



## **Midterm Status Report 2002 and Application for Continuation in 2003**

For research projects financed by grants from  
The Directorate for Food, Fisheries and Agro Business  
under the Danish Ministry of Food, Agriculture and Fisheries

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### **1. Research program**

Research in organic farming 2000-2005 (DARCOF II)

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### **2. Project title and number**

V Co-ordination, synergy and education – increasing the width and depth of research in organic farming

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### **3. Head of project**

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### **4. Participating institutes**

All institutes in DARCOF

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### **5. Other project staff**

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## 6. Project period (month, year)

Start of project: 2000  
End of project: 2005

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## 7. Midterm description of the project, its results and progress, and application for continuation in 2003

### A. Project summary

The Danish Research Centre for Organic Farming (DARCOF) is a "centre without walls", which is to say that the researchers remain in their own research environment but collaborate across institutes. The overall remit is to coordinate Danish R&D for organic farming, with a view to achieving optimum benefit from the allocated resources.

The specific objectives of the SYNERGY project are to secure the continued interdisciplinary development of Danish research in organic farming and to explore the many possibilities of synergy in DARCOF II.

In relation to these objectives, the assignments of SYNERGY are to:

- Co-ordinate, evaluate and manage DARCOF II as a whole
- Analyse, discuss and synthesis knowledge across research projects and disciplines
- Develop research methodology and investigate values associated with organic farming
- Contribute to the education of research scientists involved in the DARCOF II
- Communicate the research findings to the organic farming community and society in general
- Contribute to international co-operation and communication

In this way the project intends to secure the completion of the overall objectives of the programme; namely to contribute to increased production, and closer relationships between organic and inherent qualities in organic farming.

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

No.	Work package title	Participants*	Budget (1.000 DKK)	Start	End	Deliverable no(s):
1	Co-ordination, evaluation and management of the whole programme	Erik Steen Kristensen	1.900	2000	2005	D1-D2
2	Synthesis of knowledge	Erik Steen Kristensen	5.300	2000	2004	D3-D4
3	Systems research methodology and value inquiry	Hugo Fjelsted Alrøe	900	2000	2004	D5-D9
4	Education of postgraduate students (Ph.D.'s)	Erik Steen Kristensen	7.800	2000	2005	D10
5	National communication and mediation	Claus Bo Andreassen	2.400	2000	2005	D11-D31
6	International co-operation and communication	Claus Bo Andreassen	2.000	2002	2005	D32-D40

## B. Objectives and expected achievements

The overall objective of DARCOF II is to contribute to increased production, and closer relationships between organic and inherent qualities.

The principal objectives of this project is thus to

- I exploit a unique opportunity to synthesise and communicate relevant scientific information across traditional scientific boundaries and disciplines, and to
  - II improve both the width and depth of research in organic farming
- The objective of the individual WP's:

- WP1:** To coordinate, evaluate and manage all research projects in accordance with the overall objectives of the whole programme, to produce knowledge that can be promoted into increased production and closer relationships between organic and inherent qualities of organic foods.
- WP2:** Synthesise information on complex and relevant problems in organic farming in order to:
- a) analyse different aspects of the transition from conventional to organic farming
  - b) identify areas where new research is most needed, and
  - c) clarify complex problems
- WP3:** To establish a general framework (a "research paradigm") for research in organic agriculture, involving systems research methodology and value inquiry, in order to:
- a) promote co-ordination and collaboration between different research groups and disciplines (WP1)
  - b) facilitate the elaboration of conceptual models for synthesis of knowledge (WP2) and communication (WP5 and WP6)
  - c) investigate and clarify the interplay of values and facts in research and practice
- WP4:** Contribute to the postgraduate education of ph.d.-students and researchers in the disciplines and research areas of greatest relevance to organic farming.
- WP5:**
- a. To strengthen the interdisciplinary research and contribute to synergy through increased collaboration between between research groups and institutes dealing with organic agriculture
  - b. To ensure mediation to to the organic sector and to strengthen the relevance and the holistic perspectives through increased collaboration with the users of research in organic farming
  - c. To employ the synergy of research knowledge resource purpose etc. in both organic and sustainable agriculture
- WP6:**
- a. Contribute to international exchange of research results in organic farming
  - b. Secure that the Danish research in organic farming is at a high international level
  - c. Improve knowledge about the EU research programme system and contribute to development of international research co-operation in organic farming.

## C. Midterm results and progress. Description (summary) of main results and conclusions

### WP1. Co-ordination, evaluation and management

23 research projects that was initiated and granted in 2000 have all started up and progressing quite well. In two projects (I.3 and I.2) supplementary WP's was granted in spring 2001 in order to fulfil further targets. At the same time more resources were allocated to knowledge synthesis (WP2, 2.000 KKr) and education (WP4, 5.000 KKr.) in this project. According to this the name of the project has been changed to " Synergy, co-ordination and Education".

In spring 2001 6 new proposals has been prepared and granted by the Food Ministry. Also these projects are well initiated. At the end of October 2001 there are totally 30 projects and with a total budget on 170 mill. DKr. established in DARCOF II.

In autumn 2001 and spring 2002 14 complementary projects has been prepared and granted by the Ministry of Food, and at the end of September 2002 there are totally 43 projects with a total budget on 227 mill. DKK. In May-June 2002 all projects established in 2000 and 2001 were visited by 1-3 persons from the secretary.

<b>WP1: Co-ordination, evaluation and management</b>	Time schedule according to application	Deviations, if any*
<b>Deliverables</b>		
D1 Holding annual status meetings in November each year	November 2000 and 2001	Evaluated in written procedure and individual visits
D2 The progress and results of DARCOF II will be described through annual status reports	November 2000, 2001, 2002	✓
<b>Milestones</b>		
M1 95% of projects in DARCOF II has been initiated	December 2001	✓
M2 The status reports have been accepted	March 2001, March 2002	✓

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

## WP2 Syntheses of knowledge

The results of the 3 knowledge synthesis initiated in 2000 (task 1, 2 and 3) has been published in FØJO reports no. 8, 9, and 14. These results has been very valuable in the establishments of the new research projects in DARCOF II. Preliminary results from task 6 and 7 has been very help full in preparing the new research programme on organic GMO-free seed. The results has been published in FØJO-report no. 15 and 16. In June 2002 task 5 was initiated. Project description appears at [www.okoforsk.dk](http://www.okoforsk.dk).

<b>WP2: Synthesis of knowledge</b>	Time schedule according to application	Deviations, if any*
<b>Tasks</b>		
1: Regional protection of groundwater with organic farming	Jan.-Oct. 2000	✓
2: Organic food and human health	Jan. 2000-Jan. 2001	✓
3: Organic pig production – animal health and welfare	Apr.-Oct. 2000	✓
4: Nature quality in organic farming, on local an regional levels	Apr.-Oct. 2000	✓
5: Energy use in organic farming	Nov. 2001 Nov. 2002	June 2002 – May 2003
6: Organic plant-breeding	Nov. 2000 Nov. 2001	✓
7: Consequence of GMO for organic farming	Jan. 2001 Nov. 2001	✓
<b>Deliverable</b>		
3: DARCOF reports has been delivered for task 1, 3 and 4	Dec. 2000	✓
4: DARCOF reports has been delivered for task 6 and 7	Dec. 2001	Dec. 2001, May 2002
<b>Milestones</b>		
M3 Areas where new research is most needed has been identified in task 1, 2, 3 and 4	Oct. 2000	✓
M4 Areas where new research is most needed has been identified in task 6 and 7	Sept. 2001	✓

### **Wp3 Systems research methodology and value inquiry**

The discussion on value inquiries was initiated, when the DARCOF secretariat in November 2000 prepared a discussion paper to the user committee of DARCOF. There has been a high interest in these questions (see WP5) and the Danish discussion has also been presented at international conferences.

There is ongoing work on the further development of systems theories in agricultural research in cooperation with, in particular, Egon Noe (Dept. of Agricultural Systems, DIAS) and Chris Kjeldsen (Aalborg University). The development of the concept and practice of animal welfare in organic farming is done in cooperation with Mette Vaarst (Dept. of Animal Health and Welfare, DIAS), Henk Verhoog (Louis Bolk Institute, Holland) and Vonne Lund (Dept. of Animal Environment and Health, Swedish University of Agricultural Sciences). The development of the concept of nature quality in organic farming has continued in cooperation with Knud Tybirk and Pia Frederiksen (National Environmental Research Institute, Denmark).

The more theoretical work is being implemented by us and by others. The procedures for the midterm evaluation of DARCOF II in 2002 have been adjusted to reflect the work done on systemic research methodology - a new section on critical reflection has been added to the status report and reflexive objectivity has been included as one of the criteria for evaluation. In DARCOF II project I.7, Per Schjønning (Dep. of Crop Physiology and Soil Science, DIAS) is - together with colleagues Susanne Elmholt and Bent T. Christensen - currently editing an international book on soil quality as related to the major challenges in modern agriculture. The directing chapter, authored by the editors, utilizes the key concepts from the work on systemic research methodology. DARCOF project III.9, led by Jan H. Ingemann (Aalborg University), has taken up the three organic principles and used them as a basis for their work on the possible mismatch between principles and practice. Hugo Alrøe has been included in the Delphi expert panel of that project. A widespread discussion of the organic principles was initiated in Denmark when the DARCOF secretariat in November 2000 prepared a discussion paper to the user committee of DARCOF. The discussion on organic principles is now taken up by other countries.

The work in this work package has been presented in national and international fora (see the publications list), and the researchers involved are often invited to speak and teach on the subjects of systemic research and organic principles. Invitations for future presentations include research seminars on systemic research in Finland, December 2002, and in Holland, May 2003; seminars on organic principles in Holland and Denmark, November 2002; and teaching on systemic research in Holland, November 2002.

Lately, much work has gone into establishing an electronic archive for papers related to organic agriculture, called Organic Eprints ([www.orgprints.org](http://www.orgprints.org)) as a very practical implementation of research methodology in its widest sense. The archive was opened for deposits in October 2002, in connection with the midterm evaluation. In the SYNERGY project, the archive can contribute to WP1 by way of documenting the production in individual projects; to WP3 by way of providing an international electronic forum for dialogue on research methodology and values; to WP4 by making new research results immediately available to present and future Ph.D. students; to WP5 by way of making it possible for different kinds of users to keep up to date on what goes on in their field of interest; and to WP.6 by way of allowing institutes and individual researchers to make their research papers easily available to an international audience and by way allowing for peer comments on individual papers.

<b>WP3: Systems research methodology and value inquiry</b>	Time schedule according to application	Deviations, if any*
<i>Deliverable</i>		
<b>D5</b> Contributing to report on follow-up workshop on research methodology in organic farming	2002-2003	(✓)
<b>D6</b> Contributing to report on the knowledge synthesis "Quality of nature in organic farming"	2001	✓
<b>D7</b> Writing and submitting one or more international papers each year	2001-2004	✓
<b>D8</b> Writing or contributing to Danish papers on DARCOF activities involving systems research methodology and value inquiry	2002-2004	✓
<b>D9</b> Establishing an international electronic forum for dialogue on systems research methodology and value inquiry in agricultural research	2003-2004	(✓)
<i>Milestones</i>		
<b>M6</b> Presentation of a general framework (a "research paradigm") for research in organic agriculture	2004	

#### **WP4 Education of post graduate students (Ph.D.'s)**

Year 2001 was busy in making a procedure for evaluation and selection of the most qualified candidates within the most relevant topics. In order to be able to stimulate the maximum no. of Ph.D.-students and at the same time cover as many topics as possible it has been decided to offer shared cost scholarships. Most scholarships are supported by 375.00 Dkr. per scholarship.

At present 13 Ph.D. projects has been established and another 8 is under establishment: the progress reports for the students co-financed by DARCOF can be seen at [www.soar.dk](http://www.soar.dk):

Bea Nielsen	Produktion af økologisk oksekød
Lisbeth Mogensen	Foderforsyning og mælkeproduktion ved 100% hjemmeavlet økologisk foder til malkekøer
Rikke Klith Jensen	The effects of crop competition and repeated shoot growth inhibition on Canada thistle ( <i>Cirsium arvense</i> (L.) Scop.) re-growth, competitiveness and spatial dispersal:
Elisabeth Christine Fossing	Anvendelse af alternativ behandling i økologiske malkekvægsbedrifter med særlig fokus på virkning af veterinær homøopati på yversundhed
Martin Nørgård Hansen	Technology for reduction of nitrogen loss and environmental effects of solid manure systems
Bjørn Molt Petersen	Modellering af kvælstofomsætningen på landbrugsbedrifter med særlig fokus på udvaskning fra konventionelle landbrugsbedrifter med særlig fokus på udvaskningen fra konventionelle og økologiske brug
Dorte Bodin Bick-Nielsen	Optimering af dyrkningsmedier til økologiske væksthuskulturer
Dorthe Ilsøe	Fremtidens forbrugerkrav til den økologiske sektor
Helena Mejer	Management og alternative afgrøder som et middel til at reducere parasitbelastningen i økologiske svineproduktionssystemer
Mette Thyme	Produktion af N <sub>2</sub> O i kløvergræs
Gregor Levin	Landskabsforandringer under økologisk jordbrug – hvorvidt og hvorfor?
Chris Kjeldsen	Økologiske fødevarenetværk og bæredygtig udvikling
Paul Rye Kledal	Produktions- og afsætningsvilkår i den økologiske fødevarekæde

During the summer 2001 the Research School for Organic Agriculture and Food Systems (SOAR) was established with a base at The Royal Veterinary and Agricultural University. DARCOF is supporting SOAR and all the Ph.D.-students has an obligation to take part in SOAR.

<b>WP4: Education of postgraduate students (Ph.D.'s)</b>	Time schedule according to application	Deviations, if any*
<i>Tasks</i>		
11 Initiate and contribute financially to postgraduate education in co-operation with relevant Danish research environments	2001-2002	✓
<i>Deliverable</i>		
<b>D10</b> Descriptions of Ph.D. scholarship	2001-2002	✓
<i>Milestones</i>		
<b>M7</b> Announcement and assignment of Ph.D. scholarships	2001-2002	✓
<b>M8</b> Approval of Ph.D. degrees	2003-2004	

## **WP5 Communication and mediation**

Task 12 -15

Work on securing high levels of communication internal between institutes and research groups and externally between research and the various users groups are continuing. Preliminary steps, which shall improve the Danish research's participating in international co-operation, have been taken. In the following it is described how the individual task contributes to the objectives of the work packages and the programme as a whole.

<b>WP5: Communication and mediation</b>	<b>Remarks</b>
Task 12: International research communication	Task 12 is together with D11 - D16 moved to the new WP6
Task 13: Internal communication	See D17 - D19
Task 14: Mediation and external communication	See D20 - D30
Task 15: Policy advice etc.	See D31
<i>Deliverable</i>	
<b>D11 - D16</b>	These deliveries have been moved to WP6
<b>D17</b> Internal newsletter aimed at researchers, institutes and organisations participating in DARCOF	8 issues issued in 2001 7 in 2002
<b>D18</b> Internal workshops, seminars etc. aimed on development of research and collaboration between research groups	No internal seminars in 2001 Midterm evaluation 23 October 2002
<b>D19</b> Developing DARCOF's internet communication to support internal communication	The site okoforsk established may 2002
<b>D20</b> Publishing reports, which intend to synthesis and mediate research in organic agriculture	10 major reports together with a number of proceedings
<b>D21</b> External newsletter on new research results, new projects, new publications, meetings, workshops etc.	5 issues
<b>D22</b> Initiating seminars etc. to give researchers, farmers, advisers etc. possibilities to discuss ongoing and future research	In 2001 four national meetings has been conducted. DARCOF participates in the conduction of the national organic congress in November 2002 in Odense

<b>D23</b> Holding field demonstrations to present ongoing research activities to farmers, advisers etc.	6 field walks /demonstrations with app. 700 participants 2001, 2002
<b>D24</b> Research information on organic agriculture in Danish agricultural magazines	Monthly articles in 5 national magazines
<b>D25</b> Annual reports giving an overall view on research in organic agriculture	A biannual report are available together with a Danish version of this status report edited for Danish research users
<b>D26</b> Information materials giving an introduction to the overall research and specific projects	Information materials are available
<b>D27</b> Increasing its activities on the Internet to improve possibilities for seeking information about research in organic agriculture	A new site has been constructed
<b>D28</b> Re-establishing DARCOF's travelling exhibition in order to provide information about research in organic farming at agricultural shows, environmental congresses etc.	Posters on the individual project has been made
<b>D29</b> Disseminating knowledge about organic agriculture in newspapers, electronic media etc.	Two TV-productions 30 min. each on research in organic farming has been sent on the national Danish TV
<b>D30</b> Offering "communication services" to participating research groups.	Done on a routine basis
<b>D31</b> Contributing to national and European investigations and distanglements in connection with preparation of policies for agriculture and environment	Among others, DARCOF has contributed to distanglements on principles for organic farming, food safety

## WP6 International research co-operation

At the beginning of year 2002 it was decided to get more focus on international research co-operation in order to contribute to international exchange and research in organic farming and to secure that the Danish research is at a high international level. In the following it is described how the individual task contribute to this.

<b>WP6: International research co-operation</b>	<b>Remarks</b>
Task 16: International research communication	
Task 17: International evaluation of DARCOF II projects	
Task 18: The EU research system and international co-operation	
<i>Deliverable</i>	
<b>D32</b> Construction and develop the international internet site of DARCOF	✓
<b>D33</b> Regularly update the international internet site of DARCOF	August 2002
<b>D34</b> Publish an international newsletter (first no. June 2002, 4 times yearly)	Expected November 2002
<b>D35</b> Publish biannually DARCOF reports (July 2003, July 2005)	✓
<b>D36</b> Coordinate midterm international evaluation of DARCOF II projects (Nov. 2002)	✓
<b>D37</b> Make agreements of co-operation with EU partners and research institutes	Co-operation through expression of interest June 2002
<b>D38</b> Participate in or co-ordinate future EU proposals (at least one per year)	Participation in 3 concerted actions
<b>D39</b> Contribute in EU conferences on organic farming	September 2002, November 2002
<b>D40</b> Arrange international conferences and workshops	None in 2002



<i>Milestones</i>		
<b>M13</b>	International research societies has acknowledged the international internet site and newsletter (at least 500 subscriptions of the newsletter)	
<b>M14</b>	Alle Danish research projects have been evaluated and acknowledged by an international scientific panel (Feb. 2003)	
<b>M15</b>	DARCOF has obtained expert status and has made network contact to relevant persons in the EU System (at latest Jan 2004)	July 2002

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

In WP1, 2, 4, 5 and 6 there is no major changes according to plans of January 2002.

WP.3 started in 2001 and is progressing as it should. Several activities are contributing to the fulfilment of deliverable 5, as evident in the publications list. Establishing the first version of the Organic Eprints archive in October 2002 was an important step towards fulfilling deliverable 9. The publication of "Towards a systemic research methodology in agriculture" in 2002 goes a long way towards meeting milestone 6.

## E. Project publications and other products

### 1. Articles in international, scientific journals with review procedures

\*\*Alrøe, H.F. and Kristensen, E.S. (Submitted 2001). Towards a systemic ethic: In search of an ethical basis for sustainability and precaution. Forthcoming in Environmental Ethics.

\*\*Alrøe, H.F. and Kristensen, E.S. (2002) Towards a systemic research methodology in agriculture: Rethinking the role of values in science. Agriculture and Human Values 19(1): 3-23.

Chapter 2 in Vaarst, M. et al. (eds.) Animal health and welfare in organic Agriculture. From fraction to holistic action.

Hansen, B., Alrøe, H.F., Kristensen, E.S. & Wier, M. (Submitted 2002) Assessment of food safety in organic farming.

Tybirk, K., Frederiksen, P. & Alrøe, H.F. (Submitted 2002). Nature Quality in organic farming. Agriculture, Ecosystems and Environment.

Verhoog, H., Lund, V. Alrøe, H.F. & Vaarst, M. (Submitted 2002) Animal welfare, ethics and organic farming.

Kristensen, E. Steen & Thamsborg, S.M. 2002. Future European market for organic products from ruminants. EAAP publication no. 106: 5-15.

### 2. Presentations at congresses, symposiums etc.

Alrøe, H.F. (2001) Forsigtighedsprincippet – etiske aspekter og håndfaste konsekvenser. In: Ekologisk lantbruk, Ultuna 13 - 15 november 2001. Sammenfatninger av foredrag och postrar, pp. 237-41. Centrum for uthålligt lantbruk, Sverige.

Alrøe, H.F. (2001) Konsekvenser af økologisk omlægning – fødevareforsyning og fødevaresikkerhed. In: Ekologisk lantbruk, Ultuna 13 - 15 november 2001. Sammenfatninger av foredrag och postrar, pp. 102-106. Centrum for uthålligt lantbruk, Sverige.

- Alrøe, H.F. 2001. Research methodologies for organic farming. Introduction to the workshop Research methodologies for organic agriculture, NJF Seminar no. 327 "Urban areas - rural areas and recycling – The organic way forward? KVL, 20. - 21. August 2001.
- Alrøe, H.F. and Kristensen, E.S. (2002) Science as an actor. On the role of values and science in organic farming. In: Powell et al. (eds), UK Organic Research 2002: Proceedings of the COR Conference, 26-28th March 2002, Aberystwyth, pp. 97-100.
- Alrøe, H.F. and Kristensen, E.S. (2001) Values in organic farming and their implications. Paper presented at EurSafe 2001 - Third Congress of the European Society for Agricultural and Food Ethics, Florence, Italy, 3. - 5. October 2001, Preprints pp. 115-16.
- Alrøe, H.F. and Kristensen, E.S. 2001 Values in organic farming and their implications. Presentation at the workshop Organic farming, system thinking and the future, Wageningen International Conference Centre, 21. - 23. February 2001. (Abstract, 2 pp.) [Workshop webpage at <http://www.iac.wageningen-ur.nl/workshops/organicfarm.htm> with draft reader]
- Alrøe, H.F. and Kristensen, E.S. (2001) Values in organic farming and their implications. In: Preprints from EurSafe 2001 - Third Congress of the European Society for Agricultural and Food Ethics (ed. M. Pasquali), pp. 115-16. A&Q, University of Milan, Italy.
- Alrøe, Hugo Fjelsted and Kristensen, Erik Steen and Hansen, Birgitte (2002) Identifying the basic normative principles for organic farming. In Proceedings 14th IFOAM Organic World Congress, Victoria, Canada, Cultivating Communities, pages 281.
- Hansen, B. & Kristensen, E. Steen 2001. Grundvandsbeskyttelse ved økologisk jordbrug. I: Virkemidler i grundvandsbeskyttelsen. ATV, Jord og Grundvand. 61-70.
- Kristensen, E.S. 2001. Organic farming and food safety. Paper presented at FUNDISA International Symposium of Food Safety. October 25-26 2001, Madrid.
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- Kristensen, E.S. 2002. Research Co-operation in organic agriculture. Workshop at Wageningen Agricultural University, April 4<sup>th</sup> 2002.
- Kristensen, E. Steen, Alrøe, H.F. Food Safety in an Organic Perspective. In proceedings 14<sup>th</sup> IFOAM Organic World Congress, Cultivating Communities, Victoria, Canada. page 211.
- Noe, E. & Alrøe, H.F. (2002) Luhmann and Actor-Network Theory combined: Farm enterprises as self-organizing systems. Paper presented to RC51, Sociocybernetics, on the XVth ISA World Congress of Sociology, 7 – 13th July, 2002, Brisbane, Australia.
- Noe, E. & Alrøe, H.F. (2002) Farm enterprises as self-organizing systems: A new framework for studying farm enterprises? Paper presented to RC40, Sociology of agriculture and food, on the XVth ISA World Congress of Sociology, 7 – 13th July, 2002, Brisbane, Australia.
- Alrøe, Hugo Fjelsted and Kristensen, Erik Steen and Hansen, Birgitte (2002) Identifying the basic normative principles for organic farming. In Proceedings 14th IFOAM Organic World Congress, Victoria, Canada, Cultivating Communities, page 281.

### 3. Articles in agricultural journals etc.

- Alrøe, H.F. (2001) Miljøvurdering er mere end fakta. Kronik i Information, 20. december 2001, p. 8.
- Alrøe, H.F. (2001) Helhedsorienteret forskning i økologi. Global Økologi, 8(4): 9-13.
- Anonymous. 2001. Principper for økologisk jordbrug – Fødevarer sikkerhed i økologisk jordbrug. Notat udarbejdet til Det Økologiske Fødevareråd. Forskningscenter for Økologisk Jordbrug, Forum. 20 pp.
- Anonymous. 2001. Toårsrapport fra Forskningscenter for Økologisk Jordbrug. Forskningscenter for

Økologisk Jordbrug, Foulum.

- Anonymous. 2001. Principles of Organic Farming. Discussion document prepared for the DARCOF Users Committee. Danish Research Centre for Organic Farming, Foulum. 36 pp.
- Anonymous. 2001. Biennial Report from Danish Research Centre for Organic Farming, Foulum. 92 pp.
- Fredshavn, J., Tybirk, K. og Alrøe, H.F. (2001) Baggrund og formål med rapporten. In: *Naturkvalitet i økologisk jordbrug*, FØJO rapport nr. 9: 11-16. Forskningscenter for Økologisk Jordbrug, Foulum.
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- Hermansen, J.E. (Red.) 2000. Økologisk svineproduktion - udfordringer, muligheder og begrænsninger FØJO-rapport nr. 8. Forskningscenter for Økologisk Jordbrug, Foulum.
- Jensen, K.O., Larsen, H.N., Mølgaard, J.P., Andersen, J.O. Tingstad, A., Marckmann, P. & Astrup, A. 2001. Økologiske fødevarer og menneskets sundhed. FØJO-rapport nr. 14. Forskningscenter for Økologisk Jordbrug, Foulum.
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- Langer V. (Red.) 2001. Omlægning til økologisk jordbrug i et lokalområde. Scenarier for natur, miljø og produktion. FØJO-rapport nr. 12. Forskningscenter for Økologisk Jordbrug, Foulum.
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#### 4. Other presentations at meetings, field days etc.

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See WP5 for further information.

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## 8. Budget

### A. Account for any change in budgets

**Comments:**

More than half of the budget is reallocated to different projects/institutions in DARCOF. This course some uncertainty in the budget.

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

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

	Consumption before 2002	Expected consump. 2002	2003	2004	2005	Total
WP1	200	500	400	400	400	1.900
WP2	2.550	500	1.800	450	0	5.300
WP3	100	250	250	300	0	900
WP4	500	1.450	2.400	2.920	500	7.770
WP5	250	500	550	550	550	2.400
WP6	0	400	600	500	500	2.000
<b>Total</b>	<b>3.600</b>	<b>3.600</b>	<b>6.000</b>	<b>5.120</b>	<b>1.950</b>	<b>20.270</b>

**Comments:**

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## 9. Signatures and stamps

Name	Institute	Date	Signature
Head of project Erik Steen Kristensen	Forskningscenter for Økologisk Jordbrug		