

MARKETING

Greenhouse to help keep farms in black

As concept spreads from flowers to other crops, tomato farmers are the latest beneficiaries of the technology



BY CATHERINE RIUNGU AND SOLLO KIRAGU

Kenya is on course to becoming a major greenhouse as the technology associated with successful flower farming spreads to other crops. Under a concept developed by the Kenya Horticulture Development Programme (KHDP), greenhouse production of tomatoes has been stepped up in an effort to stabilise supply and prices.

At various demonstration in Mombasa and Kericho early this month, hundreds of farmers welcomed the new technology which promises better yields, less use of chemicals and reduced damage compared to traditional farming. In Kericho, growers said the recent hailstorm that destroyed tea plantations also wiped out tomatoes, adversely affecting this year's production. The greenhouse concept appeals to the farmers most of whom own small portions of land because it is designed to occupy a small land area.

The technology is a partnership between the USAid-funded organisation and local agricultural inputs suppliers Seminis Seeds and Osho Chemical Industries. In areas supplied with water, it takes a 240 square metre piece of land, a plastic cover and a 500-litre irrigation kit and drip lines to get started.

Except for the land, the other components including seeds, fertilisers and

chemicals would cost about Sh150,000. The plot of land can grow 1,000 plants.

Although recommending the above as the minimums farmers should go for to earn higher profits, KHDP says cheaper options are available. Mr Peter Randa, the marketing manager and project technical adviser at Seminis Seeds, says growing crops under greenhouses has many advantages, among them higher production from a small piece of land and continuous harvesting. Greenhouse tomatoes have a shelf life of 23 days compared to 14 for those grown in the open.

Continuous output

It takes two months for greenhouse tomatoes to mature and three for outdoor farming, he said. Due to controlled irrigation and temperatures, the crop spots a continuous output of flowers and fruits, all at different stages.

One plant has the potential of up to 15kg at first harvest, going up to 80kg by the time it has completed its full cycle of one year. The plant's vines are supported inside the greenhouse with sticks and strings, growing up to 50 metres in height. If well looked after, the minimum plot of land under greenhouse production can yield up to 25,000 tonnes per year. Tomatoes are highly susceptible to diseases

Ms Jane Sigei in a row of tomatoes planted in a greenhouse during the workshop.

PHOTO: SOLLO KIRAGU

and thus require heavy application of pesticides, but under the greenhouse, which comes with basic training on hygiene, common infections like blights, botritis, and mosaic are easily preventable. Also controlled are insects and other pests known to invade plants as well as weeds.

Apart from saving on crop protection chemicals, which constitute a huge part of agricultural production costs, less labour is employed in a greenhouse, while exposure to chemical toxins associated with application is minimised or eliminated.

Planting materials for the greenhouse have been specially developed as high yielding, although they can grow outdoors as well. For this programme, the partners are recommending the Annafi hybrid tomato seed developed by Seminis East Africa.

Osho Chemicals is providing free chemicals to farmers in the initial stages of planting as well as technical advice on application, said marketing manager James Ndabi.

Mr Livingstone Ochwada, deputy director of KHDP, said at the Kericho site that the demonstration centres have been handed over to organisations as training grounds for farmers.