



Greenhouse gas mitigation and soil carbon sequestration practices in the sheep sector

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Source: Thünen-Institut/Claus Deblitz

1. Introduction and data

- Greenhouse gas emissions from sheep production contribute 8 per cent to global GHG emissions from the livestock sector
- Little is known about current GHG mitigation and soil organic carbon (SOC) sequestration practices in the sheep sector
- Agricultural economic experts from 12 countries participated in the survey (see figure 1)

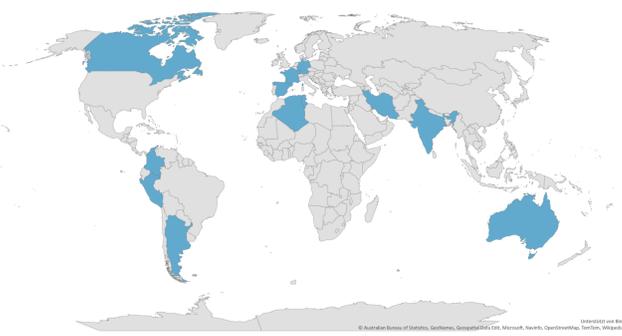


Figure 1: Overview of countries of which experts participated in the survey

2. Results on policies and actors

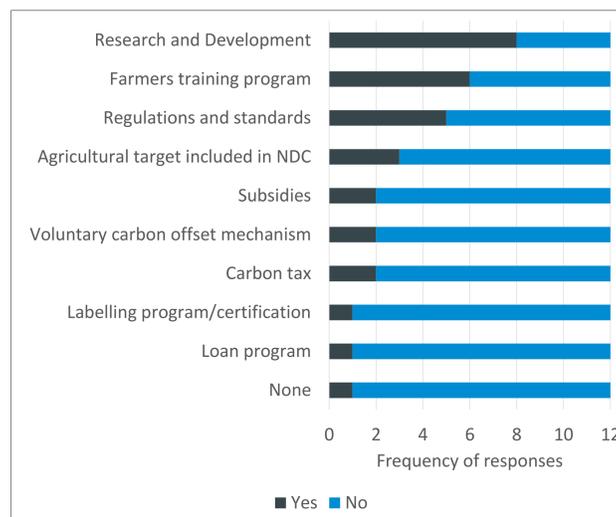


Figure 2: Policy instruments to promote GHG mitigation and/or SOC sequestration relevant to sheep production

- One-quarter of the countries did not yet implement any GHG mitigation/SOC policy
- Most countries focus on soft policy instruments, i.e. Research and Development and Farmers training program

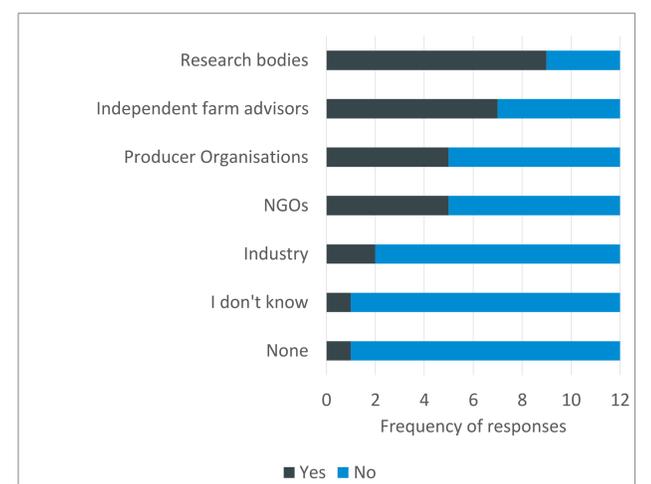


Figure 3: Non-governmental stakeholders promoting GHG mitigation and/or SOC sequestration practices in the sheep sector

- Research bodies are the most active stakeholders in promoting GHG mitigation/SOC practices → mirrors country's policies
- Stakeholders in almost all countries promote GHG mitigation/SOC practices

3. Results on the likelihood of adoption and adoption barriers

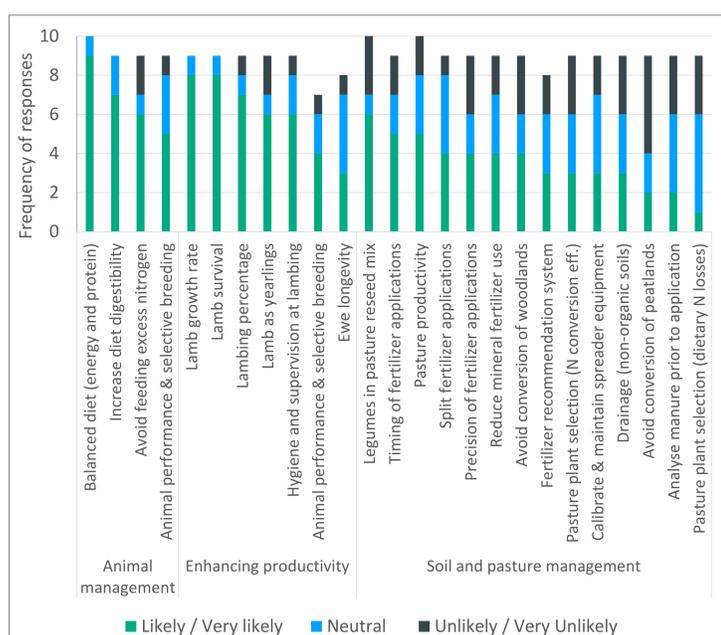


Figure 4: Likelihood of adoption of GHG mitigation and SOC sequestration practices

- Farmers will likely adopt animal management practices that enhance productivity to reduce GHG emissions (see figure 4)
- The adoption of soil and pasture management practices is less likely (see figure 4)
- The adoption of practices that enhance productivity is mainly prevented by economic barriers (e.g. uncertain returns/results).
- Behavioural/psychological barriers are the main reason for the non-adoption of soil and pasture as well as animal management practices

4. Conclusions

- Sheep sector does not play yet an important role in national climate policies (of the selected countries)
- No adoption barriers for some practices → Potential for the sheep sector to reduce GHG emissions and sequester SOC
- Need for cost-benefit analyses of GHG mitigation and SOC sequestration practices in the sheep sector → to provide information on e.g. returns and enhance adoption of practices