

Critical review of organic research world-wide

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Outline

- Short overview - capacity of organic research world-wide
- Conclusions from evaluations of organic research programs in Sweden, Germany and Denmark

Capacity of organic research – large differences between regions

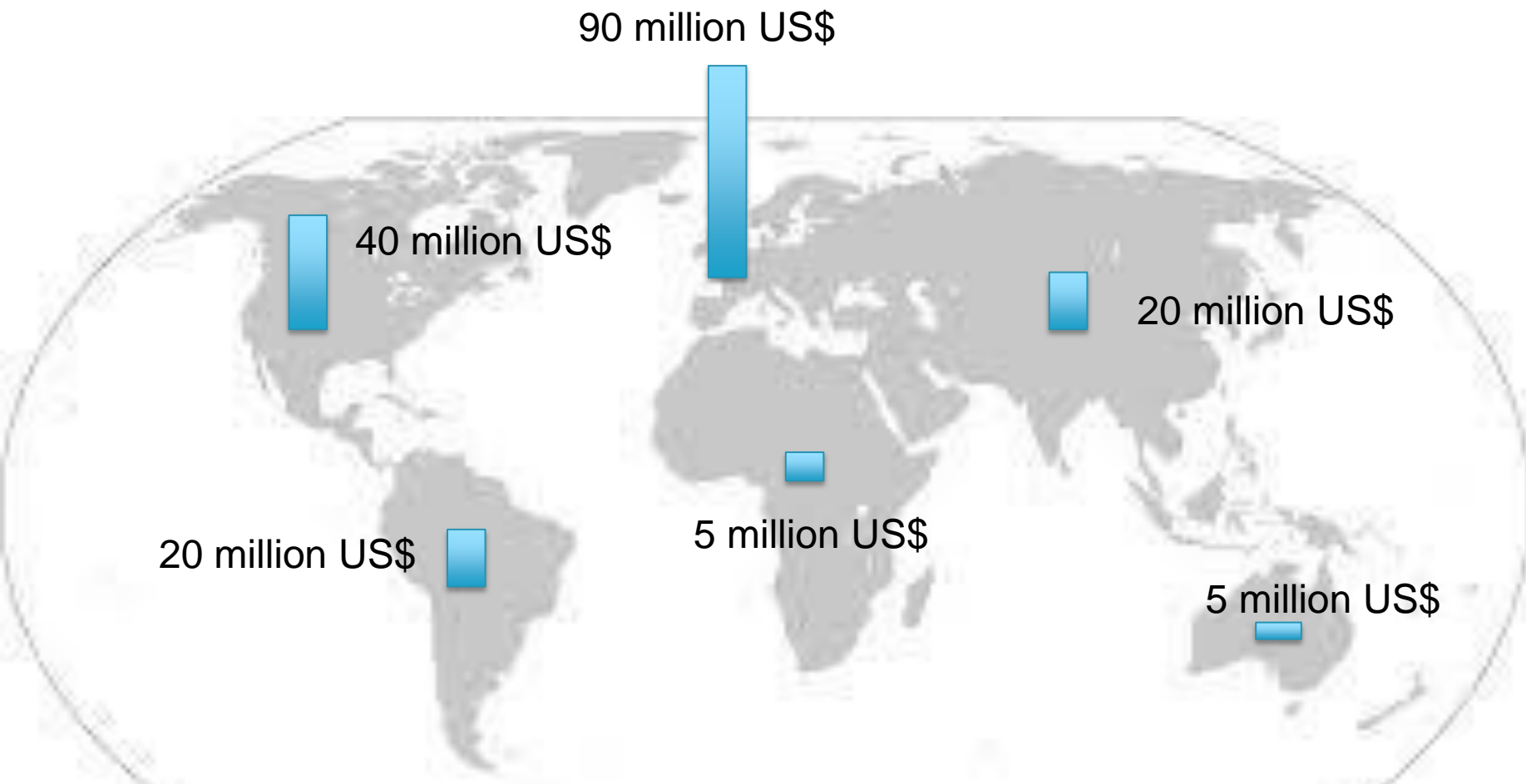
- Increased exchange between regions would benefit all, knowledge, experiences, research strategies, policy
- Differences between regions/continents need to be recognised - entail different research needs-sustainable systems look very different depending on conditions, approaches, funding possibilities etc

Global organic research funding

– shortcomings to get accurate figures

- Funding sources: by state programs, universities and research centres, by private foundations, by business companies and by organic farmer associations
- Lack of exact figures, only information about organic state programs
- Research activities are highly relevant for both organic and integrated farming
- Agro-ecological research can not always be differentiated from organic

Annual organic research funding



180 million = 0.4 % of total agricultural research funding

Specific comments - Europe

- National spending - slightly decreased; EU spending - slightly increased
- Stable funding of **the leading countries** Germany, Switzerland, Denmark, Sweden, the Netherlands, Austria and Italy for the last 10 years
- The EU – an important driver for organic farming research. **IFOAM-EU through TP Organics** – successful lobbying

Specific comments - North America

- **State Universities** - scientific support (Washington State University, Cornell University, Michigan State University, Ohio State University, University of California)
- Privately funded organisations do organic research, some very early (Rodale Institute)
- Organic Agriculture Center of Canada - cooperation between universities. A good model for the cooperation universities - farmers. Lack of funds

Specific comments - Africa

- African Universities - some organic farming research
- No clear-cut difference between agro-ecological and organic research
- Action Plan on organic farming 2011 – African Union, research is an important pillar
- Switzerland, Sweden, Denmark , the EU (part of Horizon 2020) and others support the research pillar
- Aid projects support good agricultural practice = organic agriculture.

Specific comments - Australia

- Organic farming research weakly developed
- Policy makers, the scientific community and media are critical about organic farming
- Universities, state research institutes are involved in organic farming studies
- Research need to be co-funded by the sector - limitation as the organic sector is economically weak

Specific comments - Asia

- Substantial increased research activities within the last 10 years
- China, Korea and India – leading countries
- Asian countries have many cultural and pedo-climatic specialities, research is completely underfunded

Evaluation of organic research programs - lessons learnt

Examples from three evaluations of current/recent organic research

- Sweden
- Germany
- Denmark

Evaluation of organic research in Sweden

Public organic research funding since 15 years, different funding bodies and programs

Total funding 1997-2012: €50 million

Evaluation of research 1997-2004, quality and relevance by Formas

- Scientific quality panel - international scientists
- Relevance panel – advisors from Nordic countries
- 74 projects evaluated, total grants €23 million

SWEDISH RESEARCH on ORGANIC FARMING



Recent update of projects:
www.slu.se/epok

Conclusions of the evaluation

Evaluation report 2006
Evaluation of Research on
Organic Production in Sweden



Formas, 2006.
Evaluation of research
on organic production
in Sweden. Evaluation
report 2006,
Stockholm.

- Focus on **plant-soil research**, also animal research, weak in socio-economic science, policy. Mostly component research
- A number of **flagship projects** – high quality, strong relevance, results implemented
- Key problems not enough addressed
- Sometimes **lacking organic context** and systems emphasis
- Gap between research priorities-actual research
- **Improvements** 1) coordination of funding bodies for larger projects, 2) organic expertise in selection panels, 3) more stakeholders early in research process, 4) a coordinating unit have a very important role – program coordination, dissemination, implementation

Evaluation of organic research in Germany

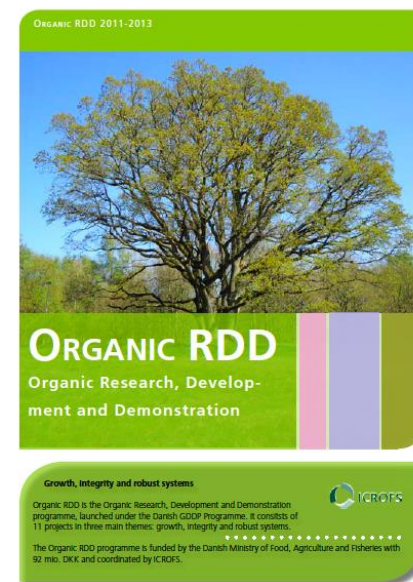
- The Federal Scheme on Organic Agriculture (BÖL) was set up in 2001 to boost organic farming e.g. by funding research and dissemination activities
- Effects of the Scheme were evaluation by an external panel 2012 (<http://orgprints.org/22369/>)
- 660 projects were evaluated (2002 – 2011), total funds €75 million, 80% of funding towards research and development, 20% knowledge transfer

Conclusions of the evaluation

- The BÖL Scheme was concluded important for the increase of organic production, e.g. **80% organic area increase** 2000-2010
- 80 % of projects have successfully **solved specific problems** in organic primary production
- Highly valued **applied research** by practitioners
- Strong **bottom-up** focus by stakeholder involvement
- Half the funds were dedicated **plant-soil research**, weaker in other prioritised areas (marketing, food processing)
- **Improvements** 1) selection process, 2) larger projects with longer duration
- Need for **knowledge transfer** strategies also supporting organic/sustainable agricultural **innovation**

Assessment of effects of organic research in Denmark

- Government grants for organic research since 15 years, in total €65 million
- **ICROFS** – International Centre for Research in Organic Food Systems made an analysis of **effects of research** 1996-2010 for the organic sector and society
- **A comprehensive analysis:** research achievements, intervjues with end-users to analyse influence of research in practise, dissemination assessment



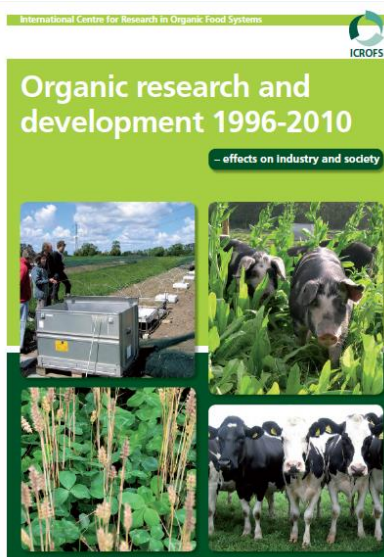
Organic RDD is funded by Green Development and Demonstration Programme (GGDP), Ministry of Food, Agriculture and Fisheries

www.icrofs.org

Conclusions of the assessment

Research has fulfilled its mission

- demands of the agricultural sector
- research conducted on prioritized topics
- dissemination activities, high scores



ICROFS, 2012.
Organic research
and development
1996-2010 –
effects on industry
and society,
www.icrofs.org

Direct effects-results have been implemented

- well functioning crop rotations
- well developed perennial weed control
- alternative seed dressing methods
- new control programs for decreased use of antibiotics in dairy farming

Indirects effects

- increased credibility in society
- acknowledged contribution to the greening of the Danish food sector

Conclusions/questions to be discussed at the workshop



- Organic research do contribute with novel perspectives, new innovative measures, systems approach, models for stakeholder interactions
- Drawbacks – missing of organic context, too week focus on key problems, too few implemented innovations
- **Design of organic research programs** – how to strengthen stakeholder involvement, innovation and sustainability-building? Are researchers prepared for e.g. high stakeholder involvement? Do universities and national funders support this broad view on research?

- Strategies to go **from component research to systems approaches** – from words to action – aligned with broader calls and possibilities for larger projects – cooperation with & between **funding bodies, policy**
- How to set up **evaluation panels** to get the most innovative projects?
- Develop TIPI - how to form useful **networks and platforms** to cooperate between regions/continents to strengthen organic research?

Thanks for your attention!

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