Property development in the countryside

"In the storm centre of agricultural policy and rural development"

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SUMMARY

In Denmark rural areas is undergoing af rapid change from pure agriculture and forest to a mix between still bigger industrial farms and properties and small holdings for housing only, parttime farming and small industries in former agricultural buildings.

In the seventies the national policy was focusing on the protection of valuable arable land from changing to parttime and distant farming, urban growth, infrastructure and Afforestration. Now thirty years after the clear distinction between urban and rural areas has been politically abandoned. Rural areas is open for more urbanization in the form of housing and trade, industry different from agriculture.

This integrated urbanization and industrialization of rural areas is a new challenge for chartered surveyors in Denmark. The surveying profession and their capacity of advisory to the owners of holdings in the countryside play a central role in transformation of ownership to land and properties.

Field studies have documented how the individual expanding farmers acts strategically in the local battle of more land to build up a still more productive and efficient agricultural enterprise.

The raising demand for land is also catalysed by the new land policy for nature reconstruction, afforrestration and ground water protection.

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1. INTRODUCTION

Until the 1950s, the number of agricultural holdings in Denmark was on the rise, finally peaking at 204,000 (Jørgensen, 1977). This increase through the first half of the century was driven by state and private subdivision of small farms - themselves originally the product of bigger estates – and the establishment of new ones as part of an active and job-promoting agricultural and social policy (Prieme, 1997). In the 1960s a massive process of change was set in motion in the entire Danish society, a transformation which entailed urbanization, outmigration of the population from rural areas and the mechanization and specialization of agricultural production (Sørensen, 1987b). Public policy accelerated these structural changes in agriculture, along with the rationalization of agricultural structures and units. These structural developments led to changes the production structure of agriculture. This developmental process thus involved several aspects:

- In the 1950s, self-ownership and full-time agriculture dominated, and the general pattern was a farm unit consisting of a single holding without tenancy of land.
- Structural change which came about during the 1960s and lasting until the present entail that farm units are phased out and that full-time agricultural production units increasingly maintain several agricultural holdings, managed as joint operations and possibly including an agricultural holding without buildings and with rented areas.
- The total number of farm units thus declines more rapidly than the number of agricultural holdings (holding are defined as the property and farm units managed by a farmer; one farmer or enterprise can today manage several holdings and rented areas).
- It has been possible since the mid-1980s to acquire the primary farm holding without a formal agricultural educationor principal occupational status in agriculture.
- Similarly, the amount of rented land has increased during the entire post-war period.

2. THE REGULATION OF THE DANISH AGRICULTURAL HOLDINGS

The number of agriculturally registered holdings peaked in 1950 with 204,000 properties, as did the number of farm units and enterprises. Subsequently, the number of properties declined drastically, reaching 141,000 in 1999. The spatial extent of the "agricultural enterprise" has several connotations so that the Danish Land Management system focuses on three different spatial forms.

First an "agricultural holding" consists of properties registered as agricultural holdings in the Cadastral Registry and may consist of several lots. Much of modern Danish agricultural regulation around structural developments focuses on the agricultural holding. Policy is

concerned with the transfer of entire holdings as well as the consolidation of areas between agricultural holdings, including: a) subdivision of agricultural holdings; b) amalgamations of land; and c) phasing out of agricultural holdings.

Second, "a farm unit" consists of several holdings, maximum three per enterprise / farmer, only one of which may be without a building, plus additional tenant and leased lands. “Leased” lands where risk is divided between renter and tenant are not covered by the Law on Agriculture’s regulations regarding joint holdings.

Third, a conceptual apparatus has arisen aimed at fulfilment of environmental legislation’s “harmony regulations”: an agricultural enterprise consisting of commonly held areas, including lands where neighbors have established an agreement regarding the spreading of slurry.

3. STRUCTURAL REGULATION AND POLITICAL DRIVING FORCES IN THE LAST 50 YEARS

Up to the 1960s, it was in practice forbidden to phase-out an agricultural holding, and there were strict limitations on the ability to convert lands between agricultural holdings (Jørgensen, 1997). That the number of holdings actually remained stable so long was linked to strong regulatory policies. Controlling the acquisition of agricultural lands was the object of a much political fervor, and there was a tradition in Danish politics of detailed regulation and administrative guidance (Sørensen, 1987b). This land policy had been heavily influenced by agricultural organizations and political parties, all with their respective land policy priorities with respect to desirable holdings sizes, restrictions on phasing out holdings, limits for amalgamations etc. The operation from 1919 until 1982 of the State Land Law Committee, with direct representation of parliamentary parties, is evidence of the strong political interest for these land law questions (Primé, 1997).

Since 1960, the regulatory framework around agriculture has been especially strongly politicized. Policy has been characterised by an intense level of detail and frequent changes, the result of land policy contests among the parliamentary parties, aided by the relevant agricultural economic associations. There has been a strong interest in regulating joint holdings and tenancy, land consolidation and land acquisition. Observations of these decision processes reveal the regulatory framework as a battleground over access to and ownership of land as a productive resource.

Regulation dealing with the phasing out or liquidation of agricultural holdings was relaxed in the 1960s, and up to the 1970s it was normally assumed that the socio-economic significance of agriculture was declining. Hence, in several public planning initiatives (e.g. Zoneplan 62) and in publications from the secretariat of the National Planing Committee (*Landsplanudvalget*), one encounters the assertion that planning priorities designed to retain land for agricultural use should yield to interests connected with urban development, summer cottage zones and infrastructure (Sørensen, 1987a, 1987b, 1987c).This situation was reversed in the 1970s following Denmark’s entry into the European Economic Community (Sørensen

1987b). A new need arose for high investment levels, which helped create recognition that agricultural land, as a social resource, should be protected against conversion to other purposes. What followed was a toughening of agricultural land legislation and stricter administration of the liquidation of agricultural holdings. Agricultural authorities were to be more cautious about giving agricultural land over to other, non-agricultural uses. Developments in Denmark were comparable to those in other Nordic Countries (Virtanen, 1985). Municipal and planning law provided for a planning system at the regional, municipal and local level. In the late 1970s, this system was coordinated with water-supply planning as well as sectoral planning for raw materials, nature preservation, and agriculture. Agricultural interests and the Agricultural Act were thus adapted into the planning system, in that the priorities within agricultural planning regarding land and water resources should seek to maximize the utility of water and land resources for agriculture as a whole. By contrast, agricultural sector planning should not concern itself with the administration of the agricultural law, including designation of areas needing investment security or environmental adaptation / extension, and other such planning efforts pursuant to a geographically goal-oriented administration of a agricultural law (Sørensen, 1987c, Willeberg, 1999, Mouritzen 1999).

Therefore the physical planning and land area designation in the study area has no authority in terms of the regulation of the development of farming. This means that regional planning can be viewed in tandem with sector planning as protective of large consolidated agricultural areas, within which structural changes must accord with agricultural law. However, assuming great regional and local variations in this structural development process, conflicts will arise with local needs for structural and environmental adjustment, such as extensification or afforestation. In this way different land uses interests compete, local development becomes more unpredictable and conflict become more acute.

4. DRIVING FORCES IN THE DANISH AGRICULTURAL LANDSCAPE: EMPIRICAL EVIDENCE

This article will explicate changing conditions of land ownership in order to understand their spatial expression in the landscape and these spatial patterns in larger regions. This is an interesting strategic research perspective due to the following factors:

- The restructuring process in the landscape among agricultural holdings reflects the local balance of power among powerful local actors in the landscape, namely the owners. The transfer of land between agriculturally registered holdings creates irrevocable changes in the basic territorial structure of the landscape, i.e., the distribution of agricultural holdings and land.

- The regulatory basis of the Agricultural Act has changed significantly so that new and more varied holding sizes have become an objective in the agricultural law. Regulatory changes in the late 1980s regarding the acquisition of holdings below 30 ha have freed the market for these holdings. Furthermore the introduction of the “non-building agricultural holding” and the possibility for simultaneous operation of up to three

holdings within 10 km have created better opportunities for new and expansive farm units.

- Previous research concerning the change of land and holding- adjustments for agriculturally registered land and holdings has been very limited. It has consisted of legalistic presentations of current agricultural legislation such as, for example, Jørgensen (1997), or has been purely historical, including local studies over long time frames.

- This ongoing research will help develop knowledge about the interaction between landscape, management authorities' functions and actual changes, based on the idea that data collected in the land management process can be used to generate real-time indicators. These can be applied to the monitoring of landscape changes. Doing this can be an alternative to scenario thinking and to the need for generalizing models about the local landscape.

With these caveats in mind, a study was undertaken in 1998-99 focusing on holding changes from 1992 to 1997. The study's first step was (a) to analyse case documents related to the transfer of land between holdings (200 cases) and the acquisition of holdings (600 cases) in the Law on Agriculture.

The study was carried out for the municipalities of Bjerringbro and Hvorslev, located in Jutland (See maps in the introductory article in this Special Issue). This was followed by (b) analysis of countrywide aggregate data on changes in the different size groups of agriculturally registered agricultural holdings during the period, using the Cadastral Registry of the Danish Ministry of Housing. In (a), all farmers buying and selling plots and holdings were classified on a scale from 1 (non-expanding) to 5 (expanding big farm) (Correia and Sørensen, 1999).

5. METHODS AND RESULTS FROM THE ANALYSIS AT THE MUNICIPALITY LEVEL: BJERRINGBRO AND HVORSLEV 1992-1998

The analysis of agricultural holding changes in Bjerringbro and Hvorslev municipalities showed a surprising variation in land consolidation. The study included several phases. The first was a round of comment on the data analysed using the Cadastral Registry for agriculturally registered holdings during the period under study. From the six-year period studied, several results emerged(see Table 1).

- The relative number of agricultural holdings changing hands in the different groups reveals a surprising variation in.

- The total number of agricultural holdings in the two municipalities has changed only slightly. In Bjerringbro, the number of farm holdings has been reduced by only six, i.e. a variation over the entire period of less than one %. In Hvorslev, there is an increase in the number of holdings by only four farms.

- Within this relatively constant number of agricultural holdings, however, there occur significant changes with regard to the transfer of plots. Most of these involve land amalgamation of middle-sized and small holdings (under 5 ha) into larger, expanding farms.
- The number of small agricultural holdings (under 5 ha) has grown in Bjerringbro and Hvorslev municipalities by 37 and 30 % respectively. These figures show that the number of holdings in this category increases when plots are separated from larger holdings. The holdings' size, together with the nature of the agricultural buildings, makes them especially attractive to part-time or hobby farmers.
- At the same time, the group of agricultural holdings with over 49 ha also grew in number. This indicates that existing large agricultural holdings in full-time farming occupation are adding lands plots and field units, moving them into the "over 50 ha" category. The number of holdings in this group increased, respectively, by 25 and 38 % in the two municipalities.
- By contrast, the number of holdings in the 5-49 ha group has declined. These holdings are subdivided to amalgamate the greatest amount of productive land with the holdings of expanding farm units into joint holdings. The rest of the plot, including any buildings, remains an independently registered holding and contributes to the growth in the number of holdings having less than five ha.

Bjerringbro	0-5ha	5-10ha	10-15ha	15-20ha	20-30ha	30-40ha	40-50ha	50-60ha	60-75ha	75-100ha	100-125ha	>125ha	Total
Pr. 1 / 1 1992	78	166	117	81	108	61	32	16	8	9	3	4	683
pr. 1 / 1 1993	83	165	119	80	107	56	32	15	10	10	3	4	684
pr. 1 / 1 1994	89	161	118	79	107	55	28	18	10	10	3	4	682
pr. 1 / 1 1995	91	156	116	76	109	54	30	19	9	10	3	4	677
pr. 1 / 1 1996	100	163	107	72	107	56	32	19	9	10	3	4	682
pr. 1 / 1 1997	107	161	104	72	98	57	28	19	14	10	3	4	677
Diff. 92-97	29	-5	-13	-9	-10	-4	-4	3	6	1	0	0	-6
% change in number of agricultural holdings by size groups: 0 to 5 ha, 5 to 50ha and <50ha.													
	37%	**-9%**						**25 %**					
Hvorslev													
Pr. 1 / 1 1992	61	187	112	66	78	52	32	19	11	4	2	0	624
Pr. 1 / 1 1993	65	187	110	66	75	49	31	21	13	4	2	0	623
Pr. 1 / 1 1994	69	186	110	63	74	46	33	22	11	5	3	0	622
Pr. 1 / 1 1995	65	180	116	65	74	46	31	24	12	6	3	0	622
Pr. 1 / 1 1996	69	180	112	65	69	46	30	22	13	7	5	0	618
Pr. 1 / 1 1997	79	176	110	62	69	45	30	22	14	8	6	0	621
Diff. 92-97	18	-11	-2	-4	-9	-7	-2	3	3	4	4	0	-3
% change in number of holdings by size groups: 0 to 5 ha, 5 to 50ha and <50ha.													
	30%	**-7 %**						**38 %**					

Table 1: Evolution in the number of agriculturally registered holdings for the period 1992-97 in Bjerringbro and Hvorslev municipalities (Sørensen, 2000)

6. EXPANDING FARM UNITS

A special analysis was carried out on all 200 cases of amalgamation in the two municipalities . In 59 % of the cases, the purchasers of the amalgamated lands were classifiable as large, expanding farms over 49 ha (class 5). 25 % were medium-sized farms with crops and animals (class 4). These are not yet large, but often needed extra land in order to fulfil the harmony regulations of the environmental protection law and land requirements in the agricultural law. A number of these farms will become class 5 farm units following expansion and acquisition of more land. Ten % of the farms are considered relatively large part-time farms (class 3). Only 4 % and 2 %, respectively, of the land acquisitions are registered as farm type classes 1 and 2.

7. DIMINISHING FARMS

Though we expected to find that enterprises which reduced their holdings would be mostly farms in decline, 16 % were in fact large expanding agricultural farms. 30 % were of medium size, 22 % were relatively large part-time farms. Only 18 % and 14 % were class 2 and 1, the genuinely declining agricultural enterprises. The explanation for this development is as follows. About two-thirds of the cases of subdivision of agricultural holdings and amalgamation of land to another holding occur within the same enterprise, i.e. between two farms with the same owner. For those acquiring holding no. 2 it is a case of a farm in expansion, as we assume only trained full-time farmers can acquire a second holding. The acquisition of holding no. 1 does not therefore indicate anything explicit about local structural pressures.

Only one agricultural holding in the farm enterprise adds land holdings, while the other is correspondingly reduced, preferably to a size of below 5 ha. This smaller holding can subsequently be sold off as a smaller agricultural holding.

8. TRANSACTIONS WITH ENTIRE AGRICULTURAL HOLDINGS

All property transactions in Bjerringbro and Hvorslev involving registered agricultural holdings were classified by whether acquired plots were sold as first or second agricultural holdings. We found that of the 600 property transactions in the period 1992 to 1997, 91 % were first holdings acquisitions; 9 % involved the acquisition of a second or third agricultural holding. An overwhelming majority of agricultural holdings sold in the period had less than 10 ha, i.e. agricultural holdings emerging after the greater part of the productive land has been separated out of a middlesized productive farm.

9. EXPANSION STRATEGIES

The comprehensive data provided a foundation for identifying the strategies used by owners of expanding agricultural holdings in Bjerringbro and Hvorslev municipalities. By examining the addresses of owners and assessing the combined operation factors mentioned in the case documentation, it was possible to locate expanding agricultural farms. Beginning with an

exploratory analysis of a larger number of exemplary cases, three distinct expansion strategies can be described. The strategies involve integrating acquired agricultural holdings in the farm enterprise in connection with growth in the farm's lands. In one exemplary case, the total land area of the farm grew by 900 %. A set of regulations in the agricultural law regulate this development.

Land areas for amalgamation with an existing agricultural holding must lie within a 2-km distance. Acquisition of entire holdings into a farm, including the purchase or establishment of agricultural holding without buildings, can occur within a distance of 10 km - in special cases up to 25 km.

Strategy A: "Building block strategy"
Over the entire period, these farms consist of one, two or three agricultural holdings, each of which is expanding. There is no phasing out of agricultural holdings , and there is a systematic effort to augment all holdings to economically sustainable sizes such that they can eventually function independently or be sold as isolated units. An example of such a building block strategy is a farm which before 1993 consisted of three holdings: no. 1 (46.3 ha), no. 2 (39.4 ha) and no.3 (33.2 ha) totalling 118.9 ha.

- In 1993 13.1 ha were purchased from another farmer, and this land was joined to holding no.1 (59.4 ha), giving a total farm area of 132 ha.
- In 1995 10.1 ha were purchased from a third farmer and joined to holding no. 2 (49.5 ha). The total holding area in the farm was now 142.1 ha.
- 1996 1.3 ha were purchased from a fourth farmer and joined to holding no. 3 (34.5 ha). The farm now consisted of 143.4 ha. The farm expands by a total of 24.5 ha in the period or 20.6 %.

Strategy B: "Main holding strategy"
In this strategy, new acquisitions are constantly manipulated so that the farm consists of the main agricultural holding alone. Other agricultural holdings are bought up, but are quickly amalgamated and consolidated - wholly or partly - into the main holding. An example of the main holding strategy is a farm which prior to 1994 consisted of two holdings: no. 1 (55.8 ha) and no. 2 (13.8 ha), totalling 69.6 ha.

- In 1994 the owner acquired holding no. 3 (40.6 ha), yielding a total farm size of 110.2 ha.
- In 1993 38.9 ha from holding no. 3 was joined with holdingno. 1 (same owner). Holding no. 1 now had 94.7 ha. The remainder of holding no. 3 was then sold as a small agricultural holding of 2 ha. The main farm unit was now 198.5 ha.
- In 1995 all of holding no. 2 was consolidated with holding no. 1 giving a total farm area on one holding of 198.5 ha. The owner chose to consolidate lands from other holdings within the farm unit into the main holding, such that all lands were contained under the same holding. During the period of investigation, this farm increased its land holdings by 55.9 %.

Strategy C: Expansion and reduction of the number of holdings in the farm unit
The owner gradually reduces the number of holdings in order to acquire new agricultural holdings. The owner seeks to create a farm which consists of one or two holdings, "making

room" for a third holding. An example of such an "expansion and reduction of the number of holdings" is a farm which prior to 1992 consisted of two holdings: no. 1 (23.0 ha) and no. 2 (7.1 ha), totalling 30.1 ha.

- In 1992 6.7 ha from holding no. 2 were amalgamated to holding no. 1 (same owner). Holding no. 1 now consisted of 29.7 ha. The remainder of holding no. 2 was then sold.
- In 1993 holding no. 3 of 9.3 ha was acquired from another farmer. The farm unit now comprised 39.0 ha.
- In 1995 holding no. 4 of 23.5 ha was purchased, and the farm unit now consisted of a consolidated area of 62.5 ha.
- In 1996 holdings 1 and 3 were amalgamated, and the total number of holdings in the farm was reduced to two with unchanged land area of 62.5 ha. As a result, a new holding (no. 5) can be acquired.

The main holding, no. 1, has increased its land area and been built up into a viable operational unit. Further purchase to add lands to the entire holding are now possible. The farm has grown by 108 % during this period.

In practice these strategies appear in mixed form, such that the most expansive agricultural farms act as in Strategy C. Consolidating in order to reduce the number of holdings in the farm unit requires owner-managers to consolidate optimally in relation to allotment structure and the geographical direction of development for expansion. Expansion through purchase acquisitions of entire holdings is a common investment pattern among the farms investigated in our study. The motives for choosing one strategy over another can be multiple, but attention to the farm's longterm survival and the owner's future plans, including transmission to the next generation, can be strong determinants.

10. METHODS AND RESULTS FROM THE ANALYSIS AT THE NATIONAL LEVEL

Can the changes in agricultural holding structure observed in Bjerringbro and Hvorslev municipalities be generalized to the regional or national level? This is the subject of the final part of our sub-project on landscape and property. It has been possible to analyse regional variations in property changes through special analysis of the Cadastral Registry, which forms the basis for the table below constructed for Bjerringbro and Hvorslev municipalities. We have undertaken an estimate of the distribution by municipality of changes in the number of agriculturally registered holdings according to holding sizes of: less than 5 ha; 5-49 ha; and over 49 ha. The result of this analysis is shown on the three maps, Figure 1-3.

In assessing the distribution by municipality of changes in the number of agriculturally registered holdings, the following observations can be made for holdings below 5 ha:

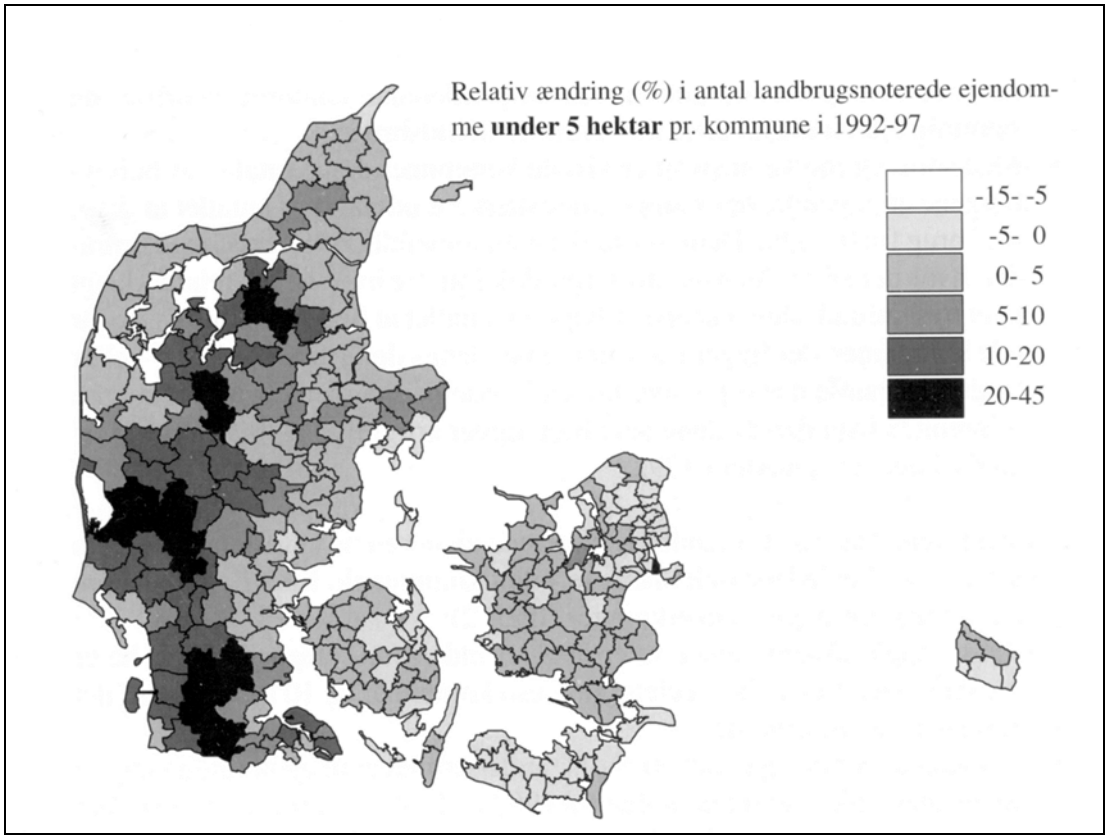

Figure 1: Changes in % for changes in the number of agricultural holdings less than 5 ha in Danish Municipalities from 1992-1997

- In the majority of Danish municipalities, the number of agricultural holdings in this category is increasing.
- The white and entirely light grey areas, however, show municipalities where the number is falling: Copenhagen and North Zealand municipalities, the greater part of Lolland-Falster, an area around Odense and northwest Funen, and various municipalities scattered around the country, e.g. Skagen, Samsø and Ebeltoft. There are several explanations for these patterns:
- In the metropolitan Copenhagen area and North Zealand, this pattern can be due to urban development and transfer of holdings to other uses.
- In Lolland-Falster, the development is presumably due to necessity, e.g. the fulfilment of "sugar beet quotas" – the right to deliver a certain amount of beets to local sugar production. Land in this zone is generally of very high quality. If a building parcel in an agricultural holding is zoned with agricultural obligations, the holding must have a part of the beet share. Therefore, declining agricultural holdings are subdivided completely and the agricultural obligations thereby cancelled, which means that these holdings no longer appear in the statistics for agricultural holdings and farms.
- The very few individual municipalities having a declining number of hobby farms are generally located near the coasts and in areas of natural beauty. This is the case for Skagen, Ebeltoft (Mols), Samsø, the Vejle Fjord area, etc. Presumably, these areas have a

limited number of expanding farms and at the same time exhibit a demand for middlesized part-time agriculture.

- The black and dark shades indicate municipalities where the number of hobby farms is increasing. The darker the colour, the stronger the trend towards small farms in the 0 to 5 ha range. This trend prevails in areas of intensive animal husbandry or close to urban communities. The most rapid growth in hobby-farming takes place around Aalborg and along main arterials to this urban center. The increase in the number of these small farms is about 10-14 % annually relative to 1992.

Assessing changes in agriculturally registered holdings sized 5 to 50 ha, the following patterns in the municipal distribution should be noted (See fig. 2):

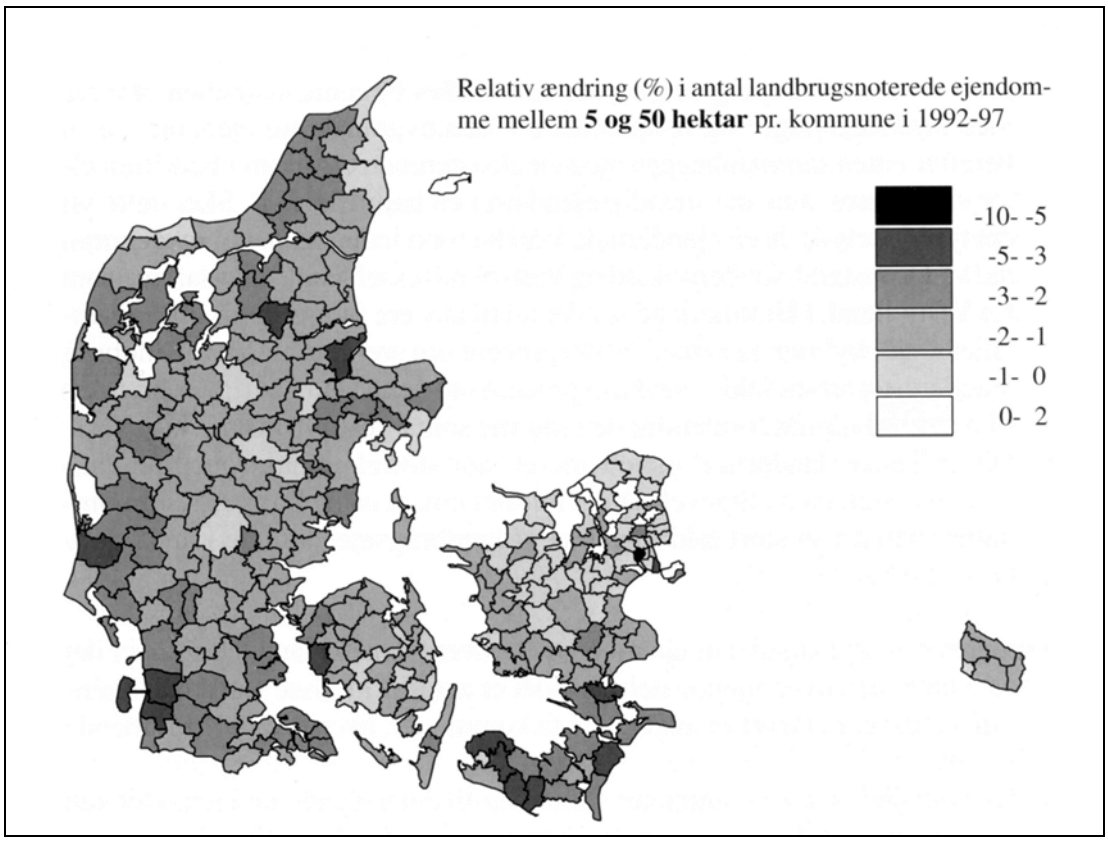

Figure 2: Changes in % for changes in the number of agricultural holdings in the 5 to 50 group in Danish Municipalities from 1992-1997.

- There are some few municipalities where the number of farms within the category 5 to 50 ha is increasing. This is especially the case for Laesø Municipality and 10 municipalities in the North Zealand area.

- On Læsø the number of holdings in this middle category increased by two during the 1992-1998 period. In the same period, two large holdings (over 50 ha) disappeared. Most likely the two large holdings were each subdivided into two lots, each an agricultural

holding though the one without building. This is supported by the time frame when these changes took place.

- In the North Zealand municipalities, it can be assumed that proximity to cities entails that many of the agricultural holdings in the 5-49 ha size range are not phased out to solve harmony problems for expanding neighbours. This is partly because there is limited animal husbandry in the North Zealand area (animal husbandry farms are the most likely candidates for "harmony" acquisitions), and because holdings of this size are attractive to a large clientele of part-time farmers with other occupations. The dark grey areas indicate municipalities where the number of agricultural holdings in the middle range is declining. The darker the colour, the greater the decline in the number of these farms. In the vast majority of Danish municipalities, the number of agricultural holdings in this midrange group declines by 0 to 2 % per year. In other municipalities the development is somewhat more rapid. Areas showing a marked decline in the number of agricultural holdings in the 5-49 ha category are Lolland-Falster, West Jutland, South Jutland, West Vendsyssel, three municipalities in Himmerland and parts of East Jutland.

- Lolland-Falster, as mentioned, distinguishes itself from the remainder of the country because of the especially good quality of the land and the unique sugar beet cultivation. Lolland-Falster is, therefore, in many ways favour-able to agriculture and especially crop cultivation. This makes it attractive to buy up land or entire agricultural holdings—to grab the beet share—separate out the buildings on holding no. 2 or 3 and eventually consolidate the non-building holding with another holding in the farm. This creates "room" for the purchase of yet another agricultural holding. There are relatively many of these "article 8, section 4" cases in Storstrøm County (Mouritzen et al. 1999).

- In West Jutland agriculture is marked by high animal headage per ha, which generates great demand for land. Here building parcels are often separated out from the rest of the holding while retenting agricultural obligations; and the remaining parcel (without any building) can subsequently be either consolidated with existing holdings in the owner's farm or maintained as an independent agricultural holding in a full-time farm. If this happens, it will typically mean the disappearance of an agricultural holding of 5 to 50 ha and the emergence of a smaller, hobby holding of 0 to 5 ha. This is the case for Southern Jutland as well as West Jutland, and probably western Vendsyssel, too. In Himmerland, the process seems to be progressing rapidly. The number of hobby farms has increased by 10 to 45 % per year, and the number of mid-sized farms has fallen by 2 to 5 % per year. Otherwise the trend is presumably the same as for West Jutland.

- In East Jutland, agriculture is more varied both in terms of size and the character of production, but it nevertheless appears that the development in certain East Jutland municipalities has been a greater decline in the number of farm holdings in the 5 to 50 ha group.

Finally, assessing the countrywide distribution of increases in the number of holdings of over 49 ha, it appears that the number of these large farms is increasing. The dark grey colours indicate the few municipalities where the number of large farms is declining.

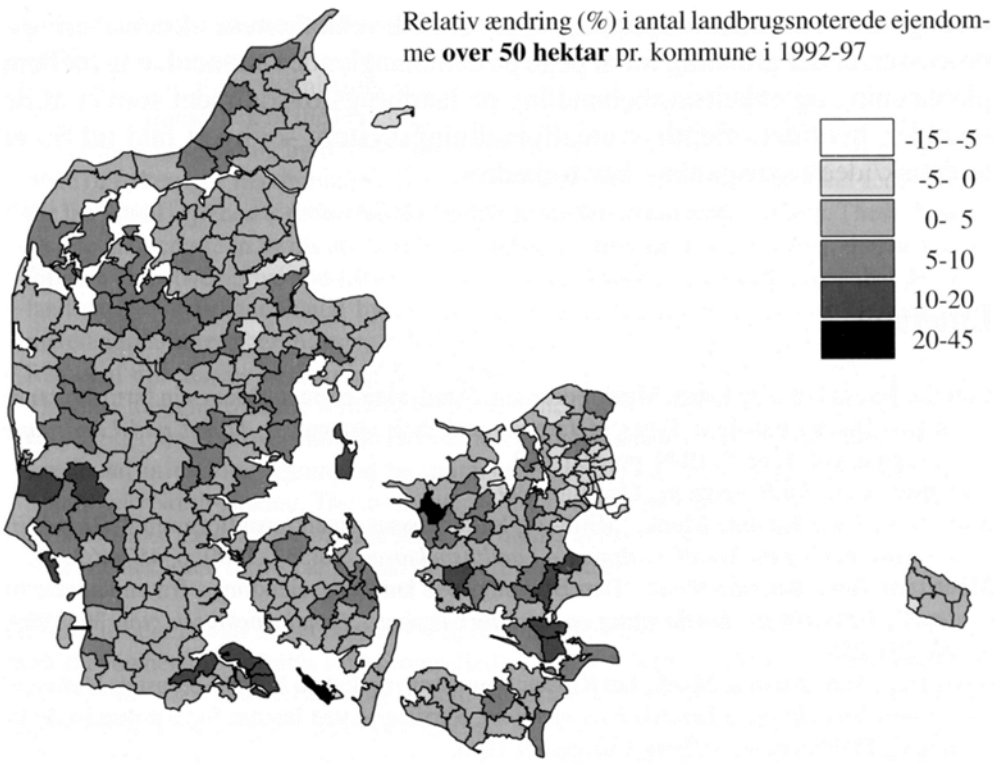

Figure 3: Changes in % for changes in the number of agricultural holdings over 50 ha in Danish Municipalities from 1992-1997.

- In the North Zealand municipalities, the decline can be due to the fact that the number of hobby farms is falling, middle- sized farms are increasing while large farms do not increase as drastically as in the rest of the country. This situation does not apply to all North Zealand municipalities, but represents a general trend.
- In the remainder of the country - with the exception of very few municipalities - the number of large farms is also growing by up to 10 % annually.

Certain municipalities in Western and Southern Jutland and in South and West Zealand exceed the 10 % figure.

Finally, the following main tendency should be mentioned:
- The development of large and hobby farming is especially strong in Ringkøbing and South Jutland counties, where changes in holding distribution leave a deeper mark than in East Jutland and on Funen and Zealand.
- Changes in agricultural holding structure on Funen and Zealand and in East Jutland are less prominent when one leaves out Lolland-Falster.

11. DISCUSSION AND PERSPECTIVES

As mentioned in the introduction, the existing planning system only designates areas for agriculture occupation, divided among regional and local agricultural areas. There is no geographic prioritisation or management of development trends for agricultural structure, and as we have shown, a significant regionalization of agricultural structure is occurring despite uniform national regulations. The local and regional developmental potential for economic and agricultural activities in the rural zone varies regionally. The industry is in general confronted with significant demands for structural adjustment and geographically well-defined extensification.. Therefore it is necessary to reiterate the current lack of administrative connection between planning and the transfer of ownership rights as one area where the public land management system needs improvement.

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