

## Fact sheet - case study

### Oro Verde Program in the municipalities of Condoto and Tadó, Chocó, Colombia

<b>General</b>	
Population size and number of households	114 households in Condoto and Tadó with almost 500 miners registered in Oro Verde Program.
Demographic changes in the past 10 years in the community as a result of in and out migration, and natural growth	Only in Condoto, in the area of influence of Oro Verde, at least 4 communities have disappeared due to the pressure of the mining settlements and heavy machinery. There are two communities that are part of the collective territory –el Guamo and el Tigre, who were displaced due to the impact of the sediments poured into the Opgodó river caused by heavy machinery.
Ethnic composition of the population	The total population in the region of Chocó is Afro-Colombian There is a foreign population of 6% and a growing number of migrants from other regions of the country. According to the 2005 national census the presence of afro-Colombians in the region is of 82,1%. The indigenous population is 12.7% and the remaining percentage comes from other parts of the country, mostly from Antioquia and the Atlantic coast.

<b>Socio-economic aspects of small scale gold mining</b>	
Number of small-scale miners in the Green Gold	Condoto: 44 miners in Soledad, 134 in El Paso, 67 at the plant, and 54 in Consuelo. Tadó: 27 in Playa de Oro, 17 in Angostura, 6 in Carmelo, 12 in Manungará, and 22 in Alto Chato.
Number of mining units / teams	Condoto: 18 teams in Soledad, 28 in El Paso, 28 at the plant, and 16 in Consuelo. Tadó: 5 in Playa de Oro, 5 in Angostura, 2 in el Carmelo, 4 in Manungará, and 8 in Alto Chato.
Proportion migrant miners of total miners community	1,92 in El Paso, and 5,76 in Soledad
Proportion of gold miners in community who are women	Condoto: 28% Tadó: 40%
Proportion of community women who are miners	16, 35% in El Paso and 26,88% in Soledad;
Share of workers who are under the age of 16	Specifically defined as workers, suggested as less than 10%, but as indirectly linked to this activity 59%.

	Total direct and indirect 69%.
Where do community members go to sell their gold?	<p>The main purchase center is the local market that generally competes with the prices of the Oro Verde Project. Sometimes the prices offered by local purchasers exceed the price of gold and platinum of the organization. Some of the reasons can be the speculative prices, royalty evasion, and asset laundering. The miner sells through debt capital, expressed in advanced payments, a colonial loan system called peonage debt.</p> <p>The other alternative market gathers all the miners who are associated with and strongly bonded to the Mayor Councils COCOMACOIRO and ASOCASAN. Part of the gold of the Oro Verde organization is sold through its Commercial representative BIODIVERSA. Even though some recognize the advantages of selling to the organization and generating a fund, there is also reluctance towards the redistribution of benefits that still have not been delivered. The over-price in direct sale is imperceptible in relation to the speculative prices of the local market (who supposedly evade royalties and produce illegally). Some associated and non-associated miners call attention on the difficulties in the administration such as: the incapacity of Oro Verde to purchase all the gold produced by miners, and the on site recollection. They appreciate the creation of sale certificates for a later generation of bonus payment.</p>

### **Community perception of small-scale mining**

The community's perception of small-scale mining is that it works as a daily support but it doesn't meet basic family needs. For this reason they must dedicate themselves to other activities, such as agriculture and hunting. The people, nevertheless, consider small-scale mining a 'poverty mining' and state that each time it is harder to find gold through artisanal means such as bowls, hoes, barretones and/or channels. It seems, as they suggest, that there is an important decrease of the mineral volume due to the intensity of tech- and large-scale mining in the same area?. They expect support of the association for improvements that enable the increase of their production through the technicality of mining with the acquisition of medium dredges and in some cases, water pumps. There is a great discussion over the conception of small-scale mining, since the community suggest that it cannot be defined by the presence or not of a determined technological resource, but must make reference to the gold extraction process itself, and whether this process is sustainable or not. The discussion also suggests that indicators such as the market chain, volume, and productive accuracy must be considered.

### **Small scale gold mining and health**

#### **Description of natural resources in and around community**

**Climate:** In Condoto and Tadó the weather is humid warm, with a temperature of 28 degrees, an altitude between 70 – 75 m.a.s.l and an annual precipitation level between 800 -

1200mm.

**Vegetation:** Condoto's vegetation is mainly conformed by forests from which wood is extracted, mostly for industrial, medical and nutritional purposes. Woods such as Lirio, Oak, Chachajo, Dormilón, Jigua, Yarumo, Guácimo, Guayacán, Pacó, Incive, and others. It also has a large variety of fruit trees such as: Breadfruit, Guamos, Caimitos, Marañón, and different species of palm trees.

**Hydrography:** the rivers around the municipality of Condoto that make up its main hydrography are: Condoto, Iró, and Tajuato rivers, and others such as Opogodó, San José, Tapacudó, Soledad and many minor currents, that drain the main watershed of San Juan river.

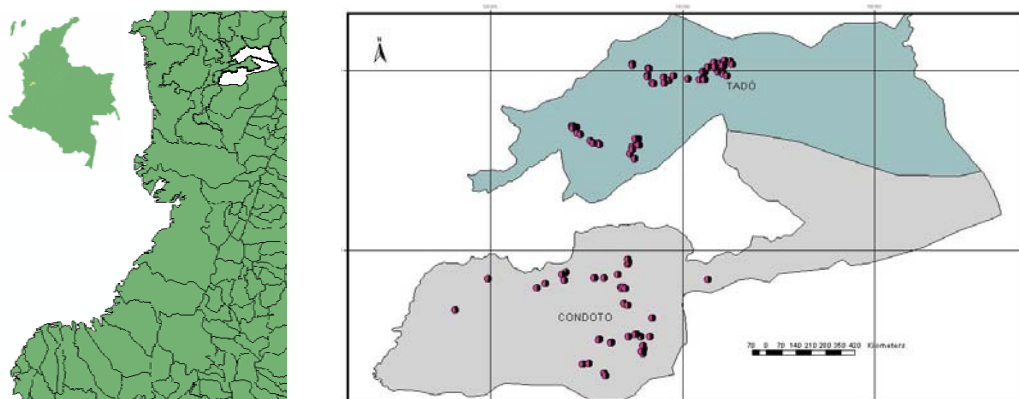
**Terrain:** Condoto's terrain is mostly mountainous and corresponds to the Western Andes mountain range, with altitude higher than 1800 m.a.s.l., including the hills of Chigorodó (185 m.) and Tarena (1800 m.) Behind it is the Iró mountain range, and its highest point is the Volcán Iró, measuring 190 meters. This mountain range reaches all the way to the outskirts of the municipality of Istmina, with the Mojarrá mountains, center of herbal<sup>1</sup> species.

**Agriculture:** some of the dominant farming products are: banana, yucca, chontaduro, borojó, pineapple, corn, lulo, and sugar cane.

**Productive activities:** Agriculture, mining, wood extraction, and fishing. The land is mostly used for forestry activity, while 22% corresponds to plantations, and only 2.8% has extensive agricultural activity. It is estimated that 39.4% of the total area of the Colombian pacific region is being used for low significance extractive or productive activities, but some of them are of high socio-environmental impact such as mechanized illegal mining. The rest of the territory has been kept for sporadic recollection, hunting, and fishing activities, and in some cases, for the ecosystem, and wildlife conservation. The potential of the non-wood resources of this forest has not been assessed.

**Natural resources:** The Chocó region has the highest diversity of natural resources in the world. It is one of the regions with the highest diversity of plant species (3.320) and endemic animals (1.906). This natural wealth is threatened by practices characterized that are not sustainable due to the damage they generate.

**Map for the Oro Verde artisanal miners in Tadó and Condoto.**



**Access to and use of natural resources by community members, male and female**

The natural resources identified by the inhabitants are the same in all the communities due to the similar cultural and environmental characteristics of the territory. These resources

<sup>1</sup> MOYA CÓRDOBA Miguel Demetrio, PEREA HINESTROZA Fabio Teolindo, Title?? Municipio de Condoto, July de 1989.

are:

- **The river:** historically it has gathered the African descendent communities that chose the closeness to the river for the development of different activities, such as gold extraction and fishing as productive activities and to wash their clothing, home accessories, bathing, and use of water for cooking and cleaning. These activities done in the river are highly impacted by the heavy machinery mining done in the territory. This type of mining exploitation pollutes the rivers. Women are among the most affected in their domestic activities and also in the development of their mining work done mostly in the river. This practice is known as “zambullidero” (freediving mining).
- **The forest:** The forest enables wood extraction for own use and for sale, the recollection of some native fruits, such as borojó, and hunting for animals. It must be noted that the inhabitants of the region show no interest in the conservation of endangered species such as the sloth. The forest is mostly a resource used by men, but in some cases, women participate in activities done by men in a secondary role. As one of the women states, when asked if women participate in hunting; “sometimes, if one goes to the forest and the dog barks and the man is not there, then she does the kill (...) but not hunting like men do” (Interview 2: Miner for Oro Verde, 2010).
- **Plot/land:** These are small portions of land used for self-support harvesting and for the sale of products that are in season. The most common harvests are banana, yucca, corn, and sugar cane. The plot is a resource for men, women, and several family members who participate in the productive activities related to farming and harvesting, since its main function is the supply of products for auto consumption.
- **“Terrace” / Azotea:** These are small plantations done on a wooden bed, a traditional agricultural mechanism from the Chocó area. These plantations are for family consumption only and are found in many houses of the community. Due to the close relation of the terrace with the house, women are the ones in charge of this for everyday products such as onions.
- **The mine:** It is the main source of income for the communities dedicated to small-scale mining done in rivers or lands where the minerals are found (mainly gold and platinum). This is the type of mining promoted by the Oro Verde program. Nevertheless, the inhabitants of these communities also participate in medium-scale mining done with heavy machinery, in a practice known as ‘barequeo’<sup>2</sup>. Men are characterized by their ability to search for mines with production, since their interest is to obtain the highest amount of money for their work. This money is invested in their family needs but there is also a strong tendency to spend part of their income in alcoholic beverages, and gambling. Women prefer to do the ‘barequeo’ or ‘zambullidero’ activities in places close to their homes so they can supervise them. This is why even though the production obtained is not high, they rather have a little bit of gold every day for the family support

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<sup>2</sup> When the exploitation is done with machinery which makes easier to extract the deepest material, the owners of these sometimes let people from the communities to look for gold with their own jeans in the terrain being exploited, this is known as ‘barequeo’.

and guarantee a daily income.

In the Oro Verde communities there is an active participation of women in the productive activities related to the use of natural resources, mainly in mining and agriculture, even though they are also in charge of raising the children and housekeeping. Men also participate in hunting and fishing activities, which has a very low female activity.

#### **Use of mercury in local mining operations**

According to CODECHOCÓ reports about the mining situation in the Chocó department, in 2010 each mining settlement consumed 30Kg/year of mercury. It must be said that environmental authorities detected the presence of 70 illegal mechanic settlements with backhoes. (37 of them in San Juan) (CODECHOCÓ, 2010)

#### **Mining-related pollution, including mercury pollution**

There is general data about the use of 30 kilograms of mercury per site per month. There are around 15 to 20 sites in Condotó and Tadó. This is approximately 7200 kg or 7.2 tons/year, compared to the national level calculated in 85.815 kg or 85,8 tons/year. Colombia is considered to be one of the countries with the highest use of mercury and the highest index of polluted water.

#### **Annual deforestation because of gold mining**

In the San Juan zone close to 50.000 hectares. Studies suggest that in the Chocó region alone 360 hectares per year are degraded and deforested as a result of mining (IIAPP, 2001 in (Ramírez-Moreno and Ledezma-Rentería 2007)).

#### **Health effects as a result of mining activities (direct & indirect)**

Some of the health effects stated in an interview with a teacher in Soledad and identified in the field work are: high blood pressure, “physical exhaustion caused by mining on women, mostly to the zambullideras” and vision damage due to zambullidera practice.

#### **Existence and activities of mining cooperatives and interest groups**

Oro Verde; Association of Barequeros and Mazamorreros of Condotó

#### **Existence and objectives of community funds**

The certified Oro Verde program, a pilot experience in the world, supplies sustainable development alternatives for marginal mining communities by promoting fair trade processes and the verification of the fulfillment of ten certification parameters as a guarantee of a responsible social and environmental practice of small-scale mining. It intends to revert the devastation process of strategic ecosystems and social exclusion, caused, among others, by the gold and platinum exploitation with uncontrolled chemicals and machinery in the Colombian Pacific. With such purpose, it promotes the return to ancestral techniques of African-Colombian communities, supported with technological transference.

#### **Occurrence of child labor in mining**

According to numbers supplied by the mining sector, 69% of children in the region have direct or indirect relation with work in gold mining. Most of them are from 8 to 11 years old. There is no difference between boys or girls, but the drastic increase of minors with an age

between a first and second range of ages must be noticed (of 17% in ages 5 through 7 to 32% in ages 8 through 11). This data states that after the 7 years of age there is a high probability for children to be enrolled in mining activities, being the range of 8 through 11 years a priority age group.

The highest percentage of boys and girls (88.6%) work on extraction activities; (73.4%) work on «barequeo» which consists on decanting sand from the river. Half of the minors who extract gold receive payment in money, without gender differences, but almost 86% of boys and girls who receive payment in money report monthly incomes below \$20.000 COP (USD 10).

None of the minor boys and girls has received a formal training for these activities, most of them learn in their own families.

## **legal aspects of small scale gold mining**

### **% of producers who are mining legally, according the national mining legislation**

The legal status of mining in Colombia refers to environmental licensing. Therefore, small mining done in the territories of African-Colombian communities (established by Law 70), do not require such licensing. In the last months the media has communicated that small-scale mining is a non-formal type of mining and that therefore it is illegal. The mining law suggests illegal mining as the mining activity done without licensing and/or title.

### **Local knowledge on existing mining legislation and related laws (environmental and workers rights)**

Local knowledge in existing mining legislation and related laws is weak among the Oro Verde miners. Nevertheless, the members of community councils do have knowledge on the regulations, even though there are deficiencies associated to operation and application. There is a higher knowledge about the African Community Laws (collective territories Law 70), the reform 1382 of the mining code 685/2001, and the environmental laws, but there is less knowledge regarding international agreements. It must be clear that knowledge is not widespread and that a good part of it is restricted to some of the council leaders who in a large extend are supported by the Inter-institutional Committee led by Oro Verde.

### **Land and water rights versus mining activities**

As part of the principles of the existing Oro Verde program, there is interest for the protection of land and water rights. These principles respond to the cultural interaction of traditional population and not to legal restrictions. Small-scale mining is an interaction of man and nature, in which the inhabitants execute a sustainable activity and therefore it becomes a focal point of the Oro Verde program. This is different to what happens with mining sites with mechanized mining (bulldozers) which have environmental practices that go against the right to the land and the rights of the resources, especially water.

## **Small scale gold mining and conflict**

### **Description of gold mining related conflicts in the community**

Environmental Conflicts due to non sustainable mining practices:

- Deforestation: mineral extraction, mainly by bulldozers, generates an impact of large magnitude on the vegetation.
- Soil destruction: the vegetable layer is destroyed and it slows down the recovery of the vegetal covering and the soil.

- Water pollution: with particulate removed material and the pollution with mercury and cyanides.
- Water stagnation: to date the total of wells that are left after the exploitation has not been filled, which implies an additional investment for businessmen.
- Devastation of strategic ecosystem: decrease of some birds, mammals and fishes species by the effects of water and air contamination and pollution and also deforestation of the rainforest.

Socio-Economic Conflicts:

- Between community leaders and illegal miners: illegal miners rent lands from families that are settled in collective lands; they rapidly exploit them and communities are left with the environmental liabilities.
- Between community leaders and the State: the State should prevent illegal mining from happening but when it doesn't the community normally turns to its leaders in search for answers.
- Within communities: some members of the community are convinced it is not a good idea to rent these lands to illegal miners, others aren't. This leads to polarized positions and to divisions within community leadership.
- Within families: some family members need the land for mining and to grow crops, others live outside their land and are not directly affected by the destruction that the land suffers. If they need to, illegal miners will contact the latter to succeed in renting the land.
- Migration: the immediate effects are the increase of immigrants as mining workers and merchants, with an increase in the life cost in the region. The demand for housing, for example, increased of the cost of rent. The urban centers of the region have received a flow of foreign population, which also increases prostitution and alcohol consumption.
- Territorial Competition: another modification is the generalization of land renting, which break the rights of the family network and generates tension in the family and community.

**References**

- Perea, Fabio, Municipio de Condoto, 1989. Mapa de Ocurrencias Minerales en Condoto Ed. Gráficas Valladares.
- Municipio Condoto, Chocó. 2010. "Nuestro municipio". <http://condoto-choco.gov.co/nuestromunicipio.shtml?apc=mlxx-1-&m=f> (Julio 7 2011)
- Ramírez-Moreno, G., and E. Ledezma-Rentería. 2007. Efectos de las actividades socio-económicas (minería y explotación maderera) sobre los bosques del departamento del Chocó. *Revista Institucional Universidad Tecnológica del Chocó* 26 (1): 58-65.