Applicant UNESCO Global Geopark

Huasteca Potosina, Mexique

Geographical and geological summary
1. **Physical and human geography**

The area covered by the Project Geopark Huasteca Potosina is in the region known as the Huasteca Potosina. Is located in a part of the physiographic province known as Sierra Madre Oriental and part of the coastal plain of the Gulf of Mexico. The geographic coordinates that delimit the Geopark are 21°27’ a 22°24’ north latitude to 98°19’ a 99°3’ length west.

The boundaries correspond to the municipal administrative boundaries of the political division of the State. The Project includes, from North to South six municipalities of the 58 that make up the state: Ebano, Tamuín, Ciudad Valles, Tamasopo, Aquismón and Huehuetlán. The total perimeter is 1,307.68 Km. The total area of the project is 7,153.97 km². The territory is large on surface, but it is more important because of its geological heritage, its cultural and natural diversity and the development opportunities for the people living in this abundant region.

The Huasteca is considered to be the second most important region in the State of Mexico, socio-economically.

The project region can be classified under three sub-provinces: Plains and Hills (Llanos y Lomerías), Huasteco Karst (Carso Huasteco) and the Gran Sierra Fold (Gran Sierra Plegada).

The climate is highly specific making the Huasteca Potosina unique with ranges from an average 26º all year round to record highs of 50ºC in the month of May.

Three languages often spoken. (Huasteco o Tennek, Nahuatl y Xiʔuí.)

The total population within the GHP project, as the last census (2015), was 345,557 in habitants.

The distribution is eminently rural and unfortunately, is a territory that still has conditions of high and very high social marginalization. The project aims to help overcome the lag and improve the quality of life of its inhabitants.

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

The geological and geomorphological evolution has originated the two main physiographic features that dominate the eastern region of Mexico and cover the territory of the Huasteca Potosina Geopark project:

The Sierra Madre Oriental - the eastern Sierra Madre - (SMO) and the Coastal Plain of the Gulf of Mexico (CPGM).

The SMO, is the most relevant orographic element in the Geopark project, is a significant tectonic example, since its origin is associated with the Laramide orogenic phase, which occurred during the Upper Cretaceous and the Paleogene.

On the other hand, the region that occupies the CPGM stands out in relation to the history of the development of oil exploration since the end of the 19th century. In this, several companies, mainly foreign, operated in various oil fields; In 1904, the first well that commercially marked the rise of the oil industry in Mexico was drilled near Ebano.

Much of the territory of the Geopark is located on the geological province known as the Valles-San Luis Potosí Platform, an extensive carbonated paleogeographic unit of the Upper Cretaceous on which marine rock sequences were deposited, highlighting powerful sections of evaporitic rocks and reef limestone of Mesozoic age.

This characteristic of geodiversity has a geological and geomorphological significance due to:

1) Its affinity with hydrocarbon-generating and storage rocks that has influenced multiple studies on the evolution of large carbonated platforms, hydrocarbon prospecting, sedimentology, stratigraphy and structural geology and

2) The development of karst features that have allowed basic and speleological exploration studies to understand karst hydrology, the nature and origin of caves, surface karst geomorphology and hydrogeochemistry.