

# Policy Brief

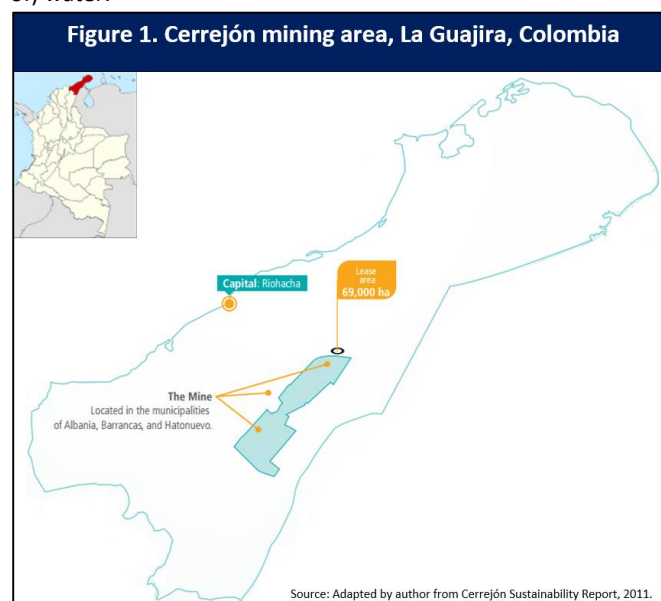
March 2017

## Conflict over water and mining

### The case of the Cerrejón coal mine in La Guajira, Colombia

#### What's the issue?

Colombia is currently experiencing a mining boom, especially in the extraction of coal, becoming the 9th largest exporter of steam coal in the world. However, despite having the support of the government, many of these mining operations have been accompanied by several environmental conflicts, with one of the main issues being (the availability/access to/contamination of) water.



The Cerrejón mine in the North-Eastern region of La Guajira (see Figure 1) is Colombia's largest coal mine (and one of the largest

in the world) and is responsible for 44.4% of Colombia's coal exports, with an annual production of up to about 33 million tonnes. This high level of production requires the use of vast amounts of water (up to 34 million litres a day) as well as the diversion/modification of water bodies to make way for the mining operation. This has led to conflicts over water resource management in the region.

Despite the mine advocating that its water management is sustainable and efficient, lack of consultation and inclusion of the local, mainly indigenous Wayuu communities surrounding the mine has created a conflict between these two groups as well as with the government. On the one hand, the indigenous people and local activist groups argue that the mining operation has severely affected the water resources of the region by using up common superficial and subterranean water sources, polluting a number of rivers and streams, and causing the drying up of water bodies through diversion projects. Along with the forced displacement of many communities, these factors have greatly hindered the local indigenous people's access to water (especially those living in rural areas near the mine). On the other hand, Cerrejón and a majority of government bodies claim that the mine's use of water is legal and sustainable, and has minimal effects on the region's water resources. They argue that the lack of water is caused by climatic conditions and population growth.

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## Why is it important?

Since 2012, this conflict has been exacerbated by persistent drought in the region, which is already classified as semi-desert. The situation is so dire that on 11 December 2015 the Inter-American Commission on Human Rights (IAHCR) ordered precautionary measures to be taken in the region, citing that lack of access to drinking water and malnutrition has caused the death 4770 children in the past 8 years (IAHCR Resolution 60/2015, 2015). Although most of these deaths have occurred in the upper Guajira where there is no mining, some of the more southern municipalities (such as Albania) where the mine is located, have also been affected. Furthermore, the resolution also mentions the potential negative effects of Cerrejón's use of subterranean aquifers on the health of the Rancheria river basin (the biggest and most important water body of the region). In this context of humanitarian crisis, the preservation and proper allocation of scarce water resources is vital for the health and survival of local communities.

This should be planned and enforced by the laws and regulation of the country. Although the human right to water is not enshrined in the Colombian constitution there is extensive legislation and constitutional court decisions which follow the United Nations (UN) guidelines of ensuring "sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses" (UN Economic and Social Council, *General Comment No. 15: The Right to Water*, 20 January 2003), and protecting water resources.<sup>1</sup> Indigenous people are also protected through their special rights to prior consultation under Law 21 of 1991, which has led to specific legislation such as Law 99 of 1993 which sets out the procedures for consultation with indigenous and black communities, and states that "the exploitation of the natural resources in the indigenous territories will be done without impairing the cultural, social, and economic integrity of [these] communities".

However, in La Guajira much of this legislation has not been properly implemented, as seen by the fact that much of the population still lacks water (with people living in the upper Guajira only consuming 0.7 litres of water a day according to UNDP, 2014)<sup>2</sup> and the high number of complaints made by indigenous communities surrounding the violation of their human rights and the destruction of their water resources. The government therefore needs to increase its efforts in upholding the right to water in the department by ensuring that the water needs of the local population are satisfied and key water resources preserved, before allowing big industries

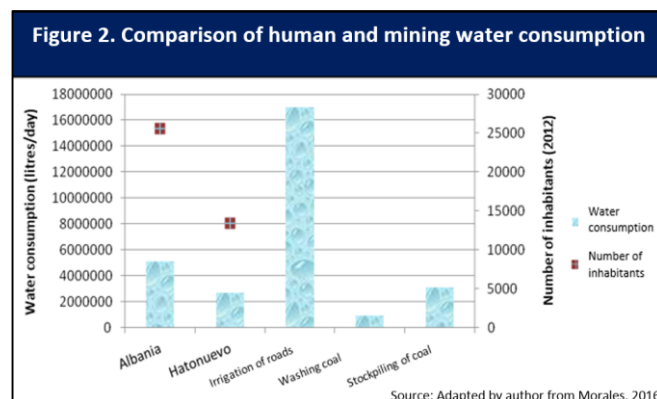
such as Cerrejón to exploit these resources. This also requires greater co-ordination between national and regional government agencies in charge of managing water in La Guajira, including: the **Ministry of Environment and Sustainable Development**, the **Autonomous Regional Corporation** in charge of environmental management in La Guajira (Corpoguajira), the **National Authority of Environmental Licences** (Autoridad Nacional de Licencias Ambientales – ANLA), the **Ministry of the Interior** in charge of determining prior consultation for affected communities, the **Ministry of Housing** in charge of ensuring water supply to the general population, and the **departmental and municipal governments of La Guajira**.

## Main areas of conflict over water

Overall, three main areas of conflict over water use and management can be identified.

### 1. The mine's high consumption of water

Cerrejón uses between 27-35 million litres of water a day in its operation, mainly for spraying the roads and other surfaces to prevent the volatilisation of coal particles. As can be seen in Figure 2 this greatly exceeds the 2-5 million



litres used by the surrounding population, living in the cities of Albania and Hatonuevo.

According to Cerrejón, between 88-93% of this water is "industrial", coming from stores of water mixed within the coal reserves, and not suitable for human or animal consumption. Only 7-12% is clean treated water coming from subterranean aquifers and a number of small streams, and this is mainly used for the water supply of the workers. However, many of the Wayuu contest this and believe that this water comes from the same aquifers and rivers used by local communities. This is backed by independent studies which show that although part of the water used is

<sup>1</sup> See Giupponi and Paz (2015), *The Implementation of the Human Right to Water in Argentina and Colombia*, *Anuario Mexicano de Derecho Internacional*, Volume 15, Issue 1, pp. 323-352 for details on how the right to water has been implemented in the Colombian legal system.

<sup>2</sup> See Programa de Las Naciones Unidas para el Desarrollo (2014), *Medidas adaptación al cambio climático*, PNUD Colombia. Available from: [https://issuu.com/pnudcol/docs/medidas\\_adaptacion\\_al\\_cambio\\_clima](https://issuu.com/pnudcol/docs/medidas_adaptacion_al_cambio_clima) [Accessed 20 March 2017].

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indeed industrial coming from the mining process itself, much of it also comes from clean superficial and subterranean water supplies (Morales and Valbuena, 2016). In a context where the local population is suffering from drought and lack of water, the mine's high consumption for industrial use is seen as unfair.

*"For them (Cerrejón) the water is industrial, but my community, my family drink this water" – Wayuu activist*

## 2. Water pollution

The mine has also been accused of polluting many important bodies of water in the region. It is estimated that for each tonne of coal extracted, over 17 tonnes of "waste" material needs to be displaced, which contains heavy metals and other toxic elements (e.g. arsenic). With many rivers and streams running through or near the mining area, there is a high risk of water contamination by these toxic elements. Although Cerrejón state that they monitor the quality of water that flows through their territory and maintain this to a high standard, many of the locals say they can no longer use this water. Most important have been the potential effects on the Rancheria river, which is the biggest source of water for the department and runs through the mining area. A study measured pollution levels at points downstream of the mine and found that in the years 2007, 2014 and 2015, the river contained levels of cadmium and lead that surpassed environmental norms (Morales and Valbuena, 2016).

*"The multinational has destroyed so many rivers and the only big river left is the Rio Rancheria but everyone knows it is polluted and no one can swim in it or use the water. It passes next to the mine." – Wayuu from La Horqueta 2*

## 3. The diversion of water flows

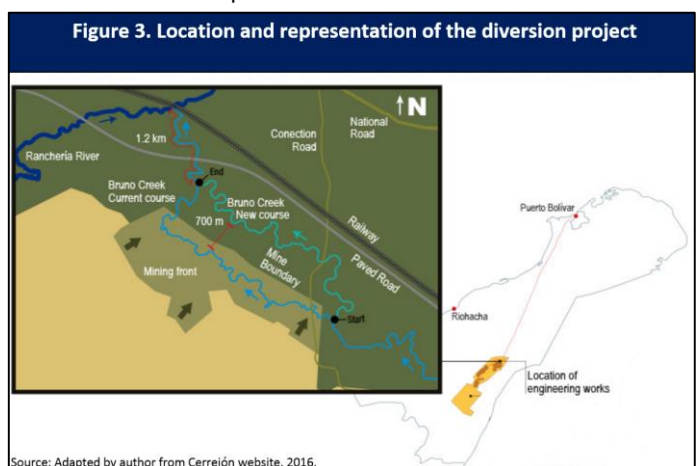
Over the years the mine has diverted and destroyed a number of water bodies in order to extract coal from underneath them. According to a government official from the department of La Guajira, 25 streams have been modified, however this number is highly contested by both the mine and local activists. The most important case was in 2011, when the mine attempted to divert a section of 26.2 km of the Rancheria river in order to extract 500 million tonnes of carbon from underneath it. This project was suspended in 2012, with Cerrejón stating this was due to a fall in the price of coal, and the NGOs and activists putting it down to the intense opposition and protest by

grassroots actors. In cases of diversion projects, Cerrejón has provided studies asserting that environmental disturbance will be minimal. But the Wayuu have refuted these claims, basing themselves on local knowledge. For example, according to activist groups, although the mine provided studies stating there would be minimal impacts when it diverted the Aguas Blancas stream in the late 1990s, this flow of water has since dried up. Furthermore, research has shown the delicate balance which exist between these rivers and the underground aquifers which store water and supply the Upper Guajira where there are no constant water flows. Diverting a flow of water can potentially break the connection between an aquifer and cause the river and/or aquifer to dry up (Morales and Valbuena, 2016).

*"Tell me in which report it says that rivers can be diverted and then return to their natural course. This a lie! You have to wait four to five million years and this will not happen. We do not need to be scientists to determine why this has a high degree of affectation. To divert a body of water is to kill it, simply it means cutting the veins." - Wayuu activist*

## Case study: Bruno stream

Most recently, Cerrejón has started the process of diverting a 3.6km section of the Bruno stream (see Figure 3), which flows near the mine, in order to expand one of its coal pits and extract an estimated 35 Mt of coal from underneath it. This project has been approved by the relevant government agencies (Corpoguajira and ANLA) despite fierce opposition by the indigenous communities living near the stream and the stream catchment being identified by Corpoguajira as an area of environmental importance.



This case highlights the main conflicts between Cerrejón and the local indigenous people in the region. Firstly, the communities

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surrounding the stream rely on this water for their livelihood. For example, a community member from La Horqueta 2 explained that most families (with an average of ten people) go every day to the stream to fill a minimum of four containers of 12-20 L. This water is used for everything: bathing, cleaning, cooking and drinking. The stream is also used by the nearby cities, with a number of studies noting that water tankers come to the stream to make extractions of up to 800 000 L a day to supply the cities of Albania and Maicao (CENSAT and SINTRACARBÓN, 2015). Therefore, the diversion of the Bruno is seen by many local people as an unnecessary risk on their water resources.

Secondly, although approximately 25 communities have been identified near the stream the Ministry of the Interior decided only one of these required prior consultation. Campo Herrera was identified as the only community to be directly affected by the diversion, and was consulted between 2013 and 2014 with a number of agreements being reached, including the establishment of an oversight committee made up of community members and other relevant actors.



However, many of the other communities situated near the stream have contested this decision claiming that they too will be affected by the diversion. Most notable has been the indigenous and afro-descendant community of La Horqueta 2 who placed an action of tutela (remedy of protection) against the Ministry of the Interior, the Ministry of Environment and Sustainable Development, ANLA, Corpoguajira and Cerrejón. This type of judicial action is brought before a judge to demand the immediate protection of fundamental constitutional rights when a person fears these will be violated by the action or omission of any public authority. Despite this complaint the Ministry of the Interior continues to state that La Horqueta 2 is not directly affected by the diversion and therefore does not require prior consultation (El Tiempo, 2016). This reveals a clear lack of proper implementation of Law 99 on the rights of indigenous people to consultation.

Finally, there is a disparity in the information used by the relevant government agencies in making their decisions on water management. This is shown by the fact that despite opposition by the indigenous population and the municipal and

departmental government, the diversion project continues to go ahead. The local communities argue that diverting the Bruno stream will have a great effect and possibly lead to its destruction – a claim which is supported by independent studies carried out by a number of organisations (e.g. CENSAT and SINTRACARBÓN, 2015). Cerrejón argues that it will divert the stream in such a way as to cause minimal impact, estimating only minor short-term effects on the stream, with a slight decrease in the volume of flow during the dry period but an increase in the wet period, and water turbidity during the construction works. This reveals a lack of knowledge sharing, where both parties are misinformed about the other. On the one hand, Cerrejón and the relevant government authorities do not adequately consult or take into account the views of the local indigenous communities, and on the other they fail to provide these communities with relevant information regarding the impacts of mining projects on water resources. Combined with Cerrejón's past activities, this has led to a high level of distrust by the indigenous people regarding the mining officials and the government.

This case not only shows the past and current issues facing mining and water resource management in La Guajira, but also points to future conflicts and problems. Now that the diversion of the Bruno stream has been approved and is under way, this provides further precedence for Cerrejón to tamper with other bodies of water. This project is part of wider Environmental Management Plan to maintain the mine's production of coal at 32 Mt per year, and involves diverting a number of other rivers and streams as well as another 9.3 km section of the Bruno by 2020. Furthermore, this could also allow Cerrejón to revisit its project of diverting the Rancheria river and, as has been pointed out by many local and national activist groups, a large part of Cerrejón's mining titles (covering an area of 69 000 hectares), and the 275 titles which have been requested (covering an area of 654 000 hectares), are located in the Rancheria river basin. If these are to be exploited in the future, this will have a major effect on the most important water resource of the region.

*"We do not have any contact with the government, the government has always been on the side of the mining activities, not on the side of the Wayuu people. They side with the mining activities for development according to them, they do not know that it can affect many lives and territories" - Wayuu from La Horqueta 2*

## Recommendations

### ➤ **Better knowledge sharing:**

Cerrejón needs to provide all local communities (not just the communities it is required to under prior consultation) with regular reports and updates on their activities surrounding water in an accessible format. This initiative should be supported by the government agencies, namely Corpoguajira and the Ministry of Environment and Sustainable Development.

### ➤ **Consultation:**

Although consultation processes exist, there needs to be an increased effort in reaching all parties potentially affected and actively including their views as is mandated by Law 99, even if these are expressed in unconventional ways (visual, verbal, cultural).

### ➤ **Better co-ordination between government agencies:**

1. The municipal and departmental government, who are best placed to have a clear understanding of the reality on the ground, should be more actively involved in the decision making processes on mining and water in the region.
2. The government environmental agencies in charge of water resource management (Corpoguajira and ANLA) need to strengthen their collaboration with the Ministry of Housing in charge of supplying water to the local population in order to ensure the preservation of vital water resources.

### ➤ **Unity between grassroots groups:**

Through the support of local and international activist groups and NGOs, Wayuu and afro-descendant communities should endeavour to combine their efforts in protesting and contesting mining activities affecting their water and livelihoods.

### ➤ **Monitoring of water management:**

Projects around water in the region should be closely monitored by a neutral third party actor in order to verify the accuracy of the information provided and ensure accountability.

## Background: Cerrejón mine

- The biggest open-pit mine in Latin America and one of the biggest coal mines in the world, covering an area of 69 000 hectares.
- Set up in 1979, Cerrejón has a licence to extract coal until 2034.
- The mine is registered under two subsidiary companies, Carbones del Cerrejón Limited and Cerrejón Zona Norte S.A., which are jointly owned by the multinational corporations BHP Billiton (Australia/United Kingdom), Anglo American plc (United Kingdom) and Glencore (Switzerland [also London-listed]).
- Responsible for 44.4% of Colombia's coal exports with an annual production of up to approximately 33 million tonnes, and making up 3.6% of global production in 2014.
- Almost all the coal is exported through the mine's private shipping port, Puerto Bolivar, to markets in Europe (46%), Asia (27%), Latin America (19%) and North America (8%).
- In the department of La Guajira, Cerrejón's mining operations represent 56.9% of GDP, employs 12 780 people and paid over USD 230 million in royalties to the Colombian government in 2014.



## Key references:

CENSAT Agua Viva and SINTRACARBÓN (2015). *La desviación del Arroyo Bruno: entre el desarrollo minero y la sequía* [online]. Bogotá: CENSAT. Available from: <http://censat.org/es/publicaciones/la-desviacion-del-arroyo-bruno-entre-el-desarrollo-minero-y-la-sequia> [Accessed 20 March 2017].

Cerrejón website: [www.Cerrejón.com/site/english/](http://www.Cerrejón.com/site/english/).

El Tiempo (2016). No habrá consulta por desviación de arroyo en La Guajira: La decisión fue dada a conocer por el Ministro del Interior (e), Guillermo Rivera. El Tiempo [online]. 15 July. Available from: <http://www.eltiempo.com/colombia/otras-ciudades/desviacion-de-arroyo-en-la-guajira/16644819> [Accessed 20 March 2017].

Field visits and interviews conducted by author in La Guajira in May 2016.

IACHR (2015). *Children and adolescents of the communities of Uribia, Manaure, Riohacha and Maicao of the Wayúu people, in the department of the Guajira, Colombia, Precautionary Measures No. 51/15, 11 December 2015*. Resolution 60/2015. Washington: Inter-American Commission on Human Rights. Available from: [www.oas.org/en/iachr/decisions/precautionary.asp](http://www.oas.org/en/iachr/decisions/precautionary.asp) [Accessed 20 March 2017].

Morales, J.F. (2016). *Megaminería a cielo abierto: Carbón en el Cerrejón y sus impactos en el ciclo del agua* [PowerPoint presentation]. Bogotá: Terrae Grupo de investigación Geoambiental.

Morales, J.F., and Llorente Valbuena, A.M. (2016). *Consideraciones ambientales acerca del proyecto carbonífero de El Cerrejón, operado por las empresas BHP Billiton, Angloamerican y Xstrata en La Guajira*. Bogotá: Terrae Grupo de investigación Geoambiental. Available from: [http://media.wix.com/ugd/302d3c\\_3c9556e80e5d411688538bf4f9bdf8f1.pdf](http://media.wix.com/ugd/302d3c_3c9556e80e5d411688538bf4f9bdf8f1.pdf) [Accessed 20 March 2017].