

Quito, august 17th, 2020

Dear Miss. Hannah Matthews

Latin America Researcher
Business & Human Rights Resource Centre

Regarding the podcast "A dam plan gone wrong in Ecuador's Amazon", published in Al Jazeera web site (<https://bit.ly/34676LY>), on July 29th, 2020, in which it is address a natural phenomenon of regressive erosion in the Coca river basin and the Coca Codo Sinclair hydroelectric plant, located between the provinces of Napo and Sucumbíos, in the Ecuadorian Amazon. I would like to inform:

Coca Codo Sinclair hydroelectric power plan is one of many projects that this administration took in charge and together with the 500 kV transmission line project reach a 3 billion of dollars investment. It is responsibility of the current government to carry out the compulsory administrative and technical activities for an optimal operation of these facilities, which were financed with resources from all Ecuadorians.

The Swiss firm Lombardi has been carried out studies in May, June and July 2020 about the regressive erosion in the Coca river basin. In this studies it is shown that San Rafael waterfall collapse occurred 19 kilometers downstream from the hydroelectric plant water catchment, therefore it occurred out of the power plant influence area. San Rafael waterfall collapse is a natural phenomenon of "remontant erosion". Below you will find the literal conclusions extracted from the study:

"5.5. Conclusions: In conclusion, it is considered that the disappearance of the San Rafael waterfall was part of the continuous process of natural erosion of the river generated by the runoff of the Coca river itself. The construction of the Coca Codo Sinclair hydroelectric plant, specifically water catchment works, cannot effect on the phenomenon. In paragraph 5.4, it is shown evidence of prior phenomenon occurred before the hydroelectric plant start running. On the contrary, the hydroelectric plant construction has a positive impact on that erosive phenomenon by reducing the river flow rate, thus the erosive capacity decreases. Therefore, it may have slowed down the erosion. Furthermore, since the power plant is a fixed barrage retain upstream sediments which are returned to the river stream during the avenue management through the barrage gates operation; hence the sedimentary regime of the river is not altered. However, this last aspect should be analyzed based on the information of the power plant's operation."

Ecuador is located in the Ring of Fire, thus its entire territory is located in a seismic zone which is sensitive to earthquakes.

Seismology, volcanology, among other important studies were carried out before the construction of the Coca Codo Sinclair hydroelectric plant. 40-year studies and documents on the hydrological history of the Coca River are public and available at the link: <http://157.100.137.109/geologico/>.

The regressive erosion in the river basin has broken that two oil pipelines installed around the area. The companies responsible for its operation: EP PETROECUADOR (public) and OCP Ecuador (private) are in charge of the environmental and social actions derived from oil spill.

It is a priority for the National Government and CELEC EP work in a mitigation plan to reduce of the effects of the natural phenomenon. For this reason, since San Rafael waterfall collapse and the regressive erosion has started, permanent monitoring (using drone) is carried out. Data can be find in the link: <https://bit.ly/2BUzYex>.

In addition, technical studies are carrying out in order to execute necessary work to mitigate the natural phenomenon. Below it is shown the studies:

- Topographic survey of the riverbed and other sites of interest, orthophotography and the Lidar system.
- Conceptual study of emergent interventions.
- Detailed geological mapping of the riverbed and definition of sites of interest.
- Geophysics.
- Development of mitigate works for riverbed and undermines, through the filling of rock.
- Protection with gabions.
- Design of definitive solutions.

It is also important to notice that coordination are carried out with the United States Geological Survey, who provide support to establish required actions in this matter. The General Management of CELEC EP also created an Advisory Board conformed by experts in geology and related areas, who advise in the execution of emergent actions to protect the safety and integrity of the catchment works in Coca Codo Sinclair Power Plant.

Based in studies done by the specialized firms, it was established specific works that will be carried out in two phases:

Phase I: Emerging Works

Based on the studies presented by the consulting firms, the execution of the emergent works began. Transverse rock walls are under construction through the riverbed in order to dissipate energy and protect riverbed. Additionally, walls composed of geocontainers filled with soil - cement will be installed.

Phase II: Definitive mitigation works

These actions will be carried out during the dry season. It will be installed protection screens through injection curtains and/or concrete piles in the riverbed in order to reduce the regressive erosion.

Coca Codo Sinclair hydroelectric plant was built in order to solve the lack of energy in Ecuador. Its energy production fulfill the requirements of the National Electricity Operator (CENACE) to cover national demand and even export to Colombia. During July 2020, its energy production reach 1,300 MW.

The Electric Corporation of Ecuador (CELEC EP) is responsible for administration and operation of the Coca Codo Sinclair Power Plant, fulfilling the policies established by the President of the Republic, Lenín Moreno, and the Minister of Energy and Non-Renewable Natural Resources, René Ortiz. CELEC EP works in coordination with a Technical Team that was established to face the natural phenomenon. This Technical Team is formed with representatives of other State institutions and provincial governments.

Sincerely,

Communications Department
CELEC EP.