

Ethical concerns of bioenergy use



Mickey Gjerris
 Danish Centre for Bioethics and Risk Assessment
 Institute of Food and Resource Economics
 Faculty of Life Sciences
 University of Copenhagen



Overview

- An impossible task
- Ethics
- Ethical concerns related to bioenergy
- Let's have a dialogue

An impossible task

- The task
 - "Identify the ethical concerns related to bioenergy use"
 - "Identify the economic potential in biotechnology"
 - Too many
 - Known unknowns
 - Unknown knowns
 - Unknown unknowns

- Bioenergy (Wiki):
 - **Bioenergy** is renewable energy made available from materials derived from biomass
 - **Biomass** is any organic material which has stored sunlight in the form of chemical energy
 - Bioenergy can thus be extracted by a variety of methods from a variety of sources in a variety of forms for a variety of purposes
 - As you will have heard many brilliant people describe different aspects of this, I will focus on *Ethics*

- **Ethics (wiki)**

- Meta-ethics
 - Semantic, ontological, and epistemic nature of ethics
- Normative ethics
 - How moral values should be determined
- Applied ethics
 - How a moral outcome can be achieved in specific situations
- Descriptive ethics
 - What moral values people actually abide by

- 3 options

- Present endless list of concerns
- Select a specific kind of bioenergy and a specific ethical theory and figure out the concerns
- Ask basic question about why and how we ask the question of ethics

Ethics

- We do not usually spend much time reflecting on ethics, but rely on our norms
- Sometimes we are confronted with situations where we are forced into thinking about ethics
 - The conflict between what we believe is right and what we do
 - Complex situations



- Ethics is a phenomenon closely related to our feelings
- We are creatures that are impressable. The world can reach us through our feelings
- Our feelings of right and wrong is the basis of ethics
- Ethics is more than feelings
 - Individual ethical perspective
 - Institutional attempts to frame the issues
 - Critical reflection



- Ethics as a hammer
 - The ethicist as an expert: a philosophical plumber
 - Discussing ethics solves problems and justifies actions
 - The purpose of ethics is often seen as providing the tools to create a socially acceptable development

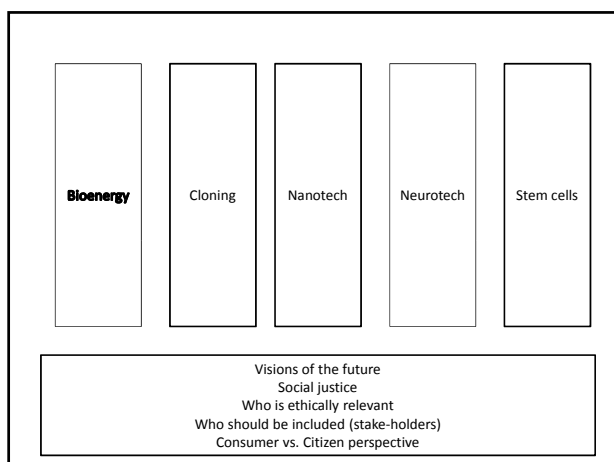


- Ethics as a flashlight
 - Knowledge about the issue at hand
 - Understanding of our own perspective and partial understanding of the perspectives of others
 - Facilitating a more transparent dialogue on the basis of this



- What is applied ethics?
 - Applying a pre-cut band-aid to new concerns
 - Rethinking ethical values in the light of cultural and technological development
 - Trying to grasp what new challenges arise within a certain area
 - Placing the concerns within a given area within a larger context, describing how they are connected in time and space to other issues

- Claim:
 - More and more ethical research is tied up with specific projects within natural science
 - Natural science is becoming more and more specialized
 - Upside
 - Ethics get into the details, points to new challenges (awareness creation), becomes relevant to scientists and enables an informed discussion - When it works
 - Flipside
 - Ethics get caught in the details, is unable to discuss what is common, is reduced to a lubricant and only leaves room for "ethically" cost-benefit analysis – When it is worst



Ethical concerns related to bioenergy

- Questions that can be asked to all uses of bioenergy
 - Will it help solve or increase
 - Climate problems (Global warming)
 - Environmental problems (Pollution)
 - Social problems (Hunger, Inequity)
 - Fuel problems (Fossil fuel dependence)
 - Will it benefit or harm
 - Humans
 - Animals
 - Plants
 - Ecosystems - Biodiversity

- For each use of bioenergy the answers will change
- Add to that the scientific and economic uncertainty of the effects
 - The competition of guesstimates
 - Biofuel case 2008

Biofuels

- What is most discussed
- The ethics of turning food into fuel
 - Impact on food prices
 - 1. generation vs. 2. generation vs. 3. generation
 - CO2 emission impact
 - Effects on agricultural sector and North-South balance

What is less discussed

- That the discussion of Fuel vs. Food takes place in a context of a cultural understanding of "freedom" as equal to "instant private mobility"
- The problem of "hyped" science and the blind search for technological solutions across the board
- The possibility of creating local economies and leaving globalized trade behind

Let's have a dialogue

- Science-oriented
 - Dialogue is information going out
 - Belief in the knowledge deficit myth
 - Dialogue as monologue
- Policy-oriented
 - Dialogue is information going in
 - Belief in the value of votes
 - Dialogue as "marketing" research
- Flash-light-oriented
 - Dialogue is value discussion
 - Belief in certain values paired with respect for the values of others
 - Dialogue as value exploration and clarification

Pre-dialogical issues

- Discussing ethical issues in relation to bioenergy has a tendency of ending up with people discussing radically different things at the same time
- It can be debated what should be debated
 - Risk management or also risk understanding
 - Specific issues or also general issues
 - Existing technologies or also visions of the future

- Tasks before entering the dialogue
 - Figure out how to understand my own values and the consequences of them in light of the technological possibilities
 - Figure out how to frame the public discussion, so that no one perspective will monopolize the debate
 - Decide what the success criterion is: find consensus, reach compromise or become wiser – or all of them?

- But it is hard to argue against the value of clarifying what is actually discussed

	Ethics as identification of individual values	Ethics as framing the discussion	Ethics as decision-making
Application level			
Policy level			
Symbolism			

- ### The modest goal
- Establishing a real dialogue will not ensure
 - Consensus
 - General acceptance of the solutions we choose
 - But it might ensure
 - Public participation
 - Democratic process
 - Socially robust actions
 - Accept of the policy by the majority
 - Accept of the process by the minority
 - One of the very important tasks of applied ethics is to facilitate this dialogue

