

The agri benchmark initiative: International and local potato production

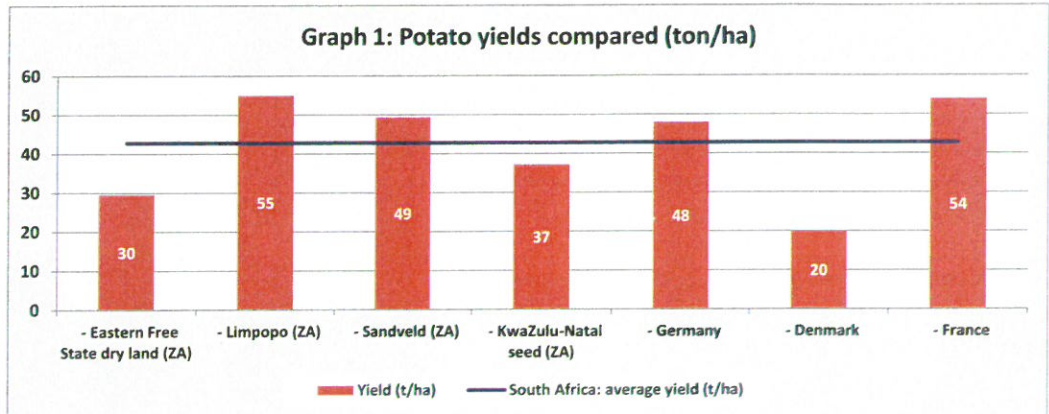
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International potato production is facing new challenges

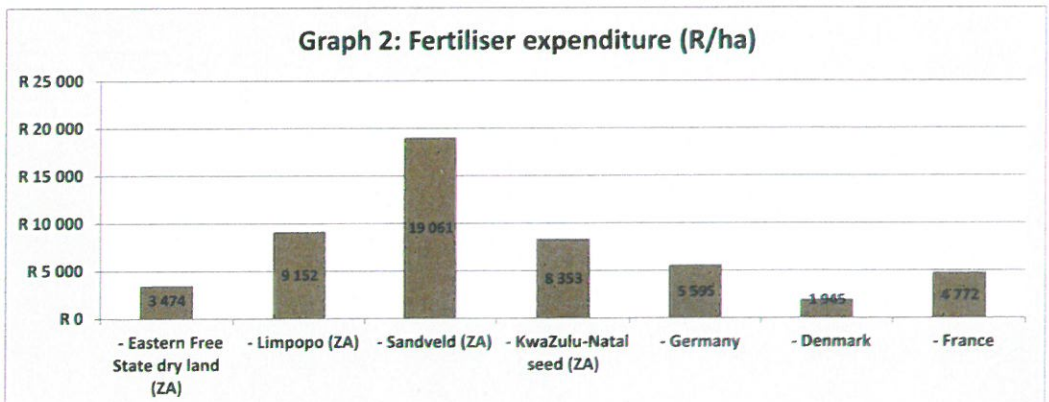
Due to changes in price relations of arable crops, the profitability of crops has been shifting throughout the world. Crop rotations and cropping systems are being put to the test. This also affects potato production. Furthermore, processors and retailers require new quality standards regarding potatoes and cultivation. Against this background, an international comparison of production cost and cropping systems in the main potato producing countries is becoming even more important for strategic decisions for the producer. Therefore the network *agri benchmark* is expanding its international comparisons of farms and production systems by including potato production and marketing. Integral parts of these comparisons are intensive regular exchanges of results and general developments in the international potato market among the participating actors from organisations and science.

What is agri benchmark?

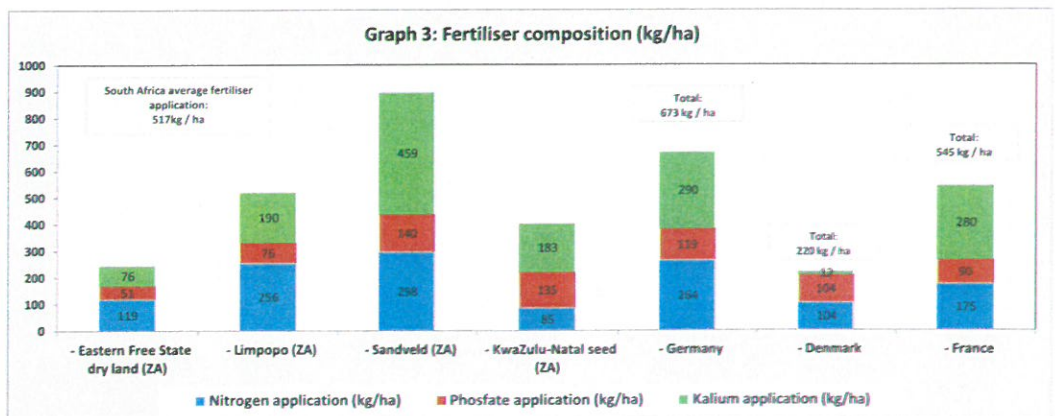
agri benchmark is a global network of agricultural economists, advisors and farmers. It is commonly man-



Graph 1: The respective yields of seven typical farms are depicted in the graph. For the specific year (2010/2011) the typical farms in France and Limpopo realised the highest yields.



Graph 2: It is clear from the graph that the Sandveld's fertiliser cost is by far the highest. This is mainly because of their sandy soils with almost no clay content.



Graph 3: Because of the sandy soils in the Sandveld the farmers need to apply more fertiliser more regularly than other regions. See also the high application of the farm in Germany.

aged by the agricultural economics institute of the Thünen Institute in Braunschweig and of the DLG in Frankfurt. In almost 30 participating countries the network analysis production systems for cereals, rice, oil seeds, sugar beet and sugar cane economically. The databases are the respective typical farms in the important production regions.

The network is based on the principle: "Put your country in and get the world back." Thus, all members have access to the data that has been collected throughout the world. Additional to the central analysis of the data in Braunschweig each member can carry out and publish own analyses. During the annual agri benchmark Cash Crop Conference these results are presented and discussed among all participating partners. For more detail on the agri benchmark initiative, please visit www.agribenchmark.org.


3. The aim of agri benchmark in potatoes

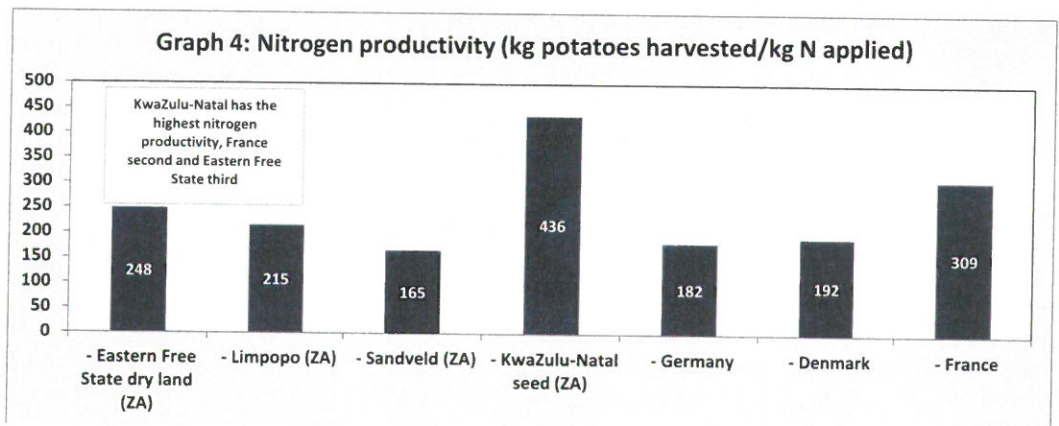
The following questions for the most important agricultural products are to be answered:

- What are the production and marketing systems in the main production areas of the most important potato producing countries?
- What is the economic situation of potato production – in regional comparison with other cultures and in international comparison?
- Which economic and legal frameworks and which consequences for cropping programs, cropping systems and production are to be expected during the next years in the most important production areas?

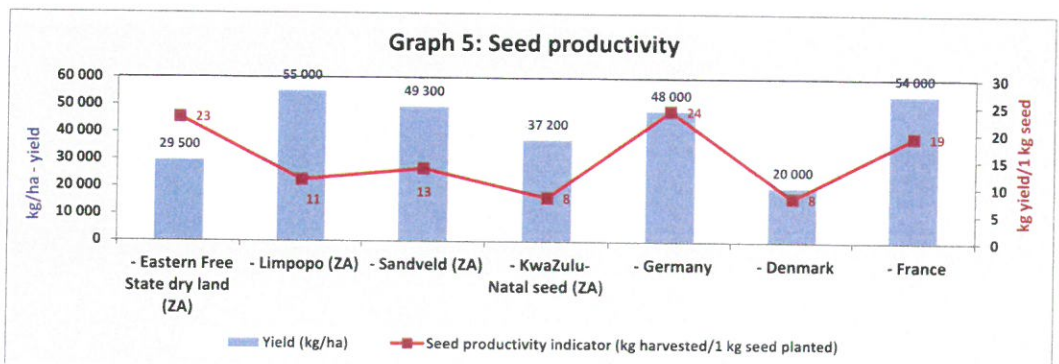
For this purpose, typical farms that reflect the production systems of the respective country's most important production areas are chosen. The data from those farms is collected and analysed annually by the regional partner in cooperation with the Thünen Institute.

4. Preliminary results

Typical farms in four production regions in South Africa were constructed, namely one in the Eastern Free State (table production, dry land), Sandveld (table production, irrigation), Limpopo (table production, irrigation) and KwaZulu-Natal (seed production, supplement irrigation). Some preliminary results are shown in the included graphs. Work still have to be done to make 100% sure all data is correct and a true reflection of potato production in the specific regions. Nevertheless the graphs give a general idea of the situation out there. 



Graph 4: Farmers in KwaZulu-Natal realised the highest productivity for nitrogen applied. For every 1 kg of nitrogen applied 436 kg of potatoes were harvested. See the relative high number for the farm in the Eastern Free State where potatoes are cultivated under dry land conditions.



Graph 5: The farm in Limpopo realised the highest yield of 55 ton, but realised a relatively low seed productivity indicator. Eleven kg of potatoes were harvested for every 1 kg of seed potatoes planted. The farm in the Eastern Free State harvested 23 kg of potatoes for every 1 kg of seed potatoes planted, more than double the Limpopo farm.