

**IDENTIFYING THE MOST SUITABLE LOCATION TO BUILD MOTO  
GP CIRCUIT IN JASIN, MELAKA**

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## **ABSTRACT**

### **Identifying The Most Suitability Location to Build Moto GP Circuit in Jasin, Melaka**

This project will demonstrate the findings of the suitability analysis of the GP motor track placement site by combining criteria from other studies and using the capabilities of ArcGIS Pro. This project shows where in Jasin, Melaka, to put this circuit. This is especially noticeable in areas far from roads and bodies of water. Based on the research found in the article, factors such as slope, land use, distance from water bodies, health care, transportation, and housing were considered when identifying suitable areas. Most studies have used Geographic Information Systems (GIS) and other special Multi-Criteria Decision Making (MCDM) methodologies in recent years. In this project, to analyse the suitability of the site is to get data from real sources such as OpenStreetMap is used to find buildings, water systems and road data while Google Earth Pro is used to take slope data. For data processing, this project uses methods such as buffer, union, intersect, IDW, TIN to raster and others. In conclusion, the study area chosen to analyse the suitability of the MotoGP circuit site is in Jasin district, Melaka. Next, the importance of this project is used to determine the future of the high-tech MotoGP circuit site to give MotoGP riders the opportunity to race on the circuit more comfortably and intensely.

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(MUHAMMAD AMREEN ARFA BIN MOHD AZMAN and MUHAMMAD ALIIF NAIM BIN TIBRANI)

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## **Chapter 1**

### **INTRODUCTION**

#### **1.0 Background of Study**

MotoGP racing is one of the favourite sports of the people in Malaysia and the sixth most popular sport in Malaysia, because of that there should be more high-tech MotoGP racing tracks in Malaysia and make this MotoGP racing more intense. Technology is very important in sports especially MotoGP to reduce carbon dioxide (Yoon et al., 2023). The opening of a MotoGP racing circuit requires a strategic location. Therefore, the construction of a MotoGP racing circuit requires an area far from housing and cities so that noise pollution does not occur by determining the suitability of the site for outdoor recreation on a local scale, the value of outdoor recreation is assumed to depend on environmental conditions and landscape attributes, such as the type of vegetation and use land/land cover, climate, slope, existing water bodies and the number and type of cultural assets (Dağıstanlı et al., 2018). In addition, various other economies can be developed after the opening of the Moto GP racing circuit such as homestays, car rentals, restaurants and so on (Fajarica et al., 2022). Not only that, foreign and domestic tourists will be attracted by the technological sophistication of the MotoGP racing circuit and cause the number of tourists to Jasin to increase. Therefore, the government also needs to play a role in managing, developing and