

Evaluation of the Organic Farming Act no. 363 of June 10, 1987

*translated from:*

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# **Evaluation of the Organic Farming Act no. 363 of June 10, 1987**

## **1. Introduction – The Mandate and Foundation of the Evaluation**

In the present report, PLS Consult presents an evaluation of the Organic Farming Act no. 363 of June 10, 1987. The evaluation is prepared for the Directorate for Farming.

The primary objective is to assess, whether the Organic Farming Act has promoted the development of organic farming. Further, the evaluation is arranged in such a way that it will constitute a strategic basis for the decision-making in relation to future initiatives within the organic field.

The concrete objective of the evaluation is first to assess the effects of the in total 186 development projects which have been initiated under the Act from 1988 until July 1, 1992. Secondly, the evaluation have, through a random sample, to make clear the importance of the support for conversion, that is the support given for shifting from traditional to organic farming. The sample is made up of 100 organic farms, which in the period from 1987 to 1992 have changed from traditional to organic farming. The sample of 100 organic farms is made from a total number of 542 (registered as of May 1, 1992) receiving the support for conversion.

Both the development support (development projects) and the support for conversion have the objective to promote organic farming. The intention of the support for conversion is in particular to reduce the loss of income that will come when a farm goes from conventional to organic farming. The support for conversion is given by hectare, which is graduated depending on the number of animals by hectare.

The development support is given to projects that aim at meeting the specific troubles in the initial phase in connection to collecting, manufacturing, selling etc. organic products. Furthermore, the development support is given to producing educational and communication material, implementation of experimental production and other measures that have particular importance to the development of organic farming.

The evaluation has to specifically focus on the administration of the system and the interplay between the Directorate for Farming, the Council for Organic Farming and the users.

Further, an assessment of the officially recognized labelling system for organic, including biodynamic products forms part of the evaluation. In this evaluation organic farming is regarded as common description of farms that fulfil the state demands made on the ways of production and treatment of the products before being sold. Hence, the biodynamic farms are part of the organic ones.

Further, the established control arrangements of production, marketing, storage, transportation, distribution, labelling and retail sale of organic products are also assessed.

In addition to this, the evaluation will on the basis of a description of the organic farming's development notably analyse the effect of the development support and the support for conversion in relation to:

- The professionalization of the organic way of production and the agricultural sector
- The shift from traditional to organic production and the consequences for the stages of manufacturing and sale
- Distribution and marketing
- The creation of networks supporting the development of the organic way of production
- The information activities
- The counselling service
- The research and experiment activities

Finally, the evaluation will contain an analysis of the expected development both within sales opportunities for organic products as well as for the organic production in general.

All of the existing 186 development projects took part in the evaluation and it is therefore an overall analysis. In total interviews have been obtained with 169 responsible for the development projects corresponding to 91 per cent. Among the 100 organic farms chosen in the random sample there has been obtained interviews with 92 equivalent to a response rate of 92 per cent.

The evaluation also contains interviews with 56 conventional farmers. These interviews with representatives of conventional farming are used for comparing data from this group with those of the organic group of farmers.

On the basis of the cited response rates the consultancy finds that the evaluation gives a very certain and representative foundation for assessing the effects of the arrangement for subsidising.

The collecting of data is based on phone interviews with the responsible of the development projects, receivers of conversion support, and representatives of conventional farming.

Furthermore, interviews have been made with members of the Council for Organic Farming, representatives from national authorities that manage the initiatives pursuant to the Organic Farming Act (Directorate for Farming, Directorate for Plants and the Veterinary Directorate), representatives for organisations, associations with interest in organic farming, researchers and a large number of persons with knowledge on organic farming and experience with the Organic Farming Act.

Further, the evaluation goes through relevant written material, including summaries from meeting in the Council for Organic Farming.

The evaluation report is made up by nine chapters. In chapter 2 the main conclusions of the evaluation are summarized.

Chapter 3 is a presentation of the recommendations of the consultancy in connection to the evaluation.

Chapter 4 has as objective to give a short and focused presentation of the historical development within organic farming. The description of the historical development concludes with some strategic reflections on notably the importance of EC's agricultural policy to organic farming.

Chapter 5 presents the basic data of the evaluation.

The management of the Organic Farming Act is described and assessed in chapter 6. Furthermore, the chapter contains an analysis of the work done by the Council of Organic Farming and the Directorate for Farming to carry out the intentions within the Organic Farming Act.

Chapter 7 contains a presentation and assessment of the quantitative effects of the Act. In this chapter focus is put on the importance of the Act on turnover, export, investments, and employment.

In chapter 8 the more qualitative effects of the Organic Farming Act are treated. Focus is put on the influence of the Act on the professionalization of organic farming. The chapter contains also an analysis of the organisational development through examples of new ways of cooperation, local network, joint operation, and the establishment of sales companies. The influence of the Act on information and counselling activities, research and experimental activities as well as the official recognised labelling and control are also analysed more closely. The chapter is concluded by an assessment of the influence of the Act on the reduction of barriers, for example within sales.

In the ninth and final chapter, the Organic Farming Act is assessed in an overall strategic perspective. The objective is to analyse the future strategic importance of the Act to the organic production.

Finally, the consultancy wishes to use this opportunity to thank the participants. The many interviews have been characterized by an open and constructive dialogue, which the consultancy hereby would like to acknowledge. The final responsibility for the analysis, conclusions, and recommendations in the evaluation are naturally at the consultancy's expense.

## **2. Summary**

### **2.1 Introduction**

The evaluation of the Organic Farming Act no. 363 of June 10, 1987 includes both the conversion support given for shifting from conventional to organic and the support given to development projects from 1987 to August 1992.

In the case of the conversion support, a random sample 100 farmers, who changed from traditional to organic farming, was made. The group of 100 corresponds to 19 per cent of the total number of farmers who have changed the way of production. Out of this group of 100, interviews were obtained with 92, equivalent to a response rate of 92 per cent.

In the case of the support for development projects all of them are included in the evaluation. Interviews were obtained with 169 projects, which correspond to a response rate of 91 per cent.

Finally, interviews have been made with in total 56 conventional farmers. These interviews notably focused on their informational level and knowledge concerning organic farming, their attitude to organic farming and their assessment of the future of organic farming.

The objective of the Organic Farming Act is to promote the development of organic farming. On this foundation it is the primary objective of the evaluation to assess whether the Act has promoted this development. Further, the evaluation is arranged in such a way that it will constitute a strategic basis for the decision-making in relation to future initiatives within the organic field.

In the following sections, the main results of the evaluation are presented. The summary is not made chapter by chapter. On the contrary, the summary is made across the chapters following a number of main headings.

## ***2.2 The Objective of the Act and the Development of Organic Farming***

The Organic Farming Act has fulfilled the objective of promoting the conversion from conventional to organic farming. Furthermore, the Act lives up to its objective to diffuse the organic idea. This can be concluded because most farmers who have changed based this decision on reasons there are in accordance with the Act being mainly environmental and animal ethical considerations.

Further, the results of the evaluation indicate that the Organic Farming Act has had an effect, that lies outside the organic sector in the way that a part of the conventional farmers, who the consultancy interviewed, note to be influenced by the organic mind-set in their own ways of production.

In the case of the support for conversion, the consultancy finds, that it has a function of balance in the way that it is not compared to other reasons the decisive factor for farmers for changing to organic farming but it is by organic farmers considered the economic 'push' needed to take the decision to change.

Therefore, the consultancy recommends that the support for conversion is maintained as a way of subsidy irrespective of whether other ways of support are introduced. Further, the consultancy finds it desirable that the functioning of the support of conversion is changed. This means that the support for conversion is given as a minimum amount following the graduation that exists within the current act. In addition, the consultancy recommends that a possibility of a supplementary support for conversion is given (based on a principle of assurance), if it can be proved that the change has caused a considerable loss of income. It is also suggested that the management of this supplementary support is as well taken care of by the Directorate of Farming after recommendation of the Council of Organic Farming.

The results of the evaluation indicate that the support for conversion in its current form has bigger importance to the large organic farms than to the small and medium size ones, which is assumable

due to that the former will have higher absolute decline in output in connection with a shift from conventional to organic and therefore, judged the total risk to be larger.

Concerning the development projects the evaluation shows that projects have been made that have been able to gain an increased turnover from organic products. These projects have mostly been carried out within production, packaging, and distribution of organic products.

It is generally assessed that the development support has had a positive effect because it secures that the risk is divided notably for the commercial projects; while most of them, anyhow, would have been carried out, it would have been at a lower pace or with a lowering of the level of ambitions.

Concerning the involvement to a great extent of the organic farms in the development projects it is indicated that there could as an experiment be made a possibility of providing subsidies to the farmers own work.

Regarding the quantitative effects of the development support, it is few of the development projects that can prove a quantitative effect. Hence, there are few projects there are capable of assessing the development projects effect on turnover, export, employment, and investments.

The interviews have shown, that only 14 projects - in all obtaining a support of 3.6 million dkr. - can document an annual turnover of 28.6 million dkr. after the termination of the project. The effect of each Danish 'krone' given in support equals 8,0.

The lack of documentation of quantitative effects should not be interpreted as a critic of the development projects but rather be seen as an expression of the profile and the objective that most of the development projects have had. Hence, more than 60 per cent of the development projects (for example projects within research, experiment, and information activities) have non-commercial quantitative effect measures as the criteria of success.

## ***2.3 Organic Farms' Income, Investments, and Consume of Labour Force***

The evaluation shows that organic farmers can be divided into three groups of equal size depending on if they had increasing, decreasing, or unchanged income after the shift from conventional to organic farming. The evaluation seems to indicate that the total gross income has increased for the organic farms.

Increasing income typically has its basis in favourable price agreements and reduction of cost in relation to fertilizers and crop sprays. Reduction in income is due to smaller crop yields, reduction in milk yields, etc.

The evaluation documents that a part of the organic farmers have invested in special organic equipment and material, but the support for conversion only has a marginal importance as a precondition for those investments. In general it can be said, that between 20 to 25 per cent of the investments made have only been possible as a consequence of the support. Without this support there would not have been a shift to organic production and therefore, as a logic consequence, there would have been no investments. The shift to organic production means an increase of 31 per cent



in the daily working hours. This is dependent on the type of production where specially row crops (for example vegetables) and pig breeding demand for an increase in daily working hours compared to conventional production.

In general, the evaluation shows the surprising result that the connexion between the size of the farm and the need for hiring extra workforce is relatively weak and therefore the total employment effect deriving from the growth in organic farming is modest.

## ***2.4 Professionalization of the Organic Production and Development of Networks***

The development support for research and experimental activities, the organic consultancy service and other information activities have secured a knowledge production and communication that have contributed to a situation where the organic farms in 1992 are at a higher technical level than when the Organic Farming Act was adopted in 1987.

The evaluation shows that the organic farms have gone through a process increasing the professionalization so that the share of fulltime organic farmers is now growing. On this foundation organic farming should be considered a genuine profession from which fulltime organic farmers can collect the main part of their income.

Concerning the channels for sale of organic products, the results show that the organic farmers have changed their ways for sale from the informal direct sale at the farm and at local markets to using formalised channels of wholesale dealers, sales companies and industrial manufacturing.

However, the consultancy should adduce that this development also contains the fact that the organic farmers not themselves have been able to build up a strong distribution and sales system, but have been obliged to leave these activities to established, conventional companies and on their conditions too.

The consultancy recommends that the future focus on the organic farmer's distribution, sale, and marketing also contains activities promoting a higher degree of independence within these mentioned areas.

The export of organic products is sporadic. Further, the evaluation shows that a great majority of the organic farmers wish to enlarge their export. However, the conditions for exporting have become more difficult because of increased competition from organic farmers from abroad. Moreover, the export is complicated by the fact that within certain areas there exist no experience of exporting, for example organic meat. On this background, it is recommended that there through continued development projects and to the fullest extend is established support for introductory marketing both at the home market and in the export markets.

All things considered, the consultancy finds, that on the basis of the problems of the organic sector to organise sale, it will be important in the future to establish through development projects organic sales companies focusing on marketing activities and rationalisation of the distribution as to strengthen the secondary stages of the organic sector.

## ***2.5 The Organisation and Management of the Organic Farming Act***

The Council of Organic Farming has in its current structure been functioning in a desirable manner. The members have gradually obtained knowledge and a competence that have been seen in the strengthened criteria for allocation of support and in a more clear strategy.

The consultancy finds that the Council is notably competent in relation to primary stages of the organic production but on the contrary lacks knowledge and experience in relation to sale, marketing and manufacturing, why this knowledge is suggested represented in future appointments of the Council.

Furthermore, the consultancy finds that the Council needs to draw up standardised schemes for the final reports of development projects. In this way a more systematic evaluation of all projects can be secured with the purpose to adjust and improve the foundation for decision making in the Council.

Moreover, the possibility exist that the Council could make its performance more efficient by to a greater extend treat cases of principle instead of every case.

The consultancy finds that the Council of Organic Farming should be represented in the Consultative Committee of the Ministry of Agriculture as to secure to influence and control the organic research. Beside the consultancy recommends that the Council of Organic Farming still follows closely the EC policies within the organic field.

Concerning the management done by the Directorate for Farming of the development support, the Directorate has consistently followed the objective of the Act by, first, giving support to the development elements and to the supplementary expenses and, secondly, by not giving support to everyday expenses (for example rent, expenses to heating, etc.). In continuation of this question, the consultancy finds that the Directorate of Farming has secured an appropriate control with the use of the means. Further, it should be mentioned that the Directorate has implemented a standardisation of the application schemes so that there provide a good foundation for comparing and deciding the amounts and allocations of support.

All things considered, the consultancy finds that the Directorate has succeeded in implementing an efficient management of the support that also has been judged positively by the heads of the development projects; respectively 70 and 83 per cent finds the management flexible and competent.

In the case of the support for conversion, 56 per cent assesses the management as flexible. There are some, however, who find the management troublesome. The reason for this opinion is that they find it inefficient that the organic farmers have to go to first the Directorate for Plants to obtain an authorization and afterwards apply for the support for conversion at the Directorate for Farming. However, the consultancy cannot recommend that this procedure is changed.

## **2.6 Public Control and Labelling System**

The role of state as being the supervisor and the issuer of authorization for the organic farms is successful. 86 per cent finds that the demands made to obtain an authorization are appropriate while only 7 per cent finds them unreasonable.

The evaluation shows that the existing organic farms very seldom severely violate the conditions for authorization. Hence, there is a profound consensus among the organic farmers to respect the rules of the authorization.

The state labelling system, the 'Ø-label', is widely accepted because 72 per cent of the organic farmers mention that they use this label on their products. If a possibility of choosing a label was given, 51 per cent would prefer the 'Ø-label' whereas one third would prefer a combination of a state label and one indicating their respective association. In total, the evaluation shows that the majority of organic farmers sees the state labelling and control system as a measure that raises the consumer confidence in organic products and thereby secure them a better position in the competition with the light green products.

## **2.7 The Governance and the Priorities of the Research**

Under the Organic Farming Act there has been implemented several research and experiment projects of relevance to organic farming. On the basis of the challenges that organic farming is meeting currently, the evaluation shows that the research and experiment activities should be given priority in such a way that a solution to short-term problems has the highest priority.

Further, a high priority should be given to the existing problems within organic farming by implementing a phase where an aggregation of known problems is made through an active involvement of the organic farmers before new and extensive research and experiment projects are initiated.

Moreover, it is crucial that the future research strategy forms a whole and that cooperation between the different research environments (natural sciences, social sciences, and humanities) is secured. It is important to oppose a creation of isolated research environments which must be concluded to have been a problem earlier.

In addition, it should in general be assessed to what extend research activities can be offered as tasks specifically directed at problems and objectives which would have as their purpose to provide models of solution to rationalisation of current distribution and sales systems.

Therefore, the financing of research and experiment projects through the development support will still be a crucial task.

## ***2.8 The Organic Farming Act in an General Perspective***

In an overall perspective, it can be concluded that organic farming in the fall 1992 seems to be in a position of awaiting the future developments. This should be seen in the light of the last five years - where the Organic Farming Act has been functioning – contain both the successful story of growth in relation to spreading, production, and professionalization of organic farming but also a story of growing problems with sale, more difficult economic conditions for organic farming and a starting recession in the number of farms that chooses to have organic farming.

The difficult situation therefore has importance to the recommendations made by the consultancy of which solutions and instruments that should be contained in the Organic Farming Act in the future.

Everything indicates that the EC's agricultural policies will profoundly affect the organic farms future development. Hence, it will be possible within the EC's agricultural policies to give a subsidy to organic farms; 50 per cent financed by the EC and 50 per cent financed by the Danish state. The subsidy is given as a fixed amount per hectare for the organic farms.

The consultancy finds that the subsidy given per hectare to the organic farms has an economic stabilising effect. On the other hand, the consultancy is sceptical that economic support through a fixed amount per hectare is able to give the solution to the problem of organic farming. Hence, it is mentioned in the evaluation that this type of support risks being capitalised into higher prices on land, and work against the professionalization that has happened in the first five years. The background to this is for example that fixed economic support risks attracting those farms run with the least agricultural knowledge.

Moreover, the consultancy finds that support per hectare should not be of such an extensive character that it risks stimulating more than necessary in comparison with the demand of organic product.

## ***2.9 Structure Subsidies***

Regarding the public financial support the consultancy finds, however, that a supplementary type of subsidy - in the form of a so-called structure subsidy – would be more promising. The consultancy sees structure subsidising as a way to promote an efficient distribution and sales structure within organic farming. Hence, the consultancy finds that the key to the reduction of the organic farms problems is lying in finding new ways of supporting that will be able to influence the organic farmers to make rational decisions and bring about a behaviour that dismantle the barriers within distribution, sale, and marketing. The consultancy notices that exactly the barriers within these three areas are the most important to remove as to promote a stabilization and development of organic farming in Denmark.

Hence, the consultancy recommends that structure subsidies are given as partly a reimbursement of the taxes that the organic farmers will pay to sales companies and wholesale dealers when selling their products. The taxes would be measured as function of the value of the products handed over to, for example, the sales company. This public reimbursement should be provided by a newly established organic tax fund.

The means for this fund is suggested raised by attaching a fixed tax to all organic production and by giving the fund a share in the local land value taxation.

Because the support given from the tax fund is dependent of the size of the taxes paid by the farmers to the sales companies, there is created an incentive both for the organic farmers and for the sales companies to sell as much as possible. The more is sold the better it is because everything else considered this creates diminishing marginal costs and thereby a more sustainable economy.

Hence, the consultancy finds that the proposed structure subsidy is more viable than for example a fixed subsidy depending on the number of hectares because subsidising according to structural measures results in a focus exactly on the unsolved problems within organic farming.

### 3. Recommendations

In this chapter all the consultancy's recommendations in relation to the evaluation are presented. The recommendations are sorted after topics which is why they are not listed in consecutive numbers.

In order to ease the readers search for the recommendations in the following chapters a guide is laid out here:

Chapter 5: Recommendations 1-2

Chapter 6: Recommendations 3-15

Chapter 7: Recommendations 16-22

Chapter 8: Recommendations 23-38

Chapter 9: Recommendations 39-45

#### **Recommendations concerning the work and composition of the Council for Organic Agriculture:**

**Recommendation 1:** It is recommended that the Council for Organic Agriculture considers how projects within the primary sector can be enhanced. The reason for enhancing this project type is that the development projects are hereby anchored directly at the organic farms and can therefore easier help the farms.

**Recommendation 3:** The consultancy recommends that the Council for Organic Agriculture is represented in the Ministry of Agriculture's Advisory Research Committee in order to ensure a superior/general influence and control of the development of the organic sector and to use the experience and knowledge of the Council for Organic Agriculture positively.

**Recommendation 4:** It is recommended that one or more persons with experience in manufacturing and sales are involved in the work of the Council for Organic Agriculture.

**Recommendation 5:** It is recommended that a close connection is kept between the Council for Organic Agriculture and the negotiators of the Ministry of Agriculture in the EEC, so that the knowledge and assessments of the Council for Organic Agriculture are taken in and used.

**Recommendation 6:** It shall be assessed whether a representative of IFOAM – possibly appointed by the Danish members of IFOAM – in the Council for Organic Agriculture could increase its ability to follow and influence the circumstances for organic farming within EEC.

**Recommendation 7:** It is the recommendation of the consultancy that the members of the Council for Organic Agriculture to a higher degree make their marks and use the service of the secretariat they have at their disposal.

**Recommendation 8:** The consultancy recommends that it is being investigated to which degree a certain economic compensation can be given to the members of the Council for Organic Agriculture as an allowance.

**Recommendation 9:** The consultancy suggests that the Council for Organic Agriculture gets the ability to consecutively review the initiated activities/projects collectively and on this background updates its competence and basis for recommendations.

**Recommendation 10:** It is suggested that the Council for Organic Agriculture to a higher degree is being oriented about the decisions made and primarily is presented to the cases of principality to be discussed with the purpose of enforcing the role of the council as an advisor on strategy.

**Recommendation 12:** The consultancy recommends that the Directorate of Agriculture and the Council for Organic Agriculture is seeking to enhance the involvement of the organic farmers in the development work among other things through the enhancement of better advising in the development work.

### **Recommendations concerning the administration of the Law on Organic Agriculture's Subsidies by the Directorate of Agriculture**

**Recommendation 13:** The consultancy recommends that the Directorate of Agriculture introduces standardized schemes for final reporting and uses these to consecutively evaluating the status and effect of the support.

**Recommendation 14:** The consultancy recommends that the Directorate of Agriculture insists on its current demands for the applicant's specification of costs and expenses in the budget thereby to ensure an appropriate use of the resources assigned.

**Recommendation 17:** In order to promote a future quantitative effect assessment of the development projects' results it is recommended that the applicants are encouraged to present their projects' purpose, organization, implementation, and effects. This should be in harmony with the application form cited by the Directorate of Farming which came into force in 1992. Except for strategic research, pilot projects and broad information projects any development project applicant at the time of application should be able to present his/her expectations concerning for example on the production of manufactured goods and on the budget. This demand will be a natural

consequence of the expected professionalization of the development projects as the Law on Organic Agriculture has had its effect during some years.

### **Recommendations concerning strengthening of the distribution and sales of organic products**

**Recommendation 15:** The consultancy recommends that the organic consultant service is used offensively in order to make use of the development support and that the consultant service upgrades its competence in giving advice on sales.

**Recommendation 18:** In spite of the mixed experiences with the projects on sales' viability it is recommended that there is a continuous focus on promoting professionalization and commercial viability on the sales side. The Development shows that sales projects are risky which is why the possibility to co-finance these projects with the development support is necessary further on. On the other side the consultancy finds that there should be made stronger demands on the commercial, organizational and strategic preliminary work on the projects. These greater demands should however not result in a larger risk adversity when assessing whether a project can be accepted.

**Recommendation 20:** On the basis of the positive expectations of the organic farmers concerning export it is recommended that export enhancing development projects are given particularly high priority among the developing projects in the years to come. For example the development projects that introduce marketing organic goods in the North German market should be continued. It is therefore generally recommended that the marketing effort gets a very high priority among the development projects. The marketing effort should be planned and followed through via cooperation between professional marketing companies and persons with an expertise within this field and with organic farms. It is crucial that the marketing takes its leaping point in the concrete problems of the organic farms.

**Recommendation 24:** It is recommended that the cooperation projects among the developing projects continue to have a high priority. The cooperation projects contribute to ensure that the development projects are anchored in various complementary environments for example between organic farms and research institutions that are making relevant research and experiments. On this background the best possible starting point is ensured to have the results used swiftly and efficiently.

**Recommendation 26:** It has to be recommended that the organic farms in particular the dairy producers reconsider their sales and marketing strategy. It should be studied whether organic farmers to a higher degree can build up an independent sales and marketing strategy. The consultancy recommends that marketing of the individual organic products primarily is made with a direct leaping point in the organic farms and preferably with professional marketing aid. Therefore in the long run this task cannot be left to the retailers or to the manufacturers. Neither can the task be left to more general nor to non producing marketing campaigns since the farmers must themselves take responsibility for the arguments that are used, the strategy and for compliance with the law on marketing.

**Recommendation 27:** The consultancy recommends that the competition on sales and marketing of dairy products is kept unchanged. It is important that no companies obtain a status of monopoly. On this background it is suggested that an initiative is taken through the development projects to study

how the competition within the industrial processing of dairy products can be maintained and even increased. This should include competition within the field of transportation and distribution.

**Recommendation 28:** It is recommended that the law on organic agriculture be used to establish development projects which enhance the establishment of sales companies, possibly by merging companies which already exist. It is particularly important to support the creation of sales companies which lessen the number of middlemen between the producer and the consumer. The organic meat producers should for instance deliver a higher amount of their products directly to the butchers' shops.

**Recommendation 29:** It is recommended that information activities, particularly those which include marketing of the organic idea/the organic products be left to the organic farmers and to the companies that produce and sell these goods. If marketing is left to these groups they only have the boundaries of the law on marketing as the limit of what can be informed about and accentuate concerning the advances and characteristics of organic product in relation to other products.

**Recommendation 30:** It is recommended that the information and advisory projects be continuously made to create information and debate. It is recommended that these projects, which have a long perspective, are rather few and have a large budget. They should be ambitious. Furthermore it is recommended that these development projects have a well defined target group and a well thought out strategy. For example teaching material for the public schools can be made in which the organic idea and problems are presented in a pluralistic and free spirited way. This presentation should include both conventional and organic views so that they are debated and presented.

**Recommendation 44:** The consultancy recommends that an introductory campaign is made for both the domestic and the export market, presenting the organic products. So far the marketing of organic foods has been scattered and it has been focusing on individual organic products. The consultancy recommends marketing of actual organic menus of both meat and vegetables. The consultancy finds that it is possible to market organic menus as actual life style goods.

**Recommendation 45:** It is recommended that the introductory marketing is financed through the development projects and supplemented with support from an organic per mille tax fund.

### **Recommendations concerning qualification and efficiency within the organic primary production:**

**Recommendation 16:** The consultancy recommends that where the consulting service is situated is maintained but that it is considered to which degree the service can be integrated into the conventional agriculture.

**Recommendation 19:** The consultancy recommends that initiative is taken to systematically collect and assess experiences and methods among the group of existing organic farmers. This is to happen in order to hand down the experiences to other organic farmers and in order to collect material that can help make new hypothesis within the organic research.

**Recommendation 21:** The consultancy recommends that a high priority is given to consultancy services, exchange of experiences and research in how to optimize the use of fertilizers and composting



**Recommendation 22:** The consultancy recommends that the organic farmers increase their cooperation and coordination on the purchase of organic fodder in order to rationalize the cost of transportation.

**Recommendation 23:** It is recommended that initiatives are taken under the Law on Organic Agriculture to further the educational background of current and future organic farmers. For example initiatives can be taken to enhance the organic agricultural education for current as well as for future organic farmers. It should be considered whether it is possible when revising the law of organic farming to make way for support for loss of income for organic farmers who are beginning to study or taking in-service training about organic agriculture.

**Recommendation 25:** It is recommended that collective running/working [‘samdrift’: two or more working together on a project] is supported through establishment of development projects that also have a character of demonstration projects. Concerning sales companies; there have been various initiatives in order to establish sales companies where the organic farms have made combined sales and manufacturing companies. Such a company is to sell the goods but also in some cases produce the goods for further sale either to wholesale or directly to the retailers.

**Recommendation 43:** It is recommended that a development projects is started in order to build up an informatics system which can handle information about the organic farmers’ needs for purchase of fertilizers and organic fodder for the animals on the organic farms. Furthermore it is recommended that the informatics system can handle expected deliverances from the organic products and [missing word?] to the sales companies and wholesalers. The goal is to give wholesalers and sales companies a tool to ensure an optimal way of getting through the distribution and sales. Knowledge about future input- output needs of the individual organic farm is necessary in order to build up an efficient distribution system. Knowledge about the future deliverances from the organic farms to the sales companies will make it possible for the sales companies to make negotiations of larger and long term deliverances. Therefore the consultancy recommends that the informatics project is concerned with both specific demands and with the implementation of a demonstration project for the informatics that should handle these tasks.

It is the assessment of the consultancy that such an informatics solution should be rather easy to handle and not very expensive. Furthermore the rather low amount of organic farms means that the system will be quite easy to build up and implement. The idea is to build up a number of regional companies that are basing their informatics system for distribution and sales on the organic farms that are situated within a short geographical radius. There is hardly any need for more than 10 large sales companies/wholesalers since it should be taken into consideration that particularly a number of smaller farms will not wish to use formalized means of distribution and sale.

### **Recommendations concerning marking and control:**

**Recommendation 2:** All in all the consultancy finds that the well known technological, economical and control related aspects means that the drawbacks connected with partial conversion to organic farming more than out weigh the advantages.

**Recommendation 11:** The Consultancy recommends that the legal conflict between rules for authorization of organic production and the veterinary rules for making food is being solved

through cooperation and coordination between the Directorate of Plants ['vegetables directorate'] and the Directorate of Animals ['veterinary directorate'].

**Recommendation 31:** The consultancy finds that the development so far where the rules of authorization from the Council for Organic Agriculture (COA) and the Directorate of Plants have been closing in on each other is a fruitful development. On this background it is recommended that COA and the Directorate of Plants try to reach a situation with only one set of rules.

**Recommendation 32:** It is recommended that the existing rules for control and marking are kept in place since the target group - the organic farms- have a large degree of respect and acceptance.

### **Recommendations concerning research and experiments:**

**Recommendation 33:** It is recommended that future research and experimenting gives a high priority to results that in the short run benefit the organic agriculture.

**Recommendation 34:** It is recommended that an interdisciplinary research strategy is made for the research and experimenting to be made in the upcoming year. There is a need for a higher degree of coordination between the sciences and social studies in each research project and experimental project.

**Recommendation 35:** It is recommended to make concrete research with a focus on possible rationalization effects by increasing the cooperation concerning transportation, cooperation, wrapping and distribution. By focusing on for instance cooperation in pilot studies it becomes possible to demonstrate how a better distribution of organic products, common use of wrapping and other topics can lesson the price of the products.

**Recommendation 36:** It is recommended that experts with knowledge in distribution and manufacturing are brought in to a higher degree when the research is prioritized. These persons can possibly be in the project committee that has been mentioned in the action plan of future research in organic farming. The consultancy therefore finds it important that the future administration of program activities within the organic field make use of resource persons who has a direct knowledge of and experience with distribution, manufacturing and marketing.

**Recommendation 37:** In order to ensure that the research and experiments made are anchored in the practical issues in organic farming it is recommended that an early collection of issues is made for instance among the various organic groups. Within a certain period of time the groups will be asked to formulate and list the concrete problems that they find particularly important to experiment on and study. This list of 'gross problems' can for instance be tested in a 'future lab' for the organic groups, the researchers, the administrators and of course the Council for Organic Agriculture.

**Recommendation 38:** It is recommended that it is considered to outsource projects where concrete objectives for how to increase the efficiency in some chosen farms have been laid out. This could be in the areas of storage and wrapping facilities or in the cost of the distribution channels and so forth.

## **Recommendations concerning support and subsidies:**

**Recommendation 39:** The consultancy recommends that the support for conversion as a subsidy is preserved. This recommendation applies no matter whether other subsidies for organic farmers are introduced. Furthermore it is recommended that the automatic subsidy for conversion with a set grant per hectare in the conversion period is changed. The change should make it possible to have a minimum level in the conversion subsidy and a higher amount of money that is handed out in case there is an unexpected large loss of income during the conversion period. The reason for this is that the initiation barriers and loss of income is different depending on which products the organic farmers expect to produce after the conversion period is over. Therefore the conversion subsidy should be given as an insurance against loss of income rather than just as a fixed amount.

**Recommendation 40:** By using a subsidy for the production in the future in the shape of a set subsidy per hectare for the organic farms it is important that the set subsidy per hectare is at just the right amount. This is to ensure that the subsidy is neither being capitalized in higher land prices nor neutralize the professionalization that has been seen in the first 5 years of the existence of the Law of Organic Agriculture. Furthermore it is important that the support per hectare is not so large that the supply is stimulated more than necessary in relation to the demand of organic products.

**Recommendation 41:** The consultancy recommends a fixed subsidy for the structures in order to support the distribution, sales and marketing of the organic products. The subsidy is a reimbursement for the charges the organic farmers pay to their wholesaler or manufacturing company. These charges are measured from the value of the organic production which the farmers deliver to the wholesalers. At the wholesaler or manufacturer there will be an incentive to use charges for financing the larger price the organic farmers depend on. The reimbursement of the charge is given from the new organic per mille tax fund.

The money in this fund could partly come from a tax on all the organic farmers' production and partly from giving the fund a share of the regional land tax on real estate to be paid to the Exchequer in accordance with the Law on Taxation in the Municipalities.

**Recommendation 42:** When the automatic conversion subsidy is changed to a minimum payment plus the possibility to give an extra conversion subsidy as insurance the Council for Organic Agriculture and the Directorate of Agriculture will be in a situation where a priority must be made between giving support to development projects and increasing the support for conversion. The structural problems that exist in the organic agriculture mean that there will both be a need for development support and for conversion support. On the other hand the consultancy recommends that a competition is made so priorities can be made between development projects and conversion support. The consultancy recommends that this competition is used to increase the demands for the relevance and quality of the development projects.

## 4. The Historical Development of Organic Farming

### 4.1 Important Numbers Concerning Organic Agriculture

Organic agriculture takes up a very small part of the total Danish agriculture. As a result of this the organic agriculture only has a marginal influence on the Danish economy. None the less organic farming has developed in quantity and quality to an extend that is radically different from the development of the conventional farming.

Quantitatively a rapid increase in the size of organic production acreages and the amount of farms has taken place.

Qualitatively the organic agriculture has gone through a development towards more professional farming and has become the topic for increased interest in research and political attention. The increased attention from researchers has supported the Law on Organic Agriculture considerably through initiation of research and experimental projects. The professional farming is for instance seen in that the organic farms have become bigger and that the number of full time employed farmers is increased at the expense of part time farmers. This development has particularly taken place under the Law of Organic Agriculture.

Table 4.1 shows the development in the size of the organic farms and the amount of farms based on numbers from “White Book on Organic Agriculture” from 1991 and from the yearly report from 1992 from the Directorate of Plants.

**Table 4.1: The development in the amount of organic farms 1980-1991**

Year	Number of Farms	Area in Hectares
1980	150	2.000
1988	219	5.881
1989	401	9.553
1990	523	11.581
1991	672	17.963

It can be seen from table 4.1 that particularly in 1991 there has been a large increase in the amount of organic farms. Barely 40% of the collected area that is grown organically, which is equal to 6.500 hectares is currently being conversed (cf. the yearly report from the Directorate of Plants from 1992).

It is also seen from table 4.1 that the collected area of organic farms in 1991 is at ca. 18.000 hectares. By comparing this to the conventional farms, the 18.000 hectares only take up 0,7% of the collected Danish agricultural area.

In table 4.2 (from the Directorate of Plant's yearly report in 1992) the development in area of the organic farms for the period of 1988-91 is described by the development in the number of farms, area of production and the average size of the farms. Furthermore this development has been split up according to the geography by focusing on the development in Jutland, on Fynen and Sealand.

**Table 4.2 The development in the amount of organic farms 1988-1991**

Number of farms:

Year	Jutland	Fynen	Sealand	Total
1988	137	24	58	219
1989	226	52	123	401
1990	281	62	180	523
1991	380	77	215	672
Percentage (1991)	57%	11%	33%	101%

Area of production in 1.000 hectares

1988	-	-	-	5,881
1989	6,060	0,857	2,636	9,553
1990	7,212	0,923	3,446	11,581
1991	12,697	1,014	4,252	17,963
Percentage (1991)	70%	6%	24%	100%

Average area per farm

1988	-	-	-	26,9
1989	26,8	16,5	21,4	23,8
1990	25,7	14,9	19,1	22,1
1991	33,4	13,2	19,8	26,7

It can be seen from table 4.2 that geographically the increase in farms has taken place in Jutland where more than half of all organic farms are situated today. Furthermore it can be seen from the table that the average size of organic farms in 1991 is 26,7 hectares, which is quite smaller than the in conventional farming where the average size is 35 hectares.

There is however a large dispersion in the sizes of the organic farms. The number of small farms (less than 10 hectares) surpass by far the average of the Danish farms overall whereas the number of farms with more than 100 hectares is at approximately the same level for the organic farms as for the general level in Denmark.

The organic agriculture is as such practiced at farms of any given size. Still the structure of organic farms can be said to move towards larger units since the increase in organic farms in 1991 is particularly in the larger farms in Jutland.

The use of the area and the structure of the production in the organic farms are differentiated from the traditional agriculture in three main areas in particular:

**First**, the area where grain is grown is typically smaller while a larger part of the area is grown with grass and nitrogen fixating crops for fodder like lucerne and clover.

**Second**, the organic farms make up 84% which is a much larger number than within the traditional farming.

**Third**, the production of potatoes and vegetables takes up a much larger area in the organic farming than is the case in conventional farming.

## ***4.2 The Increased Attention Given to Organic Farming***

Throughout the 1980ies organic farming has become the center of increased political attention and interest.

In 1986 a review was made on organic farming in the Ministry of Agriculture and in 1987 the Law on Organic Agriculture was made. In pursuance of the law the state has taken on itself to control the area. For instance the state has laid down the norms and standards for when farmers are entitled to call their farms organic. The Directorate of Plants issues authorizations for organic farms. The Directorate of Animals and the Institution Food Control [Food Control] check the marking, distribution and sales of organic products. And finally it is the task of the Council for Organic Agriculture to follow, estimate and enhance the development of the organic field.

The background for this increased attention has several reasons:

First, there is an environmental reason. The debate on the problems of conventional farming and the seepage of nitrogen and the use of pesticides lead to passing of the Law on the Water Environment in 1986. Following after this the Ministry of Environment concluded in a report in 1987 that organic farming “from an environmental view must be enhanced as much as possible”.

Second, the work environment has come into focus since the use of pesticides and problems with the indoor climate in for instance the large pig sties has increased the awareness on farmers’ work environment and health risks.

Third, modern conventional farming’s intensive production systems has lead to that animal rights problems are more prevalent. At the end of the 1980ies the Law on Animal Rights was edited and tightened up in a number of areas in agriculture.

Fourth, organic farming has an increased interest in relation with EEC’s agricultural policy. The surplus production of agricultural products inside the EEC has created political and economic pressure to reduce the agricultural production which the organic farming can help to do.

### 4.3 The Fall off in Growth in Organic Farming

The development in organic agriculture through the 80ies and beginning of the 90ies has been marked by growth in quantity and quality. Further more the historical and future development in EEC's agricultural policy seems to have many perspectives for organic farming.

Still right now a decrease in the growth in organic farming is seen.

**Table 4.3: Number of Authorized Organic Farmers in different years:**

	1988	1989	1990	1991	1992*)
Authorized at first	0	219	401	523	672
+ Applicants	-	194	166	213	62
- Withdrawn applications	-	8	23	20	1
- Finalized authorizations	0	4	21	44	61
= Authorized at the end	219	401	523	672	672

\*) Preliminary numbers by October 1<sup>st</sup> 1992

As mentioned in table 4.3 the large increase in the number of new organic farms

It can be seen from table 4.3 that the large increase in the number of organic farms was as mentioned above followed up by a lower interest among farmers to convert. The Directorate of Plants has up until now this year only treated about 60 applications for authorization which is only about 30% compared to 1991 where 213 received the authorization. To this picture it must be added that 61 organic farms lost their authorization and are no longer organic farms.

One of the explanations to this decrease is that an unsatisfying sale of a large number of organic products, for instance organic milk, has been registered. The unsatisfying sale has resulted in that the organic milk producers have not been able to reach the same profitable price at the dairying as earlier.

Further more parts of the EEC policy have had a negative influence since there in 1991 a rule has been enforced which means that the farmers now have to wait for 2 years before they can sell their products as organic and thereby gain the higher prices which are necessary to make the budgets balance.

All in all the historical development in organic farming during the first 5 years has been marked by progress. However in 1992 the organic farming is midstream. It is therefore important to notice that the historical experience is the background for the recommendations to the future organic farming.

Even though there seems to be "dark clouds in the horizon" the organic farmers are not slain by despondency. In table 4.4 the main results of the evaluation's questions for the organic farmers on whether they wish to continue to produce organically are reported.

**Table 4.4: To which degree do the organic farmers wish to continue the organic production?**

Response:	%
To the same degree as when the conversion had finished	50
To a larger degree measured in area and/or numbers of domestic animals (*hereof ½ wanted a larger area)	43
Considers to reduce, return to conventional farming or entirely to give up the production	7
Total	100

It can be seen from table 4.4 that half of the organic farmers plan to continue to produce at the same level as when they finished the conversion or by the time they expect to finish. It is furthermore seen from table 4.4 that 43% of the organic farmers plan to increase the organic production measured by number of animals. Half of the 43% has even planned to increase the organic products by taking in a larger area for their crops.

Only 7% consider to either limit their farm, return to conventional farming or entirely to give up farming.

It has been mentioned to the consultancy that the pioneer spirit among the organic farmers has been replaced by a more realistic and even negative (disappointed) attitude. The consultancy can trace disappointment among a few of the organic farmers, but the numbers in table 4.4 underscores how this is minimal.

In the coming chapters it will be studied **partly** which effect the Law on Organic Farming has had during the first 5 years and **partly** whether the law is able to rectify the problems that continue to exist in the everyday life of organic farmers.

#### ***4.4 EEC's Agricultural Reform and Organic Farming***

The recent decrease in the growth of organic farms takes place at a time where the EEC level has a larger acknowledgement of its possibilities to make an important contribution to a more environmentally friendly agriculture.

The consultancy expects that EEC's agricultural policy will forthwith have a great influence on the development of organic farming. Through the interviews with organic farmers the consultancy has been able to see that the organic farmers generally relate to EEC's agricultural reform with a policy of wait-and-see. This can be seen from that the organic farmers at the moment are reluctant in making bigger changes in their production and in making larger economic decisions (for instance new investments). Furthermore the significant increase in organic farms which was seen in 1990 through 1991 stopped in 1992 and has been replaced by a situation of no growth.

EEC's agricultural reform contains important perspectives for the organic agriculture. As a part of the reform in the order (EEC) number 2078/92 of June 30<sup>th</sup> 1992 a subsidy is introduced that is to enhance the environmentally friendly methods of production in farming and caretaking of the nature.



The order has the double target to decrease the agricultural production and meanwhile to ensure that this happens in a way that has a positive effect on the environment. The subsidies are partly to support taking out farming areas and partly to introduce environmentally friendly and extensive means of production and partly to foster caretaking of the nature.

The reform text has some central passages which gives the possibility to support and promote organic farming:

- A system is introduced by which subsidies are given to farmers who commit themselves to strongly reduce the amount of fertilizers and pesticides and introduce or maintain organic agricultural methods.
- Subsidies shall also be given to farmers who commit themselves to extensive vegetable production or to maintain an already introduced extensive production method by converting agricultural areas into extensive grassing areas.

The order gives a certain freedom of choice for each member states' composition of subsidies and conditions. The subsidy is given to farmers who commit themselves to one or more of the mentioned conditions for at least 5 year. The support is given as a yearly prize per hectare but can also be limited to a maximum amount per farm and can be graded by the size of the farm and by the character of the conditions the farmer submits himself to.

If the politicians chose to give the organic farmers the maximum support the reform text opens up the possibility to set an amount of 350 ECU, corresponding to 2.660 kroner per hectare each year. EEC will finance 50% of the subsidy that is to be chosen from the member state.

## 5. Presentation of the Basic Data

### 5.1 Introduction

In this chapter the basic data of the evaluation is presented. These basic data can be divided into three main types.

**First** on the basis of a sample contact was made with 100 receivers of conversion support among the organic farmers. The conversion support was been given to a total of 542 farmers at the end of 1992. The sample makes up 19% of the total number of receivers of support for conversion. From the chosen groups of 100 converters we got interviews with 92 which equal 92% or 17% of the total number. The sample is therefore seen as very representative.

**Second** all the project leaders of the development support cases. For the time period 1987 to July 1992 the receivers of support for development totaled 186 projects. All projects are included in the study since the project leaders for 169 cases have been interviewed, which equal 91% of the total. The remaining 17 projects are left out since they were either not initiated or it was not possible to find the leader or a few of the leaders did not wish to participate in the study. Since this is a total analysis of all development cases and there is a response level at 91% the formal frames for the data collection are very satisfying.

**Third** interviews were made with 56 farmers from the conventional side. The 56 conventional farmers have been drawn from a sample made by Statistics Denmark. The sample is of course very small compared to the total number of farmers and can therefore not be said to be representative of the conventional farmers.

Added to this the consultancy has emphasized having an overweight of young farmers among the 56 conventional farmers since this group in the long run is the most interesting in relation to organic farming. Furthermore the consultancy has made it a criterion when they were sampled that the number of larger farms (more than 50 hectare) was overweight among the 56 farmers. This group makes up 77% of the conventional farms in the sample. The reason for making this choice is that it is important to study the larger farms' knowledge of and attitude toward organic farming, since these will have a larger influence on the future of organic farming. At the interviews among the 56 conventional farmers the following three themes was in focus:

- Information and knowledge about organic farming
- Motivation and view on organic farming
- The conventional farmers' assessment of the future for organic farmers

Before this separate examination of the basic data for both development support and conversion support the support in kroner for the two project types is compared for 1987-1992.

**Table 5.1 Development Support and Conversion Support 1987-92 (August 1<sup>st</sup>) (in million kroner and percentage)**

	<b>Total</b>	<b>87</b>		<b>88</b>		<b>89</b>		<b>90</b>		<b>91</b>		<b>92</b>
<b>Development Support</b>	50	<b>0.1</b>	100%	<b>4</b>	50%	<b>8</b>	50%	<b>15</b>	65%	<b>16</b>	52%	<b>7</b>
<b>Conversion Support</b>	37	-	0%	<b>4</b>	50%	<b>8</b>	50%	<b>8</b>	35%	<b>15</b>	48%	<b>2*)</b>
<b>Total</b>	87	<b>0.1</b>	100%	<b>8</b>	100%	<b>16</b>	100%	<b>23</b>	100%	<b>31</b>	100%	<b>9</b>

\*) Note 1: The conversion support per August 1<sup>st</sup> 1992 refers to growth year 1991.

It can be seen from table 5.1 that from 1987 and forth the total consumption was at 87 million kroner. The 50 Million kroner has been given for development support projects while the last 37 million kroner has been given for conversion support.

Apart from the conversion support that is paid on the basis of the Law on Organic Farming from 1987 there was in 1991 introduced a system for the so called 'supplementary conversion support'.

This make up 700 kroner per converted hectare and is given for areas which began converting to organic farming in 1991 and which in 1992 are growing consumer products for sales.

The support was introduced due to the EEC rules which in the middle of the growth season in 1991 prolonged the conversion period from 1 to 2 years. The support is therefore characterized as a compensation for those conversers who suffered from having to wait longer in order to sell their products at the higher price; this is particularly the case for cultivators of plants.

Since the arrangement is made to compensate a special group and only came into force in 1992 it is not included in the evaluation.

## **5.2 Conversion support**

As mentioned the total number of receivers of conversion support at the end of May 1992 was 542 farms. The 542 farms make up 80% of the total number of organic farms, which are 672 farms, cf. table 4.1.

The conversion support is given per hectare that is to be converted and it is split into the numbers of animals per hectare. The support is given for a 3 year period of time as can be seen from table 5.2.

**Table 5.2: The size of the conversion support per hectare, split into years and amount of animal units per hectare.**

<b>Year in the conversion period</b>	<b>Animal units per hectare</b>		
	<b>&lt; 0.3</b>	<b>0.3- 0.7</b>	<b>&gt;0.7</b>
<b>1<sup>st</sup> year</b>	1500	1970	2200
<b>2<sup>nd</sup> year</b>	800	1055	1180
<b>3<sup>rd</sup> year</b>	300	375	420
<b>Amount of support per converted hectare</b>	<b>2600</b>	<b>3400</b>	<b>3800</b>

It can be seen from table 5.2 that as the amount of animals on the organic farm increases, the conversion sum increases. This shows us that there was a political wish to support particularly the farms that during their conversion period had a relatively large number of animal units per hectare. The reason for this is that domestic animals on the farms are considered as a prerequisite for fulfillment of the aim of the organic idea to establish stable and harmonic systems which have a production method that is organized so that the individual parts of the farming can be integrated into a natural biological cycle in the field and the stable.

The sample among the converting farmers has been made so that one gets a representative distribution among the receivers of conversion support according to the number of animal units on

the farms. It can be seen from table 5.3 that the number of converting farmers in the evaluation is nicely in accordance with the number of converting farmers in total when they are distributed after the number of animals per hectare.

**Table 5.3 Receivers of conversion support distributed on the numbers of animal units:**

<b>Number of animal units per Hectare</b>	<b>&lt;0.3</b>	<b>0.3-0.7</b>	<b>&gt;0.7</b>	<b>Total</b>
<b>Converters in the evaluation</b>	21%	29%	50%	100%
<b>Converters totally</b>	26%	29%	46%	101%

Another criterion for the sample of converters is that the consultancy wished an overweight of among the larger organic farms. That is farms with a minimum of 50 Hectare in use. The reason for this is a supposition on that a number of the very small farms primarily have chosen the organic method in order to make small scale farming with a lower level of investment and of costs than what would be necessary in conventional farming.

**Table 5.4 Receivers of conversion support distributed on the size of the farms in hectares:**

<b>Hectare</b>	<b>1-9.9</b>	<b>10-19.9</b>	<b>20-29.9</b>	<b>30-49.9</b>	<b>50-</b>	<b>Total</b>
<b>Converters in the evaluation</b>	15%	19%	12%	26%	28%	100%
<b>Converters totally</b> (542 converting farmers in may 1992)	32%	21%	13%	14%	21%	101%

It can be seen from table 5.4 that this criterion has lead to that there among the converters in the evaluation are 28% with a minimum of 50 hectares in use. Among the all the organic farmers this amount is at 21%. Similar to this there are only 15% with a maximum of 10 hectares among the converters in the evaluation whereas this number is at 32% among the all the organic farmers. In the evaluation there is a preponderance of the relatively large farms among the converters.

Concerning the number of employed on the organic farms there are 26% of the farms that employ just 1 person. These farms with one person include farms where the spouse is helping along. 42% do not have any hired besides the owner and the last 32% have more than 1 person employed.

**Table 5.5 Converters' production and sale, distributed on products in %:**

<b>Number of converters In the category of production</b>	<b>Product type</b>	<b>Production To be sold %</b>	<b>Limited Production to be sold %</b>	<b>No production for sale %</b>	<b>Total %</b>
22	Potatoes	24	4	71	99
16	Carrots	18	2	80	100

13	Onions	14	2	84	100
19	Other vegetables	21	4	75	100
4	Fruit	4	1	95	100
6	Berries	6	1	92	99
27	Milk	30	-	70	100
1	Cheese	1	1	98	100
18	Porker	20	4	76	100
37	Fat stock	41	13	46	100
25	Bread grain	28	4	68	100
25	Fodder grain	28	2	70	100
14	Eggs	16	6	79	101
21	Poultry	2	7	91	100
8	Feeding stuffs	9	7	84	100
15	Sheep	16	1	87	100
6	Others	7	-	94	101

In table 5.5 the converters' production for sale is spread out on the products and added up in percent. It can for example be seen from table 5.5 that 30% of the organic farms have a production of milk to be sold.

41% of the organic farmers have fat stocks on their farm for sale. Furthermore 13% mention that the produce fat stock to a limited amount for sale.

It can also be seen from table 5.5 that bread grain, fodder grain, potatoes, other vegetables and porkers are all produced on 20-30% of the organic farms.

Contrary to this, products like cheese, poultry, fruit and berries are only to a limited amount present among the organic farms.

**Table 5.6 Products for sale split into average used area:**

<b>Hectare Products*)</b>	<b>Average hectare</b>	<b>Hectare total</b>	<b>Number of farms</b>
<b>Feeding stuffs</b>	111	888	8
<b>Milk</b>	84	2254	27
<b>Potatoes</b>	75	1643	22
<b>Carrots</b>	74	1190	16
<b>Bread grain</b>	67	1674	25
<b>Fodder grain</b>	54	1354	25

<b>Onions</b>	52	677	13
<b>Fat stock</b>	49	1812	37
<b>Other vegetables</b>	45	854	19
<b>Porker</b>	36	646	18
<b>Eggs</b>	29	407	14

*\*) The products poultry, berries, fruit, cheese, sheep and others have not been taken in since there are too few observations.*

In table 5.6 the organic farms from the evaluation has been split into the products for sale and distributed into the average used area. It can be seen from table 5.6 that the organic farms that produce feeding stuffs has the highest level of average area at a total of 111 hectare per farm. After this come carrots, potatoes and milk with an average area between 74 and 84 hectare.

### **5.3 The background for converting to organic farming:**

The organic farmers have been asked for the reason to convert to organic farming. The answers have been summarized in table 5.7.

The answers in table 5.7 are ranked in the order of when the background factor is seen as particularly important among the organic farmers.

**Table 5.7 The background for converting to organic farming:**

Why convert? Background factors	No in %	Limited reason as to why in %	Not so important in %	Particularly Important in %
Promote the environment	3	7	7	84
Better work environment	28	8	12	50
Animal ethics	24	13	14	47
Better products	30	19	12	37
Other	64	-	2	30
Conversion support	48	15	12	24
Recommendation from colleagues	60	13	9	17
Better income	65	9	11	15

It is interesting to see that the background factor “a wish to promote the environment” is the absolute top scorer. 84% answers that this factor is particularly important. Here after there is quite a way down to the second and third most important background factor. These are the wish to have a better work environment (50%) and animal ethical reasons (47%).

It is furthermore interesting to see that the importance of the conversion support is only mentioned as particularly important among 24%. It should not be concluded from this that the conversion

support does not affect the decision to convert. It can only be concluded that the reason is not the most important factor when the farmer is in a situation where he/she should assess whether there should be a conversion or not.

It can be seen from table 5.7 that the wish for a better income was only particularly important for 15% of the farmers.

It cannot be ruled out that the answers hold a positive effect. The respondents can have a tendency to promote altruistic reasons for the conversion (better environment, animal ethics etc.) instead of 'receiving conversion support' or 'having an expectation about a better income'.

In order to take this into account respondents who mentioned several reasons as particularly important have after filling out the scheme been asked to point out the most important. On this question 'the wish to promote the environment' scores highest too, since 54% mention this as the most important reason.

The consultancy therefore finds that the motives of the converters on promoting the environment generally must be characterized as serious.

In table 5.8 the background factors have been split into producers of milk, potatoes, porkers and so forth.

**Table 5.8: The background for conversion, split into producers.**

The following reasons are particularly important:	Better income %	Promote Environment %	Animal ethics %	Better products %	Promote better work environment%	Conversion support %	Recommendation of colleagues %
Potatoes	18	82	55	64	64	18	23
Milk	30	74	33	41	56	33	31
Porker	6	94	89	61	50	11	11
Fat stock	15	91	58	38	41	24	15
Fodder grain	17	83	46	25	46	25	21
Other vegetables	16	95	47	53	74	16	16

It can be seen from table 5.8 that the milk producers is the group that focuses the most on economy: 30% of the milk producers mention that a better income is a particularly important reason for conversion. Further 30% of the milk producers say that the conversion support was a particularly important factor for the decision to convert.

The economic incentives are the least important for the producers of pork. 6% say that an increase in income is particularly important and 11% focus on the conversion support as particularly important. Instead 94% of the pork producers say that a wish to promote better environment was a particularly important reason for them. 89% among the pork producers answer that animal ethics was a particularly important reason which is beyond any comparison the largest group of producers to focus this much on animal rights.

The focus on animal rights among the pork producers is particularly big as opposed to that of the milk producers. This is not surprising since the production methods for organic and conventional milk producers are more or less the same. As opposed to this the difference between conventional and organic pork production is much bigger.

The wish to promote a better working environment is particularly important to producers of vegetables (74%) and potatoes (64%). Yet also milk producers (56%) and pork producers (50%) answer that the working environment is a particularly important reason for converting.

When it comes to the recommendations of colleagues it is first and foremost the milk producers that mention this reason as particularly important.

## 5.4 Development support

In table 5.9 the development projects have been split into project type.

Splitting the projects into individual types take its leading point from how the cases are split up in the Directorate of Agriculture. Therefore it is identical to the following project types: the primary sector, the manufacturing sector, storage and packing projects, sales, information, counseling, research and experiments and other areas.

**Table 5.9 Accepted development projects split into type of projects**

Project type	Accepted 1000 kr.	%	Average (per month)	Total n	%
Primary sector	487	1	162	3	2
manufacturing sector	7535	11	502	15	9
storage and packing projects	952	1	119	8	5
sales	8062	12	299	27	16
information	14068	21	190	74	44



counseling	10438	16	1305	8	5
research and experiments	25038	38	759	33	20
other areas	37	-	37	1	1
Total	66617	100		169	102

It can be seen from table 5.9 that the 169 projects in the evaluations' analysis make up a total of 66, 6 million Kroner. The largest accepted amount for a project is at 7011 million Kroner and the smallest is at 1000 Kroner. The average amount per accepted project is at 400.000 Kroner.

The largest average accepted type of project is research and experiments and counseling. Overall the largest amounts have been dealt to research and experiments which have received 25 million Kroner which make up 38% of the all the development projects. The information projects have received 14 million Kroner (21%) while counseling have received 10,4 million Kroner, which corresponds to 16%.

Information projects make up the most of the accepted applications. In total 74 projects were accepted. A large number of these were given to the Information Campaign under the Common Committee for Organic and Biodynamic Agriculture.

Measured by the size of the amount given the fourth and fifth largest groups are the sales projects and projects targeting the manufacturing sector. These have been given 8 million Kroner and 7,5 million Kroner.

It is noteworthy that only three projects, for a total of 487.000 Kroner, can be lead straight back to the primary sector. It seems that it has been difficult to anchor the development projects directly in the primary sector due to too few projects worthy of support.

In relation to this problem table 5.10 shows that the project type that has the highest rejection rate is exactly for projects from the primary sector.

**Recommendation 1: It is recommended that the Council for Organic Agriculture considers how projects within the primary sector can be enhanced. The reason for enhancing this project type is that the development projects are hereby anchored directly at the organic farms and can therefore easier help the farms.**

**Table 5.10 Development projects split into various types:**

Acceptance %	Project type	Not accepted %	Accepted %	Total number of applications %	The project type's share of the total number of applications%
40%	<i>Primary sector</i>	77	24	17	5
	<i>Manufacturing sector</i>	53	47	34	9
	<i>Storage and packing projects</i>	18	82	11	3
	<i>Sales, marketing and distribution</i>	43	57	53	14
60%	<u>Information</u>	44	56	153	41
	<u>Counseling</u>	27	73	11	3
	<u>Research and experiments</u>	44	56	70	19
	Other areas	94	6	18	5
	Total			367	99

Table 5.10: The total number of applications for Development Support was 367 which make for a rejection percentage of 50.

The highest acceptance percentage is gained within the project type Storage and Packing and within Counseling. Projects in Sales, Marketing, Distribution and Research and Experiments as well as Information Projects are all accepted in about 56-57% of the cases.

The projects have either gained acceptance for 40% or for 100% of the basis for support. By dividing the project types into these two categories it can be seen that there is the tendency that the projects which received a 100% support are more often accepted than the projects which got 40% financed. The reason for this is that the highest rejection rate is seen within the primary sector (77%) and within the manufacturing sector (53%).

### ***5.5 The importance of the Development Support for whether a development project is carried out***

A central matter for the evaluation is to assess whether the Law on Organic Agriculture has started development projects that would not have been made if they did not receive the funding.

In table 5.11 the importance of the development support for the making of the development projects is shown.

<b>Would the development projects have been carried out without undertaking?</b>	<b>Total of projects</b>	<b>Of this projects with 40% co-financing</b>	<b>Of this projects with 100% financing</b>
The project would not have been carried out	55%	23%	77%
Would have been carried out with a lower standard of professionalism	32%	40%	60%
Would have been carried out at a slower pace	23%	69%	31%
Would have been carried out later	13%	79%	21%
Would have been carried out in the original/same version	4%	83%	17%

The leaders of the development projects were to answer the hypothetical question of whether the development projects would have been carried out without funding. It can be seen from table 5.11 that a total of 55% would not have been carried out without the extra funding. The majority of the projects would not have been carried out without the undertaking. The majority of the 55% have received 100% financing, namely 77%. The last 23% are projects that have a co-financing of 40%.

It can be seen from table 5.11 that the majority of the projects that did receive 100% financing would not have been carried out without the funding. As an example of the project types that did achieve 100% financing research and experiments can be mentioned as well as many of the information projects. It is not surprising that these projects only are carried out with 100% financing since alternative financing for general organic projects are difficult to achieve.

It can also be seen from table 5.11 that only 4% of the projects would have been carried out in the same version even if they had not gained undertaking under the law.

Based on table 5.11 it can be calculated that 30% of the projects that did achieve 40% co-financing would not have been carried out if they had not received the undertaking. As opposed to this twice as many, namely 61% of the projects that have 100% financing would not have been carried out without the support.

It does not seem surprising to the consultancy that it is first and foremost projects that gained 40% co-financing that would have been carried out even without the public support (even if it would have been in a different and reduced version). The same pattern has been seen in other evaluations, where from 40% up to 100% co-financing have been possibilities. The reason for this is typically that the projects which receive 40% co-financing are of a commercial nature and are therefore of great importance to the one making the project.

By co-financing the commercial projects it is very much the sharing of the risk that seems attractive to the one initiating the project. The project will therefore often be carried out but not necessarily in the same version without public co-financing but either on conditions that are less professional, at a slower pace or later in the process.

In the projects that do receive 100% financing it is not the sharing of the risk that is the primary reason for giving the funding but instead quite simply to create economical resources.

## 5.6 The development projects split into the different sectors carrying out project

In table 5.12 the development projects are divided in relation to the project carrying sectors.

**Table 5.12: The development projects split into different sectors**

The development projects Split into different sectors	<u>Sum</u> 1.000 kr.	%	Average in 1000	Total	<u>n</u> %
Farms	1180	2	107.3	11	7
Manufacturing of food	4221	6	324.7	13	8
Other things manufactured	494	1	164.7	3	2
Retailers	1845	3	307.5	6	4
Service firms	23772	36	457.5	52	31
Line of trade organization	7245	11	315.0	23	14
Sector research institute	12086	18	1007.2	12	7
University institute	11107	17	793.4	14	8
Independent research institution	1648	3	117.7	14	8
Other	2854	4	142.7	20	12
<b>Total</b>	<b>66452</b>	<b>101</b>		<b>168</b>	<b>101</b>

It can be seen from tables 5.12 that by making an analysis on the **sectors that carry out the projects** instead of an analysis on project types the farms and manufacturing companies become better represented. The reason for this is for example that some organic farms have carried out projects that were focused on sales. See for instance the overview of the project types in table 5.9 where the projects are not registered under the primary sector.

Table 5.12 points out that farmers and the manufacturers are not very well represented no matter if the specification is made for projects types or if it is made for who carries out the projects.

The relation between the project type and the sector that carries out the project can be exemplified by looking at research and experiments:

The project types in research and experiments are divided up into groups relating to who carries out the project. These may be the projects within the sector research institutes, the university institutes or independent research institutions. The three groups have each received 12 million Kroner, 11 million Kroner and 1.6 million Kroner for research and experimenting.

When the sector implementing the projects is studied service firms turn out to be the sector that has the largest accepted amount. 44 of a total of 52 projects in this sector are being taken care of by the Common Committee for organic and biodynamic agriculture since for instance the information

campaign for organic and biodynamic agriculture is registered here. The 44 projects have received 20.3 million Kroner alone which make up 31% of the funds that have been given totally.

It should be mentioned that among the 44 projects is financing of the organic agricultural consultancy service. In total 4 consultant projects have received 9.2 million Kroner and the last 40 projects have received 11 million Kroner. In the sector “Line of trade organization” is the “TRÅD-project” which is being co-financed by the farmers’ and small farmers’ organizations. The TRÅD-project is supposed to build up an advisory network between the organic consultants, the conventional consultancy the organic farms and the conventional farms.

## **5.7 The target groups of the development projects and the commercial and knowledge producing character**

The target groups of the development groups can be divided into ‘organic farms’, ‘manufacturing firms’, ‘retailers and service’, ‘research institutions’, ‘consumers’ (mentioned with their specific consumer segment) ‘public decision makers’ and ‘others’. In table 5.13 the importance of the target groups in the development projects are assessed.

**Table 5.13 The target groups in percentage in the development projects**

<b>Are the following target groups relevant for the project?</b>	<b>Yes, very much</b>	<b>To some degree</b>	<b>To a low degree</b>	<b>No</b>
<b>Organic farms</b>	53	7	7	34
<b>Manufacturing</b>	14	10	9	68
<b>Retail and service</b>	24	6	10	60
<b>Research institutions</b>	11	8	10	70
<b>Consumers</b>	26	17	5	52
<b>Public decision makers</b>	10	7	4	78
<b>Others</b>	29	5	1	54

Table 5.13 points out that even though the number of project undertakers among organic farmers is low the target group for the development projects is to a very high degree the organic farms. 53% of all organic farms have this group as a very important target group. The second most important group is the group ‘others’ since 29% of all projects are made for this group (as an example could be mentioned ‘research and experimenting’ which is to facilitate the advisors of the individual organic farms, for instance organic consultants) [this is also gibberish in Danish...*tba*]

From table 5.13 it can also be seen that the areas ‘retail and service’ and ‘manufacturing’ are relatively more rare groups since 23% and 13% of the projects respectively have them as a target group. The consultancy finds that these areas which represent the secondary part of the organic sector should be prioritized very highly considering how many projects have had the organic farms as target group up until today.

An important result from table 5.13 is that the projects have had a broad scope and various target groups. Yet there is an overweight of organic farms which is not surprising since the point of the law on organic farms is to promote the organic agriculture.

When characterizing the development projects a difference can be made between development projects that have a commercial aim and those which have a generally aim to inform and build knowledge.

**Table 5.14 the commercial versus the information enhancing character of the development projects**

<b>Commercial or General information enhancing and knowledge building</b>	<b>Yes to a high degree</b>	<b>Yes to some degree</b>	<b>To a limited degree</b>	<b>No</b>
<b>Commercial target: firms</b>	29%	8%	4%	59%
<b>Commercial target: consumers</b>	9%	7%	6%	78%
<b>General information enhancing and knowledge building</b>	66%	10%	5%	19%

It can be seen from table 5.14 that 66% of the projects have had a high degree of information enhancing and knowledge building aim in relation to organic agriculture. 29% were commercial projects aimed at either an organic farm or a manufacturing company. Finally only 9% of the projects were aimed at a specific defined consumer target group which is why the project must be characterized as mainly commercial (for example a marketing project).

## **5.8 Economic future**

In table 5.15 and 5.16 the leaders of the development projects and the organic converters estimate the economic future of organic farming.

**Table 5.15 Economic future – estimated by the leaders of the development projects**

<b>Answer</b>	<b>Estimate of the sales possibilities for organic products in the coming 2 years</b>	<b>Estimate of the economy for organic agriculture in the coming 2 years</b>
<b>Very bad</b>	4%	11%
<b>Bad</b>	6%	17%
<b>Good and bad</b>	35%	41%
<b>Good</b>	37%	17%
<b>Very good</b>	13%	2%
<b>Do not know</b>	6%	14%
<b>Total</b>	100%	100%

The leaders of the development projects are generally positive concerning the sales possibilities for organic products in the coming 2 years. 50% find that the sales possibilities are either 'good' or 'very good'. Only about 10% thinks that the possibilities for future sale are either 'bad' or even 'very bad'.

The project leaders for the development projects are less positive when they estimate the economic situation. Only 2% find it 'very good' while 17% find it 'good'. 29% estimate that the economic situation for organic farming in the coming 2 years will be 'bad or 'very bad'. [These numbers are wrong! 11+17 =28 and the total is not 100 but 102 in the second row in table 5.15. The correct total in the first row is 101... *tba*]

Table 5.16 shows the estimate of the future economy of the converters. Comparing table 5.15 and 5.16 gives the interesting result that the organic farmers -that is the converters – seems have a more positive view on the future than leaders of the development projects. 47% of the organic farmers think that that the general future of organic farming is positive and only 13% have a negative view.

**Table 5.16 The economic future –estimated by converters**

<b>Expectations concerning sales:</b>	<b>Increasing</b>	<b>Falling</b>	<b>Same</b>	<b>Do not know</b>
<b>Product prices</b>	9%	50%	33%	9%
<b>Consumer demand</b>	59%	9%	24%	8%
<b>Export</b>	58%	-	7%	35%
<b>Average</b>	42%	20%	21%	17%

<b>General expectations for the future of the organic agriculture</b>	<b>Positive</b>	<b>Positive and negative</b>	<b>Negative</b>	<b>Do not know</b>
	47%	39%	13%	1%

It can also be seen from table 5.16 that the reason for the rather positive expectation for the future of the organic agriculture is an expectation of increasing consumer demand. 59% of the converters mention that they expect and increased demand. Concerning the prices of the products 50% expect them to fall, 33% expect the level to be the same and only 9% expect rising prices. It should be noticed that although half expect falling prices the organic farmers describe their expectations as positive or at least as mixed.

The expectations for exportation are very positive since 58% expect a rise in the export while only 7% expect the level to be unchanged and 35% answer that they 'do not know'. The consultancy finds that when 58% expect an increase in the export it is either due to that the export is so low today that any increase will lead to a much larger export level or due to simple wishful thinking from the organic farmers.

The general positive expectations for the demand are lowered when the answers from the project leaders in manufacturing, packing, distribution and sales is studied. Since a number of these respondents have been able to quantify turnover and investments in their projects these must be expected to have a better condition for estimating the demand. This group that knows what is going on has a more moderate expectation since only 2 out of 19 see the organic agriculture's future in the coming 2 years as this good while the rest have mixed or negative expectations.

This supports the presumption about wishful thinking among organic farmers.

The strong positive expectation for increased export can be linked to an expectation about increased demands which therefore turn out as a consequence of the expectations about increased export. The consultancy finds that the wish among organic farmers for an increased export should be studied

more especially in relation to lower the barriers that may exist in relation to enhancing the export within the next couple of years.

Section 7.4 elaborates on the barriers of and the future for the export.

## 5.9 The 56 conventional farms

The interviews made with 56 conventional farmers are made in order to register the level of **motivation** for conversion among conventional farmers.

Table 5.17 shows the result for how the conventional formers answered concerning product types. The possible types of answers were:

- Conversion is not possible
- I do not wish to convert
- I have considered to convert
- I will maybe convert

**Table 5.17 Motivation for conversion among conventional farmers, split into various product types.**

Products	Conversion is not possible	I do not wish to convert	I have considered to convert	I will maybe convert
Potatoes	13%	63%	25%	-
Other vegetables	19%	69%	13%	-
Milk	-	77%	24%	-
Porker	10%	76%	14%	-
Fat stock	-	82%	18%	-
Bread grain	20%	60%	16%	4%
Fodder grain	14%	67%	19%	-
Other	8%	73%	16%	3%

It can be seen from table 5.17 that only two farmers that produce bread grain and ‘another product’ respectively will maybe convert.

Furthermore table 5.17 shows that within all types of products some have considered to convert. The top scorers in this group are potato producers and milk producers. 25% of the potato producers and 24% of the milk producers have considered converting but did not go through with it. There is a potential to convert to organic farming in case a number of barriers are reduced.

It is interesting to see how only very few of the conventional farmers directly state that conversion is impossible in their view. It is noteworthy that no milk producers or producers of fat stock mention that conversion is not possible in their opinion.

Table 5.18 shows the interest for conversion among conventional farmers under the conditions that a partly conversion is in fact possible. Such an option does not exist today in the law. It is



interesting to see that even if a partial conversion is made possible only 5% declare their interest in conversion for the time being. Yet 30% would maybe be interested.

A closer look at the main results from table 5.18 shows that particularly the pork producers answer that they would maybe be interested in a partial conversion.

**Table 5.18 Interest in conversion among conventional farmers if parts of the farm could be converted**

<b>Partial conversion impossible</b>	<b>Not interested</b>	<b>Maybe interested</b>	<b>Interested</b>	<b>Do not know</b>
4%	54%	30%	5%	7%

The possible advantages by giving access to partial conversion could be that the organic production would increase in volume and make it possible to lower the cost per unit in distribution and sales.

The disadvantages would be that the organic basic principles as a whole in the systems and the natural cycle in field and stable would be deviated from.

Furthermore the control of the whether the farmers abide by the law on organic farming principles would be more difficult to control and it would make great demands in the moral of the farmer. It could mean a general lower trust in the organic products that has been build up by now.

**Recommendation 2: All in all the consultancy finds that the well known technological, economical and control related aspects means that the drawbacks connected with partial conversion to organic farming more than out weigh the advantages.**

When it comes to knowledge about organic agriculture among the conventional farmers about 45% answer that they think they have a good or somewhat good knowledge about organic agriculture. 50% answer that they have limited knowledge about it.

Furthermore 95% of the conventional farmers answer that they are aware of the existence of conversion support. 41% know the organic brand (the Ø-mark/-brand) and 27% have some or much knowledge about the standards for organic farming.

Concerning information about the organic agriculture the main part of the conventional farmers mention newspapers and the media as their primary source.

80% of the conventional farmers expect the drawbacks if converting to be that weed will be a big problem. Furthermore 77% of the farmers mention deceases as a problem and 57% expect a lower yield. Also 59% of the conventional farmers expect the distribution and sales to be a problem. And the conventional farmers expect the costs for employment to increase.

In conclusion the most important reason why relatively few of the conventional farmers are interested in converting since they have pessimistic expectations about the economic future of organic farming. Further the 56 interviews show that the knowledge about organic farming and parts of the Law on Organic Farming is relatively good.

## **6. Organization and Administration of the Law on Organic Agriculture**

The conversion support and the development support are organized with administration and appropriation permission in the Directorate of Agriculture. The Council for Organic Agriculture is a part of the administration of the conversion and development support as advisors for the Directorate of Farming.

Furthermore the Directorate of Plants, the Directorate of Animals and the Food Control Board (Levnedsmiddelstyrelsen) take care of the administration of the Law on Organic Farming by making authorizations, controlling organic agriculture, manufacturing and sales.

### **6.1 *The Council for Organic Agriculture***

The Council for Organic Agriculture has been made to “promote, follow and assess the development possibilities for a Danish organic agricultural production”.

The functions and members of the Council were laid down in the law. The council shall “make suggestions for how to support organic agriculture, assess the continuous counseling and experimental work, make suggestions for further activities and statements on rules for control of production, marketing, storage, marking, distribution and retail sale of organic goods.” The council therefore has no real competence to hand out funds or make rules.

The council consists of “1 representative of the Ministry of Agriculture, the Ministry of Environment, the Council for Biodynamic Agriculture, the National Council for Organic Agriculture, the Council for Cooperation between Organic and Biodynamic Agriculture, the Danish Farmers Unions, the Danish Council for Small Farms [Husmandsforeninger] and the Council for Consumer Interests. The representative of the Ministry of Agriculture is the chairperson of the Council.”

In the Council meeting are furthermore, as assessors, representatives of the Council for Food [Levnedsmiddelstyrelsen], the Directorate of Domestic Animals, the Directorate of Plants and the consultancy service.

The Council holds monthly meetings where both individual applicants and more general relations are on the agenda.

During the period the Council has been in function it has discussed and taken initiative to a number of activities. The most important task in the beginning was to establish the organic marking. Furthermore the Council discussed the content in the departmental orders and rules that followed from the Law on Organic Agriculture. The Council has furthermore been included in starting up the information activities such as the Information campaign and the development of the Branch Coordination Committee (BCC, in Danish: BKU), Danish Natural Milk and the like.

The Council has also initiated research activities. The Council has therefore taken the initiative to assemble a part of the research in institution the National Research on Domestic Animals at Foulum. They should lead and coordinate the project “Organic Agricultural Systems”. The project is build up around 18 experimental farms, which is the basis for the tests that are made as a collaboration between a number of research institutions, among others the National Cultivation of Plants, the National Institution for Agriculturally Technical Experiments, the then existing National Institution for Dairy Experiments and others. These institutions were represented in a leading group that was made to take care of and follow the research.

The research is due to the wish of the Council very practically oriented since the goal is to make it directly useful for the organic farmers. The Council furthermore decided in May 1991 that 50% of the funds should go to research. On this background the Council and the leading group in Foulum should together make a more detailed prioritization.

On the basis of the interviews with central representatives of the leading group it is the assessment of the consultancy that the Council for Organic Agriculture has actively tried to help control and prioritize the research in cooperation with the leading group. And that the Council has created competence meanwhile.

Members of the leading group do recognize that it has had a too narrow composition since it mainly did represent the traditional institutions within agricultural research and therefore needed the relation to other research environments.

In 1991 the Council for Organic Agriculture therefore took the initiative to broaden the composition of the leading group and the scope in order to ensure larger cross sectional research and cooperation between research environments in the agricultural institutions and the universities business schools and so forth. As a result of this and due to that funds were given to organic research in the Ministry of Agriculture a group was made within the Advising Research Group at the Ministry of Agriculture. It should bring up a suggestion for a 5 year action plan. Three members of the Council for Organic Agriculture have taken part in this work.

The Council has agreed to that the research group forthwith shall make decision on the organic research applications on the basis of the action plan that has been made. Yet the Council for Organic Agriculture still is accepting to give a part of the funds to research that could not obtain support from the Council of Research. This will typically be research and experiments within sales and the research that is far from the sciences.

Several of the researchers that have gained financial support within the Law on Organic Agriculture point out that their projects never would have gained support within a more traditional research funding. The Law on Organic Agriculture has been a necessary prerequisite to get research in the organic area started. That the council now has an interest in leaving the research to the Council of Research must be seen in the context that there is a wish to get the organic research accepted and integrated into the conventional research in order to get more weight and make more researchers interested in the area. Yet it is the assessment of the consultancy that by leaving the research to the Advising Research Group at the Ministry of Agriculture the Council gets more problems in keeping control over the general influence and control over the development of the organic sector.

**Recommendation 3: The consultancy recommends that the Council for Organic Agriculture is represented in the Advising Research Group at the Ministry of Agriculture in order to ensure**

**a superior/general influence and control of the development of the organic sector and to use the experience and knowledge of the Council for Organic Agriculture positively.**

Also the problems with sales have been discussed. At the first meetings in the council the possibilities for sale of organic milk was discussed as a general matter. The Council took initiative to meet with several organic milk producers, with the Common Organization of the Dairy Producers and with MD Foods.

It is the assessment of the consultancy that the Council actively has followed and discussed the organic sector and continuously has been a collaborator when relevant activities have been initiated.

The composition of the Council is set up in the Law on Organic Agriculture. Generally the composition of the Council and the persons that have a seat here are working together positively. These are persons that are very familiar with the organic production. All the Council's members that are not from the ministry have organic farms themselves. Due to this and due to their membership in different organizations within the organic sector they have knowledge of the people involved and the conditions present in organic production. This relation is also the case for the two members that represent the Danish Council for Small Farms and the Danish Farmers Unions.

It is the assessment of the consultancy that the Council has the prerequisites and also do fill out its role as advisor, supervisor, and initiator within the organic sector. Several of the interviewed applicants and also the members of the Council do point to that the competence of the Council is primarily lying in production. Competences within sales and manufacturing are at a weaker level. Sales have none the less a crucial role for the organic agriculture. The organic sales structure is also very undeveloped and fragile.

**Recommendation 4: It is recommended that one or more persons with experience in manufacturing and sales are involved in the work of the Council for Organic Agriculture.**

In relation to follow, assess and advise on the increasing number of rules made in the EC some members feel that their role is too weak. A stronger link between the Council and negotiators from the Ministry of Agriculture in EC is requested. Considering that the EC has an increasing influence on the rules and control mechanisms concerning organic agriculture it is important that the Council is included in this work since it is a general wish in the Council that the Council has a central role as an advisory board to the state in relation to organic agriculture.

**Recommendation 5: It is recommended that a close connection is kept between the Council for Organic Agriculture and the negotiators of the Ministry of Agriculture in the EC, so that the knowledge and assessments of the Council for Organic Agriculture are taken in and used.**

It has been mentioned to the consultancy that a representative of IFOAM can be a part of the Council for Organic Agriculture which will increase the relations between the Council and EC. Among IFOAM's Danish members are The Danish Association of Organic Agriculture (LØJ), the Council for Biodynamic Agriculture, the School of Organic Agriculture, Danish Natural Food and so forth.

As an organization IFOAM plays an increasingly important role in following and assessing how EC's rules on organic farming are interpreted and implemented in the individual member countries.

Therefore a representative of IFOAM could provide the Council for Organic Agriculture knowledge and insight into the development, particularly on EC's rules and increase its potential to relate actively to it.

**Recommendation 6: It shall be assessed whether a representative of IFOAM – possibly appointed by the Danish members of IFOAM – in the Council for Organic Agriculture could increase its ability to follow and influence the circumstances for organic farming within EC.**

In order for the Council to get a more central role, not only in relation to EC but in general, it is important that the Council is active in setting the agenda, also in relations that are not directly or solely related to organic farming, but that also have great influence in the organic sector. It is the assessment of the consultancy that the members of the Council have been too passive.

**Recommendation 7: It is the recommendation of the consultancy that the members of the Council for Organic Agriculture to a higher degree make their marks and use the service of the secretariat they have at their disposal.**

One of the most important problems in relation to the level of engagement in the work for the Council for Organic Agriculture is a lack of time and financing. The main part are farmers who live far from Copenhagen. It is generally hard to get time to delve into the cases before the meetings and to make time for traveling and meetings on top of this. Further more a large number of the members have to pay the hours they put into the job and travel costs themselves since the organizations they represent do not finance this.

To members the work in the council is therefore generally a burden. The relatively large replacement of the members is also partly a result of this. A solution with an economic funding for the members has been tested. This was not possible since the members represent organizations and are not participating as individual persons.

**Recommendation 8: The consultancy recommends that it is being investigated to which degree a certain economic compensation can be given to the members of the Council for Organic Agriculture as an allowance.**

In relation to the treatment of individual cases in the Council it did give priority to the distribution of development funds in the introductory meetings. The Council has hereafter consecutively discussed the development and adjusted the priorities.

At the Council meetings all applications for development support are dealt with. Also cases of dispensation in relation to the authorization of organic farms given by the Directorate of Plants and the Directorate of Animal's and the Council for Food's [Levnedsmiddelstyrelsen] control of manufacturing and distribution are treated.

The Directorates hear/consult the Council in all cases even though the Council does not have the authority to give out licenses.

The Council makes a recommendation for each applicant. The Council has been agreeing on its recommendations and it has never voted on this matter. Generally there is agreement or agreement is reached between the Council and the directorates on the recommendations in the cases.

Generally it is the assessment of the Council that the Law on Organic Agriculture provides wide frames for handing out the development support. It has therefore been possible for the Council to support all the projects that seemed reasonable and also support some more risky projects once in a while.

However several members of the Council do feel that particularly in the first years the development support was scattered all about without any real strategy or connection of the activities.

However during the period the criteria for recommendation to get support have been tightened within the Council. This is for instance the case where applicants must now be more professional. The tendency is also that it is more established organizations that get support, particularly concerning research and experimental projects.

This tightening is taking place due to the experiences from the existing projects as they report to the Directorate of Agriculture and on the basis of the generally good personal knowledge that the Council has to the relatively small group the organic farmers make up. It is however a relatively unsystematically and informal evaluation of the existing projects.

The consultancy assesses that the personal knowledge of the Council of the organic sector is valuable and an important prerequisite for a valuable diversion of the supporting funds. Without a systematic continuous evaluation there is however a risk that a real collection of experiences does not take place and competences are lost from the Council. It is the assessment of the consultancy that the Council due to lack in systematic consecutive evaluation does not adjust and expand its basis for estimation to the degree needed.

**Recommendation 9: The consultancy suggests that the Council for Organic Agriculture gets the ability to consecutively review the initiated activities/projects collectively and on this background updates its competence and basis for recommendations.**

Generally the work of the Council is seen as competent. Among those who receive development support 40% say that the work of the Council is competent. 20% does not find the Council competent, 12% are neutral and the rest answer “do not know”.

It is the opinion of the consultancy that although the Council as mentioned has been working with the general elements of the implementation of the Law on Organic Agriculture this work has been focused on looking at individual cases. There is therefore a tendency to that the general picture disappears. This should also be seen in relation to the lack of evaluations.

**Recommendation 10: It is suggested that the Council for Organic Agriculture to a higher degree is being oriented about the decisions made and primarily is presented to the cases of principality to be discussed with the purpose of enforcing the role of the council as an advisor on strategy.**

## **Conclusion**

It is the general assessment of the consultancy that the Council for Organic Agriculture has functioned well in its construction and praxis.

The members of the Council have the necessary knowledge and familiarity with the persons involved to give advice about the organic sector. The Council has taken initiative to a number of activities within for example research and information and has generally followed and related to the development within the sector.

When it comes to the Council's treatment of the development support it is seen as competence particularly concerning the direct production. In relation to manufacturing and sales the Council does need knowledge and experience.

At the same time the consultancy assesses that the Council lack a systematic update up its basis for estimates, that the Councils treatment of individual cases should be focused on cases of principal issues and that its role as a strategic advisor should be emphasized.

## **6.2 The Administration of the Directorate of Agriculture**

The administration and authority to hand out licenses are situated in the Directorate of Agriculture. There is no recurs concerning the licenses, so the decision of the directorate is final.

The administration and secretariat service for the Council for Organic Agriculture is handled by the Directorate and together with the office chief in charge of the whole administration.

### **Conversion support**

The conversion support is relatively easy to administrate. The rules for handing out support are clear. The rules are mentioned in the Note on support for enhancing organic agriculture from January 12<sup>th</sup> 1989: *“Conversion support is given with 1500 Kroner per converted hectare the first year, 800 Kroner per converted hectare the second year and 300 Kroner per converted hectare the third year from the conversion to organic farming. For farms with more than 0.3 animal units per hectare the amounts mentioned in part 1 are raised to 1970 Kroner, 1055 Kroner and 375 Kroner per converted hectare. For farms with more than 0,7 animal units per hectare the amounts mentioned in part 1 are raised to 2200 Kroner, 1180 Kroner and 420 Kroner per hectare. The conversion support is stipulated yearly on the basis of the information on the number of animal units on the farm”*.

The administrative system in a conversion case is typically that a farmer makes contact with the Directorate of Plants to be authorized as organic farmer. The application deadline of the Directorate of Plants is every year on April 1<sup>st</sup>. After that the Directorate of Plants has overlooked the farm during the growth period it will make the authorization and a plan for the conversion period if all is in order. The conversion period varies from conversion to conversion but is typically not longer than 4 years. The farmers who have fields have a conversion period of 2 years before the products are certified organic.

As soon as the Directorate of Plants has given its authorization the Directorate of Agriculture sends an application form for conversion support to the farmer. The conversion support therefore follows almost automatically after the authorization. The application scheme is also simple with very few

demands for information since the main part of this information have been given to and controlled by the Directorate of Plants at the time of the authorization.

The relevant data are put into a case controlling system which has been developed by the Agricultural EDP Center [Landbrugets EDB-Center]. The support is calculated from this and the letters are typed out automatically. The support is paid each year as the rules prescribe.

Control of the conversion is happening in the Directorate of Plants that has yearly inspection rounds and makes random tests. In case of malpractice the Directorate of Plants inform the Directorate of Agriculture that can stop the payments. However this has only happened in a few cases.

Among those who have received conversion support the Directorate of Agriculture's administration is generally seen as positive. 56% finds that the Directorate of Agriculture's administration is smooth while 39% finds it to be lengthy. A major part of the critique is concerning that applications first have to go through in the Directorate of Plants to get an authorization and *then* have to go through the Directorate of Agriculture to get the conversion support. The individual farmer naturally sees the conversion as *one* procedure which is why it seems troublesome with two rounds of applications to two different bodies.

In order to get the conversion support it is required that the conversion takes place within 4 years. This is generally not a problem. A number of biodynamic farmers do however wish to have a longer conversion period and it can be difficult for fruit growers to finish the conversion within this period.

A bigger problem is that only the whole and not just a part of the farm can be converted. The demand for conversion of the whole farm is fostered in the organic organizations themselves. They point out that organic farms must be seen as a whole which is why partly organic farms are a contradiction. The demand is furthermore supported by the Directorate of Plants that sees control of partly organic farms as unsustainable.

Authorization of manufacturing and sale of organic products is situated in the Directorate of Animals and in the Food Control Board. The Directorate of Animals authorizes and control eggs, dairy- and meat products while the Food Control Board has the responsibility for all other areas and for all dispensations concerning added chemicals in food.

The authorization given by and control conducted by the Directorate of Animals is connected to the normal controlling system through the local food control institutions. For instance if a baker wants to get an authorization to sell organic bread will typically turn to his local food control institution which will send the application on to the Directorate which will then give an authorization according to the rules in place. The control of the authorization is handled by the local food control institution. Giving dispensation from the rules and dispensations from the Directorate of Plants' authorization of primary farms shall be heard/consulted in/with the Council for Organic Agriculture.

A big problem with the current rules is that the demand for separation of organic and non organic production in time and room. The background for these strict rules was that consumers had a general distrust of the organic products' quality as a good, particularly when the Note on "production, special marking, and negotiation of foods" was created. To many producers, for instance bakers, this demand leads to that organic production is left out. The new EC rule does



however mean that these demands are lowered. In the rule “place” is mentioned instead of “room”. This gives better opportunities for partly organic production.

Another problem concerning manufacturing of organic goods is that there occasionally is incongruence between the veterinary laws and the organic laws.

One example is the rules on organic manufacturing which specify demand that non pasteurized eggs are used which is illegal in the veterinary laws. While 87% of those who did receive conversion support finds that the Directorate of Plants makes reasonable demands for authorization several points to the incongruence in relation to the veterinary law.

Some of the respondents in the evaluation find that there is a need for a closer dialogue between the different authorizing authorities concerning which added chemicals can be allowed in organic foods and that the control with the manufacturing part of the chain should be increased.

**Recommendation 11: The Consultancy recommends that the legal conflict between rules for authorization of organic production and the veterinary rules for making food is being solved through cooperation and coordination between the Directorate of Plants and the Directorate of Animals.**

## **Development Support**

The law provides many possibilities for handing out development support. The development support can be given to *“projects which take aim at solve particular starting problems in relation to collecting, manufacturing, selling and so forth organically made products. The development support as specified in § 3 of the law can furthermore be given to manufacturing of teaching and information material, experimentation (under this testing in fields) and other arrangements which are of particular importance to the development of organic farming.”*

The typical ways the applicants for development support are handled are with an applicant calling the Directorate of Farming with a suggestion for a project. The Directorate of Farming assesses the suggestion and gives advice on how to fill in the application.

The directorate then sends the application scheme and when it is returned it is shown to the Council for Organic Farming. If the Council gives the project a positive assessment the one who handles the case collects any lacking information and the final application is finished. The Council sees the application even if it is not completely done in order to save the applicant any unnecessary work in case the Council should reject the project.

The reasons for turning down the applications vary very much. The main part are based on that the Council and the Directorate do not see the value of the project or that it is really not a development project.

The percentage of rejections has varied much over the years which can be seen from table 6.1. In 1987 the rejection percentage was 97% since only 32% of the projects applied for were accepted. In 1988 the rejection percentage was at 63%. In 1989 it fell significantly to 28% where after it increased through the following three years from 32% in 1990 and 57% in 1991 to up to 78% at the moment in 1992. The main part of the projects came in 1989 and 1990 with 104 and 108

applications. In 1991 it fell drastically to 46 while the directorate during the first 6 months of 1992 had around 20 applications.

**Table 6.1: Rejection in % 1987-91**

	<b>Average</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>
<b>Rejection percentage</b>	<b>50%</b>	<b>97%</b>	<b>63%</b>	<b>28%</b>	<b>32%</b>	<b>57%</b>

*Note 1: The rejection percentage is defined as  $\frac{\text{number of rejection}}{\text{number of applications}} \times 100$*

The great variations in the rejection percentage shall be seen in light of several relations.

In 1987, 88 and 89 it was still not completely clear what could be supported with the development support. Not until the note in January 1989 was the formal basis laid down. The directorate was therefore during the first years reluctant in giving support due to the existing uncertainty. Meanwhile the applications during the first years were of a bad quality. In 1989 the basis was okay and the quality had improved. In 1990 and 1991 the funding had increased so much that the budget had been spent. This and the changing and -particularly in 1991- very low grant lead to that it was necessary to make harder priorities which lead to a significant increase in the rejection percentage in 1991.

The varying level of rejections is therefore not a reflection of a change in the criteria set up or higher or lower demands.

As was mentioned in chapter 5 the consultancy finds it problematic that the rejection percentage in the primary sector is so high. Many applicants from the primary sector have no experience in working with financed projects which is why the use of many of the projects seem to be low just like the projects on the face of it had a poor quality or could not stand to be measured by the standards among the professionals. Yet if the Law on Organic Agriculture shall enhance the organic agriculture it is important that also primary producers are taken into the development.

One reason that affects the high rejection percentage is that a number of the application concerning the primary production is that the applications are for support for own work which is not being supported.

The reason why support for ones own work is prohibited is that the support shall not fund running the project. It is also difficult to divide development work from running the project when it is the same person that is doing it all.

By funding ones own work there is an inherent risk that the development support unintended happens to cover the expenses of running the project. One way to ease the options for financing ones owns work can therefore be to make it as an experiment. It is however the assessment of the consultancy that the Directorate of Agriculture and the Council can give a qualified answer to how much development work a project must have and on this basis give funding for the work of the applicant. By paying by the hour, which can also be used by projects employees, the applicants' own development work can be registered and support can be given on this basis.

Meanwhile such registration of own work will help professionalize the development work. The applicant will get aware of the actual amount of work it takes to handle the development project and therefore becomes better at estimating future development projects, for instance in using external help.

**Recommendation 12: The consultancy recommends that the Directorate of Agriculture and the Council for Organic Agriculture is seeking to enhance the involvement of the organic farmers in the development work among other things through the enhancement of better advising in the development work.**

**It is furthermore the recommendation of the consultancy that access for finance of own work is created as an experiment. This is particularly the case when one wishes to bring in the organic farmers in the development work to a higher degree.**

In the cases where the applications are accepted the applicant gets a notice of the acceptance together with a number of general and specific terms for the acceptance. These special terms are for instance on continuous reporting on the project.

The demand for reporting varies from project to project depending on the size and subject matter. Therefore there is no standardized reporting scheme. The final report is not in a standardized scheme either.

This leads to that the Directorate and the Council does not get a collective continuous overview over the final status and effects of the projects. This makes it more complicated to make a continuous update and qualification of the decisions to be made. Also such final reports would professionalize the project work and force the responsible of the project to concretely estimate the effects of the projects.

**Recommendation 13: The consultancy therefore recommends that the Directorate of Agriculture introduces standardized schemes for final reporting and uses these to continuously evaluate the status and effect of the support.**

Payment of the development support varies from project to project depending on the size of the amount. Payment takes place in rates with a minimum level that are paid under the supervision of the accountant when it is relevant to the project. This flexible method of payment ensures that the support is paid when the need is there and in the opinion of the consultancy this takes place with a smooth bureaucracy.

The applicants' assessment of the administration of the development support within the Directorate of Farming is therefore very good. 70% find the bureaucracy to be smooth, 83% find the case worker to be serving them competently. In relation to the time spent on working the case 81% find it short or appropriate. Also the information material from the Directorate is positively evaluated. 52% find it informative against 7% that find that it is not good.

As mentioned the law gives wide possibilities for the development support. Different general priorities and criteria have been used as the support was handed out.

At first the priority of the Directorate was to get the research projects started. The research projects did receive 38% of the total funding that has been given. With the decision of putting the organic research under the Ministry of Agriculture's Advisory Research Group the researchers' share have fallen in expectancy of collective organic research strategy. In the last years the Directorate have given priority to and searched for sales projects where one has been very willing to give a positive assessment of a project.

An important criterion for giving the support is that the projects concern a development element. The Directorate of Agriculture will therefore not support normal organic production. Another criterion is the geographical spread of the projects. This is particularly relevant for projects in packing, storage and distribution. Here the Directorate and the Council have tried to enhance a structure that covers the whole country.

The geographical dimension is also relevant to the assessment of to which degree there is a development element in the project. Two relatively alike projects can therefore very well be established if this means that a larger part of the country is covered in this way.

In accordance with the formulations in the law on that support is solely given to extra costs in development projects it has been the principle of the Directorate of Agriculture not to support costs for running the projects. Therefore the applicant must specify extra costs by type and make budgets for the following 4 years.

Over the last years the application scheme has been standardized and more detailed and the Directorate of Farming has thereby made a good basis for comparing when the decisions are being made on the incoming applications. In cases where the Directorate of Farming have assessed the informations as lacking something further specification and documentation is being provided through correspondence with the applicant.

It is the assessment of the consultancy that the Directorate of Farming's criteria generally have lead to a beneficial division of the development support. This and the Directorates work to advise and initiate projects have enhanced the effect of the funding.

**Recommendation 14: The consultancy therefore recommends that the Directorate of Agriculture stand by its current demands for the applicant's specification of costs and expenses in the budget thereby to ensure an appropriate use of the resources assigned.**

## **Conclusion**

It is the assessment of the consultancy that the Directorate of Agriculture's administration of the development support and the conversion support has been efficient and promoted a beneficial use of the funds.

The Directorate's service for the Council of Organic Agriculture is generally seen as good. A systematic follow up on the initiated activities through use of standardized finishing report schemes would however support the competence and decision making process of the Council and the Directorate.

In relation to the development support it is the assessment of the consultancy that the organic farmers' share of the projects should be increased and that in relation to this experiments are made with support for own work, see recommendation 12.

### **6.3 The Organization of the Organic Agriculture.**

The organic agricultural organizations are directly involved in the administration of the Law on Organic Farms through their representation in the Council for Organic Agriculture. In a number of other relations the organic agricultural organizations also influence or affect the implementation of the law. In this part of the text the organization of organic farming is described. In section 9 this organization is assessed in relation to the Law on Organic Agriculture in a strategic perspective.

In figure 6.1 [see hand drawn image] is the structure that has been existing until the summer of 1992 shown.

In the top part of the figure the organization of the administration of the Law on Organic Agriculture shown. The direct representatives of the farmers in the Council on Agriculture are from LØJ, the Association of Biodynamic Agriculture and their cooperation group. The cooperation group does not exist anymore. The representative from that group is however still a member of the council. The conventional farmers are represented through the Danish Organizations for Small Farmers [Husmandsforeninger] and the Danish Farmers Unions [Landboforeninger]. These organizations are also represented in the Common Group for Organic and Biodynamic Agriculture which the organic consultancy service and information campaign is connected to.

#### **The Common Group [Fællesudvalget]**

The common group was started already in 1985 where LØJ made contact with the Danish Organizations for Small Farmers in order to establish an organic consultancy service. The Danish Organizations for Small Farmers went into this and also partly financed it. It was however not until the Law on Organic Agriculture came into place that the Common Group got a real role to play. Financing of the consultancy service should according to the Law on Organic Agriculture take place through the conventional farming system. As cooperation already did exist between the conventional farming and the organic farming in the Common Group the consultancy service was placed in the Common Group with both the professional and the administrative responsibility residing in the national organic consultant in the Farmers' Advisory Center in Skejby.

In this relation the Common Group was expanded with the Danish Farmers Unions. The group is made up by three representatives from the Danish Organizations for Small Farmers, three from the Danish Farmers Unions, two from LØJ, one from the Organization for Biodynamical Agriculture. From the Danish Organizations for Small Farmers and the Danish Farmers Unions the representatives are identical in the Council for Organic Agriculture and in the Common Group, which ensures coordination and information between the two bodies.

Apart from the consultancy service it was also decided in 1989 to place the information campaign in the Common Group in the Farmers' Advisory Center. The information campaign is treated in chapter 8.

The Common Group holds its meeting 3 to 4 times a year where relations concerning the consultancy service and the information campaign are discussed. Cases concerning these two areas are therefore typically handled in the Common Group before they end up in the Council for Organic Farming.

During its lifetime the Common Group has become more important. The fact that the Danish Organizations for Small Farmers and the Farmers Unions are represented by the same persons in the Common Group and the Council for Organic Agriculture leads to a close relation between the two bodies. Meanwhile the Common Groups is now the only formal forum where LØJ and the Organization for Biodynamical Agriculture are together after that the Cooperation Group for Organic and Biodynamical Agriculture has been resolved.

### **The Consultancy Service**

In relation to the Law on Organic Agriculture the organic consultancy service was expanded from two consultants to one national consultant and 5 regional consultants. The regional consultants are 100% financed by the Law on Organic Agriculture. The National consultant and the secretariat that is situated in Skejby are not funded. Totally the financing only covers 70% of the expenses. The last 30% are to be covered by payment from the users or financing from the Common Group.

Payment from the users is on a timely basis for the consultancy services. The farms that have joined the Common Group have to pay 300 Kroner per hour. Non members pay twice as much.

The consultancy services requested by the farmers are partly professional advises on field plans, fodder, deceases and the like and partly advises on how to convert to organic farming.

The conversion has been an important part of the consultants' work, particularly during the years 1989 - 1991 where the most conversions took place. Several consultants have therefore spent the whole spring period during those years with advising on conversion.

That the consultants are used for conversion is also confirmed by that a large number of the applicants have their knowledge from the organic consultants whereas 16% comes from the newspapers, 17% from information from the Directorate of Farming and 3% from the conventional consultants. Finally 27% have their knowledge from their colleagues.

In 1992 the conversion wave has become status quo like which is why the consultants have more time for the professional counseling. The organic consultants contribute significantly with professional knowledge. Among the respondents 55% has their professional knowledge supplemented by the consultants. Other colleagues contribute with 51%, courses and the like with 24%, local groups with 35%. The most important source for knowledge is however articles in the professional magazines with 70%.

The organic consultants are practically not involved in the development support. They rarely take part in advising on and assisting to project creation or application. It is the assessment of the consultancy that even though the consultants have given priority to the professional advisory work and in general have problems with getting enough time due to the large geographical area they have to cover the organic consultancy service ought to be taken more in when using the development support.

The consultancy services regionally and centrally have a feeling for what goes on in the sector. They are personally in contact with a large part of the organic farmers and therefore have the opportunity to see and establish links and cooperation between the various producers in new development works.

If the consultancy service will further upgrade its competence within sales would this in the opinion of the consultancy be a good basis for that the organic consultants can be used more offensively in connection with the development support.

**Recommendation 15: The consultancy therefore recommends that the organic consultant service is used offensively in order to make use of the development support and that the consultant service upgrades its competence in giving advice on sales.**

In relation to the professional advice the economical consultants take part in for instance the TRÅD-project (Cross-sectional Advising).

The TRÅD-project is a network project where organic farmers, organic consultants and conventional farmers cooperate.

It is the assessment of the consultancy that the TRÅD-project has been enhancing the integration between the organic and the conventional farming. The TRÅD-project has furthermore lead to that a part of the conventional consultants have become involved in organic advising. Meanwhile the TRÅD-project has worked as a good and necessary backup for the professional farms that have converted.

The TRÅD-project also seems to have contributed to get more of these professional farms to make the leap into organic production. This tendency is a clear prerequisite for that the organic farming will receive a take a place in the Danish agriculture that surpasses the niche production and that is able to affect the conventional farming.

In relation to affecting the conventional farms in a more environmentally friendly way it is the assessment of the consultancy that the act that the organic consultancy service is situated in the Common Group and thereby in the conventional advisory service is constructive. It is however also important that the organic consultancy service keeps and expands the professional organic environment. It is therefore important that the general professional and administrative control over the service is placed at the national consultant. The consultancy service is still too new and fragile to be fully integrated with the local conventional organizations.

**Recommendation 16: The consultancy recommends that where the consulting service is situated is maintained but that it is considered to which degree the service can be integrated further into the conventional agriculture.**

#### **The Trade Line Coordination Group [BKU] for Organic and Biodynamic Agriculture**

The Trade Line Coordination Group for Organic and Biodynamic Agriculture (BKU) was established in 1989 with support from the Directorate of Agriculture.

BKU was made due to a need for coordination on practical professional elements and sales. Due to this need a number of trade line organizations were being established. However a structure between production and sales had not been established. The directorate of Agriculture offered to take part in building up such a structure. The directorate could not support direct sales activities in the trade line which is why the directorate offered to support through a coordinating group between the trade lines.

With 100% financing via the development support BKU was established with a secretary to take care of the practical secretariat functions, information work and general coordination of options.

The vision was that the trade lines should fully integrate into BKU which should become self financing over a period of 2 years. BKU was however not able to take care of these functions. There was a falling member rate and decreasing level of engagement in both BKU and the connected trade lines. The old BKU has now been resolved just like several of the trade lines have been. One of the problems for BKU was that it could not take care of sales and marketing which is why the interest among the farmers was not particularly big. A new BKU is being developed. The new BKU is being planned as having a much bigger role in sales and marketing. The group is to be self financed with financial support from farmers and the sales companies. The large sales companies like “Common Green West” and “Svanholm” have made a guarantee for the beginning of the new activities in BKU.

It is the assessment of the consultancy that the concept behind the new BKU is good and that BKU has a good opportunity/realistic chance to become an organizational centre and leaping point for the organic sector. With a strong organizational body funded in the farmers and the sales companies there is also an increased possibility for a more efficient channeling and coordination between the activities initiated within the sector.

## **7 The Quantitative Effects of the Law on Organic Agriculture**

### **7.1 Introduction**

The quantitative effects of the Law of Organic Agriculture are analyzed in this chapter.

The **quantitative effects** of the Law on Organic Agriculture is referring to the effects of the products and activities that have been initiated under the law and is measured by the sale, export, investment and employment in both the organic farms and other companies that manufacture and sell organic products.

It is also being studied whether it has succeeded in enhancing the goal of establishing a sustainable cycle on the organic farms by focusing on the organic farms’ buying of fodder and use of animal fertilizers.

The quantitative effects are being analyzed individually for both the development support and the conversion support.



When evaluating the effects of the **development support** the development projects will in particular be assessed on the basis of the individual project types. This means that the substantial element in the projects and the effects will be a central to the analysis. In the analysis the quantified effect is being held together with the size of the funding for the relevant projects so that the effect per funding Krone can be calculated.

By analyzing the **conversion support** the important key for the division will be the size in hectare of the individual organic farms. There are 3 sizes of farms, namely “small”, “medium” and “larger” farms. Another important criterion for the division of farms will be the number of animals per hectare for each individual farm. The number of animal units per hectare is a raw measurement of whether a farm has its focus on the fields or on domestic animals.

It shall be emphasized that both to the conversion support and the development support it has been difficult to make the quantitative effect assessment.

For the development support there are primarily two explanations for the difficulties in making the quantitative effect assessment. First, only 26 project leaders out of 165, corresponding to 16% have been able to quantify an effect. It is furthermore the case for these 26 project leaders that very few of them were able to put a number on sale, investment, employment and export. The consultancy finds that this relatively limited material make a generalization on the effects in Kroner of the development projects difficult.

Second, a number of the projects have had a general advising, information and education goal which is why it is not possible concretely to assess these projects' effect. A number of the project leaders do find that terms like sale and investment are not relevant in the assessment of the effects of their projects.

The consultancy generally agrees with the view that quantifiable effect assessments cannot be used as a success criterion to a number of the development projects. This view is particularly being supported by the fact that for the first 5 years the law must be considered as a law that has to cover a new area that is characterized by the development work of the pioneers. Following from this it would not be fair to use the same exact success criteria for the development projects that can be used for other programs.

On the other hand it must be expected that particularly as the development projects are professionalized the project leaders will to a higher degree be able to estimate the quantitative effects of the finished development project. In this relation the consultancy finds it appreciable that the Directorate of Agriculture has taken the initiative to change the application form for the development projects:

The application form has been extended with several elements that describe the purpose of the project, character and the influence to both development of the organic agriculture and to manufacturing and sale of organic products.

The consultancy finds it particularly constructive that the new extended application form from 1992 also has an overview of where the applicant mentions the raw material and the production of goods after the project has finished. Also the applicant has to make a budget mentioning the sale, use of raw materials, salaries and income. Even though the form mentions that the information concerning

raw material, production of goods, and the other expenses (like salary) should only happen to certain projects the consultancy assesses that this is a clear specification of the demands of the applicant's documentation for the viability of the project.

**Recommendation 17:** In order to promote a future quantitative effect assessment of the development projects' results it is recommended that the applicants are encouraged to present their projects' purpose, organization, implementation, and effects. This should be in harmony with the application form cited by the Directorate of Farming which came into force in 1992. Except for strategic research, pilot projects and broad information projects any development project applicant at the time of application should be able to present his/her expectations concerning for example on the production of manufactured goods and on the budget. This demand will be a natural consequence of the expected professionalization of the development projects as the Law on Organic Agriculture has had its effect during some years.

Meanwhile the consultancy points to that the recommendation above should not result in that inexperienced project leader are cut off from or scared away from applying for a development fund.

## ***7.2 The effect of the development projects on sale***

Even though only 26 project leaders have been able to quantify an effect of their development project 47 project leaders (corresponding to 28% of the total number of development projects) answer that their project was did have either "some" or even "great" importance to the sale of organic products. However 33% find that there has been none or limited effect on the sale of organic products while the largest group, 39% find that an assessment of the quantitative effects is too insecure which is why they answer 'do not know'.

Table 7.1 shows the importance for the sale of organic products for each individual project type.

**Table 7.1: The effect of the development projects on the organic products**

Project type	None/insignificant increase	Some/ large increase	Do not know	Support in Kroner	% of total support
Primary sector	33%	67%	0%	487.000	1%
Manufacturing	27%	67%	7%	1.291.000	2%
Storage and packing	13%	88%	0%	952.000	1%
Sales	41%	52%	7%	8.062.000	12%
Information	27%	10%	63%	1.406.800	21%
Advise	25%	38%	38%	10.438.000	16%
Research and experiments	50%	9%	41%	25.038.000	38%
Other	0%	100%	0%	37.000	0%
Total	33%	28%	39%	66.617.000	100%

The project types are, as mentioned in chapter 5, identical with the registration of the cases in the Directorate of Agriculture.

It is interesting to find that for the project types within the primary sector (the organic agriculture), manufacturing companies, storage and packing together with sales and distributing the ‘do not know’-percentage is remarkably low since an average of 5% answer that they cannot assess the meaning of the project for the turnover of organic products.

The project leaders for storage and packing projects thus estimate that their projects have had a relatively positive influence since 88% think that the development projects have had ‘some’ or ‘large’ importance for the turnover. Only 13% answer ‘none’ or ‘insignificant’ influence. Also projects that has the primary sector and the production groups as a target are relatively positive since 67% in each project type answer that the development projects have had ‘some’ or even ‘large’ influence on the turnover of organic products. To the sales projects it is the case that 52% answer that the development projects have had ‘some’ or ‘large’ influence on the turnover of organic products while 41% answer that the influence has been ‘low’ or has not appeared.

For the remaining project types, that is information, advisory, research and testing it is however the case that the insecurity of the influence of the development projects is strikingly higher. Thus 63% of the project leaders in information answer that they cannot quantify the effect of the project on the turnover.

It can be seen from table 7.1 that the counselling projects (primarily the organic consultancy service) has a relatively easier job estimating the influence of their effort since the organic consultancy service is seen as having a positive influence on the sale of the organic products. This positive evaluation of the consultancy service is confirmed by interviews with the organic farmers. Still the converters cannot quantify the importance of the consultancy service for the economy and turnover on their farms.

In table 7.2 the effects of the development projects on the turnover in the first year after they have finished are summed up. The scheme contains the 14 projects that have been able to make up the positive effect (estimated in Kroner).

**Table 7.2 The effect of the development projects on turnover (1<sup>st</sup> year after the project has ended):**

<b>Project type</b>	<b>Yearly turnover increased, Kroner 1000</b>	<b>Number of projects</b>	<b>Support in Kroner 1000</b>	<b>Effect per support Krone</b>
<b>Manufacturing</b>	<b>8.050</b>	<b>3</b>	<b>880</b>	<b>9,1</b>
<b>Storage and packing</b>	<b>4.850</b>	<b>5</b>	<b>605</b>	<b>8,0</b>
<b>Sales/distribution</b>	<b>15.700</b>	<b>6</b>	<b>2.074</b>	<b>7,6</b>
<b>Total</b>	<b>28.600</b>	<b>14</b>	<b>3.559</b>	<b>8,0</b>

By comparing table 7.1 and 7.2 the conclusion can be made that out of the 53 projects within the project types “primary sector, manufacturing, storage and packing and sales” 14 projects can assess

that there has been an effect on the turnover. The 14 projects make up 8% of the total number of projects.

It can also be seen from table 7.2 that among the projects that have an effect on the turnover the effect measured by each support Krone (indicated as the total turnover effect in relation to the support the individual projects have received) is at 8 Kroner. The total support is at 3,6 million Kroner for the projects and this has resulted in a total turnover in the first year of 28,6 million Kroner.

It is not possible to attribute this effect to the Law on Organic Farming alone since the majority of the project leaders state that the projects under some form would have been carried through whether or not they had received support and co-financing under the Law on Organic Farming. It is typically mentioned that the projects would have been carried through either at a slower pace, later in the process or in less professional manner.

In table 7.3 the top 10 projects of the 14 that could estimate a specific positive turnover have been shown. It is clear that the majority of the turnover that has been found can be lead back to these 10 projects since the yearly turnover is at 27,2 million out of the 28,6 million Kroner.

It can be seen from table 7.3 that 3 of the 4 top scorers on the top 10 list are sales projects. In this number 1 on the top 10 list is a sales project carried through by a grocer. The same company is responsible for number 4 that resulted in a turnover of 3.5 million Kroner. It can also be seen from table 7.3 that there are a total of 4 projects that have been carried out within manufacturing of organic foods. 2 of the projects are thus carried through by dairies, while the last 2 have been carried through by butchers.

There are furthermore 2 storage and packing projects on the top 10 list that have both been carried though by one of the biggest organic farms in the country.

Concerning products it can be seen from table 7.3 that vegetable producers are relatively the largest group and after this comes the products meat and milk.

**Table 7.3 Top 10 lists of the development projects that have resulted in the largest 1-year turnover after the project has finished.**

#	Yearly turnover, Kroner 1000	Support, Kroner 1000	Project type	Company type	Product
1	6000	200	Sale	Grocer	Meat
2	5000	635	Dairy	Production/Foods	Milk
3	4000	316	Sale	Production/Foods	Meat
4	3500	200	Sale	Grocer	Coffee, Tee, Cocoa
5	3000	207	Dairy	Production/Foods	Milk
6	1500	64	Storage and Packing	Agriculture	Vegetables
7	1500	329	Storage and Packing	Agriculture	Vegetables

8	1000	112	Storage and Packing	Grocer	Vegetables
9	1000	1120	Sale	Production/Foods	Meat
10	700	100	Storage and Packing	Grocer	Vegetables, Potatoes
Total	27200	3283	-	-	-

From the above it can be seen that one single grocer that is a sales company for organic products is responsible for 9 million Kroner of the 27,2 million Kroner. Both projects were approved in 1990. After the fact the company was however declared bankrupt.

It can be concluded that the top scorer on the top 10 list was not in the long run economically feasible. It is of course sad that the project that in the short run seemed to have reached the best quantifiable effect afterwards turned out not to be able to survive. The consultancy finds, however that these hard-earned experiences are necessary and very difficult to avoid. The collected experiences are a reason to continuously focus on the sales projects since the sales part is one of the problematic factors that hamper a healthy and stabile development for the organic agriculture.

On this basis the consultancy recommends:

**Recommendation 18: In spite of the mixed experiences with the sales projects' viability it is recommended that there is a continuous focus on promoting professionalization and commercial viability on the sales side. The Development shows that sales projects are risky which is why the possibility to co-finance these projects with the development support is necessary further on. On the other side the consultancy finds that there should be made stronger demands on the commercial, organizational and strategic preliminary work on the projects. These greater demands should however not result in a larger risk adversity when assessing whether a project can be accepted.**

### ***7.3 The effect of conversion support on conversion***

The effect of the conversion support on the organic farms can be studied at 2 levels:

**First**, it is relevant to look at the effect of conversion support on a macro level. On the macro level the effect of the conversion support on both the growth in organic area of production and the number of converted farms.

**Second**, it is studied how much the conversion has changed at the micro level, that is for the individual organic farms' turnover. The goal of this effect would be the organic farmer's **gross income**.

In chapter 5 it was established that the conversion support has a role to play when a conventional farmer converts his production to organic farming. The effect of the conversion support on the growth in the organic production area can thus be assessed by estimating the size of the production area that the converters are having compared to the conversion support's importance for the very conversion. This assessment has been made in table 7.4.

**Table 7.4 The conversion support's effect on the growth in the production area:**

	<b>Conversion support “Particularly important motive”</b>	<b>Conversion support “Less important motive”</b>	<b>Conversion support “little or no motive”</b>	<b>Total</b>
<b>Number of farms</b>	<b>22</b>	<b>11</b>	<b>58</b>	<b>91</b>
<b>Total number</b>	<b>1254 hectare</b>	<b>423 hectare</b>	<b>2463</b>	<b>4170 hectare</b>
<b>Share of total number</b>	<b>31%</b>	<b>10%</b>	<b>60%</b>	<b>101%</b>

It can be seen from table 7.4 that 22 farms mention conversion support as a “particularly important motive” for conversion. These 22 converters have 31% of the total production area. On this basis a crude measurement of how much of the total production area the conversion support ‘can take the credit for’. Table 7.4 shows thus that for just about 1/3 of the converted area the conversion support is of central importance.

By interpreting the results in table 7.4 it can be demonstrated that the importance of the conversion support seems to increase by the hectare size of the organic farms. The farms that mention that the conversion support is of particular importance thus have an average area of 60 hectares while the average of the farms in the evaluation is at 45 hectare. The background for this difference is assessed to be that larger farms can expect a larger total reduction in returns than smaller farms when converting to the organic form. On this basis the support becomes extra important in order to ensure that the difficult conversion time from conventional to organic farming will be possible to carry through financially.

In table 7.5 the development in the gross income after conversion is divided among the products.

**Table 7.5 The development of gross income after conversion – divided among products:**

<b>Gross income</b>	<b>Increased</b>	<b>Fallen</b>	<b>Unchanged</b>	<b>Do not know</b>	<b>Number of producers</b>
<b>Product</b>					
<b>Potatoes</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>20</b>
<b>Carrots</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>15</b>
<b>Onions</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>12</b>
<b>Other vegetables</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>18</b>
<b>Fruit</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>
<b>Berries</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>6</b>
<b>Milk</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>26</b>
<b>Cheese</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Pork</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>13</b>
<b>Fat stock</b>	<b>12</b>	<b>10</b>	<b>6</b>	<b>7</b>	<b>35</b>
<b>Bread grain</b>	<b>7</b>	<b>6</b>	<b>3</b>	<b>7</b>	<b>23</b>

<b>Fodder grain</b>	<b>7</b>	<b>9</b>	<b>3</b>	<b>4</b>	<b>23</b>
<b>Eggs</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>13</b>
<b>Poultry</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>Coarse Fodder</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>
<b>Other</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>18</b>

Table 7.5 show how the answers from the organic farmers on the question on whether their gross income is unchanged, increased or fallen after the conversion has ended. It is interesting to notice that a weak tendency for that the gross income has all in all increased for the total number of organic farmers. Furthermore it can be seen that within the individual areas of production there are very different answers:

For example 12 organic farmers in the area of producing fat stock mention that their gross income has increased whereas 10 farmers say that it has fallen after ending the conversion.

Within the field of fodder grain 7 farmers mention that the gross income has increased while 9 mention the opposite. 8 milk producers mention that their gross income has increased while 6 say that it has fallen.

This varied picture with both progress and recess concerning gross income implies that there are many different factors influencing the development in the gross income after finishing the conversion.

Neither can a clear single coherence between size of area and the gross income or between the gross income and the product. It seems that there is a tendency to that the ones who experienced an increase in gross income are plant producers. Among the farms with a low number of animals per hectare a larger number have an increase in gross income than is the case for the farms with at least 0,7 animal units per hectare. From this insight it seems fair that the size of the conversion support is graded after the number of animal units where the 2 grading mean that the higher number of animal units per hectare the higher is the yearly conversion support.

The organic farmers mention different reasons for why the farm's income has increased after the conversion. Some typical examples are mentioned hereafter:

*“sale of breeding stock is the most important reason for the good income and it has therefore no direct relation to the organic agriculture but also the starting sale of organic meat and the lower expenses for fertilizers and spraying is important.”*

*“I have earned an extra price on the milk at 40% and have only had a lowering in the output after the conversion at about 10%. Furthermore I save 120.000 Kroner a year for fertilizers and spraying.”*

*“The most important reason is an increased turnover gained by packing for other organic farmers. Particularly I have a good business in carrots for humans that are grown with almost the same outcome and quality as before the conversion. The use of the gas burner has increased the effect in the weeding.”*

*“I have lower costs per unit since I have to pay less for fertilizers and furthermore the veterinary bills this year have been cut in half compared to when the conventional farming.”*

*“I have lower expenses for fodder and spraying, an average increase in price at 20% for milk and I furthermore grow potatoes which pay 50% more.”*

As examples of background factors that can explain the **fall** in income after conversion to organic agriculture are the following statements:

*“I have fewer production units that are fewer animals per hectare in order to live up to the organic standards and this leads to a loss in contribution margin. I have had fallen outcome in terms of a lower fold outcome and have therefore a lower income in spite of the increase in the price on the grain I sell. Earlier I did not sell any meat of any particular importance as ‘organic’ and instead I sold the organic meat as conventional for 17 Kroner per kilo.”*

*“The expense for organic fodder is much too high and I can only cover my fodder need with hay to a limited extend. I had hoped to get a higher price for the meat that is sold organically.”*

*“I have had a fall in income at about 25% due to lack in manure. I could increase my income by bringing in more animals, but since I am a part time farmer I do not have the time to do it.”*

*“A part of the land is lowland that only gives a normal return when I am spraying it. All my organic vegetables are grown on the high field and that is a good business. The conversion which includes the lowland has thus collectively lead to an economic loss. Financially I am therefore motivated to give up the authorization and sell my vegetables as non-sprayed products. To me allowing partial conversion would be desirable.”*

Even though the quotes above illustrate the many different factors that can explain an increase or fall in the gross income there are however some common factors the organic farmers generally mention. Most organic farmers mention the importance of the experiences they have gained themselves throughout the years doing experiments themselves. This particularly concern optimizing the use of manure and choice of time for sowing and weeding and so forth. Some mention that the effect of the privileges [rettighedseffekten] is 6 times larger than within conventional farming.

Since the individual organic farmers find that their own experiences are important it is likely that they by sharing their experiences could help other organic farmers.

**Recommendation 19:** The consultancy recommends that initiative is taken to systematically collect and assess experiences and methods among the group of existing organic farmers. This is to happen in order to hand down the experiences to other organic farmers and in order to collect material that can help make new hypothesis within the organic research.

## **7.4 Influence of the Law on Organic Farming on export of organic products:**



The export of organic products is very modest and sporadic. Furthermore making up the total export is very insecure. For example the export of organic vegetables, fruits and berries has not been added up.

The interviews made with converters underline that there is export of vegetables including potatoes to some of the near markets in Germany, Sweden, Great Britain, and partly Norway and Belgium. Furthermore there is export of cheese and butter mainly to the German market and also to Great Britain. The export is however minimal and for instance for cheese and butter it is at a few million Kroner a year in turnover.

It is thought-provoking that there is not now any form of export of organic meat. That part of the organic meat which is not sold as organic is instead sold as conventional meat in the domestic market.

It has been mentioned to the consultancy that the general reason for the limited export is partly the lack in professionalism among those who take care of export and partly the lacking coordination among the marketing groups in the export markets.

Another important reason is that there is only a small volume of the organic products which is why the sale of organic products in the export markets is marked by great fluctuations. This will often result in lacking possibilities to comply with the demand that is in the export markets and which one might have even tied oneself to honor in a contract. The instable volume of organic products is partly due to the relatively limited amount of organic farms and partly due to that the organic agriculture is particularly vulnerable in relation to the varying yield and other crisis.

It is therefore still a problem to many organic farmers to produce the sufficient amount and to have uniformity in quality so that they can handle larger orders and deliveries, particularly in the export markets.

Another matter that should be stressed in relation to the limited export is that the competition in the export markets seems to increase particularly in Sweden and Germany where the number of organic farms have increased. This obviously increases the supply of domestic organic products.

In the long run the consultancy finds however that an increased competition due to a larger domestic supply for instance in Sweden and Germany will be an advantage for the organic farmers, since the increased supply of organic products is a part of creating a market for the organic products. The chain of reason is as follows: It is preferable to have a market with tough competition than not to be able to supply organic products at all due to a non-existing market.

The high extra charge on the export market is naturally also a barrier to foreign consumer's interest in buying organic products. This problem is particularly important concerning organic meat since the prices on organic meat are so high compared to the prices on conventional goods that there is a very low demand in the retail part of the chain.

The big problem in creating export of organic products is not solved through the development projects. The development projects' effect on the export is therefore very limited. Only 10%, equaling 17 projects answer that the project to 'some' or 'a high degree' has contributed to the export. The last have either answered that there was no effect or 'do not know'.

From these 17 projects 5 projects are able to quantify the amount of export for the first year after the project was finished. The 5 projects are within manufacturing and storage and packing, see table 7.6.

**Table 7.6 The effect of the development support on export the 1<sup>st</sup> year after the project has been finished.**

Project type	Yearly export effect Kroner 1000	Number of projects	Support amount Kroner 1000	Effect per support Krone
Manufacturing	4140	3	757	5,55
Storage and packing	200	2	393	0,5
Total	4340	5	1138	3,81

It can be seen from table 7,6 that totally within manufacturing there are 3 projects with the annual export effect of 4,3 million kroner. These projects have totally received support of 0,7 million kroner, which equals an effect per support Krone on 5,6.

The projects in question within the manufacturing industry are all in the dairy sector.

The export effect of the conversion support is difficult to assess. The conversion support did not have as purpose to increase the export which is why the connection can seem misleading to analyze. The consultancy has however found it relevant to ask the converters about their expectations for export since this information have strategic importance for the future shape of the Law on Organic Farming. 32 of the 92 converters answered that they do not export any of their organic production. 39 converters answered 'do not know' which is due to that they deliver their products, for instance meat and milk to the manufacturing companies and therefore have no knowledge of whether the products are sold on the export market.

A minority of 15 organic farmers mention that a certain percentage of the production is being exported. There is a very big spread on these export shares –some export a few percentages and one exports 100% of the products.

Characteristic to the organic farms that has an export is that they are significantly bigger than the average farm size of 45 hectare: thus the organic exporting farms have an average size of 82 hectare.

To summarize the evaluation shows that an affordable export demands that a production of a certain size is established and this production furthermore has a certain quality and is often taking place in cooperation with other organic farmers. In short export seems to be very connected with professional farming.

The analysis furthermore shows that the organic farms that have an export share of 10% and more primarily produce potatoes, onions, carrots and other vegetables.

Concerning the organic farms' expectations for the future export these must be characterized as tremendously positive, since 58% expect the export to increase. The countries that are connected to the biggest expectations are primarily Germany and Great Britain and after this Sweden. (see table 7.7)

The positive expectations are for various potential markets and if these expectations shall be fulfilled it will take a significant increase in the marketing. The consultancy finds that there to a higher degree is wishful thinking than realistic expectations concerning how the export market will develop for the organic farms in the coming years.

**Table 7.7 The organic farmers' expectations for export – divided on country markets:**

Country	Increasing export	Falling export	Unchanged	Do not know
Germany	61%	0	5%	34%
UK	41%	0	6%	53%
Sweden	24%	0	11%	66%
France	5%	0	13%	82%
Holland	7%	0	14%	79%
Switzerland	6%	0	13%	81%
Others	16%	0	10%	75%

Table 7.7 underlines clearly that there is an interest among the organic farmers for exporting. This interest should be taken seriously since it clearly denies the allegation of that exporting and the basic idea about organic farming is inconsistent. Among the organic farmers there is a clear and unambiguous wish for selling parts of their products for export.

**Recommendation 20:** On the basis of the positive expectations of the organic farmers concerning export it is recommended that export enhancing development projects are given particularly high priority among the developing projects in the years to come. For example the development projects that introduce marketing organic goods in the North German market should be continued. It is therefore generally recommended that the marketing effort gets a very high priority among the development projects. The marketing effort should be planned and followed through via cooperation between professional marketing companies and persons with an expertise within this field and with organic farms. It is crucial that the marketing takes its leaping point in the concrete problems of the organic farms.

## ***7.5 The effect of the Law on Organic Agriculture on the employment***

The difficulties in quantifying the effects on the turnover and export are also taking place when quantifying the effect of the Law on Organic Agriculture on occupancy. Only 18% of those responsible for a development project say that their project has helped creating new jobs. Out of these there are 14 project leaders who say that they are able to assess the effect on occupation one year after the project finished.

Thus it can be seen from table 7.8 that 14 projects make up an effect on employment (number of fulltime employees) at 37. This equals a support for each new employed person at 102.000 Kroner. It can be seen from table 7.8 that it is only the projects within 1) manufacturing, 2) storage and packing and 3) sales and distribution that are able to make an estimate of the effect on employment from the project they made.

**Table 7.8 The development projects' effect on employment (1 year after the project finished):**

<b>Project type</b>	<b>Number of employed (fulltime)</b>	<b>Number of projects</b>	<b>Support in 1000 Kroner</b>	<b>Support in Kroner per employed</b>
<b>Manufacturing</b>	<b>16</b>	<b>4</b>	<b>1.184</b>	<b>7.400</b>
<b>Storage and packing</b>	<b>10</b>	<b>6</b>	<b>857</b>	<b>8.570</b>
<b>Sales and distribution</b>	<b>11</b>	<b>4</b>	<b>1.735</b>	<b>157.727</b>
<b>Total</b>	<b>37</b>	<b>14</b>	<b>3.776</b>	<b>102.054</b>

To the development projects it must be concluded that the total effect on the occupancy cannot be found in this project. It can however be concluded from table 7.8 that has been an effect, but that it is relatively modest.

There are individual projects particularly in manufacturing and distribution that have contributed to conquer various initial barriers and thereby ensure a positive effect on the employment. Also projects within research and development can have a positive effect on occupancy to a degree where the projects make new results that can be used in the organic farms, manufacturing or in sales. Obviously such results' influences on the employment are very difficult to quantify for the project leaders. The positive effects of these projects on the occupation are not credited in these projects.

Concerning the assessment of the occupation effect of the conversion support this is immediately easier to assess since the conversion support will have a positive effect on employment to the degree that converting to organic agriculture is related to a greater need for manpower.

Thus 54% of the converters answer that the conversion did not mean any increase in the daily working hours while 31% answer that it has increased. The normal assumption that organic farming means a larger need for working in relation to conventional farming should be reevaluated.

There is hardly any doubt that the needed labor in organic farming varies according to which products and which sort of farm is in question. When the information is subdivided into which products are produced, particularly the organic farmers that produce potatoes, carrots, onions and to a certain degree also other vegetables say that the daily working hours have grown after the conversion. This is not surprising since it must be assumed that particularly crops in rows are connected to an increased use of time for weeding and prevention against weed.

Among the farmers producing grain the working hours have increased for about 25% of them. However, farmers that produce organic pork answer that they had an increase in the daily working

hours. This is due to that the production of pork is markedly different than the conventional production method. Organic pork production needs extra labor from the farmer when the huts have to be established and moved around, fencing and so forth.

It can therefore be concluded that there is a relatively limited need for increasing the working hours and therefore there is also a relatively modest increase in employment when going from conventional to organic farming. However there are a number of farms where it is the case that the need in increased working hours has resulted in hiring of more labor. In table 7.9 the need for extra work is indicated. This extra need for work is distributed in the size of the farms.

**Table 7.9 number of extra employed divided into size of the farms.**

<b>Size of the farm in hectare</b>	<b>0-1 employed</b>	<b>1,1 -2 employed</b>	<b>3,1-4 employed</b>	<b>More than 4 employed</b>	<b>Total number of farms</b>
<b>0-19,9 hectare</b>	2	1	0	0	3
<b>20-29,9 hectare</b>	0	0	0	0	0
<b>30-59,9 hectare</b>	3	2	0	0	5
<b>60 hectare and more</b>	4	0	1	1	6
<b>Total</b>	9	3	1	1	14

It turns out that 14 farms have more people hired which correspond to a total of 24 full time employed. Even though there is a positive relation between the smaller farms and the need for a higher daily working hour it can be seen from table 7.9 that there is also a positive relation between the size of the area and the number of people employed. It can be concluded that the larger the farm is the larger is the need for extra employed even though the connection is weak.

In sum it can be concluded that the effect on employment among the organic farms is rather small.

This can be shown by making an assessment of the employment rate if the conversion was made in a macro political perspective. The 92 interviewed farmers have a total of 4.179 hectare. This corresponds to approximately 173 hectare per extra employed. According to the official data the organic production area in Denmark for now is at 18.000 hectare. 173 hectare per extra employed is a crude measurement of how many hectare should be converted to make one new job. But compared to the 18.000 hectare the total effect on employment in organic farming is 104 new jobs.

## ***7.6 The investment effect of the Law on Organic Farming***

Among the development projects 25% of the project leaders mentions that the project to some or to a high degree has promoted investments that are relevant to organic farming. 37% answer that the development project has had none or little effect on investment and the last 38% answer 'do not know'. As with the earlier effect measurements it is particularly the project types within research

and testing and the information projects that have had difficulties answering the question on the investment projects' effect. To the project types storage and packaging, sale and manufacturing and to projects in the primary sector the 'do not know'-percentage is much lower. The beneficial investment effects seem to be in projects that are targeting the dairy sector, since 2/3 of the projects in this sector are estimated to have had a positive investment effect. Unfortunately none of these projects have quantified their effect.

**Table 7.10 The investment effect of the development projects**

<b>Project type</b>	<b>Investment effect</b>	<b>Number of projects</b>	<b>Support in 1000 Kroner</b>	<b>Support Effect</b>
Storage and packing	1.500	2	212	7,07
Sale	1.700	3	1.335	1,11
Information	5.000	1	125	40,00
Research and testing	150	1	1.318	0,11
<b>Total</b>	<b>8.350</b>	<b>7</b>	<b>3.190</b>	<b>2,62</b>

In table 7.10 the investment effect of the development projects are quantified for the project types that have been able to quantify a 1 year investment effect. It can be seen from table 7.10 that 7 projects with a total investment effect at 8.4 million Kroner have been mentioned. This total amount of support for the projects are at 3.19 million Kroner which is why the support effect can be set to be 2,62.

It should be noted however that quite rarely a project of the type research and testing has been able to quantify an investment effect. This is the case for a test project made by a sector research institute on plant production in organic agriculture.

Concerning the investment effect of the conversion support this seems easier to estimate. It must be expected that the conversion to an organic farm make demands for the agriculturalist for investing in new facilities. For instance the demand that animals must not be tied up can lead to that the animal need more space in the organic stable than the conventional stables make room for. This necessitates investments in facilities. Equally the prohibition against spraying can increase the need for an efficient mechanical weeding machine which necessitates buying new machines.

57% answer that they have invested in special organic facilities when converting. 44% answers that they did not need to invest in new materials.

In table 7.11 the investment effect for new tools is mentioned.

**Table 7.11 the investment effect for tools**

<b>Tool</b>	<b>Number of purchases</b>	<b>Hereof purchases where the conversion</b>	<b>Importance of the support in</b>
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		support “was a decisive factor”	percentage
<b>Net groom [netstrigle]</b>	<b>15</b>	<b>3</b>	<b>20%</b>
<b>Long finger harrow</b>	<b>25</b>	<b>7</b>	<b>28%</b>
<b>Brush cleaner</b>	<b>2</b>	<b>0</b>	<b>0%</b>
<b>[Grubber]</b>	<b>18</b>	<b>5</b>	<b>28%</b>
<b>Gas burner(s)</b>	<b>23</b>	<b>4</b>	<b>17%</b>
<b>Total</b>	<b>83</b>	<b>19</b>	<b>22%</b>

It can be seen from table 7.11 that among the 92 converters 83 tools were bought. Out of the 83 purchases 19 were bought by organic farmers that answered that the conversion support was a decisive factor for this investment. Following from this the support in percentage can be added up to an average of 22%.

The same reasoning can be made for table 7.12 where the investment effect for stable systems, tools and other things has been made up. It can be seen that 26 farms have invested in new stable systems while 45 farms have bought other tools. Out of these farms 5 that have invested in stable systems mention that the conversion support was a decisive factor while 11 farmers that bought inventories and the like belong to the category that say that the conversion support was a decisive factor for these investments. This means that the conversion support in relation to the stable systems have had a direct investment promoting effect at 19% of the investments in stable systems that have been made in total. Equally the conversion support has had a decisive influence for 24% of the investments that has been made in inventories and other tools.

**Table 7.12 The investment effect for stable systems, inventories and the other things.**

<b>Bought for the farm</b>	<b>Number of farmers that have invested</b>	<b>Hereof farms where the conversion support “was a decisive factor”</b>	<b>The importance of the support in %</b>
<b>Stable systems</b>	<b>26</b>	<b>5</b>	<b>19%</b>
<b>Other inventories and various purchases</b>	<b>45</b>	<b>11</b>	<b>24%</b>
<b>Total</b>	<b>71</b>	<b>16</b>	<b>23%</b>

The category ‘other inventories’ make up very different sort of purchases for example special facilities for grain storage, bed stalls or other purchases such as wheel harrows, special cleaning machines and so forth.

## **7.7 The environmental effect of the Law on Organic Agriculture**

The evaluation's results do not open up the possibility for assessing the environmental effects of the organic agriculture. This is due to that the respondents as well in the development support cases as in the conversion cases have not been able to quantify an environmental effect.

There are however scientific studies, for instance from the National Testing Institution for Domestic Animals [Statens Husdyrforsøg] that have proved that the organic farms' accounts for supplying and taking out of nitrogen is better from an environmental point of view than it is for the conventional farmers.

Since the organic agriculture is a very limited part of the collective Danish agriculture the consultancy finds that it is not relevant to make an assessment of the total environmental effect.

In stead the evaluation will shed light to which degree the organic farmers have succeeded in reaching the goal of self-sufficiency concerning fodder and manuring.

A main idea in organic farming is that it must to be possible to establish a viable type of farm where the individual farm makes a self-sufficient system concerning fodder and manure. The goal is in other words to create a balance in the energy supply so that the energy that is used for production of food can be delivered by the farm without having to import energy from the outside in the shape of bought fodder and manure. When the organic farmers have been able to create a balance in the energy source it is an expression of that there is a positive environmental effect. The conversion effect, made up for bought fertilizers and fodder is therefore pointing to whether the organic farmers live up to the idea that the farm should be sustainable.

In table 7.13 the results of the conversion's effects on bought fertilizers and fodder has been assessed.

**Table 7.13 The conversion's effect on bought fertilizers and fodder**

	<b>Reduced</b>	<b>Increased</b>	<b>Unchanged</b>	<b>Do not know</b>
<b>Which effect has the conversion had on the use of bought fertilizers?</b>	<b>61%</b>	<b>5%</b>	<b>18%</b>	<b>17%</b>
<b>Which effect has the conversion had on buying fodder?</b>	<b>45%</b>	<b>11%</b>	<b>28%</b>	<b>17%</b>

The interviewed converters were asked to answer which effect the conversion has had on the use of bought fertilizers and the use of bought fodder.



It can be seen from table 7.13 that particular in relation to the use of bought fertilizers the use is reduced since 61% claim that they have had a reduction in bought fertilizers. Equally 45% mention that they have had a reduction in buying fodder. It is expected that the organic farmers due to the limitations in the possibility to use bought fertilizers are economically motivated to optimize their use of manure. By controlling the use of fertilizer the loss in nitrogen can be reduced and thereby it can be avoided that there is being used more fertilizers than the crop need. 56% of the converters answer that they find that their use of manure has been good while 33% think that it could probably be better. There seems to be a tendency to that the farms with a low number of animals per hectare find that the use of manure could be better.

This could be related to that this group is primarily plant growers and therefore more critically depending in the manure. It is a general impression that the use of manure from the organic farmers is seen as central in organic farming. When choosing the relation between keeping animals and growing plants 68% mention that creating a balance between the need for fodder and manure is an important factor.

**Recommendation 21: The consultancy recommends that a high priority is given to consultancy services, exchange of experiences and research in how to optimize the use of fertilizers and composting**

Concerning the use of bought fodder it cannot surprise that only 11% mention that they have increased buying fodder. There are a number of restrictions for how much non-organic fodder the farmers can use which is why buying fertilizers necessarily has to decrease unless the manure is replaced by bought manure.

During the conversion there can maximally be bought 25% non-organic fodder per animal per day and in the first 2 years after the conversion time this can maximally be 15%. These restrictions contribute to giving organic farmers an incentive to cover their own fodder needs as well as possible by producing their own fodder and thereby increase the ability to be self-sustained.

Many converters mention the expenses for organic fodder as a problem. A part of the extra price on organic fodder is due to the transportation to the organic farms that are spread out all over the country. The consultancy finds that the transportation can only be rationalized by that the organic farms become better at coordinating their buying of fodder and by making their orders at the same time. Since the transport costs for the time being are calculated into the price such coordination should lead to a fall in the prices of the organic fodder.

**Recommendation 22: The consultancy recommends that the organic farmers increase their cooperation and coordination on the purchase of organic fodder in order to rationalize the cost of transportation.**

Measured by the level of bought fodder and manure the organic farms seem to be in a balance that is seen as having a beneficial influence on the environment.

In section 8.6 we will elaborate on to which degree the organic farmers have lived up to the control of the rules for use of fodder and manure.

## 8. The Qualitative Effects of the Law on Organic Agriculture

### ***8.1 Introduction – the general qualitative effects of the Law on Organic Effects***

The general qualitative effects of the Law on Organic Agriculture aim at promoting the organic ‘idea’ of a sustainable development within the agriculture. The term ‘sustainable’ refers to that the Law on Organic Agriculture promotes stable and harmonic farming that is integrated in the natural biological cycle in both fields and stables.

The Law on Organic Agriculture thus has to ensure an organic way of life and an organic basis as such.

As qualitative indicators of whether the Law on Organic Agriculture has promoted this goal the consultancy in chapter 5 has used indicators such as working environment, environment and animal rights. In this way the consultancy has used these qualitative indicators as possible explanations of why the conventional farmers have converted to organic agriculture. The evaluation’s results in relation to this have clearly shown that environment, work environment and animal rights issues are important reasons for converting to organic farming. Since the evaluation also shows that the conversion support is also a reason – though it is not the most important- it can in this introduction be concluded that the Law on Organic Agriculture has promoted the organic agriculture and therefore promoted the organic idea.

In the interviews made with the project leaders for the development projects 68% of the project leaders emphasize that their project have either to some or a high degree had a positive catalyzing effect. The term ‘catalyzing effect’ should be understood as an effect where the projects have promoted the organic idea. It is not possible to test whether the catalyzing effect really exists or if it has the scope that the project leaders claim that it has.

On the one hand the consultancy finds that there cannot be any doubt whether the development projects have had a positive effect in relation to promoting the organic idea.

**Table 8.1: How did the organic farmers learn about the Law on Organic Farming?**

	Yes	Partly	No	Do not know
From the information from the Directorate of Agriculture	19%	8%	58%	15%
From news papers and medias	20%	13%	56%	11%
From the Advisory Centre in Skejby	7%	3%	77%	13%
From the organic consultancy service	31%	11%	48%	10%
From the conventional consultancy service	3%	2%	79%	15%
From colleagues	32%	8%	47%	13%

In table 8.1 it is stated how the organic farmers became familiar with the subsidies connected with the Law on Organic Agriculture. It can be seen from table 8.1 that the most important information channels are information between colleagues and the organic consultancy service. After this follow the Directorate of Agriculture’s information and discussion in the press. Relatively few organic

farmers mention activities in the Advisory Centre in Skejby. It is however important not to play down the significance of the Advisory Centre since the press to a certain extent can be initiated by the activities in the Advisory Centre.

The scope and content of the information campaign will be presented in table 8.5.

**Table 8.2: How do organic farmers add to their knowledge about organic farming?**

	To a great extend	To a certain extend	To a limited extend	No
From courses and education	11%	19%	18%	53%
From the Advisory Centre in Skejby	11%	20%	13%	54%
From the organic consultancy service	41%	22%	17%	21%
From the conventional consultancy service	12%	15%	15%	57%
From articles in journals	36%	43%	11%	10%
From scientific publications	23%	18%	19%	41%
From colleagues	39%	23%	13%	24%
From local groups	22%	19%	9%	50%

In table 8.2 it has been mentioned how the organic farmers add to their knowledge about organic farming. It can be seen that the most important sources for information is the organic consultancy service, dialogue with colleagues and information through articles in journals.

The organic consultancy is financed through the development support and on this background the consultancy argues that it has been documented that the development projects have promoted the organic idea by ensuring information for both organic farmers and for conventional farmers who potentially would consider converting to organic agriculture.

Through interviews with the 56 conventional farmers it turns out that they are relatively well informed on the Law on Organic Farming. 5% do mention that they know the law very well while 16% mention that they know it fairly well. 71% have heard about it while 7% answer that they do not know it.

**Table 8.3: How well do the conventional farmers know the Law on Organic Farming? [Where do they get their information from, *tba*]**

	Yes	Partly	No	Do not know
From the information from the Directorate of Agriculture	7%	9%	80%	4%
From news papers and media	50%	20%	26%	4%
From the organic consultancy service	2%	4%	91%	4%
From the conventional consultancy service	9%	9%	78%	4%
From colleagues	19%	13%	65%	4%
From the Advisory Centre in Skejby	2%	7%	87%	4%

Table 8.3 shows how the conventional farmers that know about the Law on Organic Farming have gained this knowledge.

It can clearly be seen from table 8.3 that the news papers and other media is an important information source (50%). Following this is the information from colleagues (19%) and the conventional consultancy service (9%).

Other results to be mentioned are that 95% mention that they are aware of that converters to organic agriculture can get financial support.

78% have through the last years seen one or more information programmes on TV about organic agriculture and out of these 29% think that the content of these programmes are credible while 31% answer 'partly credible'. Only 8% found the content to be of limited value and 17% answer that the content was unreliable. Concerning the interest among conventional farmers for hearing more about organic farming 2% answer that they are very interested, 14% that they are interested, while the rest answer that they either have a limited interest or that they are not interested.

There is a relatively good knowledge about the Law on Organic Agriculture among organic farmers and conventional farmers. This relatively good knowledge of the Law on Organic Farming can also be documented in table 8.4 where the organic agriculture's influence on the conventional farmers' attitude has been assessed. The conventional farmers have been asked whether the ways they handle farming is affected by the 'organic idea'. It is a deliberate choice from the consultancy not to define the organic idea but instead let the respondent have the option of answering 'do not know'.

It can be seen from table 8.4 that particularly the farming in the fields has been affected by the organic idea. Thus 18% answer that they are to a high degree influenced, while 43% answer 'to some degree'. Concerning treatment of domestic animals 15% answer that they are highly influenced by the organic idea while 26% answer 'to some degree'.

**Table 8.4: The attitude influence of the organic idea on conventional farming – statements from conventional farmers:**

<b>Ways to farm, influenced by the organic idea</b>	<b>To a high degree</b>	<b>To some degree</b>	<b>To a small degree</b>	<b>No</b>	<b>Do not know</b>
Animal husbandry	16%	26%	7%	42%	9%
Field growers	18%	43%	9%	27%	4%

It is obvious that the results in table 8.4 should not be overinterpreted since relatively few of the conventional farmers have been asked. On the other hand the consultancy finds that table 8.1 and table 8.4 in total document that the Law on Organic Agriculture has become quite well marketed in the course of the last four years.

On this background it is concluded that the Law on Organic Agriculture has had a positive, qualitative effect on promoting the organic idea and that the goals of the law's overall objectives and ideas have been fulfilled.

## **8.2 The professionalization of the organic production**

A central element in the assessment of the qualitative effects of the Law on Organic Agriculture is to answer whether the law has promoted professionalizing of the organic production through the development projects and the conversion support.

Professionalization is understood partly as characteristic of the individual organic farmer where having a formal agricultural education and having an organic farm full time is seen as professionalization.

Furthermore professionalization is seen in a broader perspective as whether the organic production method has improved in technical matters and has made networks and cooperation and whether information on the products is marked by a functional sharing of the work in distribution, packing and sales. In sector 8.3 it will be analyzed to which degree the organic sector is characterized by development in cooperation and network and to which degree the Law on Organic Agriculture has contributed to this development.

An indicator of whether the professionalization has increased in the organic farming is shown in table 8.5. In table 8.5 the development in the relation between the subsidized part time and fulltime organic farmers among the converters in the evaluation is split into years.

**Table 8.5 The development in the relationship between the subsidized part time and fulltime organic farmers split into years (converters in the evaluation):**

	1988	1989	1990	1991
Part timer organic farmers	40%	41%	37%	28%
Fulltime organic farmers	60%	60%	63%	72%
Total	100%	100%	100%	100%

It can be seen from table 8.5 that in 1990-91 in increase in the share of fulltime organic farmers among the total amount of organic farmers is initiated. To the degree that the increase in the share of organic farmers show a professionalization of the agriculture table 8.5 shows that a process has started that results in an increase in the professionalization where organic agriculture is seen as a serious industry.

This is also supported by the analysis of the connection between being organic farmer on a fulltime basis and having another occupation on the side.

Of the organic farms in the evaluation 64% are managed by fulltime farmers and among these 24% indicate that they also have another occupation. Among those who have their organic farm fulltime the majority – 86% - mention that their main income is the farm. On the other hand 94% of the part time farmers mention that their most important source of income is from other places than the organic farm.

These numbers indicate that living of an organic farm must be seen as a job that takes up fulltime and therefore in general is not combined with another job. Table 8.5 shows that this tendency is increasing.

### **The educational background of the organic farmer**

Another indicator for professionalization is the educational background of the organic farmers where an increasing professionalization is recognized– as mentioned - by that more organic farmers have an education in farming.

The evaluation shows that 56% of the organic farmers are self made. Furthermore 35% mention that they have a conventional farming education while 10% say that they have an organic farming education. Finally 10% say that they have another educational background which for most people means that they are graduates in agriculture. These numbers sum up to more than 100% since about 10% have mentioned more than one educational background.

The most common combination is a conventional education and an organic education.

The previous numbers show a relatively high percentage among the self made and also shows that only few organic farmers have a background in organic education. If the development in the educational background for the period 1988 through 1991 is seen it turns out that the number of self made is not falling, far from it.

**Recommendation 23: It is recommended that initiatives are taken under the Law on Organic Agriculture to further the educational background of current and future organic farmers. For example initiatives can be taken to enhance the organic agricultural education for current as well as for future organic farmers. It should be considered whether it is possible when revising the law of organic farming to make way for support for loss of income for organic farmers who are beginning to study or taking in-service training about organic agriculture.**

Even though the number of organic farmers with a formal agricultural education apparently is not increasing it is however reasonable to assume that the organic production is taking place at a higher technical and knowledgeable level than just few years ago.

The reason for this is that a large degree of the research and testing within organic farming is financed by the development support. Table 8.2 above showed that as much as 41% of the organic farmers supplement their knowledge through the organic consultancy service while 36% and 23% respectively use articles in journals and scientific publications. Thus a great deal of the organic farmers receives the research and knowledge production that the Law on Organic Agriculture has helped make. This can be seen as an expression of that the Law on Organic Agriculture has contributed to an increased professionalization.

## ***8.3 Organizational development and new types of cooperation***

Strategic cooperation between producers including making cooperation based on networks is a central part in both of both the industrial political debate in Denmark and concretely in the individual companies' strategic concerns no matter which branch they belong to.

The focus on strategic cooperation and networking has not passed unnoticed in organic farming. In table 8.6 the development projects' support of network based on project types is shown. It can thus be seen from table 8.6 that the directly business related projects within the primary sector,

manufacturing sector, storage and packing facilities, sales, marketing and distribution has a relatively high degree of support of the networks included.

However information activities, consultancy and other advisory elements together with research and testing has to a relatively less degree the character of network support.

**Table 8.6: The development projects' support of network split into project types:**

<b>Did the project support networking?</b>	To a high degree/ To some degree	To a small degree/ No	Do not know
<b>Project type</b>			
Primary sector	67%	33%	-
Manufacturing	47%	53%	-
Storage and packing facilities	73%	38%	-
Sales, marketing and distribution	81%	15%	4%
Information	41%	35%	24%
Consultancy and other services	25%	75%	-
Research and testing	44%	50%	6%

It should be noted that concerning the information projects there is a relatively high degree of the answer 'do not know' since 24% of the information projects has an unresolved relationship with whether the project has promoted the support of networks. This is due to the very general character of for instance the information projects.

Generally the statements from the project leaders of the development programs show that the majority of the projects have been carried out in cooperation with an external collaborator.

**Recommendation 24: It is recommended that the cooperation projects among the developing projects continue to have a high priority. The cooperation projects contribute to ensure that the development projects are anchored in various complementary environments for example between organic farms and research institutions that are making relevant research and experiments. On this background the best possible starting point is ensured to have the results used swiftly and efficiently.**

In spite of that the creation of networks has been given a high priority in the development projects the consultancy must underline that there is still a long way ahead to ensure an efficient network. The basis for this is for instance that the conventional agriculture in comparison has built a network over the last 250 years in the shape of the establishment of the co-operative movement as the most decisive step towards a well functioning network.

It should therefore be emphasized that the organic farmers in many ways step out of the well established and historically tested network. On this basis it is obvious that there have been important problems in building up a network equally efficient and well functioning for the organic farmers as the network they came from when they were conventional farmers and are maybe still members of.

In this picture it is also important that the organic farmers have different opinions on which strategies the organic agriculture should follow. Thus there is a classical conflict potential between the biodynamic farmers and the organic farmers.

There is no doubt that these different approaches to organic farming have led to problems in cooperation and even fights. On this basis the consultancy finds it rather positive that the LØJ-coordinated local groups' work do have a certain continuity and for instance on this basis has been an important factor to many organic farmers.

Concerning the local groups it was shown in table 8.2 that 22% of the organic farmers to a large extent use the local groups to ensure updating their knowledge about organic farming. The local groups are however not at all the most important factor in ensuring organic farmers knowledge about organic farming. The reason for this is that the larger and more experienced organic farmers do not have incentives to join the local groups. It has thus been emphasized to the consultancy that the pioneers among the organic farmers have a closer relation to each other outside of the local group than the contact that takes place within the more formal channels in the local groups. In this way the local groups might turn out to be not viable in the long run.

The results from the interview round furthermore show that it is primarily the fulltime farmers that use the groups to gain knowledge about organic farming. Thus 53% of the fulltime farmers use the local groups 'to a large extent' or 'to some extent'. While only 17% of the part time farmers answer that they 'to a large extent' or 'to some extent' use the local groups to update their knowledge about organic farming.

In the interviews conducted with the converters it has been emphasized to shed light on the degree of the cooperation in general among the organic farms. Thus the converters have been asked about their cooperation concerning packing and distribution, common wrapping, common pricing of the products, cooperation on contact to the super markets, expert cooperation and other potential areas of cooperation.

The consultancy finds that in general there are some unused potentials for closer cooperation among the organic farmers.

In general the consultancy finds that there is a relatively small cooperation between the organic farmers. The background for this is among other things that a number of organic farmers deliver their products to further processing which is why cooperation on common wrapping, pricing and so forth is not within the scope of the individual farmer. The milk producers are however an example of that there is no need for a closer cooperation since there is already a price deal and agreement on a common packing and distribution of the organic milk.

Such natural reasons why organic farmers cannot cooperate have been taken into account and still it is a fact that the cooperation is relatively modest.

A general sort of cooperation within the organic area is sharing mechanical equipment. Other organic farmers have mentioned that they have a cooperation concerning delivery of manure in return for fodder.

The cooperation has limits however since the spread of it depends on the geographical place of the organic farm.



**Recommendation 25: It is recommended that collective collaboration is supported through establishment of development projects that also have a character of demonstration projects. Concerning sales companies; there have been various initiatives in order to establish sales companies where the organic farms have made combined sales and manufacturing companies. Such a company is to sell the goods but also in some cases produce the goods for further sale either to wholesale or directly to the retailers.**

The general problem for the sales companies has been their lack of power of penetration due to the lack of resources both financially and the scarcity of labor. The sales companies' lack of resources has lead to a great vulnerability to financial risks. Due to this a number of companies have suffered financial losses and finally filed for bankruptcy.

It is furthermore the case that the sales companies that deliver directly to the retailers often have had to compete with large established companies. For instance FDB and MD Foods. The organic grocer Fællesgrønt [Common Green] is an example of a combined sales company and trade line union that went bankrupt in 1990. Fællesgrønt tried to sell to retailers around the FDB-shops but this failed.

The milk producers' sales company Danish Natural Milk has not gone bankrupt but has currently played out their role and is today only transmitting to the larger dairy companies. The two large dairy companies have now taken over almost all processing and distribution of the organic milk production except for the small dairy companies.

Concerning the slaughterhouses a fusion has taken place between the two sales companies (Friland Food and ØKO Kød). The background for this fusion is to ensure a large volume in the processing part and thereby contribute to that transportation and administration costs are less per produced unit. The organic oriented sales companies shall often compete with the conventional slaughter houses since many organic fat stock and pork producers have to sell their products through the traditional channels since they cannot receive the extra price in the organic sales channels.

It has been mentioned to the consultancy –and the consultancy agrees with this- that the Achilles heel of the organic agriculture is the high transportation and administration costs together with the large barriers to ensure efficient sale to both the processing sector and the retailers. This problem is very clear in table 8.7 where the organic farms have been asked to clarify their views on two statements. The first statement is concerning whether retailers to a too high degree can dictate the conditions for cooperation with organic farmers. 50% declare that they agree with this statement while just 4% disagree. However 31% answer 'do not know'. Furthermore the organic farmers have been asked whether companies in the industrial processing to a too high degree can dictate the conditions for cooperation. Here 48% answer that they agree to this statement while 7% disagree. 30% answer 'do not know'.

**Table 8.7 the organic farmers' assessment of the cooperation with buyers**

Statement	Agreeing	Partly agreeing	Disagree	Do not know
<b>Retailers</b> can to a too high degree dictate the cooperation guidelines with	50%	14%	4%	31%

the Organic farmers				
Companies within <b>industrial manufacturing</b> can to a too high degree dictate the cooperation guidelines with the organic farmers	48%	16%	7%	30%

The consultancy finds that these statements illustrate very well the power relations between organic farmers within the industrial manufacturing and the retailers.

The consultancy wishes to emphasise however that the blame is not necessarily with the central actors in retail and industrial manufacturing. Both actors pursue their own interests and on this basis it cannot be expected that they should take special care of the organic farmers. There is thus no basis for concluding that the rest of the world has made a conspiracy against the organic farmers. The actors react rationally from their own commercial point of view.

The problem is currently interesting since particularly the organic farmers historically have had an increase in production and number of organic farms due to some favourable price agreements. To the degree where these agreements are not renewed at the same favourable rate the worst case scenario is that the organic dairy producers in Denmark get a severe setback. The short term benefit to the organic milk producers has been that they have had an extra profit compared to the conventional farmers. But in the long it can be said that it has been a bad thing for the organic farmers. In the short run the organic farmers got an extra profit and had their transportation and distribution problems solved. The downside has however been that one has not at the same time had the possibility of making independent marketing of organic milk products. The consultancy finds that exactly the marketing of organic dairy products can be the spearhead that can increase the volume of organic dairy products and also have a positive influence on the sale of other organic products. On this basis the consultancy recommends:

**Recommendation 26: It has to be recommended that the organic farms in particular the dairy producers reconsider their sales and marketing strategy. It should be studied whether organic farmers to a higher degree can build up an independent sales and marketing strategy. The consultancy recommends that marketing of the individual organic products primarily is made with a direct leap point in the organic farms and preferably with professional marketing aid. Therefore in the long run this task cannot be left to the retailers or to the manufacturers. Neither can the task be left to more general nor to non producing marketing campaigns since the farmers must themselves take responsibility for the arguments that are used, the strategy and for compliance with the law on marketing.**

## 8.4 The sales pattern from the organic farms

This paragraph follows up on the sales problems. Table 8.8 show the sales pattern from the organic farms. The organic farmers have thus been asked how they handle the sale and whether the individual sales channels make up the ‘majority of their turnover’, ‘a share of the turnover’ or ‘a limited part/none’.

**Table 8.8 the sales pattern in the organic farms:**

How is the sale organized?	The majority	A share	Limited	None
Selling directly from the farm	17%	11%	32%	41%
Squares and market places	7%	3%	8%	82%
Through a grosser	32%	7%	1%	60%
For shopping associations	-	2%	3%	95%
For industrial manufacturing	39%	7%	4%	51%
For supermarkets and chains	7%	7%	4%	82%
Others	10%	6%	2%	82%

It can be seen from table 8.8 that the most important sales channels are for industrial manufacturing and grocer. Direct sale at markets, squares and through supermarkets and chains play a smaller role. Selling directly from the stable is in between this with a level of 17% of the organic farmers selling the main share of their organic products this way.

By looking at the organic farmers as either fulltime or part time farmers it is clear that the majority of the part time farmers sell their products directly from the stable. Thus 48% of the part time farmers answer that they either sell the majority or a part of their products from the stable. For the fulltime farmers it is however the case that just 16% sell the majority of their products directly from the stable.

If the organic farmers are divided into area size it is clear that the smaller farmers sell their products through the more informal sales channels that is directly from the stable or at squares or markets. The smallest farms (that is farms with less than 10 hectares) it is the case that the majority of the organic farms sell their products directly from the stable, namely 57% mention this channel. Among the largest farms (that is farms at more than 30 hectare) however only 17% sell their products directly from the stable.

The reverse picture is the case for sale through grocer and industrial manufacturers. Here it is the case that it primarily is farms at more than 30 hectare that use these sales channels.

These variations in sales patterns are due to that primarily the large fulltime farmers have the possibility to guarantee stable deliverances. The small farmers thus have difficulties competing where the more formalized sales channels are used. The small farmers thus have to use informal sales channels such as selling directly from the stable and use the squares and markets places. This is not necessarily a problem since the prices in these places are high enough for a number of farmers to ensure that the organic farmers have a good economical situation in the production.

Differences in the sales patterns are a part of the explanation of why the organic farmers have a relatively weak position in relation to the retailers and the manufacturers. There is thus a greater difference in the conditions for organic production and distribution than one might realize and understand the importance of.

Traditionally the differences have been between the different opinions on what is the core of the organic idea between traditional scientific founded organic farmers and biodynamic farmers.

The consultancy will however emphasize that apart from these differences in ideas about the differences in the view of the organic idea some more material and hard economical differences are present. There is a great difference in the organic farmers' production and sales relations. On this basis there are also great differences in the marketing relations.

These differences have led to that the branch unions have needed power and have often experienced declining membership rates. There has however been taken initiative to make a new umbrella organization in organic farming to replace the branch coordination group and it should among other members have representatives from the remaining sales companies and COA [Council for Organic Agriculture, in Danish 'LØJ'].

The important differences in production and distribution conditions for the individual farms can be seen by splitting up the organic farmers into their primary products:

Product	Direct sale from the stable	Square and market	Grocer	Shopping association	Industrial manufacturing	Supermarkets and chains
Potatoes	9%	18%	36%	0%	23%	18%
Carrots	13%	32%	25%	0%	38%	19%
Onions	24%	38%	38%	0%	23%	8%
Vegetables	5%	21%	32%	0%	32%	5%
Fruit	75%	0%	25%	0%	0%	0%
Berries	75%	50%	17%	0%	0%	0%
Milk	0%	0%	37%	0%	81%	4%
Porkers	33%	22%	28%	0%	11%	0%
Fat stock	24%	16%	16%	0%	46%	5%
Bread grain	12%	0%	48%	0%	24%	8%
Fodder grain	16%	4%	48%	0%	28%	8%
Eggs	14%	21%	29%	0%	29%	14%
Fodder	13%	0%	38%	0%	50%	13%

In table 8.9 it is shown how the majority of the organic products are sold. Concerning potatoes it can be seen that the grocer take care of the majority of the crops from 36% of the organic potato growers. The individual percentages cannot necessarily be summed up to 100 since the organic farmers have mentioned several sales channels as being equally important which is why the sales channels have been mentioned as channels that sell the majority of the organic products. In the following paragraph the most important products are being commented:

To milk producers it is clear that the industrial manufacturing is the primary sales channel for the organic milk producers. After this follow the grocer. The sales channel for milk within industrial manufacturing is marked by the monopoly like situation that the large dairy concerns have on the sales side. However two smaller independent dairies exist and they sell about 20% of the organic milk products.

**Recommendation 27: On the basis of the outlined sales patterns to milk producers the consultancy recommends that the competition on sales and marketing of dairy products is kept unchanged. It is important that no companies obtain a status of monopoly. On this background it is suggested that an initiative is taken through the development projects to study how the competition within the industrial processing of dairy products can be maintained and even increased. This should include competition within the field of transportation and distribution.**

The recommendation above can lead to that it in the short run gets more difficult to reach an extra profit on milk products as was the case earlier. The consultancy finds that the organic farmers' statements all in all show that there is a need for the organic farms to become stronger in both marketing and sales. This underlines the importance of a stronger independent profile in this area.

The sale of meat products, particularly porker and fat stock shows that the sales channels for the individual products are very different. To the fat stock there is however deliverances to the slaughterhouses which are the dominating sales channel since 46% of all organic farmers producing fat stock sell the majority of their products to a slaughterhouse. Another important sales channel is through directly from the stable which is at 24%.

The sale of porkers has a different sales pattern since it is primarily being sold through the informal channels with 33% being sold directly from the stables, and 22% being sold at squares and market places. Furthermore the grocer is an important channel for selling porker. 28% mention this sales channel as important.

There are very different sales channels for the organic meat trading which is both an advantage and a disadvantage. The advantage is that the organic farmers by using different sales channels can ensure that products reach the markets that give the best profit. The disadvantage is that the lack of well organized sales channels means that many producers can feel pressured to deliver to the conventional slaughterhouses. In this way they miss the extra profit that the organic products need in order to be able to make a profitable production in the long run. As has been mentioned there is a fusion between the sales companies 'Friland Food' and the producers of organic porkers in order to make a sales company that can compete which is an important signal in order to make the sale more efficient.

**Recommendation 28: It is recommended that the Law on Organic Agriculture it used to establish development projects which enhance the establishment of sales companies, possibly by merging companies that already exist. It is particularly important to support the creation of sales companies which lessen the number of middlemen between the producer and the consumer. The organic meat producers should for instance deliver a higher amount of their products directly to the butchers' shops.**

The sales structure for vegetables is equally marked by the various sales channels. The most important are the industrial manufacturers and the grocer but also squares and market places play an important role. Today the sales structure has about 10 large grocers that distribute vegetables for the retailers. Furthermore FDB has a steady number of growers connected to their shops. Furthermore a part of the vegetables are sold in more informal channels, as can be seen from table 8.9.

The grain and fodder traders are marked by few large companies within both the grocers and the industrial manufacturers. Also a number of the organic farms use a pure barter dealing method. For instance manure is traded to fodder in order to ensure the optimal use of the individual organic farm's yielding capacity.

It has been mentioned to the consultancy that fodder grain and other types of fodder seems to be quite expensive and furthermore have differences in the volume due to dry seasons. The grain and fodder area is therefore an important area that should be made more efficient in order to lower the prices on grain and fodder which will make the organic products cheaper. Concerning the organic egg production the organic egg traders' foundation was founded in 1989 and it should coordinate the sale to the retailers. However an overproduction was made which is why the organic egg producers agreed to sell to the conventional traders. Today the majority of eggs are distributed through DANÆG while the rest are sold through other channels. This development is parallel to that of the milk producers'. It can be seen from table 8.9 that next to the deliverances to the industrial manufacturing the grocers and squares and market places are the most important sales channels for egg producers.

The sales structure for both fruit and berries is marked by that there is both used direct sale from the farms, sale in squares and market places as well as sale in health care shops. Since 1989 a trade line has existed in this area and it has as a purpose to organize the area in order to organize the sale. The sale structure is for the moment being developed and we have been informed that it is not yet ready.

## 8.5 Information and counseling

The information and counseling projects make up a large amount of the collective development projects.

Of the 169 possible projects are 74 information projects and 8 are counseling projects. As one can see from table 8.10 the 'Common Group for Organic and Biodynamic Agriculture' that is situated in Skejby (also known as the Skejby-projects) is responsible for half of them.

**Table 8.10: Information and counseling projects, divided on project leaders:**

Project leader: Projects	Information projects		Counseling	
	Amount	%	Amount	%
'Skejby projects'	36	49	4	50
Other Service companies	3	4	0	0
Trade line union	12	16	4	50
Organic Agricultural	9	12	0	0

Educational Institution				
Other Educational Institutions	2	3	0	0
Other	12	16	0	0
Total	74	100	8	100

Since the Skejby-projects are so many they will be described separately:

The Skejby-projects can be divided into 4 main groups which are: 1) the so called general appropriation, 2) the farmers share, 3) the trade's share and 4) the consumers share.

The general appropriations made up by a basis appropriation and a number of ad hoc appropriations that are used for the operation of the information campaign office and for salaries for three information consultants (that cover farming, sales and the consumer area) and an office worker.

The information campaign office is a service organization and it takes care of the coordination of the information projects and the total coordination and maintaining relations with the press and other media. The projects that have been aimed at the farmers are for instance concerning information at cattle shows, farmers meetings, field shows, courses and production of consultancy maps etc. Furthermore there has been made a farmers newspaper and excursions have been financed for the organic consultants. The projects that have aimed at the retailers are made up of courses for the retailers (for instance teachers in the retail lines), production of information material for the shops and initiation of a consumer study.

This consumer study has documented that there in the population is a lot of sympathy for the organic idea and for the organic products. The largest barrier against buying the organic products is that the organic products are too expensive compared to the conventional products. Finally there have been some projects that have been aimed at the consumers in the shape of wandering exhibitions and information material containing posters, booklets, videos for the shops etc. Furthermore an OBS-spot has been produced [OBS-spots are small TV-spots with general and important information for the citizens].

In table 8.11 all the information and counseling projects have been split into the years where the appropriation was made and divided after the primary target group of the project. It can be seen from table 8.11 that the majority of the information and counseling projects have gained appropriation in 1989 and 1990.

**Table 8.11: The information and counseling projects, split into years and primary target group:**

	1987	1988	1989	1990	1991	1992
Organic agriculture	-	63%	61%	51%	50%	33%
Conventional agriculture	50%	25%	21%	17%	17%	-
Consultants	50%	50%	14%	20%	17%	-
Manufacturing	-	-	43%	14%	-	33%
Retailers	-	-	39%	23%	17%	67%

Consumers	-	38%	46%	37%	33%	67%
Scientists	-	13%	11%	20%	-	-
Students	-	13%	7%	9%	17%	-
The Public	-	13%	4%	20%	17%	-
Decision Makers	-	-	29%	20%	-	-
Total number of appropriations	2	8	18	35	6	3

It can further be seen from table 8.11 that farmers and in particular organic farmers are a favored group. From 1988-1991 more than 50% of the information and counseling projects has been aimed at the organic farmers. The share of projects that have conventional farmers as their target group have however fallen from 50% to 17% in 1991.

Up against this the manufacturing sectors and retailers have not been the target of any greater attention during the first couple of years. In 1989 however, something happens in this area since 43% and 39% respectively are aimed at these area. In the following year the shares of these areas of projects fall to 14% and 23% respectively. Concerning the directly consumer related projects these have a fairly stable share since between 33-46% of the projects are aimed at this group.

It must be noted that it is not possible to sum the percentages since several projects are aimed at more target groups at the same time.

Table 8.11 underlines that there has been given a promise to relatively few projects in the later years within the information and counseling area. This can seem surprising since there is still a great need for information and counseling within the organic area. On the other hand it is natural that one at a certain time withholds the very broad information and counseling activity in order to consider whether there is a need for a new and for instance more targeted strategy.

The consultancy finds therefore that there is a need for a more targeted strategy for the information and counseling area. Today it can be concluded that in the populations there is a positive attitude towards organic products and to the organic idea. If this positive attitude is to be transformed into an increased market share for the organic products there is however a need for that the price of organic products closes in on the level for the conventional products and that the sales problems are solved.

The consultancy finds that the following strategic consideration should be made: It is important that the information activities on organic products as much as possible are left to the individual organic farmers themselves. There is thus a relatively small limit to how much a state financed information campaign can go in order to market the organic products' advantages even if the formal responsibility is with the Common Group.

**Recommendation 29: On this basis it is recommended that information activities, particularly those which include marketing of the organic idea/the organic products is left to the organic farmers and to the companies that produce and sells these goods. If marketing is left to these groups they only have the boundaries of the law on marketing as the limit of what can be informed about and accentuate concerning the advances and characteristics of organic product in relation to other products.**



The consultancy finds that during the beginning of the time with the Law on Organic Agriculture there has been a need for a very differentiated and many sided information and counseling campaign. The time has however changed so that information and counseling activities can be given a higher priority. This means that the short run and product oriented information and marketing strategy is left to the organic farms and their sales channels, manufacturing units and so forth.

Concerning the long run and strategic information projects there are however an increasing need for that these are made ad hoc as individual development projects.

**Recommendation 30: It is recommended that the information and advisory projects are continuously made to create information and debate. It is recommended that these projects, which have a long perspective, are rather few and have a large budget. They should be ambitious. Further more it is recommended that these development projects have a well defined target group and a well thought out strategy. For example teaching material for the public schools can be made in which the organic idea and problems are presented in a pluralistic and free spirited way. This presentation should include both conventional and organic views so that they are debated and presented.**

## **8.6 Public control and marking**

As mentioned in chapter 6 the Directorate of Plants carry out the control of the organic farm in order to make the authorizations that ensure that the farm in question can be accepted as organic and fulfill the requirements to receive conversion support and in time be considered a completely organic producer.

Concerning the control in the manufacturing part this is made continuously by the Directorate for Animals and the Food Control Board. This control ensures that the organic products fulfill the requirements that are necessary for the state sponsored organic marking – the ‘Ø’-mark. If the organic products have this mark the products fulfill the requirements that exist for organic products both concerning manufacturing, storage and packing.

**Table 8.12: The organic farms’ assessment of the existing control and marking rules:**

Statement	Agreeing	Partly agreeing	Disagree	Do not know
They are a bureaucratic problem for sale.	9%	7%	73%	12%
They are a protective guarantee against competition from ‘light green’ products.	63%	13%	13%	11%
They increase the consumers’ trust and thereby promote the sale of organic products.	73%	15%	3%	9%

In table 8.12 the organic farmers’ opinions on the current control and marking rules are presented. The organic farmers have been asked to consider a number of statements concerning 1) the level of bureaucracy, 2) whether the current control and marking rules are a protective guarantee against competition from the so called ‘light green’ products and finally 3) whether the current control and marking rules increase the consumers’ trust and thereby enhance the turnover from organic products.

It can be seen from table 8.12 that the current control and marking rules can be assessed as a great success. Only 9% agree that the system is a bureaucratic problem for sale. Against this 63% say that the current control and marketing rules make up a guarantee against competition and furthermore 73% of the control and marking rules increase the consumers' trust and thereby enhance the turnover from organic products.

**Table 8.13: The organic farmers' attitude towards the various control mechanisms:**

If the farmers could choose the control method themselves which of the following would they prefer?	Yes
State control	50%
Control organized by the farmers	14%
A combination	33%
Do not know	2%

Table 8.13 shows the organic farmers' attitude towards the various control methods presented. The organic farmers have the opportunity to present their views concerning which control mechanisms they prefer if they could choose the method. It can be seen from table 8.13 that the state control is definitely the most popular. Control organized solely by the farmers only gains support from 14%. The last 33% wish a combination of the state control and a control organized by the farmers.

The combined control typically contains the combination of the state's marking and of COA's control. For the time being there are some trying to establish a coordination of the demands made by the Directorate of Plants and the demands made by COA. The general assessment is that the two controlling organizations' rules are trying to bend towards each other.

**Recommendation 31: The consultancy finds that the development so far where the rules of authorization from the Council for Organic Agriculture (COA) and the Directorate of Plants have been closing in on each other is a fruitful development. On this background it is recommended that COA and the Directorate of Plants try to reach a situation with only one set of rules.**

Table 8.12 and 8.13 shows that organic farmers accept the state's rules on control and marking. The same question has been asked for the project leaders in the development projects and also here it turns out that they are very positive towards both the control mechanisms and the marking system (the 'Ø'-mark).

It is thus noteworthy that the organic farmers to a high degree have a culture and view on life that is typical for individualistic people and pioneers have accepted the public system's control and marking system. This is clearly a pat on the back to the public system's ability to carry out control and creating a marking system that gains acceptance and respect between the organic farmers.

**Table 8.14: Control of the organic farms 1989-1991<sup>1</sup>**

	<b>1989</b> Protest	<b>1989</b> Loss of authorization	<b>1990</b> Protest	<b>1990</b> Loss of authorization	<b>1991</b> Protest	<b>1991</b> Loss of authorization
Parallel growth, plants	13		11		11	
Seed, fungicides		7		11		12
Damage due to spraying		2		6	2	
NPK fertilizer		4				
Non-organic manure				1	6	6
Biocides and pesticides				1		
Parallel breeding, domestic animals			1		1	
Non-organic fodder				9	5	7
Additives, fodder				1	2	4
Stable facilities		5		1		4
Outside facilities					1	
Logbook					3	
Total	13	18	12	30	21	33
Has lost the authorization	0		2		4	

Table 8.14 shows the effect that the control with the organic farms has had during the period 1989-1992. Table 8.14 underlines that the organic farmers are a well disciplined group that as well as possible tries to maintain the rules that characterize the organic production method.

It can be seen from table 8.14 that there is a minimum of the organic farmers that have lost their authorization. In 1991 4 farms lost their authorization. Currently in 1992 5 farms have lost their authorization. These are a minority at less than 1% that has lost their authorization.

There have to be serious violations before a farm loses its authorization. These violations have mainly been due to failing to comply with the rules on manure and pesticides. Furthermore authorizations have been taken back since farms have been run together with non-organic farms. Furthermore one authorization has been taken back due to failure to fulfill terms that earlier have been given dispensation.

Table 8.14 also does show that there has been an increase in the number of protests and loss of authorizations. This increase shall also be seen in the light of that there has been an increase in the number of authorized organic farms in the period. Protests are made to the degree where the relations on the farms are not found fully in compliance with the rules. The idea of the protests is to prevent future violations of the rules.

<sup>1</sup> The data in the table is created by the Directorate of Plant on behalf of the consultancy.

If an authorization is taken back this is due to that the standards for conversion have not been followed which is why demand for a new conversion will be made from the Directorate of Plants.

In total it can be concluded that the control and marking rules are a success and the consultancy can recommend that:

**Recommendation 32: It is recommended that the existing rules for control and marking are kept in place since the target group - the organic farms- have a large degree of respect and acceptance.**

## **8.7: Research and experimenting**

In total 33 development projects can be characterized as really research and experimental projects. These projects have totally received 38% of the total development project support. For about 80% of the cases the projects' approved received more than 100.000 Kroner.

**Table 8.15: Primary target group of research and experimenting**

Target group	Yes, to a high degree	To some degree	To a small degree	No	Do not know
Organic farms	58%	15%	6%	21%	0%
Manufacturing	18%	9%	0%	73%	0%
Retailers and service	12%	9%	6%	73%	0%
Research institutions	42%	12%	0%	46%	0%
Consumers	9%	15%	3%	73%	0%
Public decision makers	21%	12%	0%	67%	0%
Others (for instance organic consultants)	49%	6%	0%	42%	3%

Table 8.15 show the primary target group of the research and experimental projects. It can be seen from table 8.15 that the organic farms were the target group in 58% of the cases concerning research and experimenting. Hereafter follow research institutions and the category 'others', particularly the organic consultants.

It is hardly a surprise that the target group for research and experiments to a high degree are colleagues in the research environments and the organic consultants. It seems logical that the research institutions orientate each other in part in order to increase the collective knowledge and in part to control the scientific results (for instance experimental results). It seems natural that the research environments use the organic consultants as a target group in order to ensure that the organic consultants that have the closest contact with the organic farms can hand down the research and experimental results.

Concerning the promotion of the research and experimental results the project leaders mention that to a large degree have informed about the results in scientific publications, reports and so forth. Information via the general activities such as education and courses and contact to the daily press is to a higher degree aimed at both the organic farmers and the conventional farmers. Up to 60%

informed about their results through courses and teaching which must be considered a relatively high percentage for this information type.

Furthermore it is the case that the mentioned information through the press has had a broad contact level not just to the organic circles but to just a high degree to the public in general. This information way has every second project leader for a research or experimental project in fact used since 53% have informed about their results through articles and by mentioning it in the press. In total it must be said that the research and experimental projects have had a nice degree of promotion of the projects' results.

A lot of research and experiments have been made, for instance the very visible and directly used results for the organic farming.

On the other hand the consultancy finds that the time is right to assess the future of the strategy on research and experiments. The law has thus in its 5 year life time lead to that a long range of research and experiments have been initiated, without doubt because of the funding possibilities that the Law on Organic Agriculture has opened up. This is firstly due to that the organic area was not prior to this recognized to a very high degree as a scientific, viable and professional area. There is no doubt that the Law on Organic Agriculture has lead to a greater accept of and respect for the organic research area.

The risk funding for research and experiments have thus promoted an interest among the established researchers to offer funding for these environments that can study the organic farming. The downside of this is however that in case the funding shrinks these research environments will not prove viable since they will turn to other funding sources that do not have an organic aim.

In total the consultancy finds that it is not in compliance with the Law on Organic Farming to maintain the research environment within the organic area. The Law on Organic Agriculture has as its aim to promote organic production and of course to try to develop research and experiments that can support the above mentioned purpose.

The consultancy finds that the organic sector's current situation is to a very high degree marked by the problems that the lack of sale and increased costs for production and distribution lead to. The lack in sale and the difficult financial conditions hits the organic farms. Furthermore one of the most important products in organic farming, namely the production of organic dairy products is in a difficult situation since the organic milk producers to a large extend are depending on that there continuously can be made favorable price deals with the processing industry.

This leads to that the organic agricultural production is midstream and will be in that situation in the years to come. It is therefore very important that the Law on Organic Farming and the activities that have been initiated under it take their leaping point in solving these existing problems to the organic farming.

If this does not happen there is a risk that it might not be possible to maintain the organic agriculture in its current shape. On this basis the consultancy recommends that:

**Recommendation 33: It is recommended that future research and experimenting gives a high priority to results that in the short run benefit the organic agriculture.**

This means that research that has a general knowledge building purpose should be given less priority and only few long term research projects are initiated.

Furthermore the consultancy recommends that:

**Recommendation 34: It is recommended that an interdisciplinary research strategy is made for the research and experimenting to be made in the upcoming year. There is a need for a higher degree of coordination between the sciences and social studies in each research project and experimental project.**

The consultancy will promote the following issues as important for research to shed light on:

- Surveying and analyzing the current distribution and sales system for organic products.
- Surveying based on quantitative and cost considering approaches
- Analysis of the price formation on organic products in order to find out what makes the prices raise the most.
- Studying how each organic farmers' production and cost relations affect his choice of sale strategy. That is the choice between direct sale from the stable, retailers or grocers and so forth.

It is correct that such research activities to a certain degree have been carried out but the consultancy finds that these studies should be concretized and more target oriented.

**Recommendation 35: It is recommended to make concrete research with a focus on possible rationalization effects by increasing the cooperation concerning transportation, cooperation, wrapping and distribution. By focusing on for instance cooperation in pilot studies it becomes possible to demonstrate how a better distribution of organic products, common use of wrapping and other topics can lesson the price of the products.**

It is thus important that the research and experimental projects are closely connected to the organic farms.

There is furthermore a need for that the secondary elements in the organic sector –that is the parts of the sector that follow after the direct production on the organic farms- put focus on the practical and problem solving approaches that are sketched out in the recommendations above.

There is still a need for that the primary sector is strengthened so that one aims at promoting production methods that ensure a sufficiently stable yield. On the other hand the distribution, packing, processing and sale are important and unsolved issues that influence the organic farmers' financial situation.

**Recommendation 36: It is thus recommended that networkers with knowledge in distribution and manufacturing are brought in to a higher degree when the research is prioritized. These persons can possibly be in the project committee that has been mentioned in the action plan of future research in organic farming. The consultancy therefore finds it important that the future administration of program activities within the organic field make use of resource persons who has a direct knowledge of and experience with distribution, manufacturing and marketing.**

According to the existing 3-5 year action plan for research in organic farming it has been suggested that a research program concerning organic farming should be administrated by a project committee set up by the Ministry of Agriculture's research group. It is being considered that tenders shall be invited for these research activities.

The consultancy finds that offering this gives a project committee less of a possibility to control which institutions should carry out the research projects and that the possible cooperation on this. This increases therefore even more the importance of a programming phase prior to this that can ensure the right prioritization and concretizing of the research needs. This is important in order for the planned research to have the most relevance for the organic sector.

**Recommendation 37: In order to ensure that the research and experiments made are anchored in the practical issues in organic farming it is recommended that an early collection of issues is made for instance among the various organic groups. Within a certain period of time the groups will be asked to formulate and list the concrete problems that they find particularly important to experiment on and study. This list of 'gross problems' can for instance be tested in a 'future lab' for the organic groups, the researchers, the administrators and of course the Council for Organic Agriculture.**

By making a future lab as sketched out in the above text it will be possible to make a wish list that can be part of the basis for decision making on prioritization and composition of the concrete research program activities.

When research does take its point of departure in the issues that have been mentioned by the organic farmers it will be easier to know in advance who further on has a special interest in the future results from the research and experiments.

Such a planned problem gathering phase will also lead the attention to the problems that research that has already been carried out might have answers to.

## ***8.8 Braking down barriers for the organic agricultural production***

The prior paragraphs underlines that it is important to combine hard science, social science and humanities in order to enhance the organic agricultural production. There is a need for an interdisciplinary basis –aimed at making initiatives to brake down the barriers for organic agricultural production.

**Table 8.16: How the development projects have broken down barriers to organic agricultural production:**

Has the project broken down barriers for organic agricultural production concerning the improvement of:	Yes, to a high degree	To some degree	To a low degree	No	Do not know
Production methods in the primary sector	13%	20%	3%	47%	17%
Production methods in manufacturing	10%	10%	6%	59%	14%
Storage and packing facilities	6%	9%	4%	66%	15%
Sale and marketing	18%	15%	6%	44%	18%
Common sales companies	10%	12%	4%	62%	12%

Table 8.16 shows to which degree the development projects have broken down the barriers for organic agricultural production according to the assessment of the project leaders. It is thus noteworthy that the development projects to a limited degree are said to have broken down concrete barriers for organic agricultural production. These results shall not be interpreted as though the development projects did not work but that it has been difficult to the project leaders to specify the projects' ability to brake down barriers for organic agricultural production. Therefore the 'no' answers are relatively many and furthermore there are relatively many that answer 'do not know'.

The result is that only 18% of the development projects leaders can answer that the project has to a high degree helped braking down barriers for sale and marketing. Corresponding to this 13% did answer that their projects to a high degree have lead to breaking down barriers to better production methods in the primary sector.

The same percentages have been reached within the processing and manufacturing sector in relation to the efforts to build up common sales companies and in relation to ease storage and packing facilities for organic products.

When relatively few projects can directly document that they have lowered or broken down the barriers this is also a result of that this issue is very complex. It is difficult to brake down barriers for organic agriculture since it requires a solution to difficult problems. It is thus a fact that the organic farms are very much spread out both geographically and concerning the production conditions. This means that it is relatively expensive to produce organic products.

On this basis the consultancy finds that there is a need to think outside of the box. It could be possible to contract out the development projects where the sole purpose is this without deciding who could manage the project in question and under which conditions. For example a project could be contracted out where it is mentioned that an increase in efficiency of distribution and packing at 20% on the farms in the projects. The idea behind this model is to let the goal control the projects and let the consortia and/or the individual persons that go for the projects to be free to make their own model for this. The focus would thus be that the project is carried out, that the preconditions are sketched out – for instance the need for investment etc. –that are necessary in order to carry out the objective that has been presented in the project in question.

**Recommendation 38: It is recommended that it is considered to outsource projects where concrete objectives for how to increase the efficiency in some chosen farms have been laid out. This could be in the areas of storage and packing facilities or in the cost of the distribution channels and so forth.**

## **9. The future strategic importance of the Law on Organic Agriculture for the Organic agriculture**

The organic agriculture is at a turning point. The growth from prior years has been replaced by stagnation seen as a reduced sale and zero growth in the number of organic farms. The white book on organic agriculture from 1991 that gave a rather positive impression of the possibilities of development in the organic agriculture must be revised already one year after it came out.



The background for this assessment is that the expectations for the sale are no longer that optimistic. From the interviews with the organic farmers it can be seen that a large number of them expect a reduced price on their products in the coming years. This is partly due to a greater supply of organic products compared to the demand side and partly due to that some of the central price agreements that assure an extra profit for the organic products compared to the conventional cannot be expected to be prolonged or at least that there will be a reduced advantage (this is for instance the case with organic milk).

The organic agriculture is thus facing great challenges. The consultancy finds that there are particularly three instruments that must be used collectively and coordinated in order to enhance the organic agriculture and thus move the organic agricultural sector out of the stalemate.

**First**, there must be a prolongation of the research and experiments that have been financed through the development projects.

**Second**, public financial subsidies should continuously be used as an economic instrument that can partly stabilize the economy on the organic farms and partly tries to affect the actors within the collective organic agriculture to behave in a way that supports the future of the organic agriculture.

**Third**, it is important to activate the instruments that are enhancing a long term solution where particularly a reduction in problems in the distribution, sale and marketing of the organic agriculture is in focus.

Throughout this chapter the three instruments will be described.

### ***9.1 Instrument I: Research and experimenting within the organic agriculture must be emphasized***

As mentioned in chapter 8 a 3-5 year action plan for research and experimenting in organic agriculture has been made. The consultancy finds that this action plan in a number of ways supports the future production of the organic agriculture. It is thus emphasized in the report that the prerequisite for increasing the sale of organic agricultural products among other things is that stable supplies for retailers of good quality and at prices that allow for normal profits is ensured.

Furthermore the action plan mentions that there is a need for target oriented research that helps make the organic agricultural production efficient while taking care of the goals for ensuring a more efficient use of the resources where economical and environmental concerns are being taken into consideration.

In spite of these positive elements in the action plan the consultancy finds that it should be criticized that the action plan when sampling, treating and prioritizing the research needs in organic agriculture solely has considered questions concerning the primary production. By making this limitation there is a risk that particularly the problems acknowledged concerning selling organic agricultural production are lost of sight in the future research in organic agriculture. There is thus a risk that the action plan to a too high degree suggests for an amputated research that solely has its leaning point in the problems that natural science tries to solve for the organic agriculture. Such an amputated leaning point can according to the assessment of the consultancy not solve the problems of the organic sector.

Furthermore the consultancy finds it problematic that the action plan is not very easy to operationalize. For instance there is no prioritization between the suggested research areas. It is thus more of a catalogue of ideas (that is a gross list) than an actual prioritized research contribution.

It is a normal assumption in research discussions that the research in Denmark should have a long term goal that is a timeframe of 5-10 years. In the action plan for research in organic agriculture a 5 year horizon is used. For a more strategic research project there is no doubt that a 5 year timeframe should be used. However there are a number of problems in the organic agriculture that have to find their solution within a timeframe that is significantly shorter than 5 years. The consultancy thus finds that there is a need for an action plan for research in organic agriculture that gives high priority to the short term problems in organic agriculture. Furthermore the consultancy finds that the action plan for research in organic agriculture should be based on both natural sciences, social science and humanities are used in into the concrete problem solving.

The consultancy finds that there is a latent need for making the research in organic agriculture problem oriented. This means that the research should to a higher degree take its leading point in the concrete problems that the actors within the organic agriculture have. There are good examples of that the prior research has 'bailed out' various parts of the organic agricultural chain that is right away from input in the organic farms and to sale of the organic products for the consumers. There is a need that this is given a higher priority so that research and experiments can make up a strong support for the organic agricultural production. It would thus be unfortunate if an action plan for research in organic agriculture is made for long term problems while the organic farmers face unsolved and immediate short term problems.

## **9.2 Instrument II: Economic subsidies**

It is obvious that in a situation with economical problems and a recess in the sale it is relevant to assess whether economic subsidies can stabilize the economic situation and enhance the sale of organic products. An economic contribution for the organic agricultural production can even be handed out from non-organic motives, for example that environment and health are promoted through the organic agricultural production.

The consultancy finds that it is relevant to assess three different types of subsidies.

The first subsidy type is the conversion support. The evaluation shows that the conversion support is not the primary urge for farmers when they decide whether they wish to convert or not. On the other hand the evaluation shows that the conversion support is one of several important conditions of that the farmers do convert to organic agriculture. Therefore the conversion support is without any doubt an incentive.

The consultancy finds it to be important that the graduation of the conversion support in relation to the number of animal units is kept in place. Since domestic animals on the farms are considered a prerequisite to fulfil the organic purpose of establishing a holistic and self-sufficient system in the farms it is important that the conversion support has an incentive for creating this situation built in.

In total the consultancy finds that the conversion support should be maintained as a subsidy in the future. This view is also in place if/when a set hectare subsidy is carried out – cf. the mentioned

rules from the EEC that opens up the opportunity to give a set production subsidy per hectare for the organic farms after they have finished converting. The hectare support is constructed so that a set production support is given for the organic farms per hectare as long as the organic farms live up to the rules about producing organically.

When the consultancy cannot recommend that the same principle on a set hectare support per hectare is used during the conversion time it is due to two reasons.

Firstly, it is fair to maintain a graduation after the number of animal units per hectare which we have argued for in the above.

Secondly, the consultancy recommends that some of the automatic elements in the conversion support should be taken out. There should be a possibility to give a minimum support as conversion support for all farms that have been approved to start converting. Furthermore there should be the possibility to use a higher level for farms whose loss in income is rather big. By opening to the added subsidy in the conversion support the support is given after a principle of insurance: in case the farm during the conversion period has a great loss in income compensation can be given by making a greater amount in the conversion support. The use of this principle of insurance seems fairer rather than giving the same support for everyone no matter the loss of income.

The consultancy finds that it is important that breaking with the element of automatic returns does not result in a bureaucratic and uncontrollable system. On the other hand it seems fair and useful to the consultancy that it is possible to support the farms that are expected to have a great loss in income in the conversion period with a larger conversion support. There is thus a scientific basis for that there are different barriers when converting from conventional to organic farming for the different products. For instance it is proved that there are greater introductory problems with fighting weed and a greater loss in income for plant producers than to for instance farms with cattle.

**Recommendation 39: The consultancy recommends that the support for conversion as a subsidy is preserved. This recommendation applies no matter whether other subsidies for organic farmers are introduced. Furthermore it is recommended that the automatic subsidy for conversion with a set grant per hectare in the conversion period is changed. The change should make it possible to have a minimum level in the conversion subsidy and a higher amount of money that is handed out in case there is an unexpected large loss of income during the conversion period. The reason for this is that the initiation barriers and loss of income is different depending on which products the organic farmers expect to produce after the conversion period is over. Therefore the conversion subsidy should be given as an insurance against loss of income rather than just as a fixed amount.**

A different type of subsidy is the mentioned permanent production support in the shape of a **set hectare support** for the organic farm. As mentioned EEC's suggestion for farming policy opens up the possibility to make a permanent production support for the organic farms financed with 50% from EEC and 50% from the Danish state.

A set production support would thus make a fall in price possible for the organic products and thereby –all other things being equal- increase the sale of the organic products since more

consumers would find the organic product attractive. Furthermore a set production support would encourage more conventional farmers to convert to organic farming.

Immediately there seems to be much that supports the idea that a financial subsidy can remove some of the problems that the organic farmers have today. On the other hand a number of problems are related to the economical subsidies that are in the shape of a set production support per hectare:

**First**, there will be a risk that the state production support is being ‘capitalized’ in the land that is the land that potentially can be used for an organic conversion has rising prices. In this way the societal benefit of using the set hectare for production support since the farmer’s costs are increased and therefore the expected price reduction from introducing the production support never kicks in.

**Second**, the use of a set hectare support means that efficient and inefficient farms are treated equally that is gets the same production support. Thereby the badly run farms are favorized which can set back the professionalization among organic farmers that have been seen during the first years of the Law on Organic Farming.

**Third**, there is a risk that a high production subsidy will attract those conventional farmers that have the biggest economical problems which can be due to bad earth and bad choices. A subsidy per hectare can thus be so high that it ends up being a sort of social help for farmers rather than an economically motivated support. On this basis we recommend:

**Recommendation 40: By using a subsidy for the production in the future in the shape of a set subsidy per hectare for the organic farms it is important that the set subsidy per hectare is at just the right amount. This is to ensure that the subsidy is neither being capitalized in higher land prices nor neutralize the professionalization that has been seen in the first 5 years of the existence of the Law of Organic Agriculture. Furthermore it is important that the support per hectare is not so large that the supply is stimulated more than necessary in relation to the demand of organic products.**

The consultancy thus generally warns against holding too optimistic expectations for that the production support as the ability to solve all the problems in organic farming. The many extensive support rules for the conventional farming is in itself showing that the problems in organic farming are hardly solved by operating with a set supply enhancing production support.

The third support type is a **structural support**. Structural support means to the consultancy a subsidy that enhances an efficient distribution and sale structure within the organic agricultural production. The structural support has its support in the view that the most important problems in organic farming are not in the primary production but instead they are found in distribution, sales and marketing.

The structural support shall therefore contribute to cover the costs in relation to distributing, processing, packing, selling and marketing the organic products. The structural support thus aims at supporting activities that take place in the secondary part of the organic sector’s chain, being with grocers, sales companies and processing companies.

The consultancy thus finds that there is a need for an economic subsidy that affects the organic farmers to make decisions and use a behavior that brakes down barriers in distribution, sale and marketing.

The consultancy furthermore have found that instead of just using a single set support level there is a need to operate with a flexible and structural oriented support type that promotes solving the problems that are biggest in organic farming. The biggest problems exist in distribution, sale and marketing and thus it is important to construct an economic subsidy that solves these problems.

There is thus a need that the existing sales companies and grocers become more professional in handling the distribution, sale and marketing relations. Furthermore there is a need that the organic farms establish new sales companies on a co-operative basis with the purpose that the sales companies should take care of the distribution, sale and marketing problems. Following from this an incentive must be made for the organic farmers to join each other and make such a sales company or to a higher degree collectively to turn to the grocers and other companies that can handle these topics.

It is not possible under the Law on Organic Agriculture to give support to a larger degree (10% financing) for projects that have to carry out distribution, sale and marketing issues in private companies. However there is a need that the organic farmers to a higher degree have an incentive to coordinate their distribution, sale and marketing in a common, preferably regional oriented sales company.

On this basis the consultancy finds that it should be considered whether a per mille duty fund for the organic farming should be made. Under the Law on Administration of the European Economical Community's Rules and Market Rules for Agriculture and so forth (Law number 414 from June 13<sup>th</sup> 1990) such a fund can be established for financing for instance sales promotion, research and experimenting, product development, advise, education, prevention of diseases, fighting and controlling diseases. Furthermore the fund can be used for things that the minister of agriculture allows for in relation to the organic agriculture.

Through the existing law on administration of EEC's rules on the market for agricultural products it is thus possible to the minister of agriculture after recommendation from the funds' boards to make rules on payment of dues for agricultural products that are manufactured in Denmark. These dues make up a fund for each sector where the due has been paid. For the time being there is a pork farmers' fund, a dairy farmers' fund, a cattle farmers' fund and a seed farmers' fund and so forth.

The money from these funds is gained from dues on the agricultural products and from using the regional tax [den amtskommunale grundskyld] on real estate that is paid for the state according to the Law on Taxes in the Commune.

The mentioned law on administration of the EEC's rules is to be revised before the end of 1992. This is a good occasion to consider whether a per mille duty fund should be made for organic farmers.

Financing this **organic per mille fund** could be done using the following model:

The model is based on a 100% financing by the organic farmers themselves and a co-financing from the regional tax on real estate that is a part of the funds. This sort of financing from the organic farmers can in this way become cost neutral for the organic farmers seen as a group. One can thus set the support per hectare high enough so that one can afterwards take back the paid hectare support as a duty or tax for the organic per mille fund. In this way the majority of the taxes are transferred back to the organic farmers since the per mille fund refunds some of the expenses that the organic farmers pay for the sales companies in order to get their products sold and in order to have the distribution and marketing taken care of. The idea is thus that the organic per mille fund returns the tax that the organic farmer has paid for services from the sales company.

It is obvious that this model for financing has re-distributional consequences. Thus funds are given to the farms that are a part of the common distribution, sales and marketing co-operation. The farms that are not a part of this co-operation miss out on a part of the hectare support that alternatively could be dealt to the individual farmers. This could mean that the small farms that use their own sales channels through the squares, markets and sale directly from the stable will receive a smaller economic support. However the smaller farms will benefit from the larger farms' common work to create a greater demand and interest, at first in the domestic market by promoting sale and marketing. The common work will be an advantage to the smaller organic farms even though they use other sales channels.

Furthermore can the distribution, sale and marketing relations can be so fruitful that also smaller organic farms will feel the incentive to sell a larger part of their products through these formalized channels. On this basis the consultancy finds that such a redistribution of the funds through an organic per mille fund is particularly beneficial partly for the organic agriculture's future distribution sale and marketing situation and partly for the majority of the organic farms –small as well as big.

An alternative financing model is to ensure that there are both organic and conventional farms that pay to the organic per mille fund. The consequence will be that a number of the conventional milk and pork producers' taxes are used to promote the organic colleagues' sale. It is obvious that this sort of redistribution will create critique since the conventional farmers do not wish to support the organic farmers. The argument for this financing model is however that the conventional farmers in this way can invest in a future sales channel by letting a very small part of their duty funds go to the organic per mille fund. The interviews in the evaluation with the 56 conventional farmers show very clearly that one of the largest barriers for the conventional farmers hindering that they convert to organic farming is the lack of sales channels.

On this basis the conventional farmers can have an interest in carrying out a long term investment in the formalized distribution, sales and marketing channels.

The conventional farming has thus according to the reasoning above an interest themselves in letting relatively few funds be used to support an organic sales company in order to create the possibility that the conventional farmers can convert to organic agriculture. It will both enhance the organic agricultural production with the positive societal effects that might come out of this and at the same time lessen the need for regulating and minimizing the conventional production. On this basis the consultancy finds that it is also in the interest of conventional farming to give a limited support for the building of a strong organic distribution, sale and marketing network even if the competition that the organic products will be to the conventional cannot be excluded. There is a need for a constructive and open dialogue between the organic and conventional farming.

On this basis the consultancy recommends:

**Recommendation 41: The consultancy recommends a fixed subsidy for the structures in order to support the distribution, sales and marketing of the organic products. The subsidy is a reimbursement for the charges the organic farmers pay to their wholesaler or manufacturing company. These charges are measured from the value of the organic production which the farmers deliver to the wholesalers. At the wholesaler or manufacturer there will be an incentive to use charges for financing the larger price the organic farmers depend on. The reimbursement of the charge is given from the new organic per mille tax fund.**

**The money in this fund could partly come from a tax on all the organic farmers' production and partly from giving the fund a share of the regional land tax on real estate to be paid to the Exchequer in accordance with the Law on Taxation in the Municipalities.**

By letting the organic per mille funds' support depend on the size of the funds that organic farmers pay to the sales companies there becomes a strong incentive to let both the organic farmers and the sales companies ensure that as much organic products are sold as possible through the formalized sales channels.

The reason for this is, that with an increased sales volume must be expected that the marginal costs of having the sales company will fall. Following from this the organic farmers and the sales company has a common interest in –under the condition that there is a free competition between the organic producers and among the sales companies –having as many organic farmers attached to the sales company as possible. In this way the sales company and the organic farmers have a share in the economic funds and furthermore the sales company can compete on making the dues that the organic farmers anyway have to pay for the sales company for selling their products as small as possible.

The suggested structural support has thus the advantage that it promotes a behavior among organic farms and grocers/sales companies that contribute to solve the fundamental problems. By supporting this element in the organic agricultural production there also are resources to make a professional marketing which is also a long term investment that in the end will support the sale. The result will be a long term investment that in the end will support the sale. The result will be a larger volume and thereby will the costs per organic products also fall equally much. The effect will be that the organic agriculture will get into a fruitful circle where the organic agricultural production will become better and better at competing.

**The suggested structural support is thus healthier than a fixed hectare support since the support form goes to the core of the organic agricultures unsolved problems.**

### ***9.3 Instrument III: Targeted development projects***

The analysis in the previous chapters points to that there continuously should be created development projects that have a clear goal orientation in relation to contributing to solve the most pressing problems for the organic agricultural production. Furthermore there has been argued that there should be room for research and experimental projects with perspective and a long term view.

Furthermore it has been recommended that the projects that contain a clear goal orientation are being farmed out so that the competent consortia are able to bid on carrying out the development projects and giving a price on a well defined and well described basis.

A consequence of the above is that the initiation of more long term campaign like projects are replaced by more individual projects that have a shorter or longer time horizon but where the proposal and therefore the goal formulation for each project is precise.

If a change in the criteria for the conversion support are carried out in the shape of that the automatic elements in the conversion support are replaced by a combined minimum amount and a supplementary amount that is balanced from the loss in income for the farmer during the conversion period the Directorate for Agriculture and the Council for Organic Agriculture will necessarily decide on the prioritization of the financial funds between the development projects and the conversion support.

The consultancy finds that there should further on be room for both carrying out development projects and give the conversion support. On the other hand a competition between conversion support and development support could be healthy since it sharpens relevance and the quality demands for the development projects.

**Recommendation 42: If the automatic conversion subsidy is changed to a minimum payment plus the possibility to give an extra conversion subsidy as insurance the Council for Organic Agriculture and the Directorate of Agriculture will be in a situation where a priority must be made between giving support to development projects and increasing the support for conversion. The structural problems that exist in the organic agriculture mean that there will both be a need for development support and for conversion support. On the other hand the consultancy recommends that a competition is made so priorities can be made between development projects and conversion support. The consultancy recommends that this competition is used to increase the demands for the relevance and quality of the development projects.**

The consultancy finds that various types of development projects should be initiated:

**First**, it is important to make development projects that enhance the distribution system within the organic agriculture. The consultancy finds that the distribution of for example the organic fodder could be made cheaper if the organic agriculture to a much higher degree cooperates on making common orders one week ahead. This alone would rationalize the transportation and thereby lessen the transportation expenses.

Furthermore there is a need that the distribution of products from the organic agriculture to the grocers and the sales companies are being coordinated. It is obvious that there exists a geographical barrier to this but on the other hand there is no doubt to the consultancy that the logistics between the organic farmers can be made more efficient. The demand is, that the organic farmers cooperate more than they do today.

**Second**, there is a need for development projects that puts focus to sale. The consultancy finds that the coordination and increased cooperation on the sale is a prerequisite for that the organic agriculture in the long run can have a viable economy and thereby ensure that the organic



agriculture develops as a healthy, viable sector. It would be harmful in the long run if the focus on a fixed production support based on a fixed amount per hectare takes the focus away from the very important objective about ensuring better and more professional formalized sales channels.

Formalized sales channels are thus a prerequisite for that the organic farmers can make negotiations about sale of large quantities of goods. Particularly in the export markets there is a need to make long term contracts with a guarantee of a minimum of deliverances. Such a guarantee is difficult to make due to the large variations in the volume of yields which for instance is a consequence of that there are relatively few organic farmers that even do not cooperate [should probably say: that do cooperate].

Today there is a relatively up dated knowledge about how to use the converted organic areas. Thus the Directorate of Plants every year makes a report on authorization and production in the organic agriculture. This publication is made up on a very detailed product level for the converted areas. For instance for root crops the size of the area under conversion and the size of the that has not been converted to organic agriculture is mentioned. The root crops are divided into seed potatoes, industrial potatoes and potatoes for normal consumers etc. To the degree where there is a need for a more up dated list of organic expectations to for instance the coming harvest can a sales company itself in this way make a study that is equal to this among its suppliers in order to investigate and quantify the expectations for the future deliverances. On this basis the consultancy finds that there should be a development project in order to be able to control the information concerning both the input side for the organic farms (input via manure and fodder) and on the organic farms' output side (sale of the organic products in quantity and on set times).

**Recommendation 43: It is recommended that a development projects is initiated in order to build up an informatics system which can handle information about the organic farmers' needs for purchase of fertilizers and organic fodder for the animals on the organic farms. Furthermore it is recommended that the informatics system can handle expected deliverances from the organic products and to the sales companies and wholesalers. The goal is to give wholesalers and sales companies a tool to ensure an optimal way of getting through the distribution and sales. Knowledge about future input- output needs of the individual organic farm is necessary in order to build up an efficient distribution system. Knowledge about the future deliverances from the organic farms to the sales companies will make it possible for the sales companies to make negotiations of larger and long term deliverances. Therefore the consultancy recommends that the informatics project is concerned with both specific demands and with the implementation of a demonstration project for the informatics that should handle these tasks.**

**It is the assessment of the consultancy that such an informatics solution should be rather easy to handle and not very expensive. Furthermore the rather low amount of organic farms means that the system will be quite easy to build up and implement. The idea is to build up a number of regional companies that are basing their informatics system for distribution and sales on the organic farms that are situated within a short geographical radius. There is hardly any need for more than 10 large sales companies/wholesalers since it should be taken into consideration that particularly a number of smaller farms will not wish to use formalized means of distribution and sale.**

**Third** development projects should be made that aim at supporting the introductory marketing of organic products. It seems strange to the consultancy that the marketing of organic products is so spread out today.

**Recommendation 44:** The consultancy recommends that an introductory campaign is made for both the domestic and the export market, presenting the organic products. So far the marketing of organic foods has been scattered and it has been focusing on individual organic products. The consultancy recommends marketing of actual organic menus of both meat and vegetables. The consultancy finds that it is possible to market organic menus as actual life style goods.

It should be emphasized that there should only be given support to introductory marketing. Development support should not be used for more permanent marketing initiatives. The consultancy finds that it is important that the support is also given for introductory marketing in the export markets. Such a support could be for both an introductory market analysis and the creation of actual marketing material.

**Recommendation 45:** It is recommended that the introductory marketing is financed through the development projects and supplemented with support from an organic per mille tax fund. It is thus recommended that this fund also gives support for introductory marketing of new products.

**Fourth**, there should be given support for more long term strategic development projects. Long term strategic research projects are one type that under this point shall be emphasized. There is however also other types of strategic development projects: for example there should be given support for development projects that have the aim to enhance the demand of organic products by making strategic alliances.

Such strategic alliances can for instance be made with organizations that have a health political purpose and/or a disease political background. Thus it should be studied in a development project whether alliances with groups such as allergy sufferers or others who have health political interest in experimenting with organic foods. The advantage of such alliances is also that there can be a significant marketing advantage by using such alliances.

Another type of strategic development projects will be to finance documentation and debate shows produced by a commercial film production company for sale to Denmark's Radio, TV2 or a foreign film company. The interviews in the evaluation clearly show that such debate shows have a large impact on the public opinion.

**Fifth**, there should be made development companies that ensure an independent and separate development among the organic farmers. Initiatives that ensure an increase in cooperation, networking, establishment of sales companies etc. supports this sort of strategy for independence. In this way it is ensured that the organic farmers to a higher degree can set the agenda also concerning commercial negotiations. There is thus a need for that the organic farmers enforce their position. This means that short term beneficial price deals should not collide with long term interests for ensuring a strong position in the market and in the negotiations.

**Sixth**, it should be emphasized that it is important that the future development projects are anchored among the operators within organic farming. It is thus important that the organic farmers are to a higher degree active in the development projects. Furthermore it is important to have the processing and sales elements represented in the development projects.

In order to make the organic farmers take on a more active role in the formulation and completion of development projects it has been emphasized in the previous chapters that a limited and experimental access for the organic actors to have the opportunity to receive development support for financing their projects.

## **9.4 Rounding off**

The analysis in this chapter do underline like the previous chapters that it is a decisive prerequisite for ensuring a viable future for the organic agriculture that the sector stimulates the organic agricultures supply and demand. A single sided focus on stimulating the supply side for instance by a fixed production support per hectare if the demand side is not stimulated lead to that prices will weaken. The result will then partly be that the organic farms in spite of the production support continuously will have economical problems and partly that the organic farmers produce a good that have production support for an organic method but sell goods as conventional products due to the weakened demand.

A production support where one solely stimulates the supply side can thus very well prove to be a problematic way to use society's resources since a production is stimulated that is organic but the products are a part of the conventional sale. In this case critique can be made of this sort of support since it is an anti-competitive praxis.

On the other hand can an isolated aggressive stimulation of the demand for instance through a strong marketing mean that the demand for a short term rises very much and results in that the supply side cannot keep up. In this way the organic farmers loses credibility and even worse the organic agriculture is at risk of losing the large goodwill that the organic farming and the organic products have in the population. The same problem is relevant concerning the export market where a focus on making the demands higher will mean that the agreements all ready made cannot be fulfilled due to a failing supply.

These relations underline that there is a need for a professional handling both on the supply side and on the demand side in the organic farming.

There is no doubt that it is very difficult politically to control the supply and demand side in order to create a balance. Experiences from the conventional farming are very clear: in spite of the large subsidies for conventional farmers agriculture is still in a shape where farmers have serious financial problems while there is too much conventional food on the market.

The key to solving the problems in organic farming are with the organic farmers themselves. The Law on Organic Agriculture can only support the organic farmers' endeavor to solve the problems. This support should in the opinion of the consultancy both contain the conversion support and the development support. Furthermore EEC's suggestion for production support for organic farming based on hectare support to be a realistic support method.

However the consultancy finds that the most convincing support type with the most perspective is the structural support that has been outlined. It has the aim to stimulate the organic farmers' incentive to coordinate their distribution and sale. Such an incentive is created by returning some of the dues that the organic farmers have to pay to use the formalized distribution and sales channels that a grosser/sales company can offer. The consultancy has pointed to a possible way to finance this of the organic farmers' taxes through the newly established organic per mille fund. The financial funds for such an organic per mille fund can be found through a tax on production for all organic farmers on all organic agricultural products and through the regional refunding.