Deregulation of the Agricultural Sector in Denmark

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Published in:
Scaling Up Responsible Land Governance, Annual World bank Conference on Land and Poverty, Washington D.C., March 14-18, 2016

WOLD BANK CONFERENCE ON LAND AND POVERTY, WASHINGTON D.C., 14-18 MARCH 2016

Case study for World Bank Enabling Business of Agriculture Project

Deregulation of the Agricultural Sector in Denmark

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1. Introduction

Historically, agricultural land and holdings in Denmark have been strongly regulated through provisions for ownership, use, and min and max sizes of land area. Since recent years this is no longer the case and the agricultural sector is now in principle totally liberalized – except from the general obligation of habitation and using the land for agricultural purposes. This evolution has changed not only the open landscape but also the market conditions in the agricultural sector. What was formerly a strong policy towards subsidizing of the small scale agricultural livelihoods is now replaced by liberalization enabling large scale industrial farming. The case study illustrates the political incentives driving this evolution and looks into the results for agricultural development as well as the consequences for good land governance.

Denmark covers about 43,000 square kilometres, of which a total of about 65% is used for farming and agriculture, 15% by forests, 10% by urban zones and transport infrastructure, while the remaining 10% consists of bodies of lakes, marshes and wetlands. The total coastline is around 7.500 km (Statistics Denmark, 2014).

Denmark's population is about 5.6 million as of 2014, a density equivalent to 130 inhabitants per square kilometre (ibid.). Approximately one-third of the population lives in Greater Copenhagen. The administrative structure is characterised by a high degree of decentralisation whereby local authorities administer most of the total public expenditure. Denmark's GDP was approximately USD 270 billion with the public and market services accounting for 77% of the GDP, manufacturing and construction for 22% and agriculture for only 1.5% (OECD, 2014).

2. Regulation of the Agricultural Sector in Denmark

Denmark has a long tradition for heavy and detailed regulation of the agricultural sector through provisions for ownership, use, and min and max sizes of the belonging land area. This evolution of structural regulation can be categorised in three stages: (i) late 1700s – end 1800s: The enclosure movement and reclamation of heaths and commons; (ii) 1900 – 1960s: Many new land holdings appear with strong structural regulations to maintain small farm livelihoods; (iii) 1970 – today: Protection of rural zone agricultural land and deregulation of the agricultural sector leading to much fewer and bigger holdings.

2.1 Late 1700s – end 1800s: The enclosure movement

Until late 1700s agricultural land in Denmark was organized in large farms with castles and manor houses owned by the aristocracy. These estates were farmed by the peasants living in villages were they also farmed the surrounding fields in common. The peasants were heavily taxed (in natural products) and with no real opportunity to improve productivity. This system was radically changed by the enclosure movement reform 1780s that enabled the peasants to buy their share of the common farmland as an individual small farm and start farming the land individually. This process is illustrated in Figure 1 showing the situation before and after the enclosure movement.

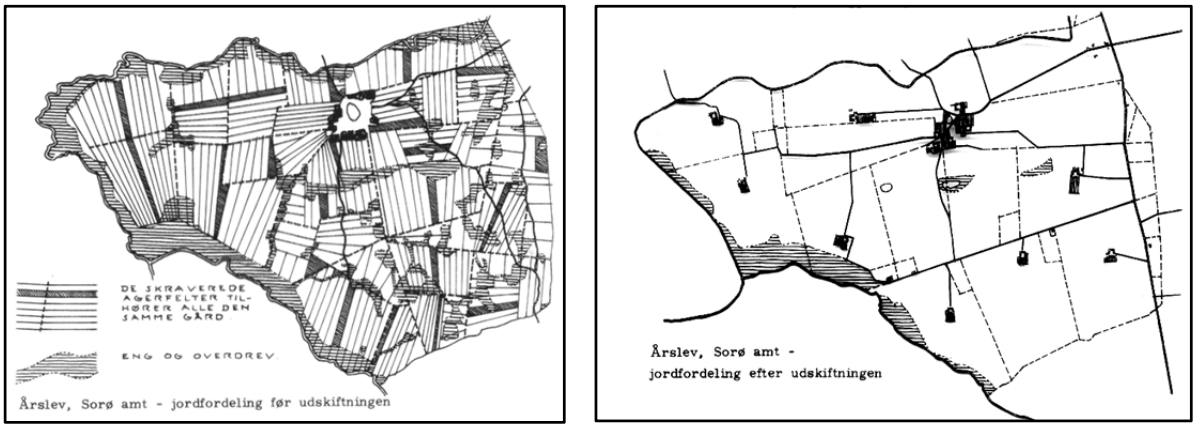

Figure 1. The enclosure movement showing a village area before the reform (left) and after (right).

The enclosure movement enforced a major change to the Danish landscape and, more importantly, changed the Danish society from a feudalistic regime into a market based economy. The reform also enabled the creation of the Danish cadastre consisting of the maps showing the situation after the reform and a register of properties for each village area with indication of owner, area, and the yielding capacity of the soil. This register was then used as the basis for a fair collection of taxes to the state. This cadaster was eventually put into force 1844 and has been maintained since – even if

tax is now based on the market value and the register and maps are now all digitized and available online. The land book was established 1846 as a deeds and mortgage protocol that was turned into a title system in 1924 and operating in close interaction with the cadastre. The land book is now digitized and transactions are available online.

The 1800s also saw a range of initiatives with regard to reclamation of wetlands, heaths and also the remaining commons from the enclosure movement. These major projects were subsidized by the state and, especially the reclamation of the heaths, required tiresome and heavy work by the pioneers. By mid 1700s the heath covered about one third of the Jutland territory or about 10,000 sq km that is almost one fourth of the total area of Denmark. Around 1950 only 2 percent of the heath is left and most of it is now preserved.

2.2 1900 – 1960s: Many new small farms and strong regulation

This period is characterized by the appearance of many new small land holdings and strong structural regulations to maintain and support these livelihoods. The first Agricultural Act appeared 1925 and introduced the concept of "agricultural property" – a property of a certain minimum size (1 hectare) and a minimum tax value that was used for agricultural production and included buildings as a basis for farming the property by the residents. This notification as "agricultural property" was entered into the cadastre, and this concept has been the basis for regulating the agricultural sector ever since with an obligation for these holdings to be properly used for agricultural purposes only.

In 1949 a new Agricultural Act introduced regulations against owning more than two agricultural properties and in 1957 institutions and companies were excluding from owning such holdings. These regulations should ensure that ownership was widely sped. Also, strict regulations for amalgamation and subdivision should ensure that the family-based small farm livelihoods were protected and maintained as a cultural identity.

Furthermore, legislation was introduced to encourage establishment of new smallholdings through subdivision of the former aristocracy estate land and reclamation of wetlands. This was supported by favorable financial incentive for the farmers to get access to new holdings. In total about 30.000 new smallholdings were established this way over the period. The end of the 1960s marked a peak of about 200,000 individual agricultural properties in Denmark with an average size of about 15 hectares and with a mix of crop and animal husbandry. Lease or co-farming of two or more properties was almost non-existent.

2.3 1970 – today: Deregulation of the agricultural sector.

This period is dominated by Denmark entering the European Economic Community (EEC) in 1972 and later joining the European Union as established in 1993. It is also dominated by technology development and the opportunity to farm large scale land areas with huge machinery and having large scale livestock.

This evolution also relates to the movement of the labor forces from the rural areas towards the cities and it relates to the administrative reform (1970) of reducing the number of counties from 25 to 14 and the number of local authorities form about 1400 to 275 municipalities. This reorganization created the basis for adopting the planning law reform 1970 – 1977 introducing comprehensive planning and land-use control at national, regional and (especially) local level. This reform was further increased in 2007 by abolishing the regional administrative level and reducing the number of municipalities to 98 at the local level while still maintaining the obligation to provide comprehensive planning covering the whole jurisdiction and also local/neighborhood planning before implementing major development projects (Galland et al., 2014).

A key asset of the planning reform is the creation of urban and rural zoning where development in rural zones is not allowed (without a special permit) unless necessary for agriculture, forestry or fishery purposes. This urban-rural divide prevents urban sprawl and, in combination with the concept of "agricultural holdings" (a farm unit consisting of one or more agricultural properties and connected leased land), the rural zone regulations create the basis for the liberalization and deregulation of the agricultural sector taking place throughout this period.

A range of detailed regulations were introduced over the period to support the need for bigger and more specialized holdings. The legal restrictions – with regard to ownership, lease and size of the holdings – were gradually eased over the period and eventually abolished (2010) in order to enable the creation of much larger production units. Table 1 presents a simplified overview of the regulations applied over the period.

What was formerly a strong policy towards subsidizing the small scale agricultural livelihoods is now replaced by liberalization enabling large scale industrial farming. This deregulation of the agricultural sector also implies some challenges – especially with regard increasing environmental concerns. Another challenge relates to financial vulnerability of large scale holdings due to major investments and a fluctuating global market for food products.

Regulations	1970s	1980 -2010	Today
Purchase			
Agricultural education	Required	Required >30 hectares	-
No of properties	Max 2	Max 4	-
Distance	Max 10 km	Max 10	-
Lease			
Agricultural Education	Required	Required >30 hectares	-
Area in total	Max 100 hectares	Max 500 hectares	-
No of properties	Max 5	Max 5	-
No of years	Max 15	Max 30	Max 30
Co-farming			
Area in total	Max 100 hectares	Max 400 hectares	-
No of properties	Max 5	Max 5	-
Distance	Max 15 km	Max 15 km	-

Table 1. Simplified overview of the structural regulations applied for agricultural holdings 1970 – today (Adapted from Mortensen, 2011: 406).

3. Results for agricultural development – and growing environmental concerns

The results for agricultural development have been the creation of much fewer, larger and more specialized farm units – see figure 2. Of the about 40.000 holdings remaining today only about one third are full time agricultural production holdings while the rest is part-time or more leisure related rural properties.

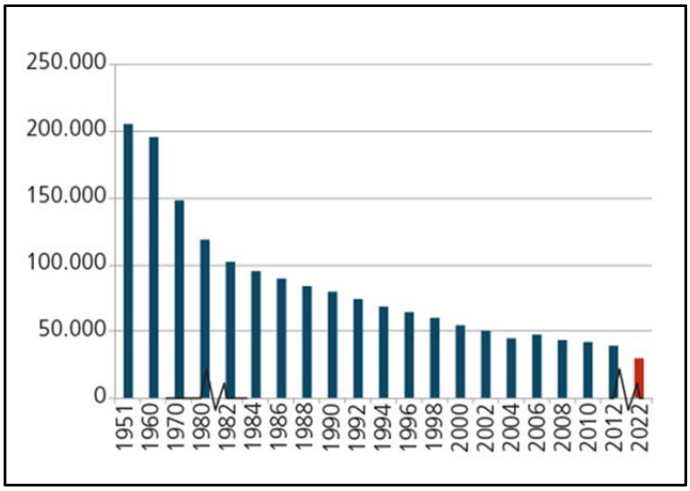

Figure 2. Agricultural holdings in Denmark 1950 – today (Statistics Denmark, 2014).

At the same time the average size of the farms has increased from about 15 hectare in 1970 to around 30 hectares in 1980 and about 70 hectares today (Statistics Denmark, 2014). Of the about 40.000 holding remaining today about 20 per cent (8.000) are larger than 100 hectares while occupying 45 per cent of the total agricultural land area. Furthermore, about one third (900.000 hectares) of the total agricultural land in Denmark (2.650.000 hectares) have leasing arrangements, which includes all of the farms larger than 100 hectares (Statistics, Denmark, 2014). An example of such development for an agricultural holding is shown in Figure 3.

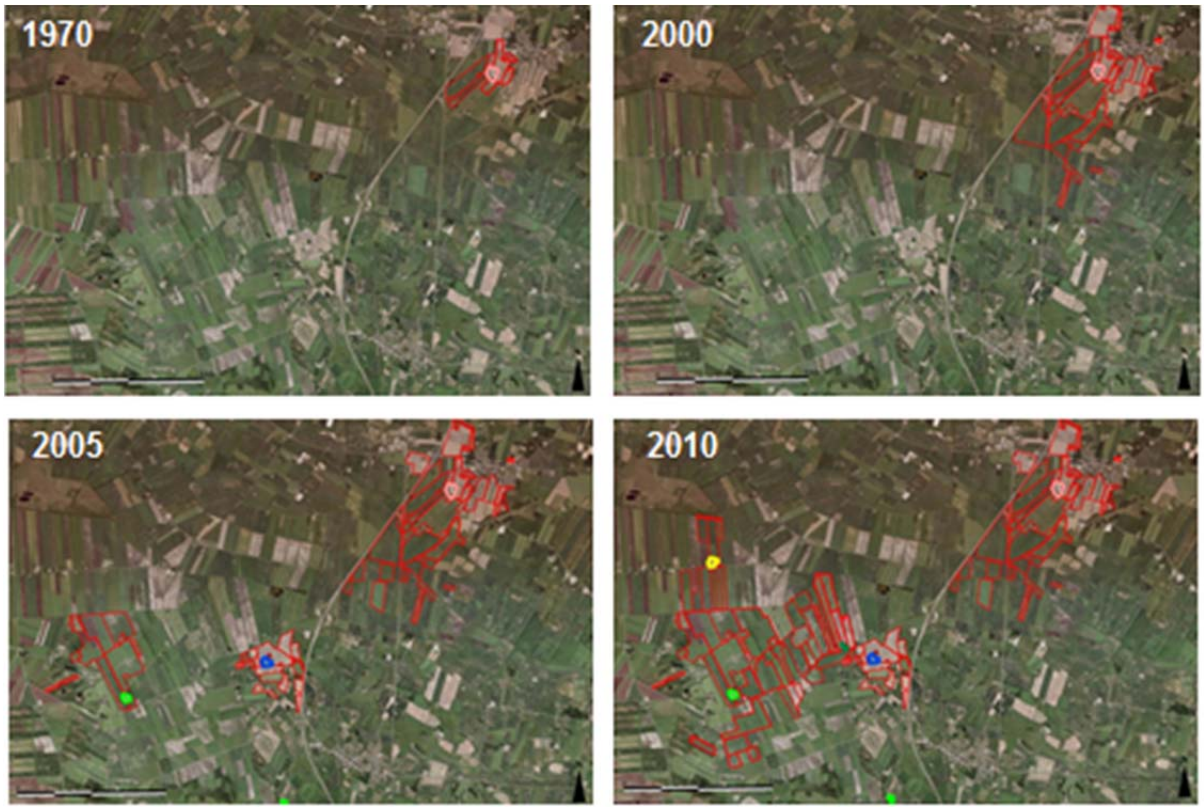

Figure 3. Example of development of an agricultural holding 1970 – 2010, showing the effect of deregulation of agricultural sector over recent years.

The political incentives driving this evolution have been concerns about the ability of the agricultural sector to adapt to structural and economic challenges. Specialized industrial agricultural production is demanding in terms of land area as well as production facilities and machinery. Investments are huge and leave many holdings in a vulnerable situation with regard to debt. The productivity of large holdings depends on global economic conditions as well as the ever changing global food market. The sector therefore needs some flexibility and should not be constrained by too narrow restrictions for structural adaptation.

There have been concerns about the environmental consequences of this structural change. Industrialized farming is changing the Danish landscape and nature significantly, small nature spots and biotopes disappear and the increased use of fertilizers needs to be carefully monitored and managed with regard to the impact on the environment, groundwater, lakes and streams. These issues are dealt with through sectoral legislation such as the Nature Protecting Act, the Environmental Protection Act, and the Water Course Act. The overall aspect of agricultural productivity versus nature and environmental protection are considered and balanced through comprehensive spatial planning at local level.

4. Conclusions on good practice for land governance

Deregulation of the agricultural sector has placed some demands on managing the open landscape in harmony by balancing the need for wide land areas for agricultural production with the need for protection of nature and environmental interests.

The specific environmental concerns such as reuse of manure for energy production, protection of groundwater and watercourses against outwash of fertilizers, and protection of specific nature features and biotopes need to be dealt with through national policies and regulations that can be managed locally. These overall concerns related to the impact on the open land landscape and natural environment are best managed through means of comprehensive spatial planning at local level. The Danish planning system is well suited for dealing with this task, e.g. the rural zones may be further planned for in different zones – in principles as is the case in urban zones. Such rural zone planning may include (Sorensen, 2012):

- Identification of areas most suitable for intensive agricultural production
- Allocation of more extensive agricultural activities in combination med nature reclamation.
- Identification of areas with vulnerable biotopes where agricultural production should be avoided and maybe used for afforestation
- Allocation of areas for increased housing and related trade and industries.
- Identification of vacant and run-down buildings that should be demolished in order to improve the aesthetic effect in the open landscape.

This kind of rural zone planning and management is currently considered as a means of managing the negative effect of the structural changes in the agricultural sector in Denmark. This also relates to a current pressure for further liberalization of agricultural policies which may lead to increased environmental concerns.

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