Meat and dairy product consumption as a root cause for biodiversity loss and food insecurity

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Abstract

Many threats of biodiversity as well as of food security are caused or strengthened by intensive agriculture necessary to meet the high demand of meat and dairy products. Consequently, research on how to reduce the consumption of these animal products is research on the efficient and holistic remedy of one significant root cause of biodiversity loss and food insecurity, at once.
These links are picked up in the research underlying this poster-presentation. Examinations included a review of scientific literature and a systematic meta-analysis about effects of meat and dairy production on biodiversity loss and food insecurity as well as about applied and recommended possibilities to reduce the consumption of these animal products. Out of this review, conclusions could be drawn including evidence for efficient instruments to tackle the change resistance of consumption patterns.

Results show that animal production and thereby intensive agriculture is linked to biodiversity loss by several causal connections. Contributory factors include e. g. deforestation and emissions of greenhouse gases. Biodiversity loss as a result may lead to, inter alia, an increased vulnerability to climate influences, and thus to food insecurity. Moreover, food security is directly threatened by animal production through the competition for land regarding crops grown for animal fodder versus crops grown for direct human consumption.

Additionally, it can be shown, that consumption patterns hardly have shifted, given the previous extensive research, the various campaigns, and the many public discussions around this topic. Among others, the deep cultural integration of animal products is retarding the process of transformation to a sustainable, predominantly plant based diet. Efficient instruments to accelerate this process seem to include the improvement of school education, the use of role models to appeal for a plant-based diet, as well as certain politico-economic measures. These results invite further empirical examination.
To sum up, in this presentation possibilities to reduce animal production as one root cause of biodiversity loss and food insecurity are introduced. Additionally, these possibilities are examined in their effectiveness; aiming to find influential ways to tackle food insecurity as well as biodiversity loss.

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