



PRACTICE BRIEF

Regulatory Science for Animal Welfare

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Practice Brief for Policymakers and Scientists

Strengthening the EU Science–Policy Interface on Animal Welfare

(Based on the SCAR CWG AHW study, 1 July 2025– 30 September 2025)

Scope

In the EU, livestock farming and animal-derived food safety are governed by extensive legislation. Animal welfare (AW) has become central to this sector. Yet important gaps persist between science and policy. These stem from aspects of governance structures, capacity limits, diverging priorities, communication barriers, and complex economic and ecological trade-offs. Citizens and NGOs demand high standards, but market dynamics, consumer behaviour, and global trade complicate implementation. Bridging these gaps is crucial to ensure regulations are evidence-based, feasible, and resilient.

What the Study Did

The SCAR Collaborative Working Group on Animal Health and Welfare (CWG AHW) commissioned a study to map the current EU science–policy interface in animal welfare, identify enabling factors and barriers, gather best practices for aligning research with policymaking, and formulate recommendations to improve two-way interaction in the AW science–policy interface.

The study was carried out through 20 key expert interviews with stakeholder actors from the EU and Member States, mapping of the key hubs and mechanisms of the current AW science–policy interface, and the development of recommendations for researchers and policymakers.

Designing Policy-Relevant Research

Align with Wider European and International Agendas

- ✦ European relevance: Avoid overly localised research. Aim for scalability and transferability across Member States.
- ✦ International orientation: Animal welfare challenges extend beyond Europe. Design projects with a global outlook, exchange knowledge across regions, and test the robustness of EU standards in international settings.
- ✦ Defend EU standards internationally: Engage in cooperation projects and conferences to ensure EU standards are known internationally.

Provide Scenario-Based Policy Guidance

- ✦ Provide scenarios, not just ideals: provide feasible intermediate steps and incremental options.
- ✦ Use scenario modelling (e.g. cost-benefit analyses, trade-off curves) to present policymakers with realistic alternatives.
- ✦ Apply the dilemma approach: highlight consequences of different policy choices without prescribing one “right” answer.
- ✦ Frame findings around policy scenarios and trade-offs

Integrate Economics and Feasibility

- ✎ Integrate economics and feasibility from the outset.
- ✎ Pair welfare science with economic analysis to assess viability and cost distribution across the value chain.
- ✎ Prioritise interventions with neutral or co-benefits (e.g. improved handling, preventive health).
- ✎ Address structural barriers such as other legislative impact or regulation in trade, retail and consumer behaviour (cheap-food paradox).

Collaboration and Co-Creation

Embed Interdisciplinarity from the Start

- ✎ Design research projects that combine animal welfare, economics, environment, and social sciences under shared key performance indicators (KPIs). Analyse trajectories in the safe and just operating (SJOS) framework.
- ✎ Place these dimensions within the same work packages, with joint deliverables (e.g. scenario analyses, trade-off curves).
- ✎ Build consortia that bridge research institutes, policy actors, and farmers ensuring replication across diverse farm conditions.

Co-Design with End Users

- ✎ Involve farmers, veterinarians, and practitioners from the earliest project stages.
- ✎ Use pilot-to-practice trials: test interventions in controlled pilots before scaling to on-farm application.
- ✎ Provide implementation tools (checklists, decision aids, factsheets) to support adoption.
- ✎ Co-create with farmers and practitioners such as inspectors to ensure uptake.
- ✎ Create open feedback loops so farmers can challenge findings and share on-farm data.

Translation and Uptake

Make Findings Accessible for Policymakers

- ✎ Digest and broker knowledge: summarise outputs in policy-ready formats that highlight actionable findings. Translate findings into concise, policy-ready formats.
- ✎ Use existing platforms (e.g. EU Platform, EUPAHW, EFSA) but tailor outputs for time-limited policymakers.
- ✎ Consider intermediary tools (knowledge brokers, syntheses, infographics) to strengthen uptake.

Shift Toward Outcome-Based Indicators

- ✎ Promote animal-based standards (e.g. behaviour, injuries, health scores) that are informed by the latest research, reflect real welfare outcomes and include positive welfare indicators.
- ✎ Outcome-based approaches allow faster integration of new science without reopening legislation. Use outcome-based indicators to align with adaptive regulation.