

MINIMUM TILLAGE IN EAST AFRICA

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Abstract:

At recent meetings of AFMA some initiatives have been described to introduce small farmers and contractors to the importance of minimum/zero tillage methods to replace the ubiquitous and 3 furrow disc ploughs and disc harrows which are commonly used to prepare seedbeds. The work is often carried out when the soils are very wet resulting in the formation of a hard pan which the rain water is unable to infiltrate causing the soil to be eroded severely. Alternatively on some lighter soils which are very dry the soil is pulverised causing dust conditions leading to wind erosion. The latter is very obvious during the dry season when mini 'tornados' can be observed for afar lifting the dirt high up into the atmosphere.

Unfortunately the efforts of a British retired farmer from the UK, a large scale farmer in Kenya and a machinery manufacturer to produce a smaller version of their direct seeding equipment for the 60 -80 HP tractor have faltered. Little progress has been made in the last two years and unfortunately the authorities and the NGOs do not seem ready to take this problem on board. This was evident at a conference organised by ECHO in Arusha Tanzania in February of this year when most of the emphasis was on the really small farms using hand cultivation or animal drawn equipment. Indeed a visit to a nearby research station showed much commendable investigation of cover crops but their method of preparing their land was by conventional means.

Indeed in their leaflet on the growing of these crops they suggested two ploughings and a harrowing to prepare a seed bed.

On a more optimistic note one of the presentations was by an organisation named GAFCO who farm hundreds of acres themselves and thousands of acres for small farmers in a non-profit setup. Training is done by World Vision, finance provided by a separate organisation and the work done by a third body using minimum tillage methods. In addition there is an Australian machinery manufacturer who is interested in producing a direct drill for the small tractor in Tanzania as was the plan in Kenya by the British input.

It is the challenge of uniting all these efforts and persuading the authorities and NGOs to come on board that is important for the good management of soil on these small farms.

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