

## EU AGRICULTURAL PRODUCTION AND TRADE:

### *Can more efficiency prevent increasing 'land-grabbing' outside of Europe?*

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#### - SUMMARY -

Today's challenging economic environment facing European farmers is creating changes in the production and investment decisions across the agricultural economy.

With 27 member states, it has become more complex for the EU to respond to globalisation, WTO negotiations and CAP reforms, and the growing demand for renewable energy. These factors have helped make the EU the world's largest importer of foreign agricultural commodities.

The study on '*EU agricultural production and trade: Can more production efficiency prevent increasing 'land-grabbing' outside of Europe?*' represents the most comprehensive analyses of agricultural trade with Europe and its impact on land use decisions outside the EU. It is the first analysis covering the EU-27 in greater detail and includes approximately 50 percent more tradable goods (~ 240 products covered) than any recent study on agricultural trade of the EU available.

The overall objective of the study is to quantify the virtual agricultural land trade of the EU. A complex indicator-based approach was used to convert international agricultural trade data of the EU into land trade.

The study details the development of agricultural trade over time (between 1999 and 2008) and quantifies the substantial agricultural acreage that is cultivated with crops by other countries to fulfil Europe's demand for food, animal feed and biofuels for energy needs.

It has been concluded that the EU imported the equivalent of 35

million hectares of arable land in 2007/2008, almost 40 % (amounting 10 Million hectares) above the average of the years 1999 and 2000.

Major contributions to the increasing EU land deficit arose from changes in the use of soya, grains and palm fruits and products made out of the specific crops, such as vegetable oils and feeding stuffs (see table below).

In addition, three scenarios were analysed to assess how changing technologies and policies might alter agricultural land trade of the EU. It turns out that only a 0,5 % annual increases in land productivity would lower arable land demand outside Europe by approximately 5 million hectares, whereas organic farming on 20 percent of all arable land in the EU would increase demand by additional 10 million hectares. Achieving the EU's biofuels mandate would increase arable land demand by approximately 3 million hectares compared to the situation in 2007/2008. The findings of the scenario analysis are summarised in the figure below.

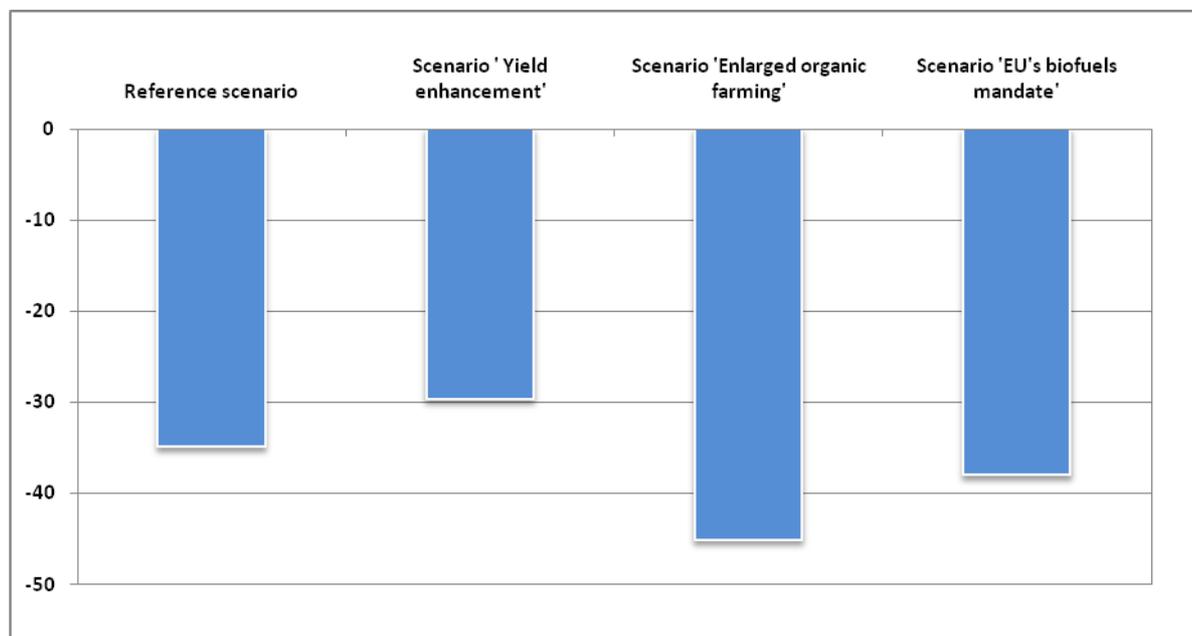
It becomes clear that agricultural innovation leading to productivity increases saves agricultural land, land that could be used more efficient, e.g. for feeding an ever growing world population, to produce raw materials for competitive bio-energy production, to sequester carbon in view of climate change, to save the environment in ecologically sensitive areas, etc.

Strategies need to be formulated to reduce the EU 'land grabbing' outside its territory.

**Table:** Composition of land exports and imports and resulting net land trade of the EU, 1999/2000 (in million ha)

	Land exports	Land imports	Net land trade
Wheat	3,28	2,57	0,71
Corn	0,56	2,48	-1,92
Coarse grains	2,92	1,40	1,52
Rice	0,04	0,53	-0,49
Soya	1,71	19,24	-17,53
Palm fruits	0,05	2,61	-2,56
Other oilseeds	3,47	8,59	-5,12
Sugar crops	0,15	0,44	-0,29
Coffee, Cocoa, Tea	0,44	6,72	-6,28
Fruits	0,95	3,31	-2,36
Vegetables	0,22	0,56	-0,35
Others	0,31	0,54	-0,23
<b>Total</b>	<b>14,10</b>	<b>48,99</b>	<b>-34,90</b>

Source: von Witzke and Noleppa (2010).

**Figure:** Net arable land imports of the EU under changing technologies and policies (in million ha)

Source: von Witzke and Noleppa (2010).