The research aims to determine the level of knowledge, attitudes and skills of farmers on the application of organic fertilizer on rice fields. The research was conducted on August until October 2013 in Caturharjo village, Kecamatan Sleman, Kabupaten Sleman, provinsi D.I. Yogyakarta , Indonesia. Data was collected in the form secondary and primary data using interviews and observation techniques. The method used is descriptive method, to determine the location of purposive sampling. Census method is used and method for sampling. Samples taken amounted to 43 people rice farmers have adopted organic fertilizer in the village of Caturharjo. Analytical techniques used was Multiple Linear Regression Analysis. The result of the research, show that internal factor were affecting level of adoption farmer i.e: farming education, farming experience, age, wide area, intensity of the interactions with the agricultural extension officers and informations. Farming education, farming experience, age, wide area, intensity of the interactions with the agricultural extension officers and informations those gives significant. Conclusion of the research from this analiys is farming education, farming experience, age, wide area, intensity of the interactions with the agricultural extension officers and informations that affect the rate of adoptions in using organic fertilizer in the villages of Caturharjo.

Keywords: Farmers, Rice Fields, Adoption, Organic Fertilizer.