

## **ABSTRACT**

Indonesia is a tropical country with abundant sunshine. Tropical country has a variety of advantages such as its fertile soil, high rainfall, abundant sunshine, flora fauna beranegaragam. Therefore, Indonesia has been at the famed as the State Agriculture because quite successful self-sufficiency in foodstuffs, such as rice. Now, the feasibility of the title was questionable back along with the Indonesian diligently to bring in food from other countries. Hence the need for real action to restore the condition of agriculture in Indonesia, especially in Java which is a rice barn in Indonesisa. One factor in the decline of food self-sufficiency in rice is inaccurate data in the can by the minister of agriculture so that the uneven distribution of fertilizers and other agricultural needs throughout the region.

This digital map will incorporate spatial data captured by the satellite and attribute data taken from surveys or censuses in the form of facilities and infrastructure of the relevant government as well as the data area of the island of Java as a big city, rural, residential areas and population.

At this final project has been successfully realized application of digital map monitoring rice in Java-based Geographic Information System using ArcGIS desktop with interface in the form of a geographical information system WebGIS Sigaptani. WebGIS made provide information to support management functions through access mapping-related positions, and potential land area estimates, the potential growth rate of rice plants based on land categories, and monitoring of land and rice crops. The information presented in the form of pop-up on the map in the form of cards, tables and diagrams related information rice in Java.

**Keywords: ArcGIS, Agriculture, Satellite Imagery, Digital Map**