

## **Farmers field school technology extension approach increases grassland productivity and improves spiritual and socio-economic welfare of communities in Kenya**

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**Introduction** Farmers Field School (FFS) approach to extension service was first developed in Indonesia for training rice farmers how to reduce the use of pesticides . The school is a community based , practically oriented field study programme involving about 35 farmers . It provides an opportunity for learning together , testing and adopting technologies to solve identified community problems . Majority of farmers in Western Kenya have small farms averaging one acre that provide livelihood to an average family of eight . The farms are unproductive because of many years of continuous use and lack of appropriate farming skills . Human food and livestock feeds produced are inadequate resulting in poor socio-economic status of the communities . The objectives of FFS extension project were to empower farmers with the Word of God and appropriate agricultural knowledge and skills that will enable them increase productivity of food crops and livestock feeds .

**Material and methods** A survey was carried out in Western Kenya to identify poor communities whose grassland productivity had depreciated because of lack of improved farming knowledge . Communities in Ekwanda Parish 20 miles West of Kisumu city were identified and 8 FFS established . In each FFS , 35 farmers were selected with ability and desire to learn , implement and extend the technologies learned to their own farms and their neighbours . 3 facilitators trained on FFS methodology were attached to each FFS to guide the systematic learning process involving exchange of information through sharing , observation , brainstorming and discussions . Starting with devotion , farmers learned all aspects of farming in the demonstration plots and were assisted with inputs to implement the same in their own farms . They held regular field days to demonstrate the technologies learned to members of their communities . Intensive training was done for one day in a week for two growing seasons lasting one full year but farmers remain working as a group for 3 years .

**Result and discussion** A survey carried out 3 years after commencement of the project shows that farmers who attended FFS had learned and adopted various technologies on : soil conservation and improvement ; land preparation ; identification of suitable seeds ; agronomy ; management and utilization of various crops . As a result grassland productivity in the region had substantially increased , food crops ( maize ) and livestock feeds grasses and legumes had increased many folds ( Figure 1 ) . Farmers realized adequate food and livestock products in the family and some had surplus for sale to raise funds for other family needs . Farmers were spiritually nourished and had learned to share technologies learned with other members of the community . They freely paid tithes of their produce as love offering to the store house for feeding the orphans , poor widows and disabled groups in the community . With increase in food production , food prices in the community had stabilized and remained low ; the crime rates had gone down and the general socio-economic status of the communities had improved . Each FFS ended up forming a sustainable community based organization .



**Figure 1**

**Conclusion** FFS approach to extension is a faster method of empowering farmers with spiritual and agricultural knowledge and skills that enable them to increase their crop production and improve the socio-economic welfare of communities .

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