

# Sustainable farming: Mechanisation skills transferred to Limpopo emerging farmers

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otatoes South Africa's
(PSA) Enterprise
Development Programme
(EDP) focusses primarily
on supporting black
emerging potato farmers to
establish viable commercial farming
operations. It provides farm-based
training and development as a
support mechanism to these new
farmers, which translates into a cost
benefit and worthwhile return on
investment for the producer and
his/her farming operation.

### **PSA** partners with McCain Foods

PSA's transformation division partnered with McCain Foods to offer a two-day theoretical and practical training course to enterprise development farmers in Limpopo. This took place during March this year at McCain Foods' demo farm and workshop.

The transformation division is committed to helping farmers apply the skills and knowledge acquired through training programmes, which are provided in a sustainable manner to adhere to its mandate of developing emerging commercial potato producers.

# Mechanisation and soil management

The training was based largely on the basic principles of potato production, including mechanisation as a key component to increase production and food security. For this reason, developing countries are showing a growing interest in mechanisation.

While most emerging potato farmers do not have modern or largescale machinery, the basics of soil management in potato farming still apply. The training therefore covered this important aspect as well.

Topics discussed included the following:

- Selecting suitable implements for soil preparation.
- Planting seed at the correct depth and spacing.
- Inter-row cultivation practices.
- Crop rotation methods.

During the training, the farmers also relayed the challenges they face with soil preparation, planting, and harvesting. Solutions and ideas were formulated, which will be implemented during the coming May/June 2021 planting season. The producers also visited the McCain Foods workshop, where they were exposed to various types of machinery used for the production of potatoes.

#### **Crop rotation**

The last stop was the demo farm, where different types of

crop rotation were presented to producers. Crops shown included soya bean to suppress the infestation of nematodes, and alfalfa to feed livestock, cover the soil and suppress high infestation of weeds.

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Low yields, high weed pressure, soil erosion, nematode infestation and diseases occur when proper crop rotation systems are not implemented. PSA and the EDP mentors encouraged the emerging potato producers to practice crop rotation and act timeously, so that the soil will remain in good condition.

#### No-tilling farming

Farmers observed the system of notilling, which has proven to be one of the more profitable production methods in potato farming. It can be applied after harvesting and grass or cereals can be planted without using soil preparation implements.





The enterprise development farmers attending a demonstration by a facilitator from McCain Foods

Advantages of the no-tilling method include:

- Not disturbing the soil structure.
- Organic material added to the soil.
- Conserving oil moisture.

## Reaping the rewards of training

Through the training course, producers were able to acquire new skills to manage soil for long-term use. Some of the farmers are in the process of acquiring

improved machinery demonstrated during the course. They were fascinated by the different types of crops that can be planted for crop rotation to improve the physical and chemical status of soil, such as soya bean (legumes), maize (grass), wheat (cereal), and cover crops such as clover and hay, which are known for adding organic material.

Malakia Motibane, one of the farmers who attended the training, encouraged emerging farmers to not underestimate the programmes provided by organisations such as PSA, saying the programmes can be used as a tool to build a sustainable farming operation.

For more information on PSA's transformation projects, email Nomvula Xaba at email nomvula@potatoes.co.za or visit www.potatoes.co.za.

