

Conservation agriculture holds promise for food production in Africa
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3 October 2005, Rome - Conservation agriculture holds considerable promise for farmers in sub-Saharan Africa because it can control soil erosion, reverse land degradation, give more stable yields and reduce labour and fuel needs, FAO said today on the eve of the Third World Congress on Conservation Agriculture in Nairobi (3-7 October 2005).

The meeting aims to examine evidence of recent experience in Africa and other parts of the globe and to promote discussion of it among decision-makers in governments, farmers, civil society, international agencies and donor countries.

Unlike conventional farming methods, conservation agriculture disturbs the soil as little as possible. Instead of ploughing, farmers plant their seed directly into the soil and the soil is kept covered.

"With conservation agriculture, farmers can produce more food on a sustainable basis, they spend less time and labour on land preparation, fuel consumption for machinery is lower and there is a reduced need for chemicals," said Shivaji Pandey, Director of FAO's Agricultural Support Systems Division. "The concept contributes directly to the fight against hunger and poverty."

Traditional farming in Africa often impoverishes the soil: intensive digging with hand hoes or ploughing has often damaged the soil structure, reduced its ability to hold moisture and has caused wind and water erosion. Water cannot soak into the soil and runs off, carrying topsoil and nutrients with it. Furthermore, many families living with HIV/AIDS and malaria can no longer farm enough land to grow the food they need.

Conservation agriculture offers help:

Instead of labour-intensive ploughing, farmers can plant their seed directly into the soil. They can use a simple hoe, inexpensive jab-planters or animal-drawn direct seeders.

Crop residues or a special cover crop keep the soil covered. This protects the soil from erosion, adds organic matter, fixes nitrogen and most importantly, conserves soil moisture. The soil cover also suppresses weeds - so less work is needed to remove them.

Instead of planting a single crop time after time, farmers should sow several crops in rotation. This raises fertility and prevents pest and disease outbreaks. The system has also been adapted for vegetables and root crops.

Conservation agriculture is especially attractive for women because it reduces the amount of work they traditionally do in land preparation and weeding. For families living with HIV/AIDS, conservation agriculture offers a way to grow a diversified diet using less labour.

Conservation agriculture is already practised successfully on around 90 million hectares worldwide but particularly in North and South America and the rice-wheat system of South Asia.

Spreading in Africa

Conservation agriculture has started to spread in Africa and is being adopted in Burkina Faso, Cameroon, Chad, Eritrea, Ghana, Kenya, Lesotho, Madagascar, Mali, Mozambique, South Africa, Swaziland, Tanzania, Uganda and Zambia. Some farmers have doubled or even tripled their grain yields.

In Kenya and Tanzania, FAO is implementing a conservation agriculture project with small-scale farmers in eight districts. The project is financed by Germany.

In Zambia, conservation agriculture has helped vulnerable households pull through drought and livestock epidemics. Over 200 000 farmers are now practising this technique. In the 2000-2001 drought, farmers who used conservation agriculture managed to harvest one crop, others farming with conventional methods faced total crop failure.