

Gain without Pain

The drudgery of weeding is so ingrained into the lives of farmers in developing countries that weeds are taken for granted and often overlooked in pest surveys. And yet weeding by hand, typically carried out by women and children, accounts for 50% of the total labour inputs needed to produce a crop, deprives millions of children the joys of playtime – and often schooling – and adds to the already heavy burden of women in third-world agriculture. Like death and taxes, weeds are always present and they adversely affect the livelihoods and quality of life of so many of the world's poorest people.

The problem of weeds was addressed many decades ago by the developed nations, with farmers adopting mechanisation and herbicides to such an extent that manual weeding now has one of the lowest demands for labour on the farm. So, can these technologies be transferred to developing countries? Expecting a positive outcome, CPP supported a project on weed management in maize-based cropping systems (R7405). Based in five districts of Kenya and Uganda, over 100 small-scale farmers have been involved in the participatory evaluation of

herbicides since 1999. Large variations between seasons, districts and farms have not concealed the fact that herbicides increased yields by 21% compared with the standard practice of hand-weeding. Moreover, herbicides reduced labour costs by an average of 42% compared to farmers' normal requirements and gave a 20% increase in gross benefits. The opinions of participating farmers on herbicide-treated plots could hardly be more encouraging:

- 100% of farmers thought there were fewer weeds
- 74% believed their crops were more vigorous
- 63% said that herbicides were effective, good or preferred when compared with hand weeding.

Many poor farming households would like to use herbicides but school fees, poor access to credit, lack of knowledge and poverty-related constraints all militate against investment in these products. Many farmers have been shown how to use herbicides to alleviate the burden of weeding but, until the socio-economic climate of rural farmers improves, many will be unable to benefit from the associated livelihood gains.



Training farmers to apply herbicides in Uganda

R7405: *Development of weed management in maize-based cropping systems*

Contact: *John Terry, Long Ashton Research Station, University of Bristol*