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FINNISH AGRICULTURE IN 1984

LAURI KETTUNEN

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Preface

This publication is a brief review of agricultural development in Finland in 1984. Some of the statistical data are still very preliminary. This is particularly true of farms income for 1984. Despite the uncertainty, the statistical data give the trends in the most important factors in agriculture and should thus be useful to the reader.

Part III of the publication contains a short review of agricultural policy. It does not cover the whole sector but concentrates on areas which the author considers most interesting. Earlier annual reports may be used to make the review more comprehensive.

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Helsinki, January 17, 1985

Lauri Kettunen

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I INTRODUCTION

1. Economic situation

The economic situation was quite good in Finland in 1984. According to forecasts, the increase in the gross domestic product was about 4 % and the growth rate will be nearly the same in 1985. This business cycle as such has been quite restrained in comparison with previous ones, and the overheating often connected with intense economic growth has now been avoided. Compared with other Western countries, however the economic situation in Finland has been very good.

Economic development has in many respects been quite stable. Despite the upturn, inflation has diminished constantly and by the end of the year it was 6 %. This was achieved in part through moderate income settlements. Also, inflationary expectations have generally declined, and this has helped to keep prices under control. The balance of trade was in equilibrium or even positive. Forest industry exports have been particularly favourable, which has improved the balance of trade. In general, the whole industry has been able to operate at full capacity throughout the year.

Employment has increased along with economic activity. The unemployment rate was about 5.8 % in 1984, which is a little lower than the year before. Compared with the other OECD countries, the unemployment situation in Finland is quite good, although unemployment is still considered the most serious problem facing the Finnish economy.

In spite of the boom, investment activity has not been very high, although the latter part of the year did show signs of improvement. The money market could probably have permitted more investment activity. The foreign exchange reserves of the Bank of Finland in particular grew considerably during the year, which made the money market to the whole country more buoyant. The reason for this intense growth in exchange reserves was presumably the growth in the money market. For instance, activity in the short-term money

market has increased, and this has made it possible to raise interest rates, which have otherwise been much lower in Finland than in the other OECD countries.

The good economic situation has also helped management of the economy, though borrowing by the State is still on quite a high level. On the whole, administration of budget policy has been quite easy, although a rise in the gross tax rate could not be avoided. On the other hand, a rise in the tax rate suits a boom period, though such a policy is politically very difficult to carry out.

The year has also been economically favourable in agriculture, which has supported the general economic growth. The marked growth of forestry and especially the pick-up in logging have undoubtedly also affected agriculture. Stumpage price incomes for farmers and other incomes from forestry are apparently increasing.

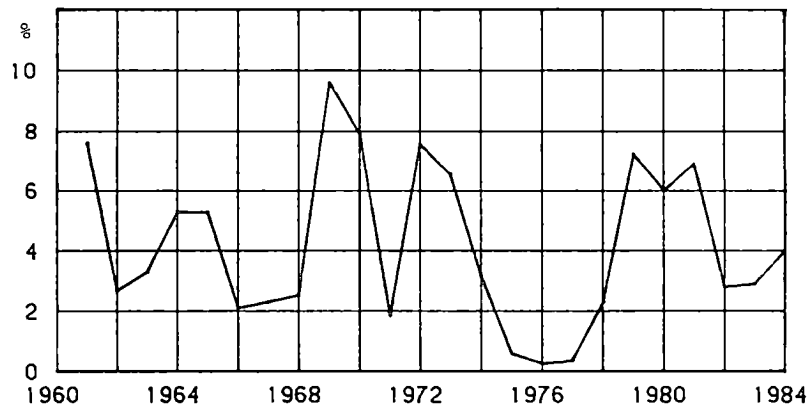


Figure 1. Growth in the volume of the gross national product in 1960-84.

II PRODUCTION, PRICES AND FARM INCOME

2. Plant production

Growing conditions were good early in the summer and bad late in the summer in 1984. Spring came early and warm, May in particular was exceptionally warm, promising a good annual yield. There was, however, a cold spell at the beginning of June, and in some parts of northern Finland the temperature fell as low as ten degrees below zero. Later in the summer the rainfall was very great; this impeded harvesting and reduced yield quality. Some of the yield even went unharvested.

Table 1. Yields of main crops in 1983 and 1984.

	1983			1984		
	Area	Yield		Area	Yield	
	1000 ha	100 kg/ha	total mill.kg	1000 ha	100 kg/ha	total mill.kg
Winter wheat	31.7	35.5	112.6	19.7	25.6	50.4
Spring wheat	127.9	34.2	439.9	134.3	31.9	427.9
Rye	46.7	24.9	116.1	44.1	20.9	92.3
Barley	550.4	32.1	1764.4	562.3	30.5	1715.3
Oats	449.9	31.3	1406.5	418.6	31.6	1320.9
Potatoes	45.3	177.5	804.0	41.3	180.4	745.1
Sugar beet	32.9	322.8	1060.2	31.4	262.2	914.5
Hay	490.3	42.0	2057.4	434.8	39.8	1732.2
Silage	203.8	207.7	4232.5	219.0	208.5	4576.3
Oil seeds	60.9	16.6	101.2	62.0	13.8	85.7
Other crops	56.4			50.6		
Total	2095.6	2797 ¹	5772.9 ²	2018.1	2647 ¹	5366.9 ²
Pasture	166.4			170.6		
Fallow	52.4			62.9		
Soil bank	66.8			40.1		
Other land	85.4			106.0		
Total acreage	2466.6			2397.6		

1) f.u./ha without straw 2) million f.u. without straw

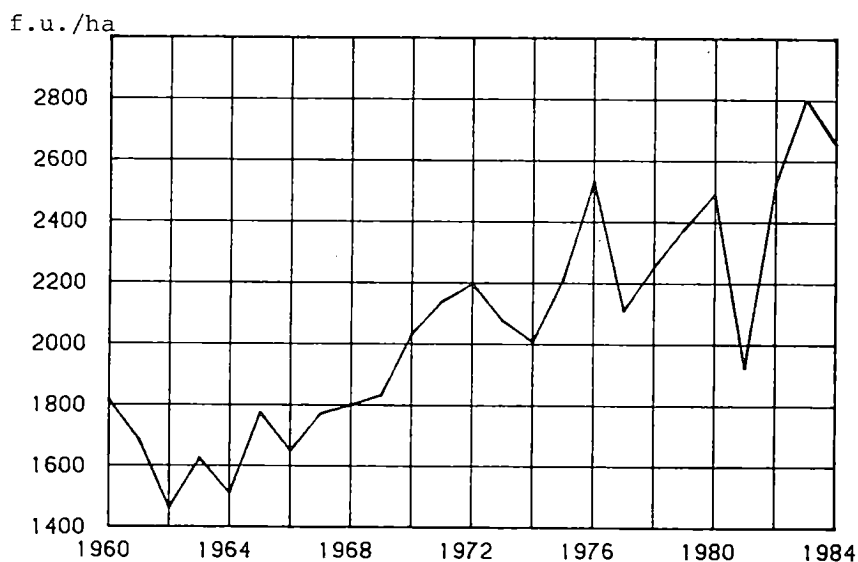


Figure 2. The total yield, without straw, in feed units per hectare in 1960-84.

The quantity of the annual yield was normal in 1984. In fact, the yield per hectare corresponded to the long-term trend, and was therefore the second largest yield on record. The total yield was 5367 million feed units (f.u.) and 2647 f.u. measured per hectare.

The weather probably affected the growth of hay and silage least, though some difficulties occurred in harvesting dry hay and therefore its quality is evidently bad. The silage yield was very good in both quality and quantity.

The hectareage under rye almost reached the target for the first time in many years, and the total yield is about sufficient for domestic consumption. The yield of wheat, however, was insufficient, and imports will be necessary this winter. Winter wheat did not winter well and therefore parts of the hectareage sown had to be ploughed up and sown again. The yield of spring wheat would have been high, but because of rain in the autumn a large part of the yield is of such low quality that it will be used as animal feed. Some of the spring wheat (7000 ha) also went unharvested.

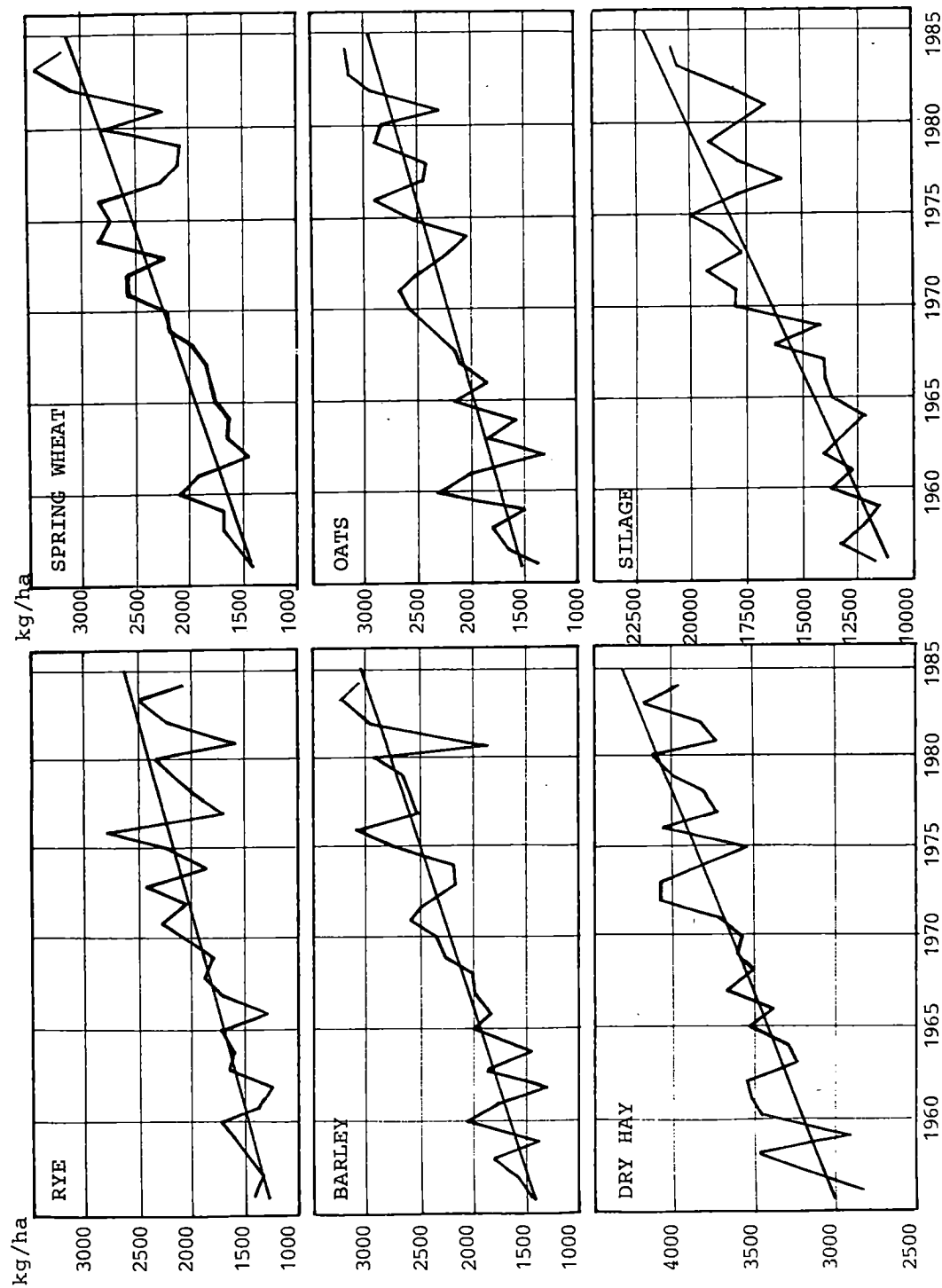


Figure 3. Yields of rye, spring wheat, barley, oats, dry hay and silage in 1955-84, kg/ha.

Table 2. Quantities of domestic crops marketed in 1978-84,
mill. kg.

	1978	1979	1980	1981	1982	1983	1984 ^e
Rye	57	60	90	64	30	76	84
Wheat	97	108	208	184	251	431	427
Feed wheat	113	59	5	42	59	7	20
Barley	615	588	592	527	587	869	818
Oats	261	273	347	322	386	564	503

In contrast, the yield of feed grain was very good in 1984. The oat yield per hectare was good, that is distinctly above the long-term trend. The barley yield was also quite good. Since some of the wheat is also used for feed, the supply of feed grain is abundant this winter, and, according to estimates, about 450 mill. kg of feed grain will have to be exported. Stores are already very full because of the previous high yield, and it will not be possible to increase them much more.

The potato yield was quite satisfactory and sufficient for domestic consumption. The sugar beet yield also reached the target, although harvesting conditions were difficult because of the rain. The oil seed yield would also have been good, but some of it could not be harvested.

Although annual yields were good on the whole, there were great regional differences. Rain in the fall impeded harvesting, especially in southwestern Finland. According to estimates, losses to crops totalled about 288 million marks; the State will probably pay about 90 million marks in compensation, the remainder being loss to farmers. The allotment in the State budget for crop failure compensation is not sufficient, and therefore the Ministry of Agriculture and Forestry plans to provide crop failure loans to help farmers with crop losses.

The difficult harvesting conditions will also be reflected next summer, because sowings of winter crops were only about half the target or normal sowings. We can therefore predict that our

self-sufficiency in bread grain will also remain low in 1985. The hectarage under rye, for instance, is absolutely insufficient.

3. Animal production

Milk production fell slightly in 1984. The number of dairy cows continued to decrease steadily; production has therefore remained constant. The general aim has been to curtail milk production, because the self-sufficiency rate exceeds 130 %; the target is clearly lower. The volume of milk delivered to dairies was about 2935 million litres, in other words it still exceeds the production ceiling (i.e. the upper limit of the volume of milk delivered to dairies) by about 175 million litres. According to forecasts, milk production will also fall slightly next year. Milk quotas for each farm came into force at the beginning of 1985. This will presumably limit the growth of production, although the measure in itself will not do much to reduce production.

Beef production rose by 8 % in 1984, i.e. to about 120 mill. kg. The number of animals slaughtered has of course decreased as the number of dairy cows has decreased, and this sustains the present high output level. Consumption is clearly lower than production, and this made exports necessary during the past year.

Table 3. Animal production in 1978-84.

	1978	1979	1980	1981	1982	1983	1984 ^e
Milk, mill. litres	3125	3141	3174	3082	3068	3136	3129
Beef, mill.kg	106	110	114	122	117	118	127
Pork "	154	164	169	179	181	177	169
Eggs "	76	76	79	80	82	83	88
Poultry "	12	14	15	17	17	18	19
Other meat "	2	2	2	2	2	2	2

mill. litres

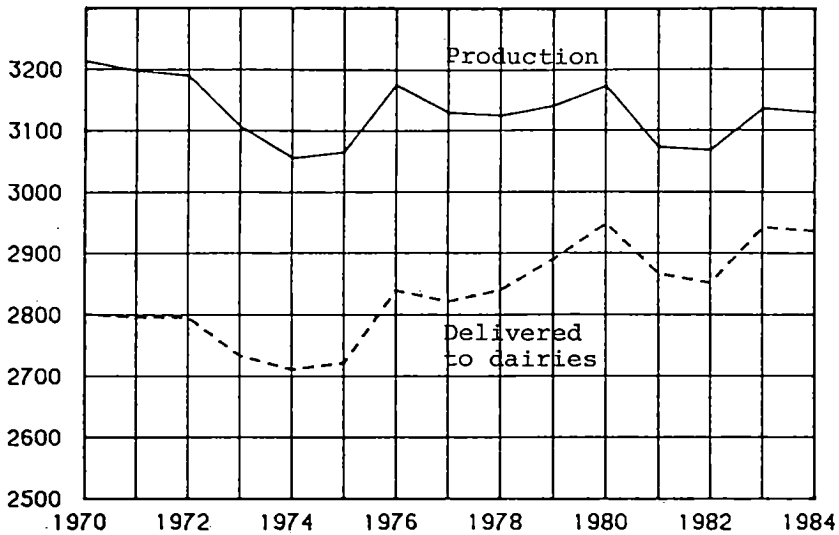


Figure 4. Milk production and the quantity of milk delivered to dairies in 1970-84.

Pork production adjusted best to the production ceilings. According to the latest statistics, pork production declined in 1983, and this trend continued in 1984, when production fell about 4.5 % compared with the previous year. The export ceiling was 17 mill. kg in 1984, and it was not exceeded very much. It has been possible to reduce pork production by special policy measures. Production in 1985 will remain similar to that of 1984.

Egg production in contrast has increased rapidly. Production was already increasing in 1983, and this trend continued in 1984, when production growth was about 6 %. In other words, production rose to about 88 mill. kg, which means that the export ceiling of 16 mill. kg was exceeded considerably. The self-sufficiency rate rose to 170 %. As the export price has tended to be low, overproduction of eggs is perhaps the most unprofitable to agriculture.

mill.kg

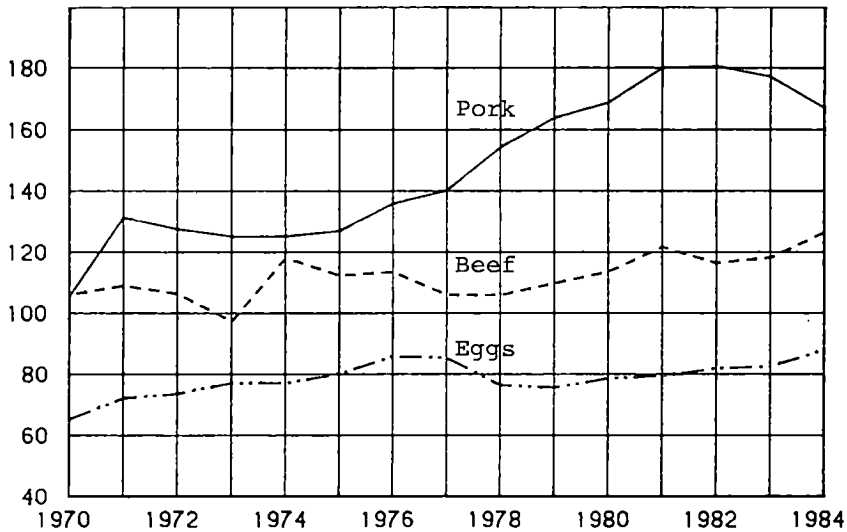


Figure 5. Production of beef, pork and eggs in 1970-84.

4. Consumption

Previous trends applied in the consumption of agricultural products. The consumption of milk products has stayed at about the previous level, whereas meat consumption has risen slightly. Economic growth has been relatively good, and the real net incomes have increased, so the consumption of high income-bound products in particular has risen.

The consumption of whole milk and liquid milk products decreased on the whole by an average of about 3 % compared with the previous year. The decline in butter consumption has continued, although the price relationship between butter and margarine remained constant. The consumption of margarine has also decreased slightly; total fat consumption has decreased, and thus margarine did not gain on butter during the past year. The consumption of cheese rose by about 5 % on the previous year. Cheese is one of the few agricultural products whose consumption is expected to grow in future.

Table 4. Consumption of milk products in 1975-84, kg per capita.

	Milk products	Butter	Cheese
1975	291.8	12.9	6.2
1976	287.5	12.6	6.2
1977	282.3	12.0	6.2
1978	279.1	11.7	6.5
1979	276.0	12.5	6.8
1980	272.6	11.8	7.2
1981	264.0	12.0	7.7
1982	262.1	12.1	8.0
1983	252.1	11.9	8.3
1984 ^e	245.7	11.6	8.7

It was earlier forecast that pork consumption would also increase rapidly, but the trend has not been as rapid as, for instance in the 1970s. The reason lies perhaps in the saturation point reached, or it can be assumed that the price trend has not been as favourable to pork as before. The price of beef has not changed in relation to that of pork and therefore pork has not replaced beef as rapidly as before. The consumption of beef has remained at approximately the earlier level, but it is expected to fall. This might, of course, mean that the pork consumption will rise from the present level. The consumption of broilers and other poultry has so far been relatively low, i.e. about 3-4 kg/capita, and growth has not been very rapid so far.

Table 5. Consumption of meat and eggs in 1975-84, kg per capita.

	Beef	Pork	Poultry	Eggs
1975	24.2	26.7	2.4	10.9
1976	23.6	25.9	2.4	10.6
1977	22.7	27.2	2.7	10.7
1978	22.1	27.8	2.8	11.3
1979	23.4	28.9	2.9	11.3
1980	23.3	29.6	3.0	10.9
1981	22.3	29.5	3.5	10.7
1982	21.9	30.0	3.5	10.6
1983	21.2	30.8	3.6	10.6
1984 ^e	22.2	31.1	4.0	10.7

The consumption of eggs has remained constant for a longer time (11 kg/capita). The consumption has even fallen slightly in previous years, but according to preliminary estimates it rose a little in 1984. No big changes are expected in the future.

5. Foreign trade

Foreign trade in agricultural products has again picked up. The export of grain, for example, increased because of a good crop in 1983. The crop of feed grain also exceeded the domestic need in 1984, and this will maintain the export of grain products in the future.

Pork exports have decreased slightly because production and consumption are now in better balance than before. The export of beef has, however, stayed at the previous level. The export of eggs increased by about 20 % on the previous year owing to pronounced growth in production. Exports of milk products have also remained at the previous level, but some changes in the structure of exports have appeared. Butter exports have decreased but those of cheese and milk powder have increased considerably.

Table 6. Exports of some agricultural products in 1975-84, mill. kg.

	Butter	Cheese	Milk powder	Pork	Beef	Eggs
1975	11.9	21.3	20.1	2.0	1.6	28.5
1976	21.2	30.2	22.0	12.0	2.4	34.4
1977	15.6	33.6	29.1	11.1	0.5	33.8
1978	14.9	36.5	27.4	22.1	0.8	22.2
1979	17.4	40.9	28.1	27.3	0.4	21.0
1980	9.8	41.1	30.5	25.5	0.9	25.8
1981	14.7	37.6	28.4	39.7	16.1	27.5
1982	8.8	34.8	23.2	36.1	8.1	30.1
1983	26.6	32.3	37.5	25.5	17.8	32.2
1984 ^e	21.0	39.0	42.0	21.0	17.0	37.0

Table 7. The value of exports and imports (Brussels nomenclature 1-24) in 1975-84, mill. mk.

	Exports	Imports			
		Total	Coffee and tea	Fruit	Drinks and tobacco
1975	719.8	2472.3	368.5	341.4	184.9
1976	921.4	2332.4	692.3	366.0	155.7
1977	1303.3	2899.9	1012.9	404.1	166.0
1978	1127.3	3107.2	904.4	447.1	226.9
1979	1284.2	3679.9	932.7	533.9	226.7
1980	1669.9	4598.1	1097.1	638.0	255.6
1981	2639.4	4462.2	825.4	688.9	335.1
1982	2151.9	5308.9	990.5	710.6	286.0
1983	2673.4	4888.2	1065.7	752.2	332.7
1983 ^e	2129.3	3943.3	902.5	567.6	267.7
1984 ^e	2525.6	4153.6	1052.9	575.6	293.6

e) January-October

Falling world market prices are the main problem in exports of agricultural products. Since 1982, export prices for butter and cheese have continued to fall. This means more export subsidies which, of course, strain the state budget.

6. Agricultural incomes settlement

Farm incomes negotiations began under normal conditions. The Farm Incomes Act gives clear rules for making an incomes settlement. Negotiations started according to these rules and the price council had completed calculation of the cost increase by the middle of February.

The labour market again confused farm income negotiations. Workers' and employees' organizations aimed throughout for a comprehensive solution and therefore the negotiations continued past the end of February, which is the limit for normal farm incomes and general wage settlement. Agriculture did not want to make a separate settlement before the other sectors, nor was the State even willing to make an offer to farmers before the general situation in other sectors was clear. Since the general negotiations were

prolonged, agricultural negotiators decided to divide the solution into two parts, the cost compensation being realized at the beginning of March and the incomes increase later on.

The general labour market situation finally led to the appointment of an arbitrator to seek a general solution. The proposal by director Pekkanen led to a two-year settlement that also included agriculture. The farmers' representatives protested strongly against inclusion of agriculture in a wage and salary agreement, but one has to realize that agriculture was the first to accept a settlement. The general settlement was a comprehensive package that included wage and salary agreements as well as other agreements, of which shortening of the working week was one of the most important.

The agricultural settlement also included elements other than a price settlement. The present price act was extended for two years, and this also changed the production and export ceilings. The quota scheme for milk was also included in the solution. It was agreed that the State would finance all grains exports in 1984 and 1985. However, an export ceiling was set for feed grains for 1986 and 1987 (see table 13). Annual leave will be increased by one day, beginning in 1985/86. The negotiators also agreed on social policy issues. Annual leave is to be uniform, the system for days off will be made permanent, substitute help and health care will be improved, and pension security will be developed.

Farm income was raised by 310 million marks in 1984/85 and it will be raised by 345 million marks for the pricing year 1985/86. This means that the price negotiations will evidently be less difficult in 1985, since only cost compensation remains, and this will be done according to a well specified calculation.

In general, the price negotiations seemed to go rather smoothly: at least the disputes did not get too much publicity. The favourable incomes trend in agriculture may have restrained farmers from making any special demands this time. However, one has to admit that the Finnish price system protects agriculture fully against inflation and also grants an income increase, which is not true in many Western countries today.

6.1. Spring settlement

According to the calculation of the Price Council the rise in costs from July 1983 to January 1984 was 660.8 million marks or 4.8 %. The increase in the value of other than target price products was 55.8 million marks, which was deducted from the cost compensation. When the other adjustments had been made, the final cost compensation was 502.5 million marks. As stated above this amount is clearly determined and will cause no problems in negotiations. The total sum was directed to target prices (481 million marks) and to price support (21.5 million marks).

Target prices were raised by 3.3 % (see Table 11). The producer price for rye was raised a little more than the average, the reason being that the premium on rye cultivation was abolished in 1984. The additional price of milk was lowered by 1.5 p/l, the budget appropriations having been insufficient owing to the increase in quantities delivered to dairies.

6.2. Autumn price settlement

The autumn price negotiations do not cause much dispute, since they only concern compensation for the increase in costs, which is based on the total calculation by the Price Council. The negotiators have only to divide the total increase among the different products. Of course, this may give reason for some arguments between the different interest groups. For instance, in order to reduce the rather large surplus of eggs the government negotiators would have liked to raise the target price for eggs less than was finally done. The farmers' union protested against this move by saying that prices must not be used to regulate supply, since this would hinder the trend in incomes. They said that other means should be used to guide production.

However, price is probably the most effective tool in regulating supply, so it also should be used. The Farm Incomes Act also states that when a price decision is made the market situation has to be taken into account. The rapid increase in egg production may be an indication of improved profitability, and also of a healthy

Table 8. Cost calculations in 1.3. and in 1.4. 1984.

	Price level in autumn 1983 mill. mk	Price level in spring 1984 mill. mk	Change %
Gross return			
Target price products	14 408,2	14.408,2	
Other products	1.665,1	1.673,8	0,5
Rent incomes	468,5	510,6	
After payments	492,4	492,4	
Price support	1.922,2	1.927,2	
Total	18.956,4	19.012,2	
Costs			
Requisites	7.844,8	8.163,1	4,0
Wages	417,2	425,0	1,9
Machinery and implements	3.120,2	3.330,4	6,7
Building costs	1.015,2	1.072,6	5,7
Rent costs	380,1	384,5	1,2
Other costs	848,1	910,8	7,4
Total	13.625,6	14.286,4	4,8
Farm income	5.330,8	4.725,8	
Change		605,0	

Table 9. Income and cost calculation for the spring decision.

	Mill. mk
Increase in costs	+660.8
Increase in gross return in other products	-55.8
Deviation from target prices 1982	-102.5
Total	502.5
Cost calculation	502.5
Increase in farm income	310.0
Total	812.5
Reserved for grains in spring decision	30.9
Total	843.4
Division:	
target price	777.1
price political support	54.3
vacation and substitute system	12.0
Total	843.4

Table 10. Cost calculation, autumn 1984, mill. mk.

	Price level in spring 1984	Price level in autumn 1984	Change %
Gross return			
Target price products	15.185,1	15.185,1	
Other products	1.673,8	1.673,8	
Rent incomes	510,6	510,6	
After payments	492,4	572,8	16,3
Price support	1.981,5	1.981,5	
Total	19.843,4	19.923,8	
Costs			
Requisites	8.163,5	8.546,1	4,7
Wages	420,3	447,5	6,5
Machines and implements	3330,4	3.344,6	0,4
Building costs	1.072,6	1.082,8	1,0
Rent costs	384,5	399,4	3,9
Other costs	910,8	910,8	
Total	14.282,1	14.731,2	3,1
Farm income	5.561,3	5.192,6	
Change		368,7	

The parts of the decision:

	Mill. mk
Increase in costs	449,1
Increase in income	-80,4
Increase in the price of grains decided in spring	-30,9
Total	337,8
Division: of	
target prices	306,7
price political support	24,1
vacation and substitute system	7,0
Total	337,8

income trend, even though one has to admit that other things may also affect the growth of egg production. Farmers have difficulties in choosing a proper line of production, since all lines of animal production are blocked by production ceilings.

Table 11. Target prices in 1983 and 1984.

		1.3.83	1.4.83	1.9.83	1.3.84	1.4.84	1.9.84
Rye ¹	p/kg			220.70			245.00
Wheat ¹	"			204.80			218.00
Feed barley ¹	"			151.00			161.00
Feed oats ¹	"			141.50			150.00
Milk ²	p/l	197.20	202.70	205.70	212.70	216.70	221.60
Beef ³	mk/kg	21.56	22.01	22.31	23.01	23.31	23.91
Pork	"	13.68	13.98	14.18	14.68	14.98	15.38
Eggs	"	9.23	9.46	9.60	9.90	10.05	10.20
Mutton ⁴	"	24.80	25.30	25.30	25.30	25.60	26.15

1) Beginning 1.8. Prices are in farm price level from autumn 1983.

2) The additional price of milk is paid as follows:

Beginning 1.4.1983 15 p/l up to 200 000 litres

Beginning 1.3.1984 13.5 p/p "

and in addition:

Beginning 1.9.1981 10.5 p/l up to 30 000 litres

Beginning 1.9.1983 11.5 p/l "

3) Production premium for beef:

	Bulls		Heifers	
	160-210 kg	210 kg	130-160 kg	160 kg
Beginning 1.9.1981	1.50	2.50		2.50
Beginning 1.3.1982	1.90	2.90	1.00	2.90

4) Production premium for mutton 3,70 mk/kg beginning 1.3.1984

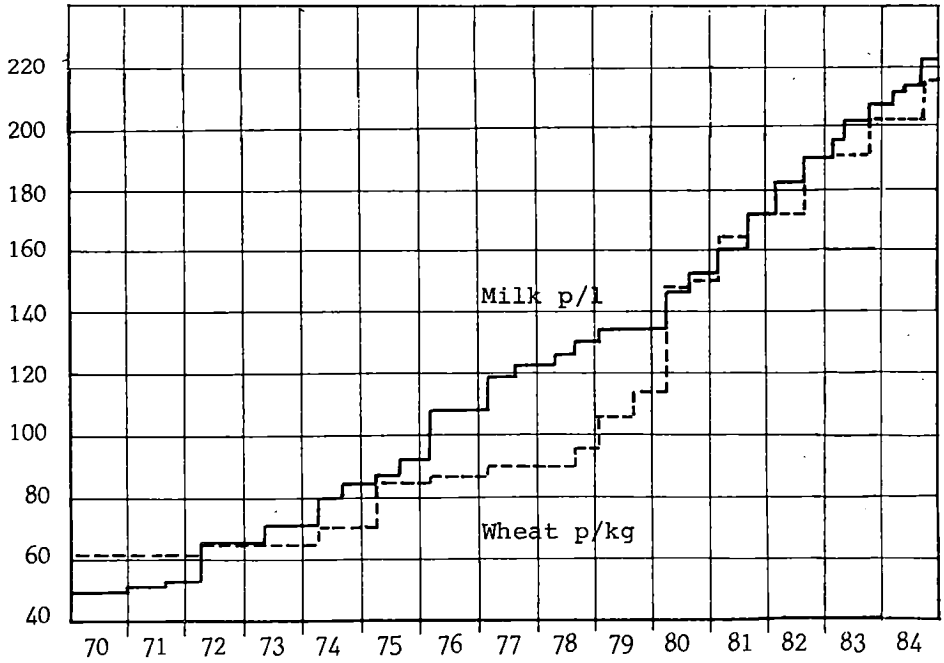
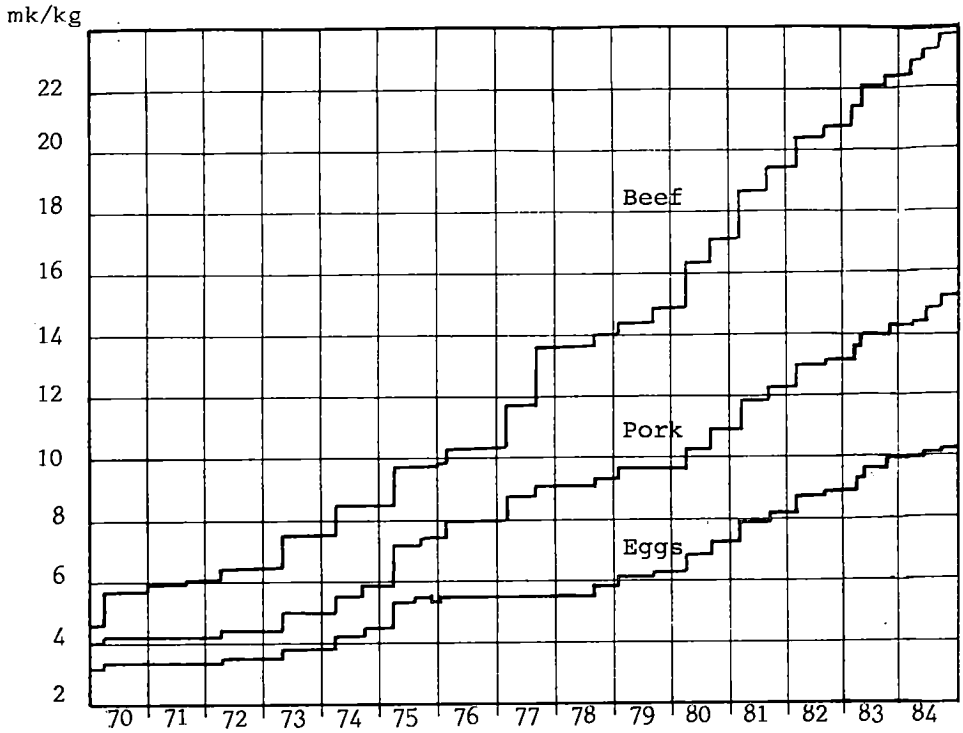


Figure 6. Trends in some target prices in 1970-84.

The increase in costs from January to July was 449.1 million marks or 3.1 %. An increase in post-payments (80.4 million marks), an increase of 30.9 million marks in target prices in the spring and an increase in the farmers' share of annual leave costs (7 million marks) were deducted from the increase in costs, leaving 330.8 million marks for the final increase in prices. Of this sum 306.7 was for the target prices and 24.1 million marks for price subsidies.

Only the target prices for animal products are raised in the autumn. The increase was largest in the target price for pork (2.7 %, see Table 11) and smallest in the target price for eggs.

The target prices were raised by a total of 7.5 % in 1984, or by slightly more than the general price level for the whole year. The target price for rye was raised by 11 % but this was because the special premium on rye cultivation was abolished in 1984. Otherwise, target prices were raised relatively uniformly. An exception was the price of mutton, which was raised by only 3.5 %, since it has been difficult to achieve the target earlier. In general, the targets have been achieved rather well. The producer price for milk was slightly above target, whereas the producer prices for meat were a little below the targets in 1984.

7. The trend in incomes

The estimate of the incomes trend made at the end of the year may be erroneous for many reasons. The quantities and prices of output and input may include errors, and since farm income represents the difference between the total value of production and the total costs, it is easy to understand why the error may be large. Since the estimate of the incomes trend has been reasonable in recent years, an attempt was made again to estimate it for 1984. It is hoped that the error will not be too large this time, either.

Table 12. Farm income trends in 1975-84, mill. mk.

	Total revenue	Total costs	Farm income	Index
1975	8.099,4	4.978,0	3.121,4	100,0
1976	9.272,1	5.763,8	3.508,3	112,4
1977	9.977,2	6.234,7	3.742,5	119,9
1978	10.246,2	7.199,0	3.047,2	97,6
1979	11.147,4	8.166,6	2.980,8	95,5
1980	13.176,1	9.736,5	3.439,6	110,2
1981	14.760,4	11.271,8	3.488,6	111,8
1982	17.594,1	13.141,7	4.452,4	142,6
1983	19.907,5	13.711,5	6.196,0	198,5
1984	21.103,8	14.030,5	6.983,3	223,7

According to the preliminary estimate, farm income also increased rather well in 1984, that is by about 12 %. The yield in summer 1984 was not so good as that of 1983, but when the calculation is done by calendar year, the results are divided between consecutive years and the good yield is also felt in the following year, as happened in 1984. On the other hand, the 1984 yield was better than normal, even though it was not so good as in 1983.

The volume of production fell by 0.3 % in 1984 on the previous year. The total volume of animal production rose a little, but the quantity of grains marketed, which is significant for the total calculation, fell by 5 per cent on the previous year. The good yield is reflected in the input side. The use of commercial feed fell by about 10 %. Purchases of fertilizers also fell (7 %). There have only been small changes in the trend in the use of other inputs. These changes and the increase in producer prices contributed mainly to the increase in farm incomes.

III AGRICULTURAL POLICY

8. Overproduction continues

Although agricultural production has not increased, overproduction has become the most difficult problem for agricultural policy. This mainly concerns farmers, for the Farm Incomes Act sets the limits of the State's obligation to pay the costs of exporting the surplus. Production and export ceilings have been exceeded for all animal products, and this has raised the export costs of agriculture by up to 500 million marks. They amount to about 7 per cent of farm income. The value of the excess production above the ceilings is about 3 per cent of the total value of agricultural production.

Overproduction concerns the State, too. The rise in domestic producer prices and the fall in world market prices have increased the need for export subsidies. Surplus grain is still exported by the State, and since grain yield has been good in recent years, it has raised the export subsidies. The export ceiling for feed grains (480 mill. kg) will be effective at the beginning of 1986. The excess supply of feed grains will not be that high in normal years, unless animal production falls considerably. Then bread grains will be the only product with no export ceiling. So far, bread grain production has not advanced very well and therefore overproduction does not seem likely.

Overproduction of milk accounts for most of the export subsidies. Policy measures have not been effective enough, but the quantity of milk delivered to dairies has increased slightly. Formulation of the two-price system was one of the most important measures of agricultural policy in 1984. It was to become effective as from September 1, but the act could be enforced for only one year because of political opposition; it therefore became effective at the beginning of 1985.

When the incomes settlement was reached in the spring, it was agreed to extend the present Farm Incomes Act by two years, or up to the price year 1987/88. At the same time the production and

export ceilings were set for the two extra years. They are gradually being reduced, which means that agriculture has to curtail production further.

Investment activity in agriculture has been heavily constrained by many means. An almost complete halt in investment was effective in agriculture in 1984. However, capital problems are becoming increasingly serious at the same time. A special committee submitted report on the matter at the end of the year.

9. Regulating supply

Most measures in agricultural policy have focused on curtailing or reducing the surplus. The Farm Incomes Act has set production goals by placing a limit on the State financing of exports. Table 13 gives the production and export ceilings in 1979-87. As can be seen, the levels of the ceilings were revised as from 1983.

The ceilings for animal production have been exceeded every year (see Table 14). Grain production was not high enough for domestic consumption in 1979-82, and imports were necessary. Agriculture benefited from this, i.e. the export costs of agriculture for other products were correspondingly lowered. There is no export ceiling for grains in 1983-85, so the State is subsidizing all exports during these years.

Table 13. Production ceiling for milk delivered to dairies (million litres) and export ceilings for other products (mill. kg) in 1979-84.

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Milk	2710	2675	2675	2675	2790	2760	2730	2710	2695
Pork	14	13	13	13	18	16	14	14	13
Beef					14	12	12	12	12
Eggs	15	12	12	12	17	15	13	12	11
Bread grains	105	100	100	100					
Feed grains	210	200	200	200				480	480

Table 14. Amounts in excess of production and export ceilings and the share of agriculture in export costs in 1979-84.

		1979	1980	1981	1982	1983	1984
Milk	mill. l	181	274	193	183	153	175
Pork	mill. kg	13.3	12.5	26.7	23.1	7.5	5
Beef	"					3.5	5
Eggs	"	6	13.8	15.5	18.1	15.5	21.5
Bread grains	"	-	-	-	-	-	-
Feed grains	"	-	-	-	-	-	-
Export cost, mill. mk		153	329	229	206	380	452

Once the ceilings have been set, the State could conceivably leave the management of overproduction entirely to agriculture (which might be a good solution). The State has, however, bound itself to various measures for guiding and reducing production as the price for an agreement on ceilings. On the other hand, it might be impossible for farmers to manage the surplus without any legislative help. This forces the State to take part in regulating supply.

Effective regulation of supply is of course in the interests of agriculture. The various supply regulation and curtailment methods today form a comprehensive system, for which about 398 million marks were included in the State budget for 1984.

9.1. Restrictions on production

Special contracts to reduce agricultural production have been made with older farmers. A farmer then has to stop agricultural production for five years and compensation amounts to about 20-35 per cent of his earlier income. The effect of these contracts has been slight. Lapland has been partly outside the system owing to regional policy considerations.

Contracts for decreasing animal production have been in use since 1984. A farmer binds himself to stop all animal production for five years. The compensation is in relation to earlier incomes (about

20-35 %). Under this scheme pork production fell by about 5.7 mill. kg, egg production by about 1.4 mill. kg and milk production by about 19 mill. litres at an annual level.

The milk bonus system was one of the most important measures for restricting production in 1984. The system was made more attractive by lowering the minimum requirements for agreement. A 15 per cent decrease in production (or 5,000 litres per year) is needed for making an agreement. Earlier these limits were 25 per cent, or 10,000 litres. The agreement is made for three years and the farmers are paid 90 pennies per litre in compensation (65 p/l earlier). New agreements were made for about 25,500 dairy cows in 1984. This system included in total about 42,500 cows and the decrease in milk production was estimated to be about 203 million litres at an annual level.

Egg production has also been curtailed by special contracts. The farmer binds himself to stop production for four years and receives total compensation of 50 marks per slaughtered hen. The gross effect of these contracts is estimated to be about 5 mill. kg at an annual level. Under other contracts, egg production has been reduced by 1.4 mill.kg. Thus, the total effect of all contracts is about 6.4 mill. kg.

There are always farms going out of production and others starting. It is estimated that most of those that made the contract would have stopped or lowered production in any case, which means that the net effect of the contracts was not very large.

Egg production has also been curtailed by restricting hatchings. These have not been allowed to exceed those of the earlier years. Despite restrictions, egg production rose about 5 per cent in 1984.

Fallowing contracts were again possible in 1984. The area has to be at least 25 per cent of the total arable area of the farm and the contract is made for three years. The compensation was 1000-1200 marks per ha. These contracts were made for about 25,000 ha in 1984. The total area in fallow was 63,000 ha.

The soil bank system, which included only about 40,000 hectares of arable land in 1984 is coming to an end. Compensation was 380 marks per ha at the maximum. Termination of the system has been accelerated by paying the compensation for the rest of the agreement period (maximum 3 years), if the field has been sold for agricultural use. Most of the soil bank agreements will end in 1985.

Regulation of the establishment of large production units was continued in 1984. Permission from the Board of Agriculture is required if a production unit is to accommodate over 200 pigs, 1000 hens, 30,000 chickens, 20 dairy cows or 120 beef animals. In addition, a permit from the local authorities is required for the establishment of a production unit for over 8 dairy, 100 pigs or 500 hens. Moreover, larger new farms must have 3/4 self-sufficiency in feed and smaller new farms a 2/3 self-sufficiency.

There was an almost complete ban on new investments in 1984. New farms could be established only in the event the holding was transferred from one generation to another; even then the farm could not be expanded.

9.2. Marketing fees

Agriculture's share of the export costs of surpluses was estimated to have been 452 million marks. Since 49 million marks were carried over from the previous year, a total of 501 million marks had to be collected from farmers in 1984. Since the marketing fees are set by Parliament at the beginning of the year or during it according to predictions, they cannot fully correspond to the final marketing fees, which are calculated at the end of the year. It is thus estimated that only 440 million marks were collected, which means that 61 million marks were carried over to 1985.

The marketing fee for milk was 7.5 p/l up to the end of August, after which it was 2.5 p/l; since January 1, 1985 it has been 5.5 p/l. The marketing fee for pork was 15 p/kg up to the end of March, after which it was 5 p/kg. Some of the export costs are collected by excise taxes on fertilizers and feed mixers. The fertilizer tax was 10 p/kg up to the end of June and 12 p/kg

thereafter. The tax on poultry feed mixers (except for chicken) was 20 p/kg up to the end of June and 24 p/kg thereafter. For other feed mixers the tax was 12 and 14 p/kg, respectively. Large pork and poultry farms also paid an additional marketing fee.

The above figures indicate that the marketing fee for milk and the excise taxes on fertilizers and feed mixers account for the bulk of agriculture's share of the export costs.

9.3. Production support

Finnish production policy is characterized by measures to regulate supply. Production is, however, supported to some extent. The support is directed principally to beef production, which was expected to fall below consumption unless support measures were taken. It has been possible to increase production by raising the slaughter weights. Slaughtering of calves was quite common earlier which, of course, lowered the beef production capacity. There are very few purely beef animals in Finland; beef calves therefore come from milk production farms. The support policy has worked rather well, since large quantities of beef have been exported in recent years. Consumption predictions, on the other hand, have evidently been too optimistic.

A special production premium system has been developed for beef production. A premium is paid for beef if the slaughter weight is above 160 kg (see note to Table 11). Production support is also paid for mutton. These supports are all implemented as an internal income transfer in agriculture in the same way as other price political supports.

Beef production is also supported by a special beef programme. A farmer received a premium if he agreed to keep at least two cows for milk feeding of slaughter calves. The premium was 850 marks per cow in 1984. The scheme comprised about 8,000 cows at the end of 1984. New contracts were not done in 1984.

Bread grain production support was suspended in 1984. A special premium of 170 marks/ha was paid for feed grain production in northern Finland.

Internal income differences in agriculture are equalized by many means, leading to a kind of production support. Chapter 11 includes a summary of the measures taken to equalize income differences.

10. Investments

Short term fluctuations in agriculture depend primarily on climatic factors, but to some extent also on the use of fertilizers and feed. In the long term, the volume of production depends mainly on production capacity or on capital, land and labour. Investments in buildings, machinery and land provide the general framework for the scope of production. Building of new cow or pig houses or the repairing of old ones as well as the clearing of land increase production capacity and thus also production. Agricultural capacity can be considered to be in full use, even though the State has aimed to lower the rate of utilization, e.g. by fallowing premiums and milk and pork bonuses.

From a purely economic point of view, the regulation of supply should be started by building up the production capacity so that it is in the right proportion to production targets. Thus, investments should be made so that they are consistent with the target to achieve the correct level of production capacity. If this kind of level is reached, no measures would be necessary to curtail production; this would be the best solution for farmers. Production quotas may cause financial problems for farmers particularly if they have much of borrowed capital.

It is evident that restricting investments is as difficult as regulating supply. Investment restriction would, however, have the advantage that it would not make the position of present farmers any worse. The establishment of new animal farms is already controlled, but the regulation of investments could be extended until the correct production capacity level has been reached.

Investments in agriculture have increased quite rapidly in recent years, which is alarming since it indicates an intention to increase production. Gross investments vary from year to year for many reasons, such as good yield or economic result. General economic conditions, economic growth, easy money markets, stumpage price incomes, etc. may also effect investments. The most essential point though is how large a share of them is replacement investment and what proportion is used to create new production capacity. Unfortunately, there are no statistics on this.

10.1. Investment support

The State subsidizes investments with low interest loans through the Agricultural Development Fund. In 1984, 756 million marks were transferred to the Fund from the State budget. In addition, the Fund had its disposal interest and amortization payments of 224 million marks. The State also granted interest subsidies of 100 million marks for commercial loans, making the interest rate on them the same as that on loans granted by the Fund. The interest rate varies from 3 to 5 % (in some cases 6-7 %). The total amount of these interest subsidy loans was 512 million marks in 1984. Loans from the Development Fund have gone to developing areas; farmers in southern Finland therefore have to rely on interest subsidy loans, whose amortization period is shorter than that of the Development Fund loans.

The 'start money system' is becoming an important means of investment support. A young farmer (under 35 years) may be granted a subsidy of 50,000 marks when he starts to farm a holding. The subsidy may be used to buy machinery, fertilizers, etc. The aim of this system is to lighten the loan burden on young farmers. Experience has been bad in Western countries where young farmers have got into economic difficulties due to heavy loans. For this purpose, 61 million marks were included in the State budget in 1984, and at the end of the year this amount was increased by an additional 28 million marks, since applications exceeded expectations. All eligible candidates may receive this subsidy.

10.2. Agricultural indebtedness

Finnish agriculture is not yet as heavily indebted as that of many other nations. The amortization of debts has not become too difficult, since the State has supported investment activity, as was explained above, and because the official interest rate level has been regulated and has not risen so high as in many other Western countries.

Investments in agriculture have increased rapidly. Establishment of a new farm requires heavy investment and a large number of loans. Bankruptcies are also possible in Finnish agriculture. Decision-makers have realized this, and are prepared to prevent them. For instance, a special committee was set up in 1982 to examine agricultural indebtedness. It completed its report at the end of 1984.

In its report the committee stated that agricultural loans have increased in real terms since the mid-1970s, and even though capital stock has also been raised, the degree of indebtedness (the ratio between loans and capital) has increased slightly. Since the increase in capital stock is partly due to the growth in land price, the degree of indebtedness has actually mounted considerably. Young farmers with livestock farms are in particular difficulty.

A special stabilizing system was applied in 1979 and 1981 to support farms with large debts. The committee suggested that this method should be applied again. For this purpose new legislation should be passed concerning the loans for 1980-1984. The loans would be stabilized by converting them into long-term loans from the Development Fund.

The committee stated further that exceptional measures should not be the rule; excessive indebtedness should be prevented beforehand. This requires regulation of capital costs by increasing the share of equity and by better planning of investments.

11. Incomes policy

Internal income differences in agriculture are equalized by an extensive support policy realized through the State budget. In connection with incomes settlements, some of the price increases are transferred to price policy support, the size of which was 1,981.5 million marks according to the incomes decision made in autumn 1984. In other words, this amount was not levied on target prices, but is paid as hectarage or regional support, or as an additional price for milk, etc. to farmers from the State budget. Income differences are equalized quite well by that amount. To increase this price policy support (as it is called) in real terms is no longer considered necessary. According to current incomes legislation, it has to be raised in the same proportion as target prices.

Low-income farmers may receive a hectarage subsidy, which is paid throughout the country, if the income of a farmer is below a certain minimum. Hectarage subsidy is tied to the arable land and number of animals on a farm and it is at a maximum on farms of about 7-8 ha. The subsidy was 548 mark per 'production unit', rising towards the north by 50 %. The additional price of milk (see note to Table 11) is lowered according to the production level. Thus, it also serves the aims of the incomes equalization policy.

Regional subsidies are paid to milk and meat producers. For that purpose the country is divided into 8 regions. For each of them a stepwise-rising subsidy is determined annually. The boundaries have gradually been formed according to the practical solutions and have been subject to nearly constant change. The regional subsidy is very important to farmers in northern Finland. For instance, the regional subsidy is 14.5-26.5 p/l in the province of Oulu in the north. In the northernmost part of the country the subsidy is as high as 57 p/l. For beef the subsidy is about 7.8 mk/kg and for pork a maximum of about 0.75 mk/kg.

The feed price is reduced with a special subsidy in northern Finland. It may rise to 45 % of the costs, but to no more than 9000 marks/year.

12. Social policy

Farmers are both workers and entrepreneurs at the same time. This is why development of their social security has lagged. Farmer's unions have tried to emphasize the importance of social security in connection with price settlements and to improve the position of farmers in this respect.

The latest achievement was the one-day increase in annual leave. Farmers with animals may have 15 days' annual leave. The local authority hires a labourer as a leave replacement. Agriculture pays about half the costs by lowering the target prices by the same amount when the price decision is made. The amount was 19 million marks in 1984.

The scheme for days off is under further development. All farmers will get 12 days off a year, beginning in 1985, but only one day at a time. Farmers have to pay a part of the costs of the scheme, the maximum being 50 %. The target is an average of 30 % of the costs of the whole system. The costs will be taken into account in the cost calculation in setting of prices, payments by the State being counted as income for farmers.

The substitute system in cases of illness, occupational health care and pension security will be further developed according to the price settlement in spring 1984.

13. Two-price system for milk

There has been a production ceiling on milk since 1979 to curtail production (see Table 13). This collective system has not, however, been effective, for milk production (or to be more precise, the milk quantity delivered to dairies) has grown steadily, and the marketing fees have risen correspondingly. The two-price system for milk came into effect at the beginning of 1985. It is hoped that it will curtail production more effectively.

The two-price system is based on legislation which is, however, effective for only one year, since opposition prevented enactment for a longer period; it will have to be renewed for the next year. According to the new act, a quota will be levied on every milk farm. The quota will be determined according to the higher production in either 1981/82 or 1982/83. Each farm can, however, produce up to 30,000 litres without permission. Production in excess of the individual quota will be paid the world market price only. In practice this will be realized by collecting a marketing fee of 1.60 marks/l from the farmer.'

Dairies informed dairy farms of their quotas at the beginning of 1985 and the farmers had one month to apply for alteration of the quota. The State will decide annually on changes in quotas and issue instructions on how quotas will be granted to new dairy farms. Government officials will regulate the quotas, which will not be for sale. At least initially, the system will be very rigid and will not allow changes in the structure of milk production.

A double production control system exists for milk in Finland: the collective production quota and the individual quotas. The sum of the latter quotas is higher than the collective quota. They do not force any farm to curtail production, but the individual quota will make an increase in production unprofitable. The individual quota will therefore prevent any increase in production and, in the longer term, total milk production may drop. Small farms may, however, increase production and thus offset the aim of curtailing production. The marketing fees will remain a burden for agriculture until total production falls below the collective ceiling.

IV SUMMARY AND CONCLUSIONS

Economic development in Finland was good in 1984. The Gross National Product grew by about 4 %, the trade balance was positive and the exchange reserves of the Bank of Finland rose to a very high level. Unemployment fell to 5.8 % even though it is still considered too high.

Agricultural development was also favourable. The total yield was rather good, or 5367 million feed units. The per hectare yield was the second best ever recorded, or 2647 f.u. Rain in the autumn detracted somewhat from the overall achievement. Some wheat and oats could not be harvested and wheat quality was in part so bad that it is good only for feed. However, the quantity of feed exceeds domestic demand, and about 450 million kg of feed grains will have to be exported or stored. The yields of other plant products were at least satisfactory.

After two good yields farm income has risen rather favourably. According to a preliminary estimate, farm income rose by 12 % in 1984. The approximately 6 % increase in producer prices contributed mostly to this increase in income. On the other hand, the use of purchased feed fell by 10 % owing to the good feed grain yield. Purchases of fertilizers also declined.

Surpluses have caused the most trouble for policy-makers. Production ceilings have been exceeded consistently and so export fees for agriculture rose to about 500 million marks in 1984. This represented about 7 % of farm income. Many supply regulating measures were applied, but they did not bring about satisfactory results. State appropriations on these measures was 398 million marks in 1984.

The most significant new phase in agricultural policy was the enactment of the two-price system for milk, beginning in 1985. It does not force farmers to reduce milk production, but it prevents further increase in production. The legislation could be enforced for only one year because of strong opposition.

The conduct of Finnish agricultural policy is hampered by conflicting goals. Production should be decreased, since export is unprofitable. Maintaining the population of rural areas is considered the task of agriculture, which implies that as many farms as possible should be kept in production. There are, however, still many small farms that cannot generate sufficient income. Production should be increased on these farms, but this conflicts with the general production goals. The conflict seems unsolvable.

New jobs should be created in the countryside in this situation. Agriculture can partly support this process. Raising of fur-bearing animals, peat production, cultivation of forests for energy production, etc., are good examples of subsidiary occupations of agriculture. Nevertheless, these may not be enough to maintain the rural population at the present level.

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Appendix 1. Some price indices.

	Wholesale price index	Consumer price index	Producer price index of agriculture
1970	100	100	100.0
1971	105	106	103.7
1972	114	114	115.0
1973	134	127	129.4
1974	167	150	150.2
1975	189	176	188.2
1976	211	201	213.6
1977	233	226	229.4
1978	245	243	242.5
1979	266	261	257.2
1980	309	291	288.2
1981	352	326	324.5
1982	378	357	370.0
1983	400	388	394.8
1984 ^e	424	415	420.7

Appendix 2. Cost price index in agriculture with subindices.

	Cost price index	Requisites	Machines and tools	Buildings
1970	100.0	100.0	100.0	100.0
1971	107.9	103.6	109.2	109.2
1972	116.9	107.6	120.2	123.6
1973	135.6	122.2	133.4	155.5
1974	167.9	154.6	162.7	201.4
1975	205.9	188.4	208.3	230.2
1976	238.4	255.3	231.2	255.4
1977	273.6	267.3	258.1	281.4
1978	285.4	273.8	282.2	294.9
1979	304.3	282.8	308.7	325.6
1980	341.7	318.0	341.2	372.1
1981	394.0	384.9	374.6	400.8
1982	427.5	423.2	404.0	424.2
1983	464.2	461.3	445.7	454.3
1984 ^e	501.7	501.9	473.4	479.6

Appendix 3. Some figures of the agriculture structure.

	Number of ¹⁾ farms, 1000 pcs	Average ¹⁾ size of farms, hectares	Number of milk suppliers 1000 pcs	Employed persons in agriculture 1000 persons	% of total labour force
1970			190	404	19.0
1971			175	374	17.6
1972	274.4	9.31	163	339	16.0
1973	265.9	9.54	151	304	14.0
1974	258.2	9.79	140	303	13.6
1975	248.7	10.05	128	277	12.5
1976	242.7	10.26	119	244	11.3
1977	237.7	10.43	112	223	10.6
1978	232.8	10.60	104	208	10.0
1979	229.3	10.78	98	200	9.4
1980	224.7	10.96	91	200	9.1
1981	218.9	11.16	85	200	8.9
1982	212.6	11.42	78	206	9.0
1983			74	246 ²⁾	10.3 ²⁾
1984 ^e			70	245	10.2

1) Over 1 hectare.

2) The method of data collection has been revised in 1983. The data are not comparable with previous data.

Appendix 4. Number of animals in June and the average yield per cow.

	Dairy cows 1000 pcs	Yield per cow, litres	Pigs 1000 pcs	Hens 1000 pcs
1970	889.1	3677	1002.4	4470.9
1971	849.3	3806	1129.3	5249.0
1972	836.5	3889	1045.7	5963.7
1973	823.6	3839	1139.3	5869.0
1974	818.5	3856	1048.9	5803.2
1975	773.2	3997	1036.1	5943.3
1976	763.1	4200	1053.9	6333.2
1977	751.6	4197	1143.3	6245.1
1978	742.0	4260	1244.7	6046.4
1979	730.1	4336	1288.7	6029.4
1980	719.5	4478	1410.2	6040.7
1981	700.8	4450	1467.1	5200.2
1982	689.2	4493	1475.3	5291.5
1983	663.1	4778	1440.7	5440.4
1984 ^e	659.5	4790 (e)	1389.8 ¹⁾	6025.3

1) Including the pigs of dairies.

Appendix 5. Sales of fertilizers (kg/ha).

	N	P	K
1969-70	58.3	27.2	40.0
1970-71	63.7	29.4	43.5
1971-72	68.5	30.5	46.5
1972-73	69.4	30.8	47.4
1973-74	78.2	33.9	52.0
1974-75	85.8	34.2	53.9
1975-76	79.6	29.5	47.6
1976-77	65.4	25.0	41.1
1977-78	69.1	25.8	43.3
1978-79	76.9	27.8	47.4
1979-80	83.3	28.0	50.2
1980-81	82.4	27.8	49.3
1981-82	78.7	26.8	47.5
1982-83	91.4	29.9	53.8
1983-84	90.7	30.9	55.9

Appendix 6. Agricultural gross return in current prices, mill. mk.

	1978	1979	1980	1981	1982	1983
Crop production						
Rye	63.3	82.4	148.8	121.3	67.2	184.4
Wheat	178.4	173.0	310.9	345.8	544.3	901.8
Barley	455.2	461.7	572.5	644.1	826.2	1338.5
Oats	177.5	200.6	308.1	350.9	488.2	799.9
Potatoes	88.2	122.3	216.5	198.8	362.3	205.6
Potatoes for processing	73.7	88.5	98.6	102.5	110.6	182.0
Sugar beets	206.8	199.2	286.3	253.5	349.6	454.0
Oil plants	86.3	94.1	166.7	182.1	264.3	388.0
Peas	9.9	10.3	10.3	20.1	33.7	51.5
Grass seeds	12.5	20.2	26.4	42.5	45.6	43.5
Total	1351.8	1452.3	2145.1	2261.6	3092.0	4529.2
Garden production						
Vegetables	210.2	205.7	261.8	369.7	373.4	373.3
Root crops	40.0	22.6	47.5	36.1	51.3	46.5
Fruits	30.3	42.0	40.3	46.9	30.3	49.8
Berries	60.0	66.9	71.0	142.1	173.6	168.8
Total	340.5	337.2	420.6	594.8	628.6	638.4
Animal production						
Milk	4773.3	5176.4	5762.5	6119.2	6881.9	7604.3
Beef	1548.1	1676.8	2007.8	2380.2	2586.4	2836.8
Veal	4.1	6.6	2.5	4.1	4.2	2.9
Pork	1400.4	1543.9	1711.0	2057.9	2290.0	2422.3
Mutton	15.6	17.1	19.6	23.9	28.4	31.3
Horse meat	11.6	10.0	11.4	12.8	12.5	13.4
Poultry	76.6	93.8	114.3	147.7	156.4	182.1
Wool	1.6	1.7	1.7	2.1	2.3	1.7
Eggs	440.8	486.0	577.7	674.2	764.2	826.0
Exports of animals	7.7	5.3	5.4	7.4	9.4	10.3
Total	8279.8	9017.6	10213.9	11429.5	12735.7	13931.1
Subsidies						
by farm size	217.4	246.0	283.2	351.3	426.8	500.4
by number of cows	16.8	36.8	40.5	42.6	48.4	53.7
for purchased fodder	22.4	25.4	27.4	34.3	44.6	49.4
Premium on bread grains	-	-	-	-	79.5	16.8
Premium on feed grains	-	-	-	-	28.7	30.3
Premium on beef	-	-	3.6	3.0	5.2	6.0
"Start money"	-	-	-	-	0.0	10.5
Total	256.6	308.2	354.7	431.2	633.2	667.1
Compensations						
for crop damages	17.5	11.5	7.9	2.3	426.8	19.1
Production guiding	-	-	2.8	20.5	48.7	66.1
Egg bonus	-	-	-	11.9	5.0	5.5
Milk bonus	-	-	-	8.6	24.1	49.5
Pork bonus	-	-	-	-	-	1.5
Fallowing payments	-	20.6	31.1	-	-	-
Total	17.5	32.1	41.8	43.3	504.6	141.7
Gross return total	10246.2	11147.4	13176.1	14760.4	17594.1	19907.5
Index (1975=100)	126.5	137.6	162.7	182.2	217.2	245.8
Change %	+2.7	+8.8	+18.2	+12.0	+19.2	+13.1

Appendix 6, continued. Costs in current prices, mill. mk.

	1978	1979	1980	1981	1982	1983
Fertilizers	975.6	1059.8	1232.3	1333.9	1635.8	1746.1
Lime	54.0	50.9	69.8	41.7	72.8	130.7
Feed concentrates	1584.3	1854.4	2416.6	3097.5	3752.4	3422.5
Feed conserving chemicals	64.0	76.0	86.5	95.8	93.6	126.9
Pesticides	89.2	116.5	134.4	141.4	140.7	192.5
Equipment	57.8	66.3	77.8	85.2	96.7	109.6
Skimmed milk	27.1	20.6	20.7	20.5	24.4	21.3
Whey	2.3	2.3	2.4	3.0	3.7	4.6
Fuel and lubricants	365.8	480.1	609.8	701.9	866.9	926.7
Electricity	174.0	189.1	209.2	243.7	273.7	263.7
Purchased seeds	215.6	229.8	237.3	274.7	378.2	398.1
Hired labor	253.3	265.0	271.7	278.9	304.7	299.4
Social expenses	102.5	107.5	112.1	118.7	135.1	132.2
Machinery and equipment expenses	1691.3	1935.1	2210.7	2526.5	2764.4	3100.8
Building expenses	668.5	721.8	870.8	969.5	1096.2	1220.7
Interest payment	299.3	346.4	448.9	528.7	613.3	684.7
Imports of animals	0.4	0.4	0.6	0.8	0.3	1.3
Overhead costs	574.0	644.6	724.9	809.4	888.8	929.7
Costs total	7199.0	8166.6	9736.5	11271.8	13141.7	13711.5
Index (1975=100)	144.6	164.1	195.6	226.4	264.0	275.4
Change %	+15.5	+13.4	+19.2	+15.8	+16.6	+4.3
Gross return	10246.2	11147.4	13176.1	14760.4	17594.1	19907.5
Costs	7199.0	8166.6	9736.5	11271.8	13141.7	13711.5
Farm income	3047.2	2980.8	3439.6	3488.6	4452.4	6196.0
Index (1975=100)	97.6	95.5	110.2	111.8	142.6	198.5
Change %	-18.6	-2.2	+15.4	+1.4	+27.6	+39.0

Appendix 7. Agricultural gross return in fixed prices, mill. mk.¹⁾.

	1978	1979	1980	1981	1982	1983
Crop production						
Rye	101.9	105.0	148.8	111.3	55.1	128.4
Wheat	309.3	245.7	310.9	330.8	447.6	630.9
Barley	593.4	567.8	572.5	509.9	566.5	836.1
Oats	230.9	244.3	308.1	286.3	343.5	499.2
Potatoes	157.8	177.1	216.5	190.6	221.0	216.4
Potatoes for processing	91.7	101.7	98.6	89.2	81.4	129.8
Sugar beets	234.0	221.5	286.3	215.0	251.2	337.1
Oil plants	107.7	110.6	166.7	164.5	198.9	249.0
Peas	10.3	10.3	10.3	11.6	16.2	21.5
Grass seeds	7.8	19.0	26.4	28.0	37.7	34.3
Total	1844.8	1803.0	2145.1	1937.2	2219.1	3082.7
Garden production						
Vegetables	278.0	281.0	261.8	271.0	289.1	315.0
Root crops	54.0	30.1	47.5	32.8	25.1	39.7
Fruits	32.4	47.9	40.3	56.5	32.6	53.1
Berries	72.5	75.2	71.0	122.4	152.4	132.5
Total	436.9	434.2	420.6	482.7	499.2	540.3
Animal production						
Milk	5670.5	5703.9	5762.5	5577.7	5557.4	5679.3
Beef	1868.7	1909.4	2008.5	2150.1	2059.8	2039.4
Veal	4.9	7.4	2.5	3.7	3.7	2.5
Pork	1564.1	1660.3	1711.0	1825.4	1829.5	1795.0
Mutton	19.6	19.6	19.6	21.8	24.0	26.2
Horse meat	13.9	11.4	11.4	11.4	10.1	10.1
Poultry	90.1	103.7	114.3	128.7	124.9	138.5
Wool	1.7	1.7	1.7	1.6	2.0	1.4
Eggs	560.8	555.6	577.7	583.5	565.2	606.3
Exports of animals	8.6	5.8	5.4	6.5	7.5	7.7
Total	9802.9	9978.8	10214.6	10310.4	10184.1	10306.4
Subsidies						
by farm size	274.8	285.8	283.2	309.2	349.6	386.8
by number of cows	21.2	42.8	40.5	37.5	39.6	41.5
for purchased fodder	28.3	29.5	27.4	30.2	36.5	38.2
Premium on bread grains	-	-	-	-	65.1	13.0
Premium on feed grains	-	-	-	-	23.5	23.4
Premium on beef	-	-	3.6	2.6	4.3	4.6
"Start money"	-	-	-	-	0.0	8.1
Total	324.3	358.1	354.7	379.5	518.6	515.6
Compensations						
for crop damages	22.1	13.4	7.9	2.0	349.6	14.8
Production guiding	-	-	2.8	18.0	39.9	51.1
Egg bonus	-	-	-	10.5	4.1	4.3
Milk bonus	-	-	-	7.6	19.7	38.3
Pork bonus	-	-	-	-	-	1.2
Fallowing payments	-	23.9	31.1	-	-	-
Total	22.1	37.3	41.8	38.1	413.3	109.7
Gross return total	12431.0	12611.4	13176.8	13147.9	13834.3	14554.7
Index (1975=100)	102.2	103.7	108.4	108.1	113.8	119.7
Change %	-3.3	+1.5	+4.5	-0.2	+5.2	+5.2

1) 1980 prices.

Appendix 7, continued. Costs in fixed prices, mill. mk.¹⁾

	1978	1979	1980	1981	1982	1983
Fertilizers	1088.0	1138.1	1232.3	1091.3	1640.7	1310.2
Lime	52.4	52.7	69.8	39.2	59.9	102.5
Feed concentrates	1749.7	2025.1	2416.6	2530.3	2720.7	2185.2
Feed conserving chemicals	82.9	90.4	86.5	89.2	87.9	115.2
Pesticides	102.0	129.0	134.4	129.9	124.2	146.4
Equipment	70.8	73.5	77.8	77.3	82.2	84.7
Skimmed milk	49.8	22.7	20.7	17.2	13.6	10.9
Whey	2.4	2.4	2.4	2.6	2.6	2.6
Fuel and lubricants	713.1	746.7	609.8	564.2	679.4	679.4
Electricity	198.8	209.6	209.2	208.6	219.1	220.0
Purchased seeds	347.5	257.7	237.3	233.0	270.6	261.8
Hired labor	315.8	293.7	271.7	249.6	242.7	223.4
Social expenses	127.8	119.2	112.1	106.3	107.6	98.6
Machinery and equipment expenses	2058.9	2140.8	2210.7	2299.1	2342.6	2382.3
Building expenses	853.9	865.2	870.8	891.7	956.3	988.7
Interest payment	434.2	469.9	448.9	450.5	536.7	565.4
Imports of animals	0.5	0.5	0.6	0.7	0.2	1.0
Overhead costs	725.6	748.9	724.9	712.5	728.0	728.0
Costs total	8974.1	9386.1	9736.5	9693.2	10815.0	10106.3
Index (1975=100)	104.3	109.1	113.2	112.7	125.7	117.5
Change %	+9.8	+4.6	+3.8	-0.4	+11.5	-6.6

1) 1980 prices

CORRECTED

Appendix 7, continued. Costs in fixed prices, mill. mk.¹⁾

	1978	1979	1980	1981	1982	1983
Fertilizers	1088.0	1138.1	1232.3	1091.3	1247.5	1310.2
Lime	52.4	52.7	69.8	39.2	59.9	102.5
Feed concentrates	1749.7	2025.1	2416.6	2530.3	2720.7	2185.2
Feed conserving chemicals	82.9	90.4	86.5	89.2	87.9	115.2
Pesticides	102.0	129.0	134.4	129.9	124.2	146.4
Equipment	70.8	73.5	77.8	77.3	82.2	84.7
Skimmed milk	49.8	22.7	20.7	17.2	13.6	10.9
Whey	2.4	2.4	2.4	2.6	2.6	2.6
Fuel and lubricants	713.1	746.7	609.8	564.2	679.4	679.4
Electricity	198.8	209.6	209.2	208.6	219.1	220.0
Purchased seeds	347.5	257.7	237.3	233.0	270.6	261.8
Hired labor	315.8	293.7	271.7	249.6	242.7	223.4
Social expenses	127.8	119.2	112.1	106.3	107.6	98.6
Machinery and equipment expenses	2058.9	2140.8	2210.7	2299.1	2342.6	2382.3
Building expenses	853.9	865.2	870.8	891.7	956.3	988.7
Interest payment	434.2	469.9	448.9	450.5	536.7	565.4
Imports of animals	0.5	0.5	0.6	0.7	0.2	1.0
Overhead costs	725.6	748.9	724.9	712.5	728.0	728.0
Costs total	8974.1	9386.1	9736.5	9693.2	10421.8	10106.3
Index (1975=100)	104.3	109.1	113.2	112.7	121.2	117.5
Change %	+9.8	+4.6	+3.8	-0.4	+7.5	-6.6

1) 1980 prices

