

Ethical impacts of the public perceptions of the life sciences

Regarding agricultural biotechnology

Dr. Roger J. Busch
Director TTN Institute Munich
Hannover, 2008-04-24

www.ttn-institut.de

TTN Institute – what's that ?

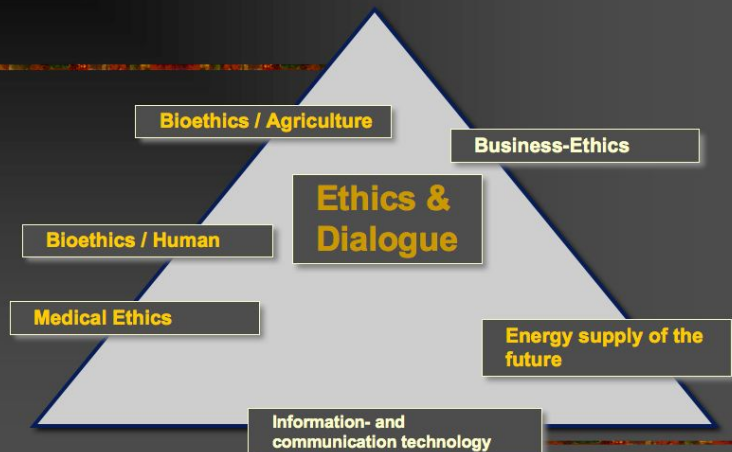
TTN Institute, founded 1992, is ...

- initiated by representatives of sciences, economy and the Church
- an interdisciplinary working institute for applied ethics
- an independent research institute at Munich University
- funded by the *Lutheran Church of Bavaria*, by private donors  and public research funds

2

Dr. Roger J. Busch, 2008-03

TTN Institute – what's that ?



3

Dr. Roger J. Busch, 2008-03

TTN Team-Members



Dr. Roger J. Busch
Theologian



Dr. Michael Zichy
Philosophy



PD Dr. Heiner
Aldebert
Theologian,
Educationalist



Andrea Beck
Team Assistant



Herwig Grimm
Philosophy; Farmer



Mirjam Krebs
Philosophy



Martin Dürmberger
Theologian



PD Dr.
Friedemann Volgt
Theologian



Dr. Berthold Sülzer
Engineer

4

Dr. Roger J. Busch, 2008-03

Focusing the issue

Introducing remarks:

- **Restriction:** Focusing on (agricultural) biotechnology as part of the life sciences – because of accessible data
 - Important: The shape of societal debate and potentially irreconcilable perspectives work as trigger for ethical evaluation
 - Necessary: Systemizing relevant ethical aspects and ethical evaluation
 - Wishful thinking (?): fair dialogue – without suspicion – based on reasonable criteria for decision-making

5

Dr. Roger J. Busch, 2008-03

Agenda

1. Societal debate – and some of its problems
2. Ethical Pathway for decision making
3. Rough drawing of a participatory model of dialogue

6

Dr. Roger J. Busch, 2008-03

1) Societal debate – and some of its problems

Many people are sceptical against modern (agricultural) biotechnology.

To understand why modern biotechnology is dealt with in a ritualised mode of dispute, it might be helpful to have a closer look on societal debate.

7

Dr. Roger J. Busch, 2008-03

1) Societal debate – and some of its problems

(Many) non-biotechnologists refer to the “simplicity” of old fashioned agriculture – to happy animals and familiar pictures of cultivated land.

Biotechnologists talk about efficiency. And they refer to *masses* of produced crops.

☛ There is a gap of misunderstanding - performed and perhaps reinforced by the use of different moral vocabularies ...

8

Dr. Roger J. Busch, 2008-03

What is self-evident?



It's a minority which knows at least *something* essential about plant breeding and cultivation.

Nevertheless: people tend to judge plant production – and most of associated issues – negatively.

But why?

9

Dr. Roger J. Busch, 2008-03

What is self-evident?

What seems to be self-evident to producers isn't evident at all to most of the people.

The complexity of scientific data is too much for "ordinary" people (who could amount up to > 90% of the population)

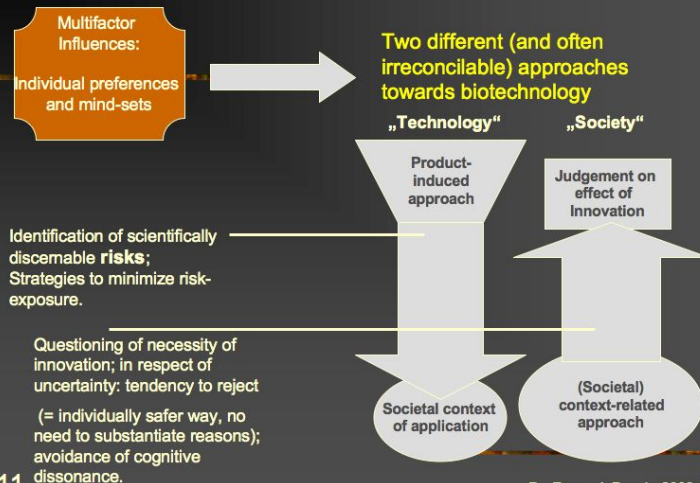


This is a trigger for critical attention and/or disapproval.

10

Dr. Roger J. Busch, 2008-03

Different Approaches



11

Dr. Roger J. Busch, 2008-03

Complexity and reduction

Nobody is able to know everything.

We are overwhelmed by emerging (scientific / technical) knowledge.

To remain able to decide in all-day-life in this perspective, people tend to reduce complexity to simple binary patterns and "old (cognitive) maps":
e.g.

good versus bad

[norms]

wanted versus not wanted

[preferences]

12

Dr. Roger J. Busch, 2008-03

Complexity and reduction

There are people and organisations who pretend to be able to help the not-efficiently-informed and/or the *misinformed* people:

Solicitors of public morality

Advocates of nature's integrity

Promoters for good common living

13

Dr. Roger J. Busch, 2008-03

Games people (like to?) play ...

Scientists and applicators are supposed to do a good job!

Nevertheless, they are confronted with critiques – *not* referring to scientific data or business knowledge, *but* to consumer's intuitions, emotions and (perhaps) moral values.

Public controversies start to follow the rules of a **GAME**.

14

Dr. Roger J. Busch, 2008-03

Games people (like to?) play ?

That is: Our societies act in a ritualized manner to deal with conflicts of interests.

The stakeholders take different *roles*: The good and the furious – and some else.

And someone (who?) makes up the *rules*.

Challenges:

How to make this GAME transparent ?

How to overcome the ritualized conflict?

15

Dr. Roger J. Busch, 2008-03

Public reproaches

Two categories of public reproaches against modern biotechnology:

A) *Well-founded* reproaches: There's always something to optimize.

B) *Intuitive* reproaches: There must be something wrong – even if I don't exactly know what.

Different kinds of reproaches require different ways to deal with them.

16

Dr. Roger J. Busch, 2008-03

Public reproaches

A) *Well-founded* reproaches: There's always something to optimize.

This kind of reproach can be discussed within the framework of production's / producers' rationality:

- sound scientific data – whatever that means ...
- experience and ongoing optimization

But this kind of reproach is not interesting for many GAME-players. They prefer the second one ...

17

Dr. Roger J. Busch, 2008-03

Public reproaches

B) *Intuitive* reproaches: There must e something wrong – even if I don't exactly know what.

The evidence of modern biotechnology conflicts with consumers' imaginations and their wishful thinking.

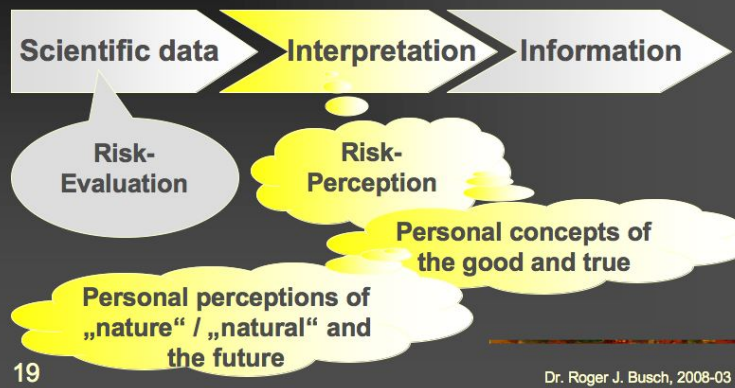
This kind of reproach cannot be answered by scientific data and experience.

This kind of reproach deals with morality as such or – at least – with moral justification of action.

18

Dr. Roger J. Busch, 2008-03

Impacts on public communication



Transition: moral justification

Even if safety standards of biotechnological products were guaranteed by specific regulations

sustainability, precaution and consumer protection might be threatened.

It is important to systemize the challenges – including ethical aspects and emerging ethical judgements.

20

Dr. Roger J. Busch, 2008-03

2) TTN ethical pathway for decision making

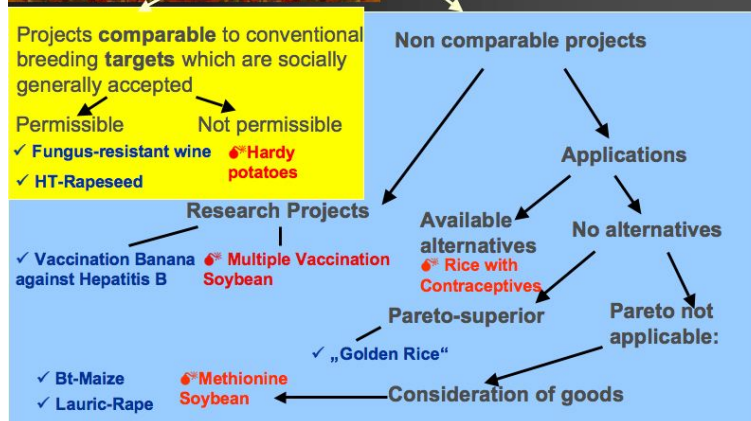
Important preface:

- Distinction between *research* and *application*
- Regarding upcoming biotechnological applications: Reference to Pareto.
 - Here: evaluation of possible *relative* improvements regarding sustainability.
 - If Pareto not applicable: decision in regard of minimizing damages

21

Dr. Roger J. Busch, 2008-03

2) TTN ethical pathway for decision making biotechnological project



2) ethical pathway for decision making

Restrictions:

- Ethical judgements on biotechnological applications have an *expiry date*!
- If scientific data changed, ethical judgement had to be set up again – and perhaps revised.
- The proposed pathway is not easy to connect to ongoing societal debate starting from individual preferences and mental states – and referred to by politicians ...

23

Dr. Roger J. Busch, 2008-03

2) Enhancement of the ethical pathway for decision making

3 different frames of reference / classes of arguments have to be distinguished dealing with biotechnological applications:

- scientific database controversial
- compatibility of the innovation with societal context(s) (including dimensions as transparency, participation, specific moral values, "overlapping consensus"?)
- general aspects as compatibility with democratic decision-making, dealing with uncertainty, religious preferences etc.

24

Dr. Roger J. Busch, 2008-03

2) Enhancement of the ethical pathway for decision making

Any ethical pathway for decision-making in the field of life-sciences should be compatible to societal debate as it actually works.

Otherwise, such a pathway would not be referred to. Thus, the challenge is to check potential compatibility and enhance public dialogue.

25

Dr. Roger J. Busch, 2008-03

3) Rough drawing of a participatory model of dialogue

The “*enlightenment communication*” –
experts teach the not-knowing –
is *out* !

Pragmatically, the probably most crucial issue
is the lack of *trust* in experts.

Trust is triggered / fostered by *personal relations*
and to be stabilised by experiences of fair
participation.

26

Dr. Roger J. Busch, 2008-03

Generating trust



Martin
Buber

True dialogue:

„That’s where two or more people,
gathered in a room, speak to each
other, intensively trying to
understand their neighbours in
order to generate mutual
understanding and behavioural
reciprocity serving common good
living“

27

Dr. Roger J. Busch, 2008-03

Participatory experience? - Elements

- starting from a challenge with the task to find a solution
- set up as a “game”:
- participants collect their information from sources they trust
- participants try out perspectives of not familiar judgements in a “protected” setting (triggered by personal encounter with e.g. biotechnologists)
- participants evaluate different frames of reference for their own judgement
- group of participants gives a judgement compatible to criteria of sustainability – with an expiry date!

28

Dr. Roger J. Busch, 2008-03

Participatory dialogue ? - Experiences

So far: encouraging !

29

Dr. Roger J. Busch, 2008-03

Thanks for your attention!

TTN Institute
Marsstraße 19
D-80335 Munich / Germany
www.ttn-institut.de
Busch@elkb.de

30

Dr. Roger J. Busch, 2008-03