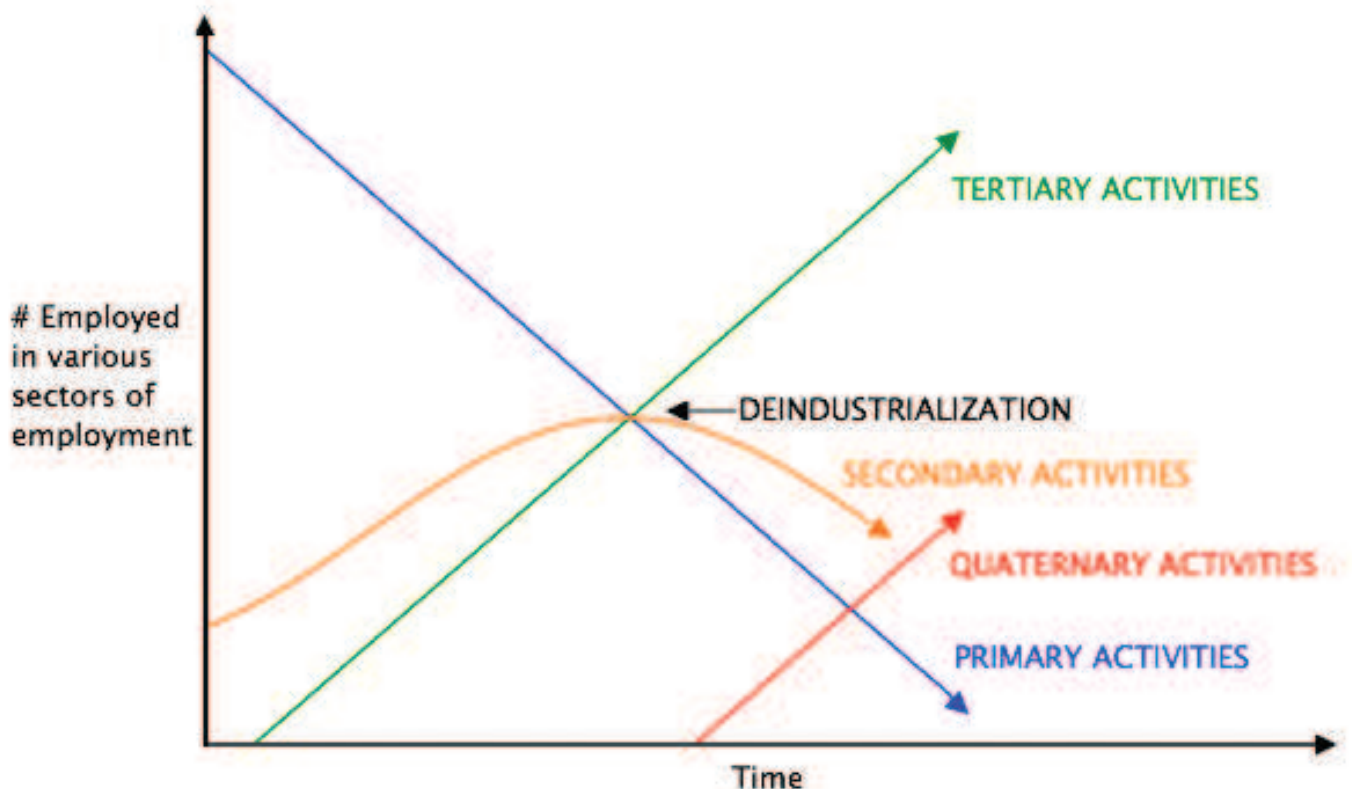


Food Industrialization

Less and less people working in primary sector (= agriculture). More and more is handed over to industrial mass production of food with less people and more technology. This type of production has several ecologic problems. Scandals (BSE, horse-meat, ...) are the result of the increasingly large-scaled, concentrated food industries.

Ecologic problems of industrial food production:

- o too many nutrients (nitrogen, phosphat, ...) in water for farming
- o pollution of ground water through pesticides
- o packing of soil through heavy agricultural machinery
- o danger of erosion through single-crop farming
- o vulnerability of crops against illnesses and pests
- o resistance of pests against pesticides
- o reduction of biodiversity of crops
- o exposure of food products with pesticides, nitrates, antibiotics, hormones, tranquilizers, ...
- o death of farmers through pesticides
- o increased energy consumption through machinery
- o increased CO2 emissions through machinery

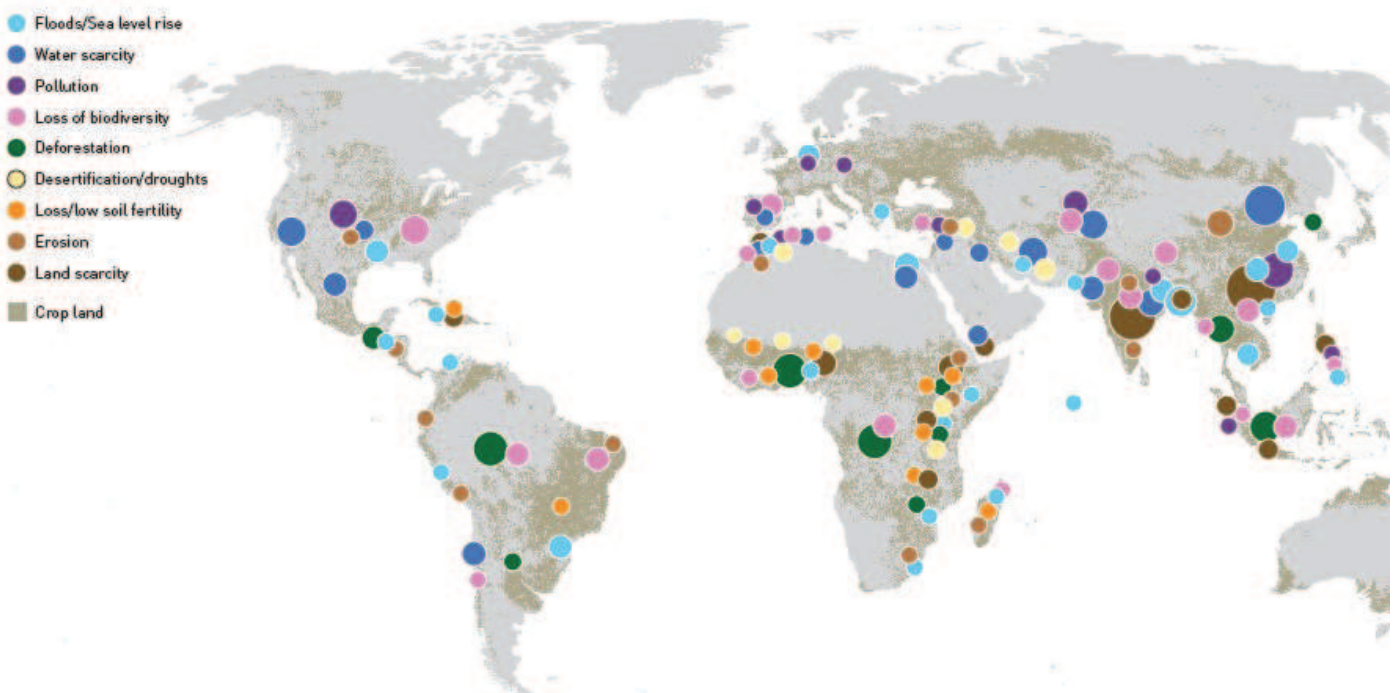


Land transformation

Pesticides and synthetic fertilizers damage long-term fertility of the soil. The consequence is land transformation, degradation and devastation. Other reasons for land transformation are water scarcity, pollution, loss of biodiversity, floods, deforestation, ...



FIGURE 3.3: GLOBAL DISTRIBUTION OF RISKS ASSOCIATED WITH MAIN AGRICULTURAL PRODUCTION SYSTEMS - A SCHEMATIC OVERVIEW



Source: This study

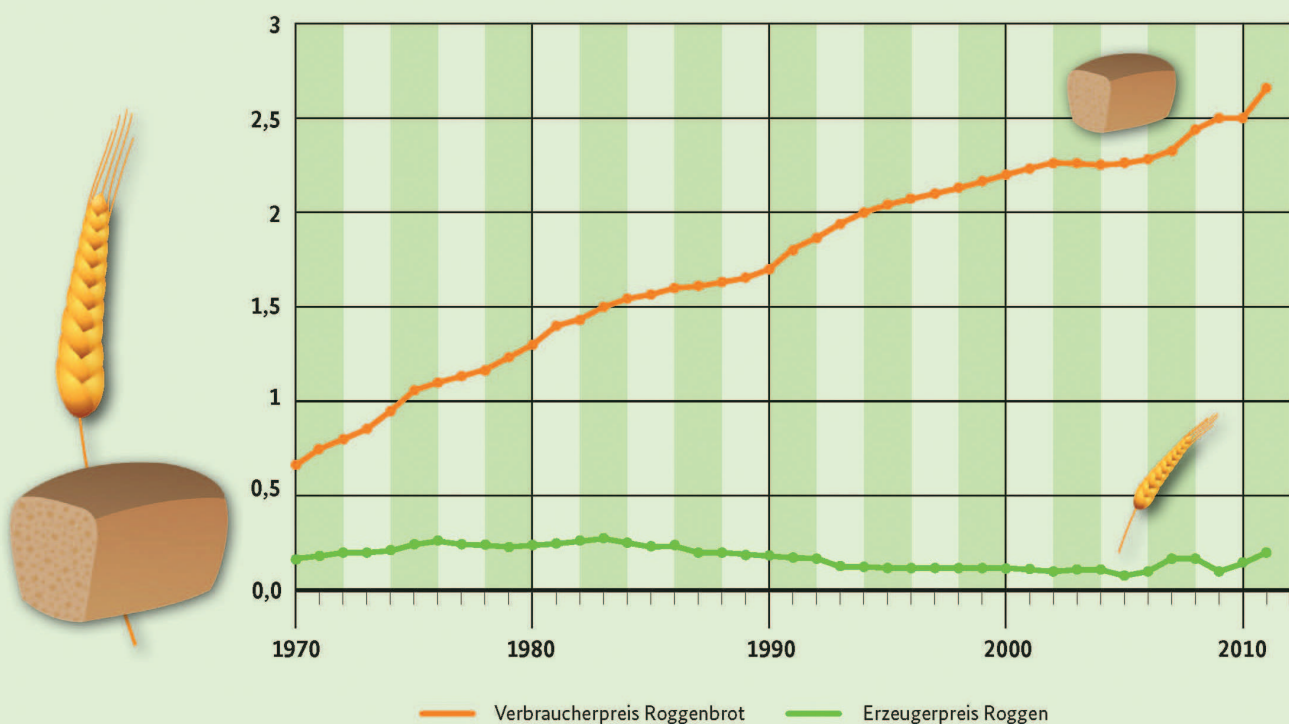
Economic pressure

Due to the fact that agriculture deals with a very sensitive resource “food” there is a high economic pressure in the agricultural system. At the moment, productivity in agriculture decrease, this means that prices for agricultural end-products increase. The result is a rise in hunger and poverty worldwide.

Farmers have to “grow” or “go”. This is due to the following facts:

- o the average productivity increase in agriculture of 2 % per year
- o the increased work productivity through technical progress in machinery
- o the only low increase of population and so forth demand of food
- o the strong concentration of supply in agricultural machinery
- o the strong concentration of demand with high price pressure
- o the disposal of guaranteed prices for agricultural products
- o administrative and environmental regulations in food production

Entwicklung des Erzeugerpreises für Roggen und des Verbraucherpreises für Roggenbrot in Euro pro Kilogramm

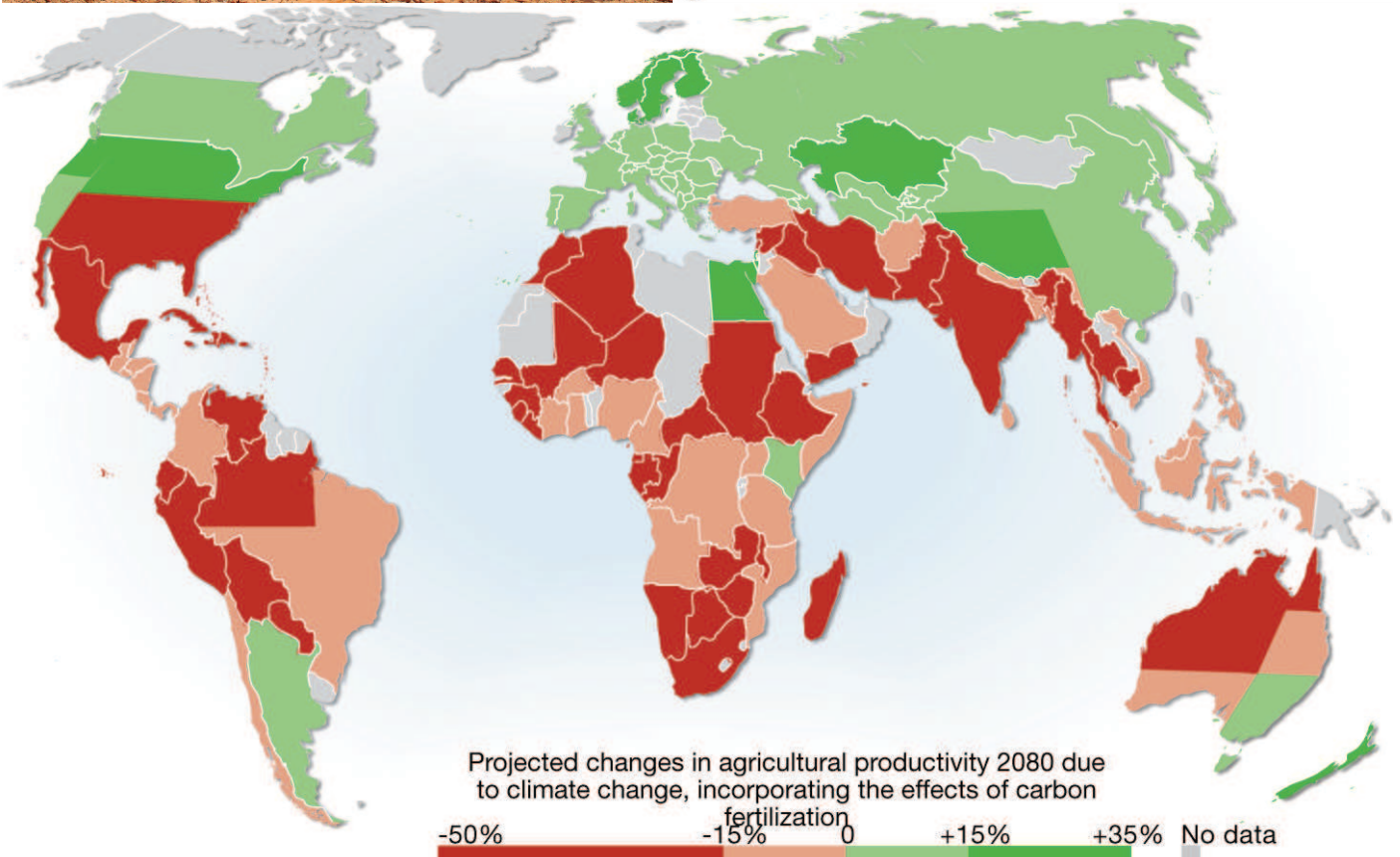
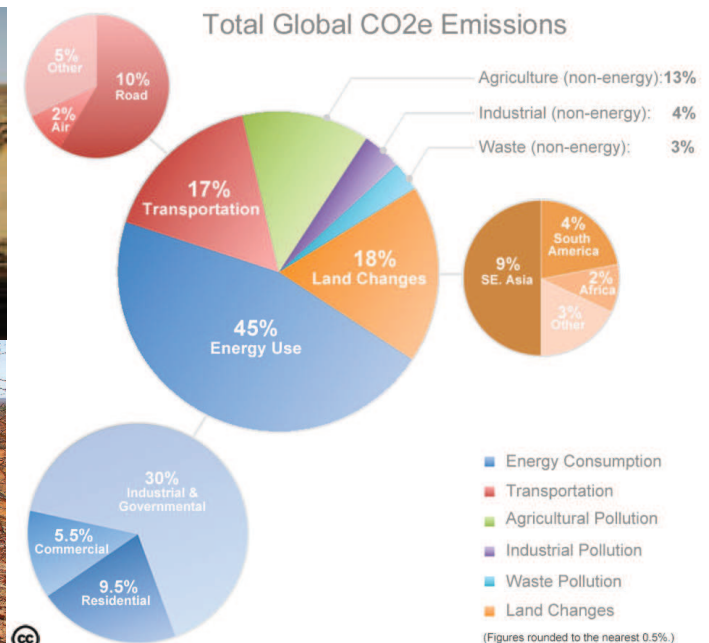


Beim Roggenbrot bis 2002 früheres Bundesgebiet,
beim Roggen bis 1990 früheres Bundesgebiet.

Grafik: BMELV (August 2012)

Climate Change

The agricultural sector is one of the largest climate killers. Agriculture causes carbon dioxide emissions. The downside of this has also be carried by the agricultural sector (= flood, drought, hail, storm ...).



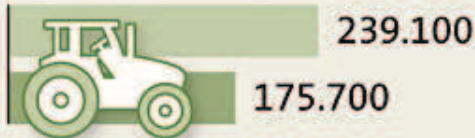
Farmer's death

Reasons for farmer's death (in Austria) are various, but the main reason is the following: "Typically small farmers quit, because of the high costs of technization and industrialization and because of low income expectations if there is not a minimal production volume to be competitive."

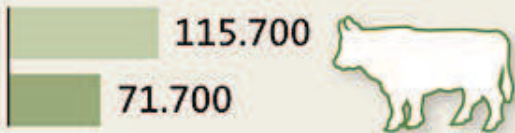
Agrarstruktur

1995 2010

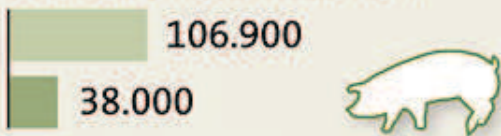
Agrarbetriebe gesamt



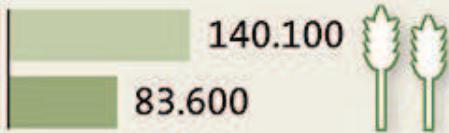
Betriebe mit Rindern



Betriebe mit Schweinen



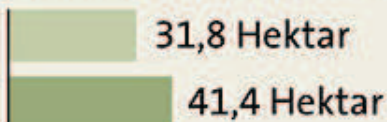
Ackerbaubetriebe



Genutzte Agrarfläche Hektar

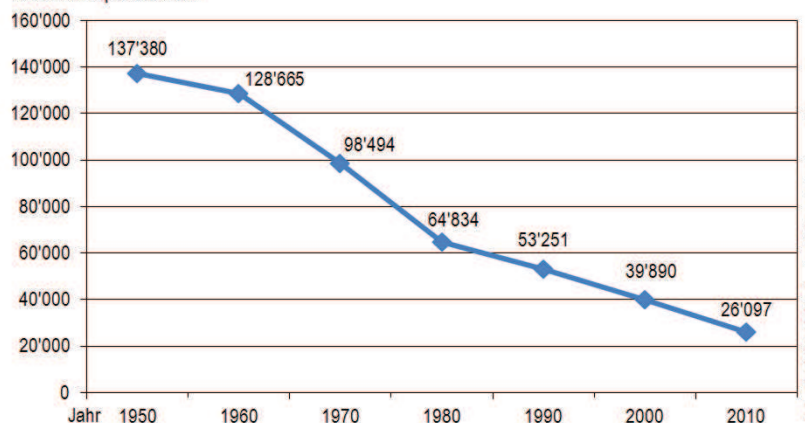


Fläche pro Betrieb im Schnitt



Megatrends: Anzahl Milchproduzenten

Anzahl Milchproduzenten



Food Quality

Due to industrial mass production in the food industry fast food, junk food or convenience food are spreading and getting popular by consumers. Though there is a contrary movement to plant their own vegetables, herbs and other agricultural products on farms that are shared with other “hobby” farmers (urban farms, shared farming).

