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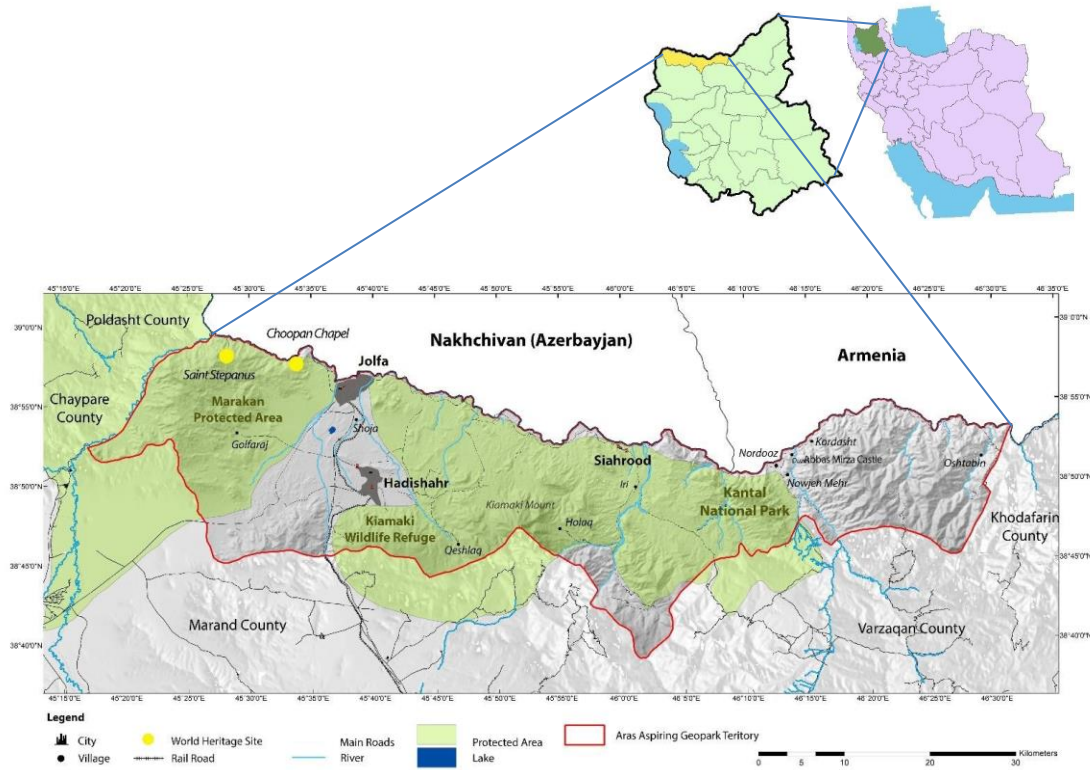


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# Applicant UNESCO Global Geopark

*Aras, Iran*

## Geographical and geological summary



## 1. Physical and human geography

Aras aUGGp boundary is totally defined to the Jolfa County limits. Jolfa County with an area of 1670 km<sup>2</sup> is one of the 21 counties of E. Azerbaijan Province. Jolfa County is divided into 2 districts of Central and Sahi Roud. Tabriz City the capital of province with an international airport is located in 135km southeast of Jolfa. Although Hadishahr is the biggest city, but Jolfa is the administrative and capital of the county. The Aras River makes the northern limit of the geopark and is considered as the borderline between Iran, Armenia and Nakhichevan (Azerbaijan). The lowest and highest points in this area vary between 400-3347m. Kiamaki Mount is the highest peak in the northern part of the whole province. There are 3 protected areas in the geopark territory, Kamtal National Park, Kiamaki Wildlife Refuge and Marakan protected area. The semi-arid weather in this area is hot in summer and very cold during the winter (+40°C to -10°C).

About 65000 people are living in this area and their main jobs are farming and gardening, livestock farming and trading. The majority of the population is Muslim and speaks Azeri (Local Turkish) Language, while the official language is Persian (Farsi).

Aras Free Zone Organization (AFZ) is the governing body of the area. The area is under the rapid industrial and trading developments due to the benefits of the Free Zones Regulations. Numerous investment projects are running by domestic and international investors. The roads and railway network in the area is in a good situation, easy access to the main neighboring cities as well as international connections. Varieties of accommodations are available in the area, local guest houses and hotels up to 5 stars. Shopping malls, markets and bazar are among the most popular attractions of this area receiving many visitors especially during the holidays and weekends. Ecotourism, cultural tourism and geotourism are the second important reason to receive considerable amount of tourists, nationally and internationally. The UNESCO World Heritage site of "Armenian monastic Ensembles" is another added value to the tourism of the area.

## 2. Geological features and geology of international significance

Aras aUGGp is part of Lesser Caucasus terrane. The collision of Iran- Eurasia plates in the late

Triassic and then, Arabian-Central Iran microcontinents in the late Miocene formed this region. Numerous interesting geological features that resulted out of these collisions emerge in Aras aUGGp area. For instance, Oligocene intrusive rocks cropped out in eastern part, extrusive igneous rocks in southern part and folded and faulted Cenozoic flysch type deposits in the central part. The Paleozoic and Mesozoic successions are also exposed in western part of the region.

Briefly, the most important geological phenomena are introduced in the following geosites: Ordobad granite - diorite rocks in Oshtobin, Dasitic volcanic rocks in Kiamaki, variety of folding and faulting in

Cretaceous and Eocene flysch type sediments in Irri, Holoq and Asiab Kharabeh, The Permian- Triassic boundary in Ali Bashi\* Mountain, Qechi Qalasi travertine spring, Tohlom landslide and Dykes and Sills in Marakan.

The most important geological feature with international significance in this geopark is the Permian- Triassic Boundary. The End Permian mass extinction made it as one of the most important events in the Earth's History. The different stratigraphic sections containing the mentioned boundary in the Jolfa area are, together with localities in Central Iran and South China, the world's most important sections. It makes a unique opportunity for the geoscientists to study uninterrupted, highly fossiliferous successions in carbonate to claystone-dominated facies and represent an important link to the well-investigated global stratotype of the Permian-Triassic boundary in China. The advantages of this section are: The good outcrop conditions of the strata (hundred meters thick outcrop), The easy accessibility of the outcrops, The variability of the sedimentary rocks, The abundance of various fossil groups, Ease of sampling and study of the end Permian mass extinction event.