

Roxane FELLER

EFSA Stakeholder Platform

Brussels, 18-19 October 2007

Cloning

COPA-COGECA

What links between cloning and agriculture?

1. Cloning: the definitions / the techniques

- Embryo cleavage (twins)
- Nuclear transfer
  - Embryonic cloning (from embryo)
  - Somatic cloning (from adult animal: Dolly)

2. Possible applications of cloning in farm animal breeding

- For animal breeding purposes :
  - Genetic improvement - The next generation is better than the present one, the desired genetic improvement can be achieved faster - Risk however: less genetic diversity but breeders are aware of this fact and are reacting accordingly
  - Better prospects for saving rare breeds.
- For food producing animals :
  - Duplicating a productive animal
  - Using semen from a breed with specific characteristics (ie. TSE resistant, …)

What link between cloning and food producing animals (1)?

1. Placing on the market products directly from somatically cloned animals (Products from "Dolly" herself) :

   - EU legislation applying to cloned animals for food production is the EU Regulation N° 258/1997 on novel foods: Food from cloned animals is considered to have to fulfil the legal criteria in this legislation in order to be put on the market. (Danish Centre for Bioethics and Risk Assessment report published in 2006 under the 6th EU Research Framework Programme)
   - Opinion of the Group of advisors on the ethical implications of biotechnology to the European Commission N°9 from 28 May 1997: Research and Medical outcome are likely to bring benefit these however have to be done under a series of ethical conditions.

NB: No such food has yet been placed on the EU nor on any other market.

What link between cloning and food producing animals (2)?

2. Placing on the market products from off springs of Somatically cloned animals (Products from “Dolly” + conventional male = Dundee Paradise, the off spring)

   - **Legislation**: Currently non in place at EU level - do we need one? On cloning itself? On labelling? Do we leave it to the market?
   - **Ethics** : Currently the 9 May 1997 opinion is being reviewed

NB : No such food has yet been placed on the EU nor any other market. However such off springs do exist : Dundee Paradise was born in the EU on 2 December 2006, she is the daughter of a cloned Dairy Holstein mother and a “conventional” bull.

This is why today’s topic is “a propos”.

What are the questions/concerns?

- Animal welfare issues?
- Animal health issues?
- Environmental issues?
- Food safety?

- Ethics?

- Social acceptance?
- Public and consumer concerns?

Who could provide the solutions/answers?

EFSA (15 February 2007 - Question from EU Commission)

- Animal welfare issues
- Animal health issues
- Environmental issues
- Food safety

European group on Ethics in science and New technologies to the EU

- Ethics

Media, Stakeholders, Public authorities, others…?

- Social acceptance/
- Public and consumer concerns

COPA-COGECA: current state of reflection (1)

- **Need for comprehensive communication** from Risk assessors, risk managers, stakeholders, NGO,…….

  COPA-COGECA suggest a reinforced cooperation between all key actors as well as developing - when possible – clear common wording

  (ie; NOT "vaccinated meat" but "meat from vaccinated animals"!)

COPA-COGECA: current state of reflection (2)

- **Need to further analyse the market opportunities:** COPA-COGECA note that there are at this stage diverging interests linked to the perspectives for livestock cloning:

  COPA-COGECA suggest to individualise the debate and to tackle the issue on a case by case basis

  (ie. There seems today to be limited economic perspective in dairy cattle but this might prove different in other sectors)

COPA-COGECA: current state of reflection (3)

- **Need to avoid distortion of competition** : How will the EU position itself if and when it imports EU such products.

COPA-COGECA recall the need to ensure giving EU producers equal competitive advantages.

(ie. Distortion of competition would arise if the technique of cloning is available and proves to be scientifically assed as acceptable and if it is used in third countries but not in the EU and simultaneously EU would allow imports

COPA-COGECA: current state of reflection (4)

What ever the out come, COPA-COGECA suggest that the following 3 cumulative ingredients are paramount for all future reflection on cloning :

- **Coherence (assess all impacts from economical to societal)**
- **Transparency (inform and invite stakeholders and public at large on state of play, participative actions)**
- **Rationality (rely on science-based decisions)**

Thank you

www.copa-cogeca.be