

## **Assessment of Factors Affecting Maize Yield in Machakos County**

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### **ABSTRACT**

Maize is the main staple crop for many Kenyans and high yielding cereal grown almost in all parts of the country mainly under rain fed conditions. Despite that fact, there has been structural maize deficit in Kenya hence a rise in prices of maize and maize products leading to food insecurity. This forced the country to occasionally import maize to cover the shortage and also provide subsidized maize flour. The research was aimed at assessing the factors that affect maize yield in Machakos County. The research addressed its objectives by examining maize yield trends and finding out the factors that constrain realization of high maize yield. It was conducted between July and November 2017 and involved random selection of farmers and administration of questionnaires. Secondary data was obtained from the ministry of Agriculture. The research findings were analyzed using a simple production function to represent the relationship between the variables such as inputs and the yield. The study found that maize yield is greatly affected by climatic conditions, education level, land size, maize varieties and input usage. The research recommends that input policy be implemented especially provision of subsidized fertilizers and improved drought tolerant maize varieties, delivery of agricultural extension services and provide early warning mechanism on any expected change in rainfall patterns to farmers.

**Keywords:** Maize Yield, Trends, Food Security, Machakos County.