

## Abstract

An integrated soil fertility management (ISFM) initiative was started in the central highlands of Kenya in 2003 with an objective to introduce, evaluate and promote adoption of ISFM technologies with farmers' participation. Participatory approaches were used to test and disseminate the use of organic and inorganic inputs during the period 2003 to 2005. This study was carried out to assess farmer attendance in project activities, testing levels of the various inputs, maize yield response to soil fertility inputs and farmers experiences as they tested the inputs. Data on participation were collected from secondary data while on-farm trials, a household survey and focused group discussions were used in collection of primary data. Results showed that more males than females participated in most meetings but the participation of women was encouraging and improved with time. An integration of organic and inorganic inputs was tested by most farmers. However farmers also had their own modifications that combined different kinds of organic materials. Use of the inputs increased maize yields at the farm level by more than 150% above the control. When the inputs were ranked by farmers, in terms of overall benefits, gender differences were observed with female farmers preferring materials that would be within their reach such as calliandra, while male farmers preferred fertilizer possibly because they could afford to purchase it. This study has demonstrated that the use of organic materials by farmers (calliandra, leuceana, tithonia and manure) combined with inorganic fertilizer has potential to address the low soil fertility problem in farmers fields and raise yields. There is a clear need of strategies and policy that address gender disparities in adoption of soil improvement technologies.