



## **Progress Report 2007 and Application for Continuation in 2008**

for research funding under the research programme:

**Research in Organic Food and Farming**  
International Research Co-operation and Organic Integrity  
(DARCOF III 2005-2010)

Funded by the Ministry of Food, Agriculture and Fisheries  
under the Finance and Appropriation Act, Sections 24.33.02.10

---

1. Project title and acronym

Sustainability of organic farming in a global food chains perspective (GLOBAL ORG)

---

2. Project journal number

3304-FOJO-05-44

---

3. Project period (month, year)

**Start of project:** 01-2006  
**End of project:** 10-2009

---

4. Head of project

Niels Halberg, Senior Researcher, Ph.D., University of Aarhus, Faculty of Agricultural Sciences, Dept. of Agroecology and Environment, Research Centre Foulum, PO Box 50, DK-8830 Tjele. Phone: +45 8999 1206. Fax :+45 8999 1200. E-mail: [Niels.Halberg@agrsci.dk](mailto:Niels.Halberg@agrsci.dk).

---

5. Participating institutes

Faculty of Agricultural Sciences, University of Aarhus, Dept. of Agroecology and Environment, Research Centre Foulum, PO Box 50, DK-8830 Tjele.

Food and Resource Economic Institute (FOI), Rolighedsvej 25, DK-1958 Frederiksberg C.

KU-Life, University of Copenhagen, Department of Agricultural Sciences, Højbakkegaard Allé 13, DK-2630 Taastrup.

Danish Institute for International Studies (DIIS), Department of Development Research (DoDR), Strandgade 56, Building E, 1st floor, office 1.10, DK-1401 Copenhagen K.

ENSA-Montpellier, Agro Montpellier, Dpt SESG, 2 place Viala, 34060 Montpellier Cedex 1, France.

Environment and Production Technology Division (IFPRI) (see letter of commitment attached)

---

## 6. Project staff

Researcher, Paul Rye Kledal, Food and Resource Economic Institute, Rolighedsvej 25, DK-1958 Frederiksberg C. Phone: +45 35 28 68 75. E-mail: [paul@foi.dk](mailto:paul@foi.dk)

Associate Professor, Henning Høgh Jensen, Ph.D., KU-Life, Department of Agricultural Sciences, Højbakkegaard Allé 13, DK-2630 Taastrup. Phone: +45 3528 3391. Fax: +45 3528 3584. E-mail: [hj@kvl.dk](mailto:hj@kvl.dk).

Project Researcher, Henrik Egelyng, Ph.D, Danish Institute for International Studies (DIIS), Department of Development Research (DoDR), Strandgade 56, Building E, 1st floor, office 1.10, DK-1401 Copenhagen K. Phone Direct: +45 3269 8744. Phone: +45 2339 0618. Fax: +45 3269 8700, Email: [heg@diis.dk](mailto:heg@diis.dk), [www.diis.dk/sw7025.asp](http://www.diis.dk/sw7025.asp).

Professor, Lucie Sirieix, ENSA-Montpellier, Agro Montpellier, Dpt SESG, 2 place Viala, 34060 Montpellier Cedex 1, France. Phone: +33 4 99 6127 19, E-mail: [Sirieix@ensam.inra.fr](mailto:Sirieix@ensam.inra.fr) (see letter of commitment attached)

Research Analyst Timothy Sulser, Environment and Production Technology Division (IFPRI) (see letter of commitment attached)

Head of Research unit, Tommy Dalgaard, Ph.D. University of Aarhus (DJF)

Ph.D. Student, Ahmed El-Naggar, Ku-Life

Senior Researcher, Esbern Friis-Hansen, Ph.D., Danish Institute for International Studies (DIIS)

Head of Department, Neil Webster, Ph.D., Danish Institute for International Studies (DIIS),

Senior researcher, Mogens Lund, Ph.D. head of section Production and Technology at Food and Resource Economic Institute (FOI)

Professor, Kostas Karatininis, Food and Resource Economic Institute (FOI)

Ph.D. Student, Marie Trydemann Knudsen, University of Aarhus (DJF)

Ph.D. Student, Panneerselvam Peramaiyan, University of Aarhus (DJF)

Ph.D. Student, Myles Oelofse, KU-Life

---

## 7. Midterm description of the project, its results and progress, and application for continuation in 2008

---

### A. Project summary

There is an increased conversion to organic farming (OF) on a global scale both in Developed and in Developing countries such as China, India, Tanzania, Uganda, Egypt, Brazil and Argentina. The primary driving forces for this is the increased demand for imported organic products in the richer countries in the North and the increasing domestic market in some developing countries. At the same time

supermarket sales of organic products have been increasing and dominate sales in DK and other European countries. This development may spread also to the home markets in developing countries, where supermarkets are gaining important shares of food sales. Consumers in Denmark and in urban centres around the world are thus being exposed to an increasing number of imported organic foods, some of which are substitutable with similar locally produced conventional food items. It is difficult for consumers and traders to know what the consequences are of their different food choices, i.e. what development do they support if they buy “global organic food”?

The organic food system has been transformed, from groups of loosely coordinated producers and consumers, to a globalised system of regulated trade linking socially and spatially distant sites of production and consumption. While organic farming policies, practices and institutions in Europe have been thoroughly studied; state interest in organic agriculture remains low and weakly institutionalised in many other parts of the world. The development of certified OF in some tropical countries has been driven by demands from companies and organisations with the aim of supplying consumers in the North. Therefore, the organic ideas and principles are not always embedded within the local farmers. These characteristics represent both a possibility and a challenge to organic farming, because they hold the potential to increase the volume of organic products sold, but at the same time threatens to dilute the specific organic ideas as expressed in the principles formulated by IFOAM and local organic movements. Based on this reality, global trade and the increasing role of supermarkets in worldwide organic food supply, this project will research the globalisation of organic agriculture from an interdisciplinary development perspective.

Certified organic farming in Europe has evolved from a niche to become a public policy instrument for meeting multiple societal goals, including provision of environmental services, rural development and sustainable livelihoods. At the global level, potentials to increase volumes of organic products sold has raised expectations for organic agriculture to provide also a global development pathway. Potentially, certified organic farming can offer food security, livelihood and poverty alleviation opportunities and less liquidation of natural capital. That is why development bodies such as IFAD and FAO increasingly perceive organic farming as representing a development potential. Outside Europe, however, developmental – livelihood and sustainability - implications of organic globalisation are under-researched and so is the question of the necessary local institutional set up for organic farming to be locally embedded and benefit smallholder farmers. No major study has yet analysed the ideas, practices and institutions, which comprise and coordinate the increasingly global organic agro food network.

The overall objective of this project, therefore, is to determine to what extent and under which conditions organic farming may reduce local and global negative environmental impacts and provide sustainable improvements in poor farmers’ livelihoods within the framework of the global food supply chain and the increased urbanisation.

**Table A.1: Work package list (from application)**

WP No.	WP title	Responsible scientist	Budget DKK	Start	End	Deliverable No.
1	Urban demands for organic food, food chain organisation and markets	PK, FOI	2272	01.01.06	30.09.09	D1.1-D1.4
2	Agro-ecology of Organic Farming Systems	HHJ, KVL	2725	01.01.06	01.01.09	D2.1-D2.6
3	Product-oriented environmental assessment	NH, DIAS	1588	01.01.06	01.07.09	D3.1-D3.4
4	Institutions and Livelihood	HE, DIIS	1285	01.01.06	30.09.09	D4.1-D4.8
5	Synthesis: Organic Farming in a global perspective	NH, DIAS	2621	01.07.08 (01.04.06)	30.09.09 (01.07.06)*	D5.1-D.5.4
6	Project management, database and website	NH, DIAS	778	01.01.06	30.09.09	D6.1-6.6
<b>Total</b>			11269			

(Please give month and year for start and end) \*) Contribution to data recording planning

## B. Objectives and expected achievements

Specific objectives are:

- To identify how smallholder organic production systems complies with organic principles and ideas of diversity and recycling of nutrients under different degrees of integration in local and export markets
- To assess environmental profiles of organic food products in relation to long and short food chains relevant for informing Danish and other urban consumers, and economic factors influencing the same.
- To determine levels and nature of embedment of organic ideas, principles and practises among public and private agencies as well as farmers' organisations in four case countries: Brazil, Egypt, Uganda and Vietnam.
- To determine to what extent formal policies and programmes are conducive to the development of organic farming in the four case countries.
- To study the impact of organic farming on rural development and determine under which policy and market conditions the price premium and/or other development values benefit smallholder farmers in the case countries

The project will build on a combination of case studies where selected organic products are followed backwards through the chain from consumers, through supermarkets and procurement systems to smallholder farmers. Products will be selected to represent different choice situations for the consumers (e.g. imported goods that compete with locally produced resp. exotic products). There will be research in consumers' and market agents' roles for organic food demand in DK and a number of countries and in the consequences of OF in selected smallholder farms. The importance of food miles and energy use in short vs. long product chains will be researched in relation to other environmental and socio-economic consequences of OF. The cross-disciplinary approach will be secured through involvement of different expertise in DK and abroad and participatory working methods. The project has a strong focus on coordination and communication through workshops and websites and research education including four Ph.D. students. Moreover a specific work package is reserved for synthesis of the market oriented, farm oriented, product oriented and institutional analyses.

## **C. Midterm results and progress**

### **C.1 Description (summary) of main results and conclusions for each year**

#### WP 1:

The main results and conclusions are related so far to the development of organic food and farming in China, and comparing consumers (in the North and South) concerning motivations for buying organic in respectively France and Brazil.

One of the objectives of GLOBALORG is to determine if organic farming can improve the livelihood of smallholder farmers. From the case studies in China a major conclusion concerning the livelihood aspect is that in relation to organic procurement systems supplying the domestic urban consumers of Shanghai, no smallholders are involved at all. Under the present property rights regime of Chinas 'politicised capitalism' land is a collective property, which farmers own by leasing, but cannot sell. Due the growing and better paid opportunities for off-farm jobs in the Shanghai province, land is then left idle by the smallholders. The administrative county level has then arranged to lease the idle land from the smallholders, and re-lease larger land areas to 'farm enterprises' supplying organic vegetables mainly to supermarkets placed in higher-income city areas. The farm enterprises offer jobs to elderly migrant male workers and local woman.

In the Shandong province analysis of an export driven organic vegetable chain has increased the income of 1.300 smallholders with almost 40 per cent compared to off farm job as an unskilled labour in a factory. In the Shandong province off-farm jobs are seldom and therefore the organic production has become important source of income.

The results on the development of organic food and farming in China are described in E, no. 11246-11250).

Concerning consumer motivations results comparing Brazilian and French consumer behaviour showed common concerns in relation to quality or personal and family health as well as common pref-

erences for local and organic products, but for different reasons. Our studies also showed different attitudes to the mode of distribution of organic. In Brazil, a larger part of the consumers prefer organic farmers markets and reject supermarkets. In France consumers also prefer producer markets, but shop also in supermarkets purchasing generally processed and imported organic products. Further analysis will be taken to investigate the impact of prices and limitations of choice on organic products in the supermarkets in Brazil and France, and compared to planned consumer studies in Egypt and China. The results on consumer studies comparing Brazil and France are described in E, no. 11247 and 11253).

## WP2

The sector in the three major countries has been mapped and trial sites selected accordingly. This type of baseline setting was needed due to a completely lack of reliable data on the extent of the sector in all three countries. For instance, it was found that a number of companies were involved in certification in Egypt (Table 1) and that herbs were produced on 264 farms, while vegetables were produced on 227 farms and fruits on only 82 farms (partly M1). The main certification bodies were ECOA and COAE.

**Table 1.** Organic agriculture status in Egypt (source: manuscript in preparation by Salem et al.)

Company Names	Total organic cultivated area (ha)	No. of registered companies	No. of registered farms
Egyptian Center for Organic agriculture (ECOA)	6993	47	358
Center of Organic Agriculture in Egypt (COAE)	4778	35	179
Soil Association	942	4	4
Mediterranean Institute of Certification (IMC)	934	3	8
QC& I	989	6	6

One main achievement during the last year is that the manpower situation has been secured. Consequently, two PhD projects are running in relation to WP2.

A major second achievement is that trial sites have been identified in Egypt, China and Brazil as the project is based on a cross-sectional study approach supplemented with some longitudinal elements. The first interview round with selected farmers has been conducted in China, while the interviews with farmers in Egypt and Brazil will be achieved before 15 October. A second wave of data collection will take place in accordance with a longitudinal research design.

Gradually a picture is emerging from China and Egypt of a sector that is more complex than we initially thought. Some places and for some products, small farmers link to – formally by contracts or informally by social relationships – larger farmers who collect and sometimes process the products. These farmers then supply directly to companies or in some cases to traders. In other cases, the farmers supply directly to the processing and exporting companies. This complexity will be further investigated in the coming periods.

Three MSc students have conducted their fieldwork in relation to the project. One student investigated the perspectives of organic vegetable production in peri-urban Hanoi in Vietnam in collaboration with the Danish NGO ADDA. Another student investigated the impact of organic agricultural practice like organic fertilizers on high-value export oriented crops in Uganda in collaboration with the international research organisation CIAT and the University of Natural Resources and Applied Life Sciences in Vienna (BOKU). Finally, the third student investigated the organic vegetable supply chain in China via cases that reflected both domestic and export markets in collaboration with China Agricultural University in Beijing.

In order to enable generalisations, a common database is being set up that will contain the data collected on all the farms in our study areas, based on households as the unit of analysis. This will allow both statistical generalisation as well as analytical generalisation. The data from China is being entered now and the other data will be entered as they are being produced. Data recording is on-going in

two case areas in Brazil with the assistance of the partner in Embrapa and two local MSc students.

Regarding the modelling approach, a number of models have been reviewed for later use in the WP2. As part of this a 4-day training intern was arranged at KU-Life by inviting two researchers from a group in Brisbane, Australia, who runs the model APSIM. This model has emerged as the top candidate for subsequent use in our studies.

A general framework has been identified for linking the agroecological conditions with the socio-economics of the farm. A paper is under preparation to report this analysis. The point of departure in the paper is that the General Livelihood Framework concept is being applied where five types of assets (physical, financial, human, natural, social) are included in the livelihood. Indicators for these types of assets are currently being defined. Obviously these indicators are relating back to the database being developed.

There has been close collaboration with the Asian Development Bank Institute, China Agricultural University, Helvetas Sri Lanka and the Tea Research Institute of Sri Lanka in the joint project: The contribution of organic agriculture to achieving Millenium Development Goals in Asia. DJF has coordinated and co-funded through this study GLOBALORG, which has surveyed app. 100 organic and 100 non-organic households in each of 3 case areas. Results show that market oriented OA via the involvement of private companies may secure market access and higher income in smallholder farm households. Moreover, organic farmers used more agro-ecological methods and were saved from health related pesticides problems, which were reported to be important among non-organic households. The effect on gender roles and capacity building was small but in projects combined with Fair Trade certification there was an important community development. Detailed reports are under publication.

#### WP3.

The major flows of organic products from the case countries (China, Brazil, Egypt and Eastern Africa) to Denmark have been identified as a background for selection of the food chains and farming systems to survey. These data show that a large variation exists in terms of products and volumes as well as ownership and farm size. Organic products exported from China mostly originate from areas where the non-organic production is not intensive, so presumably environmental differences are relatively small in the primary production.

A lot of material re. market chains and volumes of organic products from these countries to Denmark and Europe has been gathered and reported to the project participants. This overview is interesting in itself and could eventually be used for a publication or report on the open part of the website.

#### WP4.

In addition to producing its deliverables and reaching milestones, the main results of WP 4 has been:

- Establishing collaboration, including important work relations with research institutes and researchers in China, Brazil, Egypt and – as far as East Africa is concerned – initiating a renewal of existing networks.
- Strengthening the position of organic agriculture in the International donor policy agenda (IAASTD).
- Consolidating the position of organic agriculture in the Danish donor policy agenda (Danida).
- Flagging the Danish resource base on organic agriculture vis a vis world market demand for expertise and knowledge on all aspects relating to organic agriculture (Danish Strategy for Africa).

As far as WP4 main findings (on institutions for organic farming) are concerned, the following preliminary conclusions on Brazil and China can be presented:

In Brazil federal state law(s) and three ministries (Agriculture, Environment and Agrarian Development), supports organic agriculture through a range of policy instruments and programmes, including some that explicitly favour smallholders and also including agricultural research and development programmes on organic farming. Policy rationales include agrarian reform, environmental objectives, food security and rural development. A range of public sector institutions have either initiated policies of buying organic or converting publicly owned land to organic management. In Brazil, a national regulation (law) has not yet been implemented, but a diversity of certification and conformity assessment

schemes co-exist. There is strong tendency in Brazil's domestic market towards accepting alternative conformity assessment procedures rather than adopting certification as stated in international standards. There are also significant differences in the levels of engagement of regional and municipal authorities and in terms of CSO activities supporting organic production. In Brazil, the opportunity for exporting COA products with a price premium has also been a strong driver for conversion attracting private companies, but this has gone hand-in-hand with a strong involvement from the public sector and civil society. The latter, which is relatively strong, includes locally organized farmers' groups and NGOs which have helped embed organic farming in many areas of the country. (Egelyng, Fonseca, Li and Halberg forthcoming 2008)

In China, there is a nationally unified system for organic standards, management and accreditation, including national standards established (2005) for COA products, a national accreditation and certification body (2001) and thirty one certifiers for COA (2006). While the state provides limited specific financial support to organic farmers, China's National Action Plan for Rural Environment Protection envisages establishing three hundred organic food production bases covering between hundred to ten thousand hectares by 2010. Further, strategies and support for COA are formulated at local levels, with some municipal governments supporting conversion through reimbursing certification costs and acting as intermediaries between the private sector and smallholder farmers. In China, a few university research activities constitute examples that 'organic' research does take and has taken place in China. The development of COA in China has mainly been driven by demand from export markets and the engagement of the private sector (including newly privatised former public agri-food-companies) in areas that find it difficult to compete in conventional agriculture products. (Egelyng, Yu Hui and Li 2006)

Some preliminary conclusions can be made on the similarities and differences between the "organic" institutional development trajectories (pathway) of the same two countries. Both Brazil and China have e-commerce of organic produce in major cities, and knowledge about organic farming and labels is restricted to educated segments in their major cities. Public sector support for the organic sector through advice, training, research and marketing is probably stronger in Brazil, but is also evident in China. In addition the estimated numbers of professional 'organic' agricultural advisors in the national extension service and private sector and promotion for Organic Farm Days indicates a somehow stronger institutional environment for organic agriculture in Brazil. Independent farmers' organizations have played a strong role in the development of organic agriculture and CSOs are more involved in organic activities and exert a stronger policy influence in Brazil. China has no real equivalent of these organizations, but national, regional and local workshops relating to certified organic production, and involving multi-stakeholder participation, have and continue to be organised in both countries. Both countries feature a significant number of active international certifiers and both host activities by international donors promoting certified and de facto organic agriculture through projects and programmes. In both countries, smallholder farmers report significant difficulties in meeting quality, safety, packaging and labelling standards. In both countries organic farming may be said to exist in a 'policy ghetto' vis-à-vis conventional farming, but to a varying degree. Brazilian policies on organic agriculture do play out in a broader context of rural development, food security and health (children's meals). In China organic farming seem to remain less integrated with other policy areas such as tax, rural development, and health. Neither country seems to have operationalized the polluter pay principle – in the form of for example fertiliser or pesticides taxes - as an incentive for promoting organic agriculture beyond its current largely market-led niche. In both countries it makes sense to think the level of embeddedness of organic farming as being regionally differentiated, following patterns of regional (and regionally targeted) support and responses to agricultural constraints and marketing opportunities. In Brazil, agrarian reform or rural development programmes and civil society may be seen as driving organics deeper into policy discourses and measures than in China. But in China large areas are planned to be converted to organic agriculture over the next three-five years as part of (local) public strategies. (Egelyng, Fonseca, Li and Halberg forthcoming 2008).

Conclusions on the institutional environments in Egypt and East Africa will be included in the next status report.

WP5.

A Ph.D. Student, Panneer, has been employed by May 2007 and the Ph.D. study plan is now finally developed. The work with focus on food security or organic farming at household and regional level.

We have negotiated an agreement with IFPRI regarding the content of their support to the modelling and the availability of Impact-water model for the PhD student. We have discussed the choice of case area and IFPRI also favours India (or regions in India) both from a relevance and a data availability criteria.

Ifpri will assist in identifying the data sources in India first and will perform the first on-site data recording between December 2007 and February 2008, see more under Panneer's phd project. Tim Sulser from IFPRI will come to Foulum to introduce the model in a 4-5 day training course in beginning 2008. He will then give input to the data recording guideline.

WP6.

We have had several constructive project meetings (workshops including PhD students) in Denmark with thorough discussions of methodologies, case areas, product chains to select, coordination of data recording, content of PhD projects etc. It was agreed to have a 2-day workshop for all WPs in the first part of 2008 with the purpose of joint data interpretation and in order to draft cross-disciplinary papers.

There have been 3-4 workshops in China with local participants about the project, 2 in Brazil and 1 in Egypt. The project coordinator will visit Brazil again in November 2007 and there will be workshops in Egypt in September (WP2) and November (WP 1 and 4). We are planning to have larger project meeting in Brazil autumn 2008 with all participants (Danish representatives from all WPs and all relevant Brazil colleagues). At this time there should be data and draft papers about Brazil from all WPs.

There will be an international project workshop in connection to the ISOFAR conference in Modena, June 2008. GLOBALORG has already invited one partner from China (Qiao, CAU) and Brazil (Lucimar, Embrapa). Other partners should be invited from Egypt and –possibly China and Brazil and India- and Montpellier.

We have tried to use the web-site for exchange of news including reporting from field trips and conferences. This seems to be a good way to share information within the project and to non-participants. A number of journalists and stakeholders from organisations have expressed interest in the project after reading on the web-site. You are all encouraged to use your password to write and submit material for the web-site under news and under your respective WPs.

## C.2 Fulfilment of deliverables and milestones

(To be completed for each work package)

Deliverables list (from application)

Deliverable No	Deliverable title	Lead scientist	Delivery date	Allocated scientific person month	Type of deliverable	Fulfilled (ok) or deviations (d)*
D1.1	Urban-Rural economic development and Organic Food Procurement Systems	PRK	08.2007	12	P, R	ok, d
D1.2	Consumers Attitudes related to Organic Food and Organic Distribution	PRK (LS) (Ph.D. student)	08.2008	4	S, P, R C	
D1.3	Supermarket lifecycle development and urban organic consumers	PRK (Ph.D. student)	01.2009		S, P, R, C	
D1.4	Opportunities and Challenges for Organic Food Producers Supplying Supermarkets Local and Global	PRK	10.2009		S, P, R, C	
D1.5	PhD thesis: Organic farmers and contractual relations with supermarkets	(Ph.D. student)	06.2009	12		
D1.6	Publications in FØJO E-Nyt and Darcof E-news	PRK	*	2	P	
D2.1	Relation between farm-gate nutrient balances on typified farm systems in relation to the nutrient cycling on the farm under varying distance to markets described. International publication.	HHJ (Ph.D. Student)	11.2007	18	S	d
D 2.2	Effect of market orientation of organic farmers on biodiversity in the farming systems established. International publication.	HHJ (Ph.D. Student)	02.2007	8	S	d
D2.3	Model developed that link socio-economic and agronomic data. International publication. (link to WP4)	HHJ (Ph.D. Student)	05.2008	18	S	d
D2.4	Scenario analysis for typified farm systems on the linkage between the farms productivity, fertility and environmental impact to market integration and to income and investment of money, land and labour. Report. (link to WP4)	HHJ (Ph.D. Student)	09.2008	16	R	d
D2.5	Relation between market integration of organic farmers and livelihood and socioeconomics for farmers and families established.	HHJ (Ph.D. Student)	06.2009	16	S	d
D2.6	Research education of one Danish and one Egyptian Ph.D. Student	HHJ	12.2009	6	O	d
D2.7	Publications in FØJO E-Nyt and Darcof E-news	HHJ	*	2	P	d
D 2.8	Publications in FØJO E-Nyt and Darcof E-news	HHJ	*	2	P	
D3.1	Comparative Life cycle assessment results of organic products and food chains with different food miles	Ph.D. Student* (Halberg)	12.2007	6	S, O (web-database)	
D3.2	Comparative evaluation of different environmental assessment methodologies (LCA, ecological footprint, ..) and their suitability for describing impacts of different food choices	Ph.D. Student* (Halberg)	12.2008	4	S	
D 3.3	Important factors and tradeoffs for the sustainability and environmental profile of smallholder organic farms.	Halberg, Ph.D. Student*	05.2009	6	S	
D 3.4	Ph.D. thesis to be formulated within WP3 and WP5 themes	Ph.D. Student	03.2009	10	Thesis	
D3.5	Publications in FØJO E-Nyt and Darcof E-News	NHA	*	2	P	
D4.1	Added values of organic agriculture: a development perspective (links with WP2 and WP3)	Egelyng	06.2007	3	S + C	ok

D4.2	How well are farmers in case countries compensated for organic values added to and through their products?	Egelyng	06.2008	4	P + S	
D4.3	Institutional environments for organic farming in the tropics: how conducive and how rooted?	Egelyng	12.2007	2	C + P	
D4.4	Findings on the Institutional Nature and Sustainability Ambition of Agricultural Policy Reforms in Case Countries.	Egelyng	06.2009	3	S + C	
D4.5	How are institutional environments conducive to organic farming rooted in selected countries and production systems/regions supplying tropical organic products for Danish markets? (Links with WP 1).	Egelyng	09.2009	5	S + C	
D4.6	Contribution to FØJO E-Nyt and Darcof E-News	Egelyng	*	2	P	
D5.1	Development/improvement of a model tool for the assessment of food production and security under large scale introduction of OF methods in developing countries	Halberg/(IFPRI)/PH.D.-student	06.2009	8	O	
D5.2	Estimating the regional effects of large scale conversion to organic farming on food prices and consequences for food security among urban resource poor on a regional scale”	Halberg/(IFPRI)/PH.D.-student	09.2009	8	S	
D5.3	Importance of different institutions and procurement systems for large-scale conversion to OF	Kle-dal/Egelyng	07.2009	8	R	
D5.4	Integrated analysis of consequences for food security, livelihood, resource use and environmental impacts of scenarios for conversion to OF in regional scale	Halberg	09.2009	8	S	
D6.1	Annual reports	Halberg/all	09,200x	2	R	
D6.2	Common protocols for data recording	Halberg/all	05-10-69	3	R	ok
D6.3	Project web-site	Halberg/all	17-08-87	3	O	ok
D6.4	Project database updated	Halberg/all	01.200x	3	O	ok
D6.5	Newsletters to all stakeholders in and outside Denmark	Halberg/all	08, 200x	2	O	
D6.6	Exchange of Ph.D. students facilitated	HHJ	2007-08	2	O	ok

#### Milestones:

Milestone No.	Milestone title	Lead scientist	Delivery date	Fulfilled (ok) or deviations (d)*
M1.1	Delimitation and definition on ‘urban’, ‘peri-urban’ and ‘rural’ in relation to the chosen urban settlements.	PRK	2006/03	ok
M1.2	Delimitation of the organic food commodities and type of food procurements applied for further studies in this and the other WP’s	PRK	2006/06	(ok) d
M1.3	The chosen organic procurement systems within the case study areas documented in volume and monetary terms	PRK	2007/01	(ok) d
M1.4	Data collected on urban economic development in the four case studies	PRK	2007/06	d
M1.5	Occasional and regular organic consumers identified in the chosen urban settlements for preparation and conduct of focus group studies	PRK	2007/12	
M1.6	Statistical and subjective analyses of the data obtained from the focus group studies, generating new knowledge on organic consumers in developing and developed countries for comparison studies.	PRK	2008/08	
M1.7	Data collected on supermarket expansion and market concentration delimited to those selling the chosen organic food products	PRK	2008/01	
M1.8	Analyses of the qualitative interview data of the supermarket procurement officers in relation to supply and handling requirements on organic food commodities	PRK	2008/06	
M1.9	Modelling supermarket life cycle development in relation to urban economic data, creating new scientific knowledge on possible supermarket	PRK	2008/08	

	expansion and market concentration in developing countries.			
M1.10	Refinement of the supermarket model in relation to the studies on consumer attitudes purchasing or not purchasing organic, and from the analyses of the procurement officers	PRK	2009/01	
M1.11	Synthesis of possible strategies and future challenges for organic producers and their organizations trading and supplying supermarkets local and global	PRK	2009/05	
M2.1	Identification, selections and base-line description of farms in Egypt, China, and Brazil (new dates indicated)	HHJ	2006/05 (2007/12)	ok
M2.2	First year quantification of nutrient management on-farm	HHJ	2006/12 (2008/02)	d
M2.3	Model reviewed and tested	HHJ	2007/04 (2007/12)	ok
M2.4	Conductance of training course of DSSAT in USA or APSIM in Australia	HHJ	2007/06 (2007/02)	d
M2.5	Second year quantification of nutrient management on-farm	HHJ	2007/12 (2009/06)	d
M2.6	1 <sup>st</sup> Model integration ready for testing	HHJ	2008/02 (2008/08)	d
M2.7	Plant and soil samples from on-farm studies analysis completed	HHJ	2008/03 (2008/06)	d
M2.8	Diversity analysis on-farm completed	HHJ	2008/03 (2009/03)	d
M2.9	2 <sup>nd</sup> Model being tested	HHJ	2008/04 (2009/01)	d
M2.10	Scenario analysis completed	HHJ	2008/08 (2009/09)	d
M2.11	Livelihood analysis completed	HHJ	2008/11 (2009/09)	d
M2.12	Initiation (2006/01) (2006/10) of a Ph.D. study in Denmark to be finished	HHJ	2008/12 (2009/09)	d
M2.13	Initiation (2006/01) (2007/01) of a Ph.D. study in Egypt to be finished	HHJ	2008/12 (2009/12)	d
M3.1	Selection of products for environmental assessment finalised and coordinated with other WPs.	NHA	2006/06	ok
M3.2	Data recording on organic farms and food chains initiated	NHA	2006/08	ok
M3.3	Preliminary assessment of environmental costs of transport for comparable food products to be used in participatory evaluations of food systems	NHA	2007/01 (2009/03)	d
M3.4	Data recording for environmental assessment of organic foods finished.	NHA	2009/02	
M3.5	Comparable Life cycle assessment results of organic farming systems and food chains established.	NHA	2008/12 (2009/06)	
M3.6	Comparison of different environmental assessment methods ready for use in WP5	NHA	2009/03 (2009/06)	
M3.7	Initiation (2006/03) of a Ph.D. study in Denmark to be finished (2009/03)	NHA	2006/03- 2009/02	ok
M4.1	Mapping and analysis of formal policies and programmes initiated in all four case countries	HE	2006/06	ok
M4.2	Mapping and analysis of agency and practices (embedment) initiated in all case countries	HE	2006/12	ok
M4.3	Plan finalized for Workshop Contributions (see WP 6)	HE	2007/01	ok
M4.4	Plan finalized for feeding results of policy and institutional analysis from WP 4 into WP 5	HE	2007/06	ok
M4.5	Mapping and analysis of formal policies and programmes in all case countries completed	HE	2008/04	
M4.6	Analysis of organic premiums and development returns initiated in all case countries	HE	2008/06	
M4.7	Mapping and analysis of agency and practices (embedment) completed	HE	2008/12	
M4.8	Input to D 5.3 (Importance of different institutions and procurement systems for large scale conversion to OF)		2008/12	
M 4.9	Analysis of organic premiums and development returns completed	HE	2009/09	

M4.10	Theoretical generalization completed	HE	2009/03	
M4.11	Synthesis with WP 5 completed	HE	2009/09	
M5.1	Data recording guideline for the Impact-water model tool established	NHA	2007/12	
M5.2	Data sources identified by case area	NHA	2008/03	
M5.3	Model parameterised and tested with preliminary data for the OF scenarios in the regions	NHA	2008/06	
M5.4	Assumptions of technical productivity growth and price relations established for the model	NHA	2008/11	
M5.5	Modelling with final data finished	NHA	2009/07	
M5.6	Synthesis of results from WP1-4 established and presented to stakeholders	NHA	2009/08	
M6.1	Project website established and access provided to partners	NHA	2006/03	ok
M6.2	Workshop 1, Ex-ante meeting finalising collaboration between partners and the joint selection of typical product and farms to involve in the case studies in each case area	NHA	2006/06	ok
M6.3-6.7	Workshops organised twice per year, 1 for partners only and 1 for local participants in the case-areas	NHA		ok
M6.8	Quarterly newsletters	NHA		
M6.9	Two foreign Ph.D. students visiting Denmark for 6 months each	NHA	2008/12	

\* *Deviations are to be further discussed in D*

(The nature of the deliverables must be indicated by S = publication in scientific journal with peer review; P = publication in journals without peer review; R = reports; C = presentation at meetings and congresses or O = other types of deliverables, e.g., prototypes, models, websites, etc.).

#### **D. Description of deviations and subsequent adjustments of plans**

##### **WP 1:**

Three case areas in Brazil, China and Egypt are part of the core research in GLOBALORG. To fulfil deliverable D1.1 all three has to be examined, but only China has been completed. This is due to delay on implementing the work contract with EMBRAPA in Brazil and setting up the Ph.D. student in Egypt. However, case studies in Brazil and Egypt are now in motion and the expected Reports on organic food procurement systems in these two countries will be delivered by the 15<sup>th</sup> of November. Likewise consumer studies will commence in Egypt during November thus fulfilling D1.1 as well as Milestones M1.2-5. In relation to the documentation on the development of organic food and farming in Brazil and Egypt arrangements have been made with IFOAM and FiBL to write two articles for the yearly volume: "The world of organic agriculture – statistics and emerging trends 2008" (similar to the one made on China in the 2007 volume, see under E, no. 11246).

The activities towards fulfilment of D1.2 concerning consumer studies have been implemented in Brazil in the case area of São Paulo State during spring 2007. These studies have so far resulted in two Conference papers (E, no. 11247 and E, no. 11257) contributing to the fulfilment of M1.5 and M1.6.

##### **WP 2:**

The deviation that is indicated in C.2 is due to (i) a delay in the upstart of two PhD projects, which is the main man power in the WP. The delay started by a late arrival of the funding confirmation. Before such a confirmation, a position cannot be announced according to the regulation of University of Copenhagen. Subsequent to the announcement, it took approx. six months to fill the positions. However, from the point of filling the positions, the activities in the work package project have progressed as planned. Therefore, the adjusted deliverables and milestones are included below. This adjusted time frame will be the planning guide for the future.

## Adjusted deliverables list

Workpackage 2						
Deliverable No	Deliverable title	Lead scientist	Delivery date	Allocated scientific person months	Type of deliverable	Fulfilled (ok) or deviations (d)*
D2.1	Relation between farm-gate nutrient balances on typified farm systems in relation to the nutrient cycling on the farm under varying distance to markets described. International publication.	HHJ (Ph.D. Student)	11.2008	18	S	
D2.2	Effect of market orientation of organic farmers on biodiversity in the farming systems established. International publication.	HHJ	02.20097	8	S	
D2.3	Model developed that link socio-economic and agronomic data. International publication. (link to WP4)	HHJ (Ph.D. Student)	05.2008	18	S	
D2.4	Scenario analysis for typified farm systems on the linkage between the farms productivity, fertility and environmental impact to market integration and to income and investment of money, land and labour. Report. (link to WP4)	HHJ (Ph.D. Student)	09.2008	16	R	
D2.5	Relation between market integration of organic farmers and livelihood and socio-economics for farmers and families established. International publication.	HHJ	06.2009	16	S	
D2.6	Research education of one Danish and one Egyptian Ph.D. student	HHJ	12.2009	6	O	
D2.7	Outreach activities like e.g. publications in FØJO E-Nyt and Darcof E-news	HHJ	*	2	P	ok

## WP3.

D3.1 is due at the end of 2007 and is part of Marie's PhD project. Marie has prepared for this deliverable by collecting information in China and Brazil and have started to establish models in the LCA tool Simapro (see also M3.3). Part of the data for the LCA will come with farm studies presently ongoing. Marie is now on maternal leave until late 2008 and the deliverable will be postponed accordingly, in which time the farm data will then be ready.

In the coming year the effort in WP3 will be limited due to Marie's maternal leave. She has already started to prepare the D3.2 by comparing the methods behind different environmental assessment methodologies. It is therefore also necessary to postpone M3.4. The WP-leader will continue the data recording from different companies and food chains and coordinate with WP2.

Deliverable No	Deliverable title	Lead scientist	Delivery date	Allocated scientific person month	Type of deliverable	Fulfilled (ok) or deviations (d)*
D3.1	Comparative Life cycle assessment results of organic products and food chains with different food miles	Ph.D. Student* (Halberg)	06.2009	6	S, O (web-database)	
D3.2	Comparative evaluation of different environmental assessment methodologies (LCA, ecological footprint) and their suitability for describing impacts of different food choices	Ph.D. Student* (Halberg)	08.2009	4	S	
D 3.3	Important factors and tradeoffs for the sustainability and environmental profile of smallholder organic farms.	Halberg, Ph.D. Student*	05.2009	6	S	
D 3.4	Ph.D. thesis	Ph.D. Student	12.2009	10	Thesis	
D3.5	Publications in FØJO E-Nyt and Darcof E-News	NHA	*	2	P	

The only real adjustments of plans for Work Package 4 are those involving plans for a larger and more inclusive workshop involving the extended GLOBALORG group, i.e. not only those members of the other work packages based in Denmark, both also foreign based local researchers associated with GLOBALORG.

#### WP5

Due to the delay in hiring the PhD student for this study the milestones and deliverables in WP 5 are delayed ½-1 year.

### E. Project publications and other products

#### 1. Products from Organic Eprints archive

Henning Høgh Jensen (2006) Økologi kan skabe udvikling i Afrika. *Økologisk Jordbrug*, Nr. 369, 26. årgang. 6. Oktober pp. 13.

Henning Høgh Jensen (2006) Illusionen om kunstgødning i Afrika. *Jord og Viden* (151) Nr. 13, 5. oktober 2006. pp. 10-12.

Henning Høgh Jensen (2006) Forskningen globaliseres. *Økologisk Jordbrug*, Nr. 359, 26. årgang. 21. april. pp. 6.

Ahmed El-Naggar, Andres Ounmaa, Eija Muukka, Ernestas Zaleckas, Gerda Abraityté, Imants Jansons, Jim Rasmussen, Johan Ahnström, Karin Pirhofer-Walzl, Katherine O'Doherty Jensen, Kirstine F. Jørgensen, Lina Sarunaite, Mara Bleidere, Marie Trydeman Knudsen, Massimo Pugliese, Merete Højrup Møller Nielsen, Natalia Bellostas Mugurerza, Petra Bakewell-Stone, Preben Klarskov Hansen, Sermed Adil Abed-Ali Al-Kufaishi, Sofie Kobayashi, Torbjörn Rydberg, Vera Klubova, Viktoras Liorancas, and Henning Høgh-Jensen. (2006) Globalisation as a Challenge or Opportunity for Organic Farming. DARCOF Enews, March 2006, No. 1.

11246: Organic food and farming in China	Deposited 12 September 2007
11247: Comparing organic urban consumers in developing and developed countries: First results in Brazil and France	Deposited 12 September 2007
11248: The organization of Organic vegetable supply chains in China - Flexible property rights and different regimes of smallholder inclusion	Deposited 12 September 2007
11249: Kina og den økologiske sektor [The organic sector of China]	Deposited 12 September 2007
11250: Kinesisk økologi under lup [Investigating chinese organics]	Deposited 12 September 2007
11253: Factors influencing organic urban consumers in developing countries	Deposited 12 September 2007

Egelyng, Henrik. 2006. Glocalisation of Organic Agriculture: Options for Countries in the South? Paper presented to the Conference on Place, Taste, and Sustenance: The Social Spaces of Food and Agriculture, Boston University, June 7 – June 11, 2006 (session 5:8). (Work Package 4 Deliverable D4.1 (P)). Uploaded to Organic Eprints (in que).

Egelyng, Henrik, QIAO Yu Hui and Luping Li. 2006. The Institutional Environment for Certified Organic Agriculture in China: A review, some landscaping and a framework agenda for more analysis. Paper presented to the International Conference on "Challenges Facing Chinese Agriculture and the West Development Strategy", Yangling, Shaanxi China, July 6-7 2006. (Work Package 4 Deliverable D4.2 (P)). Uploaded to Organic Eprints (in que).

Egelyng, Henrik; Halberg, Niels and Høgh-Jensen, Henning (2006) [Organic Agriculture in a Development Policy Perspective](#). Paper presented at Joint Organic Congress, Odense, Denmark, May 30-31, 2006. (Work Package 4 Deliverable D4.3 (C)). Available at Organic Eprints.

Esbern Friis-Hansen and Henrik Egelyng. 2007. Supporting Local Innovation for Rural Development: Analysis and Review of Five Innovation Support Funds. DIIS Report.

Høgh-Jensen, Myles Oelofse, Henrik Egelyng, mfl. 2006. Do we ask the right questions in research for development? (Under submission to international journal). 2007 (Work Package 4 Deliverable D4.3 (S)). Will be uploaded (with restricted access) to Organic Eprints when internationally published.

Egelyng, Henrik. 2006. Institutional Environments for Certified Organic Agriculture: Enabling Development, Smallholders Livelihood and Public Goods for Southern Environments? Paper for presentation at 106th European Association of Agricultural Economists (EAAE) seminar: Pro-poor development in low income countries: Food, agriculture, trade, and environment, 25-27 October 2007 – Montpellier, France. (Work Package 4 Deliverable D4.5 (P)). To be available from Conference Proceedings and subsequently to be uploaded (restricted) to Organic Eprints.

Egelyng, Henrik, Fernanda Maria Fonseca, Luping Li and Niels Halberg. 2007 (submitted). The evolution of institutional environments for certified organics: a comparative analysis of Brazil and China. Submitted to International (social science) Development Journal. Will be uploaded (with restricted access) to Organic Eprints when internationally published. (Work Package 4 Deliverable D4.4 (S)).

Egelyng, Henrik. 2006. Measuring Sustainable Development: A Brief Discussion - and a view to Agricultural Policies on Certified Organics in a Globalizing Context. Paper presented to the 2006 FAU Conference "Breaking New Ground: Development Research 2005-2015 and beyond. Copenhagen Business School (CBS). May 10-11th 2006. (Work Package 4 Deliverable D4.7 (P)).

Friis-Hansen, Esbern and Henrik Egelyng, 2007 (under submission). What Role for Agriculture Based Societies (Africa) in the New Global Food System? Work Package 4 Deliverable D4.7 (S)

Egelyng, Henrik, Gustavo Ferreira, Anne-Marie Izac, David Duthie, Bernard Hubert, Niels Louwars, Morven McLean, Erika Rosenthal, Steve Suppan, Martin Wierup, Patrick Avato, Daniel de la Torre, Shaun Ferris, Laura T. Reynolds and Peter Robbins. 2008 (forthcoming). Options For Enabling Policies and Regulatory Environments. Chapter 7 in: International Assessment of Agricultural Science and Technology for Development. Washington. (Work Package 4 Deliverable D4.9 (S)).

Kledal, P.R. Q.H. Hui, H. Egelyng, X. Yunguan, N. Halberg and L. Xianjun. (2007). "Organic Food and Farming in China," in Willer and Yussefi (eds.) 2007. *The World of Organic Agriculture: Statistics and Emerging Trends*. FiBL. Frick. Switzerland. ISBN FiBL 978-03736-001-9. (Work Package 4 Deliverable D4.9 (R)).

Susanne Møller Andersen, Tine Breinholt and Henrik Egelyng 2007. A Developmental Role for SME's: a *Globalising Market for Certified Organics*. Paper presented to the Danish Development Days, *DDD session on Small and Medium Sized Enterprises*. Eigtveds Pakhus, June 11 2007. (P). Available from [www.um.dk](http://www.um.dk).

Niels Kærgård, Martin Magelund Rasmussen og Henrik Egelyng. 2007. At måle udvikling: hvordan økonomer måler nytte, bæredygtighed og lykke. Den Ny Verden - Tidsskrift for internationale studier 2007:1. Dansk Institut for Internationale Studier (DIIS). ISBN: 978-87-7605-220-1. Work Package 4 Deliverable D4.2 (P)).

Egelyng, Henrik. 2007. Udviklingens metermål: fra omsætningsvækst til ægte fremskridt? Den Ny Verden - Tidsskrift for internationale studier 2007:1. Dansk Institut for Internationale Studier (DIIS). ISBN: 978-87-7605-220-1. Work Package 4 Deliverable D4.2 (P)).

Egelyng, Henrik. 2007 (submitted). Kina Spiser Grønt. Den Ny Verden - Tidsskrift for internationale studier. Dansk Institut for Internationale Studier (DIIS). København. (Work Package 4 Deliverable D4.10 (P)).

## 2. Other products (oral presentations, public meetings, field days, etc.)

Henning Høgh Jensen (2007) Crop Diversity and Nutrition. Oral Presentation at "Food Security Programme Officer Course 26 June 2007 in Roskilde" for DanChurch Aid.

Henning Høgh Jensen (2007) Do we ask the right questions in climate change and natural resource management ? Oral Presentation at the Danida Development Days 11-13 June: Key Issues in Poverty Reduction. Ministry of Foreign Affairs, Eigtved Pakhus, Copenhagen.

\*\* Henning Høgh Jensen (2007) IAT modelling workshop of integrated agricultural systems. LIFE, 2007. Organising for 25 participants with two facilitators from CSIRO, Australia.

- Henning Høgh Jensen (2007) Internationalisation of NRM education and research activities at Copenhagen University - links to APSRU. Oral presentation at CSIRO, Toowoomba, 31 January 2007. 15 participants.

•  
Henning Høgh Jensen and Lene Sigsgaard (2006) Organic Agriculture in Development - The need for integrated production for food security. Conference organized at the University of Copenhagen, Institute of Geography, 24. November 2006. 75 participants.

Henning Høgh Jensen (2006) Er økologi svaret på Afrikas sultproblemer? Foredrag i Økologisk Forum på KVL, fredag den 31. August 2006 kl. 17-20.

Henning Høgh Jensen (2006) Bt-Bomuld og udvikling. P1 Miljømagasinet, DR. Fredag den 18. August 14.45-15.30 og igen søndag den 20. august 12.45-13.30.

Egelyng, Henrik, QIAO Yu Hui and Luping Li. 2006. The Institutional Environment for Certified Organic Agriculture in China: A review, some landscaping and a framework agenda for more analysis. Oral (Luping Li) PowerPoint presentation (Henrik Egelyng) to the International Conference on "Challenges Facing Chinese Agriculture and the West Development Strategy", Yangling, Shaanxi, China, July 6-7 2006. (Work Package 4 Deliverable D4.2 (C))\*.

Egelyng, Henrik. 2006. Glocalisation of Organic Agriculture: Options for Countries in the South? Oral and PowerPoint presentation to the Conference on Place, Taste, and Sustenance: The Social Spaces of Food and Agriculture, Boston University, June 7 – June 11, 2006 (session 5:8). (Work Package 4 Deliverable D4.1 (C))\*.

Egelyng, Henrik. 2006. Økologisk mad som udviklingsvej - i globalt perspektiv. Oral and PowerPoint. Presentation, Danish Institute for International Studies, Copenhagen. 5th September 2006.

Egelyng, Henrik. 2006. Hele Kloden Økologisk? Oral and PowerPoint. Presentation to KU LIFE (natural resource) students. Frederiksberg, 10th October 2006.\*

Egelyng, Henrik. 2006. Measuring Sustainable Development: A Brief Discussion - and a view to Agricultural Policies on Certified Organics in a Globalizing Context. Oral and PowerPoint presentation to a 2006 Conference of Development Researchers: "Breaking New Ground: Development Research 2005-2015 and beyond. Copenhagen Business School (CBS). May 10-11th 2006. (Work Package 4 Deliverable D4.7 (C))\*.

Susanne Møller Andersen, Tine Breinholt and Henrik Egelyng 2007. A Developmental Role for SME's: *a Globalising Market for Certified Organics*. Oral (PowerPoint) presentation to the Danish Development Days, DDD session on Small and Medium Sized Enterprises. Eigtveds Pakhus, June 11 2007 (C).

\* 25-75% financed by DARCOF

\*\* 5-25% financed by DARCOF

## F. Scientific education

A total of four MSc students from the MSc study programme in “Agricultural Development” at LIFE have been associated with the project. They have worked in four different countries (China, Vietnam, Uganda, and Brazil).

In addition, two MSc students from partner universities are involved in data collection in China and Brazil. The data collection will form part of the data they will generate in their thesis work.

Three PhD students are directly employed by the project, see participants list; two in Denmark and one in Egypt. All three enrolled at LIFE. In addition, a Chinese PhD Yuexian Liu student is associated with the programme with support from the China Scholarship Council. Finally, a Danish PhD student is associated with the programme with a full scholarship from LIFE. Thus, the project expects to generate the frame for a total of five PhD thesis' work.

Henrik Egelyng co-supervises a KU LIFE (Agricultural Development) Master student Elsebeth Dam Nordlund, who is affiliated to GLOBALORG, writing her thesis (related to GLOBALORG work package 4) and who did her internship in Brazil, arranged through GLOBALORG work package 4.

## G. National and international cooperation

Close cooperation and networking between Assistant professor Paul Rye Kledal Institute of Food and Resource Economics, Copenhagen University - Supagro/Inra in France/Montpellier with professor Lucie Sirieix - and professor Lucimar de Abreu working at EMBRAPA in Brazil/Campinas in Saõ Paulo State on the consumer studies. The cooperation has so far resulted in two conference papers in 2007, and the work will be continued in November concerning consumer studies in Egypt as well as be extended in Brazil in the beginning of 2008 concerning setting up a Ph.D. plan for investigating supermarket expansion and strategies related to organic food products. There has also been cooperation with Dr. Xi Yunguan, director of Organic Food Research and Consulting Centre at Nanjing Institute of Environmental Sciences on data recording on Chinese organic sector and export (see paper 11246: Organic food and farming in China).

Participation in a Meeting (30 May 2007) called by DARCOF on the new Danish synthesis on growth, development and integrity in the Danish Organic Sector. Invited as member of working group on market creation and globalisation. Consultations with Danish colleagues Dr. Daugbjerg (University of Aarhus) and Dr. Michelsen (University of Southern Denmark), on the desirability of contributing a joint Book Chapter on the institutional framework serving as foundation for the organic market. The proposal was forwarded to DARCOF on 18<sup>th</sup> June 2007.

Input during summer of 2007 to the Danish (Danish Language) Africa Strategy. The new (2007) Danish Strategy for Africa (now published and available from [www.um.dk](http://www.um.dk)) reads (on page 16, in Danish): “Regeringen vil:” [] “Arbejde for, at miljöhensyn, bæredygtig anvendelse af naturgrundlaget og forebyggelse af naturkatastrofer indarbejdes i afrikanske landes politikker og fattigdomsstrategier og undersøge mulighederne for at fremme f.eks. økologisk landbrug, herunder også som eksportmulighed, med udgangspunkt i den forskning og ekspertise, der findes på området”. (Regeringen. 2007. Danmark i Afrika - et kontinent på vej: regeringens prioriteter for samarbejdet med afrika syd for sahara. Udenrigsministeriet, København).

Interviewed by Miljømagasinet, Danmarks Radio P1, 1. December 2006, and participated in the workshop “Organic Agriculture in Development”, held in Copenhagen on 24. November 2006. The programme is available on: <http://dr.dk/P1/Miljoemagasinet/Udsendelser/2006/11/30130349.htm>.

In Brazil, Work Package 4 initiated collaboration with Universidade Federal Rural do Rio de Janeiro (Dr. John Wilkinson) and Empresa de Pesquisa Agropecuária do Estado do Rio de Janeiro (Dr. Maria Fernanda FONSECA).

In China, Work Package 4 initiated collaboration with the Organic Food Development Center (Prof. Xingji Xiao and Dr. Xi Yunguan) and the Chinese Center for Agricultural Policy (Prof. Dr. Jikun Huang, Dr. and Dr. Luping Li). In addition, collaboration was undertaken with the Chinese Agricultural Univer-

sity (Dr. Qiao Yu Hui).

In WP 2 and 3 there is collaboration with CAU in China, Embrapa in Brazil and CLOA in Egypt regarding field surveys in the selected organic food chains. This is an important aspect of the project setup and has taken considerable effort to establish. Formal contracts have been established which foresees joint publication of results and participation of at least one researcher from each country at a project meeting in relation to to ISOFAR conference in Modena 2008

In Egypt, Work Package 4, in addition to the projects collaboration with the Central Laboratory for Organic Agriculture (CLOA), Dr. El-Araby and Sherif, WP4 scheduled visits and workshops with local researchers and planned visits to certification bodies such as Egyptian Center for Organic Agriculture and Organic Agriculture in Egypt (EOCA and COAE), as well as administrators and policy-makers. WP4 also works with Dr. Salwa Dogheim, working out of the Central Laboratory of Residue Analysis of Pesticides and Heavy Metals in Food.

In Eastern Africa WP4 undertakes explorative research, initially through fact finding, overview and review activities initially primarily in collaboration with international organisations (UNCTAD, meeting with Dr. Twarog), (FAO Kenya, Deborah Duveskog) planned re-visit to ILRI (Carlos Seré, Annita Tipilda), in preparation for GLOBALORG settling the question of which East African country to work with jointly.

In terms of global collaboration, the WP 4 Lead Scientist (Dr. Egelyng) - with backing from WP3 Lead Scientist (Dr. Halberg) and WP 2 Lead Scientist (Dr. Høgh-Jensen) – actively contributed to the 2006-2007 International Assessment of Agricultural Science and Technology for Development or IAASTD (See [www.agassessment.org](http://www.agassessment.org)). The report of IAASTD will be published in 2008.

In 2007, the WP 4 Lead Scientist (Dr. Egelyng) joined the Board of the Danish Development Research Network (DDRN) and subsequently advised on the establishment of a DDRN Working Group: Organic Agriculture for Sustainable Development (OASD).

Also in 2007 (March), WP 4 Lead Scientist (Dr. Egelyng) assisted the Ministry of Foreign Affairs (Danida) in programming for Danish Development Days or DDD (2007). He also drafted a paper - *A Developmental Role for SME's: a Globalising Market for Certified Organics - for presentation at the DDD session on Small and Medium Sized Enterprises* for oral presentation.

In 2006 (summer) Esbern Friis-Hansen (DIIS), through the "old" agriculture related research network then known as NETARD, supported an initiative that lead to a 2006 workshop on Organic Agriculture in Development.

Participated in a joint application seeking funds from the GATES foundation to support an expansion of GLOBALORG to include funding of non-danish researchers and additional countries. The application, unfortunately, did not result in any funding from GATES.

## H. Critical reflection on the project

The planning for a quick employment in the announced PhD positions turned out to be naïve. This condition may however reflect an academic job market where international recruitment is needed to get qualified applicants.

The integration of data in a modelling approach has proven to be a major challenge. The only group who works with such an approach so far (Brisbane, Australia) are very interested in future collaboration but the tool is yet fairly basic. However, exactly this very practical approach that this group has taken may be the only way forward to integrate the large amount of data that is being and will be generated. This just shows that cross-disciplinary research may prove more difficult than anticipated because basic research tools are yet to be developed.

The project, and in particular the Work Programme II, is critically sensitive to the identification of the right partners and the establishment of proper working relations. Despite the presence of a broad international network in the project group, this still was a major task for the first period of the project. As PhD students are involved in the project, this has been a topic of major concern until now. However,

gradually the partnerships have been established and mutual trust developed. Administrative procedures have seriously delayed field studies especially in Brazil, but good personal relations to local researchers have secured initial data recording.

The domestic organic procurement systems in Shanghai did not directly involve smallholder farmers. This discovery has put the question of the type property rights regimes up front when analyses are going to take place in Brazil and Egypt. Different property rights regimes will lead to different firm and production chain organizations each trying to minimize transaction costs. When starting to compare the different case areas/countries the question of property rights will be of importance in explaining the various outcomes in the organic production chains.

Work Package four (WP4) had a very good and productive start in its first 18 month, but may now have to concentrate on deepening the collaborations already established and using the preliminary data collected to further strengthen and refine its analytical framework as well as adding further data, with a view to consistency and comparative analysis across case countries. This is, therefore, what WP4 will be pursuing, ahead.

A contributing factor to the positive “environment” or framework condition for WP4 has been that 2006 has seen a globally emerging change of attitude as far as the role of organic agriculture in development is concerned. (The 2005 DARCOF knowledge synthesis and the CABI publication (Halberg et al 2006) may have helped in bringing about this emerging change, - and a handful internationally published books on global organic agriculture – also including Lockie et al 2006, Kristiansen et al 2006 and others – is indicative of this “turn” of tide).

The project as a whole – perhaps because it provides a cross-cutting and interdisciplinary research agenda which is broadly appealing in terms of policy relevance – has served as a good platform for invoking the interest of policy makers in international organisations, in case countries as well as in the Danish international policy community.

## B. Budget for the whole project (1.000 DKK)

Total consumption of funds from DARCOF and expected consumption this year and coming years

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	163	17	43,75	51,25	50,5	4	166,5
Technical personnel	5	1,5	1,5	1,5	0,5		5

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	6295	691	1464	2027	1983	130	6295
Technical personnel	149	44	45	43	17		149
Other operational costs	1807	128	433	681	565		1807
Equipment	200	22	58	60	60		200
Others (please specify)	942	92	326	400	124		942
Direct costs	9393	977	2326	3211	2749	130	9393
Indirect costs (20% of direct costs)	1878	196	465	641	550	26	1878
Total	11271	1173	2791	3852	3299	156	11271

### Comments:

## 8. Signatures and stamps

Name	Institute	Date	Signature
Head of project			

---

## Appendix I. Detailed budget

### A. Budget for each participating institute (1.000 DKr)

Name of Institute and department: Faculty of Agricultural Sciences  
Department of Agroecology and Environment

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	59	6	13	18	18	4	59
Technical personnel	5	1,5	1,5	1,5	0,5		5

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	2320	291	496	711	692	130	2320
Technical personnel	149	44	45	43	17		149
Other operational costs	383	36	168	114	65		383
Equipment							
Others (please specify)	441		217	224			441
Direct costs	3293	371	926	1092	774	130	3293
Indirect costs (20% of direct costs)	659	74	186	218	155	26	659
Total	3952	445	1112	1310	929	156	3952

**Comments:**

Name of Institute and department: Copenhagen University  
Institute of Food and Resource Economics

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	36	3	12	12	11		38
Technical personnel							

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	1666	112	364	610	580		1666
Technical personnel							
Other operational costs *)	650		70	300	280		650
Equipment	200	22	58	60	60		200
Others (please specify)							
Direct costs	2516	134	492	970	920		2516
Indirect costs (20% of direct costs)	503	27	98	194	184		503
Total	3019	161	590	1164	1104		3019

**Comments:**

**\*) Other operational costs include in 2007 the implementation of data collection on organic procurement systems in Brazil in the State of São Paulo destined for both domestic and export. Likewise consumer studies in selected urban areas of Cairo will commence in November, as well as in-depth analysis of the organization of organic production chains in Egypt will take place. From 2008 and 2009 other operational costs include mainly the implementation of a Ph.D. student focusing on supermarket expansion and strategies concerning organic food products, as well as comparative studies on supermarket strategies on organic foods in China and Egypt.**

Name of Institute and Department: **Copenhagen University**  
**KU-Life**

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	44	3	12,75	12,75	15,5		44
Technical personnel							

Year:	Original budget	Consumption 2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	1254	80	354	354	466		1254
Technical personnel							
Other operational costs	510	28	132	200	150		510
Equipment							0
Others (please specify)	301	85	59	83	74		301
Direct costs	2065	193	545	637	690		2065
Indirect costs (20% of direct costs)	413	39	109	127	138		413
Total	2478	232	654	764	828		2478

**Comments:**

Name of Institute and department: Danish Institute for International Studies  
Department of Development Research

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	27	5	6	8,5	6		25,5
Technical personnel							

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	1055	208	250	352	245		1055
Technical personnel							
Other operational costs	264	64	63	67	70		264
Equipment							
Others (please specify)	200	7	50	93	50		200
Direct costs	1519	279	363	512	365		1519
Indirect costs (20% of direct costs)	303	56	72	102	73		303
Total	1822	335	435	614	438		1822

**Comments:**

**B. Budget for each participating department (1.000 DKK)**

Name of Institute and department:

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel							
Technical personnel							

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel							
Technical personnel							
Other operational costs							
Equipment							
Others (please specify)							
Direct costs							
Indirect costs (20% of direct costs)							
Total							

Comments:

### C. Budget for co-financing from each participating institute (1.000 DKK)

Name of Institute and department: Copenhagen University  
Institute of Food and Resource Economics

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	4	1	1	1	1		4
Technical personnel							

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	201	49	49	51	52		201
Technical personnel							
Other operational costs							
Equipment							
Others (please specify)							
Direct costs	201	49	49	51	52		201
Indirect costs (20% of direct costs)	40	9	10	10	11		40
Total	241	58	59	61	63		241

#### Comments:

\*) Other operational costs include in 2007 the implementation of data collection on organic procurement systems in Brazil in the State of São Paulo destined for both domestic and export. Likewise consumer studies in selected urban areas of Cairo will commence in November, as well as in-depth analysis of the organization of organic production chains in Egypt will take place. From 2008 and 2009 other operational costs include mainly the implementation of a Ph.D. student focusing on supermarket expansion and strategies concerning organic food products, as well as comparative studies on supermarket strategies on organic foods in China and Egypt.

Name of Institute and department: Copenhagen University  
KU-Life

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	8	3	2	2	1		8
Technical personnel							

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	360	135	90	90	45		360
Technical personnel							
Other operational costs							
Equipment							
Others (please specify)							
Direct costs	360	135	90	90	45		360
Indirect costs (20% of direct costs)	72	27	18	18	9		72
Total	432	162	108	108	54		432

**Comments:**

Name of Institute and department: Danish Institute for International Studies  
Department of Development Research

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Man-months							
Scientific personnel	8	2	2	2	2		8
Technical personnel							

Year:	Original budget	Consumption 2005/2006	Expected consumption 2007	2008	2009	2010	Total
Salaries							
Scientific personnel	400	100	102	104	106		412
Technical personnel							
Other operational costs							
Equipment							
Others (please specify)							
Direct costs	400	100	102	104	106		412
Indirect costs (20% of direct costs)	80	20	20	21	21		82
Total	480	120	122	125	127		494

**Comments:**