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Abstract for the presentation: 'Environmental impacts of agriculture'

The sustainability of agriculture and the capacity of agro-ecosystems to provide many services is in danger caused by harmful practices of agriculture. In the result soil is being degraded and water contaminated, it caused also declines in pollinators, the loss of natural biological control of pests and diseases.

The total area of farmland has decreased, but productivity of European agriculture increased significantly a result of intensification and specialisation.

Agricultural production contributes to greenhouse gas emissions, through methane produced by livestock and emissions from agricultural soils. Fortunately, emissions from the agricultural sector have declined by 22% since 1990.

Despite many differences between countries, overall pesticide use in Europe declined in the period 2000–2009. However new pesticides placed in market, which have got more concentrated active ingredients, reflect a declining volume of pesticide use without a significant declining in environmental impact.

Agricultural nitrogen balances are declining but they are still high in some countries, especially in Western Europe. Many water bodies suffer from diffuse pollution, particularly in regions with intensive agriculture and high population density. As a result eutrophication can cause biodiversity loss, increase algae production and reduce oxygen levels.

Europe has experienced a major decline in biodiversity associated with agro-ecosystems and grasslands: 63% of the assessments of habitats linked to grasslands are unfavourable and only 11% of the conservation status assessments of species linked to grasslands is favourable. Since 1990, common farmland birds have declined by 30% in Europe. Between 1990 and 2011, populations of grassland butterflies declined by almost 50%.

Based on: *The European environment – state and outlook 2015: synthesis report*, EEA, Copenhagen, 2015