



Examples and experiences for the reduction of pollution from agriculture What are the main pressures on lakes and water bodies from agriculture?

"Agriculture, which accounts for 70 percent of water withdrawals worldwide, plays a major role in water pollution. Farms discharge large quantities of agrochemicals, organic matter, drug residues, sediments and saline drainage into water bodies." (FAO.org, 2017)

Major water pollutants in agriculture:

- Nutrients (nitrogen, phosporus)
- Pesticides (herbicides, insecticides, fungicides and bactericides)
- Salts (E.g. ions of sodium, chloride, potassium, magnesium, sulphate, calcium and bicarbonate)
- Sediments, Organic Matter, Pathogens, Metals, Emerging pollutants

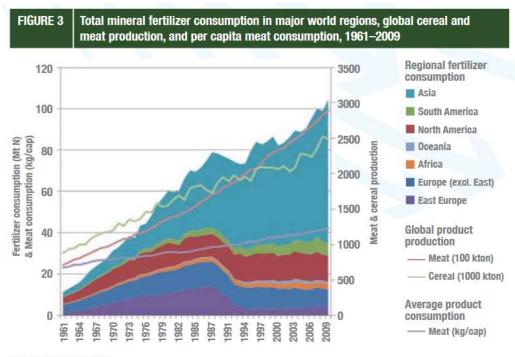






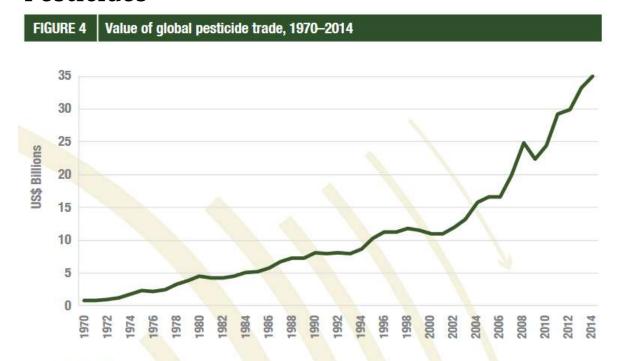
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Nutrients



Source: Sutton et al., 2013.

Pesticides









Examples and experiences for the reduction of pollution from agriculture How do you get pollution reduction into practice? Example: Beneficial insect strips in potato fields

Goal: Test, demonstrate and disseminate innovative farming practices - beneficial strips increase the number and diversity of insects while reducing pesticide use and pest pressure.

Action: 4 Demonstrations Farms of EU-LIFE project "Insect Responsible Sourcing Regions" plant strips for beneficial insects in their potato fields

- Financing of the planting and compensation of the cultivated area with 15.000,- € (5000,- per ha)
- Realisation of a total of 3 ha of beneficial insect strips
- The measure was accompanied by beneficial insect inventories (monitoring) between 2022 and 2024.
- The effect will also be monitored by the potato cultivation advisory service in Heilbronn and the cultivation advisor of the intermediary involved.









Examples and experiences for the reduction of pollution from agriculture How do you get pollution reduction into practice? Example: Reduce fertilizer & pesticide use in durum cultivation

Goal: create lasting added value through regionality and more biodiversity - Long-term strategy through integration in the supply contracts/quality requirements

Action:

- Principle #1: Two biodiversity measures! Extensive crop land & high-quality perennial flowering strips
- Principle #2: **Defining the scope!** The two biodiversity measures must be implemented on an area equivalent to 10% of the contractually fixed durum wheat area with ALB-GOLD.
- Principle #3: **Clear rules with flexible implementation!** The farmer decides himself about the distribution
- Principle #4: ALB-GOLD pays for quality! Alb-Gold pays farmers quality bonus of 60 Euros per hectare of durum wheat.

Unfortunately: project on hold (extreme increase in durum wheat prices due to crop failures - impossible to conclude contracts with binding biodiversity measures.

















Examples and experiences for the reduction of pollution from agriculture How do you get pollution reduction into practice? Example: Integration into education and training

Goal: Strengthening sustainability competence - in agriculture and the food industry - Concept and implementation of training materials, practical workshops and training events

Action:

Project GENIAL



Project LIFE Insect Responsible Sourcing Regions



German Sector Initiative "Food for Biodiversity"













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