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## DANISH AGRICULTURAL POLICY, 1870–1970: THE FLOWERING AND DECLINE OF A LIBERAL POLICY

Denmark's entry in the European Communities (EC) in January 1973 marked the end of an era in Danish agricultural policy. Earlier policy changes, especially after 1958, had foreshadowed the demise of this era, but EC membership made it complete and irreversible. The common EC farm policy with its reliance on fixed prices, flexible import levies and export subsidies is a negation of the liberal principles under which Danish agriculture flourished for a large part of the period we are considering.

Two world wars and the depression of the 1930s brought numerous departures from the liberal principles, to be sure, some of them permanent. Nevertheless, as late as the mid- to late 1950s roughly 90 percent of the value of Danish agricultural production may be estimated to have stemmed from products which were sold—or purchased—in foreign markets without subsidization and which fetched the same prices domestically as they obtained abroad (see pp. 231–33). In this important sense Danish agricultural price and marketing policy was still governed by the liberal ideal of competitive marketing at that time.

In a developed, industrial economy the conditions under which agriculture operates are such that some measure of government intervention in the price and marketing mechanism or some form of collective action by farmers is to be expected. The well-known basic reasons are the low elasticity of demand for food products and the atomistic nature of competition (with each producer too small to influence price and total supply noticeably) as well as the lack of flexibility of the factors of production, especially land and family labor. Because of these factors technical progress tends to result in increased output and declining prices, to which farmers react with further intensification of production, leading again to price declines. Planned intervention is called for to halt this "treadmill" (3, Chap. 5; 29, pp. 1-15; 42, pp. 155-68).

The Danish version of the industrial revolution is variously judged to have occurred in the 1850s or the 1870s (46, pp. 246-51; 5, pp. 97-110; 38, p. 120). It is certain that at the beginning of the period we are considering industrialization went hand in hand with agricultural development. Very soon the nonagricul-

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tural sectors outstripped farming with respect to their share in the population and in national income (2, pp. 142, 144). Thus it is perhaps more surprising that Danish agriculture was able to thrive so long under conditions of relatively free competition than that a policy of market intervention, price support, and subsidization ultimately replaced a more liberal policy.

The purpose of this paper is to describe the course of Danish agricultural policy, 1870 to 1970, and identify the conditions that made the liberal policy possible as well as those which, step by step, caused this policy to be abandoned as support and subsidization measures were adopted. But first a sketch of the types of agriculture that prevailed may be helpful.

#### TYPES OF FARMS AND FARMING

The small to medium-sized family farms predominated throughout the period, all devoted to mixed farming and almost all owner-operated.1 From the mid-1880s on, livestock accounted for some 85 to 95 percent of the value of total farm production.2 Fully as large a share of the total crop output (including pasture) was fed to livestock and supplemented by large quantities of imported feedstuffs. The dairy cow was the pivot of the farming system. Beef and yeal were by-products of the dairy enterprise. Hog production also developed as an adjunct to milk production to utilize the huge amounts of skim milk that were by-products of butter production. As late as 1959 some 95 percent of all farms also kept chickens (in 1971 less than 50 percent).

The dwarf holdings and badly fragmented farms that have posed such serious problems in most European countries never developed in Denmark, thanks to a farm structure policy that dates back at least to 1682 (32, pp. 122-23). In that year an ordinance was passed which prohibited the manorial lord from selling or absorbing into the demesne any land that had been operated by a tenant farmer and requiring that such land had to be maintained as a separate entity. The principle of the integrity of the family farm had been established.

A century later began a period of great agricultural reforms which within a few decades ended the feudal system with its village oriented open-field cropping pattern and created, instead, well-consolidated family-farms, dispersed over the countryside and protected by law against merger into larger units as well as against subdivision below the size necessary for a family's livelihood.8 Compulsory education introduced in 1814 and the development of folk high schools after mid-century broadened the outlook of the operators of these farms, and the introduction of "universal" suffrage (for male heads of households) in 1849 made them politically effective. They saw their opportunity in the last quarter of the century when cheap grains from America and Russia and growing mar-

<sup>&</sup>lt;sup>1</sup> In 1970 farms of over 60 hectares accounted for barely 4 percent of all farms. Prior to 1968 they had accounted for less than 3 percent for nearly half a century. Earlier figures are not comparable, but it is clear that the proportion of larger farms can only have been moderately greater (see 19, p. 9; 34, pp. 272-73; 38, p. 86).

2 Total farm production = production of crops and livestock for sale + consumption by farm

families of home-produced foodstuffs.

<sup>&</sup>lt;sup>2</sup> The reforms have been dealt with extensively in Danish literature (see especially Hans Jensen in 33, Vol. 1; also Ejnar Jensen in 32, pp. 40-56 and 122-29; and Friedley Nielsen in 36, pp. 315-42). Aspects of the subject are dealt with in Friedlev Skrubbeltrang, 43, Vol. 20, No. 2, pp. 165-75 and Axel Thorpe, 44.

kets for livestock products in western Europe, especially in Great Britain, favored intensive development of the livestock industry in Denmark, and their farms were well suited for the purpose.

#### THE LIBERAL PERIOD, 1870-1931

Transition to Intensive Livestock Production, 1870-1900

In the 1860s Denmark was still a substantial exporter of grains, but by 1875 exports of livestock products were twice as valuable as of grains, and from 1883 on, imports of grains and grain products exceeded exports. By the turn of the century the import surplus was on the order of 600,000 tons annually (30, Vol. 5, p. 483). Danish agriculture had become a converter of domestic and imported feedstuffs into livestock products for west European markets.

The transition occurred spontaneously, without official decisions or proclamations to that effect. The landmark decision in Danish farm policy that reflected the change was therefore a negative one: in its 1885-86 session, the Folketing the lower house of parliament—soundly defeated a proposal to impose tariffs on grain, thanks to the votes of the Left, the farmer's party (33, Vol. 2, p. 387). This was in striking contrast to corresponding events in most European countries. Similar later proposals by the Right, to which the grainselling, large land owners belonged, suffered the same fate, even though the last quarter of the century was a period of declining farm prices. The farmers' demand for government intervention to alleviate the effect of low prices centered on requests for a reduction of tariffs on industrial products and on tax relief, not on tariffs on farm products.6

Government action on behalf of agriculture in 1870-1900 consisted chiefly of support of research and education and of regulatory measures. An agricultural college had been established in 1856, and the later decades saw the development of a system of aid to research and education, which remained characteristic of farmer-government collaboration. The Livestock Law of 1887 is a good example (30, Vol. 3, pp. 451-52). The law provided grants to help pay the salaries of livestock advisors, employed by farm organizations, to award prizes at livestock shows, to support animal breeding centers, and to publish herd books. None of the programs aided could receive more than 50 percent government support. In the course of the 1880s and 1890s the government also began to grant aid for plant breeding, advisors on crop production, and fertilizer experiments. The regulatory measures included a Drainage and Irrigation Law of 1880, a Law for Control of Livestock Diseases of 1893, and provisions concerning quality control of fresh meat for export in 1894. In 1896 the Ministry of Agriculture was established (30, Vol. 2, pp. 355-56 and p. 35; Vol. 3, p. 547; Vol. 5,

The most momentous development of this period was undoubtedly the growth of farmers' producer and marketing cooperatives, entirely a spontaneous

<sup>&</sup>lt;sup>4</sup> Furthermore, imports of bran and oilcake had become important.
<sup>5</sup> Prices fell steadily after 1876. The upturn in livestock prices came in 1890–91, after a drop of 20 percent, that for grain not until 1900–01 after a drop of 40 percent (38, p. 55).
<sup>6</sup> A profound change in the tax system in 1903 and a new tariff law of 1908 granted some of these with (28 V 1 1).

these wishes (30, Vol. 1, pp. 239-40).

grassroots movement, neither supported nor regulated by the government. The first cooperative creamery was founded in 1882; eight years later there were 679. Technically, the invention of the cream separator in 1879 was the basis of this development. Jointly, through their cooperatives, farmers with small or mediumsized herds could take advantage of this new technology, jointly enforce quality standards, and jointly reap the profit of the manufacturing and marketing process. To the extent that the cooperative creameries formed export associations. they also profited from the export trade. Statistics show that in 1909 the milk from 86 percent of all dairy cows in the country was handled by cooperative creameries, a percentage that has remained nearly unchanged. The first cooperative slaughterhouse followed in 1887, and cooperatives accounted for 64 percent of all hogs slaughtered by 1909. Also important, though not of the same wide coverage as creameries and slaughterhouses were cooperative associations for grading and marketing of eggs, begun in 1895, for export of live cattle (1898). for the purchase of feedstuffs (1901), of fertilizers (1901) and of seed (1906) (26, pp. 148, 152, et passim).

The intensification of agriculture that went on during this period required large inputs of capital and was facilitated by cooperative credit associations, created to provide farm mortgage loans. Their legal framework was provided by a law of June 20, 1850, which, however, granted no financial aid or government guarantees. Due to the security inherent in the mutual liability of the loantakers, the bonds of the associations were readily marketable, and by 1909 these associations accounted for 44 percent of all farm mortgage debt (30, Vol. 5, p. 505)

# The Prewar Years: Consolidation, Growth, and Emergence of Viable Smallholdings

The years 1900–14 were prosperous, with substantial growth in production and productivity along the lines established prior to the turn of the century. The value of total farm output (in constant prices) increased by nearly 60 percent while the labor force grew by only 7 percent and the agricultural area hardly at all, though capital inputs must have increased substantially (6, Vol. 2, p. 546; 38, p. 87). The ability of foreign and domestic markets, especially the continually tariff-free British market, to absorb the growing output of livestock products at rising prices made this possible.

An important new phenomenon of this period was the government-supported creation of viable smallholdings. Until the turn of the century smallholders were agricultural laborers whose small plots provided some food for their families and, incidentally, made them more inclined to remain as laborers in rural areas. A law of March 1899 was still in this spirit. Updated in 1904, 1906, 1909, and 1914 it was changed to help provide sufficient land for smallholdings to make them independent farm units. Technically, the intensive, commercial type of

<sup>&</sup>lt;sup>7</sup> Under an additional law of 1880 concerning *loans to smallholders only*, the government guaranteed the 4 percent interest which the cooperative mortgage credit associations, set up under this law, were allowed to charge (33, Vol. 2, pp. 271, 402).

<sup>&</sup>lt;sup>8</sup> In the words of one economic historian, this law to provide land for agricultural laborers might just as well have been called a law to provide laborers for the landed gentry (38, p. 64).

livestock industry that now prevailed made it possible for a family to earn a living on a relatively small acreage, and political changes that occurred in 1901 and 1905 gave the smallholders influence to further this legislation.9

Originally it was left to the smallholders, singly or jointly, to find land to buy with the loans granted them under the new legislation, but in 1919 three important laws helped bring on the market land made available from entailed estates, glebe land, and other public lands. 10 Also in 1919 smallholdings were made subject to the same rules that had long applied to family farms: they could not be abandoned, but must be continued as independent, viable units (33, Vol. 2, p. 429). Again, we see it confirmed that the nonintervention policy that prevailed with respect to production, marketing, and prices was departed from in matters of farm structure and farm tenure.

#### World War I and the 1920s

The price and marketing controls that were introduced during World War I need not be described. They were discontinued within a few years after the armistice and were, in any case, not designed to protect agriculture, but rather to protect the consumers, and to make it possible for the country to observe strict neutrality in its foreign trade relations (4, p. 1).

In the 1920s the liberal policies of the pre-1914 decades were resumed. The deflationary effects of the revaluation of the Danish krone in 1924-26 posed serious problems for agriculture, but practically speaking nothing was done by the authorities to alleviate the impact (30, Vol. 5, pp. 526-28). Agricultural production continued its growth. It passed its prewar level in 1923 and was half again as large in 1930 (6, pp. 546-47). Agricultural exports claimed a record share of this production—some 70 percent—and accounted for about 80 percent of all Danish exports (38, pp. 231, 232). Great Britain remained the largest market by far, and Germany was again second in importance (23, p. 18; 24, p. 18).

#### THE PERIOD OF INTENSIVE REGULATION, 1931-50

#### The Depression of the 1930s

The great depression that began in 1929 reached Danish farmers in 1930, and by 1932 the livestock price index stood at 54 percent of its 1929 level (38, p. 89). Because favorable circumstances in export markets had been a necessary condition for the previous upsurge of the Danish livestock industry, so it was primarily events in the British and German markets which were the immediate cause of the collapse of Danish farm prices and set in motion efforts to alleviate the effects of this disaster. In Great Britain these events included the devaluation of the pound in September 1931, introduction of tariffs on food products, and the Dominion preference policy adopted at the Ottawa conference in 1932 (1, p. 542 ff). Germany, maintaining the value of its currency, resorted to import restrictions in a limited way in 1929 and 1930 and introduced foreign exchange

highly controversial, but was upheld by the Supreme Court by a narrow margin (38, p. 66).

<sup>&</sup>lt;sup>9</sup> Parliamentarism—the rule that the cabinet members must be chosen from the party that has the majority in the lower house—won out in 1901. The Radical Left party was created in 1905 and supported the cause of the smallholders (7, pp. 132–34).

<sup>10</sup> Sec 33, Vol. 2, pp. 427–28, 470. The law concerning entailed estates was confiscatory and highly controlled the controlled by the Suppose Court by a party party (28, p. 66).

controls in 1931 which by 1932 involved severe rationing of imports (1, p. 626; 30, Vol. 5, p. 531). Important among the comprehensive economic measures enacted which affected agricultural production or trade after the Nazi takeover was the law of April 1933 which authorized the Foreign Minister to enter into bilateral trade and payments agreements with other countries. Such agreements regulated the volume and direction of foreign trade in agricultural products during subsequent years.<sup>11</sup>

Three types of protective measures, enacted pragmatically as specific problems became acute, were adopted in Denmark to combat the resulting farm crisis.<sup>12</sup> They were: measures to prevent forced sales of farms, to lower costs—especially taxes and payments on debts—and to raise farm prices. The last group concerns us here.

First among measures that had the effect of raising farm prices was the devaluation of the krone in line with the sterling devaluation in 1931.<sup>13</sup> To maintain a reasonably stable exchange rate with sterling, and soon also to regulate the flow of foreign trade in accordance with the new bilateral agreements, a Foreign Exchange Control Office was set up in 1932 with authority to allocate foreign exchange, thus in effect exercising quantitative controls over imports (except for products later specified on a "free list"). Furthermore, because a number of countries importing Danish farm products began restricting such imports to specified quotas, it was found necessary in the early 1930s to create machinery for the allocation of these quotas to the various Danish exporters. This was done with a law of December 1932 which set up export boards under the auspices of the Ministry of Agriculture. By 1936 there were nine such boards: for cattle and meat, butter, bacon, eggs, cheese, potatoes, fats, poultry and horses. While their chief function was to allocate export licenses, they also provided price equalization in certain cases. This they did by imposing fees on exports to markets with relatively high prices and distributing the proceeds to all producers of the product in question (31, pp. 25-38). Imports and exports of many farm products were never again to be completely unregulated.

While the devaluation tended to raise farm prices in general, other pricesupport measures were enacted for individual commodities. In 1932 a policy of fixed prices for sugar beets was adopted. In 1933 followed support purchases of cattle for destruction, minimum prices for potatoes for industrial use, price increases for butter by means of a fee on that part of the output which was sold in the domestic market, and, temporarily, for grains by means of an import fee. But the most important scheme was that adopted for hogs, a direct outgrowth of the situation in the all-important British market. It involved a severe cutback in Danish hog production and a complex allocation of hog-production permits to individual farmers. As a result, the price of pork in Denmark was twice as high in 1934 as it had been in 1932. The power to restrict imports, exercised by the Foreign Exchange Control Office, was a necessary condition for all these mea-

12 The policies adopted to combat the depression are dealt with extensively in Kjeld Philip, En Fremstilling og Analyse af den Danske Kriselovgivning 1931-38 (41).

18 The krone was devalued again in 1933, then to a level well below sterling.

<sup>11</sup> These agreements reflected a merging of trade and foreign exchange policy, but where agricultural products were important in foreign trade they became, unavoidably, instruments of agricultural policy also.

sures. Prices could not have been maintained if similar products could have been imported freely.

#### World War II and Its Aftermath

After the German occupation of Denmark in April 1940, farm prices were favorable, but rigid controls were needed under the prevailing conditions of scarcity and the special demands made by the occupying power. The internal supply situation was regulated by the Commodity Supply Directorate; most prices were controlled by the Price Control Council.14 Two special agencies had been set up just after the outbreak of the war in 1939 but before the occupation to deal with breadgrains and feedgrains respectively, for which prices were to be set by the legislature. The export boards for farm products created during the depression were made the sole exporters of the products subject to their authority. They were controlled by the Ministry of Agriculture.

These regulatory agencies continued to function for several years after the war. World shortages of vital commodities as well as the foreign exchange problems and trade restrictions which plagued the world made an early end to their activities impossible. The situation improved slowly, under the impact of the Marshall Plan and the trade liberalization efforts of the Organisation for European Economic Co-operation (OEEC) and the General Agreement on Tariffs and Trade (GATT).

For a decade after the war Danish food exports were dominated by bulk contract sales to the British Ministry of Food (35, pp. 272-88). Anxious to reestablish Danish farm products in the British market, the Danish government at first agreed to prices well below those obtainable elsewhere and subsidized these sales. In late 1947 the British prices were raised. From then on and until the end of the 1950s the Danish producer prices for all the important livestock products varied with the average of the prices obtained in all foreign markets.

#### THE YEARS OF DECONTROL, 1950-57

In 1950 the government controlled export boards were terminated. The British purchase contracts then in effect typically called for the delivery of 90 percent of the export surplus of bacon and 75 percent of the butter. 15 Some agency had to ensure compliance with these contracts and other agreements. New voluntary export boards were therefore set up, consisting of representatives of the interested agricultural and trade organizations, cooperative and private (39, p. 52). The boards negotiated directly with foreign authorities such as the British Ministry of Food. They did not have a monopoly on the export trade in their products and had no direct influence on the level of production in Denmark. Possessing wide information on markets and price trends and able to prevent competitive offerings from within member groups, they were nevertheless able to stabilize export prices. They also equalized prices to producers through a pooling of re-

<sup>16</sup> The exact stipulations of the contracts varied, of course, in the span of the years (35, pp. 275-76).

<sup>&</sup>lt;sup>14</sup> The Commodity Supply Directorate was the former Foreign Exchange Control Office, with expanded powers. A Price Control Council had first been set up in 1937, but its functions were limited to matters pertaining to monopolistic price agreements. Under the Price Law of May 1940 the Council's chief purpose was to prevent runaway inflation (see 28, pp. 25-56).

ceipts and through storage operations. Prices obtained in foreign markets—unsubsidized except for a dollar premium in effect 1952-61—determined the prices which producers received for their total livestock production.<sup>16</sup>

Controls over grain prices and marketing ended in 1953. From then on Danish grain prices were also determined by world market prices (39, p. 56). Still regulated were the prices of sugar beets and potatoes for industrial use. In addition, import restrictions on fruits and vegetables undoubtedly maintained the prices of these products above the level that would have prevailed in the absence of restrictions.<sup>17</sup> The combined value of these products—sugar beets, potatoes for industrial use, fruits and vegetables—amounted, however, only to about 5 percent of the value of agricultural production in the mid-1950s.<sup>18</sup> Because of the dollar premium it would not be correct to say, conversely, that roughly 95 percent of the agricultural production was sold at "world" market prices, but it seems justified to assume that the percentage could not be far from 90. The value of the exports of major agricultural products to the dollar area, benefitting from the premium, was equal to about 5 percent of the total value of agricultural exports and corresponded to about 3 percent of the value of total agricultural production.

Farm income in the first half of the 1950s was very satisfactory. For 1950/51 to 1954/55 the average net profit from farming was about 5 percent and the average farm income was well above that of skilled workers (38, p. 93; 45, p. 55). Growing foreign demand for livestock products as well as rationalization and mechanization on Danish farms and the related decline in the farm labor force accounted for this favorable situation. But from 1956 on, clouds began to gather. The British market for eggs which had taken 66 percent of Danish exports in 1953 was almost completely lost by 1957 when the rise in subsidized British production even led to export surpluses (25, p. 9). By 1959 egg exports to West Germany also began a sharp decline. For butter the British market weakened in 1957, due in part to great increases in subsidized exports from Sweden, Finland and Ireland to that market (25, p. 7). In 1958 butter exports to West Germany almost ceased, protected domestic production having caught up with consumption. Bacon prices in 1957 were down 14 percent from the 1956 level (25, p. 11).

While prices weakened, costs continued to increase. Comparing the 3-year averages 1952-54 and 1956-58, while the value of agricultural production in-

<sup>16</sup> Introduced in 1952 to encourage all exports to the dollar area, the complex premium arrangement at first amounted to the equivalent of a 6 percent subsidy on such exports. It was later reduced to 4 percent and was discontinued at the end of 1961 (40, pp. 135–36). Exports of major farm products to the United States, including the armed forces in West Germany, amounted to 224 million kroner in 1956, the equivalent of about 3 percent of the value of agricultural production (20, pp. 138–40; 22, p. 115).

<sup>17</sup> The import restrictions which Denmark continued to impose on the major livestock products, most of which she exported in large quantities, could only be a means of price support if they were coupled with producer or export subsidies. This was not the case in the mid-1950s. The Danes maintained in OEEC and GATT that the restrictions were necessary to prevent dumping from countries which subsidized their exports. A comparison of prices for livestock products in various countries as given by FAO—inconclusive as they are because of differences in quality, stage of processing and costs of transportation—tend to support the view that such imports into Denmark might have constituted dumping (27, pp. 337-46). Under GATT rules Denmark should, however, have used other specified and less inclusive measures to prevent dumping.

<sup>&</sup>lt;sup>18</sup> The value of production figures are from Det Statistiske Departement, Landbrugsstatistik 1959 (22, p. 57, 87, 115, except for fruits and vegetables which are from 18, p. 265).

creased by only 7 percent, the cost of raw materials for that production increased by 22 percent, of maintenance and depreciation by 26 percent (22, pp. 114–15). Average farm income in the second half of the decade was well below that of skilled workers (45, p. 55).

#### PRICE SUPPORT AND SUBSIDIZATION, 1958-70

The exodus of gainfully employed from agriculture, which had been going on since the end of World War II, gained momentum after 1958, but there was as yet almost no decline in the number of farms. The old laws that prohibited abolition of farms, reenacted in 1949, prevented this. It had become amply clear that a merging of farms to create larger units was essential to improve the farm economy, but before the time-honored policy favoring existing farms was modified in the 1960s (see below) farmers demanded and were granted price and market support measures, including outright government subsidies, to ease their plight.

The first step was taken in 1958, modest in scope, but important in principle. Comprehensive wage negotiations were being conducted and by March agreement had been reached by all groups except farm labor and management (37). Large farm operators flatly refused to agree to wage demands unless they were granted "compensation" in the form of higher grain prices. The government acceded and on June 16 the Grain Law for 1958/59 was passed, establishing fixed prices for wheat and rye, high milling rates, and import fees on feed grains (15). Comparable grain laws were adopted for subsequent years until the EC common agricultural policy went into effect in 1973.

Also of more potential than immediate importance was the Agricultural Products Marketing Act of June 1958. It was designed to further closer coordination in marketing of farm products, sales promotion in general and export drives in particular (12; 40, pp. 128–29).

In 1959 came a break with the principle that prices obtained for livestock products in export markets determine home market and producer prices. A law of June 10 authorized the Minister of Agriculture to set a minimum price for butter sold domestically, that might be higher than the average export price (14; 45, p. 247).<sup>20</sup>

A new crisis arose again in 1961 in connection with wage negotiations. A Farmers' Joint Committee on Labor Economics demanded measures that would provide 550 million kroner additional farm income in 1961/62 in compensation for wage increases. The smallholders, not represented on the committee, demanded 416 million kroner. The government offered 300 million kroner. Adamant farmers effected a "delivery strike" on May 8, holding back all milk and

20 On Jan. 1, 1961 this system was replaced by an equivalent voluntary arrangement, operated by the creameries. Based on the cost of production, the minimum prices adopted by these creameries

had to be approved by the Monopoly Control Authority.

<sup>&</sup>lt;sup>19</sup> The milling rates called for specified percentages of domestic wheat and rye in the miller's grist, originally set at 70 and 90 percent respectively, later on often at 100 percent. The grain-buying majority of farmers accepted the Grain Law with its price increases, because the British market was in danger of being oversupplied with Danish bacon. Higher grain prices would tend to curb this trend. Also, the proceeds from the import levy on feed grains was distributed to small farmers. The Grain Law could only function so long as Denmark was an importer of grain. When net export surpluses appeared in 1968/69, large subsidies were needed to move them.

cattle. A separate strike on hog slaughterhouses, begun on May 4, had already immobilized this activity. The government again gave in, and a new law of June 16, 1961, provided for substantial direct subsidies to farmers as well as various forms of support for export promotion, and some relief with respect to property taxes. It granted an increase in the price of pork sold in the domestic market (13; 37).<sup>21</sup>

The deterioration of farm relative to nonfarm income continued, however, and in September 1962 higher home market prices were authorized for pork, beef, veal, poultry, and eggs (8; 45, pp. 116, 247).<sup>22</sup>

The system of price support and subsidies developed during the years 1958-62 remained in effect, essentially, until Denmark joined EC, though there were many changes in detail and new features were added.<sup>28</sup> The total amounts involved increased steadily. According to calculations by a blue-ribbon Danish committee, the total farm income generated by the programs begun so modestly in 1958 accounted for one-third of the value of agricultural production (net product at factor cost) ten years later (45, p. 136). Between 1960/61 and 1970/71 the budget for the Ministry of Agriculture increased 18-fold while overall government expenditures increased only five-fold (Table 1).

Throughout this period most Danish farmers, as well as the government, hoped and expected that Denmark would some day become a member of EC, and the steps taken in support of agriculture were therefore considered temporary. Higher supported prices were to be expected when membership would become a reality, more than compensating for the subsidies which would become illegal. This is in fact the case: Danish farm prices will be raised to the EC level over a 5-year period. A Danish White Paper on EC membership of July 1971 estimates that the net increase in the annual sales value of major farm products during the first year, 1973–74, will be on the order of 800 million kroner (some 7 percent of the 1971 value of agricultural production), rising to 2,350 million kroner when the EC price level is fully effective.<sup>24</sup>

#### EASING CONTROLS ON FARM STRUCTURE IN THE 1960s

As price and marketing policies in the 1960s moved farther and farther away from the liberal ideal, the legislation that limited the free disposal of farms moved in the opposite direction. The first modest step was a law of 1962 which permitted the abolition of farms of less than 5 hectares (best soil), but only if the land was added to farms which would not thereby exceed 12 hectares (best soil), and further liberalization followed in 1963 and 1967 (9; 11).<sup>25</sup> With a

million kroner; and price increases for pork, 50 million kroner.

22 Between 1955 and 1962 average farm income had increased by barely 30 percent, the income of skilled and unskilled workers as well as of independent operators in industry by 60 to 70 percent (37, 1963, No. 3, p. 197).

<sup>28</sup> In 1968, for instance, a new subsidy was introduced to compensate farmers for income loss due to the devaluation of the British pound in November 1967.

24 These figures are not forecasts, but are illustrative only. They are based on the assumption of a constant level of production equal to that of 1970, combined with EC prices in effect on April 1, 1971.

<sup>25</sup> Specified larger acreages were permitted on soils of average or poor quality.

<sup>&</sup>lt;sup>21</sup> The value to agriculture of this "package" for each of the years 1961/62 and 1962/63 was estimated at 425 million kroner, namely: direct subsidies (allocated per cow and per farm, small farms only), 250 million kroner; for export promotion, 75 million kroner; fertilizer subsidy, 50 million kroner; and price increases for pork, 50 million kroner.

Table 1.—Total Expenditures of the Government of Denmark and for the MINISTRY OF AGRICULTURE, 1960/61, 1965/66, AND 1970/71\* (Million kroner)

Budget item	1960/61	1965/66	1970/71
Total government expenditures	6,246.1	13,145.5	33,402.3
Ministry of Agriculture	$88.5^{a}$	619.84	1,577.9
Central administration	7.7	12.5	24.3
Experiment stations, advisory services	25.3	61.8	110.3
Foreign affairs, incl. FAO costs	2.0	6.8	44.4
Technical services:			
Drainage and irrigation	.9	5.3	11.9
Activities under land laws	2.0	2.9	5.2
Forestry, heath reclamation	8.2	13.8	23.4
Veterinary services	9.4	60.1	103.3
Testing, control, supervision:			
Dairy products, eggs, etc.	.9	4.8	7.1
The Grain Office	31.5	88.5	8.7
Pest control laboratory	.3	.8	1.6
Others	.3	2.3	10.1
Marketing support		360.2	898.3 <sup>b</sup>
Consumer subsidy on dairy products			190.00
Other expenditures			139.3

<sup>\*</sup> Data from official statistics (Denmark, Danmarks Statistik, Statistisk Årbog 1966, pp. 350, 353-54; ibid., 1972, pp. 361, 365-66; Det Statistiske Departement, Statistisk Årbog 1961, pp. 315, 322-23. U.S. \$1 = 6.9 kroner in 1960/61 and 1965/66, 7.5 kroner in 1970/71.

A For comparability, expenditures on behalf of the Royal Veterinary and Agricultural College

b Includes some items formerly part of the Grain Office expenditure.

law of 1971 the legislature, recognizing the technological and economic realities of the times, finally freed itself sufficiently from the old fear of a concentration of land ownership and from the old belief in the social and economic desirability of small farms to allow a merger of existing farms up to a combined area of 100 hectares (10). Furthermore, joint operation was permitted for up to ten years of up to five separate farms, totalling up to 200 hectares of leased land.<sup>26</sup> About the same time the extensive legislation which provided for the creation of smallholdings was terminated (16).27 It had outlived its usefulness years earlier.

The effect of this legislation was pronounced. Between 1960 and 1971 the number of farms declined by 31 percent-from 196,076 to 135,588-, smallholdings of less than 10 hectares by more than 40 percent. There was some increase in the number of farms over 30 hectares in size, and the average farm size increased from 15.8 to 21.5 hectares. Many of the remaining smallholdings became part-time enterprises (19, pp. 9, 21). Clearly, the change in farm structure policy that made this possible did not alter the trend in price and marketing policy

<sup>26</sup> If more than five farms were involved, the limit was 100 hectares. There was no limit placed on the land allowed under joint operation, if all the land belonged to the same owner.

have been excluded. In recent years they have been in the budget for the Ministry of Education.

<sup>&</sup>lt;sup>a</sup> Originally authorized by a law of June 9, 1967, this subsidy was designed to counterbalance—for dairy products only—the value added tax adopted in March 1967.

<sup>&</sup>lt;sup>27</sup> This law provides for government loans to help improve farm structure by the purchase of supplementary land. In addition, its par. 36 terminates various older laws, including that which provided for the creation of smallholdings.

towards government support and subsidization, but it must be assumed that in its absence the cost of the programs would have been considerably greater.

In conclusion it may be said that Danish agriculture was able to thrive under a truly liberal price, marketing, and foreign trade policy until 1931, partly because population growth and rising wages in western Europe created a growing demand for Danish livestock products, and partly because the farmers' cooperative enterprises to a considerable extent eliminated or alleviated the detrimental effects of the atomistic form of production associated with farming under laissexfaire conditions. For, through their cooperative processing, marketing and export associations, small farmers obtained some of the advantages of large-scale production and avoided the unfavorable price effect of competitive offerings. In effect, they garnered some of the advantages inherent in what has later come to be known as vertical and horizontal integration. The type of farm that prevailed as the result of the more than century-old farm structure policy was well adapted to the type of livestock farming that developed in the second half of the nineteenth century.

During the 1950–57 period of decontrol—following the two decades of intensive regulations caused by the great depression and World War II—growing demand and rising prices for Danish livestock products temporarily prevailed again in foreign markets, and the stabilizing effects of the cooperative organizations were further strengthened by the activities of the agricultural export boards as well as by new joint farmer initiatives in the fields of market research and promotion.

By the end of this period foreign markets were beginning to weaken, and the old farm structure policy favoring family farms and smallholdings had become a liability as modern technology called for larger units. Compared with steeply rising incomes in other occupations, farm income fell seriously behind, arousing farmer demands for "compensation." What remained of the liberal policy—the principle that prices obtained or paid in foreign markets determined Danish producer prices—gave way under the impact of this three-pronged assault. A policy of price support and subsidization took form during the years 1958–62 and grew in complexity and in cost to the country during the 1960s. Developed pragmatically and without clearly formulated goals, these programs are now in the process of being replaced by the even more protective, very comprehensive and interrelated programs of the common agricultural policy of the European Communities.

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