

Tackling a root cause: Reduction of animal product consumption to face biodiversity loss and food insecurity

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The link

Biodiversity, food security and animal product consumption – How does the link of these terms offer a solution for tackling problems of biodiversity loss and food insecurity?

Many threats to both areas are caused or fueled by intensive agriculture necessary to meet the **high demand of meat and dairy products**. For instance, deforestation and greenhouse gas emissions are drivers for habitat change as well as for climate change (Fig. 1). Food security is affected by these factors by an increased vulnerability to climate influences, the competition for land regarding crops grown for animal feed versus crops grown for direct human consumption.

Thus, **research on how to mitigate the consumption of animal products** is particularly on the remedy of one significant root cause of both biodiversity loss and food insecurity.

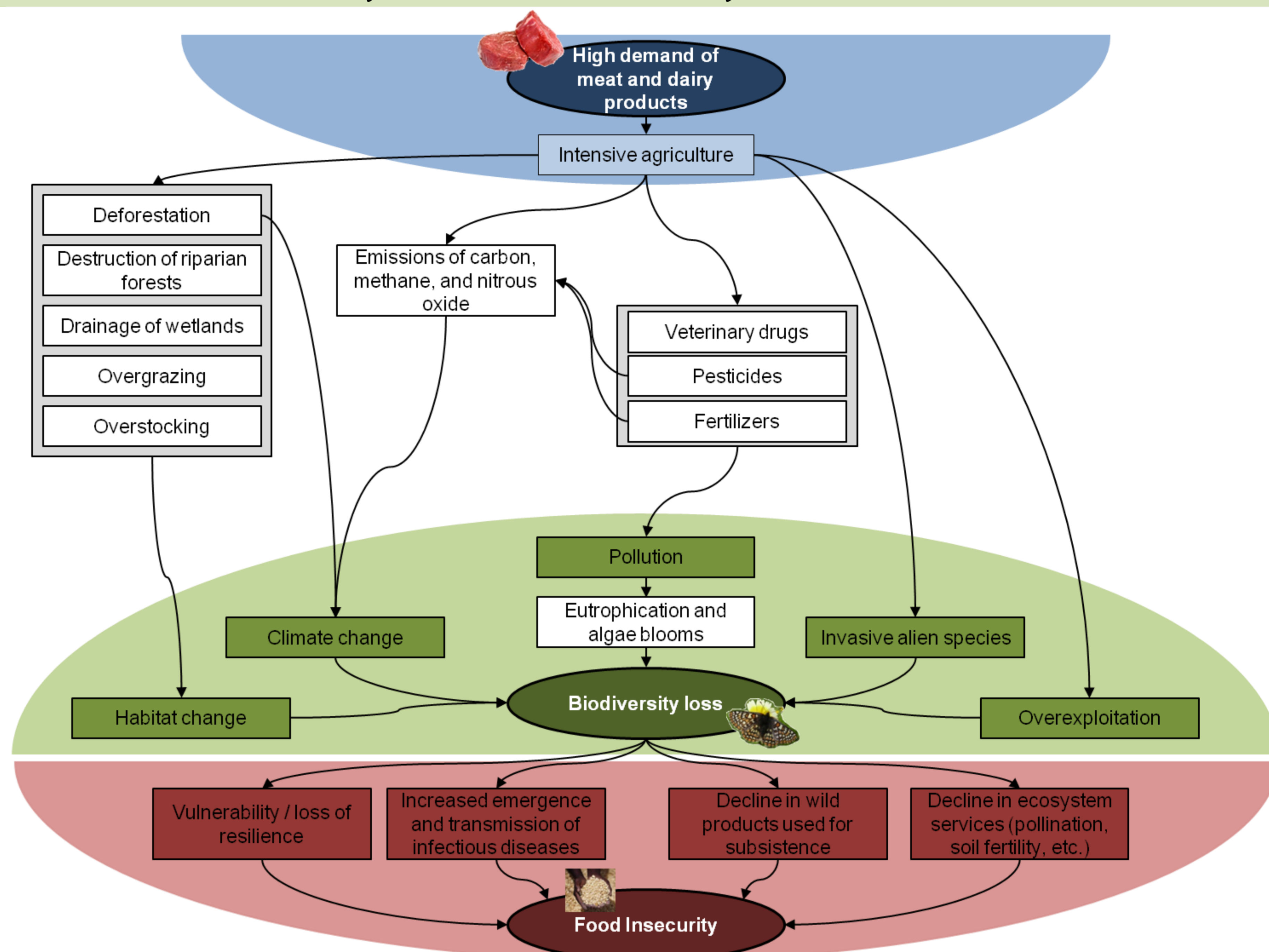


Figure 1: Causes and impacts of meat and dairy production on biodiversity and food security

Tackling unsustainable meat consumption

Consumption has hardly shifted towards sustainable consumption patterns, in spite of the existing **extensive research** on this topic, the **various campaigns** which have been conducted by diverse organizations worldwide, and the many **public discussions** which have been held about the consequences of animal production and how to reduce it.

Different root causes could be identified underlying the change resistance which include the **deep cultural integration of meat**, leading to **con-firmed habits** as well as the **alleged dichotomy between human and nonhuman animals**. Additionally, **lack of knowledge** and the **preference for immediate rather than future gains** constrain the process of reducing meat consumption. However, instruments were found which seem to have the potential of efficiently accelerating this process, these include the **improvement of school education**, the **use of role models to appeal for a plant-based diet**, and **certain politico-economic measures** (Fig. 2).

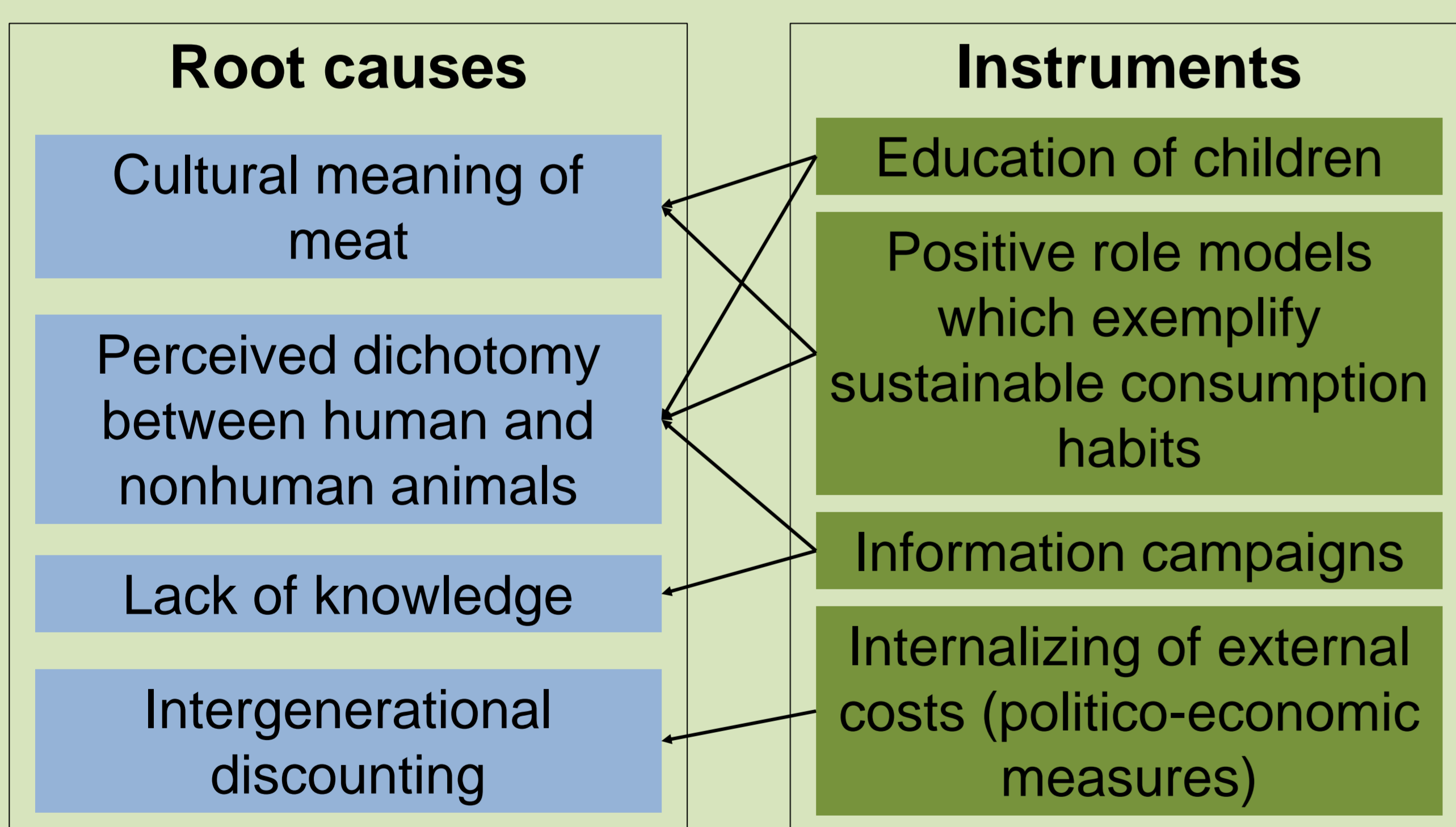


Figure 2: Root causes of meat consumption and respective instruments for tackling them

Methods

Research is based on 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 production and consumption of animal products, predominantly in industrialized countries. Moreover, literature about psychological determinants on consumption patterns has been reviewed. Thereof, conclusions are drawn including evidence for efficient instruments to tackle the change resistance of consumption patterns. The **empirical foundation of the meta-analysis is planned** as a further step.

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