Applicant UNESCO Global Geopark

Maros Pangkep, Indonesia

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

Located in the south arm of Sulawesi Island, Maros Pangkep Geopark (MPGp) is across by the Wallacea Line at the coordinates of 118 ° 54'25.0" E - 119 ° 58'22.6" E and 4 ° 25'21.0" S - 5 ° 12'41.3" S. Located 30 km from Makassar City (1 - 2.5 hours), geopark territory of 5,077.25 km² area stretches from land to the ocean. With an elevation of 0 - 1300 masl, this area is dominated by tower karst clusters. The mountainous area is located in the northeast, with the highest peak represented by Bulusaraung Mountain (1,353 masl). The western and southern sides are dominated by hilly areas. The rest is in the middle to the east in the form of lowland and archipelago areas with the farthest island on Kapoposang Island (± 40 miles). The climate is divided into 2, namely Type C2 which is relatively dry in the west, and Type B2 which is relatively wetter in the east. In this area, there are also Bantimurung Bulusaraung National Park on the mainland and the Kapoposang Water Tourism Park in the ocean part, as a whole, there are 1,437 species of flora and fauna with 153 endemic species of Sulawesi and 52 protected endangered species.

Administratively, MPGp is located in Maros and Pangkep Regencies, South Sulawesi Province, covering 24 districts and 183 villages. The area is inhabited by 655,236 people (2019) dominated by Bugis-Makassar ethnicity, the majority of whom work in the agriculture, livestock, tourism, and mining sectors. To support regional activities, there are several infrastructures such as Sultan Hasanuddin International Airport, Soekarno Hatta Makassar Port, Maccini Baji Port, as well as several bus terminals with adequate road network modes and conditions. To visit the archipelago, there are non-regular community boats that can be used at any time. As for supporting the geopark area, several facilities are available, such as an information center, interpretation panel, thematic museum, special equipment, interpreters, and both printed and digital information media.

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

The Maros Pangkep Geopark is a combination of terrestrial and coastal marine systems, built by three main landscapes, namely towers karst, the Bantimala Mélange complex, and the Spermonde archipelago.

The terrestrial section displays the tower karst landscape known as "The Spectacular Towers Karst", a landscape with a very complete hydrological system, there are hundreds of horizontal and vertical caves with complete speleothem characteristics and one of the longest subsurface channel in Indonesia. Karstic has a cross-cutting relationship with Neogene volcanic rocks that can be observed. Developed by syn-tectonic carbonate is mainly composed of coralline algae and foraminifera as a representation of equatorial systems during the Cenozoic in Southeast Asia, it can contribute to the development of global predictive models for understanding past climates and predicting the future. The karstic is underlined by the tectonic complex of Bantimala Mélange which is composed of low- ultra high grade of metamorphic rock, deep marine sedimentary rocks, and tectonic blocks of oceanic crust, aged 70-135 million years ago. This tectonic linkage of SE Asia and Australia is important evidence of the early evolution of Sulawesi Island and has become a reference for the synthesis and reconstruction of pre-tertiary global tectonics.

In the coastal area, there is extensive exposure to carbonate ramps of Spermonde archipelago with hundreds of patch reefs, covered by sandy marine sediments that demonstrates the morphology that can change throughout the monsoon by the geodynamic process of the Indonesian Throughflow (ITF) ocean currents. These reef islands, which are part of the global coral triangle represent modern equatorial carbonates and complement the evolution of Sulawesi paleogeography.