



Deutscher Tropentag, October 9-11, 2002, Witzenhausen
“Challenges to Organic Farming and Sustainable Land Use
in the Tropics and Subtropics”

**Agricultural Mechanisation in Ghana. The Challenge to Combine
the Need for Increased Productivity with Sustainable Land
Management.**

HEINZ LOOS

German Agency for Technical Cooperation (GTZ), Sedentary Farming Systems Project, Ghana

Abstract

In line with the Poverty Reduction Strategy of Ghana the development of the agricultural sector is a key element. In Ghana agriculture contributes 60 % to domestic product, 65 % to employment and 50 % to exports. Increase in agricultural production and productivity, and the subsequent introduction of agrobased industries are seen as the motor for economic growth, of income generation and creation of job opportunities.

However, the majority of Ghanaian farmers still work at a very low level of mechanisation, tilling the land with hand tools such as cutlasses and hoes and transporting their produce by headload. These labour intensive production methods limit the area under cultivation and are responsible for severe yield losses due to untimely-performed operations such as planting, weeding, harvesting, transport and storage. Furthermore, the tedious fieldwork and low returns to labour make agriculture increasingly unattractive for the youth.

Mechanisation of agricultural production is seen as the missing link to agro-processing and the development of agrobased industries. Tractor services are available in some parts of the country, mainly for soil tillage and transport of produce. However, the exclusive use of disc implements has resulted in soil degradation and has increased the dependency on mineral fertilisers.

A concept is needed that is agronomically sustainable and economically affordable, that produces sufficient quantities and quality of produce, and that provides efficient postharvest services.

Therefore, the concept of conservation farming should be promoted for most conditions in Ghana in order to arrest soil erosion, sustain soil fertility, reduce production costs and make services affordable to small-scale farmers. A systems model for conservation farming is being presented.

Different organisational models are being discussed to assure efficient services. The establishment of Private Mechanisation Service Centres (Model of the German Maschinenring) that receive some support through Government is being favoured as an option, because it involves the private and the public sector, but maintains private entrepreneurship and assures organised service delivery.

Keywords: Conservation tillage, mechanisation