Environmental Safety Aspects of Regulations for GM Animals

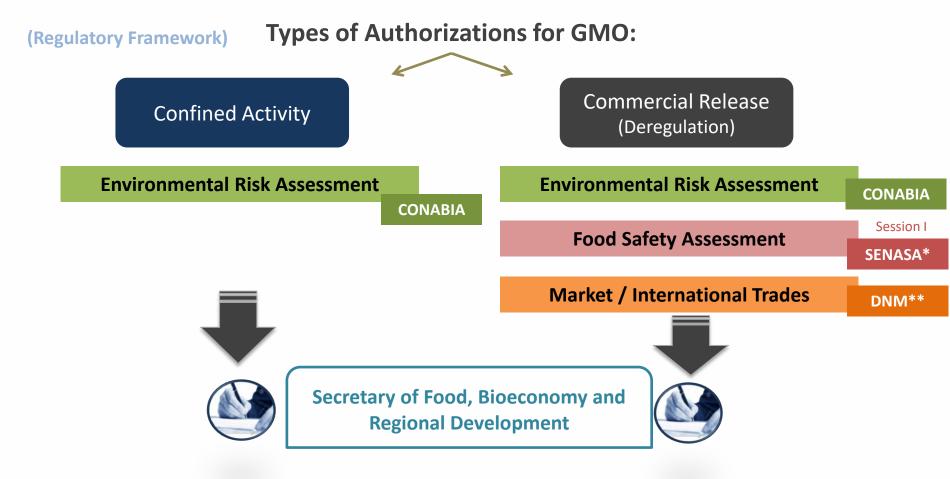
in ARGENTINA

October 7th, 2020

Lic. Paulina Boari *Ministry of Agriculture, Livestock and Fisheries*



// National Authority for GM Animal Activities



- The Secretariat is the national authority that authorizes GMO Activities.
- To make decisions, the Secretariat is advised by different Committees or Commissions.

// National Authority for GM Animal Activities

Ministry of Agriculture, Livestock & Fisheries



National Advisory Commission on Agricultural Biotechnology (CONABIA)



Secretary of Food, Bioeconomy and **Regional Development**



Environmental Risk Assessment

- **CONABIA assesses** applications for **Confined** Activities and Commercial Release.
- **CONABIA members** are scientists, professionals and specialists from different institutions (public and private)
- **CONABIA** submits a **non-binding advisability** report (allowing or denying) on the activities required.

After CONABIA's report, the Secretariat grants or denies the authorization.

// CONABIA - Criteria

CRITERIA APPLIED TO ENVIRONMENTAL RISK ASSESSMENT FOR GM ANIMALS



- Flexible: case by case
- **Data Quality**: data and information must be of sufficient quality and quantity.
- Scientific Base: data and information based on sound scientific principles.
- **Comparative Approach**: use of a suitable conventional counterpart.

// Environmental Risk Assessment (ERA)

CONABIA

- Its main goal is to protect biodiversity, human and animal health and agroecosystems.
- CONABIA bases its evaluation on risk analysis.
- The assessment focus depends on which activity is required.

Confined Activity

- Field Trials
- Animal House Facilities (indoor)



Facility's **BIOSAFETY**Conditions

Commercial Release (Deregulation)

Biopharming or Consumption



ENVIRONMENTAL RISK (linked to animal release)

// ERA – Confined Activities

Modules of Application Form



Host Organism

- Species
- Objective of trait



Molecular Characterization

- Objective of trait
- Description of the genetic modification.



Planned Activities

- Animals to generate
- Material storage
- Final disposition method



Sites & Facilities

- Location
- Storage place
- Final disposition site

Biosafety conditions and measures are determinated by risk hypotheses

Facility's **BIOSAFETY**Conditions

// ERA – Confined Activities

Facility's **BIOSAFETY** Conditions are determinated to:



- Keep a safe environment during and after the project.
- Prevent mating outside the project.
- Avoid trespassing or animal escaping.
- Avert them entering the Argentine food chain or commercialization



Entering the Argentine food chain, or commercialization of regulated animals, their derivative products and reproductive materials, IS NOT ALLOWED.

CONABIA

Oversees biosafety conditions and activities during the project.

// ERA – Confined Activities

Cases presented in Argentina (since 2005):

Specie	Trait	Purpose/Use	
Fish	Growth hormone	Consumption	
Cow & Sheep	Differences in milk composition	Biopharming or Consumption	bar.
Sheep	GFP expression	Research	

// ERA – Commercial Release / Approval

Modules of Application Form



Host Organism

- Specie
- Objective of trait



Molecular Characterization

- Objective of trait
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Detection Techniques

- Specific to GM



Interaction Environment-GM Animal

- Interactions with other species



Use of GM Animal

- Biopharming
- Consumption

Environmental Risk is determinated through risk hypotheses

ENVIRONMENTAL RISK (linked to animal release)

// ERA – Commercial Release / Approval

ENVIRONMENTAL Risk is determinated:

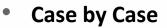












- **Data Quality** (quality and quantity)
- Scientific Base
- **Comparative Approach** (changes in GM animal behaviour)



- MAIN GOAL (to protect biodiversity, human and animal health and agroecosystems)
 - Assessing **GM Animal Interaction** with the environment.

There Are No Requests for Commercial Release of GM Animals in Argentina Yet!

// SUMMARY

Types of Authorizations for GMO (Regulatory Framework) Commercial Release **Confined Activity** (Deregulation) **Environmental Risk Assessment Environmental Risk Assessment CONABIA CONABIA BIOSAFETY** Conditions Possible **Environmental IMPACT Food Safety Assessment SENASA Market / International Trades DNM** Secretary of Food, Bioeconomy and **Regional Development** The **Secretariat is advised** by CONABIA. The **Secretariat is advised** by CONABIA, SENASA and DNM. oversees the project's conditions **CONABIA**

