THE DARK SIDE OF THE MINING ‘BOOM’ IN COLOMBIA

The open economic mining policies of Colombia’s last governments have led to internal displacement and harm to the environment by multinational mining companies.

Candidate number: 9001
Submission deadline: December 1st, 2014
Number of words: 17,409
Table of contents

1. Introduction .................................................................................................................. 4

2. Economic liberalization policies and foreign investment in the current Colombian mining context ................................................................. 8

3. About the breach on human rights in mining areas due to forced displacement and violence against civilian population in Colombia .......... 16

   3.1. International and Local legal framework on internal displacement ...... 16

   3.2. Facts and figures about internal forced displacement in mining zones in Colombia .................................................................................. 24

   3.3. Coal mining in the Cesar Department as an unfortunate example of Multinational mining companies obtaining profits from the breaching on human rights .............................................................................................. 30

   3.4. Chapter Conclusion ............................................................................................... 34

4. Adverse effects on the environment due to contamination of land, water and air resources in mining zones in Colombia ........................................ 36

   4.1. International and Local legal framework about the right to the environment ......................................................................................... 36
4.2. Most damaging environmental impacts in the mining activity in Colombia: Open-pit coal mining and extraction of gold by using cyanide………………………………………………………………………44

4.2.1. Environmental impacts in open-pit Coal mining…………….48

4.2.1.1. Main impacts on the environment and living forms due to open-pit Coal mining………………………………………………………………………………………………………49

4.2.1.2. Gaining profits from the production of Coal in the Guajira Department. At what cost? The Cerrejón case: The curse of coal by DanWatch ………………………………………………………………………………………………………………………………………52

4.2.2. Environmental damage due to the use of cyanide for the exploitation of gold………………………………………………………………………………………………………………56

4.2.2.1. Cyanide toxicity: About the impact on wildlife and water…………………………………………………………………………………………………………………………………57

4.2.2.2. Threat of an environmental tragedy in the Tolima department: La Colosa: A Death Foretold by London Mining Network ………………………………………………………………………………………………………………………………………59

4.3. Chapter conclusion ………………………………………………………..61

5. General conclusions…………………………………………………………………………..63

6. Bibliography …………………………………………………………………………………….66
1. INTRODUCTION

Colombia is a country with a notable amount of mineral resources that have been exploited from the colonial era until recent decades. The mineral extractive practices used to be informal, or developed in an artisanal and small scale, therefore used not to represent substantive changes in the land or in the vegetation cover.¹

But nowadays, this situation has changed remarkably, and the presence of the mining industry in certain areas generates sociopolitical conflicts, mainly determined in the ownership of the land, ‘unfair’ practices of compensation to the former owners, unequal distribution of resources and environmental degradation, as the transformation of territorial dynamics where these economic activities take place.²

The mining operations in Colombia have been accelerated due to the recent policies of the former and current government, in which, to make of Colombia a major player in the territorial division of labor and to export the natural resources through the direct investment of foreign capital, has become one of the priorities. The mining potential of the country, and the vast amount of reserves of minerals like gold and coal, have made of this land a mining destination for foreign companies.³

In point of fact, the actual president of Colombia, Juan Manuel Santos, incorporated in the National Development Plan 2010-2014, which has the title “Prosperity for All: more jobs, less poverty and more security”, the mining and energy activities as the main asset to the country to reach the economic development and it is referred in the Development Plan literally as a “development

---

³ Gravelle, J. (2011, agosto). Colombia’s mining industry is growing up, but not without some growing pains. Canadian Mining Journal, p. 2.
locomotive”. This idea continues the former president’s logic, whose policies were based on the offering of financial safety to the foreign investors.\(^4\)

But an unexpected issued has arrived during the carrying out of the actual mining economic policies: in the eagerness of the actual and the previous Colombian governments to drive this mining ‘locomotive’ it has been overridden human and environmental rights by non-state actors. As it will be presented later, this situation has brought several breaches to International Law in all of levels, since the Geneva Convention IV and its Additional Protocols I and II, the UN Guiding Principles on Internal Displacement, the ICRC’s Customary International Humanitarian Law rules, The American Declaration on Human Rights, the 1972 Stockholm Declaration, certain UN General Assembly Resolutions and the International Covenant on Civil and Political Rights, among others. Furthermore, there have been breaches to the 1991 Colombian Constitution and other local Laws.

Certainly, in the recent Colombian context the socio-political conflicts have led to an increase of generalized violence, mainly represented by internal forced displacement and land dispossession. As a matter of fact, to 2014, the number of forced displaced persons is at least of 5,700,000,\(^5\) of which for example, 1’194.174 occurred in Antioquia, a central-western department known for its great reserves of diverse minerals. But other regions have suffered of these social conflicts linked to mining as well, like the northern department of La Guajira and Cesar and the central Department of Tolima -how it will be shown in next chapters--; all of them coincidently with a permanent presence of both, multinational mining companies and illegal armed groups.\(^6\)

On the other hand, in the areas of mineral extraction activities, the presence of open-pit mines of coal and nickel are causing rapid changes in the vegetation

\(^4\) Dirección de Planeación Nacional Colombia, Plan Nacional De Desarrollo 2010-2014 Tomo I. P. 205.
cover and pollution of rivers and air due to legal and illegal mining practices.\(^7\) The drilling in open-pit mines and the leaching of minerals using hazardous chemicals as mercury or cyanide, generate removal of topsoil and overload the lands to make accessible the ore deposits using modern excavation equipment such as conveyors, large machinery and pipelines, that permits to remove whole mountains in a matter of hours; making profitable for instance, to extract less than one gram of gold per ton of material removed.\(^8\) But besides of the harm that this can produce in the soil, the most affected subjects for these practices are the people that work in the mines, as the ones who live nearby of the mines, and the flora and fauna of the territory as well.

The question that is addressed in this dissertation then is whether the open economic mining policies of Colombia’s lasts governments have led to internal displacement and harms the environment by non-states actors.

Bearing in mind the latest, first, there will be an approach to the recent policies undertaken in mining matters by the last Colombian governments and how these have evolved in the earlier years. Afterwards, there will be a focus in the two most largely problematic situations that have been documented, this is, these derivative from the breaching on human rights caused due to forced displacement and violence against the civilian population living in areas of abundant mineral reserves; and the adverse effects on the environment due to contamination of land, water and air resources, which have led to the generation of multiple environmental damage and hence affectation of different rights of 1\(^{st}\), 2\(^{nd}\) and 3\(^{rd}\) generation linked to the environment.

\(^{7}\) Espinosa, D. de J., & Toro, L. J. (2012). Evaluación de la susceptibilidad a la erosión por el cambio de cobertura debido a la minería, en el Municipio de Anorí, Antioquia, Colombia. Revista Gestión y Ambiente.

In order to expose these social and environmental “undesirable side effects” and the breaches on the diverse human and environmental rights because of the mining industry in Colombia, it will be remarked the international and local legal framework in every context, and it will be shown quantitative and qualitative data collected from public official organizations, as from local and international NGO’s, which have conducted studies in the most affected regions by mining issues. It will be presented then, important cases widely documented by PAX Netherlands -coal mine in the Department of Cesar-, DanWatch Denmark –coal mine ‘El Cerrejón’ in the department of La Guajira-, and London Mining Network –Gold mine ‘La Colosa’ in the department of Tolima-. 
2. ECONOMIC LIBERALIZATION POLICIES AND FOREIGN INVESTMENT IN THE CURRENT COLOMBIAN MINING CONTEXT

Nowadays, Colombia is considered an emerging potency in the mining and oil industry context, just in the last 10 years 40% of the Colombian territory has been solicited to develop mineral and oil extraction practices.\(^9\) According to the Ministry of Agriculture and Rural Development, more than 5.8 million hectares of land were licensed for mining programs in 2010.\(^10\)

But indeed, the mining history in Colombia could be tracked since colonialism times, when the country used to export one quarter part of the gold in circulation in the world.\(^11\) Today, some of the Spanish Crown customs still apply in the actual context, like one disposition that dates back from the XIII century of the Castilian Reign, according to which, the State is the owner of all of the mineral resources that may be found in the ground and under it.\(^12\)

The State, as the solely owner of all the mineral resources that are within its territory, established the concept of ‘mining title’, which is the generic denomination of the approval granted by the Colombian State to either, natural or juridical persons, to obtain benefits and profits from a possible mining resource within the national borders. This authorization is formalized with the subscription of a concession contract, and afterwards, the beneficiary has to achieve some steps before opening the mine. First, it has to conduct a study about the existence of the mineral in the field prospects, later an exploration to determine if the deposit has economic value, and afterwards, the beneficiary has to conduct a research about

---


\(^10\) Juan Camilo Restrepo, "A comprehensive land policy for Colombia," Plenary Presentation before the House of Representatives, (Bogotá, Colombia), August 2010.


\(^12\) Ponce M., Á. ¿Cuál Locomotora? El desalentador panorama de la minería en Colombia (1.a ed.). Colombia 2012.
the technical feasibility; bearing in mind economic and environmental factors. If these steps are succeed, finally it is possible to open the mine.  

In the last and recently years then, the Colombian Government has referred to the advent of a ‘mining boom’, and describe this phenomenon as an ‘economic engine’ that will bring develop and prosperity to the country. The concept of this mining boom was first defined by the former president of Colombia Álvaro Uribe Vélez (2002-2010), who opened the doors to the transnational mining companies, and placed important efforts in trying to make of the country an interesting destination for mining. This policy has been continued by the actual president Juan Manuel Santos, who perceives in the mining exploitation by privates a ‘locomotive of development’ for the country, which in theory will bring “prosperity to all, more jobs, less poverty and more security.”  

As a matter of fact, the Santos’ National Development Plan 2010-2014 brings literally in its proposal five “locomotives of development”, which are in charge to lead the economic growth in Colombia by an estimated average of 10% per year. These locomotives are infrastructure, agriculture, housing, mining and innovation.  

In total, these ‘locomotives’ comprise 234.4 billion of Colombian Pesos. From this budget, 96.6 of billion go for mining and energy expansion, which represents 17% of the total cost of the National Development Plan, figure that contrasts for instance, with the 11.7 billion (2% of the Plan) assigned for agricultural and rural development activities. The intention to impose an economical model based on the extensive exploitation of natural resources of the Colombian subsoil is noticeable.

13 Ibidem.
15 Dirección de Planeación Nacional Colombia Op. Cit. 4.
16 Ibidem.
These last policies have brought already results. In fact, meanwhile in 1996 the external invest in the mining industry was of 2,2 percent, just five years later, in 2001, after the enacting of the Mining Code, the foreign invests in the mining area was of the 26 percent. In the following maps it can be noticed the difference between the lands that have been solicited for mining exploration in between 1994 and 2009 for foreign companies:

![Maps showing mining exploration solicitations 1994-1998 and 2006-2009](image)

Source: Reclame Colombia

The Mining Code, Law 685 of 2001, has been a key for the foreign investments, indeed, it was established in the article 1 that the State’s role in mining matters is “to facilitate mining activity, to promote sustainable development and to supervise the mining incomes”, so then, the Staterenounced to take part in the mining rent, and restricted its participation just to collect taxes, contributions and economic compensations from the mining actors.

---

As it is visible in the previous map, just twenty years ago, Colombia was not on the map as a mining destination for multinational mining companies, which hold themselves because of the guerrilla warfare and narcotics issues, but currently, these companies have recognized the apparently improvement in the safety situation, and now the country is considered in its route to “becoming an international mining powerhouse”. The fact that Colombia has a rich territory in minerals, which 80% are still unexplored, remains interesting to the global mining companies.

In numbers of DANE (the Government official institution in charge of the statics) in 2009 mining industry had 5% of participation in the total production in the country, and it is expected that it will reach 12% by this year. Hence, the Ministry of Mines and Energy has described this phenomenon as the “economic development axis of the country in the last decade”.

The importance of the mining industry nowadays in Colombia is noticeable as well in the ‘National Mining Development Plan Vision 2019’, in which it is stated that “in 2019 the Colombian mining activity will be one of the most important industries in the continent”. In the same line, the Government’s main goals are to keep the country in the list of the main five destinations in Latin-America for mining investing, to double the national mining production, and to guarantee the tax stabilization for the investors.

---

21 Gravelle, J. op. Cit. 3.
22 Ibidem.
23 Ibidem.
As a consequence of the arriving of the multinational mining companies, the acquisition of lands by foreigner companies in Colombia has been the highest in the last years in Latin-America,\(^{28}\) for instance just two of the main foreign companies that exploit coal, Drummond Company and El Cerrejón, have acquired 130,000 hectares of land in the departments of La Guajira and Cesar.\(^{29}\) The participation of international companies in the mining industry in Colombia it is visible in the next map\(^{30}\).

---


As can be observed in the last map, multinational companies are exploiting different type of minerals in Colombia: coal, gold, coltan and nickel; but the three minerals most largely extracted are gold, coal and oil.31

Indeed, nowadays, Colombia is the largest producer of coal in Latin-America,32 and the coal reserves are the largest in the continent.33 Besides, current studies have shown that “at the current rate of extraction, coal mining in Colombia would be able to continue for another 100-120 years”.34 For its part, gold production in Colombia has reached a level of 40 tons annually, and accordingly with the ‘Vision Plan Colombia 2019’ it is supposed that this production will be extended to 143,186 tons annually this year.35

When it comes to Oil, the most exported product of the country,36 the current rate of production of 1.4 million (2014)37 makes possible to compare it with other OPEC countries members like Venezuela38 or Egypt.39 Also, the biggest company in the country, ECOPETROL -one of the five biggest companies in the continent- has extraction fields in the center, south, east and north of the country, counts with two

34 Ibidem.
refineries, ports for exportation and importation in both coasts (Atlantic and Pacific) and it has a net of 8.500 kilometers of pipelines across the country.\(^{40}\)

A 'mining boom' is indeed happening in Colombia, but not only the multinational companies are interested in the good-looking business, illegal armed groups as the FARC guerrilla (Revolutionary Armed Forces of Colombia) paramilitaries groups or common crime groups have noticed the juicy economic gains in the mining industry, and have become an important factor in the mining activities as well. In fact, it has been documented that the location of these groups overlaps with areas of mining operations, and mining is often used to launder money earned from exporting drugs.\(^{41}\) The presence of those illegal armed groups has increased the index on the breach of human rights in mining areas. In a report published in 2011 by the UNDP (United Nations Development Program) it was shown that the competition for lands has led to land evictions.\(^{42}\)

It is known as well, that in these areas, in which converge mining industry and presence of illegal armed groups activities, there is a gravely affection to civilian communities, provoking forced displacements and serious threats to a large amount of families' human rights.\(^{43}\)

In the other hand, mining industry has brought several causes of environmental degradation in the rural areas. In point of fact, in order to extract the mineral resources it is necessary to use highly toxic products like mercury or cyanide, which lead to contaminate lands and hydric resources, affecting, besides to the communities, a large number of species in the fourth most bio-diverse country in


the planet.\textsuperscript{44} The change in the courses of the rivers, the use of dynamite, and deforestation because of the need to expand the mines and build infrastructure for bringing out the minerals to the ports; are the main situations that civilians and animal species have to face.\textsuperscript{45}

The influence of these illegal armed actors, and the presence of big multinational companies in an important part of the Colombian territory have triggered diverse social and environment situations within the areas of higher mining activity. These situations have been difficult to predict by the authorities and have represented a challenge in order to face them. In the next chapters it will be examined two main groups of affectations of this phenomenon in Colombia: the Social impact and violation of human rights because of the internal forced displacement due to exploitation of natural resources, and the Environmental impact and violation of human rights because of pollution of lands and hydric resources.


\textsuperscript{45} Rodríguez, Guadalupe Op. Cit. 43.
3. ABOUT THE BREACH ON HUMAN RIGHTS IN MINING AREAS DUE TO FORCED DISPLACEMENT AND VIOLENCE AGAINST CIVILIAN POPULATION

3.1. International and Local legal framework on internal displacement

The United Nations has defined forced displaced persons in its Guiding Principles on Internal Displacement as:

Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border.

There are a diverse mix of international mechanisms that preserve the rights and interests of this vulnerable community, but the UN Guiding Principles on Internal Displacement is the corner stone when it comes to internal displaced persons situation, and even if it has the rank of soft law -hence not-binding nature-, the international community has shown its support towards it.

In these principles, it was established the importance on guarantee that the internal displaced persons get access to the same rights and conditions than other

---

48 Ibidem.
inhabitant from their country, and it is remarked the importance on the prohibition of discrimination of any type. It can be read in the Principle 1:

Internally displaced persons shall enjoy, in full equality, the same rights and freedoms under international and domestic law as do other persons in their country. They shall not be discriminated against in the enjoyment of any rights and freedoms on the ground that they are internally displaced.

Also in these principles, is emphasized the importance on the enjoyment of fundamental and human rights as right to dignity and physical, mental and moral integrity (principle 11), right to liberty and security (principle 12) the right to life during the displacement (principle 10), the right to an adequate standard of living (principle 18), among others. It is established as well, that the National authorities “have the primary duty and responsibility to provide protection and humanitarian assistance to internally displaced persons within their jurisdiction” (principle 3).

In the other hand, and in accordance with the UN Guiding Principles, there are different legal international provisions concerning the prevention of forced displacement and protection of the persons that are victims of it. In fact, the Geneva Convention IV –Relative to the protection of civil persons in time of war- and the Additional Protocols I and II are embodying most of these provisions as the customary law.

The Geneva Convention brings the prohibition of forced displacement when in the article 49 was established that “[i]ndividual or mass forcible transfers, as well as deportations of protected persons from occupied territory to the territory of the Occupying Power or to that of any other country, occupied or not, are prohibited, regardless of their motive”. This position is reflected in the article 147 in the same Convention, as in the article 51 (7), 78 (1) and 85 (4, a) of the Additional Protocol I, and articles 4 (3, e) and 17 of the Additional Protocol II. This point has been stated
as well in the rules number 129 and 132 of ICRC’s Customary International Humanitarian Law rules.\textsuperscript{49}

Moreover the prohibition of forced displacement, and right to return; there are several rights that need to be guarantee, and that usually victims under displacement conditions tend to seem particularly vulnerable. One of them, the right to non-discrimination, settled down in the articles 3 and 27 of the Geneva Convention IV, article 75 of the Additional Protocol I and articles 2 (1) and 4 (1) of the Additional Protocol II; establishes that persons involved in armed conflict “shall in all circumstances be treated humanely, without any adverse distinction founded on race, color, religion or faith, sex, birth or wealth, or any other similar criteria” (Art. 3 GC IV).

In the same line, the right to life, to dignity and freedom; are encouraged to be respected an protected under the articles 3, 27 and 32 of the Geneva Convention, 75 of the Additional Protocol I and the article 4 of the Additional Protocol II. This right to life and dignity involves the right to be protected in a physical and mental way as well (articles 75 Additional Protocol I and 4 of the Additional Protocol II).

Displaced persons are also entitled with the right to family reunification (GC IV Art. 26, 27 and 49, AP I Art. 74, AP II 4(3), the right to have documentation (GC IV Art. 50. GC IV Art. 97(6), the right to keep their property and possessions (GC IV Art. 33, AP I Art. 85) and the right to education even in the middle of the conflict (GC IV, Art. 24(1)). It is obligation of the international community, and every State to respect these rights, and foment their consideration when enacting national legislation.

In the regional context, The American Declaration on Human Rights established the States’ duties on respect the fundamental rights of the persons (article 1), as the right to life (article 4), to Humane Treatment (article 5) and to Personal Liberty (article 7) among others. In the article 22, it was settled down the right to Freedom of Movement and Residence, which result of vital importance for displaced persons, refuges and asylum seekers:

Article 22. Freedom of Movement and Residence

7. Every person has the right to seek and be granted asylum in a foreign territory, in accordance with the legislation of the state and international conventions, in the event he is being pursued for political offenses or related common crimes.

8. In no case may an alien be deported or returned to a country, regardless of whether or not it is his country of origin, if in that country his right to life or personal freedom is in danger of being violated because of his race, nationality, religion, social status, or political opinions.

Additionally, there are more rights in the American Convention on Human rights tending to protect this vulnerable community: the right to juridical personality (article 3), the right to life (article 4), the right to a fair trial (article 8), the rights of the family (article 17), the right to nationality (article 20), the right to property (article 21), the right to equal protection (article 24) and the right to judicial protection (article 25).

Against this international legal background, in the particular case of Colombia, when it comes to forced displacement, the first explicit approach to the protection of this population was established in the Law 387 of 1997, in which the guarantee of rights and protection of this population were settled in charge of the Colombian State. In the first article of this law, internal displaced person was defined as:

[w]ho has been forced to migrate within the national territory, abandoning his place of residence or habitual economic activities due that their lives, physical integrity, safety or personal freedom have been violated or are directly threatened because of any of the following situations: internal
armed conflict, internal strife, generalized violence, massive violations of human rights, violations of international humanitarian law or other circumstances emanated from the former situations, that may alter drastically the public order.

It can be noticed, that this definition has its source in the UN Guiding Principles on Internal Displacement. The article 2 of this law by its part brings the ‘principles’ on the internal displacement, where can be found a variety of measures to protect the displaced person integrity and rights. As an example of these principles are “the right to request and receive international aid and this generates a correlative right of the international community to provide humanitarian aid” (principle 1), “the right to access to a definitive solution to their situation” (principle 5) or “the right to return to their place of origin” (principle 6).

But one of the novelties that brought the law Law 387 of 1997 was to make explicit the responsibility of the Colombian State on taking care of the displaced persons, and to proceed with any measure needed to prevent this situation. It can be read in the article 3:

> It is the responsibility of the Colombian State to formulate policies and adopt measures for the prevention of forced displacement; giving attention, taking care, and reaching the socioeconomic consolidation and stabilization of the internal displaced persons.

> For purposes of the preceding paragraph, it shall be taken into account the principles of subsidiarity, complementarity, decentralization and concurrence; in which the Colombian State organization is based.

In addition, in the same law was created certain institutions, which function is to give integral attention to the internal displaced persons. It was created the National System on Integral Attention to the Displaced Population, and the Regional Committees for the Attention of the Displaced Persons in municipalities, districts and departments (articles 4 and 7 respectively).
Later in the year 2000, the incitement and committing of forced displacement started to be considered as a crime against humanity in the Law 589, which was later incorporated in the article 159 of the Law 599 of 24th of July of 2001 (Colombian Penal Code).

One decade later, in concern of the high amount of internal displaced persons, it was enacted the Law 1448 of 2011, of great importance when it comes to the protection and safeguard of displaced communities. In fact, this law was given the name of “Victims and Land restitution Law”, which has been set up like an attempt to repair the Colombian conflict victims. Along with this law, it was enacted as well, a series of National Decrees, in order to regulate the process and give a special treat to the most vulnerable victims. The most significant ones are the Decrees 4633, 4634 and 4635, by which were taken measures of assistance, care, comprehensive reparation and restitution of land rights to victims belonging to Indigenous, Gipsy and Afro communities. Through the Decrees 4800, 4801, 4802 and 4829; it was also established the internal Structure of the Special Administrative Office in charge of the management of the Restitution Process.

The Victims and Land Restitution Law has become in the milestone in the recent Colombian conflict History, due to it is recognized the internal armed conflict, and it makes important efforts in the reparation of the victims conditions, like the attempt of bringing the lands back to the persons that have been displaced by any circumstance. In the article 1 of the Law 1448 of 2011 it was established that:

This Law aims to establish a set of administrative, social and economic measures, individual and collective speaking, on behalf of victims of the violations referred in the article 3 of this Act, within a framework of transitional justice, which would make possible to guarantee their rights to truth, justice and reparation and non-repetition, hence their victim

---

50 Martínez Cortez, Paula. Ley de víctimas y restitución de tierras en Colombia en contexto. Berlín, Diciembre de 2013. P. 10
condition is recognized and dignified through the materialization of their constitutional rights.

Furthermore, besides of the previous explicit protection to displaced persons, this population is entitled with the fundamental rights emanated from the 1991 National Constitution, like the right to life (article 11), the right to humane treatment (article 12) right to equality and prohibition of discrimination (article 13), the freedom of movement, understood as “the right of free locomotion within the national territory, to enter and out from it, and to stay and get residence in Colombia” (article 24), the right to work (article 25), and the right of liberty (article 28).

Additionally, the Colombian Constitutional Court has made important progresses in the treatment and rights of displaced persons. In the Verdict T-227 of 1997, this Court pointed out for the very first time, that the condition of internal displaced person does not depend on the certification of an authority, but it is determined by the condition itself and the advent of two situations: the use of coercion that forces the displacement and that such displacement happens within the Colombian borders.51

The Constitutional Court's efforts have been recognized for correcting negligent and discriminatory actions or omissions of the authorities in the attention of displaced population,52 pointing out the institutional responsibilities in the care of displaced population,53 establishing criteria for the interpretation of the rules on

53 Constitutional Court of Colombia. Sentence SU-1150 de 2000, Regional de Antioquia de la Defensoría del Pueblo vs Inspección 8B Municipal de Policía de Antioquia and others. Reporting Judge Eduardo Cifuentes Muñoz.
displacement matters,\textsuperscript{54} fomenting the development of policies and programs to the attention of this phenomenon,\textsuperscript{56} and providing effective protection to the displaced population, in particular when it comes to population that has to be treated with special consideration under the National Constitution as children, women who are heads of family, elderly people and ethnic minorities;\textsuperscript{56} among others.

As it can be noticed from the above norms and judicial decisions, Colombian authorities have made an important effort into shielding the internal displaced population, at least from the regulatory point of view. These efforts are in line with the international legal framework, in which the UN has marked an important path with the Guiding Principles on Internal Displacement, and the Geneva Convention IV and its Additional Protocols and the American Convention on Human rights have established rights and principles. But in contrast to the Colombian legal framework in this matter, in the next sections it will be shown that unfortunately these rules have remained only on paper in some circumstances.

Also is important to remark that from international instruments as from the national normative, the Colombian state has the responsibility of the protection of the internal displaced persons, as to take any measure needed to prevent and halt this phenomenon as it is established in all of the international mechanisms mentioned before, and explicitly in the article 3 of the local Law 387 of 1997.

\textsuperscript{54} Constitutional Court of Colombia. Sentence T-098 de 2002, Luz Mosquera Aluma and others vs. Red de Solidaridad Social Reporting Judge Marco Gerardo Monroy Cabra.
\textsuperscript{56} Constitutional Court of Colombia. Sentence SU-1150 de 2000. Op. cit 53
\textsuperscript{56} Constitutional Court of Colombia. Sentence T-215 de 2002, Narciso Doria Segura y Pedro Tuberquia vs Colegio Sol del Oriente and others. Reporting Judge Jaime Córdoba Triviño.
3.2. Facts and figures about internal forced displacement in mining zones in Colombia

In a global world that demands permanent flux of natural resources based on the mass production system, the raw material exchange between different countries has become a need. For instance, just the United States depends from external exchange of goods in a considerable amount of minerals and energy material. The United States imports 100-90% of the manganese, chrome and cobalt; 75% of the tin, 61% of the copper, nickel and zinc; 35% of the steel; and in between of 16-12% of the bauxite and lead. In the other side of these numbers, it is Latin America and the Caribbean countries, which provide to the US 66% of the aluminum, 40% of the cooper and 50% of the nickel.57

In Colombia the total Foreign Direct Investment (FDI) in the last year (2013), reached a record of USD $16.822 million, in which the 81,6% were for oil, hydrocarbons and mining invests (USD$13,763 million). That represented an increase of 2,9% compared with the previous year.58

This huge invests cover furthermore, macro projects in different fields like agro industrial areas, hydroelectric and micro-centrals, and water for energy production to supply transnational mining companies’ demands.59 All of these activities have their cornerstones in the land tenure, which represents the main condition to develop their projects. This leads to the high concentration of land through legal and sometimes illegal ways in Colombia.60

Against this background, spoliation, forced displacement, persecution of leaders, among others, are found in rural rich-lands with exuberant amount of natural

60 Ibidem.
resources and biodiversity, lands that are mainly occupied by peasants, indigenous and Afro-Colombian communities.\textsuperscript{61} The exploitation of these natural resources, and large-scale projects that involved National Government and multinational companies’ interests, which collide with the cultural rootedness of these communities who resist into hold the ownership of the lands, generate forced displacement by armed illegal ways.\textsuperscript{62}

Colombia is the second country in the world in number of displaced people, just after Syria.\textsuperscript{63} From 1985 to 2008, the conflict between the Government and the illegal armed groups, push more than 4 million people to leave their places due to intimidation or violence directly applied.\textsuperscript{64} The lost in the guarantee of the human rights, is one of the major issues for displaced people, moreover, the Colombian state has shown itself historically ineffective into taking care of the victims and designing policies and strategies in order to halt the increase of displaced population.\textsuperscript{65}

It is important to bear in mind as well, that the effects of this social phenomenon goes beyond the displacement to other place and the material losses, also involves all of the impact on losing their homes, the affection of human rights and the limitation on their personal and social development.\textsuperscript{66}

One of the main reasons of forced displacement is the territorial occupation, and the intention of expand the area of influence of illegal armed groups with the goal

\textsuperscript{61} Ibidem.
\textsuperscript{62} Ibidem.
\textsuperscript{64} CODHES, Desplazamiento creciente y crisis humanitaria invisibilizada. Boletín de la Consultoría para los Derechos Humanos y el Desplazamiento Número 79 - Bogotá, Quito, Marzo de 2012.
\textsuperscript{66} Serrano, M. E. Evaluando el impacto de intervenciones sobre el desplazamiento forzado interno. Hacia la construcción de un índice de realización de derechos, Bogotá, Consejería en Proyectos-PCS, 2007.
of extend or maintain their illicit crops or routes for drug trafficking, but it is also known that in the areas that counts with a considerable amount of natural resources, and in regions where is been building big-scale energy projects, the forced displacement is more intense, like in the Urabá Region and Urrá Dam (north west of Colombia), where it has been found more land concentration, minor economic growth, low wages, and higher levels of violence.

The displaced persons usually settle down in the main urban centers, and that has led to an increase on the unemployment rates, and an ineffective assignation of the resources to the poor population in the urban areas, hence this population lives in precariousness conditions and their quality of life is similar or even worse than the poorest population of the receptor areas.

The Comptrollership National Office found out that in areas where has happened high scale displacement matches with the mining activities zones, those at the same time concur with the poorest regions of the country and lands that are aimed to agricultural exploitation. Also, it was stated that after two decades of intense mining activity in the North West and North part of the country (Departments of Antioquia, Córdoba, Cesar, Montelíbano) there has been a severe increase in social conflicts that matches with violence conflicts in high impact mining areas.

This is represented in the next map, in which the matching is evident:

---

68 Fajardo, D. Para sembrar la paz hay que aflorar la tierra, Bogotá, IDEA, Universidad Nacional de Colombia, 2002.
70 Murad Rivera, R. Estudio sobre la distribución espacial de la población de Colombia, CEPAL, Serie Población y Desarrollo No. 48, 2003.
71 Ibáñez, A. M. y A. Moya. “¿Cómo el desplazamiento forzado deteriora el bienestar de los hogares desplazados? Análisis y determinantes del bienestar en los municipios de recepción”, Documento CEDE No. 26, 2006.
72 Words from Sandra Morelli, General Comptroller of the Nation. In: http://www.rcnradio.com/noticias/en-mas-del-70-de-colombia-hay-casos-de-desplazamiento-por-la-mineria-68799
Forced Displacement and mining

In the Study ‘Mining municipalities in Colombia: characteristics and impacts on development’ it is concluded that in the mining municipalities, especially those

---


which gold and silver are being exploited, there are an institutional weakness and vulnerability in the socio-economic conditions, there is a low presence of State’s authorities, a major armed conflict incidences, and are mainly isolated from the main productive centers and usually are zones with multinational companies’ presence. Besides, some of these municipalities hold low potential for agricultural production, the land is highly concentrated, and are targets of environmental vulnerability due to be located near forests and which the most of them are under the title of Natural Park.75 Furthermore, the lack of presence of authorities, the remoteness of these zones, and the existence of minerals, make of those lands a very attractive opportunity to illegal armed groups, and trigger the illegal and informal exploitation.

One of the most affected zones is ‘Bajo Cauca’ in the department of Antioquia, in the northwest part of the country, where struggles occur due to the production of gold in this area. The most affected populations are the indigenous and afro-Colombian communities76; the illegal groups dispute the exploitation of gold in the municipalities of Anorí, Cáceres, Caucasia, El Bagre, Nechí, Tarazá and Zaragoza. The victims mainly belong to Embera-Katio and Zenú indigenous community, and afro-colombians77. Just to mention, the last year (2013) from El Bagre municipality 607 Zenú people flew because of the presence of illegal groups that wanted to control the gold exploitation. The same happened in Tierralta, where 348 indigenous from the Embera-Katio flew from their lands.78

But not always the illegal armed groups take action by themselves; there are several reports that inform about a conspiracy between these groups and legal private companies to achieve their mining goals.

75 Ibidem.
77 Ibidem.
78 Ibidem.
As a matter of fact, different social organizations have denounced that some multinational companies have funded paramilitary groups in order to ‘protect’ themselves and displace communities from the territories they require to exploit.\textsuperscript{79} This situation has been exposed in the 2011 Consultancy on Human Rights and Displacement report (CODHES) as well, and they pointed out that there are presence of both, militaries and paramilitaries groups in mining zones: “the armed forces protect private investment and paramilitaries suppress social protest and create displacement”.\textsuperscript{80}

This type of accusations also were heard at the seminary ‘Mining, Land and conflict in Latin America’ hold by the Universidad Nacional of Colombia (the biggest and most important university in the country) where it was exposed that “multinationals tend to appear in places that have previously suffered paramilitary attacks and that these places have seen their population disappeared, assassinated, or displaced”.\textsuperscript{81}

For its part, the National Mining Company ‘Minercol’ Workers Union (Sintraminercol) asserted that 87% of the displaced persons of this organization come from mining-energetic industry municipalities, and that 80 % of the breaches to Human Rights of its workers happened in the same areas.\textsuperscript{82}

In fact, just in 2011 for instance, were reported two massacres in the south of Bolívar region, where mining community leaders were tortured and killed presumably by illegal armed groups who claimed the control of some of the mining

\textsuperscript{81} Julio Fierro, “La política minera en Colombia,” International Seminar on mining, territory and conflict in Latin America, (National University, Bogotá, Colombia), 6 October 2011.
\textsuperscript{82} SINTRAMINERCOL, “La violación de los derechos humanos en el país está estrechamente ligada con el modelo económico existente en Colombia,” www.acantioquia.org/...foro/EXPOSIC_SINTRAMINERCOL.doc.
regions,\textsuperscript{83} it is also known that 35 people from the Zaragoza municipality who worked in the mining industry had to flight from their lands due to paramilitaries threats,\textsuperscript{84} and 78\% of the of the crimes against worker unions leader occurred in mining-energetic areas.\textsuperscript{85}

### 3.3. Coal mining in the Cesar Department as an unfortunate example of Multinational mining companies obtaining profits from the breaching on human rights

PAX Netherlands – the Dutch section of Pax Christi International- has presented a report in June of 2014 to the Dutch Minister of Development Cooperation, called "The Dark Side of Coal"; which deal with the breaches of human rights in mining areas between 1996 and 2006 in the department of Cesar in Colombia (northeast), where paramilitaries murdered a total of 3100 people and drove 55,000 farmers from their land. Furthermore, nowadays the victims have not received any type of reparation, and the report reveal that these multinational mining companies get benefits from these massive human rights abuses.\textsuperscript{86}

In this report, PAX shows that as a pace movement, they investigate ‘the impact of mining and naturally places an emphasis on its consequences for the security and human rights situation of the civilian population. Of the many human rights violations committed in the Cesar mining region, [they] concentrated on the categories with the greatest apparent impact: selective killings, massacres,

\begin{footnotesize}
\textsuperscript{84} Consultancy on Human Rights and Displacement (CODHES), op. Cit. 80.
\textsuperscript{85} Ramírez, Francisco. Gran minería y derechos humanos en Colombia. International Seminar on mining, territory and conflict in Latin America, (National University, Bogotá, Colombia), 6 October 2011.
\textsuperscript{86} Moor, Marianne and Van de Sandt, Joris. The Dark side Of Coal: Paramilitary Violence in the Mining Region of Cesar, Colombia. PAX, The Netherlands. June 2014.
\end{footnotesize}
enforced disappearances, and forced displacement. The report is also restricted to the apparent involvement of the mining companies Drummond and Prodeco, which extract coal in this region, in the northeast part of the country, next to the border with Venezuela.

In the report, it is stated that according to national police figures, there were registered 4,948 murders in 14 municipalities in the mining area in the Department of Cesar between 1996 and 2006, also, that the JAA Front (Juan Andrés Álvarez Front, that was part of the biggest paramilitary group of the Country, AUC) committed at least 2,600 selective killings in the Cesar mining region. When it comes to massacres, they assert that 499 civilians in the same region were killed in by the JAA Front. In the next image it can be observed the distribution of these massacres in the region of Cesar:

Source: PAX The Dark side of Coal

---

Ibidem P. 10.
When talking about forced displacement, PAX estimated that the number of people displaced as a result of the violence of the JAA Front in the Cesar mining region between 1998 and 2006 is approximately of 59,000.

But despite of these alarming figures, something that draws special attention is the fact that PAX pointed out to two big multinational companies Drummond and Proedco, based in The United States and Switzerland respectively, about financing to the JAA front in the Cesar region to ensure their protection, and to commit some crimes against humanity in order to pursue their profitable goals. They support those facts in interviews and testimonies to members of the paramilitaries (that now are sentenced for drug trafficking in the US), victims, and former official workers of both companies. In the report, are quoted revealing testimonies, which expose the transfer of high amount of money to illegal armed groups by Drummond and Prodeco, and how these companies provided financial assistance for 200 men in the region of Cesar.

---

88 Ibidem P. 56.
89 Ibidem P. 57
Also, it is stated in the report that according with one of the testimonies of a former constructor of Drummond, that this Company gave financial support to the JAA front through the company until mid-2001, due that after September 2001, right after the attack on the Twin Towers in New York City, the AUC were tagged as a terrorist organization and operations with this illegal armed group had become risky. Anyway, he argued that from 1997 to mid-2001, the company had paid a total of USD 900,000 to the JAA Front. The presence the presence of guerrillas and paramilitaries groups is represented in the next image:

Presence of armed groups in Cesar, period 1999-2006

Source: PAX The Dark side of Coal

---

90 Ibidem P. 59
In the PAX report there is also an special chapter in which is displayed how Drummond and Proedco bought some lands of forced displaced population in the municipality of La Jagua de Ibirico (I in the department of Cesar), where some politicians and public officials arranged the fabricated purchase of the victims’ lands through intermediaries. The testimonies of some of the ex-paramilitaries sentenced in the U.S are revealing of these illegal purchases. After the forced displacement occurred, some intermediaries bought those lands, and afterwards they sold them to Drummond and Proedco for coal mining purposes. The forced displaced families noticed about the purchase of their lands in 2007, and started the process to be recognized as displaced persons under the Law 1448 of 2011 – Victims and Land Restitution Law-, and get their lands back.

3.4. Chapter conclusion

After the presentation of the legal framework in subchapter 3.1. and in contrast with the facts and figures brought in the subchapter 3.2. it can be noticed that there have been multiple violation to human rights by non-state actors in diverse mining areas. Large-scale mining projects that involved multinational companies’ interests in certain occasions have led to forced displacement, spoliation, persecution of leaders, among others. Also the people that have been more affected by this phenomenon are found in rural rich-lands with exuberant amount of natural resources and biodiversity, lands that are mainly occupied by peasants, indigenous and Afro-Colombian communities.

In the cases mentioned above there are a breach on the displaced persons’ rights of dignity and physical, mental and moral integrity, liberty and security, life during

91 Ibidem P. 74
92 Ibidem P. 75
93 Ibidem P. 75
the displacement, the freedom of movement, and the right to an adequate standard of living; all of them established in the UN Guiding Principles on Internal Displacement, and the articles 3, 27 and 32 of the Geneva Convention, 75 of the Additional Protocol I and the article 4 of the Additional Protocol II, and the articles 1, 4, 5 and 7 of the American Declaration on Human Rights. Moreover, these rights are under protection in the articles 11, 12, 13, 24, 25 and 28 of the Colombian Constitution.

The International and local normative reviewed claim for State accountability when it comes to protect the displaced persons’ human rights and to prevent forced displacement. Therefore the Colombian State is in the obligation of taking the necessary measures to halt the occurrence of these situations according with the Principle 3 of the UN Guiding Principles on Internal Displacement, which set forth that “national authorities have the primary duty and responsibility to provide protection and humanitarian assistance to internally displaced persons within their jurisdiction”. Also, it is important to remark the Colombian State’s liability to formulate policies and adopt measures for the prevention of forced displacement according with the article 3 of the Law 387 of 1997, and the primarily Responsibility to Protect imposed to all the States by the International Customary Law.
4. ADVERSE EFFECTS ON THE ENVIRONMENT DUE TO CONTAMINATION OF LAND, WATER AND AIR RESOURCES IN MINING ZONES IN COLOMBIA

4.1. International and Local legal framework about the right to the environment

One of the first statements about the relationship between the quality of the human environment and the enjoyment of human basic rights can be seen in the 1968 UN General Assembly 2398 (XXII) Resolution\(^\text{94}\), but it was in the 1972 Stockholm Declaration, where it was remarked the importance about have into account the environmental issues when it comes to the enjoyment of fundamental human rights. In the principle 1 of this international instrument was settled down:

> Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations. In this respect, policies promoting or perpetuating apartheid, racial segregation, discrimination, colonial and other forms of oppression and foreign domination stand condemned and must be eliminated.\(^\text{95}\)

Similar international mechanisms have pointed out in the same direction, the 1982 World Charter for Nature reaffirmed the importance in the relationship human conduct-environmental harm\(^\text{96}\), the 1989 Declaration of the Hague on the Environment recognized “the right to live in dignity in a viable global environment, and the consequent duty of the community of nations vis-á-vis present and future

---

\(^{94}\)In the *ratio decidendi* of the mentioned Resolution it can be read that human environment is basic for the “*enjoyment of basic human rights, in developing as well as developed countries […]*”.

\(^{95}\)1972 Stockholm Declaration, Principle 1.

generations to do all that can be done to preserve the quality of the environment”, and the UN General Assembly in 1990 declared that “all individuals are entitled to live in an environment adequate for their health and well-being”.

The recognition by the international Community about the linkage between environmental harm and enjoyment of human rights, entails practical consequences in the context of international human rights, inasmuch as the distinction that has been drawn between economic and social rights, and political rights; understood the former as substantive rights which individuals are entitled, and the later as “due process” rights, that creates new obligations for the international community and for domestic governments.

At this point, having established the normative connection between the environment and human rights, it is raised the question about what human rights are endangered with the harm to the environment. About this matter, Simon Caney argue about the concept of human rights from the environment perspective, and concluded that this phenomenon jeopardizes ‘three key human rights: the human right to life, the human right to health; and the human right to subsistence’ among others.

The human right to life is stated in the International Covenant on Civil and Political Rights as this: “[e]very human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life”. The right to life can be endangered due that human life takes place in the environment and depending on how are the environmental conditions in which a community is

---

101 Article 6.1 of the International Covenant on Civil and Political Rights.
established, it may be developed gravely health illness that lead to death,\textsuperscript{102} or the occurrence of natural disasters that may lead to direct loss of life due to the “increasing frequency of severe weather events, such as tornadoes, hurricanes, storm surges and floods”\textsuperscript{103}

Respect to human right to health concerns, it has been understood as “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health”,\textsuperscript{104} and it has been identified that adverse conditions in the environment may lead to health diseases as it was stated above. In fact, unfavorable situation in the environment may increase diseases like malaria, diarrhea, dengue and cardio respiratory morbidity.\textsuperscript{105}

The human right to subsistence is affected by the environment as well, and in the Universal Declaration of Human Rights it has been stated as: “[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care […]”.\textsuperscript{106} For its part, Caney defines this right as “[a]ll persons have a human right that other people do not act so as to deprive them of the means of subsistence”.\textsuperscript{107} This right to a standard of living, or just mere subsistence it may be directly breached by the negative impact of anthropogenic interference in the environment, due to pollution for instance that may tend to endangered the production of food, loss of agriculture lands, contamination of hydric sources or crop failure.

Additionally to these basic human rights, Oliver C. Ruppel have explained in his books \textit{Environmental Law and Policy in Namibia – Towards Making Africa the Tree}

\textsuperscript{103} Ibidem Caney p.77.
\textsuperscript{104} Article 12.1 in International Covenant on Economic, Social and Cultural Rights.
\textsuperscript{105} To a deeper view on how this right is considered a human right see on Caney: http://www.esrc.ac.uk/Image/Climate_Change_Human_Rights_and_Moral_Thresholds_tcm11-9417.pdf p. 9
\textsuperscript{106} Article 25.1 Universal Declaration of Human Rights.
\textsuperscript{107} Ibid Caney, Op. cit. 100 P. 10
of Life, and Constitutional Democracy in Namibia – A Critical Analysis After Two Decades, as in the conference that took place last 4th of November of 2013 in the Faculty of Law at the University of Oslo, that the harm to the environment may endangered and breach several rights of 1st, 2nd and 3rd generation.

Ruppel lists these different rights and how are endangered: The right to life, which is linked to any disruption that lead to the loss of lives; the right to health due that the pollution of natural resources may lead to illness and affect the right to access to clean water; right to food, due that environmental disruption endangered the physical an economic access to adequate food; the right to development, because environmentally destructive economic progress halt long-term societal progress; the right to property, in the case that people living on islands and coastal areas that loss their property and lands due to the rising of the sea level; the right to Shelter and Housing, that takes place when environmental degradation displaces individuals and communities, the right to work, which is affected when the economy of a determine person or community depends on the environment; and the rights to minorities that deserve special treatment, and have been recognized progressively by international community like the right to Culture, Family life and Rights of Indigenous People, rights and Equity, non-discrimination, women and Children’s Rights.108

In fact, bearing in mind the importance and linkage between the environment and rights of any generation, it is possible to find a diverse range of legal international norms pointing out into the protection of these rights in different ways. Indeed, in the preamble of the Aarhus Convention – the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters- it is remarked the importance of the right to live in an adequate

environment in order to cover all of the persons’ healthcare needs. It is stated like this:

Every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations.

Along the same line, the International Covenant on Economic, Social and Cultural Rights brings certain rights linked directly to the environment; as the right to safe and healthy working conditions (Article 7 b), the rights of children and young persons to be free from work harmful to their health (Article 10-3), the right to and the right to health in article 12, in which it calls on States parties to take steps for "the improvement of all aspects of environmental and industrial hygiene [...]".

Also, in 2003 the UN Committee on Economic, Social and Cultural Rights concluded in the General Comment No. 15, which was adopted at the Twenty-ninth Session of the Committee; that there is a human right to access to water implied in the Articles 11 and 12 of the ICESCR, which defined the right to livelihood as including adequate food, clothing and housing.\(^{109}\)

Furthermore, in the Article 12 (2-h) of the 1979 Convention on the Elimination of All Forms of Discrimination against Women, there is an obligation to the States, about taking measures in discrimination against women, particularly in rural areas, to ensure that women “enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply”. Meanwhile, in the article 24 (2-c) of the Convention on the Rights of the Child it is set forth that the “parties shall take

appropriate measures to combat disease and malnutrition through the provision of adequate nutritious foods and clean drinking water, taking into consideration the dangers and risks of environmental pollution”. When it comes to indigenous peoples, the United Nations Declaration on the Rights of Indigenous Peoples in the article 29 (1) establishes that “Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources”.

It is also important to make allusion of the principles on International Environmental law, usually established by the Customary Law, and that claim for special attention to the environment when carrying out economic activities that may harm the environment, and hence threat the different rights above mentioned.

In fact, in the Gabcikovo-Nagymaros Project case, the International Court of Justice made mention of the principle of Sustainable Development, and made reference to the obligation for the states of pursuit economic development bearing in mind the protection of the environment. In words of the Court:

The Court is mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage.

Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind - for present and future generations - of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. This need to reconcile economic development with protection of the
environment is aptly expressed in the concept of sustainable development.\textsuperscript{110}

In the same line, there are other principles, like the *Precautionary Principle* set forth in the article 15 of the Rio Declaration, according to which “[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental damage”. Likewise the principle of *Permanent Sovereignty over Natural Resources*, whereby the exercise of this right entails to the States the duty of always consider the national development and the well-being of the people.\textsuperscript{111} For its part the *Preventive Action Principle* encourages that actions should be taken in order to prevent environmental harm before the damage has occurred.\textsuperscript{112}

In the particular case of Colombia, these principles and well-founded rights have been brought to the domestic legislation, and the importance on the environment and the protection of the different rights associated to it, is part of the 1991 National Constitution. In the article 79 of the National Constitution is stated that:

\begin{quote}
Everyone has the right to enjoy of a healthy environment. The Act will ensure the community participation in decisions that may affect it. \textbf{It is the duty of the State to protect the diversity and integrity of the environment, conserve areas of special ecological importance and promoting education for achieving these ends (emphasis added).}
\end{quote}

This constitutional rule must be interpreted in connection with the fundamental right to life and health, due to these can be only guarantee under proper conditions, in which life can me enjoy with a minimum standard of quality.

In the article 8 of the National Constitution as well, the environment is included like a common patrimony, and it is imposed to the State and to the people, the duty of protect the cultural and natural wealth. In establishes that “property is a social function that implies obligations and, as such, is inherent the ecological function”. It keeps the same idea, when it is determined in the article 63 that “the public goods, natural parks, communal lands of ethnic groups, land stewardship, the archaeological heritage of the Nation and other property determined by law, are inalienable and indefeasible”.

The Constitution takes into account the sustainable development as well, understood this as the one that leads to economic growth, always bearing in mind the increase in the quality of life and welfare, without draining the basis of renewable natural resources on which it is based, or damaging the environment or the right of future generations to use for meeting their own needs. In this respect, The National Constitution establishes in its Article 80 that:

> The State will plan the management and use of natural resources to ensure sustainable development, preservation or replacement. It must also prevent and control environmental deterioration factors impose legal sanctions and must claim compensation for damages. Additionally, it will cooperate with other nations in protecting ecosystems located in border areas.

As can be observed, there has been a wide development in environmental legislation in the last decades, as in an international as in a local level. Diverse legal mechanisms have settle down the importance on protect the environment, and how this is directly related with the humans, hence its disruption may lead to the breach of different human rights included even those from 2nd and 3rd generation. It has to be highlighted as well, that the State has a relevant role into the protection and prevention of any environmental harm, and is obligated to

---

113 Definition included in the guide of the Colombian Ministry of Mines ‘UPME’ (Unity for the mining and energy planation). In: http://www1.upme.gov.co
guarantee the enjoyment of all person’s environmental rights, and all others linked to them. As it was stated before, the liability of the State when it comes to environmental matters have been extensively set forth in the international mechanisms, as in the local normative, indeed, the article 79 of the Colombian National Constitution makes explicit this responsibility.

4.2. Most damaging environmental impacts in the mining activity in Colombia: Open-pit coal mining and extraction of gold by using cyanide

Despite of the previous legal mechanisms which pretend to ensure the environmental rights of the Colombian population, reality is far from the juridical frame established and will of the 1991 National Constituent Assembly.

As a matter of fact, the environment degradation due to mining activities in Colombian territory is evident, and to achieve the extraction of a mineral like gold, it is necessary to use highly toxic products, like cyanide, which pollutes lands and hydric resources, and affects the communities settled in those areas, as the wild animals. For instance, to achieve the gold-extraction Project Angostura, it was predicted that it was necessary to use 20 tons of cyanide every day for 15 years, but this project did not acquire the respective license.\(^{114}\)

Besides, to develop the big-scale mining projects, it is required sometimes, to change the rivers’ flow with dynamite, which produces huge changes in the geography and interfere with the humans and animal habitats. It is common as well, the construction of massive infrastructure like buildings and railroad tracks to

transport the minerals to the ports in the middle of natural parks, that give shelter to all of the rich biodiversity of the country.\textsuperscript{115}

The use of cyanide and mercury to reach the extraction of the gold is a common practice by the formal mining companies and the thousands of informal miners, who pollute the water with these heavy metals. But the hydric resources are not the only ones that are negatively implicated; also, the mixing that result of burning these metals to quarry the gold turns the air into a toxic amalgam. In this aspect, the Colombian Office of the Ombudsman found out that the air quality in some mining municipalities like Segovia, Zaragoza and Remedios (in the Department of Antioquia, west of Colombia) the level of mercury could be even 1000 times higher than the allowed. Just in the municipality of Remedios, 15 people have solicited a kidney transplant due to mercury intoxication.\textsuperscript{116}

One of the conclusions in the Study ‘mining municipalities in Colombia: characteristics and impacts on development’ it was that when it comes to infant mortality, it was found out that for children less than one year old and less than four years old, this rate is inferior in the municipalities where there are not mining activities than in those where gold and silver have been extracted, in municipalities where there are coal mining activities, this rate is even higher.\textsuperscript{117} Also it was concluded, that the municipalities where mining activities are common, these are entitled with a bigger environmental vulnerability than the other municipalities where this types of activities are not developed, curiously, it was found that the probability of a municipality into holding mining activities, it is proportional to the distance to natural parks and forests reserves, which actually sets an alarm about

\textsuperscript{115} Ibidem.
\textsuperscript{117} Ibáñez, ana María and Laverde, Mariana: Los Municipios Mineros en Colombia: características e impactos sobre el desarrollo P.9 In: http://www1.upme.gov.co/sites/default/files/forum_topic/3655/files/municipios_mineros_colombia_caracteristicas_impactos_sobre_desarrollo.pdf
the probability of the advent of mining practices in protected areas, where is forbidden by law.\textsuperscript{118} In the next map it is shown actually, how mining titles applications overlaps in certain areas with protected areas in Colombia:

![Protected areas, mining titles and applications 2013](image)

Source: Semillas Group

The harm in the minimum quality of life is one of the main grievances. The vital needs of people that used to be covered with the production of food from the land, today is threatened by the new use that it has been given to the natural resources. In the same way, even archaeological looting has occurred and is constituted an assault on the memory and history of the various regions and the growing

\textsuperscript{118} Ibidem p. 15.

\textsuperscript{119} In which: In light red: Current mining applications. Dark red: Mining titles granted. In green: Natural parks and forest reserve.
environmental degradation visible to the extinction of fish, water pollution, deforestation and death of animals.\textsuperscript{120}

In spite of these problems, another evident environmental harm is the consequence of the negligence in the administration of the local governments, which have breached the norm that obligate all of the municipalities to invest at least 17% of the mining royalties in the preservation and the betterment of the environment. It has been registered that in between of 2004 and 2009, just an average of the 3,2% of these royalties were intended to cover this legal obligation, furthermore, even the energy-mining production have been widely increased in the national total production, the environment budge representation in the GDP has been smaller year by year.\textsuperscript{121}

The breaches in human rights and the environment for mining activities were detected officially by the authorities in 2010, due to multiple denounces of corruption and scandals in the granting of the mining titles. In February of 2011, the Colombian Government was pushed in to stopping the granting of mining titles until the situation get normalized. This denounces were on head of the General Comptroller Office, which exposed in that time that contrary to the official version, there had not been given 6,653 applications for mining titles, but were been granted 12,997 applications, and there were still 19,629 reposed in the National Mining Agency (ANM); further adds that to date of the report had not set a ‘reliable Mining Cadastre’ yet had traditionally been issued titles, and even worse had traditionally been issued in areas of forest reserve and in protected areas which would cause harm ‘to the ecological heritage of the country,’ plus multiple social breaches against possibly ‘international conventions on the environment’.\textsuperscript{122}

\textsuperscript{121} Ibidem
Bearing the last in mind, it will be shown then, the two main affectations to the environment when it comes to coal and gold mining activity in Colombia: open-pit coal mining, and extraction of gold by using cyanide.

4.2.1. Environmental impacts in open-pit Coal mining

The Cerrejón mine in La Guajira, Colombia. The world's biggest open-pit coal mine. Photograph: Oliver Balch in The Guardian Edition UK

Mining projects generally involve important modifications in the territory in which they take part. These modifications are related to the practices for extraction of the mineral, building of tracks to get access to the mine and getting out the mineral, transport of machinery and equipment, land acquisition, among others, which may have an impact on a number of variables like the physical environment -air, water, soil, climate geology and geomorphology-, the biota -fauna, ecological balance, wildlife and vegetation-, the perceptual landscape or environment; the socio-economic environment, which relates economy, population, infrastructure, land use and social and cultural heritage.
According to Espinosa & Toro, one of the main environmental impacts of open-pit mining is the increase in the susceptibility to erosion in the lands where the exploitation is taking part due that this activity involves the removal of all vegetation cover and the ground remains expose, which has a direct impact in the increase of the erosion in the area. This conclusion was a result of a study that was conducted in the municipality of Anorí in the department of Antioquia (west of Colombia), where a model that evaluates the aforementioned susceptibility of soil to erosion was proved, before to the inclusion in the territory of mining projects in order to assess potential impacts that they may entail.

4.2.1.1. Main impacts on the environment and living forms

In the same line and in accordance to the study conducted by the Costa Rican Ecological Association – ‘Friends of the Earth’, a detailed description of the environmental impacts caused by the presence of open pit mining are the next ones:

Affectation on the surface: the open-pit mining devastates the surface, severely alters the morphology of the terrain, piles, revealing large amounts of waste material, leads to destruction of cultivated areas and other surface assets, can alter water courses and form large gaps to the discarded material.

Affectation of the surroundings: the open-pit mining radically changes the environment, it loses its possible landscape attraction and is affected by the noise generated by the operations, such as crushing and grinding, in power generation, in the transport and loading and unloading of minerals and waste material from the mine and the mill.

123 Espinosa, D. de J., & Toro, L. J. (2012). Evaluación de la susceptibilidad a la erosión por el cambio de cobertura debido a la minería, en el Municipio de Anorí, Antioquia, Colombia. Revista Gestión y Ambiente.

**Air pollution:** air can be contaminated with solid impurities, such as dust and toxic fuels. These impurities are able to penetrate into the lungs, in the various stages of the extraction process. It is possible as well, to contaminate the air with vapors or gases of cyanide, mercury, sulfur dioxide; that are content in the waste gases from incomplete combustion processes or fumes ponds with no water circulating decaying organic matter.

**Affectation in the surface water:** thin solid waste from the mining area can result in an elevation of the layer of sediment in the rivers of the area. The oxidization in dams and ponds poorly constructed or poorly maintained, or that have been improper handling, plus the storage or transportation of supplies (such as fuel, lubricants, chemical reagents and liquid waste) may lead to contamination of surface waters.

**Affectation of groundwater:** water contaminated due to used oil, with 3 reagents, mineral salts from the batteries or dumps waste solids treatment processes and contaminated rainwater contents of these dumps, or batteries or water from tailings dams or contaminated process waters may reach groundwater. In addition, there may be a decrease in the levels of the groundwater when they are a source of fresh water supply for mineral processing operations.

**Affectation of the soil:** Open-pit mining involves removal of soil in the area of exploitation, and produces a drying of the soil in the surrounding area as well as a decline in agricultural and agricultural performance. It also tends to cause the formation of sinkholes and swamps where the groundwater level rises. Also causes disqualification soil by stacking of matter excess.

**Impact on flora:** Open-pit mining includes the removal of vegetation in the area of mining operations, and a partial destruction or modification of the flora in the surrounding area due to the alteration of the phreatic level. It can also cause
pressure on existing forests in the area, which can be destroyed by the process of exploitation.

**Impact on wildlife:** wildlife is disturbed and / or driven away by the noise and pollution of air and water, and due to the raising in the level of sediment in rivers. In addition, the erosion of barren waste piles may particularly affect aquatic life. It may also be poisoning reagents contained in the residual water from the area of operation.

**Impact on people:** Open-pit mining can cause conflicts on rights of land use, lead to uncontrolled emergence of human settlements causing a social problem and destroying areas of tourism potential. It can cause a decrease in performance of the work of fishermen and farmers due to poisoning and changes the course of rivers due to elevated levels of sedimentation. Furthermore, it can cause a negative economic impact due to the displacement of current or future local economic.

**Changes in microclimate:** Open-pit mining can cause changes in microclimate and can cause a multiplication of pathogens in puddles and stagnant water covered areas.

**Landscape impact post-exploitation:** Open-pit mining leaves deep craters in the landscape. Their removal may involve such high costs that may prevent the exploitation itself.

In the same line, there are studies about open-pit mining that have been conducted in England and the United States (West Virginia) in which they have arrived to the same conclusions that have been just showed up. In fact, Michael Hendryx, Ph.D. at 'The Institute for Health Policy Research' from the West Virginia University, exposed in his studies about chronic diseases related to pollution in coal mines, and argue that the larger the coal production near to the community the higher the
risk to get lung, heart or kidney diseases. In his study, Hendryx examined 16,400 people that live in proximities to coal mines, and concluded that there are 64% bigger risks in getting obstructive lung diseases, which causes problems in pulmonary tissues, physical malfunction, change in the shape and may lead to the lung destruction.\footnote{West Virginia University Health Sciences Center (2008, March 27). Chronic Illness Linked To Coal-mining Pollution, Study Shows. ScienceDaily. Retrieved December 10, 2009, from http://www.sciencedaily.com/releases/2008/03/080326201751.htm}

But these affections are not related just to the academy and scientific studies, are part of the Colombian mining daily-context, and are easily visible in the northern part of the country in the department of La Guajira, where it is located the biggest open-pit coal mine in the world: El Cerrejón.

4.2.1.2. Gaining profits from the production of Coal in the Guajira Department. At what cost? The Cerrejón case: The curse of coal by DanWatch

In all of the communities that DanWatch has visited in La Guajira [northern part of Colombia], pollution from the mining has resulted in polluted drinking water, headaches, rashes and lounge problems for the inhabitants, and when it rains it smells of sulphur. Earlier the inhabitants would use their traditional medicine plants to fight diseases, but in fear that the plants will make them even more ill, they have stopped using them.\footnote{Rømer Adamsen, Dennis-Poulsen, Anne Sofie -Urban Swart, Maren. Curse of Coal: Our coal consumption causes diseases, pollution, and poverty in Colombia. DanWatch May 2010.}

This is one of the observations that Danwatch -a Danish corporate watchdog that investigates and monitors companies’ impact on humans and the environment globally- pointed out in the report the ‘Curse of Coal: Our coal consumption causes diseases, pollution, and poverty in Colombia’.
The report was initially published by DanWatch in Denmark under the name of “Kullets Forbandelse”. In the report there is a focus in the activities of Danish DONG Energy and Swedish company Vattenfall, which are one of the main importers of the Coal produced in the Cerrejón mine in Colombia.

El Cerrejón was funded in the earliest 80’s as a mix company between the Colombian company Carbones de Colombia S.A. (Carbocol) and International Resources Incorporated (Intercor), which is subsidiary of Exxon. Later, in 1999 Carbocol sold its part of the Cerrejón to a conglomerate of companies integrated for Anglo American, BHP Biliton and Glencore. Later in the 2002, Exxon did the same, and sold its part to the conglomerate just mentioned. It was like that, that the tripartite consortium got the 100% of the Cerrejón mine. In 2006, Glencore sold its shared part to Xstrata.\textsuperscript{127}

Cerrejón holds the title of the world’s largest open-pit mine, and produces over 30 million tons of coal annually.\textsuperscript{128} It is located in the department of La Guajira, in the nort-eastern part of Colombia, and it has a mining area of 150 square kilometers.\textsuperscript{129}

It is supposed, that in the frame of the actual policies of the current government, the extraction of the gold that lie under the Guajira soil would bring development and a boost in the economy of the region and its inhabitants, but despite of the earnings from the mining activity for the Cerrejón conglomerate, and the eventually taxes and royalties paid to the local administration, the truth is that the typical environmental risks of the open-pit mines have caused several diseases to workers, local communities e indigenous people, without mention the social issues common in this type of activities. It was described in the DanWatch report that:

\begin{flushleft}
\textsuperscript{127} Ibidem P. 11  \\
\textsuperscript{128} Ibidem P. 13  \\
\textsuperscript{129} Ibidem P. 12
\end{flushleft}
The Danish coal consumption has thus been contributing to the Wayuu-indians and other local peoples being driven out, forcefully relocated, losing access to land, water, hunting grounds, schooling, infrastructure and have been living with heavily polluted air and water. In addition, the work in the mine makes the workers sick, without the mining company acknowledging that fact.\footnote{Ibidem P. 6}

It is known also, that the workers have poor conditions, and by the time of the report, 900 workers were sick because of the pollution in the mine and the lack of safe working conditions was usual.\footnote{Ibidem P. 12} In fact, the most common diseases involve working with heavy machinery that causes affections due to the high level of vibration, and poisoning because of handling of chemicals over the permitted limits, which lead to increase of the levels of led in the blood, hydrocarbon in the urine and sever lung diseases that in some occasions have led to deaths.\footnote{Ibidem P. 12}

Even if the Cerrejón has been reluctant to admit the poor conditions of the mine workers, it was shown that in October of 2007, the company conducted a research, and concluded that in fact, the workers are exposed to high level of chemical fumes and inappropriate contact with the chemicals that are used in the extraction of the coal. One of the conclusions of this research was:

Benzene and dicloromethane exceed many times the maximum permitted concentration for each chemical (...). Given the elevated concentrations of Benzene and Dicloromethane there could be adverse effects on the health of the workers that work there.\footnote{Ibidem P 13}

It was pointed out as well, that lungs, lymph and bladder may be affected due to the contact to benzene, and eventually leads to death\footnote{Ibidem P. 9}. But despite of this, the contact with chemicals is not the only cause of illness to workers in the mine. The
most common diseases are developed because of the inhalation of the coal dust that emerges from the extraction; this in particular, although affects directly the workers at Cerrejón, are also the main cause of illness of the communities and population that lives around the extraction areas.

Indeed, the inhabitants of the near areas to the mine have to live with the consequences of the mining. There were collected some depositions of the people in the area, and it is evident how the pollution affects the health of the communities:

The Contamination from the port is awful [...] when it’s really windy and you eat, your plate gets covered with coal dust [135]. “The vegetation is not as vigorous as earlier, the animals are all contaminated and the inhabitants experience a hefty reduction in their health; “Women have suffered sterility, and the inhabitants have had eye problems and lung problems. Sometimes it feels like a rash or an itching. When the pores open, the dust enters and that causes an inner scratchy, stingy sensation. A lot of communities suffer that. Also there’s like a flu, a constant coughing, that comes from the dust [136].”

Even if all of these situations affect gravely to the communities in La Guajira, in general, the most affected are the Wayuu indigenous communities, who have experienced as well that the quality of life has been reduced by the pollution from Cerrejón.

It can be stated then, than the open-pit mining in La Guajira have brought some undesirable side effects to the inhabitants of this rich-ore territory, who have to face the daily risk of live in an high polluted area, where the extraction of coal contaminates the local environment in a large proportion, that leads to the local population and to the workers of the mine to get ill. The Cerrejón case then, is a perfect example on how open-pit mining and coal extraction have a profound

135 Ibidem P. 9 [41]
136 Ibidem P. 9[42]
137 Ibidem P. 9
impact in the environment, and consequently to the people and biodiversity that live near the extraction areas.

4.2.2. Environmental damage due to the use of cyanide for the exploitation of gold

Cajamarca, Tolima. Explorations carrying out by Anglogold Ashanti where La Colosa gold-mine will take place.

Photograph: The Prisma: The Multicultural Newspaper

Mining operations by cyanide leaching can be of two types, ‘closed’ or ‘open’ depending in the use of the cyanide solution system. In an open system, the cyanide is diluted and the "sterile" solution remaining after recovering gold is discharged into the environment to fulfill applicable water quality standards for cyanide concentrations. In a closed system the "sterile" solution of cyanide is reused to minimize the need of more cyanide, in order of accomplish the environmental standards which may be applicable at the mine site.\textsuperscript{138}

The mining operations that use cyanide extraction technology involve high environmental impacts, which in many cases can be classified like environmental disaster, but according to the DuPont Corporation (cited by Alberswerth) is economically feasible to extract gold by using cyanide with just 0.01 ounces of gold per ton of mineral. This technology has come to replace gold recovery by amalgamation with mercury, inefficient process in terms of recovery, due to allow just 60% recovery of ore, compared to over 97% for extraction with cyanide. The amalgamation is known as the process by which the mineral is bound to the substance used, in this case mercury or cyanide, for the purpose of separating it from the rest of the material.\textsuperscript{139}

The adverse effects in the extraction with cyanide can be summarized in the next ones, according with the previously quoted Costa Rican Ecological Association – ‘Friends of the Earth’ and the ‘International Cyanide Management Code’.\textsuperscript{140} The high toxicity and natural reactivity of cyanide, to restrain this substance is one of the primary concerns of the mines in which the leach extraction is used, that brings adverse effects of on fish, wildlife and humans.

\textbf{4.2.2.1. Cyanide toxicity: About the impact on wildlife and water}

Cyanide is extremely toxic to any type of living form, and that includes obviously plants and animals. Cyanide spills could kill vegetation and impacting photosynthesis and reproductive capacity of plants. As for animals, cyanide can be absorbed through the skin, ingested or aspirated. Concentration in air of 200 parts per million (ppm) of hydrogen cyanide are lethal to the animals, while as low as 0.1

\textsuperscript{139} Ibidem.
\textsuperscript{140} International Cyanide Management Code’. In: http://www.cyanidecode.org/cyanide-facts/environmental-health-effects
milligrams per liter (mg / l) concentrations are lethal to sensitive aquatic species.\textsuperscript{141} Sublethal concentrations also affects the reproductive systems of both animals and plants.

The lethal dose for humans is, in case they are ingested, 1 to 3 mg / kg body weight, should be assimilated, 100-300 mg / kg, and 100 to 300 ppm if they are aspirated. This means that a smaller portion of cyanide than a grain of rice would be enough to kill an adult. The long-term exposure to sublethal doses may cause headaches, loss of appetite, weakness, nausea, dizziness and irritation of the eyes and respiratory system.\textsuperscript{142}

The handling of this component then, has to be very carefulness to prevent the harmful effects of contact with the workers, but is still mining workers often have contact with cyanide, especially during the preparation of the solution of cyanide and the recovery of gold from solution. For the miners, the risks are: cyanide dust, fumes cyanide in the air from the cyanide solution and contacting the cyanide solution with the skin.\textsuperscript{143}

The impact on wildlife and water of extraction with cyanide has been pointed out for the National Wildlife Federation of the United States,\textsuperscript{144} and they have affirmed that when millions of tons of ore mines are extracted in open-pit mines, removed and treated with millions of gallons of cyanide solution, operations that use cyanide heap-leaching disrupt the habitats of wildlife and watersheds and can lead to a multitude of risks to health and the environment.

In the next subchapter it will be presented how the mentioned negative impacts in the environment may be represented in one of the most ambitious gold mining projects in Colombia: La Colosa.

\textsuperscript{141} Asociación Ecológica Costarricense - Amigos de la Tierra Op Cit. 124.
\textsuperscript{142} Ibidem.
\textsuperscript{143} Ibidem.
4.2.2.2. Threat of an environmental tragedy in the Tolima department: 

La Colosa: A Death Foretold by London Mining Network

Anglogold Ashanti (AGA) is a mining company based in South Africa, which own several mines across the globe and has been consolidated as the biggest mining Company in Colombia. In the year 2003, the company Ashanti Gold Fields, initially based in Ghana was merged with the AngloGold Company to create the company that exists now. Its operations started in South Africa, where it was in the eye of hurricane of controversies and accusations because of the breach of human rights and the environment. Later, it expanded its operations to other countries.\textsuperscript{145}

AGA also operate in Chile, in the area known as El Salar de Huasco, where 60% of the water supply for the whole region goes to mining activities, concretely to the mines Quebrada Blanca, Cerro Colorado and Doña Inés de Collahuasi; the issues than AGA has faced in its operations is due to the the lack of water supply to the inhabitants living in the towns of Iquique, Huara, Pica y Pozo Almonte in Chile.\textsuperscript{146}

In Colombia, AGA has one ambitious project in the municipality of Cajarmarca, in the Department of Tolima. From 2003, AGA is planning to construct a huge mining complex with the capacity for 150 people in an area of 17,000 m\textsuperscript{2} in two campaigns: Bélgica and La Colosa. It has been predicted that this two campaigns will not be contiguous, which implied the threat of the flora and wild life in an area of 1,7 hectares, also it has been announced that it will be affected important hydric resources, like the river Coello, of which most of the agricultural activities are

\textsuperscript{145} Rodríguez Maldonado, Tatiana and Urrea, Danilo. Agua o minería un debate nacional. CENSAT Agua viva. Bogotá, Colombia, 2011.

\textsuperscript{146} Ibidem.
depending in the zone.\textsuperscript{147} In fact, Coello River has been denominated as a hydric complex that supplies water to more of 4 million people in the center of the country, and the risk of this river to get polluted because of the discarding of the cyanide, that is need it to extract the gold in the area.\textsuperscript{148} In the report “water or mining” of the Non-Governmental Organization CENSAT, the exploitation of minerals in Cajamarca has been denominated as a catastrophe in environmental terms.\textsuperscript{149} This may lead to a breach to the right to access to clean water to the inhabitants of this area.

In spite of this gravely predictions, AGA was accused of breaching the Colombian Law # 2 of 1959 due of developing mining explorations in forest reserves without an authorization. As a matter of fact, in February of 2008, the regional environmental authority “CORTOLIMA” halted the exploration works because it was founded out that AGA was drilling in areas of forest reserve, without the environmental licenses.\textsuperscript{150} In 2009, this decision was seconded by the National Ministry of Environment, which through the Resolution 785 of 2009 started legal proceedings against AGA due to breaching of national and local environmental regulations.

The forest reserve area that concerns to the authorities is of the type ‘páramo’ area, which is key in the supply of fresh water to millions of people in the center of the country, and AGA has already carried out drilling in areas that are above the

\textsuperscript{147} Idárraga Franco, Andrés. “Exploración en La Colosa, entre ingenuidades e insinuaciones” http://www.censat.org/articulos/10024-analisis/481-Exploracion-en-La-Colosa-entre-ingenuidades-e-insinuaciones


\textsuperscript{149} Rodríguez Maldonado, Tatiana and Urrea, Danilo Op. Cit. 145. P. 22

elevation threshold of where the páramo starts, that is 3200 meters above sea level.\textsuperscript{151}

In the report ‘La Colosa: A Death Foretold. Alternative Report about the AngloGold Ashanti Gold Mining Project in Cajamarca, Tolima, Colombia’ published in December of 2013 by the Colombia Solidarity Campaign, a member group of London Mining Network, which links together 30 organizations that have similar concerns, it was detailed how over the life of the mine, approximately 100 million tons of wasted rock would be generated, which will be dumped to the valleys and represent highs risks of Acid Mine Drainage of surface and underground water because of the chemicals used for the extraction, especially cyanide.\textsuperscript{152}

AGA’s La Colosa project then, it is shown as an example on how great-scale mining may affect the environment, and therefore all living forms in the operation areas. The social problems also are visible in the horizon, because it happened to be repeating all of the mining issues that Africa experienced in the past, and now, to be translated to Latin-America. The precedents of AGA’s projects in Africa and Chile, as the breaching of important environmental legislation in Colombia, it is presented now like the story of a death foretold, as was stated in the Colombia’s Solidarity Report.

4.3. Chapter conclusion

The environment degradation due to mining activities in Colombian territory is evident. The most damaging environmental degradation has to do with open-pit coal mining and extraction of gold by using cyanide. The use of highly toxic products like cyanide or mercury and the surface extraction of coal, pollute the air,
the lands and hydric resources, affecting the communities settled down in those areas. Mines’ workers are getting ill due to the pollution and the lack of safe working conditions. In the cases mentioned in the department of La Guajira, Antioquia or Tolima, mine’s workers and the inhabitants of the near areas to the mines have to live with the adverse consequences of the extraction of the minerals; hence, there is a breach on 1st, 2nd and 3rd generation rights.

As it was described in the subchapter 4.1., in the International Law and the Local Colombian Law there are a diversity of rights linked to the environment that are normatively protected, and in contrast to the cases mentioned in the subchapter 4.2. there are a breach on the rights to life, to health, to access to clean water, to food, to work, and the rights to minorities. All of these rights are established in the Principle 1 of the Stockholm Declaration, the World Charter for Nature, the article 25 (1) of the Universal Declaration of Human Rights, and the articles 7 (b), 10 (3) and 12 of the International Covenant on Economic, Social and Cultural Rights; as in the article 79 of the Colombian Constitution and the International Environmental Law Principles.

According to the International Principle of Sustainable Development and the Preventive Action (of great importance in La Colosa case) and the articles 8, 79 and 95 of the National Colombian Constitution, the Colombian State has the responsibility to protect the environmental and take measures for remedying and preventing the disruption of the environment in the mining context. Is the duty of the State to protect the diversity and integrity of the environment, and when taking the measures, to have in special consideration the rights of women (article 12 (2-h) of the Elimination of All Forms of Discrimination against Women), children (article 24 (2-c) of Convention on the Rights of the Child) and Indigenous peoples (article 29 (1) of the United Nations Declaration on the Rights of Indigenous Peoples).
5. GENERAL CONCLUSIONS

5.1. The open economic mining policies of Colombia’s last governments have had a series of unexpected side effects that have led to internal displacement and harm to the environment by non-state actors. The consequences of such effects have brought multiple violations to human rights by non-state actors in diverse mining areas in Colombia and in certain occasions have led to forced displacement, spoliation and persecution of leaders, as to environment degradation mainly due to the extraction of minerals through open-pit system and the irresponsible handling of toxic chemicals.

5.2. Due to the unexpected effects before mentioned, there has been a breach in the internal displaced persons’ rights of dignity and physical, mental and moral integrity, liberty and security, life during the displacement, the freedom of movement, and the right to an adequate standard of living. Also, there has been a breach on the rights of mine’s workers and the inhabitants of the near areas to the mines to life, to health, to access to clean water, to food, to work, and the rights to minorities due to environment degradation because of mining activities.

5.3. The break on these different rights has entailed a breach to International and Local Law. Indeed, there are multiple violations to the UN Guiding Principles on Internal Displacement, the Geneva Convention IV and its Additional Protocols, to the American Declaration on Human Rights, to the Stockholm Declaration, the World Charter for Nature, the Universal Declaration of Human Rights, and the International Covenant on Economic, Social and Cultural Rights, among others; as to the 1991 Colombian Constitution.
5.4. The International and local normative claim for State accountability when it comes to safeguard the displaced persons’ human rights and protection of the environment. Therefore, in regards to internal displaced persons, the Colombian State is in the obligation of taking the necessary measures to halt the occurrence of these situations according with the Principle 3 of the UN Guiding Principles on Internal Displacement, the article 3 of the Colombian Law 387 of 1997 and the International Custom Law of Responsibility to Protect. Respecting to the environment issues, according to the International Principle of Sustainable Development, the Principle of Preventive Action, and the articles 8, 79 and 95 of the National Colombian Constitution, the Colombian State has the responsibility to protect the environment and take measures for remedying and preventing the disruption of the environment in the mining context.

5.5. The exploitation of mineral resources have triggered a variety of social and environment situations within the areas of higher mining activity, which have been difficult to predict by the authorities, and have represented a challenge in order to face them. It is exposed that the Colombian Government has fairly capacity to administrate and control the extraction mining activities; hence, it is necessary to strengthen the sector. In the mining municipalities, especially those which gold and coal are being exploited, there is an institutional weakness and vulnerability in the socio-economic conditions, there is a low presence of State’s authorities and therefore a major armed conflict incidences. It is necessary a coordinate work between the central government and the local environment authorities in order to have a major control in the mining zones.

5.6. The mining and oil boom have not just brought negative consequences for the inhabitants of the extraction areas or the environment; there are indeed, profits from taxes and royalties to the municipalities that host the projects. Mining industry emerges like an unique opportunity to give a boost to the country's infrastructure, and would help to take out from poverty a great amount of Colombians who do not
have enough income to make a decent way living. Nevertheless, it should be realized that mining is an activity that should not be just well regulated on the paper, but the control has to be effective and real through the different control offices as the *Procuraduría* and the Comptroller office.

**5.7.** The government should create formulas to banish mafias and make room for the miners. It must also be imposed on the companies that corrupted the institutions and violated the law, a new ethical code and taking measures of sustainable development. Once the appropriate institutional mechanisms are created, it is needed to encourage the environmental protection as a good more valuable than gold and coal. For this goal, it is vital to take into count any feedback that the leaders of the communities and Ong’s have to offer.
6. BIBLIOGRAPHY

BOOKS, REPORTS AND ACADEMIC ARTICLES


4. Dirección de Planeación Nacional Colombia, Plan Nacional De Desarrollo 2010-2014 Tomo I. P.


MEDIA ARTICLES


57. Juan Camilo Restrepo, “A comprehensive land policy for Colombia,” Plenary Presentation before the House of Representatives, (Bogotá, Colombia), August 2010.


65. CODHES, Desplazamiento creciente y crisis humanitaria invisibilizada. Boletín de la Consultoría para los Derechos Humanos y el Desplazamiento Número 79 - Bogotá, Quito, Marzo de 2012.


ochentaempresas-financiaban-paramilitares-del-bloque-norte.


72. SINTRAMINERCOL, “La violación de los derechos humanos en el país está estrechamente ligada con el modelo económico existente en Colombia,” www.acantioquia.org/...foro/EXPOSIC_SINTRAMINERCOL.doc.


NORMS AND VERDICTS


82. Constitutional Court of Colombia. Sentence T-1635 de 2000, Reporting Judge José Gregorio Hernández Galindo.

83. Constitutional Court of Colombia. Sentence SU-1150 de 2000, Reporting Judge Eduardo Cifuentes Muñoz.


85. Constitutional Court of Colombia. Sentence SU-1150 de 2000, Reporting Judge Eduardo Cifuentes Muñoz


87. 1972 Stockholm Declaration


96. UN Guiding Principles on Internal Displacement

97. Geneva Convention IV –Relative to the protection of civil persons in time of war- and the Additional Protocols I and II

98. ICRC’s Customary International Humanitarian Law rules.

99. American Declaration on Human Rights

100. Congress of the Republic of Colombia Law 387 of 1997
102. Congress of the Republic of Colombia Law 599 of 2001
103. Congress of the Republic of Colombia Law 1448 of 2011
104. 1991 National Constitution
105. 1968 UN General Assembly 2398 (XXII) Resolution
106. 1982 World Charter for Nature
108. UN Committee on Economic, Social and Cultural Rights
109. 1979 Convention on the Elimination of All Forms of Discrimination against Women
110. Convention on the Rights of the Child
111. United Nations Declaration on the Rights of Indigenous Peoples
112. Rio Declaration