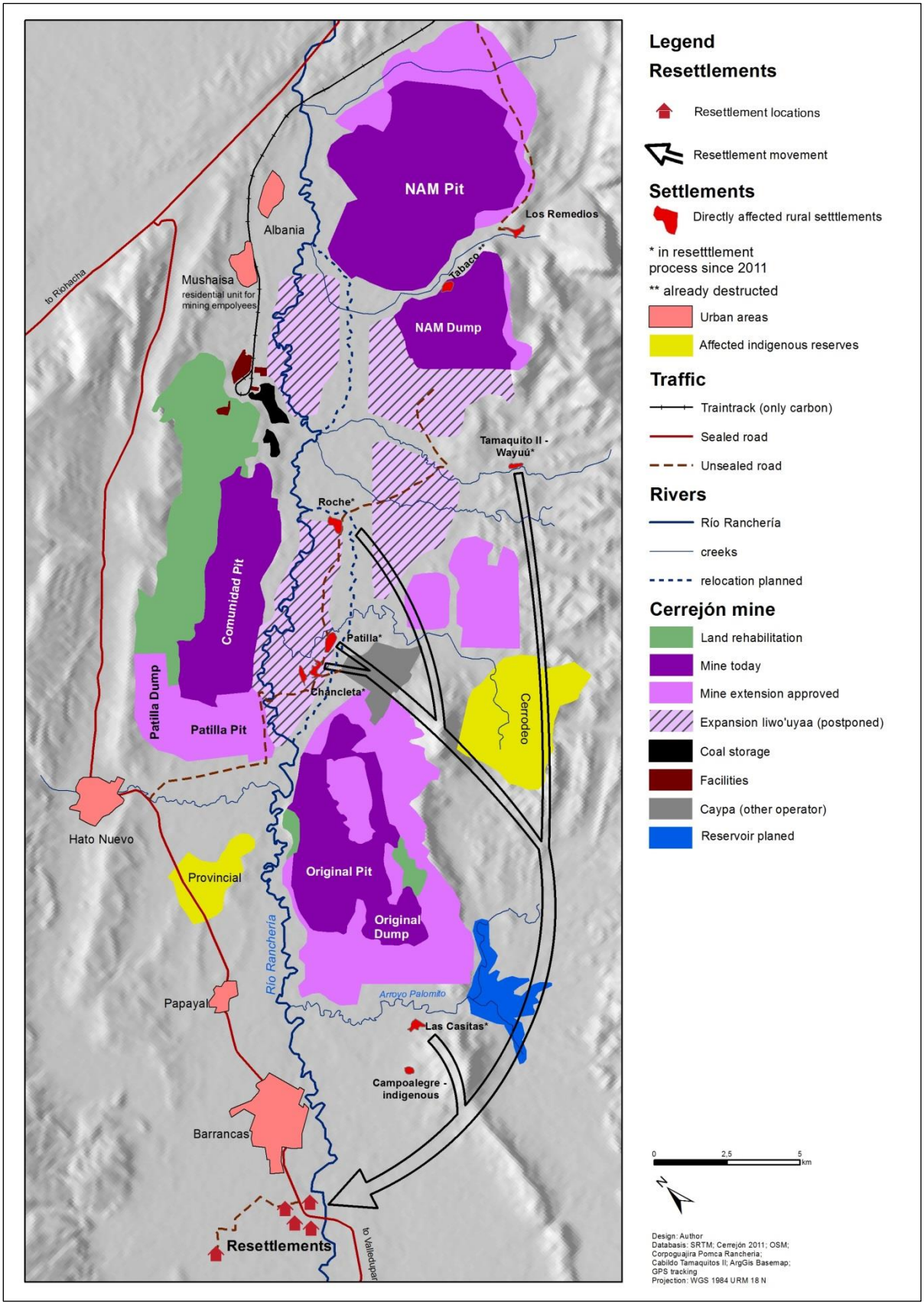


Figure 24: View into the Patilla pit

Figure 25: Rehabilitated land – Overburden was dumped in the former pit

Source: both B. Hora

6.4 CERREJÓN- RESPONSIBLE MINING?

6.4.1 THIRD PARTY REVIEW OF CERREJÓN'S CSR PRACTICES

The reason why Cerrejón implemented CSR policies was an Independent Third Party Review had been undertaken, addressing their CSR practices and their relation with neighboring communities in La Guajira. The international panel was chaired by Dr. John Herker, President of the Cape Brenton University in Canada; Nick Killick, from International Alert; Salomón Kalmanovitz; Dean of Economics and Business Administration at the University of Jorge Tadeo Lozano in Colombia; and Elena Serrano, from the Foundation Casa de la Paz, an NGO in Chile.

The Final Report Paper of the Panel gave the following recommendations to Cerrejón: "To Foster sustainable development and poverty reduction in La Guajira, Cerrejón should increase efforts to encourage and attract civil society organizations, Colombian and international development agencies, donor governments and multi-lateral institutions. This is essential for the future of Cerrejón and La Guajira" (Harker 2008 et al. p.3).

At the end of the third party review the authors criticized the former owners, Intercore and Carbocol, concerning their social actions. Moreover, the panel recommended implementing CSR standards that go beyond compliance with the law:

"[…] Both the shareholders and senior management should recognize that while much was accomplished during the previous ownership times, success in production was more marked than success in building trust, and one major factor was the previous approach to social management as being dominated by that which was permitted in law or prohibited by law.

The panel respects the law, and would advocate its being disregarded, but there is more to life than law, and legalism has its limits, which do not prove conducive to best practice. Social Responsibility is much about ethics as law, and it must characterize Cerrejon. It is a work in progress but also a work of and towards progress and only measured and evaluated best practice can serve. The shareholders and the people of La Guajira deserve nothing less" (Harker 2008 et al. p.47).

Textbox 6: Corporate Social Responsibility (CSR) in the extractive sector

CSR can be seen as situations where corporations go beyond compliance and engage in actions that appear to further some social good, beyond the interests of the corporations and beyond actions required by law (McWilliams et al. 2006 p.1).

"There is no standard definition for CSR in the extractive sector. Companies generally use the term (or related ones such as "sustainability") to refer to commitments to respect environmental and human rights standards. Providing benefits to local communities also tend to be a key part of (particularly in recent years) extractive industries companies' definitions of CSR. Many companies now produce annual CSR or "sustainability" reports that highlight these benefits and the steps taken to protect the environment" (Slack 2005 p.179).

6.4.2 CSR Practices of Cerrejón

Following the Third Party Review, Cerrejón incorporated a very visible corporate social responsibility (CSR) scheme. The mine uses the motto: Mineria responsable (responsible mining). In 2007-2008 the Cerrejón mine implemented a Human Rights policy for its business. The policy is applied to employees, contractors and communities within the area of influence. The policy is based on (Cerrejón 2014c):

- Colombian law
- The Universal Declaration of Human Rights and the basic Conventions of the International Labor Organization
- The UN Guiding Principles in Business and Human Rights
- The social and environmental performance standards of the International Finance Corporation (IFC, belongs to the World Bank) , in particular those related to impact assessment (1), involuntary resettlement (5), and indigenous communities (7)
- Voluntary Principles on Security and Human Rights
- The UN Global Compact
- The International Council on Mining and Metal's Sustainability Framework

Figure 26: Logo of Cerrejón. The high standard of their CSR is emphasized.

Source: Cerrejón 2001a p.2

Cerrejón is participating in the Global Reporting Initiative (GRI) an independent institution evaluating sustainability reports for corporations, which is recognized by the United Nations. Out of this membership different sustainability reports have been published. In the 2011 published sustainability report, Cerrejón was evaluated with an A+ in the GRI rating in the Mining and Metals Supplement category (see Cerrejón 2011b: Sustainability report. Bogotá). So Cerrejón is in the context of the Global Reporting Initiative, a best practice mine. Cerrejón used 21 indicators including economic (1), social (10), environmental (9). In all categories, except in the Recordable Injury Rate, the goals were reached. Also the environmental indicators, including water and air quality, in the realms of the mine were all below governmental contamination thresholds (Cerrejón 2011b p18).

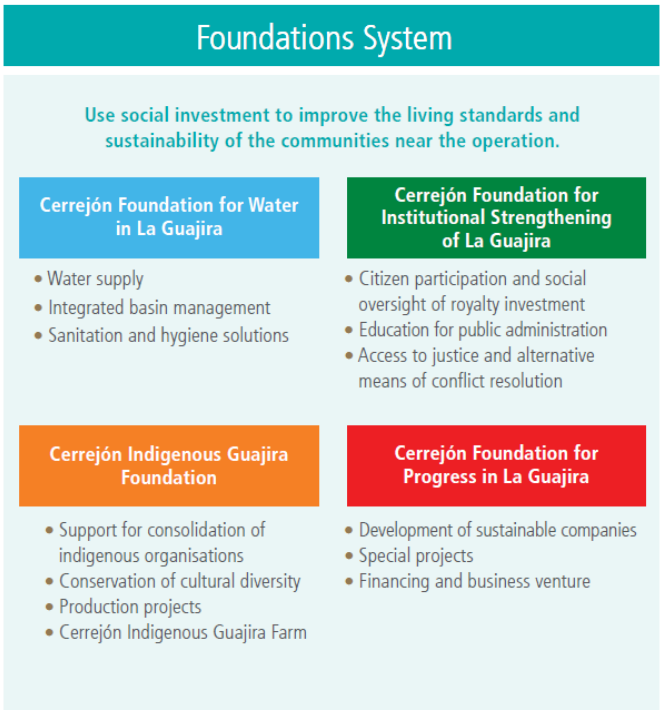
Social indicators not concerning direct and indirect employees of Cerrejón were as follows (Cerrejón 2011b p18):

- **Training in human rights and humanitarian rights**. The indicator was the number of stakeholders trained. In 2011 Cerrejón had 839 soldiers of the Colombian Army, called the Guajira Task Force and 271 persons of private security companies employed to protect their infrastructure. They all have received human rights training.
- **Complaints resolved**. Cerrejón has introduced a complaints office (Oficina de Quejas) in 2010. Everyone can communicate his concerns due to possible impacts if mining operations. In 2011 129 complaints were logged in and 67 of them were solved. Particularly complaints concerning indigenous rights with 99 cases were indicated. Railway accidents with animals were the most significant issue. The railway runs through the Alta y Media Guajira Wayuú reserve, where many dwellers have goat herds.

Since 2011 there has been no other sustainability report. There are no indicators evaluating resettlements within the 21 indicators. However, the resettlement process is mentioned in the Sustainability Report briefly on one page (ibid. p 69).

Besides publishing the Sustainability Report and obeying international standards on human rights Cerrejón introduced a Foundation System as another pillar of their CSR scheme. The Foundation System has the aim to use social investment to improve the living standards and sustainability of the communities near the operation (Fig. 27).

Figure 27: Four foundations of Cerrejón as part of their CSR program



Source: Cerrejón 2011b p.63

Cerrejón tries to have a strong regional identification. Images of Wayuú culture are present everywhere on the homepage of Cerrejón. The social responsibility reaches into the indigenous communities of Wayuú, who live close to the train tracks. The Cerrejón Indigenous Guajira Foundation carries out projects concerning Wayuú communities (see below). Cerrejón has implemented IFC social performance standards concerning indigenous communities, which state that indigenous communities should participate in the benefits of the project and may help to develop the region in a sustainable way (IFC 2012 p.43)

Out of these foundations different projects have emerged, trying to develop the mining region in a sustainable way. Some of the most characteristic projects are mentioned (Cerrejón 2011b p.64):

- **Food security in southern Asawa Yuja**: Recovery, improvement, and installation of irrigation systems for production activities (farming and livestock) in the communities of the indigenous reservations of Trupio Gacho and San Francisco. The indigenous communities are close to the railway track.

Figure 28: Wayuú people participating at the food security program

Source: Cerrejón 2011b p.74

- **Source of safety:** Promotion of safety and the prevention of vandalism of railway equipment at schools neighboring the railway.
- **New symbols on Cerrejón's locomotive trains:** Updating of the image of the locomotives through the sharing of knowledge with Wayhuú nature advisors and teachers from schools neighbouring the railway.
- **Strengthening of schools administration of educational institution:** Monitoring of education institutions in terms of training, management of new technology, improvement plans, and implementations of teaching methods to improve the quality of education in 16 schools in Fonseca, Barrancas, Hato Nuevo and Albania.
- **Cerrejón Fulbright Scholarship for La Guajira**. Awarded annually to a Guajiran professional to undertake post-graduate studies in a university in the United States.

- **Cerrejón Scholarship for Excellence**: Benefits ten high school students annually in the department with the highest ICFES scores. 30% of them are Wayuú.
- **Program for the prevention of diseases and promotion of healthcare**: To increase the scope of the provision of services under the Compulsory Subsidized Healthcare Plan, strengthening State entities, focused on promotion and prevention programs, to contribute to the improvement of healthcare conditions.

In the evaluation of the 21 indicators these programs were not mentioned. During the fieldwork these projects weren't visited, therefore no assessments by observation could be done.

6.5 Critical perspectives on CSR of Cerrejón

CSR programs are highly visible and exert strong influence on Cerrejón in La Guajira. The regional identity of mining is well established and entrenched in most of the people. Hato Nuevo, which has been an independent municipality since 1999, even included a pile of black coal in its coat of arms. It can be assumed that at least some of the population is profiting from the CSR programs.

However, extractivism has high degree of enclave economy features with relatively few links to local suppliers (Ayelazuno 2014; Lust 2014). In the case of Cerrejón these characteristics can be observed. Resources are transmitted to extraterritorial actors, without generating endogenic value chains within the extraction region. Jobs indirectly generated in the region by Cerrejón are relatively low, because many services and goods bought from Cerrejón originate from other departments of Colombia or from other countries (Cerrejón 2011b p.17). A partially dependency of the population in form of monetary redistributions via CSR schemes is the consequence (Svampa 2012 p.15).

This kind of situation can be observed in the Cesar mining region as well (Ronge 2013 p.79). This circumstance backs up the argument that open pit coal mining in Colombia only offers opportunity for participation of a small number of people in the workforce in the mining regions. In 2011 only 7% of the national purchases Cerrejón bought were from enterprises located in La Guajira. In previous years the percentages were similarly low. The same happened with outsourced contracts for suppliers of Cerrejón. Only 10% of the financial volume of the national suppliers was made in La Guajira (Cerrejón 2011b p.17). The most obvious reason for this is that companies in La Guajira don't have the know-how and quality that Cerrejón requires from its suppliers.

The mine offers little work for skilled laborers. The ongoing influx of opportunity seekers from other regions of Colombia, leads to an increased competition for the few jobs. Many locals have gradually adapted to provide services for the well-paid miners. Typical low skilled jobs in the cities of the Cerrejón mining region include mototaxi driving, collective taxi driving, street selling and illegal gasoline selling from canisters.

From the investigated resettlement of Roche, only one from one hundred inhabitants was working directly for the mine. This fact supports the assumption that for unskilled workers in the region the mine doesn't provide good job opportunities.

From the available evidence, it is possible to say that the CSR aid provided by Cerrejón can be seen as a compensation for the money flowing out of the region. On the one hand supporting the region in different social and environmental projects seems honorable of Cerrejón, on the other

hand the local people become more and more dependent on these grants. Two quotes from expert interviews describe this situation:

> "One part of the problem is that we have never understood that we could have done things better. Why don't we give more jobs to people in La Guajira? 62% of our employees are from here, but we need more. For example, why don't we buy more here [La Guajira]? Everybody says that Guajiros don't produce the quality we need. But if we don't prepare them, they won't produce the quality. In total we spend more or less 250 million US-Dollars every year in Colombia. The best employer a Guajiro can have is Cerrejón. We haven't understood this well but now we understand. […] I believe that in all these communities (talking about the communities on the La Guajira Peninsular), we need to work on" (Interview Echavarría).

Jairo Epiayu gets critical of the Cerrejón CSR program:

> "This with the scholarships doesn't work for us Wayuú. [Probably talking about the Cerrejón Scholarship for Excellence] They place some restrictions. This is only for the kids of miners, governors and majors."

From 2005 to 2011 an annual Sustainability report from Cerrejón was published. In the CSR policy, it was outlined that resettlements should comply with the IFC (International Finance Corporation) guidelines. These guidelines are derived from the World Bank Operational Policies. OP 4.12 addresses Involuntary Resettlement as discussed earlier in the theoretical chapter.

In comparison with another major coal mining project La Loma, in the Cesar department, some differences in CSR-policy can be identified. This mine is run by Drummond, which is a family owned company from the United States of America. In contrast to Cerrejón, Drummond has a low profile policy characterized by a minimal visibility and minimal participation with the surrounding communities. La Loma is run in the same way as mines in the USA held by Drummond. The production of coal is the central aim. Minimal interaction with the surrounding area is favored. As the investors of Cerrejón come from three different TNCs (Anglo American, BHP Billiton, GlencoreXstrata) with thousands of different shareholders the decision-making about CSR policy is different. The pressure from the civil society to act in a "responsible" way was bigger, because the shareholders demanded sustainable production practices (Sarmiento 2008).

The next chapter will discuss the resettlements. First the displacement of the residents of Tabaco in 2001 is discussed. Then the recent resettlements, post 2011 of Tamaquitos II and Nuevo Roche, are studied in depth.

7 RESETTLEMENTS IN THE CERREJÓN MINING REGION

7.1 HISTORY OF RESETTLEMENTS IN THE CERREJÓN MINING REGION

From the beginning of production in 1985, relocation of people was necessary for expanding the mining area of Cerrejón. Up until the year 2000, when the mine was one part state-owned (Carbocol) and the other part by Intercore, there were no resettlement schemes for the people impacted. Instead there was a system of compulsory acquisition where the land was bought by the company and the owner had to leave. Many went to nearby urban areas like Albania, Hato Nuveo or Barrancas and moved to houses with a small parcel of land. Farmer families who had to leave the mining area in the 1980s suffered from impoverishment, as their livelihood from enterprises like cattle farming and subsistence cultivation was no longer possible in the new environment. Betti Ortiz, now living in the built-up area of Hato Nuevo, who was affected by these early compulsory acquisitions, describes the situation in the interview as follows:

> "Yes, many families moved to a small property in Hato Nuevo, where they couldn't hold their animals. They lost their livelihoods. What do you do without animals? The mine didn't give jobs to anybody. There was nothing to do. The people were in the air without anything. Some got fincas (small farms) in other places."

These expropriations were carried out without professional help. Neither government entities nor non-government organizations were in place to help the resettled in juridical disputes concerning the amount of compensation.

The case of Tabaco- An example of bad governance

In the year 2000 Tabaco was a rural settlement of 100 families (see Fig. 23), located within the boundaries of the municipality Hato Nuevo. It was acknowledged as a corregimiento (a center with a population below the level of municipalities). Afro-Colombian peasant families colonized the area at the end of the Thousand Day War in 1902. The conditions for agriculture, cattle-raising and hunting were good. There were already several indigenous families living in the area, which lost battles against the new colonists. Tabaco creek, which has its source on the slopes of the Serranía del Perijá, supplied the village with water. Economic activities included small-scale livestock farming such as rearing chickens and pigs and growing crops such as corn, yucca (manioc), beans, pumkins, plantains, oranges, annatto and medical plants (González 2007).

Tabaco had a very good relationship with the neighboring Wayuú settlement of Tamaquitos II. In addition to family and economic relations, the children of Tamaquitos II went to school in

Tabaco and they received health and other services in the village (González 2007). During the 1990s the Cerrejón mining pits grew around the village of Tabaco. In 1997 most of the surrounding grassland was bought by the mining company. In 1997 Cabocol-Intercore made an offer to the inhabitants of Tabaco, to buy their land in order to expand mining activities. Around half of its inhabitants accepted the offer and decided to leave and move to urban centers. The other half stayed in Tabaco (Interview Echavirra).

However, the mining activities close by, resulted in high coal dust concentrations and contamination of. This degraded the natural capital of the area. In 1999 the state declared that the inhabitants of Tabaco should be expropriated, and therefore cut public services like health, school and Telecom services. The community cohesion was weakened and social ties were broken. With the decreasing income from the degraded farming, fishing and hunting areas, parents could not supply sufficient food for their children. People had to commute to urban centers like Hato Nuevo to generate income (González 2007).

In 1999 the Ministry of Mines and Energy passed the law to expropriate the land where Tabaco was located. According to Article 183 of the Mining code, a request of expropriation for mining must include the name, address and residence of the owner or possessor. The resolution did not include this information. The resolution stated that Tabaco was a plot of land and not a town, which it was in reality. The Ministry obviously ignored the political, social and legal existence of Tabaco (Pérez 2007). Land tenure has weak definition and violent land grabbing was a normal practice of powerful actors and political elites in Colombia's recent history (Grajales 2011). Therefore, what happened in Tabaco is on the list of displacements in the long and vicious history of land possession in rural Colombia.

The remaining population of Tabaco resisted public orders to leave their houses and on August 9th, 2001 bulldozers accompanied with police officers forcefully occupied Tabaco and began the destruction of the town. The displaced suffered psychological stress and were at high risk of impoverishment. Some moved to Hato Nuevo, where they could live in houses of relatives. Since 2001 some former inhabitants of Tabaco have been in a continuing legal dispute with Cerrejón.

Summarizing the reasons of the Tabaco displacement, the following factors have to be taken into account

- Land tenure was and is weakly defined in Colombia.
- The Colombian judicature was ineffective in the incidence.
- From beginning of production in 1985 till 2000 there were no corporate standards concerning resettlements.

- The change of the owners of Cerrejón from Intercore-Carbocol to Anglo American, BHP Billiton, GlencoreXstrata led to a delay in the legal process, as the new owners didn't see themselves responsible in the beginning.

The new transnational owners inherited this immense human rights scandal from the former owners. International attention, which this mismanaged displacement policy was receiving, changed the Cerrejón policy towards resettlement and other Human Rights issues.

Between 2007 and 2008 Cerrejón underwent a convocation of a Comité Independiente de Revisión (TPR) renegotiating the Tabaco case and implementing a CSR policy. From there on Cerrejón acknowledged the standards concerning involuntary resettlements of the IFC (Cerrejón 2011a p.52). Some families of the former Tabaco will probably soon receive a new land-based area of 14ha from Cerrejón close to Hato Nuveo (Alcaldia Municipal de Hato Nuevo 2014). Even though the displacement occurred 13 years ago the compensation process is still not complete.

7.2 Recent resettlements

The Iiwo'uyaa expansion project also included the resettlement of the rural communities of Roche, Patilla, Chanclecta and Las Casitas and the Wayuú community of Tamaquito II (Cerrejón 2011 b p.69). These communities are located on the potential pit extension sites next to the Comunidad pit, except Las Casitas which lies south of the Oregenal pit. All communities are located within the administrative boundary of Barrancas.

In Tamaquito II and Las Casitas physical mining activities would not have reached the community's soils. However, other factors made resettlement necessary. Las Casitas was already very close to the pits and residents complained about the following negative effects: air contamination; noise pollution, especially from blasting; water contamination; limited freedom of movement; extinction of fish; social disarticulation with former neighboring communities that had already been resettled (Oregenal, El Espinal, Palmarito); mining related health issues (lung infections; hacking cough); worsened access to education (Gonzáles & Paola 2013). Why the resettlement of Tamaquito II became necessary is discussed in detail in Chapter 9.

The indigenous communities of Tamaquito I and Nuveo Espinal are located on the potential reservoir area of the Palomino creek dam project some 3 km further upstream of Las Casitas. These two communities have not participated in the recently organized resettlement project. The dam construction hasn't been carried out yet.

Five communities have participated in the recent resettlement project. Table 8 shows how many people are participating in each community. In addition, basic facts about the community and

the associated agricultural area are listed. The two investigated communities are highlighted within a red border.

Table 8: Communities participating at the recent resettlements

	Tamaquito II	Roche	Patilla	Chancleta	Las Casitas	Total
Total population	134	100	320	280	80	914
Family units for relocation	31	25	46	56	31	189
Relocation date	2013	2011	2012		2013	
Ethnic or population group	Wayuú		Rural communities			
Community area (ha) in resettlement	300	25	48	43	?	
Agricultural projects (ha) in resettlement	93	5	6	8	?	
Livestock projects (ha) in resettlement	wood pasture	3	15	1	?	

Source: B. Hora compiled from Cerrejón 2011b p.69; Corpoguajira 2013; own field notes

The old communities of Roche, Patilla, Chancleta and Tamaquitos II are now almost completely abandoned and decaying. The area can still be visited. Mining employees of Cerrejón use four wheel drive jeeps on dirt roads. Coal trucks from the Caypa mine leave the area via the same road to the port of Santa Marta (Fig. 29). The unpaved road is in fairly good condition until the Caypa mine is reached, but further north-east towards Patilla and Roche, the road quality decreases significantly. During the wet season even four wheel drive jeeps have problems using the road.

Some people still live in the communities even though observations during a visit to old Chancleta showed that most of the houses were in the process of decay (Fig. 30). All were built in the bahareque style using mud and sticks and the roofs were made out of corrugated galvanized iron. Only one family was still living there in November 2013 and was waiting for relocation. Chancleta looks like a ghost town. In the other settlements the same scene can be observed. Quality of life, for the people in the region in general has significantly deteriorated because of the nearby mines. Besides noise, the roads are blocked at night for security measures and Cerrejón security personnel are patrolling the area regularly (Fig. 31). The “buggy whip” which is indicated on the street sign, is a “whip” fixed to the jeeps deployed by the mine. If in use it is about six or seven meters high, upright on the car with a small light bulb on the upper end. It is used to ensure that carrier drivers, who sit up to 10 m high in their immense vehicles, don’t miss seeing smaller cars further on the ground. The “whip” has to be bent down, when the cars drive on normal roads, as they could touch electrical wires above the street.

On the 13th of November 2013 a soldier from the Colombian army was killed in an incident close to Chancleta, within the area where mining-induced resettlements are carried out. The press stated that FARC rebels wanted to destroy heavy machinery belonging to Cerrejón. During this

sabotage attempt Colombian army personnel confronted them with gunfire. The "rebels" returned gunfire, leaving one soldier dead and two injured (El Tiempo 2013b).

Cerrejón employs in total 800 Colombian soldiers and 279 private security personnel to enforce stable production conditions (Cerrejón 2011b p.19). As mentioned above the train track is prone to sabotage and security personnel are also employed to protect the trains. The different entrances to Cerrejón are protected by security staff and the mines are surrounded with high barbed wire fences. It seems that the area is becoming increasingly violent and unattractive for inhabitants.

Figure 29: Trucks waiting to get loaded with coal close to the Cypa mine

Source: B. Hora

Figure 30: Abandoned, decaying house in "old" Chancleta

Source: B. Hora

Figure 31: Street sign for Cerrejón four wheel drives with 5m long buggy whips.

Source: B. Hora

7.2.1 WHO ARE THE ACTORS OF THE RESETTLEMENT?

The main actors of the resettlement of Roche and Tamaquitos II and the three other communities (Patilla, Chancleta, Las Casitas) are the Cerrejón mine with their CSR policy, the communities themselves and the Colombian NGO Indepaz supporting and negotiating for the interests of the resettled communities and to a very limited extent government agencies (see chapter 2.3).

Indepaz is based in Bogotá and its employees have regularly visited the communities before, during and after the resettlement process. They employ competent lawyers, who went into negotiations with Cerrejón. Gonzáles (2011 p.9) from Indepaz stated that the Colombian law (Ley 56 de 1981) has not been useful for addressing all aspects of resettlement. It does not set rules concerning the design and execution of resettlement programs, neither does it explain the commitment and the responsibilities of the parties. Therefore guidelines of the World Bank and International Finance Corporation are also used in the process. As Indepaz works together with the Swiss NGO Ask! Arbeitskreis Schweiz-Kolumbien, which published articles in Europe about human rights topics in Colombia, Cerrejóns' policies and the affected communities are visible in European media (see next paragraph).

NGOs and Global media attention

The issue about the resettlement of Tamaquito II was even shown in the German public TV-channel ZDF (Zweites Deutsches Fernsehen) documentary show Zoom. The episode titled "Böse Mine – gutes Geld," depicted Cerrejón and the issue of resettlement. The video can be watched online (see ZDF 2013). Furthermore an article in the German weekly newspaper Zeit was published about Cerrejón in September 2012 titled "Blutige Kohle für deutschen Strom" (Zeit 2012). The article blamed Cerrejón for violating human rights. The Tabaco case and persisting violence involving security personnel from the mine was criticized. Changes to the CSR and transparency policies were not mentioned in the article. Therefore Cerrejón made a request for a correction of the article.

Jairo Dionisio Fuentes Epiayu the Governor of indigenous Cabildo of Tamaquito II was invited by the NGO Ask! to visit Switzerland and talk about the resettlement problems of his community in May 2014 (Ask! 2014). The practice to invite indigenous people, whose survival and wellbeing is endangered by development projects or extractive activities for the benefit of industrialized countries, has become common. Just recently a human rights activist invited a member of the Huarorani people, who are endangered by the ongoing oil extraction in the Yasuní National Park in the Ecuadorian Amazon rainforest to Austria and Germany (Südwind 2014). The human

rights NGOs do this to bring their issues to a broader audience in developed countries. Looking at the Cerrejón coal mine in particular, there has been a transnationalisation of the mine owners on one hand and a transnationalisation of the non-governmental organizations defending the rights of the resettled on the other. The formerly Wayuú and peasants with very limited rights and influence in the Cerrejón mining area are now more visible, and via the NGOs, their rights are defended. The mine is reacting to this the new situation with more transparency (e.g. Sustainability Reports) and CSR practices.

The state

The influence of the state is very limited on the resettlements in La Guajira. As mentioned above the laws made for resettlements are impracticable. In the case of the displacement of the inhabitants of Tabaco the state even used violence to enforce the interest of the mine. It seems that the Colombian state, from the municipal to the national level, is weak and not able to give its citizens adequate protection from Cerrejón's activites.

In the expansion of project Iiwo'uyaa initiated by Cerrejón, consulting entities of the state were not visible. During the consultation process, which included initiation, coordination and monitoring of the consultation of indigenous people, the actual responsible Ministry of the Interior and Justice appeared not to be involved. It seems that some of these duties were delegated to companies, for logistical or budgetary reasons. In the expansion project, Cerrejón appears to be the main managing party (Pax 2012). In the case of the resettlement of Tamaquito II the governmental entity INCODER (Instituto Colombiano de desarollo rural) appeared to be ineffective, as the land they selected to be on offer for the resettlement in 2007, was rejected by the community (Cerrejón 2014e). Finally they chose another area offered by Cerrejón itself.

In the departmental level, the highest environmental authority of La Guajira called Corpoguajira seemed to have had an important role in the resettlements. They worked out an in depth study of the natural stock of the agricultural areas (trees, shrubs) of resettlements and published regulations of natural management of the open spaces of the resettlements (Corpoguajira 2013)

On the municipality of Barrancas only administrative work was undertaken for the resettlement. The resettlements are mentioned in the Plan de Desarrollo 2012-2015 (local development plan). However, only sources of Cerrejón were quoted without any of their own contributions (Alcaldia Municipal de Barrancas 2012).

The mine

Cerrejón has a prominent role in the resettlement process, as it finances and manages everything concerning it. They have introduced the CSR-policy with the IFC social performance

standards for resettlements. In the Colombian context these practices of resettlements are probably the best for transnational coalmines. Cerrejón can be seen as state like body. With their financial potential they are able to carry out huge scale social welfare projects in addition to the resettlements. Because of its size, Cerrejón probably has a huge influence on local and departmental governments.

The affected communities

The affected communities had to form a council in order to have their demands and wishes heard by Cerrejón and the supporting NGO. The community Tamaquito II formed an Indigenous council (cabildo) in 1999 (Guerra 2000 p.39). The Afro-Colombian community of Roche has a communal assembly.

7.3 RESETTLEMENT LOCATION

The rural communities of Roche, Patilla, Chancleta and Las Casitas have found their new homes in settlements next to the highway Ruta Nacional 88 about 1.5 km away from the southernmost outskirts of the town of Barrancas, which has a population of more than 20,000 people. The area is called San Francisco (Fig. 23; Fig 32). The only exception in the location is the indigenous resettlement of Tamaquitos II, which is around 3.5 km away from the highway and is only accessible via a dirt road.

The proximity to the highway affects the new residential areas in different ways: the easy access to Barrancas leads to a very good connection to this central place and other cities in La Guajira. This has changed the life of all inhabitants significantly. From the old locations it took a lot longer to reach the highway and the towns (30 min to 1 h). At night the road got blocked from Cerrejón staff for security reasons, which further decreased the freedom of movement.

The forms and structures of the resettlements will be discussed in the following chapters for both Roche and Tamaquito II. In the case of Roche the location, the form, structure and processes leading to the resettlement are quite similar to Patilla, Chancleta and Las Casitas.

Figure 32: Location of the five resettlements

Source: Digital Globe (satellite) approx. September 2012 via Google Maps changed

8 THE RURAL COMMUNITY OF ROCHE

8.1 VIEJO ROCHE

The Viejo Roche (old) was a corregimiento[2] close to Tabaco, located in the municipality of Barrancas. It can be described as a rural village. The foundation of Roche took place during the War of 1000 days (1899-1902) by Afro-Colombian colonists. Oral traditions of the elders say that the first settlers of Roche came from La Tuna, a village on the other side of the Ranchería River. They had to isolate themselves from the constant threat of hostilities during the time of war (Cerrejón 2014d). They mainly lived from subsistence farming, fishing and hunting in the early phase of colonization.

The community was functioning well before the mines came closer and demanded their land. They had a primary school and a small health care center. The school had existed already since the 1960s. Cerrejón started to buy the land around Roche from 1997 onwards. The final resettlement of the community was carried out in 2011. Cerrejón no longer allowed locals to enter and use the purchased land for fishing and hunting (CAJAR 2005).

The predominantly land-based subsistence livelihood of the inhabitants was endangered, because common property couldn't be used anymore, like the forest for hunting and the close by Ranchería River for fishing. Some were even detained for fishing in the Ranchería River or entering the old fincas where they used to hunt, hold their cattle or cultivated crops. On the other hand the mine did not create jobs for the now unemployed farmers. As a consequence many inhabitants sold their houses and property in order to leave the community in search of a better life (ibid. p.19).

Most left individually to urban areas

There were around 300 to 400 households in Viejo Roche before Cerrejón started buying land in 1997 (Interview Osiris Molina; Ramirez 2010). The exact number of households was impossible to find. A reliable number is 374 households, because former inhabitants have formed an association called Asorochero with this number of participating families (Ramirez 2010 p.3).

The amount of compensation paid by Cerrejón for the expropriated settlers of Roche and the other affected communities remains a disputed topic.

[2] Corregimientos are the lowest administrative unit below the municipal level in Colombia

230m^2 of land were sold for 230,000 COP in 1998. This means a square meter price of 1,000 COP (today around 40 €-Cents)[3]. Another house owner was given 12 Million COP (today 4,800€) for a property of 113 m^2 with a house (CAJAR 2005 p.19). During the research contradicting prices for rural land purchased carried into effect by Cerrejón were stated by different interview partners. Therefore the prices given by CAJAR (2005) seem more reliable. Carlos Franco Echavarria a Cerrejón spokesmen, stated in the interview that the land was bought at two or three times higher than the average price. However, agricultural land is very cheap in La Guajira. Furthermore, it has to be taken into account that land tenure was and is poorly defined in Colombian rural areas. And landless settlers, who obviously exist, might have ended up with no compensation.

In the process of buying the land one of Colombia's big miseries became very evident. Besides obvious problems of deciding which land belongs to which residents, the compensations paid were too low to buy a new house in the nearby cities. During the fieldwork the construction of social housing in Hato Nuevo could be observed. Some of the expelled people now live in these marginalized settlements, with high depts. The remaining population of Viejo Roche, who had heard bad stories from people living in the urban centers, finally decided to take part in an organized group resettlement to avoid new urban impoverishment.

The remaining 25 households were selected from Cerrejón to participate in the group resettlement in 2008. So in the end some 8% of the initial households participated in the group resettlement. In the resettlement of Roche 100 individuals participated, so there is an average of four persons per household. If we assume the same ratio in the households who left individually to the nearby cities, an estimated 1200 people had previously left the area of Viejo Roche.

17 of the 25 families participated in the resettlement and have lived in their new houses since 2011. Eight of the 25 still have not moved into their newly built houses in "new" Roche at the time research. They are still in negotiations with Cerrejón concerning the conditions of their resettlement. They weren't satisfied with the amount Cerrejón offered as just compensation.

The reason why so many families of Roche left for urban areas prior to, and without organized group resettlement, can be explained by an understanding of different processes:

First there was Cerrejón, which bought the land gradually from 1997 onwards. Quality of life decreased constantly during this phase.

Secondly the municipality of Barrancas decreased its public investment to a minimum, as it was obvious that Roche was going to disappear. The existing infrastructure like the power lines,

[3] The Colombian peso is a relatively stable currency since the late 1990s. The value to the € and US-$ only chanced slightly. In the 28th May 2014 the rate was 1€=2,614 COP; 1US-$=1,916 COP Source: http://bankenverband.de/service/waehrungsrechner

health center and the assembly hall were kept running. Other investments ceased (Ramirez 2010 p.13).

Thirdly tranquillity, which was one of the reasons why the first settlers of Roche decideded to move to this location, was over. This was largely because Cerrejón used the communities access roads for their own industrial purposes.

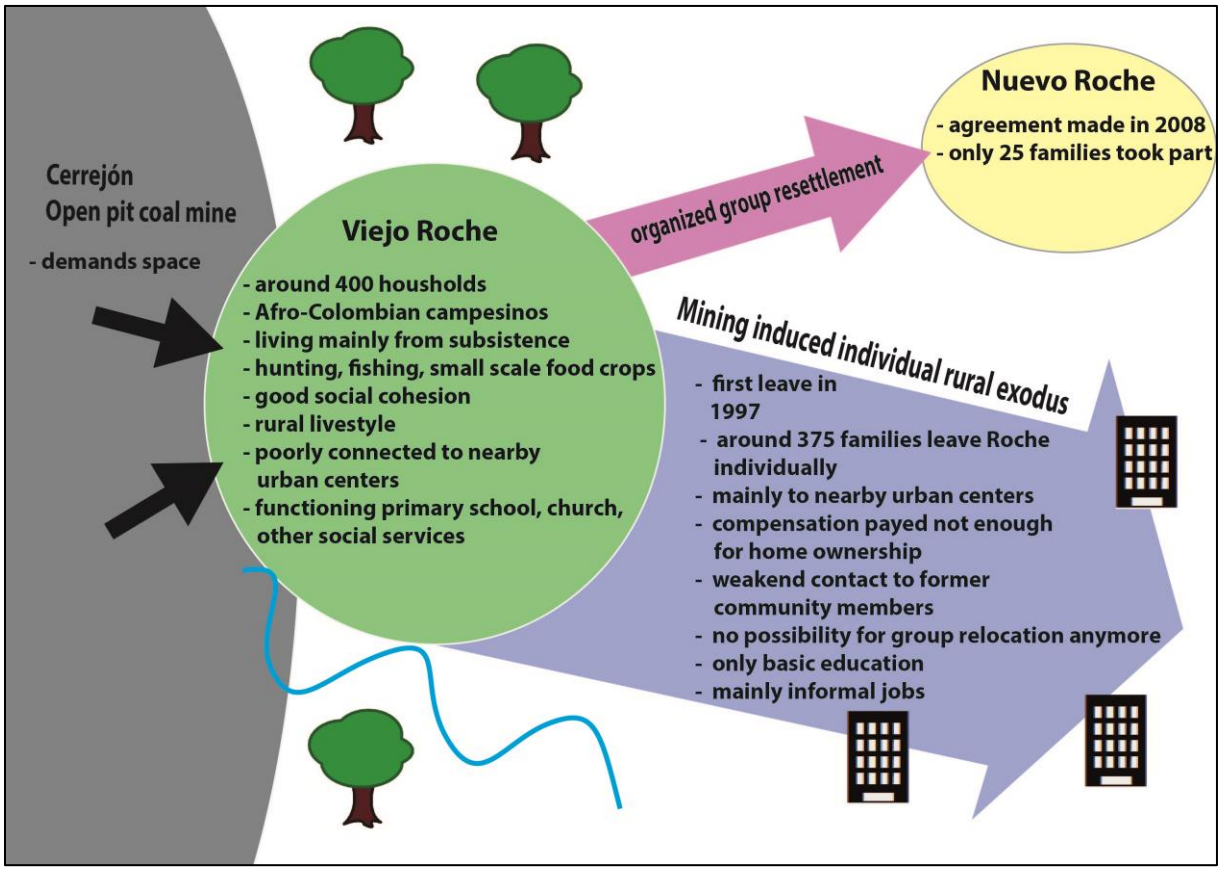
Finally, social cohesion weakened as Cerrejón personell frequently visited the village in order to negogiate and accelerate the process of buying up the properties, causing disputes among the Rocheros.

Prior to 2006 it wasn't obvious that there would be a Cerrejón implemented group resettlement. The insecurity about the future of Roche and also the deteriorating social cohesion of Roche made many people decide to leave during this phase. Furthermore, these push-factors to leave the area were a great incentive to leave behind a rural life and start a favorable life in urban areas. Figure 33 illustrates the division process of the former residents of Viejo Roche.

Textbox 7: Urbanization and rural exodus in Colombia

Urbanization can be understood in a quantitative and qualitative way. The share of the population in urban areas of the total population indicates quantitatively the degree how urban the area is (countries, regions). Qualitatively urbanisation can be described as the dissemination of an urban lifestyle (Borsdorf & Bender 2010 p.156). Colombia developed into a highly urbanized country in the last decades. The internal civil war, which was and is carried out to a large extend in rural areas has led from the 1964 onwards to an enormous violence induced displacement from the countryside into the cities. Between 1985 and 2002 2.9 million were displaced within Colombia (=6.6% of Colombia's population) (Mertins 2004 p.46). In the beginning of the 21th century Colombia has an urbanization rate of 75% which is about the average of the very urbanized Andean region (UN DESA 2008). From the displaced people 93% have migrated to urban areas. This rapid movement into the cities had led to manifold marginalization and increase of impoverishment in Colombian cities (Albuja & Ceballos 2010).

Figure 33: Process of the depopulation of Roche Viejo (old)



Source: B. Hora derived from own fieldwork, Cerrejón 2014d, Interview Echavarría; Interview Molina

8.2 The new resettlement of Nuevo Roche

8.2.1 Planning and implementation of the resettlement

Cerrejón has divided the resettlement process of Roche and the other communities into four stages (Cerrejón 2014d):

(1) Community Outreach and the Strengthening of Social Capital

In this stage a topographic and a socio-economic census coordinated in 2003 by CIDER (Centre of Regional Studies) by the University de los Andes placed in Bogotá was carried out. The results of these documents weren't accessible. However, the result was that only 25 families out of the 400 families of Roche Viejo took part in the resettlement (See chapter above). Furthermore, social and psychological programs for the resettled were organized, to prepare them for the psychological stress to the resettlement.

(2) Participative Design of the Resettlement

The phase started in 2007. Cerrejón states on its homepage that the new location called the "San Francisco" lands was arranged in a participatory and systematic way. There are no statements whether the soil conditions of the selected site is good for subsistence agriculture. However, it is said that the land meets the agricultural needs of the community. The community was asked and decided to construct houses, with amenities like air-conditioning and modern construction materials. The negotiations were held between representatives of Cerrejón, community representatives of Roche and an ombudsman of the municipality of Barrancas.

(3) Execution of the Resettlement Plan

In 2009 the municipality of Barrancas gave the permit to construct on the San Francisco land and the construction of the resettlement Roche started

(4) Stabilization at The New Location

During 2011 the first families moved into their new houses. Cerrejón paid during the transition phase for the implementation of the agricultural production. The resettled people received a new house and 150% of the value of their former belongings as an incentive to establish their agricultural activities (Cerrejón 2014d).

Furthermore, the education of the children was paid until they leave university level (Interview Echavirra). The amount of money the children received for their education was not mentioned.

8.2.2 THE LIVING SITUATION NOW IN NUEVO ROCHE

The new location for Roche was selected in a rural place called San Francisco around 1.8 km south the outskirts of Barrancas (Fig.32). The Ruta Nacional 88 the main highway, which connects the northern part of La Guajira with the department of Cesar and the capital Bogotá, is only around 100 m away from Nuevo Roche. The size of Roche was determined to be 25 ha of flat land, where agriculture could be carried out and 4.5 ha for the built-up resettlement. The resettlement includes 25 houses of 85 m^2 located in plots of 300 m^2 (Fig. 34). Seven of the houses are not yet inhabited, because the affected families are still negotiating with Cerrejón about the amount of compensation. They already live in urban places in Fonseca and Hato Nuevo, as Viejo Roche is already a ghost town (Interview Echavarría).

Demographic aspects of Roche Nuveo

In the 10 households surveyed 18 minors under the age of 18, 25 adults from the age of 18 to 65 and three seniors above the age of 65 lived in the houses (Tab. 9).

Table 9: Age of the residents of the surveyed households in absolute numbers in Nuevo Roche

Below 18	18-65	Above 65	Total
18	25	3	46

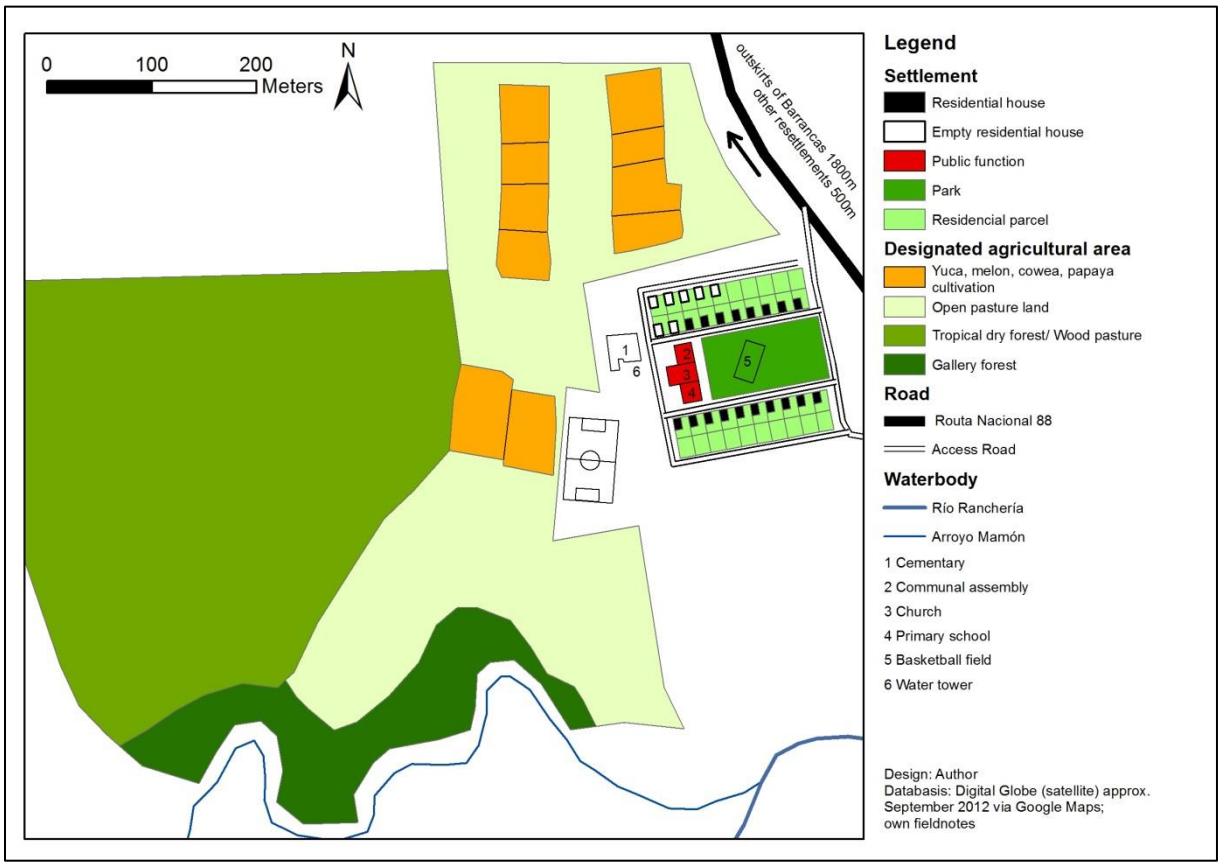
Source: Own survey 2013 (10 out of 17 households)

In average 4.6 persons lived in the households, which is slightly above the average of four persons per household, which Cerrejón published for the resettlement of Nuevo Roche (Cerrejón 2011b p.69). Some of the children were already above 18 years and living in the household, so the average child per women ratio might be higher than the 1.8 surveyed in the questionnaire. In La Guajira the average household has four residents, in total Colombia the average is at 3.6 (DANE 2012b). There was one single household, where one senior was living. His spouse had passed away already. There was only one family with four children and one with three. Four families had two children and three had one. Therefore, a demographic change to smaller family sizes can be observed.

The resettlement – physiognomy, infrastructure and location

The houses are built with modern construction materials (bricks and cement) and have two sleeping rooms, one bathroom and a combined kitchen/living room. The resettlement is connected to the electricity network and all houses have air-conditioning. The oven is heated by natural gas. The two households that were visited inside the dwelling during the fieldwork had a washing machine. Tap water was not of drinking water quality. Usually drinking water is transported to the households via trucks in pretreated 20 liter canisters. Also in urban centers of Barrancas and Hato Nuveo households acquire their drinking water this way. The resettlement is connected to the aqueduct and local culvert system. All houses are constructed in a similar style.

Figure 34: Resettlement of Roche including area designated for agricultural production



Some house owners have painted the façade in different colors. Most residents have built a corrugated metal roof above the entrance. This measure protects them from the sun and the rain and is used as a common space. Standing on the central square an impression of a planned Western style suburb is produced. The access roads to the house entrances are not paved. There are planted trees and the front gardens of most of the inhabited houses, which are well arranged with small palm trees or colorful bushes and flowers (Fig. 35).

Communal building includes an assembly hall, a Catholic church and a primary school and a small health center. The pastor lives in another area of Barrancas and is responsible for several communities. The teacher of the primary school also lives externally. There is also a football field, which was not observed to have frequent use. A cemetery is also in place.

Figure 35: Street of the resettlement Nuevo Roche

Source: B. Hora

The properties have a high barbed wire fence. Residents stated that burglary from strangers is becoming a problem, since the Nuevo Roche is just beside the highway and the city of Barrancas is very close. On the other hand central services like a hospital, the town hall and other services are just a few minutes away via taxi. A new high school is only about 600 m away. This is a very notable difference between this settlement and the old site.

8.2.3 Agricultural production and socio-economic perspectives of Nuevo Roche

Nuevo Roche agricultural plots have a size of 25 hectares. The idea was to establish a land based economic livelihood for the inhabitants. After visiting the resettlement and the nearby area, which was supposed to be the agricultural area, some problems of this productive plan became obvious. Only some 2.5 hectares of the 25 hectares are currently used for agricultural production. According to Cerrejón (2014d) water melons and beans have been cultivated since 2011. In 2012 650 kg of cowpea beans were harvested and marketed. During the fieldwork visit yuca[4] (cassava) cultivation was predominant (Fig. 36). In addition, papaya, cooking plantains and maize were cultivated. Irrigation is carried out via drip irrigation in the dry season. During the wet season there is enough precipitation so no irrigation is required. The production is consumed domestically or marketed, depending on the quantity. The rest of the designated agricultural area remains as a tropical dry forest or cleared pasture land. Furthermore on riverbanks of creek Arroyo Mamón a dense gallery forest persists (Fig. 34).

The agricultural area Roche received from Cerrejón seems to be very small for a land based resettlement compared with other examples. For instance land given to landless families after the resettlement following the Lejeado dam construction in Brazil, was a minimum of 4 ha (Geipel 2003 p.70). In a land reform area in the municipality of Mahates close to Cartagena Colombian campesino families received in average 9 ha of land. In this example similar agricultural activities like yuca, water melon and maize cultivation were carried out (Borsdorf & Marchant 2013 p.37).

These 2.5 hectares are farmed only by 7 families, the rest of 11 families don't work in agricultural activities. A visit on the fields showed that the yuca and papaya cultivation were in good condition. The soil seemed to be suitable for these productive activities (Fig. 36).

[4] In the Colombian tropical lowlands the term „yuca" is used predominantly. Yuca is an important carbohydrate supplier in tropical countries. Growing yuca is a good for food security, as it has a high tolerance regarding precipitation variability and droughts. Furthermore it can adopt to different soil conditions and temperatures from 10°C till 40°C (FAO 2000 p.5 ff)

Figure 36: Yuca (cassava) cultivation on the agricultural field of Roche Nuevo

Source: B. Hora

Some possible explanations of the discrepancies could be: The crops they have planted have a high area-yield and are usually used for an intensive agricultural production. This might be one reason why they don't use the whole granted land. Another reason is that some Rocheros have other incomes like rent. For example one man from Nuevo Roche grew water melons and sold them for 3,500 USD in two months. With this money he bought a house outside of Nuevo Roche, which he is now renting out (Interview Echavarría).

Many isolated rural communities in Colombia have the problem that the access roads are in a bad condition. And trucks are not available for transportation. This was shown in the example of the agricultural cooperative Asociacíon Songó near Cartagena in the coastal lowlands of Colombia (Borsdorf & Marchant 2013 p.37 ff). In the wet season the washed out bridges, landslides or deep slippery puddles can make the access to the agricultural consumer markets very harsh or even impossible. This is not the case in Nuevo Roche. The well paved highway is just a few hundred meters away from the crop fields, making it easy for the famers to sell their products in the local markets.

The fallow land, mainly grassland and the dry forest is used as extensive pasture land. Five families of Viejo Roche held cattle before they were resettled. They rent additional pasture land outside of the resettlement where they can hold their cattle (Interview Echavarría).

Many Rocheros answered in the survey that they cannot hold household animals, such as pigs or chickens anymore because the backyards of the houses are too small. Five out of ten household representatives said that what they most miss is that they don't have animals anymore. It was part of their previous livelihood.

A mixture of urban and land based resettlement

The household representatives were asked in the survey to describe the employment situation of all adults in the house. Out of 25, only two were working in agricultural production, six were working in commerce, nine were unemployed with eight occupied in other jobs (Tab. 10).

Table 10: Occupation of the residents of Nuevo Roche

Agriculture (full time)	Commerce	Unemployed	Other	Total
2	6	9	8	25

Source: Own survey (10 out of 17 households)

The very low number of people working in agriculture could be explained by noting that most of the seven farming families were probably working in the fields on the day of the survey. A high unemployment rate is notable and the eight others were mainly working in their own households or taking part in a capacitation process. Some of the younger adults went to the Universidad de La Guajira.

Another question revealed that five out of the 10 household representatives have received a capacity building program to find new occupation possibilities. One was trained as a social worker, one as a nurse, the others were not specific.

A further source of income is a handcrafting association funded by the women of Roche. It is called Wayuriuu, which means luck in the Wayuunaiki language. They produce colorful key fobs and pack them with a piece of chocolate. It sells for 3200 COP each. In 2012 they sold these artesanías (handcrafts) for in total of 16 Million COP (around 6,150 €) (Fig. 37).

Figure 37: Osiris Molina showing the products of the Wayuriuu handcrafts association

Source: B. Hora

However, most of the residents in Roche live from day laboring. Some sell products in Roche, others work as taxi drivers or on construction sites (Interview Molina). During the fieldwork some of the residents were cleaning and cutting the trees in the central plaza park of Nuevo Roche. It can be assumed that the municipality of Barrancas was paying for that job. The mine itself hasn't created jobs for the Rocheros because the mine related tasks are too specialized and the local people don't have the qualifications.

8.2.4 Summarizing the of the situation of Nuevo Roche

In summarizing the new location, the form of the settlement, the economic and social structure of the new resettlement, the following can be stated: Nuevo Roche is located close to the outskirts of Barrancas, which is only a view minutes away on the Ruta Nacional 88. It is the most important transit traffic road in the region. The other resettlements are only 500 m away. The new traffic location is dominant, because Nuevo Roche is now well connected with the nearby urban centers. The road also brings negative aspects to the resettlement. Many strangers pass by the road and a feeling of insecurity has evolved. High barbed wire fences surrounding the properties are one expression of this insecurity. The forms of the house rows and the houses themselves have suburban functions. The backyards and properties are too small for cultivation or holding small livestock. There is no space to store the harvest within the properties. Inside the houses there are amenities for modern living. A full functioning bathroom, a gas oven, electricity and air-conditioning are in place. Through the communal buildings, the church,

primary school and an assembly hall gathering places exists and a group identity as Rocheros persists. However this identity is in danger. Only 10% of the designated agricultural areas are used for intensive agricultural cultivations: yuca, water melons and maize. The soil is suitable for these activities. The rest remains dry forest, gallery forest and fallow land. Irrigation water comes from a well. Only a minority of seven families of the Rocheros work as campesinos (peasants). In the sample 9 out of 25 adults were unemployed. The majority is employed as day workers in different businesses. The first local business created by the women of Roche is called Wayuriu, which produced handcrafts and contributed significantly to the community's income.

8.2.5 Opinion of the Rocheros about their resettlement

In the survey different questions were asked about the resettlement. In the following table the questions and the answers are summarized (Tab. 11).

Table 11: Opinion of household representatives of Nuevo Roche about the resettlement

	not at all / don't agree at all	not much / don't agree much	more or less / relatively agreeing	yes completely/ totally agree
Are you happy with your new house?	0	0	2	8
Are you happy with your new surroundings?	2	2	4	3
Are you satisfied with the job opportunities?	7	0	2	1
Can you keep your traditions in the new location?	3	4	1	1
Are you happy with the decision to have changed to this place?	3	2	4	1
Did Cerrejón behave correctly during the resettlement process?	1	2	2	5
Was the community Roche well prepared for the resettlement?	3	2	3	1
Did Roche have a good juridical support during the resettlement process?	7	2	1	0

Numbers indicate responses Source: Own survey, n=10 household representatives

The new housing with modern amenities is perceived as very satisfactory for the Rocheros. In old Roche they lived in bahareque style houses. Now the floor is tiled, before it was compressed loam. The individual space per person is bigger in the new accommodation. Individual washing machines are in place as well as a fridge and a gas stove. Some households in Viejo Roche still used firewood for cooking and washing machines were not standard. The new surroundings were seen differently by various household representatives. On the one hand they said that central functions of Barrancas were easily accessible. Secondary schools were far away in Viejo Roche. It took the children more than one and half hours to get to one. Some had to live with relatives in Barrancas or Hato Nuevo to attend secondary school. On the other side the new suburban life is not appreciated by most household representatives. Apparently criminal activity, including theft has risen in comparison to the Viejo Roche. High barbed wire fences around the properties are one reflection of this.

What they miss most is that they can't hold small livestock like chickens and pigs in their backyards and streets anymore. They see these animals as their tradition. That's why many replied that their culture is in danger. They mean a culture living from the soil with house animals just beside their properties.

The answers about the job possibilities were very negative. Seven out of ten replied that the situation is not satisfying at all. Without the animals and a minority working in agriculture most have lost their former identity of campesinos. Nine out of the 25 residents in the 10 surveyed households were unemployed. The questions remains open how the Rocheros will be able the pay for their improved but surely more expensive lifestyle. Many adults don't contribute at all to the income of the community. There is a risk that the community might become persistently dependent on governmental welfare aid or grants from Cerrejón.

According to the survey juridical support was generally seen as bad by the household representatives. The NGO Indepaz supported the Rocheros during the resettlement process. What they probably were referring to was the lack of support during the gradual depopulation. Furthermore, the legal problems with the eight families, who still haven't moved in yet seem to persist. A disadvantage of the Rocheros was that they were the first to be resettled in this scheme. Therefore they weren't able to learn from others who had been resettled in the same region.

However, the majority of the household representatives perceived Cerrejón's behavior as correct during the resettlement process.

9 THE INDIGENOUS COMMUNITY OF TAMAQUITO II

9.1 OLD TAMAQUITO II

Tamaquito II was founded in 1965 by the grandfather of Jairo Epiayu, who was interviewed in the fieldwork. He is now the governor of the cabildo of the community. Earlier the area was uninhabited. Before the resettlement in 2013, 31 families and 165 people lived in the village. Within the community there were three clans of the Wayuú, the Eupieyuu, the Pushaina and the Ipuana. The old site of the Wayuú indigenous community of Tamaquito II was located in the slope toe of the Serrenía del Perijá (Fig. 23). The creek Arroyo Caurina originating from the mountains flowed directly beside the settlement. The hills of the Serrenía gave the village a distinctive microclimate. The air was cooling down more, than in in the nearby broad plain of the Ranchería River. With abundant mountain rainfall the village had sufficient water for irrigation and consumption year-round. The vegetation was also different to the plain. On the old site thousand year old moist forest trees could be found, whereas in the dryer plain trees were smaller and lost their leaves during the dry season (Interview Epiayu).

Guerra (2000) carried out an ethnographic study in the old site of Tamaquito II, providing crucial information about the history, the social fabric and the economic activities of the inhabitants of Tamaquito II.

On the old site they used a vast area of 5,000 ha for their cattle and hunting. This area in the Serrenía was owned by the Colombian government and was used as common property. Closer to the village they cultivated maize, beans and pumpkins for subsistence. The creek was used for fishing. When mining operations began to get closer to the village in late 1990 the living situation of the setters degraded gradually. The mining pits themselves would never have encroached directly on the land where Tamaquito II was located. However, the depopulation of the neighboring village of Tabaco (see chapter 7.1) and other non-indigenous villages like Roche (see chapter 8) affected Tamaquito II negatively. Living conditions were continuously being eroded by the ongoing influx of Cerrejón exploration staff in addition to dust and noise contamination. Furthermore the medical herbs, which were cultivated by a medicinal woman, did not continue to grow well under the dust layer. The people of Tamaquito II did not exclusively live from subsistence farming as worked in fincas near Tabaco, where some of their income was generated (Ramirez 2010 p. 1).

However, life continued in the village. During the 2000s they constructed a school in Tamaquito II through their own efforts (Ramirez 2010 p. 1). The women produced handcrafts, like hammocks and bags. The money they earned with these activities was used to buy goods like

salt, coffee, rice, corn flour, meat and vegetables from the nearby urban centers (Guerra 2000 p.40).

However the inhabitants became dissatisfied with the situation. Guerra (2000 p.39) quotes Alfonso Epieyuu, an elder of the Tamaquito II, who described the issue as follows:

> "Here there is plentiful water but there is no work as the company has bought almost all the properties. It's not possible to sow, nor put animals to pasture, nor are hunt, and the nearby villages such as Tabaco, where we used to get occasional work as day laborers, becoming depopulated. There is no work, no schools, no neighbors. We are alone and isolated. That's why we want to leave."

As a result of this situation, in 1999 the people of Tamaquito II founded an Indigenous council (cabildo) in accordance with Law 89, 1890 (see chapter 5.1 and 5.2). This is a common practice, as the indigenous communities in Southern Guajira are in constant threat due to land use conflicts and cultural survival (Guerra 2000 p.39). The pressure comes as a result of colonists, large landowners and mining projects surrounding them from all directions (see Chapter 5.1). Legalizing their community was the only chance of cultural and economic survival.

To get recognized Guerra (2000 p.40) confirmed that the community of Tamquito II can be considered as an Indigenous community. The following arguments were considered:

- The Tamaquito II people consider themselves as Wayuú. This is recognized by other indigenous and non-indigenous groups in the area.
- They preserve the ancestral language (Wayuunaiki); funerary rites; rites of passage and traditional mechanisms of social control
- They comprehend and share a common historical origin and they see themselves as different from the rest of the Colombian society. They have a self-recognition and clear consciousness of their indigenous identity.

9.2 THE RESETTLEMENT OF TAMAQUITO II

9.2.1 PLANNING AND IMPLEMENTATION OF THE RESETTLEMENT

As was the case with Roche and the other resettlement communities in the Cerrejón mining region, the resettlement of Tamaquito II was divided into four stages: Community Engagement and Strengthening of Social Capital (start 2007); Participative Design of the Resettlement Action Plan (start 2008); Execution of the Resettelement Action Plan (start 2011) (Cerrejón 2014 e). Since August 2013 the settlers of Tamaquito II have physically changed to the new resettlement.

Now there are in the last phase of the resettlement scheme, Cerrejón calls it Stabilization at The New Location.

From 2004 the need for resettling Tamaquito II became more urgent. The reasons were not directly associated with land use, but rather deterioration of the surrounding communities. The increasing isolation became problematic, as nearby communities like Tabaco in 2001 and Roche in 2011 were abandoned villages. As time went on and the socio-economic situation became more and more unattractive, steps were taken to plan a resettlement of the village. Tamaquito II took the NGO Indepaz as their advocate to negotiate with Cerrejón (Ramirez 2010; Interview Epiayu).

The official start-up of the resettlement of Tabaquito II was announced in 2007 by Cerrejón. Socio-economic and ethnographic studies were carried out in Tamaquito II in 2008 to determine, who was entitled for resettlement and confirming the indigenous status of the community. Ramirez (2010) was critical that they were not asked what firm they would investigate and all processes were delegated by Cerrejón without consulting them adequately. Subsequently the NGO Indepaz negotiated with Cerrejón and gave the community juridical support.

The institute INCODER (Instituto Colombiano de desarollo rural), which is the governmental institution responsible for agrarian reforms and rural development in Colombia offered an area of resettlement in the municipality of Hato Nuevo in 2007. This offer was rejected by the community of Tamaquito II, as the area didn't meet the community's expectations (Cerrejón 2014e). The residents of Tamaquito began with their own search for an adequate area and in 2008 they requested Cerrejón to buy land called La Liga, where the resettlement was finally constructed. The location had adequate soil features for their agricultural activities. Furthermore Tamaquito II had achieved official recognition as an indigenous group by the Dirección de Asuntos Indígenas, Minoria y ROM (Directorate of Indigenous, Minorities, and ROM Affairs) of the Colombian Ministry of the Interior and Justice.

During the land survey and parceling Tamaquito II only was granted 10 ha. Ramirez (2010 p.2) states that they demanded from INCODER an area of 1900 ha in 2000. However, this was not granted. This would have significantly changed their negotiation position.

First the cabildo of Tamaquito II demanded and area of 1000 ha for their resettlement property, however Tamaquito II was only granted an area of 300 ha for their land based resettlement (Ramirez 2010 p. 2)

The new resettlement should have houses, space and natural features that would conform to the cultural and economic desires and needs of the people of Tamaquito II. Ramirez (2010) stated that the suburban qualities of houses in Nuevo Roche were seen as a negative, to the point that

they didn't want to live in them. The inhabitants of Tamaquito II had the advantage that other communities already had their new houses in the resettlement processes, so they were able to adapt and change their desires. Nuevo Roche was constructed in 2007 and the first people moved in in 2011.

In Tamaquito II in 2011 the conceptual design of public spaces, houses and access roads of the resettlement was finalized. The plan was designed in accordance with the special cultural desires of the community. In 2012 the development and physical construction of the resettlement began (Cerrejón 2014e).

9.2.2 THE LIVING SITUATION NOW IN TAMAQUITO II

The location of Tamaquito II is close to the other resettlements around 3.5 km away from the Ruta Nacional 88. The resettlement is accessible via a dirt road and the noises from the transit traffic are hardly noticeable. The access road is only used to connect the resettlement with the highway and therefore is rarely used for other reasons.

Demographics of Tamaquito II

In August 2013 the 31 families or households and a total of 165 inhabitants have participated in physical relocation. This means that all inhabitants of old Tamaquito II took part in the recent resettlement process. In the survey carried out 67 persons under 18 years and 56 adults between 18 and 65 and only two above 65 were identified by the household representatives. In total 20 households were participated. This means that 6.6 persons and 3.4 children lived in one household in average. These numbers suggest that the household size and the child-per-women rate hasn't adapted to modern, small sized families. Moreover uncles and aunts of the parents also live in the families. The proportion of old people is low and suggests a high mortality rate of this generation. As mentioned above, the situation in Nuevo Roche is different. The families are smaller (4.6) and they don't have that many children (1.8). In the demographic context Nuevo Roche can be seen as more urbanized or more "modern".

Table 12: Age of the residents of the in absolute numbers in Tamaquito II

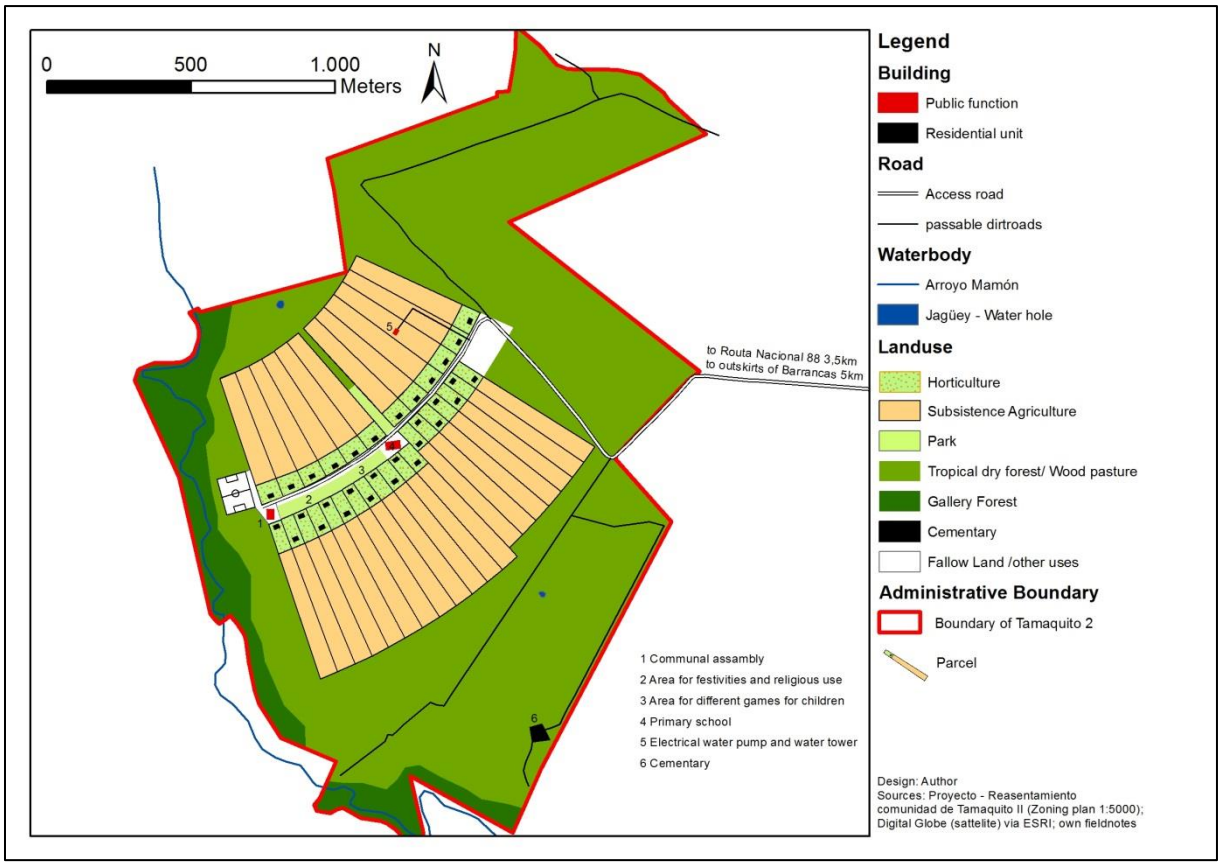
Below 18	18-65	Above 65	Total
67	54	2	123

Source: Own survey (20 out of 31 households)

The resettlement – physiognomy, infrastructure and location

The area of the Tamaquito II resettlement comprises an area of 300 ha (Fig. 38). It is located in the alluvial plain of the Ranchería River and is a generally flat area, which no significant hills. This property contains 31 built-up dwellings with an adjoining parcel of land of three hectares. The buildings can be described as farmsteads. Furthermore, there are buildings where community assemblies and council meetings are held and a primary school is situated near the center of the resettlement. A park like area is planned, adjacent to the access road, for activities like sporting events, religious ceremonies and as a playground for old and young. Arroyo Mamón creek to the west, with surrounding gallery forests and two waterholes make up the sources of surface water. The creek originates from the foothills of the Sierra Nevada de Santa Marta. The catchment area is not big. During the dry season the water course almost of falls dry completely. The rest of the area is tropical dry forest. During the time of research, the parcels were only cleared where horticulture activities were planned. A bulldozer was clearing further areas to cultivate.

Figure 38: Overview of the resettlement of Tamaquito II



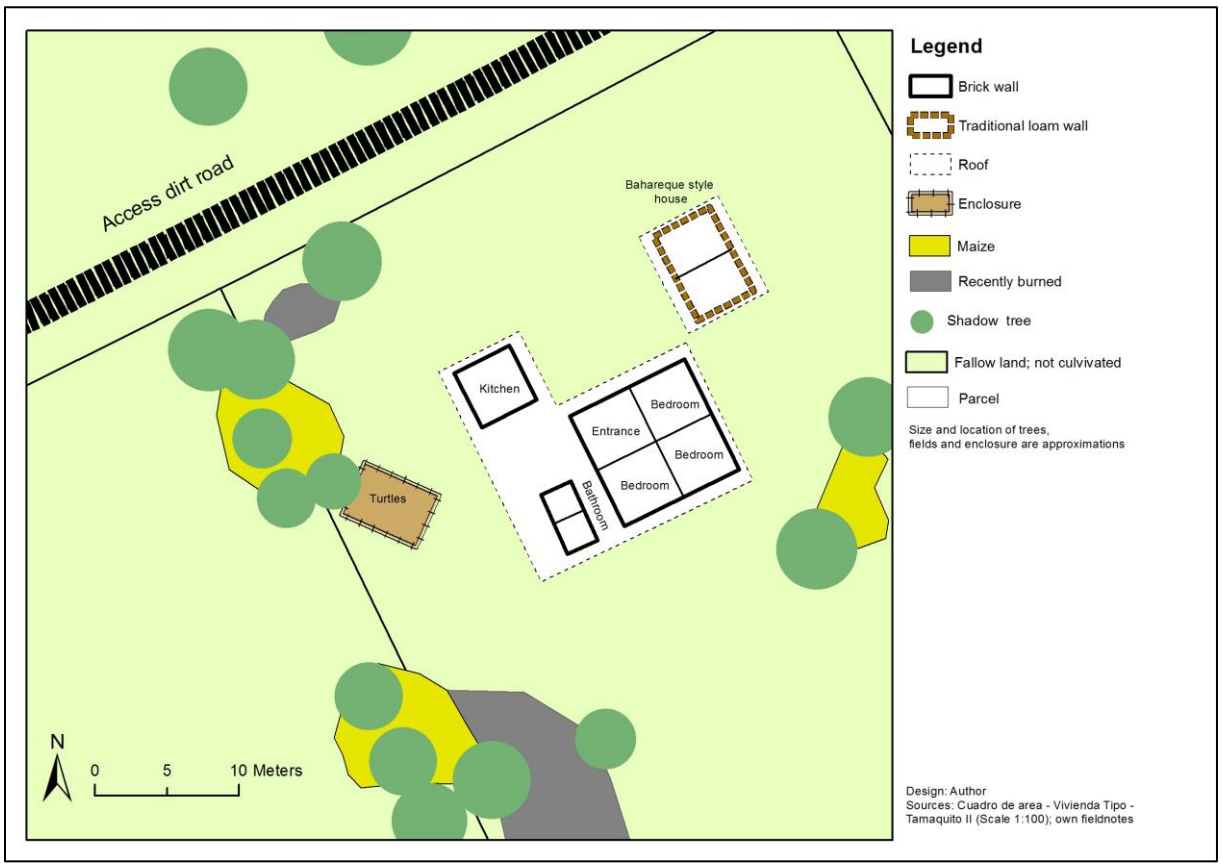
The biggest part of the property will stay as a tropical dry forest and be used as wood pasture for cattle farming. Some 30 ha will stay as protected forest reserve to grow special trees and plants for medical purposes (Interview Epiayu).

The houses are separated by more than 80 meters. Beyond the access road, the houses are located in an approximate 1 km stretch on both sides.

The residential unit

The residential unit comprises four buildings, where three are made of bricks and are protected with a single connecting corrugated iron roof (Fig. 39). One mud wall building stands alone. In "old" Tamaquito II this was the standard building type. During the survey elder men said that they prefer sleeping in the mud houses in hammocks, rather than in the rooms of the bricked houses (Fig. 40).

Figure 39: Residential unit with surrounding in Tamaquito II



The three other houses are constructed with bricks, which were constructed out of left overs of coal production. The houses have amenities of reticulated electricity and water. The electricity comes via land line from the Barrancas network. The houses have no air conditioning, however, the house architecture allows relatively good air circulation. However, they use refrigerators and televisions in their households. In old Tamaquito II, these modern amenities were not in place, as there was no electricity and they used candles and torches as a light source at night.

In total the rooms have an area of 125 m^2. Through open area protected by a roof, between kitchen, the main house and the loam house, an informal atmosphere is produced. However, it has to be taken into account that in average five to six persons live in each household.

Figure 40: Mud house to the left, bathroom with water small water tower and dwelling house to the right

Source: B. Hora

9.2.3 Agricultural production and socio-economic perspectives of Tamaquito II

The resettlement of Tamaquito II was established on a 300 ha property in a fertile area. The 31 households have each received 3 ha, for cultivation. With this area available for agriculture and forests the resettlement has sufficient land resources to allow the local residents to produce enough food crops for themselves.

During the fieldwork the inhabitants were in the process of beginning agricultural production, in the cleared area next to their houses. They plan to cultivate maize, cowea (beans), yuca (cassava) in their fields. Furthermore, the residents want to rear animals like goats, cattle, pigs and chickens (Interview Epiayu). As they had only lived there for three months during the fieldwork, all activities were only just in their beginning phases. One resident had domestic turtles in an enclosure (Fig. 38) for alimentation. Another was breading chickens in a cage. The survey showed that most of the adults were active in agriculture. Therefore, it can be said that the residents of Tamaquito II live from their land (Tab. 14).

Table 13: Occupation of the residents of Tamaquito II

Agriculture	Commerce	Unemployed	Education	Other	Total
38	5	4	1	5	48

Source: Own survey (20 out of 31 households)

Maize plants already were growing below the shadow trees close to the houses (Fig. 39; Fig. 41). These shadow trees are remnants from the original dry forest and serve the purpose of providing shade for the settlers, animals and cultivated plants. The field work was carried out during the relatively wet month of November, therefore all cultivations were in their growing phase and all trees had green leaves. In the dry season these planes receive nearly no precipitation. Most plants lose their leaves and planting becomes more and more difficult because of water scarcity.

Figure 41: Maize cultivation below shadow trees

Source: B. Hora

Water accessibility is problematic

Water accessibility is an obvious problem in the resettlement. The creek Arroyo Mamón and the two waterholes are inadequate for irrigation. Probably the creek is too low and inaccessible. During the dry season it may dry out completely. This water source is inadequate for year round productive cultivation and the rearing of animals.

The community has founded two groups, who are responsible for drinking water supply and the other water called agua negra (Interview Epiayu). The drinking water comes from an artificial

ground water well, where it is pumped out with an electrical pump (Fig. 38; Fig. 42). The groundwater is not directly consumable; it has to be treated in a technical room. The mineral concentration is too high and if consumed will lead to digestion problems (Ask! 2014). During the visit to the well treatment room and the water tower, obvious problems became evident. The technical equipment needs regular maintenance work. In the community one person has received training in order to operate the system. However, the plant seemed to be in a poor condition. The solar panels were out of order and the water cistern was already showing signs of advanced corrosion. Community members responsible for the water supply also said that they could not use the pump to full capacity, as the ground water level has dropped too much and the pump starts soaking in air. This system, in its current design, is inadequate to supply the community with sufficient drinking water.

Figure 42: Well with photovoltaic system, treatment system and water tower

Source: B. Hora

Increasingly depended to generate monetary income

In old Tamaquito II the local people lived in a relatively autonomous community. They only needed money to buy useful house tools and complementary nutriment. Now they need electricity and natural gas, which is supplied by contractors from outside. The power land line comes from the Barrancas electricity network.

The initiation of the productive phase will be financially supported by Cerrejón for four years. From there on Cerrejón is going to pull out from giving financial support (Interview Echavarría). With ongoing expenses of the community, they will have to integrate more into the national and

international monetary system. Previously, they didn't have to pay monthly fees for electricity and natural gas and were to high degree autonomous, without reliance on outside services. This process of integration into "Western" society is not reversible anymore. The community of Tamaquito II will have to cope with this situation. On the one hand the women traditionally knitting Wayuú handcrafts are already producing some money in the resettlement, however, on the other hand it can be assumed that this income is insufficient to generate the money the community requires for expenses.

Figure 43: Wayuú women in the resettlement Tamaquito II knitting a bracelet

Source: B. Hora

The community also has to find other income generators. Besides the subsistence agricultural activities, field cropping is probably big enough to produce surpluses, which can be sold in the local markets. Yuca, beans, maize and melons also find demand by consumers in the nearby urban markets. As the area is relatively big and has good soil conditions, this resource seems to be the biggest potential of Tamaquito II. However, it has to be acknowledged that the water accessibility for irrigation and domestic water is still not solved. If the community manages to solve the water accessibility problem, they might be able to have a sustainable economic income. One advantage of Tamaquito II is that most community members are already skilled in agricultural and cattle farming activities. It also seems inevitable that some members of the community will end up working outside of the village. In addition, in the new settlement there are increased possibilities to sell crops in the nearby urban centers, as these centers are closer and the road conditions are better than they were in the previous settlement.

9.2.4 SUMMARIZING THE SITUATION OF TAMAQUITO II

The resettlement of Tamaquito II has a total area of 300 ha, which is located 3.5km away from the Ruta Nacional 88. On the highway the other resettlements and the outskirts of Barrancas are just a few hundred meters away. Tamaquito II is the only resettlement in the Cerrejón mining region, in which an indigenous community was relocated. Since August 2013, when the people were relocated, a total of 31 families or households and a total population of 165 have lived in the village. Every residential unit comprises a main house with three sleeping rooms and an entrance room. Furthermore there is a single kitchen and bathroom. Besides these three buildings, which are made out of bricks and cement, there is one house made out of loam and sticks. This is the traditional construction material, which was used for dwellings in the former village. They use the loam house mainly for sleeping as the room temperature and internal climate is perceived as better.

Every residential unit has a three hectare area, which is designated for agricultural activities and horticulture. During the time of fieldwork most of the area still wasn't cleared from the dry forest. Cultivation of yuca, maize, melons and beans is planned. Close to the houses the first cultivations of maize were planted below shade trees, which are remnants from the former forest. Furthermore, small animals like chickens and turtles are held for alimentation. The rest of the property will remain wooded pasture and a natural reserve where some cattle will be allowed to graze and medical plants will be grown. A significant disadvantage for this community is the poor accessibly of water, all year round, for irrigation and consumption. The ground water has a high concentration of minerals and therefore has to be laboriously pretreated. The electric pump isn't working well and the groundwater lever falls very rapidly, when the pump is soaking. The water problem seems to be one crucial point for the sustainable development of the community.

Through the services of natural gas for cooking and electricity, delivered by the Barrancas network, the community has gained modern amenities they did not previously have. In the houses they have electric light, satellite television and fridges. This also implies that the residents have to generate monetary income to pay the bills in the future, which they didn't have to do in the old settlement. Knitting Wayuú handcrafts will not provide sufficient income anymore. For the economic survival of the community they have to start selling surpluses of farming production to the markets and some people will have to work in nearby urban centers.

Tamaquito II has a strong community identity. As mentioned above, all community members took part in the resettlement and from an outside perspective, it does not seem that the residents are split in different groups of interest. The fight for a dignified resettlement, which did

not eventuate for the other resettled villages, was the main motivation for the people of Tamaquito II. This quote from the governor of the cabilo Jairo Epiayu describes this fight (Interview Epiayu):

> "This struggle was well fought; we have made this from our own force. Our unity was one of our fundamental properties. We are the only community in Colombia here in La Guajira and in the world, which was resettled by a company collectively with our own criteria. We stayed firm and said this is what we want. Some things are still missing from the company. For example the productive projects […]. "

9.2.5 Opinion of the residents of Tamaquito II about their resettlement

As in Nuevo Roche, in Tamaquito II a survey with different questions asked about the resettlement. In the following table the questions and the answers are summarized (Tab. 11).

Table 14: Opinion of household representatives of Tamaquito II about the resettlement

	not at all / don't agree at all	not much / don't agree much	more or less / relatively agreeing	yes completely/ totally agree
Are you happy with your new house?	1	2	7	10
Are you happy with your new surroundings?	5	0	4	11
Are you satisfied with the job opportunities?	4	3	4	9
Can you keep your traditions in the new location?	0	0	0	20
Are you happy with the decision to have changed to this place?	2	3	2	13
Did Cerrejón behave correctly during the resettlement process?	0	0	6	14
Was the community Tamaquito II well prepared for the resettlement?	0	0	0	20
Did Tamaquito II have a good juridical support during the resettlement process?	0	0	1	19

Numbers indicate responses Source: Own survey, n=20

The household representatives had a predominantly positive view of their new dwellings. However, the four said that they did not feel that they had adapted to the new houses. One said that the houses were getting too hot and one said that the bricks were poor in quality. The greyish bricks are made from slag, which is a byproduct of the coal production process in the mine. A group of scientists of the Universidad de los Andes in Bogotá had developed this brick material with Cerrejón. Nevertheless, some cracks in the bricks were visible during the fieldwork. Obviously modern house materials are strange to the residents, as they previously lived in mud houses.

The majority of the household representatives are happy with the new surroundings. However, five out of the 20 are completely unhappy with the new surroundings. Four said that the area is too hot, too dry and that the water scarcity was too much of a problem. One said that the trees were too small.

From the question about job opportunities the responses were more balanced, but still the majority said that the situation was satisfactory. As mentioned above, the fieldwork was carried out just three months after the relocation process of the community. The agricultural production was just about to start and they were growing the seeds for maize production. It seems that that the community expected an economically prosperous future. If the community is able to solve the water access problem and generate enough monetary income, a future without debt is possible. It should be taken into account that the 300 ha parcel of land is common property, which is soon going to have a status as a resguardo (indigenous reserve) (see chapter 5.2). The question remains, how will Tamaquito II manage the balancing act between this common property of the reserve, the cultural survival of the community and integration into “Western” society, with the requirement of earning sufficient income. Somehow the cabildo has to find a bale out, between these diverging interests.

The following questions generally received a positive response. In response to the question about keeping the community’s traditions, all 20 surveyed people replied that they were completely satisfied. It can be stated, that the Tamaquito II struggle for dignified resettlement, with support from the NGO Indepaz, was successful. Cerrejón itself realized that this resettlement was a best practice example. Therefore visitors, who want to be informed about resettlement processes, are commonly shown Tamaquito II. The other resettlements, where social disarticulation and other key risks formulated by Cernea (1997) were in place, are commonly not shown to foreign visitors. The quote by the Govenor of the cabildo Jairo Eupiayu accurately describes the situation (Interview Epiayu):

> “The company has done a big damage to the environment. The Ranchería River is contaminated. The flora and fauna has changed in La Guajira and in our community the

water quality and quantity worsened, so fishing became difficult. You can't enter the river banks anymore, because the mine has bought the area and says that it is unsafe. They have caused a great damage to the communities as well; they have displaced them to other communities. That's why they want to show everybody the example of Tamaquito. One month ago they brought the ambassador of the United Kingdom to our community. I told them not to show only Tamaquito, which was resettled collectively. They also should show the other resettled communities to demonstrate, the whole resettlement process. They shouldn't take Tamaquito as the best practice example, because the fight for a good resettlement was our fight. But Cerrejón doesn't want to show the other communities. They don't want to show Patilla and the other communities like Roche, where families were separated, because they didn't agree with Cerrejón. "

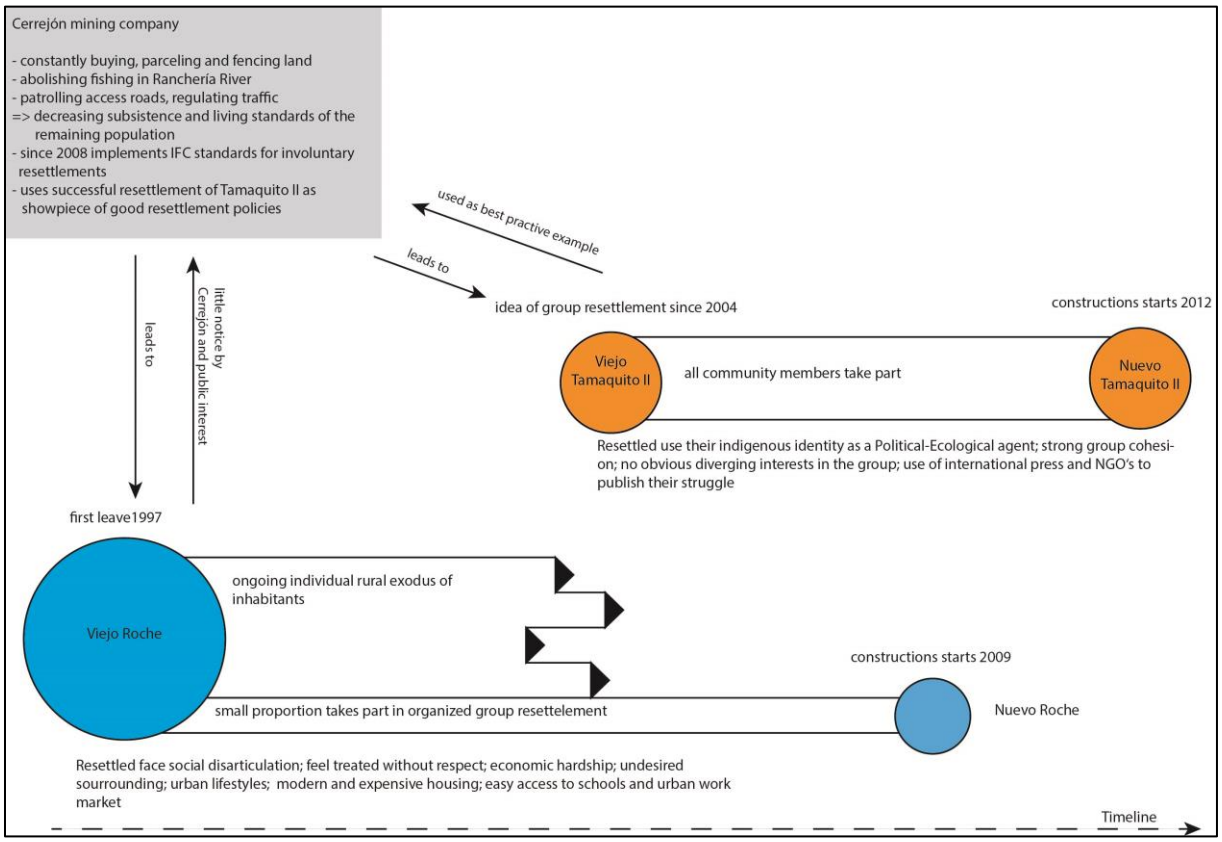
10 COMPARING PERSPECTIVES IN A POLITICAL ECOLOGY CONTEXT

The resettlement process of the two communities differed in many ways (Fig. 44). In the case of Roche, the resettlement can be seen as partially problematic. During the Carbocol-Intercore time of the Cerrejón mine, land was bought by the individual campesinos of Roche and many left the area. When the group resettlement of Roche was initiated by Cerrejón in 2007 the fast majority of the former inhabitants of Viejo Roche already had left the area. From 2007 the number of the people to be resettled was clear. During the time of research eight families were still negotiating with Cerrejón, about the amount of compensation. The 17 families, who now live in the resettlement Nuevo Roche don't feel that they were well treated by Cerrejón. On the one hand they enjoy the new living conditions in modern houses, however, on the other hand the future remains socio-economically uncertain. Certainly social disarticulation is a key risk, alongside landlessness, joblessness and loss of common property (Cernea 1997) in the resettlement of Nuevo Roche. However it has to be acknowledged, that the soil and the housing materials are of good quality. Cerrejón has taken its responsibility seriously, at least to a certain degree. As Roche belongs to the ethnicity of Afro-Colombians, who don't have indigenous rights, their struggle did not receive the attention from media and NGOs that was the case of Tamaquito II.

Tamaquito II had some advantages compared to the resettlement experienced by Roche. The Tamaquito II resettlement took place later, so the complete process was already under the new owner of Cerrejón. Their involuntary resettlement policy and CSR-scheme had significantly improved the situation. Furthermore, the cabildo of Tamaquito II used the pending resettlement as an opportunity to be acknowledged as an indigenous group. This process of self-identification resulted in a strong group cohesion, which strengthened their negotiation position with Cerrejón. It is likely that this was an exception to the four group resettlements, which were carried out by Cerrejón over recent years. The example of Tamaquito II shows that the indigenous group uses their identity as a Political Ecological agent to strengthen their negotiation position with other actors.

Cerrejón itself used the resettlement of Tamauqito II to demonstrate an example of best practice for their resettlement practices. The residents of Tamaquito II, however, claim that the resettlement was undertaken in the way they wanted it, was mainly because they stayed firm and negotiated unison with Cerrejón and the other actors involved in the resettlement.

Figure 44: Processes during the resettlements



Source: B. Hora

10.1 Benefit - Power structure of the Cerrejón mining project

The Cerrejón mining project reveals typical power structures and processes of transnational mining activities in countries of the Global South, with some positive and noteworthy nuances (Fig. 45).

Transnational mining shareholders receive most of their profits from the coal exploitation mining activities of the company. The cheap costs of exploitation and the high black coal price on the world market make the business very attractive for Cerrejón and its shareholders. Therefore, a decrease in mining activities is unlikely in the near future. However, it has to be noted that the decrease in price since the all-time price peak in 2008 has triggered a reaction from Cerrejón management not to expand their mining pits and infrastructure at the rate that they had previously planned. The operators of Cerrejón and other transnational operators of coal mines in Colombia are very powerful within Colombia. The center-right winged neoliberal Santos administration was reconfirmed into office from 2014-2018 (Spiegel Online 2014), so major changes in mining legislation cannot be expected. The Colombian government sees the mining

sector as a major foreign exchange income generator. Furthermore ongoing economic growth is expected with these revenues. Government interventions into to coal mining activities are limited and can be described as laissez-faire. With an ongoing internal armed conflict, drug trafficking and urban impoverishment, the government is seeking economic growth and is focusing on aspects other than social standards with respect to the extractive sector.

Since the royalty system is reformed since 2012 no money flows directly into the municipalities, where mining activities are carried out. All municipalities in Colombia can hand in projects acquiring funds from this resource. In the system before more money came directly into the public hands of the municipalities of Barrancas, Hato Nuevo and Albania. However this was seen as ineffective and prone to corruption. Surely the municipalities profit from mining activities via trade tax payments from Cerrejón. But the social losses of the resettlements and environmental contamination of the mining activities always have to be taken into account.

Obviously the new immigrants, who went into the Cerrejón mining region, are benefiting from the job opportunities the mine is offering. Working in the mine is relatively well paid. In Mushaisa, the residential unit for mining employees, only the higher ranked employees such as engineers, managers and administrators are living. Most of the public relations and management is undertaken in the headquarters of Cerrejón in Bogotá. Workers live outside in the nearby small cities like Barrancas, Hato Nuevo and Albania. Cerrejón is well organized with busses picking up employees at their place of residence.

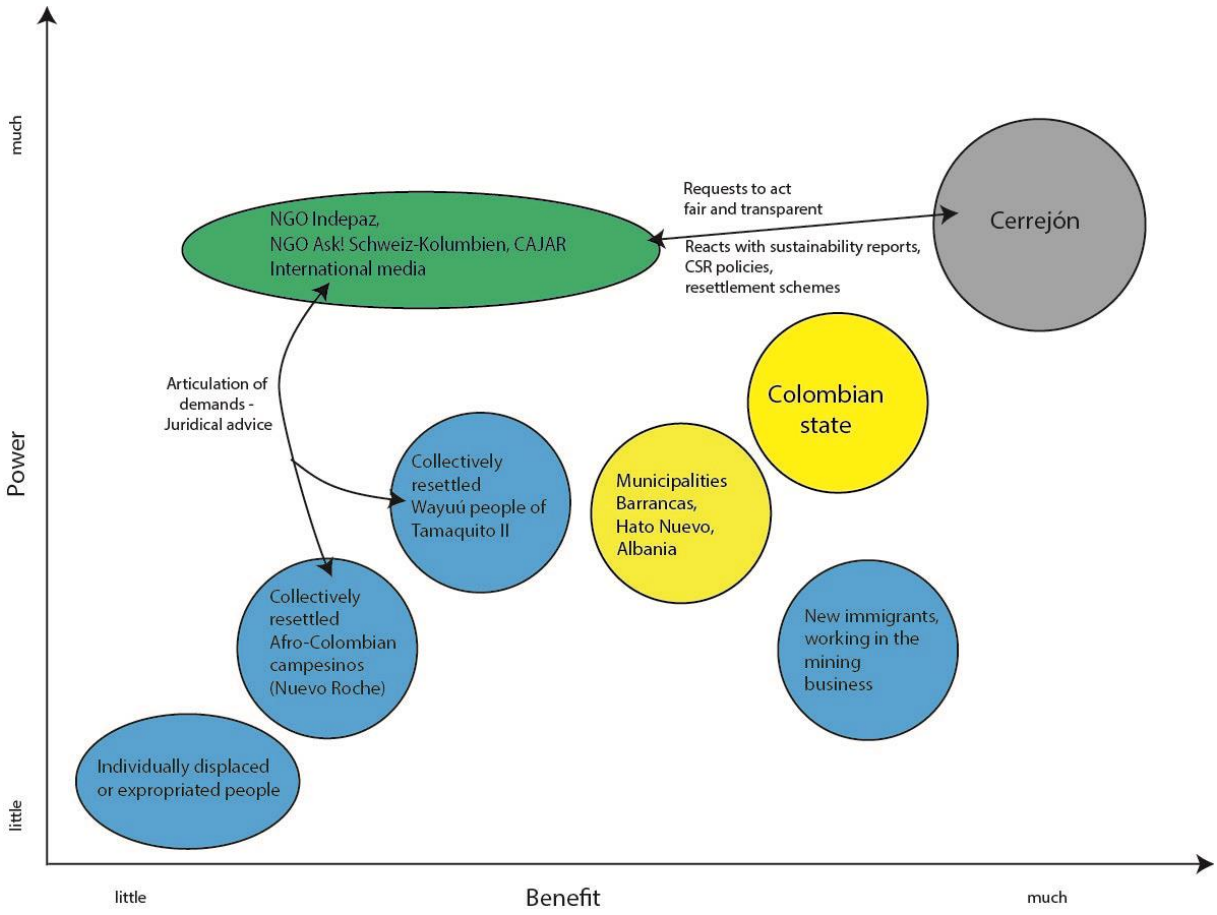
The people who were most negatively affected were the expropriated and displaced people, who had to leave their rural environment in order to make space for mining expansion. In the case of the Tabaco displacement in 2001 the lack of an effective legal system dealing with these suffering people became obvious. An important phenomenon, not mentioned frequently, is the ongoing rural exodus of individual people leaving to nearby urban places. The compensation they received varies, as some could prove landownership and others could not. However, it can be assumed that most people had to move into marginalized quarters or social housing in nearby cities, as the money they received was not enough to buy real estate in the city. The juridical support was poor, as lawyer groups helping these people either came in too late or took money from uninformed people searching for a better life in the cities.

The people who took part in group resettlement were obviously significantly affected by the mine. However, the hardship of losing their property, their ancestral lands, job possibilities, family ties was at least softened. When Cerrejón was buying land around the villages from 1997 onwards, it created a difficult time, by decreasing economic sustainability until the actual resettlements, beginning with Roche in 2011. Since the resettled people have been living in their new houses, the situation has eased. Modern amenities (TV; air conditioning), good housing and

close urban work opportunities have opened a new way of life. However social cohesion has been weakened and people feel insecure. Unemployment seems to be the biggest risk, as resettled rural people have not been prepared for the urban work market.

The people of Tamaquito II used their resettlement to improve their situation in a Political-Ecological sense. Before the resettlement they were not acknowledged as an indigenous community, which made them vulnerable to outside interests, such as colonists demanding land. Furthermore, they had nearly no access to public services like schools or health centers in their remote settlement. When Cerrejón increased the pressure on the community to leave the area, the representatives of Tamaquito II became politically active and used their distinctive cultural background, which also explains the inner cohesion of the group. In 1999 they were an acknowledged Indigenous community according to Colombian law. With the help of different national and international NGOs (Indepaz; Aks, CAJAR), scientist (Aviva Chomsky) and newspapers (NZZ, Die Zeit) attention was drawn to the issue of Tamaquito II. The transnational Cerrejón shareholders reacted on the attention to avoid further accusations of Human Rights abuses with CSR policies including group resettlement practices. The ongoing political discussion with Cerrejón on the one side and Tamaquito II and the NGOs on the other side resulted in relatively harmonious resettlement of the village. It has to be noted that the political strength of Tamaquito II resulted from good representation by their cabildo and the good networking with different parties. Figure 45 shows a diagram representation of the different stakeholder groups, who were affected by the Cerrejón mining project. The power and benefit of the Cerrejón megamining project is used in the axis.

Figure 45: Power-Benefit diagram of the Cerrejón mining stakeholders



Source: B. Hora

11 CONCLUSION, REFLECTION AND OUTLOOK

This study was set out to show the similarities and differences between resettlement processes due to mining expansion of the Cerrejón mine in the department of La Guajira. From a theoretical perspective, extractivism in Colombia was contextualized. From the literature it was seen that Colombia's policies favor an export orientated mining strategy, with minimal governmental interference. The open pit coal mines in the department of La Guajira and Cesar exploit nearly 100% of their production for shipping to consumers, mainly to the USA and European countries for energy production. This investigation examined Cerrejón coal mine in La Guajira, which has a government granted concession area of 690 km^2, where today 115 km^2 are actually used for operation (pits and dumps) and infrastructure.

The different stakeholders of the Cerrejón mining project were explained in a regional geographic introduction with an historical emphasis. La Guajira is a unique department in Colombia in many aspects. It has the highest relative and total number of indigenous people in Colombia. Nearly 300,000 people identify themselves as Wayuú, which is around 43% of the La Guajiran population and 20% of all Colombian indigenous people. Until the 1970's when the former mine owners Carbocol and Intercore commenced with the infrastructural development of the Cerrejón mine, this part of the department was in the shadow of booming centers of other Northern Colombian lowlands and remained very rural. However, development rapidly occurred as a result of the mining in the region and with the influx of Colombian opportunity seekers working for the mine a completely new socio-demographic society evolved.

In the late 1990s the Cerrejón mine planned further extensions of their operation area. This made land expropriations and relocation of the ancestral population necessary. In the case of the Tabaco settlement in 2001, forced displacement involving policemen was carried out in 2001. Following this scandal the new owners of Cerrejón followed a different policy regarding involuntary resettlements. They implemented a CSR-policy, which also included group resettlement program guidelines of the IFC (a branch of the Word Bank). National and international NGOs and media have brought the struggle between the mine and affected communities to public. As a result Cerrejón became more cautious and more transparent with their corporations policies dealing with affected communities.

Empirical research of the two resettled communities of Roche and Tamaquito II has shown a dialectic picture of the resettlements. In Tamaquito II all 31 families living in the formal old village participated in the resettlement process and since 2013 have lived in the resettled community. In contrast, in the case of Roche, it was demonstrated that only 25 out of 400 families, who formally lived in Viejo Roche took part in organized resettlement in 2011. The rest

left the area individually, with money Cerrejón gave as compensation. They left the region to search for a better life in nearby cities. The people who left individually are barely noticeable in the common discourse about resettlements in La Guajira. During this research the focus was on physical group resettlements constructed by Cerrejón. Interviews of displaced individuals would have offered other perspectives of the phenomena of losing their ancestral residential area.

The indigenous community of Tamamquito II has had a relatively satisfactory resettlement process. The 31 families received 300 ha of good quality land. The modern concrete housing and traditional style loam houses are satisfying by the majority of people in the new settlements. Their cultural heritage as Wayuú was integrated into the planning of the resettlement. Sufficient land area for subsistence agriculture, cattle farming in wood pastures and space for cultural rites were also included in the participatory planning of the resettlement. In addition, they are allowed to return to their ancestral sites to celebrate religious festivities. The old site will not be used directly by Cerrejón as dump or pit.

In Nuevo Roche social disarticulation, landlessness, joblessness and loss of common property, which are four of the eight key risk formulated by Cernea (1997) are, to some extent, in place with this resettlement. The agricultural area they received was 25 ha. The survey revealed that only two adults out of 25 were actively involved in agriculture and nine out of 25 were unemployed. The rest were active in commerce or other economic undertakings. Only a minority of the families worked predominantly in agriculture. Therefore, Roche could be described as a mixture of a rural and urban group resettlement. Cerrejón constructed houses of relatively good quality with good connection to the city and in close proximity to other resettlements. They constructed a high school which was appreciated by the majority of the Rocheros. On the old site poor access to these facilities was one of the major problems faced by the Rocheros. What they most disliked was the loss of their traditions. What they meant by tradition, was rearing small livestock like pigs and chickens, which they can no longer do because their backyards are too small and the communal square in the middle of the resettlement is not intended for this purpose. Roche was the first to be resettled in this process and therefore had no example to follow, of how the resettlement could have been better implemented.

For the socio-economic survival of the both communities it will be necessary for resettled people to learn and adapt, at least to some extent, to be able to integrate into to the economic practices of modern society. This means that they will have to create enough monetary income, from which they can pay the running costs of infrastructure and utilities and meet the consumption costs they have acquired by living in their new residential sites. In both cases, the resettlement resulted in an immediate modernization of their housing and infrastructure. Both have access to the electric network, stoves heated by natural gas, good road accessibility and every house is connected with reticulated water. Having a washing machine was common in the Rochero

households. These running costs have to be paid to the provider. This means that their production behaviors will not allow them to exclusively produce subsistence food crops but also cash crops, which can be sold in the nearby urban markets. In the case of Nuevo Roche, which already has a very urban socio-economic structure with only a minority working in agriculture and a high unemployment rate, this transition might be hard to achieve. While some people are working as day laborers in low paid, temporary jobs, this will not serve well for meeting ongoing living expenses and running costs in the long term. Cerrejón also has some responsibility for the inhabitants not feeling that their socio-economic and socio-cultural backgrounds were respected in the new resettlement. Poor access to irrigation water makes the productive situation worse in the dry season in both communities. How the communities will cope with this problem and how much they can bring Cerrejón to account for these issues remains open. This research presented a snapshot of the socio-economic and socio-cultural situation of the two communities. Because the resettlement of Roche in 2011 and in Tamaquito in 2013 took place recently, the analysis offered an overview of short term effects of the resettlement. Tamaquito II was still in the initial stages of their productive projects, whereas Nuevo Roche was already established, albeit for only two years in their new settlement.

The weakness of this survey was that other resettled communities like Patilla, Chancleta and Las Casitas were not surveyed, nor were interviews conducted with community members involved in these resettlements. The reasons were that, primarily due to time constraints no contact had been established with a member of one of these communities during fieldwork in the research area. An interesting question would be how their resettlement process differed from that of the Roche community, as their socio-ethnographic background as Afro-Colombian campesinos is the same.

Further research is warranted within the next few years, in order to investigate the long-term effects of resettlement on residents.

12 ABSTRACT IN ENGLISH

Colombia follows an economic growth strategy, which is mainly based on increasing exploitation of natural resources. The country is with 81 million tons p.a. (2011) the 5th biggest black coal exporter in the world. The coal is extracted in huge open pit mines in the northern departments of La Guajira and Cesar, which are in hands of transnational corporations. The main objective of the study was to identify and characterize social, economic and ecological impacts of resettlements caused by the expansion of the Cerrejón mine in La Guajira. Two resettled communities were picked for an in depth survey, who now live close to the southern outskirts of the municipality of Barrancas. Methods included expert interviews, observations and household surveys in the two communities.

Results show that the Afro-Colombian community of Roche suffered from an ongoing depopulation process of their old settlement before the remaining 25 families participated in the group resettlement (start of construction 2009). Families living in the resettlement now complain about losing their traditional way of life as campesinos (peasants), who used to live mainly from subsistence agriculture. Lack of agricultural land (25 ha in total) leads to limited job opportunities in this field and high unemployment within the community. Furthermore many feel insecure, because of the influx of strangers, due to the close by highway. On the other hand, the modern housing with air-conditioning, fridges, satellite TV and modern construction materials is perceived positive. Better access to education and other services of the city is also favored by the community.

The resettlement of the Wayuú indigenous community Tamaquito II took place later (start of construction 2012). In this process all members (31 families) took part in the resettlement. The community was able the use their indigenous identity as a Political Ecology agent to advocate their rights. The resettlement is significantly bigger (300ha) than the one of Roche. The houses are constructed in consent with the community and traditional elements like a loam house for each family is included. Each family can cultivate 3 ha of fertile soil for horticulture and agricultural production. Furthermore wood pasture is provided to hold cattle. The community is in general satisfied with the resettlement process. The majority of the questioned household representatives agreed with the new housing and the surrounding. A few complained that the area is too hot, too dry and water is too scarce. All agree that they can keep their traditions and most agree that the group was well prepared for the resettlement.

For both communities the resettlements meant an immediate modernization of the infrastructure and an end of the relative isolation, because the new locations are close and well connected to the city of Barrancas. The running expenses like gas, electricity and other expenses

have grown. Hence more monetary income is needed, which probably will result into further integration to the urban society of the surrounding.

The study was able to identify and characterize the short-term effects of the resettlement. Further research in the future is needed to study the long-term effects. Investigating other resettled communities in the region would allow a broader insight into the phenomenon.

13 ZUSAMMENFASSUNG AUF DEUTSCH

Kolumbien verfolgt eine Wirtschaftswachstumsstrategie, die hauptsächlich auf der Ausbeutung von natürlichen Rohstoffen beruht. Das Land ist mit 81 Millionen Tonnen (2011) jährlich der fünftgrößte Steinkohleexporteur der Welt. Die Kohle wird in immensen Tagebauminen in den nördlichen Departements La Guajira und Cesar gefördert, die in Händen von transnationalen Unternehmen sind. Das Ziel der Studie war die sozialen, wirtschaftlichen und ökologischen Auswirkungen von Umsiedlungen aufgrund der Expansion der Cerrejón Mine in La Guajira zu benennen und zu charakterisieren. Zwei umgesiedelte Siedlungen wurden ausgewählt und eingehend untersucht. Die Umsiedlungen befinden sich in der in der Nähe des südlichen Stadtrands der Gemeinde Barrancas. Methoden umfassten Experteninterviews, Beobachtungen und Haushaltsbefragungen in den zwei Gemeinschaften.

Ergebnisse zeigen, dass die Afro-Kolumbianische Gemeinde Roche schon von einer anhaltenden Entvölkerung ihrer alten Siedlung litt, bevor es zur organisierten Umsiedlung der verbleibenden 25 Familien kam (Baubeginn 2009). Familien die jetzt in der Umsiedlung Nuevo Roche leben, klagen über den Verlust ihres traditionellen Lebensstils als campesinos (Kleinbauern), die ihren Lebensunterhalt hauptsächlich durch Subsistenzlandwirtschaft bestritten. Der Mangel an landwirtschaftlichen Flächen (25 ha insgesamt) führt zu eingeschränkten Arbeitsmöglichkeiten in diesem Bereich und zu hoher Arbeitslosigkeit innerhalb der neuen Siedlung. Zudem fühlen sich viele in der neuen Umgebung unsicher, durch den vermehrten Kontakt mit Fremden, aufgrund der Nähe zur Bundesstraße. Andererseits wird die moderne Behausung mit Klimaanlage, Kühlschrank, Satellitenfernsehen und moderne Konstruktionsmaterialien als positiv empfunden. Zudem wird der einfachere Zugang zu Bildungseinrichtungen und anderen Dienstleitungen begrüßt.

Die Umsiedlung der indigenen Wayuú-Gemeinschaft Tamaquito II fand später statt (Baubeginn 2012). Alle 31 Familien, die in der ursprünglichen Gemeinde lebten nahmen an dem Prozess teil. Der Gemeinschaft gelang es ihre indigene Identität als Politisch Ökologisches Mittel zu nutzen um ihre Rechte einzufordern. Die neue Siedlung ist signifikant Größer (300 ha) als die von Roche. Die Gebäude wurden mit dem Konsens der Gemeinschaft geplant und gebaut und traditionelle Elemente wie ein zusätzliches Lehmhaus für jede Familie berücksichtigt. Jede Familie kann 3 ha Land für Gartenbau und Landwirtschaft auf fruchtbarem Boden nutzen. Daneben stehen noch Waldweiden für die Viehhaltung zur Verfügung. Die Mehrheit der der befragten Haushaltsvorstände ist mit der neunen Behausung und Umgebung zufrieden. Lediglich wenige beklagten sich, dass der Ort zu heiß, zu trocken und die Wasserknappheit problematisch

ist. Alle Befragten stimmten zu, dass sie ihre Traditionen erhalten können und die Gruppe gut für den Umsiedlungsprozess vorbereitet war.

Für beide Gemeinschaften bedeutete der Umzug eine sofortige Modernisierung der Infrastruktur und ein Ende der relativen Isolation, da die neuen Standorte nahe und gut verbunden zu der Stadt Barrancas sind. Die laufenden Kosten für Gas, Strom und anderen Ausgaben sind gewachsen. Deswegen ist in der Zukunft ein höheres monetäres Einkommen nötig, dass vermutlich ist zu einer weiteren sozialen und wirtschaftlichen Integration in das stätische Umfeld bewirken wird.

Die Arbeit war in der Lage die Kurzeiteffekte der Umsiedlung zu benennen und zu charakterisieren. Mehr Forschung in der Zukunft wird notwendig sein um die Langzeiteffekte zu untersuchen. Andere umgesiedelte Gemeinschaften in die der Region zu erforschen, würde eine breitere Einsicht in das Phänomen erlauben.

14 RESUMEN EN ESPAÑOL

Colombia considera la explotación sostenida de sus recursos naturales como su principal estrategia de crecimiento económico. Con 81 millones de toneladas en el año 2011, el país es el quinto mayor exportador de carbón en el mundo. La extracción de carbón se realiza en grandes minas a tajo abierto en los Departamentos de La Guajira y Cesar, los cuales se encuentran bajo el control de corporaciones transnacionales. El objetivo principal de esta investigación fue identificar y caracterizar los impactos sociales, económicos y ecológicos causados por procesos de reasentamiento de comunidades debido a la expansión de la mina El Cerrejón, en el Departamento de La Guajira. Para ello dos comunidades, las cuales en la actualidad habitan la periferia sur del municipio de Barrancas, fueron analizadas en profundidad. Metodológicamente, la investigación consideró entrevistas a expertos, observación y cuestionarios aplicados a hogares en dos comunidades reasentadas.

Los resultados obtenidos muestran que la comunidad afrocolombiana de Roche se enfrentaba a un proceso de despoblamiento de su asentamiento tradicional previo a la participación de las 25 familias en el proceso de reasentamiento (inicio de la construcción en 2009). Las familias que viven actualmente en los reasentamientos señalan haber perdido sus modos de vida tradicionales como campesinos, dado que su principal actividad era la agricultura de subsistencia. La falta de suelo agrícola (25 hectáreas en total) provocó una disminución de las oportunidades laborales y se tradujo en un alto desempleo en la comunidad. Asimismo, muchos se sienten inseguros debido a la cercanía de la vía principal y la presencia de extraños en la comunidad. Por otro lado, las modernas condiciones de vida alcanzadas en los hogares, los que cuentan ahora con aire acondicionado, refrigeradores, televisión satelital y modernas construcciones, son percibidas como positivas. Lo mismo ocurre con el mejor acceso a educación y otros servicios de la ciudad, los cuales son calificados como positivos por la comunidad.

El reasentamiento de la comunidad indígena Wayuú de Tamaquito II ocurrió posteriormente (inicio de la construcción 2012). En este proceso todos los miembros (31 familias) fueron parte del proceso. La comunidad tuvo la posibilidad de utilizar sus derechos indígenas, tal como lo menciona la Ecología Política, como un agente para reivindicar sus derechos. Este reasentamiento es considerablemente mayor que el de Roche (300 hectáreas). Las viviendas fueron construidas de manera consensuada con la comunidad y con elementos tradicionales como el bahareque. Cada familia puede cultivar 3 hectáreas de suelo fértil para la producción hortícola y agrícola. Asimismo, poseen pastos para la tenencia de ganado. En general, la comunidad está satisfecha con el proceso de reasentamiento. La mayoría de los hogares encuestados señalan su conformidad con las nuevas viviendas y los alrededores de éstas. Un

grupo reducido manifestó molestias con el área (demasiado calor, muy seco y problemas de escasez de agua). Finalmente, la totalidad de los entrevistados concuerdan en que han sido capaces de mantener sus tradiciones y señalan haberse sentido bien preparados para enfrentar el proceso de reasentamiento.

Para ambas comunidades el proceso de reasentamiento significó un proceso radical de modernización de su infraestructura y el fin de un aislamiento relativo. Sin embargo, los pagos de gas, electricidad y otros gastos se han acrecentado. Es aquí donde surge la necesidad de generar mayores ingresos económicos, los cuales probablemente puedan provenir de una mayor integración de las comunidades a la sociedad urbana y sus actividades.

Esta investigación permitió identificar y caracterizar los efectos recientes de estos procesos de reasentamiento. Otras investigaciones son necesarias para determinar los efectos al mediano y largo plazo. Asimismo, el análisis de otras comunidades reasentadas en la región permitiría obtener una visión más amplia de este fenómeno.

15 List of Figures

16 LIST OF TABLES

17 List of Textboxes

18 BIBLIOGRAPHY

Acosta, A. (2013): Extractivism and neoextractivism: two sides of the same course. In: Lang, M. & D. Mokrani (Hrsg.): Beyond Development Alternative versions from Latin America. Fundación Rosa Luxemburg. Quito. S. 61-86

Albuja, S. & Ceballos, M. (2010): Urban displacement and migration in Colombia In: Forced Migration Review Vol.34 No.10

Alcaldia Bogotá (2013): Constituión Política de Colombia 1991. Bogotá http://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=4125 accessed 17.10.2013

Alcaldia Municipal de Riohacha (2012): Plan de desarrollo. Municipio de Riohacha. 2012-2015

Alcaldia Municipal de Barrancas (2012): Plan de desarrollo. El Progreso Continúa. Municipio de Barrancas. 2012-2015

Alcaldia Municipal de Hato Nuevo (2014): Administración municipal de Hatonuevo, replantea agenda tabaco. http://www.hatonuevo-laguajira.gov.co/noticias.shtml?apc=ccx-1-&x=1964097 accessed 07.07.2014

Álvarez, J. (2005): Vocalic mora augmentation in the morphology of Guajiro/Wayuunaiki In: Proceedings from the Eighth Workshop on American Indigenous Languages. Santa Barbara Working Papers in Linguistics. Vol. 16

Anglo American (2013): Preliminary Results 2013 http://www.angloamerican.com/~/media/Files/A/Anglo-American-Plc/media/releases/2014pr/pr2014-02-14.pdf accessed 05.04.2014

Arbeitsgemeinschaft Energiebilanzen (2013): Bruttostromerzeugung in Deutschland von 1990 bis 2012 nach Energieträgern. Berlin http://www.ag-energiebilanzen.de/index.php?article_id=29&fileName=20130809_brd_stromerzeugung1990_2012.pdf accessed 10.12.2013

Ardila Beltrán, E. & C. Ternera Lobato .& J. Giraldo Barbosa (2010): Las Paradojas de una Bonanza. Impactos de la Actividad Carbonera en los Departamentos del Cesar y Magdalena. Santa Marta.

Ask! (Arbeitsgruppe Schweiz-Kolumbien) (2014): Verantwortungsvoller Bergbau – nur etwas für den Hochglanzprospekt? http://www.askonline.ch/themen/wirtschaft-und-menschenrechte/bergbau-und-rohstoffkonzerne/el-cerrejon-und-

xstrata/verantwortungsvoller-bergbau-nur-etwas-fuer-den-hochglanzprospekt/#_ftnref1 assessed 12.06.2014

Ayelazuno, J. A. (2014): The 'new extractivism' in Ghana: A critical review of its development prospects In: The Extractive Industries and Society. DOI: 10.1016/j.exis.2014.04.008

Banco de la República (Hrsg.) (1998): Plan de desarrollo del subsector carbón: 1999 – 2010. Bogotá

Bebbington, A (2009): Latin America: Contesting extraction, producing geographies In: Singapore Journal of Tropical Geography Vol. 30 No. 1 S. 7-12

Bebbington, A. & Humphreys Bebbington, B. (2011): An Andean Avatar: Post-Neoliberal and Neoliberal Strategies for Securing the Unobtainable In: New Political Economy Vol. 16. No. 1 S. 131-145

Bebbington, A. & L. Hinojosa & D. Humphreys Bebbington & ML. Burneo & X. Warnaars (2008): Contention and ambiguity: Mining and the possibilities of development. In: Development and Change Vol. 39 No. 6 S. 884-914

Becker, E. & D. Hummel & T. Jahn (2011): Gesellschaftliche Naturverhältnisse als Rahmenkonzept. In: Groß, M. (Hrsg.): Handbuch Umweltsoziologie. Wiesbaden. S. 75-96

Becker, E. & T. Jahn (2006): Soziale Ökologie. Grundzüge einer Wissenschaft von den gesellschaftlichen Naturverhältnissen. Frankfurt am Main.

BHPBilliton (2013): Annal Report 2013 http://www.bhpbilliton.com/home/investors/reports/Documents/2013/BHPBillitonAnnualReport2013_Interactive.pdf accessed 05.05.2014

Blaikie, P. & H. Brookfield (1987): Land Degradation and Society. London & New York

Blaikie, P. (1995): Changing Environments or Changing Views? A Political Ecology for Developing Countries In: Geography Vol. 80 No. 3 S. 203-214

Bloomberg (2014): Pain at the Pump. Gasoline Prices by Country http://www.bloomberg.com/visual-data/gas-prices/ accessed 12.02.2014

Bonet, J & A. Urrego (2014): El Sistema General de Regalías: ¿mejoró, empeoró o quedó igual? In: Documentos de trabajo sobre Economía Regional. Vol. 198 Bogotá

Boris, D. (2009): Lateinamerikas politische Ökonomie. Ausbruch aus historischen Abhängigkeiten im 21. Jahrhundert? 2. Auflage. Hamburg

Borsdorf, A. & Marchant, C. (Hrsg.) (2013): Kolumbien – Ein Land zwischen neoliberaler Öffnung und Nachhaltigkeit. Strategien der Regionalentwicklung im Zuge des Globalen Wandels anhand ausgewählter Beispiele an der Karibikküste. Innsbruck.

Borsdorf, A. & Stadel, C (2013): Die Anden – Ein geographisches Porträt. Heidelberg.

Borsdorf, A. (2006): Die naturräumlichen Grundstrukturen Lateinamerikas. In: Borsdorf, A. & W. Hödl (Hrsg.): Naturraum Lateinamerika – Geographische und biologische Grundlagen. Wien. S. 11-34

Borsdorf, A & Bender, O. (2010): Allgemeine Siedlungsgeographie. Vienna, Cologne, Weimar

BP (Beyond petroleum) (2013) Statistical Review of World Energy June 2013 http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical_review_of_world_energy_2013.pdf accessed 02.11.2013

Braun, A. (2002) Das Karbon. Nicht nur Steinkohle In: Biologie unserer Zeit Vol. 32 No. 5 S. 286-293

Bridge, G. (2004): Mapping the bonanza: geographies of the mining investment in an era of neoliberal reform. In: The Professional Geographer Vol. 56 No. 3. S. 406-421

Bryant, R. & S. Bailey (1997): Third World Political Ecology. London

Bultmann, I. (2007): Ressourcennationalismus in Lateinamerika. In: Rohstoffboom mit Risiken. Jahrbuch Lateinamerika Analysen und Berichte Vol. 31 Münster S. 40-62

Burchhardt, H.-J. (2004): Zeitenwende. Politik nach dem Neoliberalismus. Stuttgart

Cabrera, M (2011): Nuevo systema de regalías: avances innegables, errores deliberados. In: Portal Razón Pública. http://www.razonpublica.com/index.php/regiones-temas-31/2103-cabrera.html accessed 03.05.2014

CAJAR (Colectivo de Abogados José Alvear Restrepo) (2006): Cerrejón impactos de la mineria an la Guajira. Bogotá.

CENSAT Agua Viva (2010): Conflictos Socio-Ambientales por la Extracción Minera en Colombia. Casos de la Inversión Británica. Cali

Cernea, M. (1997): The Risks and Reconstruction Model of Resettling Displaced Populations. In: World Development Vol. 25 No. 10 Washington D.C. S. 1569-1587

Cernea, M. (2000): Risks, Safeguards, and Reconstruction: A Model for Population Displacement and Resettlement. In: Cernea, M. & C. McDowell (Hrsg.): Risks and Reconstruction: Experiences of Resettlers and Refugees. The World Bank. Washington

Cerrejón (2006): Carbón para el mundo progreso para Colombia. Powerpoint presentation. https://www.icesi.edu.co/sudafrica/pdfs/conferencias/2_presentacion.pdf accessed 24.03.2014

Cerrejón (2011a): Resumen del Proyecto de Expansión Iiwo'uyaa para Grupos de Interés. Bogotá

Cerrejón (2011b): Sustainability report. Bogotá

Cerrejón (2014a): Historia http://www.cerrejon.com/site/nuestra-empresa/historia.aspx accsessed 14.03.2014

Cerrejón (2014b): Nuestra empresa http://www.cerrejon.com/site/nuestra-empresa.aspx accsessed 05.05.2014

Cerrejón (2014c): Human Rights Policy

http://www.cerrejon.com/site/Portals/1/Documents/pdf/policies/Cerrejon_Human_Rights_Policy.pdf accessed

Cerrejón (2014d): Roche

http://www.cerrejon.com/site/english/sustainable-development-%E2%80%A2-social-responsibility/resettlements/roche.aspx accessed 05.05.2014

Cerrejón (2014e): Tamaquito II

http://www.cerrejon.com/site/english/sustainable-development-%E2%80%A2-social-responsibility/resettlements/tamaquito-ii/phase-i.aspx accessed 03.05.2014

Cerrejón (2014f): Indicators

http://www.cerrejon.com/site/english/press-room/cerrejons-numbers.aspx accessed 30.06.2014

Chakraborty, M. et al. (2002): Determination of the emission rate from various opencast mining operations. In: Environmental Modeling & Software Vol. 17 S. 467-480

Chomsky, A. & G. Leech & S. Striffler (2007) (Hrsg.): The People Behind Colombian Coal: Mining, Multinationals and Human Rights. Chicago.

Coakley, G (1998): The Mineral Industry of Ghana. International Minerals Statistics and Information. US Geological Survey. Washington

Coal International (2013): Emerging coal producer in Colombia. January February 2013. Newark on Trent. S. 15

Congreso de Colombia (2001): Ley 685 de 2001. Bogotá http://www.minambiente.gov.co/documentos/ley_0685_150801.pdf accessed 02.06.2014

Constitution Finder (2014): University of Richmond http://confinder.richmond.edu/ accessed 04.05.2014

Contraloría General de la República (Hrsg.) (2013): Minería en Colombia – Fundamentos para superar el modelo extractivista.

Correa, R. (2008): Cadena Radial, 11 October 2008

Corpoguajira (2013): Acuerdo No. 0009 published on the 19.09.2013 http://www.corpoguajira.gov.co/web/attachments_Joom/article/997/ACUERDO%200009.pdf accessed 03.06.2014

Coy, M. & F. Geipel (2004): Staudämme in Brasilien. Großprojekte zur Energiegewinnung im Spannungsfeld zwischen wirtschaftlichem Nutzen und sozialen Kosten. In: Geographische Rundschau Vol. 56 No. 12 S. 28-35

DANE (Departamento Administrativo Nacional de Estadística) (2005a): Aplicativo de consulta de población indígena. Bogotá

http://190.25.231.237:81/gruposEtnicos/indigenas.phtml accessed 07.03.2014

DANE (Departamento Administrativo Nacional de Estadística) (2005b): Proyecciones nacionales y depramentales de poblacíon 2005 – 2020. Bogotá

DANE (Departamento Administrativo Nacional de Estadística) (2010): Censo General 2005. Bogotá http://www.dane.gov.co/index.php/poblacion-y-demografia/censos accsessed 18.12.2013

DANE (Departamento Administrativo Nacional de Estadística) (2012a): Mercado Laboral Departementos 2011. http://www.dane.gov.co/files/investigaciones/boletines/ech/juventud/presentacion_dep_11.pdf accessed 30.06.2014

DANE (Departamento Administrativo Nacional de Estadística) (2012b): La Guajira: Pobreza Monetaria 2012 http://www.dane.gov.co/files/investigaciones/condiciones_vida/pobreza/Guajira_Pobreza_2012.pdf accsessed 08.05.2014

DANE (Departamento Administrativo Nacional de Estadística) (2013a): Anexos estadísticos 2013 Colombia, exportaciones totales, según CIIU Rev. 3 1995 - 2013 (octubre de 2013). Bogotá http://www.dane.gov.co/files/investigaciones/comercio_exterior/exportaciones/2013/anexos_export_oct13.xls accessed 11.12.2013

DANE (Departamento Administrativo Nacional de Estadística) (2013b): Colombia, exportaciones de café, carbón, petróleo y sus derivados, ferroníquel y no tradicionales según valores y kilos netos http://www.dane.gov.co/files/investigaciones/comercio_exterior/exportaciones/2013/expo_tra_notra_oct13.xls accsessed 15.04.2014

DANE (Departamento Administrativo Nacional de Estadística) (2014): Cuentas Trimestrales – Colombia Producto Interno Bruto (PIB) Cuarto Trimestre de 2013 y Total Anual. Bogotá. http://www.dane.gov.co/files/investigaciones/boletines/pib/bol_PIB_IVtrim13.pdf accessed 15.05.2014

DanWatch (2010): The course of coal. Our coal consumption causes diseases, pollution, and poverty in Colombia. http://www.multiwatch.ch/cm_data/100505_danwatch_cerrejon.pdf accessed 20.06.2014

Des Roziers, P. (1995): Cultures mafieuses: l'exemple colombien.

De Wet, C. (1995): Moving together, Drifting Apart, Betterment Planning and Villagization in a South African Homeland. Witwatersrand University Press. Johannesburg

De Wet, C. (Hrsg.) (2006): Development-Induced Displacement. Problems, Policies and People. In: Studies of Forced Migration. Vol. 18 New York & Oxford

Denny, M. & B. Lockwood & G. Somero (2009): Can the giant snake predict palaeoclimte? In: Nature 460: E3

Destatis (Statistisches Bundesamt Deutschland) (2012): Steinkohleimporte nach Deutschland accessed 10.12.2013

Dones, R. & Bauer, C. & Röder, A. (2007): Kohle: In: Dones, R. (Hrsg). et al. In: Sachbilanzen von Energiesystemen: Grundlagen für den ökologischen Vergleich von Energiesystemen und den Einbezug von Energiesystemen in Ökobilanzen für die Schweiz. Final report ecoinvent No. 06-Vilingen, Swiss Centre for Life Cycle Inventories. Dübendorf (CH)

Downing, T. (2002): Avoiding New Poverty: Mining-Induced Displacement and Resettlement. Mining, Minerals and Sustainable Development (MMSD) project of the International Institute for Environment and Development (IIED). London

EIA (Energy Information Administration) (2011a) Total Coal Exports (Thousand Short Tons). Washington http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=1&pid=1&aid=4&cid=&syid=1995&eyid=2011&unit=TST accessed 10.12.2013

EIA (Energy Information Administration) (2011b) Total Coal Imports (Thousand Short Tons) Washington http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=1&pid=1&aid=3 accessed 10.12.2013

El Tiempo (2013a) Farc atacan la línea férrea de Cerrejón y cuasan descarrilamiento (13.10.2013)

El Tiempo (2013b) Un soldado muerto y dos heridos en enfrentatmientos con las Farc (13.11.2013)

Engineering & Mining Journal (2011): Colombian Coal – Project development and exploration investment. Jacksonville/Florida S. 104-109

Facchini, K. & K. Faschingleitner & C. Marchant (2011): Von Müttern und Töchtern: Landwirtschaft im Biosphärenreservat Cinturón Andino In: Borsdorf, A. & M. Mergili (Hrsg.): Kolumbien im Wandel – Erkenntnisse und Eindrücke einer dreiwöchigen Studienexkursion durch Zentral- und Südkolumbien. inngeo – Innsbrucker Materialien zur Geographie Vol. 14 Innsbruck S. 77–83

FAO (Food and Agricultural Organization) (2000): The World Cassava Economy. Facts, Trends and Outlook. Rome

Fernandes, W. (1991): Power and powerlessness: development projects and displacement of tribals. In: Social Action Vol. 41 No. 2 S. 243-270

Fierro Morales, J. (2012): Políticas mineras en Colombia. Bogotá

Finer, M. & Moncel, R. & Kenkins, C. (2010): Leaving the Oil Under the Amazon: Ecuador's Yasuní-ITT Initiative In: Biotropica Vol. 42 No. 1 S. 63-66

Gebhardt et al. (Hrsg.) (2007): Geographie. Physische Geographie und Humangeographie. München

Geipel, F. (2003): Politische Ökologie von Staudammprojekten – Interessenskonflikte und sozioökonomische Folgen des Staudammes Lajeado (Toncatins, Braslien). Diplomarbeit. Tübingen

Geipel, F . (2005): Brasilien Wasserbau Raumplanung Politisch-ökologische Analyse der Umsiedlungsproblematik beim Staudamm Lajeado (Tocantins, Brasilien). Ein Großstaudamm zwischen neuen Rahmenbedingungen und alten Umsetzungsmethoden In: Tübinger Geographische Studien Vol. 142 Tübingen S. 321-348

GlencoreXstrata (2014): Preliminary Results 2013 http://www.glencorexstrata.com/assets/Investors/GLEN-2013-Preliminary-Results.pdf accessed 15.05.2014

Gonzáles, M.C. (2007): Social study of the town of Tabaco in 2000 In: Chomsky, A. & G. Leech & Striffler, S. (Hrsg.): The People Behind Colombian Coal: Mining, Multinationals and Human Rights. Chicago. S. 34-37

Gonzáles, L. (2011): Desalojos forzadas, reasentamientos involuntarios y derechos de las comunidades In: Instituto de Estudios para el Desarollo y la Paz (Indepaz)(Hrsg.): Megaminería y reasentimentios forzadas. Bogotá S. 7-30

Gonzáles, L & Paola, D. (2013): Informe de visita y reuniones con comunidades a reasentar en la Guajira. In: Indepaz (Hrsg.) http://www.indepaz.org.co/wp-content/uploads/2013/06/Visita-a-comunidades-en-mayo-de-20131.pdf accessed 04.07.2014

Görg, C. (2003): Regulation der Naturverhältnisse. Zu einer kritischen Theorie der ökologischen Krise. Münster

Goulet, J.-G. (1981): El universo social y religioso guajiro. Maracaibo.

Grajales, J (2011): The rifle and the title: paramilitary violence, land grab and land control in Colombia. In: Journal of Peasant Studies. Vol. 38 No.4 S. 771-792

Gudynas, E. (2010) Si eres tan progresista – Por qué destruyes la naturaleza? Neoextrctivismo, izquierda y alternativas. In: Ecuador Debate. Conflictos del Exttractivismo. Centro Andino de Acción Popular (CAAP) No. 79 Quito S. 61-81

Guerra, W. (2000): Report on the community of Tamaquito, 2000 In: Chomsky, A. & G. Leech & Striffler, S. (Hrsg.) (2007): The People Behind Colombian Coal: Mining, Multinationals and Human Rights. Chicago. S. 38-40

Gutiérrez, A. (2007): Mujeres wayúu, territorio y comercio de combustible en la frontera colombo-venezolana. In: Mujeres indígenas, territorialidad y biodiversidad en el contexto latinoamericano. Bogotá S. 93-100

Huber, L. (2007): Factsheets zur Ausweitung von Cabones del Cerrejón und deren Konsequenzen auf die umliegende Bevölkerung. In: Ask! Arbeitsgruppe Schweiz-Kolumbien (Hrsg.)

http://www.askonline.ch/fileadmin/user_upload/documents/Thema_Wirtschaft_und_Menschenrechte/Bergbau_Rohstoff/Cerrejon_Xstrata/FactsheetCerrejon-LH.04.07.pdf accessed 10.05.2014

Harker, J. & S. Kalmonovitz & N. Killick & E. Serrano (2008): Cerrjon Coal and Social Responsibility. An Independent Review of Impacts and Intend. Bogotá http://www.cerrejon.com/site/Portals/1/Documents/pdf/FinalPanelReportFebruary.pdf accsessed 15.05.2014

Head, J. & J. Bloch & A. Hastings & J. Bloque & E. Cadena & F. Herrera & F. Polly & C. Jaramillo (2011): Giant Boid snake from Palaeocene neotropics reveals hotter past equatorial temperatures. In: Nature 457 S. 715-717

Hostein, N. (2010): El pueblo wayuu de la Guajira colombo-venezolana: un panorama de su cultura. In: Cuadernos de Antropología Vol.20 No.12

Huertas, J. & M. Huertas & S. Izquierdo & E. Gonzalez (2012): Air quality impact assessment of multiple open pit coal mines in northern Colombia In: Journal of Environmental Management. Vol. 93 S. 121-129

Hummel, D. (Hrsg.) (2008): Population dynamics and supply systems. A transdiciplinary approach. Frankfurt/ New York

Humphreys Bebbington, D. & A. Bebbington(2010): Extraccíon, territorio e ineuqidades: el gas en el Chaco boliviano. In: Ecuador Debate. Conflictos de extractivismo. Centro Andino de Accíon Popular (CAAP) No. 79 S. 83-104

Humphreys Bebbington, D. & A. Bebbington(2012): Post-what? Extractive industries, narratives of development and socio-environmental disputes across the (ostensibly changing) Andean region In: Haarstad, H. (Hrsg.) New Political Spaces in Latin American Natural Resource Governance

IDEAM (Instituto de Hidrología, Meteorogía y Estudios Ambientales) (Hrsg.) (2014): Mapas clima http://institucional.ideam.gov.co/jsp/1772 accessed 02.03.2014

IFC (International Finance Corporation) (2012): Performance Standards on Environmental and Social Sustainability

Indepaz (Instituto de Estudios para el Desarrollo y la Paz) (Hrsg.) (2013): El Río Ranchería. Perdido en el Desierto. Bogotá.

Indermühle, S. (2011): Transnacionales mineras en Colombia. In: Instituto de Estudios para el Desarollo y la Paz (Indepaz)(Hrsg.) Megaminería y reasentimentios forzadas. Bogotá S. 75-141

Jaramillo, C. & B. Bayona & A. Pardo-Trujillo & M. Rueda & V. Torres. & G. Harrington & G. Mora (2007): The palynology of the Cerrejón Formation (upper Paleocene) of Northern Colombia. In: Palynology Vol. 31 S. 153–189

Kellermann, C. (2006): Die Organisation des Washington Consensus. Bielefeld

Kohlhepp, G. (1998): Große Staudammprojekte in Brasilien. Ökologische und sozioökonomische Probleme. In: Geographische Rundschau Vol. 50 No. 7/8 S. 428-436

Kohlhepp, G. (2002): Interessenkonflikte beim Bau großer Wasserkraft- und Staudammprojekte in Brasilien. In: Meyer, G. et al. (Hrsg.): Wasserkonflikte in der Dritten Welt (= Veröffentlichungen des Interdisziplinären Arbeitskreises Dritte Welt, 15). Mainz. S. 95-124

Krings, T. (1998): Mensch-Umwelt-Beziehungen in den Tropen unter besonderer Berücksichtigung der Politischen Ökologie als Gegenstand der geographischen Entwicklungsforschung In: Rundbrief Geographie Vol. 149 S. 22-25

Krings, T. & Coy, M. (2000): Umweltveränderungen und Politische Ökologie in Entwicklungsländern. In: Blotevogel, H. H. & Ossenbrügge & Wood, G. (Hrsg.): Lokal verankert – weltweit vernetzt. 52. Deutscher Geographentag Hamburg 1999. Tagungsbericht und wissenschaftliche Abhandlungen. Stuttgart S. 396-399

Krings, T. & M. Müller (2001) Politische Ökologie: Theoretische Leitlinien und aktuelle Forschungsfelder. In: Reuber, P. & G. Wolkersdorfer. (Hrsg.): Politische Geographie: Handlungsorientierte Ansätze und Critical Geopolitics (= Heidelberger Geographische Arbeiten, Vol. 112). Heidelberg S. 93-116

Los Angeles Times (2013) Stuck in Venezuela with those currency exchange blues http://articles.latimes.com/2013/nov/12/world/la-fg-wn-venezuela-currency-exchange-air-travel-20131112 accessed 28.05.2014

Low, S. & Altman, I. (1992): Place Attachment. In: Plenum Press. New York.

Lust, J. (2014): Social Struggle and the Political Economy of Natural Resource Extraction in Peru In: Critical Sociology DOI: 10.1177/0896920513501354

McDowell, C. (Hrsg.) (1996): Understanding the Impoverishment: The Consequences of Development-Induced Displacement. Providence & Oxford

McWilliams, A. & D. Siegel & P. Wright (2006): Corporate Social Responsibility In: Journal of Management Studies. Vol. 42 No. 1 S. 1-18

Mertins, G. (2004): Kolumbien im Einfluss von Guerillas, Drogenmafia und Paramilitares In: Geographische Rundschau Vol.54 No.3 S. 43-47

Michel, J. (2008) Status and Impacts of the German Lignite Industry, the Swedish NGO Secretariat on Acid Rain. Goteborg S.17

Mineweb (2014) Word's Top 100 Mining Stocks. http://www.mineweb.com/mineweb/content/en/mineweb-mining-finance-investment-old?oid=95737&sn=Detail accessed 05.4.2014

Mining Technology (2014) Rhineland Lignite Mining, Germany http://www.mining-technology.com/projects/rhineland/ accessed 29.01.2014

Ministerio de Cultura (2010) Wayuú, gente de arena, sol y viento. Bogotá http://www.mincultura.gov.co/areas/poblaciones/noticias/Documents/Caracterizaci%C3%B3n%20del%20pueblo%20Wayu%C3%BA.pdf accessed 06.10.2014

Ministerio de Hacienda y Crédito Público (2011): Reforma al régimen de regalías. Equidad, ahorro, competitividad y buen gobierno. Bogotá.

Ministerio de Minas y Energía et al. (Hrsg.) (2004): Guía ambiental transporte de carbón. Medellín

Ministerio de Relaciones Exteriores (2011) Colombia: a country with energy diversity. República de Colombia. Bogotá http://www.cancilleria.gov.co/sites/default/files/DocEstrategicos/EnergiaWebEn.pdf accessed 11.12.2013

Montes Veira, S. (Hrsg.): (2003) La Guajira. Colombia

NIOSH (National Institute for Occupational Safety and Health) (Hrsg.) (2005): Significant Dust Dispersion Models for Mining Operations IC 9478. Pittsburgh, PA

Nötstaller, R. (2009): Entwicklungstendenzen im Rohstoffsektor –Fakten und Folgerungen. In: Berg- und Hüttenmännische Montanhefte. Vol. 154 No. 8. Leoben

Oliver, J. (1990): Refelxiones sobre los Posibles Orígenes del Wayu (Guajiro). In: Ardila, G (Hrsg.): La Guajira: De la memoria al povernir: Una visíon antopológica. Bogotá

Oliver-Smith, A. (2001): Displacement, resistance and the critique of development: from the grass roots to the global. Final Report prepared for: ESCOR R7644 and the Research Programme on Development Induced Displacement and Resettlement. Oxford

Oliver-Smith, A. (2009) (Hrsg.): Development & Dispossession: The Crisis of Forced Displacement and Resettlement. School for Advanced Research Advanced Seminar Series. Santa Fe

Parques Nacionanels Naturales de Colombia (2014): Vivienda de Los Wayú. http://www.parquesnacionales.gov.co/PNN/portel/libreria/php/decide.php/xml/decide.php?patron=01.170604 accessed 15.04.2014

PAX (Pax for Peace) (2012): Free, Prior and Informed Consultation in Colombia: the case of the expansion of the Cerrejón project. http://www.paxforpeace.nl/media/files/free-prior-and-informed-consultation-colombia.pdf accessed 29.06.2014

PBI (Peace Birgades International) Colombia (2011): Minería en Colombia: A qué precio? Vol.18

Penz, P. & J. Drydyk & P. Bose (2011): Displacement by Development. Ethics, Rights and Responsibilities. Cambridge University Press. Cambridge

Pérez, A. (2007): A legal view of the Case of Tabaco In: Chomsky, A. & G. Leech & Striffler, S. (Hrsg.): The People Behind Colombian Coal: Mining, Multinationals and Human Rights. Chicago. S. 54-56

Poveda, G. (2005): La minería Colonial y Republicana. Cinco siglos de variantes y desarrollos. Bogotá

Presidencia de la República Colombia (2008): Constitution politica de Colombia. Bogotá http://web.presidencia.gov.co/constitucion/index.pdf accessed 10.03.2014

Programa Presidencial de Derechos Humanos y DIH (2010): Diagnósitco de la situación del pueblo inígena Wayúu. http://www.derechoshumanos.gov.co/Observatorio/Documents/2010/DiagnosticoIndigenas/Diagnostico_WAY%C3%9AU.pdf accessed 12.04.2014

Programa Presidencial de Derechos Humanos y DIH (2010): Diagnósitco de la situación del pueblo inígena Wayúu. http://www.derechoshumanos.gov.co/Observatorio/Documents/2010/DiagnosticoIndigenas/Diagnostico_WAY%C3%9AU.pdf accessed 12.04.2014

Ramirez, N (2010): Interview mit Nilson Ramirez, Lehrer des indigenen Dorfes Tamaquitos im Departement Guajira. In: Ask! Online Interview on the 19th and 20th November http://www.askonline.ch/fileadmin/user_upload/documents/Thema_Wirtschaft_und_Menschenrechte/Bergbau_Rohstoff/Glencore_Kolumbien/Interview_Nilson_Ramirez.pdf accessed 28.05.2014

Reichel-Dolmatoff, A. & G. Reichel-Dolmatoff (2013): The People of Aritama: The Cultural Personality of a Colombian Mestizo Village. First published in 1961.

Ritzer, G. (2003) Rethinking Globalization: Glocalization/Grobalization and Something/Nothing In: Sociological Theory. Vol. 21 No. 3 S. 193-209

Robbins, P (2004) Political Ecology. Critical Introductions to Geography.

Ronge, S. (2013): Displacement by Development? A Social-Ecological Conflict Ethnography about Mining-Induced Resettlements in the Carboniferous Area of Cesar, Colombia. Master thesis. University of Vienna. Vienna

Ronderos, M. T. (2012): El millionario y oscuro negocio del carbón: Auge y miseria en El Cesar colombiano. In: Centro de investigacíon periodista (CIPER). Santiago de Chile

http://ciperchile.cl/2012/02/23/el-millonario-y-oscuro-negocio-del-carbon-auge-y-miseria-en-el-cesar-colombiano/ accessed 31.01.2014

Roy, A. (2002): Die Politik der Macht. 4. Auflage. München

Rudas, G. (2011): Contexto del Sistema Nacional Ambiental y la minería. Uso del suelo, recursos tributarios y capacidad de regulación. Taller sobre Minería y Proyectos Extractivos Sus Impactos en Territorios Étnicos. Bogotá, 2 a 4 de agosto de 2011(powerpoint presentation)

Rueda, J. & G. Becerra (2011): La Guajira - Vision historica y antropologica de larga duración

Sarmiento, N. (2008): Virtue or strategy? Weaving Social Responsibility into the Coal World In: Colombia Internacional Vol. 67 S. 132-151

Schmalz, S. (2013): Neo-Extraktivismus in Lateinamerika? In: Burchardt, H.-J. & Dietz, K. & Öhlschläger, R. (Hrsg.): Umwelt und Entwicklung im 21. Jahrhundert. Impulse und Analysen aus Lateinamerika. Baden-Baden S.47-60

Scholz, F. (2000): Perspektiven des "Südens" im Zeitalter der Globalisierung. In: Geographische Zeitschrift. Vol. 88 No. 1 S. 1-20

Slack, K. (2005): Mission impossible?: Adopting a CSR-based business model for extractive industries in developing countries. In: Resources Policy. Vol. 37. S. 179-184

SIMCO (Sistema de información minero colombiano) (2014): Producción Oficiales de Minerales en Colombia. Bogotá http://www.simco.gov.co/simco/Estad%C3%ADsticas/Producci%C3%B3n/tabid/121/Default.aspx accessed 10.02.2014

Sniderman, K. (2009): Biased reptilian palaeothermometer? In: Nature Vol. 460 E1-E2

Sonengberg, D. & F. Münster (2001): Mining Minerals Sustainable Development. Southern Africa. Research Topic 3: Mining and Society - Involuntary Resettlement In: MMSDSA Regional Research. African Institute of Corporate Citizenship South Africa.

Spiegel Online (2014): Stichwahl in Kolumbien: Präsident Santos wiedergewählt (16.06.2014) http://www.spiegel.de/politik/ausland/kolumbiens-praesident-santos-wiedergewaehlt-a-975353.html accessed 25.06.2014

Springer Gabler Verlag (Hrsg.) (2014): Gabler Wirtschaftslexikon. Stichwort: Transnational Coporation (TNC) http://wirtschaftslexikon.gabler.de/Archiv/17148/transnational-corporation-tnc-v11.html accessed 23.04.2013

Strüver, G. (2007): Bergbau und Minenwirtschaft in Lateinamerika – Zwischen alten Herausforderungen und neuen Akteuren In: Lateinamerika Analysen Vol. 16 No.1 Hamburg S.97-123.

Südwind (2014): Amazonien – Was soll uns bleiben? http://www.suedwind-agentur.at/start.asp?ID=257025 accessed 04.06.2014

Svampa, M. (2012): Bergbau und Neo-Extraktivismus in Lateinamerika. In: Rosa-Luxemburg-Stiftung (Hrsg.): Der Neue Extraktivismus. Eine Debatte über die Grenzen des Rohstoffmodells in Lateinamerika. Berlin S. 14-23

Terminski, B. (2013): Development-induced displacement and resettlement: Theoretical frameworks and current challenges. Geneva.

The Economist (2013): Going for gold. (22nd June 2013)

Trewartha, G. (1961): The earth problem climates. Madison.

Ulloa, A. (2005): The ecological Native: Indigenous peoples' movements and eco-governmentality in Colombia. New York.

UN DESA (2008): World Urbanization Prospects. The 2007 Revisions. Executive Summary. New York. http://www.un.org/esa/population/publications/wup2007/2007WUP_ExecSum_web.pdf accessed 29.05.2014

Latina Press (2014): Ecuador: Kongress genehmigt Ölförderung im Yasuní-Nationalpark. (04.10.2013) http://latina-press.com/news/164068-ecuador-kongress-genehmigt-oelfoerderung-im-yasuni-nationalpark/ accessed 03.04.2014

UPME (Unidad de Planeamiento Minero Energético) (2005): Districots Mineros: Exportactiones e infrastrucura de transporte.

UPME (Unidad de Planeamiento Minero Energético) (2007): Contrato 1517-12-2007. Programa de Aprovechamiento Sostenible de Carbón –PASC- en la Zona Central del Cesar Aplicando Evaluación Ambiental Estratégica –EAE- Informe final. Bogotá

UPME (Unidad de Planeamiento Minero Energético) (2009): Plan Nacional de Desarrollo Minero 2019. Bogotá

Vásquez Caradozo, S. & H. Darío Correa (2000): Los Wayuu, Entre Juta(El que llueve"), MMA ("la tierra") y el desarollo urbano regional In: Instituto Colombiano de Cultura Hispánica (Hrsg.): Geografia Humana de Colombia. Nordeste Indígena (2. Auflage) http://www.banrepcultural.org/blaavirtual/geografia/geograf2/wayuu1.htm accessed 10.04.14

Vergara Gonzáles, O (1990) Los Wayú: Hombres del desierto. In: Ardila, G (Hrsg.): La Guajira. De la memoria al povernir, una visión antropológica. Centro Editorial Fondo FEN Colombia. Bogotá

Wheeler, A. & I. Williams & R. Beaumont & R. Manilton (2000): Characterization of particulate matter Sampled during a study of Children's Personal exposure to airborne praticualte matter in a UK urban Environment. Environmental Monitoring and Assessment Vol. 64 S. 69-77

Wing, S. & F. Herrera & C. Jaramillo & C. Gómez-Navarro& P. Wilf & C. Labandeira (2009): Late Paleocene fossils from the Cerrejón Formation, Colombia, are the earliest record of Neotropical rainforest In: Proceedings of the National Academy of Sciences of the United States of America. Vol.106 No.44

World Bank (2001): Operational Policies. OP 4.12 Involuntary Resettlement http://siteresources.worldbank.org/INTFORESTS/Resources/OP412.pdf accessed 02.04.2014

World Bank (2013): World Bank Commodity Price Data (The Pink Sheet) http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1304428586133/pink_data_a.xlsx accessed 11.12.2013

World Energy Council (2010): 2010 Survey of Energy Resources. London http://www.worldenergy.org/wp-content/uploads/2012/09/ser_2010_report_1.pdf accessed 07.07.2014

Zapata, R & Pocaterra, J. (1995): Wake Keru. 2. Auflage. In: Artesanias de Colombia (Hrsg) Bogotá

Zeit Online (2012): Blutige Kohle für deutschen Strom. http://www.zeit.de/wirtschaft/2012-09/kolumbien-steinkohle-el-cerrejon accessed 28.05.2014

ZDF (Zweites Deutsches Fernsehen) (2013): ZDFzoom: Böse Mine – gutes Geld (video) http://www.zdf.de/zdfzoom/boese-mine-gutes-geld-30680618.html

ANNEX 1: INDIGENOUS FUNDAMENTAL RIGHTS IN THE COLOMBIAN CONSTITUTION OF 1991

"**Article 7**: The state acknowledges and protects the cultural and ethnical diversity of the Colombian nation.

Article 8: It is a duty of the state and of its people to protect cultural and natural richness.

Article 10: Castilian is the official language of Colombia. Languages and dialects of ethnic groups are also official in their territories. In communities with traditional linguistic properties, the education should be bilingual.

Article 68: […] The members of ethnic groups will have the right to training that respects and develops their cultural identity […]

Article 246: Indigenous authorities are allowed to execute juridical functions within their territory in conformity with their norms and procedures. They are not allowed to be in contrary of the Constitution and laws of the Republic. […]

Article 329: The configurations of indigenous territorial entities will be developed subject to provisions of the Organic Law of Territorial Planning, and their determination will be effected the national government with the participation of the representatives of the indigenous communities following the plan of the Commission of Territorial Planning

The reservations constitute collective property and are inalienable. […]

Article 330: In accordance with the Constitution and the laws, the indigenous territories will be governed by councils formed and regulated according to the customs of their communities and will exercise the following functions:

1. Supervise the application of the legal regulations concerning the uses of land and settlement of their territories.
2. Design the policies, plans, and programs of economic and social development within their territory, in accordance with the National Development Plan.
3. Promote public investments in their territories and supervise their appropriate implementation.
4. Collect and distribute their funds.
5. Supervise the conservation of natural resources.
6. Coordinate the programs and projects promoted by the different communities in their territory.

7. Cooperate with to maintain public order within their territory in accordance with the instructions and provisions of the national government.
8. Represent the territories before the national government and the other entities within which they are integrated; and
9. Other matters stipulated by the Constitution and the law."

   Paragraph: Exploitation of natural resources in the indigenous territories will be done without impairing the cultural, social, and economic integrity of the indigenous communities. In the decisions adopted with the respect to the said exploitation, the government will encourage the participation of the representatives of the respective communities.

Article 357: The municipalities will have a share in the current revenues of the nation. The law, at the initiative of the government, will determine the minimal percentage of such shares and will define the priority areas of social investment that will be funded out of said resources. For the purposes of this revenue sharing, the law will consider the indigenous reservations as municipalities. […]"
(Presidencia de la República Colombia 2008; Confinder 2014)

ANNEX 2: QUESTIONNAIRE

Cuestionario para tesis de maestría

Extractivismo y consecuencias socioeconómicas en el Norte Colombiano: Caso de estudio, mina de carbón El Cerrejón.

Apreciado vecino: Soy estudiante de maestría en Geografía de la Universidad de Innsbruck, Austria y escribo mi tesis sobre la mina el Cerrejón. Este cuestionario me ayudará a conocer más sobre sus condiciones de vida, sus intereses y opinión sobre los cambios que usted ha vivido desde el inicio del proyecto minero. Este cuestionario le tomará como máximo 10 minutos, tiene solo fines académicos, no hay políticos ni ningún tipo de grupo involucrado en este trabajo, es solo parte de un estudio universitario. Asimismo, no hay respuestas buenas o malas. Toda la información entregada será manejada con discreción. Desde ya le agradezco su ayuda.

Aspectos básicos sobre el núcleo familiar

1. **¿Desde cuándo vive en esta casa? Respuesta**: _____ (Año de llegada, por ejemplo 2005)
2. **¿Cuántas personas viven en la casa, incluyendo a los niños?** Separe entre:

   Niños hasta 18 años:_____ Personas en edad laboral 18 -65 años: ____

   Mayores de 65 años: _____
3. **¿En que trabajan los adultos?** Escriba el número de personas

   Agricultura:_____

   Comercio:_____

   Sin trabajo:_____

   Otros (especifique que actividad):_____
4. **¿Ha realizado algún curso o capacitación para encontrar su trabajo actual o para buscar uno nuevo?**

   O Si O No

   En caso afirmativo especifique: _____
5. **A su juicio, ¿reciben los niños aquí una buena educación en la escuela?**

No	No mucho	Si, mas o menos	Si

Sobre la vivienda y el municipio

6. ¿Está conforme con su nueva casa?

Para nada conforme	No muy conforme	Relativamente conforme	Muy conforme

a. ¿Por qué? Escriba sus razones (por ejemplo, tamaño, servicios, accesibilidad, etc)

_____

7. ¿Está conforme con su nuevo entorno?

Para nada conforme	No muy conforme	Relativamente conforme	Muy conforme

a. **Justifique su respuesta anterior** (Suelo bueno/malo, lugar seguro/inseguro, cercanía o lejanía a la ciudad, este lugar me agrada, este lugar me es extraño, etc)

_____

8. ¿Está conforme con las posibilidades de trabajo en su nuevo lugar de residencia?

Para nada conforme	No muy conforme	Relativamente conforme	Muy conforme

9. ¿Puede mantener sus tradiciones en su nuevo lugar de residencia?

Para nada	No mucho	Si, mas o menos	Si, completamente

a. Justifique su respuesta anterior

_____

10. ¿Está conforme con la decisión de haberse cambiado a este lugar?

Para nada	No mucho	Si, mas o menos	Si, completamente

a. Justifique su respuesta anterior

_____

11. Si pudiera elegir nuevamente, se cambiaría otra vez a este municipio?

0 Si 0 No

Sobre la relación de la minera El Cerrejón con la comunidad

12. ¿La empresa minera El Cerrejón se comportó correctamente durante el proceso de traslado y llegada al municipio?

Para nada	No mucho	Si, mas o menos	Si, completamente

Mencione las razones de su respuesta anterior (por ejemplo mucha o poca información, buena o mala información, buena o mala organización, etc).

_____

_____

13. **¿Fue la comunidad bien organizada para el proceso de traslado al nuevo lugar?**

Para nada	No mucho	Si, mas o menos	Si, completamente

a. Justifique su respuesta anterior

_____

_____

14. ¿Tuvo la comunidad buen apoyo jurídico durante este proceso?

Para nada	No mucho	Si, mas o menos	Si, completamente

a. Justifique su respuesta anterior

_____

_____

15. **A su juicio, ¿Qué podría haber sido mejor durante el proceso de cambio al nuevo lugar?**

_____

Perfil del encuestado

Sexo Femenino:_____ Masculino:_____

Edad

Menor de 20 O	21-30 años O	31-40 años O	41-50 años O

51-60 años O	61 y más O		

Si quiere agregar algún comentario, escríbalo aquí

_____

_____

_____

¡Muchas gracias por su tiempo y sus respuestas!