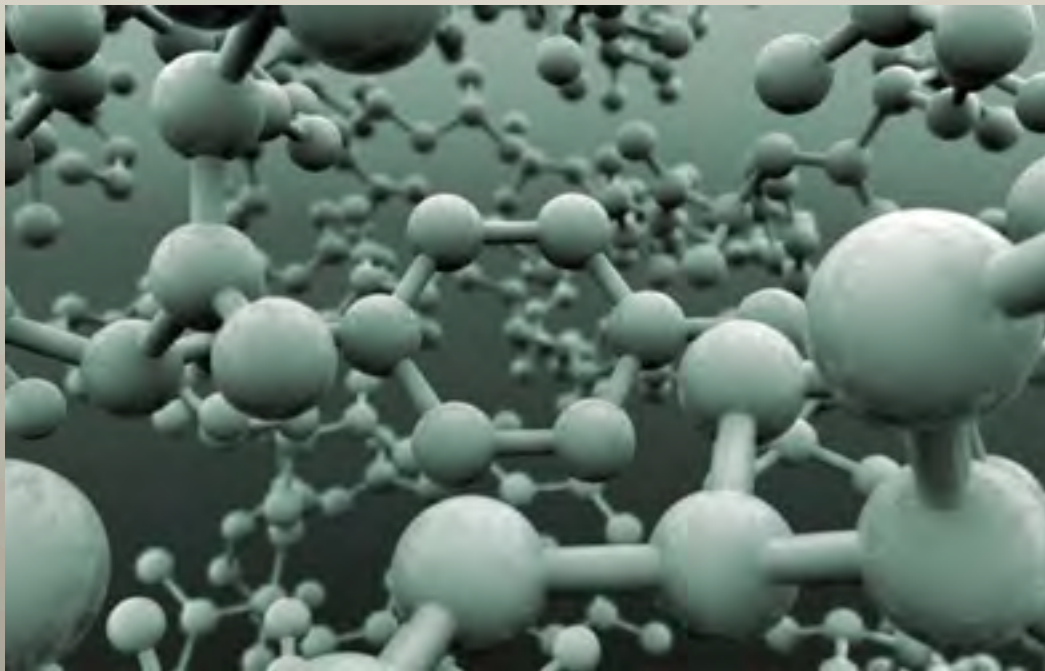


Ethical aspects of breeding GM farm animals




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- Ethical rule No. 1 & 2
- Perspective
- Bioethics
- Ethical issues

Ethics



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Danish zoo kills healthy giraffe, feeds body to lions

By **Bharati Naik** and **Marie-Louise Gumuchian**, CNN
February 10, 2014 -- Updated 1357 GMT (2157 HKT)



Killing of young calves is dairy industry's 'dark secret'

SUE NEALES, RURAL REPORTER | THE AUSTRALIAN | NOVEMBER 24, 2011 12:00AM

SAVE



Dairy farmer Chris Place, with some of his calves on his property at Camperdown, western Victoria, says the concerns of the animal welfare lobby are misplaced. Picture: Stuart Mcevoy Source: The Australian



+6

- If one is to distinguish ethically between situation A and situation B one needs to be able to point to a relevant difference that justifies this

A = B

A ≠ B

Obvious example

- Is it ethically problematic to produce farm animals through modern biotechnology including but not limited to
 - insertion of genes from other organisms
 - putting in copies of already existing genes
 - Knocking out existing genes
 - Ect
- And if so
 - In what way or ways does this differ from more conventional breeding technologies?

- Claim:
 - One ought always to help other human beings if
 - It is of great importance for the other
 - Life
 - Health
 - Happiness
 - What is asked of you is trivial
 - Time
 - Effort
 - Economy
 - It is an ethically legitimate action and the consequences are ethically acceptable as well

- Rule 1
 - Be consistent
- Rule 2
 - Be nice
- As experience shows that few of us actually live up to rule 2
 - even though we would generally have a hard time justifying not to do so
 - thereby violating Rule 1
- it seems unfair to judge others too harshly for failing as well

Perspective

- Important lesson
- People that disagree with us might not be
 - Stupid
 - Not listening
 - Not understanding
- They might just have another perspective and therefore other values

Bioethics

The General & The Special

- There is more than a tendency within applied ethics to looking for what is special:
 - Seen as unfair to discuss general problems within one area by proponents
 - Problems/situations that we are used to often seen as basic conditions
 - Nobody wants to to know that the sky is blue, water is wet and that women have secrets...
 - Or that animals suffer in intensive agricultural production systems

Special issues

GM Farm Animals

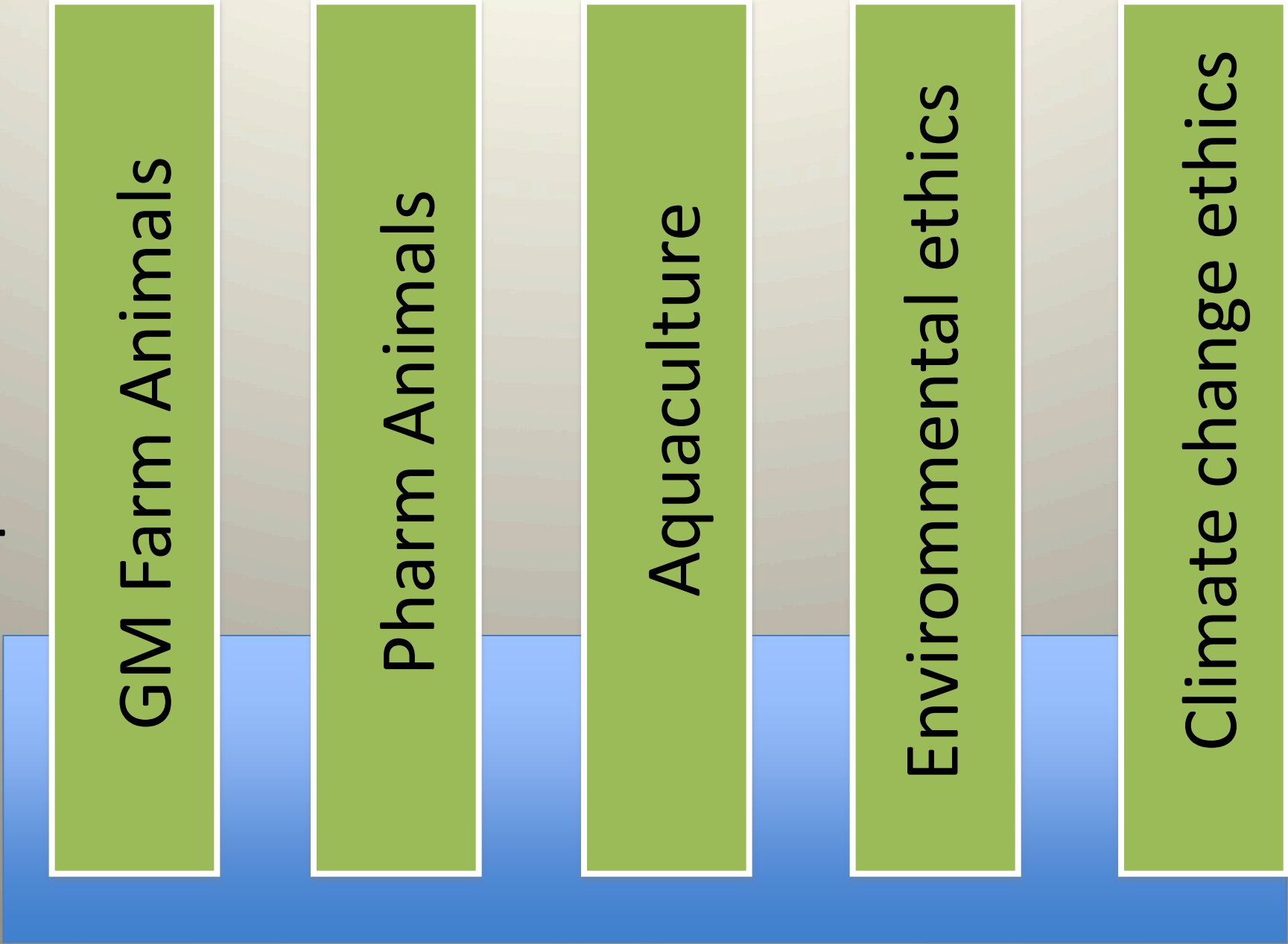
Pharm Animals

Aquaculture

Environmental ethics

Climate change ethics

Common Issues



Ethical issues

- Risks

- Humans

- » Health

- » Socio-economic issues

- Animals

- » Welfare

- » Integrity

- Environment

- » Direct

- » Indirect

- Socio-economic issues
 - International trade
 - Patenting
 - Small-scale vs large scale production
- Animal integrity
 - What does "integrity" mean?
 - Specific technology as symbol
 - Old wine on new bottles

The straw that broke the camel's back

- The straw that broke the camel's back was just like the previous one in the bale, yet from the camel's point of view it was a very special straw. Sometimes, indeed, we only appreciate something as distinctive and novel by seeing it as the culminating stage – one that reaches a limit – of a continuous process.
- So the fact that genetic engineering of animals may be continuous with previous practices, such as dog-breeding or force-feeding, does not mean that it is innocent of committing a new wrong

– Cooper, David E. (1998): Intervention, humility and animal integrity, i Holland, Allan & Johnson, Andrew (eds.): *Animal Biotechnology and Ethics*. Chapman&Hall, London, s. 145-155.

- Aim
 - What was the question?
 - Improved efficiency
 - More meat
 - Healthier products
 - Reduced environmental impact
 - Reduced impact on animal welfare
- Responsibility
 - Researcher/research institution
 - Funding agency/company
 - Citizens/politicians
 - Consumers

- Unnaturalness

- Is the technology in some sense “unnatural”

- Should it be compared to conventional breeding in that respect?

- What is nature?

- Humans are nature
 - Everything is nature
- Nature is that which is untouched
 - Nothing is nature
- Nature is a question of degrees
 - Cotton vs. Pyloester
- Nature is a question of purpose
 - For whose sake are we changing the world

- Whether GM is considered "natural" or "unnatural" it still begs the ethical question
 - Can it be justified?
 - Nobody said that nature is always right
 - Not even in the ethical sense

- The discussion can also become one of strategy
- Important not to limit the discussion to too few alternatives
 - GM or business as usual
- Is genetically modifying the animals to produce meat with less climate impact the right strategy?
 - Or should we change our dietary habits?

- To reach an ethically informed decision all these different aspects needs to be thought through and
 - the ones experienced as relevant weighed against each other or
 - The non-negotiable needs to be identified
- This does not get less complicated
 - Risks are evaluated differently
 - Benefits are unsure
 - Unknown unknowns

A final word

- *It is probably not wise to dismiss all criticism by pointing to already existing practices*
- *Discussing the ethics of biotechnology can serve as an eye-opener towards already existing practices*
 - *And make us remember what we forgot, because it became so obvious that we lost sense of it*

