

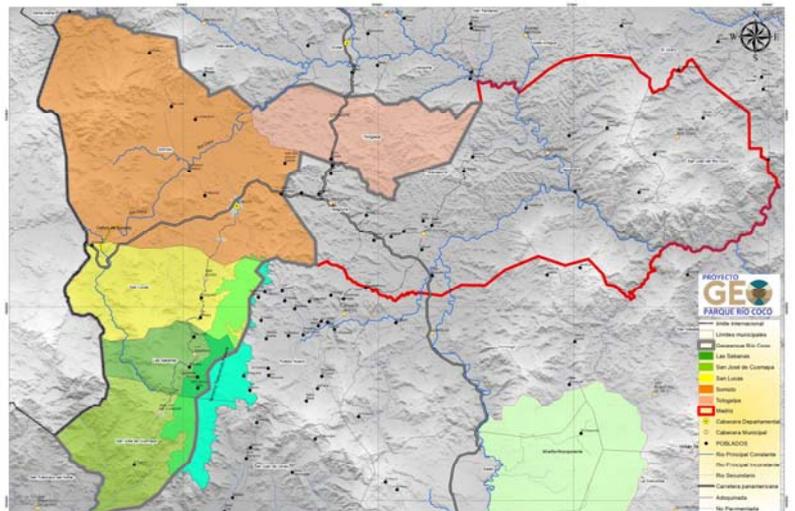
 <p>United Nations Educational, Scientific and Cultural Organization</p>	 <p>UNESCO Global Geoparks</p>	<h2 style="margin: 0;">Applicant UNESCO Global Geopark</h2> <h3 style="margin: 0;">Río Coco, Nicaragua</h3> <h2 style="margin: 0;">geographical and geological summary</h2>
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### 1. Physical and human geography

The Río Coo Geopark Project covers an area of 954 km<sup>2</sup> in the north of Nicaragua in the Department of Madriz, between 86°20'57'' and 86°46'11'' E and 13°11'29'' and 13°29'45'' N. The project includes five municipalities: Somoto (the departmental capital and administrative center of the project); Totogalpa; San Lucas; Las Sabanas and San José de Cusmapa. Somoto is 218 km from the capital Managua and 20 km from the Honduras border.



The territory is in the physiographic province of the Interior Highlands (*Las Tierras Altas del Interior*) known as the Central Mountainous Chain (*Escudo Central Montañoso*). This includes a series of geographical features mainly related to the mountainous volcanic system. The area's physiography includes mountain ranges, rolling hills, and plains with small valleys between the mountains. A network of rivers drain to the Atlantic basin and to the Gulf of Fonseca in the Pacific. The altitude ranges between 580 and 1,730 m a.s.l.



The latest census reports a population of 74,224 across the area. Dominant economic activities are agriculture and livestock-raising in what is one of the smallest departments in Nicaragua that also has fewer economic resources than others in the country.

The climate is dry subtropical, forming part of the Central American Dry Corridor. The average temperature is 22 °C. The area contains several ecosystems, from subtropical to cloud forest, and a range of flora and fauna, including several migratory birds and endangered species.

### 2. Geological features and geology of international significance

The area pertains to the western part of the Eastern Chortis Terrane, the rifted continental margin of the North American Plate which developed during the Jurassic separation of the North and South American Plates. The area's basement mainly consists of sub-greenschist- to greenschist-facies metamorphosed siliciclastic sediments of Paleozoic age.

Intensive volcanic activity started in the Neogene and acidic ignimbrites of late Miocene age up to 500 m thick are typical for this area. Below the sequence of ignimbrites lies a sequence of dominant basaltic andesite that reach a thickness of 1000 m.

It is a denudation area with a distinctive relief. The majority of sediments are represented by dejection (alluvial) cones and the fluvial deposits of the streams.

As well as 21 other areas identified as Geosites, the area includes an area of international geological significance. With a total length of about 7 km, the Monumento Nacional al Cañón de Somoto, formed in very solid welded ignimbrites during the Pleistocene from tectonic and exogenous processes, is between 150 and 250 m deep and in some parts only a few meters wide.

Tectonic processes are still active in this part of the world, and the Somoto Canyon represents an area where the direct effects of such process can be observed. It is a unique scenario where, in a relatively small and very accessible area, you can see a wide spectrum of geological and geomorphological phenomena of volcanic, tectonic and exogenous origin.