Applicant UNESCO Global Geopark

Mujib Geopark, Jordan

Geographical and geological summary

Location of the aspiring UNESCO Global Geopark and detailed map
1. **Physical and human geography**

The proposed Geopark is located at the eastern shoulder of the Rift Valley of Jordan, along the shoreline of the Dead Sea. Mujib Geopark lies within west central part of Jordan, immediately east of the Dead Sea, with the centre coordinates: Lat 31.480131 Long 35.658505. The King's Highway crosses its middle part, some 55 km SSW of the Capital Amman. The Dead Sea Highway passes by its mouth in the west where it discharges to the Dead Sea, some 85 km of Amman in a SW direction. Several minor roads reach to various parts of the geopark. The total surface area of the proposed site is 387.02Km2.

The area is rugged and mountainous with elevations in excess of 1000 m above mean sea level (amsl). Wadi Mujib base level is the Dead Sea surface at -433 m below sea level as of 2019; a difference in elevation around 1500 m. There are no permanent settlers in the Geopark, but about 10 villages belonging to Al-Qaser district and the two sub districts Al-Qaser and Al-Mujib are all located around the site. The estimated population around the site is around 30,000. People around the geopark have traditional livelihood style and basic income resources. Most of them are working in governmental or military permanent jobs, while having small herd of livestock to provide the basic needs of meat and dairy products which is also helping to increase the income when produced and sold at local level. Some are working in the dam authority at the two dams located at the eastern side of the geopark.

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

Wadi Mujib is the Grand Canyon of Jordan with a difference in elevation of around 1500m. It exposes most of the geological history of Jordan and adjacent areas from the early Middle Cambrian to the Recent. Strata are uncovered by soil or vegetation where the fine primary sedimentary structures can be seen in three dimensions. For example, the early Middle Cambrian marine Burj Formation gives a widow for the eastern Gondwana supercontinent and the adjacent Paleo-Tethys, Umm Irna Formation (Late Permian)/Ma’en Formation of the lowermost Triassic (and the P/T boundary) with the associated volcanics show the first rifting the Neo-Tethys, and the Late Cretaceous-Eocene deposits are good examples for paleo upwelling the formation of giant phosphorite and bedded chert sequences. Moreover, The Dead sea and the Dead Sea Transform (plate boundary) make the western reaches of the geopark, with all that can be said on the geology, geochemistry and evolution of the supersaturated water (salinity is nearly 10 times that of the open oceans), paleoseismology, sinkholes, oil seepages, of the lowermost terrestrial area on Earth (-433.5m bmsl 2019). Furthermore, the area, as a whole, is attractive for local and international tourists for geological features, hot water and Dead Sea water therapeutic, wild life and adventure.