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Sustainability and animal welfare - Can they go hand in hand?

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Place and date
Dias 1



Agenda

- Two concepts of 'sustainability'
 - Top-down has priority
- Two concepts of animal welfare
 - No priority is made
- Two Challenges for Animal Welfare from Sustainability



Sustainability - Introduction

- 'Sustainability' has become an ultimate buzz-word, something undeniable good
 - No-one defends 'unsustainable development'
- This means the concept is almost empty
 - Unclear what the practical implications are
- There is a need for making the concept more precise
 - But then it will also become more controversial
- 'Sustainability' is a normative concept
 - Clarification through reflection



The Goal of Sustainability

- Origin in forestry and fishery:
 - Harvest rate \leq natural regeneration rate
- Underlying principle:
 - Keep the resource stock constant over time
- This seems reasonable, but it does not take us very far
 - What should the baseline be?
 - What about non-renewable resources?
- The research has taken two directions



Bottom-Up

- A farm as a system in exchange with its surroundings
- In order to sustain its production over time,
 - the farm should not only be able to keep its production stable over time, but
 - also be sustainable in social sense:
 - It should meet the expectations of key stakeholders
- "Functional Integrity"



Economics/Brundtland

- Problems with the simple prescription:
 - Non-renewable resources?
 - Substitutions?
 - Increasing efficiency?
- Answer: The *value* of resources
 - Needs-satisfaction (Brundtland)
 - Welfare (Economics)
- Underlying value in sustainability:
 - Equality in welfare between generations



Top-Down

- More general idea:
 - Justice between generations
 - What about increasing population?
- From an ethical point of view:
 - Justice between generations has great weight
 - Sustaining a farm under unjust conditions has not
- Value uncertainty: The goal is indeterminate



Empirical Uncertainty

- Given a fixed goal, prescriptions depend on:
 - Rate of population increase
 - Puts more strain on resources
 - Rate of increased productivity
 - Puts less strain on resources
- Possible substitutions between resources
 - Can non-renewable resources be substituted?
 - Can natural resources be substituted with man-made?



Substitution

Hypotheses Strategies	Unrestricted substitution	Restricted substitution	Natural resources cannot be substituted
Keep total stock of resources constant	Constant level of welfare	Considerable reduction of welfare	Ecological catastrophe
Keep total stock constant and preserve critical nat. resources	Reduction of welfare	Constant level of welfare	Ecological catastrophe
Keep stock of natural resources constant	Extreme reduction of welfare	Considerable reduction of welfare	Constant level of welfare

Values in Face of Uncertainty

- Strong precaution
 - Choose the act with best worst outcome
- Weak precaution
 - Consider likelihoods
 - Consider consequences
 - Consider need for precaution
 - Consider price of precaution



Conclusion: Top-Down

- The goal should be clarified
 - But even given a clarified goal, we do not know for sure whether some policy is sustainable or not
- Some of this uncertainty can be reduced by future research
 - But some uncertainty is likely to remain
- We need to decide on the right attitude to this uncertainty



Conclusion: Bottom-Up

- Given the great indeterminateness of the Top-Down approach, we might want to revive the Bottom-Up approach
- However, it needs to be corrected:
 - Justice should be the guiding principle, not just stakeholder expectations
 - Admit the uncertainty
- Still, the approach might give rise to useful prescriptions



Animal Welfare - Introduction

- Animal welfare is also a normative concept
 - What makes life good from the perspective of the animal itself?
- As there are for humans, there are competing notions of what makes life good for an animal
- It takes reflection to decide between them
- The choice is based on values:
 - What do we consider good about life?



Mental State Accounts

- Animal welfare = the quality of the animal's mental states
 - Defined at a time
 - For welfare assessments, welfare at all times throughout life has to be aggregated
- 'Quality' has been defined in terms of pleasure and pain, considered as opposites poles of a continuous scale.
- It is probably a better to say that mental states can be very different in nature, and that
- quality is a matter of what experiences the animal itself prefer
- Mental states of animals cannot be directly observed,
- We have only rough indicators



Perfectionist Accounts

- Perfectionism for animals is based on the idea that an animal has an inherent nature,
- which will unfold, if it lives under 'normal favorable conditions' without human intervention

- It must be assumed that the inherent nature has evolved in order to adapt to a more or less specific kind of environment.

- A good life = a life where the animal unfolds its inherent nature,
 - which can only happen fully in the kind of environment, it is adapted to.

- Perfectionism stresses objective values which apply to all animals of the species in question



Potential Conflicts (1) – Food Security

- Food security will have very high priority from the perspective of sustainability
- This raises the question of how, if at all, pork production contributes to food security
- Compared to alternatives, pork production is likely to be a very inefficient source of proteins.



Potential Conflicts (2) – Environmental Effects

- There is considerable negative effects on the environment from manure and GHG emissions in pork production
- One solution is to keep the pigs in very controlled environments, where this can be handled
- However, very artificial environments are not compatible with a perfectionist conception of animal welfare
- In theory, they are compatible with mental state accounts of welfare, if the animal can be ensured good experiences
 - It is an empirical question to which degree 'natural' environments are necessarily instrumental for good experiences





Thank you for your attention