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Agroecology Scientific Days 2024
Workshop 3, Session 2

Title: The role of livestock farming in the adaptation trajectories of cereal and wine growers in the Upper Rhine (France, Germany, Switzerland)

Summary: Livestock farming is particularly criticised for its environmental impact and its contribution to climate change (Bourban & Broussois, 2020). This stigma has led to a deterioration in the professional identity of livestock farmers, in addition to the rapid disappearance of pastoral livestock farming (Petit et al., 2023) . However, without calling into question the reality of the environmental impact of livestock farming, the analyses calling it into question generally focus on the greenhouse gas emissions generated (e.g. Singhet al., 2017) , and overlook the major benefits of pastoralism in terms of reducing fossil fuel combustion (Vigne et al., 2013) and carbon storage (Reid et al., 2004) .

Assessing the links between livestock farming and climate change may therefore require a more systemic approach, taking into account the specific features of livestock farming methods and, above all, their interactions with crops.

Studying the adaptation trajectories of cereal growers and winegrowers, we have observed the fundamental role played by livestock farming, as a link ensuring the cohesion of an agro-ecological system, at farm level or through symbiotic interactions between growers and farmers. By providing payment for soil-covering practices, diversification of crop rotations and the supply of manure, livestock farming enables farmers to be better integrated into certain socio-economic systems, encouraging certain adaptive practices.

Bibliographical references (max. 10)

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