

# EGERTON UNIVERSITY



## TEGEMEO INSTITUTE OF AGRICULTURAL POLICY AND DEVELOPMENT

Tetezi Towers, 4th Floor  
George Padmore Rd,  
Off Marcus Garvey Rd  
P O Box 20498 Code 00200  
NAIROBI, KENYA  
Tel: 254 (020) 2347297/3504316  
Cell: +254 720 895454/706 895454/  
734 658 222

## Press Release:

### **Title:**

**Economic Viability of Irrigated Maize Production**

### **Authors:**

Otieno D., Kirimi L. and Odhiambo N.

### **Key Messages**

1. Irrigated maize production is profitable, viable and sustainable.
2. Farmers' willingness to pay increases with increase in premiums for irrigation services.
3. Despite having a 71% production gap, Kenya has the potential to produce 16.5 million bags of maize annually, almost half the national annual output with the current technology.

Climate change, declining access to arable land and an increasing population in Kenya has increased pressure on limited and decreasing medium to high potential agricultural land in Kenya. This has led to increased poverty amongst the vulnerable Kenyans especially the youths. To provide food to such a large population, the government of Kenya has adopted irrigation as a strategy to increase food production. However, poor performance of irrigation in the 80's and 90's, lack of information and the high cost of production has led to low engagement and investment in irrigation. We postulated that irrigation development for food production water use can only be sustainable if economic value of water exceeded the operations and maintenance costs. We then used primary and secondary data from TAPRAII data set for the study

It was found that irrigated maize production is profitable, viable and sustainable. This implies that irrigated maize production can enhance Kenya's food security and household welfare. The country is 71% inefficiency in irrigated maize production. The economic value of water was greater than operations and maintenance costs.

### **Conclusions and Policy recommendation**

It is recommended that efficient use of fertilizer, water and land would lead to increased productivity and thus low per unit cost of production. This would have the potential of improving the household food security and thus the welfare of the rural resource poor farmers.

### **It is recommended that for production to increase there is need to:-**

1. Carry out research and development to improve on the current maize production technology,
2. Train farmers to enhance their adoption of better production technology and improve on their plot level production efficiency,
3. Define clearly the roles of the National and County governments in irrigation development in the country and
4. Have participatory prioritization of land and water use rights to enhance irrigation development in Kenya.

*For further assistance, more information or if you would like to conduct interviews with any of the authors, presenters or Tegemeo Institute staff, please contact: Judy Kimani, 0720 96 33 48, [jkimani@tegemeo.org](mailto:jkimani@tegemeo.org).*

[www.tegemeo.org](http://www.tegemeo.org)