Soya bean vs maize production

S

Soya bean production is a significant and growing component of South Africa’s agricultural economy. Large-scale production commenced during the late 1990s, after which the area planted to soya beans expanded rapidly.

Increasing yields, supported by a favourable agricultural policy environment backing the commercialisation and use of agricultural biotechnologies, has facilitated a smooth transition of commercial farmers from the production of traditional grains to soya bean. It has also enabled them to rotate soya beans with other grain crops in order to maximise profits. The increase in production can be ascribed to commercial farmers becoming cognisant of the benefits of soya bean in crop rotation systems with maize.

Plantings compared

When considering the period from 2006 to 2016, Mpumalanga is by far the largest producer (47%) of soya beans in South Africa in terms of area planted. The Free State is second (30%), while KwaZulu-Natal is third (9%).

This can mainly be ascribed to South African farmers using soya beans as a substitute for maize.

The relation between planted soya beans and maize has changed over time. As shown in Figure 1, the percentage of soya bean compared to maize hectares planted for the major producing provinces has shown some variation since 2006.

Major producing provinces

In the Free State, the percentage of soya bean hectares planted relative to maize hectares has increased from 8 to 20% between 2006 and 2016. This can mainly be ascribed to South African farmers using soya beans as a substitute for maize, as soya bean processing capacity has aggressively expanded in the last few years. From 2006 to 2016, soya bean planting in the Free State province has increased by 287%, from 45 000 to 174 000ha.

In KwaZulu-Natal, however, soya bean plantings declined in relation to maize plantings, from 30% in 2006 to 25% in 2016. Although the area planted to soya beans increased by 12% over this period, the expansion in maize plantings was much greater at 46%.

Mpumalanga soya bean plantings, relative to maize, increased from a ratio of 29:71 in 2006 to 33:69 in 2016, and now constitutes one-third of the traditionally maize hectares planted in this province. For Limpopo, soya bean plantings increased by 3 000ha (23%) during the period 2006 to 2016, whereas maize plantings, however, increased by 36 000ha (206%). Due to the huge increase in maize hectares planted, the ratio of soya beans to maize dropped from 43% in 2006 to 23% in 2016.

Increase recorded in Gauteng

Soya bean plantings in Gauteng increased by 254%, from 6 500ha in 2006 to 23 000ha in 2016. In comparison, maize plantings increased by 50%, from 70 000ha in 2006 to 105 000ha in 2016. Due to the huge increase in soya bean plantings, the relation between soya beans versus maize increased from 8:92 in 2006 to 18:82 in 2016.

Finally, for the North West province, the ratio of soya beans to maize has remained fairly unchanged during the period under review, i.e. from 2 to 3% against 97 to 98%. Out of all the main soya bean-producing provinces, the Western Cape, Northern Cape and Eastern Cape excluded, North West appears to be the one province which plants the smallest area of soya beans, that is to say 3 to 4%.

In terms of rainfall, Mpumalanga, KwaZulu-Natal and certain parts of Gauteng, the Free State and Eastern Cape are the most suitable for soya bean production. Moreover, since soya beans can also be rotated with maize, provinces such as the North West hold a greater potential for soya bean production.