

Beyond yes or no: how RUMIGEN mapped the societal boundaries of future animal breeding

By

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THE CONTEXT

Breeding technologies are advancing faster than public confidence. In livestock, the challenge is not only whether a technology works, but whether it is seen as legitimate, fair, transparent and compatible with animal welfare and environmental expectations. RUMIGEN WP2 addressed this problem by building a practical method to understand the conditions under which new breeding approaches may remain socially acceptable.

EXECUTIVE SUMMARY

RUMIGEN developed the Room of Acceptance, a structured method that moves societal dialogue beyond simple support-versus-opposition. By combining stakeholder input, future scenarios and multi-country citizen consultation, WP2 identified the conditions under which breeding innovations are more likely to be seen as legitimate. The result is a practical governance tool that can help breeders, researchers and policymakers align innovation with societal expectations from the start.

THE ISSUE

Public acceptance of breeding technologies is often treated too narrowly. Standard surveys can capture whether people react positively or negatively at a single moment, but they miss the real question: under what conditions would citizens tolerate, support or reject a breeding approach once trade-offs become visible? In livestock breeding, those trade-offs involve animal welfare, environmental performance, transparency, ownership, who benefits, and the risk of unintended consequences. Without a structured way to discuss these conditions early, innovation can become defensive, polarised and vulnerable to backlash.

RUMIGEN contribution to solutions

WP2 created and tested an end-to-end societal dialogue model. It started with desk research and multi-actor engagement to define a broad ex-ante Room of Acceptance. It then used contrasting future scenarios to make the debate concrete for citizens. Through large-scale citizen consultation across multiple European countries, the framework was refined into an ex-post Room of Acceptance that reduced a long list of concerns into a smaller, usable set of dimensions. In simplified form, these dimensions focus on unexpected consequences, animal rights and natural life, quality and lower chemical use, environmental protection, openness and fair access, price, and general feeling.

The key advance is methodological, but it is also practical. The approach shows that acceptance is conditional. Citizens do not simply approve or reject breeding technologies in the abstract. Their views depend on how animal welfare is protected, whether benefits are shared fairly, whether governance is transparent, and whether long-term risks are taken seriously. That makes the Room of Acceptance directly relevant for responsible breeding design, communication strategies and policy framing.

Applications and potential impact

For policymakers, the Room of Acceptance offers a way to test whether proposed breeding pathways are likely to remain inside or outside socially acceptable boundaries before implementation. For breeding organisations and technology developers, it highlights where strong governance, openness and welfare safeguards are essential. For researchers, it offers a transferable framework for other controversial technology domains.

WP2 also demonstrated that scenario-based deliberation and digitally supported citizen consultation can be run at scale. This means the model is not only conceptually strong but operationally reusable. In practice, the outputs can support breeding strategies, policy briefs, stakeholder workshops, science-to-policy dialogue and future public engagement exercises.

Conclusions

The strongest final WP2 message is simple: social acceptance is not a binary verdict, it is a conditional space. RUMIGEN's Room of Acceptance turns that insight into a usable tool. That is the real exploitation value of WP2. It gives the livestock sector a more credible way to align innovation with public values before conflict hardens, and it gives policymakers a better basis for responsible governance of emerging breeding technologies.