Summary
Soya consumption in the Netherlands

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Soya is used in the Netherlands for human products and technical applications (mainly soya oil) and for livestock feed (mainly soya bean meal). The value of soya is determined by the demand for these two products derived from the soya bean.

Very little soya is grown in the EU, it is mainly imported. Of the total imports of approximately 3.7m tonnes of soya beans, 4.8m tonnes of soya bean meal and 0.2m tonnes of soya oil, a proportion is directly shipped on to other countries. Some of the product processed in the Netherlands is also exported and some is used domestically. The livestock feed sector is an important consumer of soya bean meal. The quantity of soya products used in livestock feed in the Netherlands is not clear.

The Task Force Sustainable Soy asked LEI to conduct research into the quantity of soya beans, soya bean meal, soya oil and soya bean hulls used in the domestic production of livestock feed for the production of meat (pork, beef and poultry), milk and eggs. In order to calculate soya consumption, a computational model was devised which was then used to calculate soya consumption in the Netherlands based on feed production in the Netherlands and the soya content of the different types of feed, taking account of the use of soya products in human and technical applications.

Results

The total consumption of soya and soya products in compound feed for livestock farming over the period January 2008 - April 2010 was almost 1.7m tonnes per year. In addition, approximately 140,000 tonnes were consumed annually as simple raw materials. The total annual consumption of soya products in livestock feed in the Netherlands averages 1.8m tonnes, which is equivalent to 2.0m tonnes of soya beans.

The consumption of soya products (excluding soya bean hulls) per unit of product varies greatly between different types of meat, from over 100 grams per kg for veal to almost 600 grams per kg for poultry (based on slaughter weight). 11 grams of soya are used per kg of raw milk, while for the production of eggs the figure is 300 grams per kg.
The total area of cultivated land required to grow the soya consumed in Dutch livestock farming is a little over 700,000ha at an average yield of 2.8 tonnes/hectare. Not all the products from the nearly 2m tonnes of soya beans produced on this land area actually find their way into the Dutch livestock farming industry.

A total of 550,000 tonnes of soya products (including soya bean hulls) are used in the production of meat, milk and eggs for domestic consumption; this is less than the total consumption by Dutch livestock farming because a part of the Dutch production of meat, milk and eggs is exported.

Besides the consumption of soya by animals, another 130,000 tonnes of soya products (almost exclusively soya oil) are consumed annually in human products and technical applications. To meet this demand, a total of 650,000 tonnes of soya beans need to be grown, which equates to 230,000ha of cultivated land. This area overlaps almost entirely with the area of land required for livestock farming.

Conclusion
In the Netherlands, a total of 1.8m tonnes of soya products are consumed in livestock feed and 0.13m tonnes (primarily oil) in human and technical applications. The total area of cultivated land required to produce this quantity of soya is approximately 700,000ha.