

AGRICULTURAL ECONOMIC REPORT 1995
Summary

November 1995

Agricultural Economics Research Institute (LEI-DLO)
The Hague
The Netherlands

ABSTRACT

AGRICULTURAL ECONOMIC REPORT 1995; SUMMARY

Bruchem, C. van, H.J. Silvis and I.J. Terluin (eds.)

The Hague, Agricultural Economics Research Institute (LEI-DLO), 1995

Periodical Report/Periodieke Rapportage 2-95

ISSN 0924-0764

28 p., tab.

This Periodical Report offers an English summary of the contents of the Agricultural Economic Report 1995 (235 p.), which is published in Dutch. A general survey is given of the economic situation of Dutch agriculture and horticulture for the past years. Among other subjects, attention is paid to the Common Agricultural Policy and developments in the agricultural production in the world, in the EU and especially in the Netherlands and to the processing, marketing, imports and exports of agricultural products. Furthermore an analysis is made of the development of rentability, income, investments and the financial situation of agricultural and horticultural holdings in the Netherlands. Finally the report deals with developments in the structure and the utilization of land and labour in Dutch agriculture.

Agriculture/Agricultural Policy/Trade/Farm Structure/Agricultural Production/Farm results/Incomes/Netherlands

LANDBOUW-ECONOMISCH BERICHT 1995; SAMENVATTING

Het Landbouw-Economisch Bericht 1995 geeft een overzicht van de economische situatie van de Nederlandse land- en tuinbouw in de afgelopen jaren. Daarbij wordt onder andere aandacht besteed aan het EU-landbouwbeleid, de ontwikkeling van de landbouwproductie in de wereld, in de EU en meer in het bijzonder in Nederland en aan de verwerking, de afzet en de in- en uitvoer van agrarische producten. Voorts volgen analyses van de ontwikkeling van rentabiliteit, inkomens en investeringen in de land- en tuinbouw en de verschillende bedrijfstypen. Tenslotte wordt ingegaan op enkele ontwikkelingen in de structuur en op de inzet van arbeid en grond in de Nederlandse agrarische sector.

Landbouw/Landbouwbeleid/Handel/Bedrijfsstructuur/Productie/Bedrijfsuitkomsten/Inkomens/Financiële positie/Nederland

The contents of this report may be quoted or reproduced without further permission. Due acknowledgement is requested.

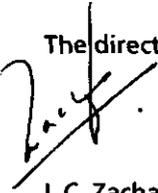
CONTENTS

	Page
PREFACE	5
1. INTRODUCTION	7
2. THE ECONOMIC AND POLITICAL FRAMEWORK	8
2.1 General economic developments	8
2.2 European integration	8
2.3 Agriculture in the world	9
3. AGRICULTURE IN THE EUROPEAN UNION	10
3.1 Production and income development	10
3.2 The agricultural budget	10
3.3 Institutional prices and agrimonetary developments	11
3.4 Reform of EU agricultural policy	11
3.5 Structural, rural and environmental policies	12
4. PRODUCTION AND TRADE IN THE NETHERLANDS	13
4.1 Production and prices	13
4.2 Processing and consumption of agricultural products	14
4.3 Agricultural imports and exports	15
5. RESULTS OF SECTORS AND HOLDINGS	17
5.1 Returns and costs of the arable and livestock sector	17
5.2 Returns and costs of the horticulture under glass sector	17
5.3 Results of arable farms	18
5.4 Results of dairy farms	19
5.5 Results of pig and poultry farms	19
5.6 Results of horticultural holdings	20
5.7 Distribution of family farm incomes	22
6. FINANCING AND INVESTMENTS	23
7. STRUCTURAL DEVELOPMENTS IN DUTCH AGRICULTURE	25
7.1 Development of the number of holdings	25
7.2 Labour	26
7.3 Land use and landscape conservation	26
ANNEX - Definitions	28

PREFACE

The Agricultural Economic Report is an annual publication, offering a global survey of the economic situation of Dutch agriculture and horticulture. This English summary is published separately as part of the series 'Periodieke Rapportages' (Periodical Reports). The complete report is available only in Dutch.

The report is based on data and contributions from nearly all divisions of the Institute. The coordination and editorship of the report is conducted by the General Economics and Statistics Division. The final draft of this edition of the report was completed in the course of August 1995.

The director,


L.C. Zachariasse

The Hague, November 1995

1. INTRODUCTION

Dutch agriculture and horticulture are going through hard times. The net value added of agriculture (arable and livestock farming) fell sharply in 1992/93 and 1993/94. It is true that some recovery is estimated for 1994/95, but the prospects for 1995/96 are again less favourable. In horticulture under glass a comparable development may be observed: a decline in the net value added in 1992 and 1993, strong recovery in 1994 and sombre prospects for 1995.

The income level of the holdings is in general disappointing, but there are great differences between and also within the individual farming types. The arable farms showed favourable results in 1994/95. The dairy farms are contending with declining results, while the intensive livestock farms and horticulture under glass holdings are at a low ebb. The results of the field vegetable holdings are modest, but for the fruit growers a recovery is estimated for 1994 after the very low incomes in 1993. The mushroom and flower bulb growers had a good year in both 1993 and 1994.

In the Agricultural Economic Report 1995 the results outlined above are described in further detail and their causes and consequences analysed. First the international and national economic and political developments are discussed, with particular attention to the Common Agricultural Policy (CAP). Then agricultural production, processing and marketing are considered. After the analyses of the economic results of the principal sectors and of farming types, the publication concludes with observations on the structure of the farms and the utilization of labour and land in agriculture and horticulture.

2. THE ECONOMIC AND POLITICAL FRAMEWORK

2.1 General economic developments

With an average growth of nearly 3% the economy of the OECD countries recovered in 1994 from the recession that had been going on since the beginning of the nineties. In almost all Central and Eastern European countries a period of cautious economic recovery has dawned; however, the Russian economy contracted in 1994 by some 15%. The developing countries displayed an economic growth of over 5% on average in 1994.

Under the influence of the improving international economic situation, economic growth in the Netherlands in 1994 was at 2.5% stronger than in the two previous years. The profitability of industry improved, but total employment fell by some 10,000 labour units. Only the services sector displayed a limited growth of employment. Inflation in 1994 was in excess of 2.5%. The prices of foodstuffs rose on average by close on 2% and wage costs too increased by some 2%.

In national policy driving back the financial deficit still plays an important role. Reduction of government support to industry also affects the agricultural sector. Thus the governmental contribution to inspection costs, advisory services and research is being or has been gradually cut back or run down, which means higher costs for the agricultural sector. In the 'Change and Renewal' policy memorandum that the Dutch Agricultural Minister published in April 1995, these lines are continued. In addition to cuts and cost increases, however, measures are also being taken that are favourable to the agricultural sector, such as a general reduction in the tax burden and a lowering of the wage costs of the lower pay scales. In that memorandum considerable attention is also devoted to nature and landscape, the dynamics of the rural area and innovative projects.

2.2 European integration

From 1 January 1995 Austria, Sweden and Finland joined the EU. As a result, the population of the EU has risen by nearly 22 million to over 370 million. The possibilities for expansion of agricultural exports from the EU-12 to the new Member States are limited on account of the small size of the markets and the high degrees of self-sufficiency. However, for the Netherlands there are chances for ornamental products, and also for fresh fruit and vegetables.

The European Summit in December 1994 again confirmed that the Central and Eastern European (CEE) countries may join the EU, provided that they satisfy certain political and economic conditions. The possible expansion of the

EU to the east has provoked fierce discussion on its consequences for the (agricultural) policy, the budget and the institutions of the EU. The estimates of the consequences of this expansion for agricultural expenditure vary from 6 billion ECU to more than 35 billion ECU. The differences come about above all through varying assumptions with regard to the growth of agricultural production in the CEE countries. In 1996 the Intergovernmental Conference (IGC) is to be organized, at which among other things the Maastricht Treaty and the institutional structure of the EU will be discussed. The negotiations on EU membership for the CEE countries cannot begin until after the IGC.

2.3 Agriculture in the world

The world production of cereals, sugar, soya beans, pulses and the most important kinds of meat was greater in 1994 than in the previous year. Fewer potatoes were produced, while the production of milk remained practically the same as in 1993. Agricultural production in the developing countries increased more than that of the developed countries. In 1994 the prices of agricultural products on the world market in dollars rose by nearly 20% on average. This rise related above all to tropical products such as coffee and agricultural raw materials for industrial use. World prices of sugar and wheat rose, whereas those of feed grains, oil seeds and beef fell.

The OECD has calculated that protection of agriculture in 1994 roughly speaking did not decrease. The rate of protection, measured in Nominal Assistance Coefficients (NAC), for the joint OECD countries even worked out higher in 1994 than in 1993. The volume of agricultural world trade in 1994 was barely larger than in 1993.

With effect from 1 January 1995 the GATT organization has been succeeded by the World Trade Organization (WTO), which supervises compliance with the GATT agreement signed in 1994 and has to settle any trade disputes. Meanwhile, the various blocs have worked on implementation of the agreement in agricultural policy. To regulate the reduction of export refunds the EU has switched with effect from 1 July 1995 to a system of export licences with prefixed export refunds. Further, the import levies have been replaced by tariffs, while minimum access to the market is regulated by tariff quotas.

3. AGRICULTURE IN THE EUROPEAN UNION

3.1 Production and income development

In 1994 the volume of agricultural production in the EU decreased for the second successive year. As a result, production returned to the 1989 level. Between 1984 and 1989 production was still growing by 4-5% and in the period 1979-1984 by 10%. Although it is not the only factor, it may be concluded from these data that the EU policy aimed at production restriction has been reasonably successful, at least for the past years. The average selling price of all agricultural products in the EU improved in 1994 by 3.5%, after it had fallen by over 1% in 1993 and in the year before that by nearly 5%. The prices of animal products rose on average in 1994 by only 0.6%, but those of vegetable products by 6.7%. The prices of purchased means of production remained on average practically the same. The gross value added of the agricultural sector in the EU increased nominally by over 4% in 1994. On estimate the real increase in family farm income per family worker in the EU was 10-15%. In 1993 it had improved by some 3%.

In the Netherlands real income per family worker displayed a recovery of over 25% in 1994, after a fall of approximately the same extent had occurred in 1993. In recent years the development of agricultural income in the Netherlands has lagged behind that of most of the other EU countries. Among others, this is caused by the fact that in the Netherlands a relatively small part of the Mac Sharry price reduction is compensated for by premiums, on account of the small proportion of products in the Dutch production package for which premiums are given. In addition the depreciations, wage costs paid and interest paid have developed less favourably and the volume of labour has fallen less in the Netherlands than in the rest of the EU.

3.2 The agricultural budget

The expenditure on market and price policy in the EU amounted to nearly 35 billion ECU in 1991. That was about the same as in 1993. For 1995 expenditure has been estimated at nearly 37 billion ECU. On estimate about half of the total EU budget is then devoted to market and price policy. Ten years earlier it was still some 70%. A steadily growing part of the agricultural budget is intended for premiums and a steadily smaller part for export refunds. The rest of the EU budget includes the expenditure on structural policy, the costs of the staff of officials, food aid, foreign policy and aid to Central and Eastern Europe.

The receipts of the EU consist of agricultural levies, import duties, VAT and GNP payments from the Member States. Up to 1992 the Netherlands was

a net recipient, but in 1994 over 4 billion guilders more was paid to the EU than received from it. It is expected that in 1999 the net contribution will work out at over 6 billion guilders. Expressed as a percentage of the GDP, the Netherlands has in 1995 become the largest net contributor to the EU.

The switch in the payment position of the Netherlands is bound up with the introduction of the milk quotas, as a result of which dairy expenditure has fallen sharply, the 'Own Resources Agreement' of the European Summit in Edinburgh in 1992 and the Mac Sharry reform of agricultural policy. The agreement lays down inter alia that the budget for the Structural Funds will rise from 21 billion ECU in 1994 to 29 billion ECU in 1999. The receipts for the Netherlands from these funds are minimal. Through the Mac Sharry reform a larger part of the budget is devoted to direct income payments, of which the Netherlands receives relatively little. The net position of the Netherlands forms only the tip of the iceberg. It brings to light only the visible, easily quantifiable money flows. The economic advantages of membership of the EU, such as free access to a large market, naturally extend much further.

3.3 Institutional prices and agrimonetary developments

As part of the Mac Sharry reform long-term agreements were made on the reduction of the EU prices for cereals and beef and on the raising of compensatory payments and premiums. In the Price Decisions for 1994/95 and those for 1995/96 these agreements were confirmed, while the prices of nearly all other products remained unchanged.

Since the abolition of the Monetary Compensatory Amounts in 1993, changes in exchange rates have a practically direct effect on the development of EU prices in national currency. In 1995 the agrimonetary system has again been changed. The so called switch-over mechanism has abolished in such a way that the prices for the farmers remained the same. In addition the rules for adjustment of the green rates have been revised and a new compensation scheme has been introduced for 'considerable revaluations' of green rates. The former adjustments of the green rates meant for most countries, except Germany, Belgium and the Netherlands, an increase in national prices. Thus prices in Italy rose by more than 30% between 1 January 1993 and 1 July 1995. With effect from 1 July 1995 the green rate of the guilder has been revalued to such an extent that intervention prices in the Netherlands fell by over 2.5%. By way of compensation for the income consequences of this for Dutch farmers the EU has made a maximum 280 million guilders available for the period 1995-1999.

3.4 Reform of EU agricultural policy

One of the aspects of the Mac Sharry reform was the obligation for larger producers to set aside part of the area for which compensatory premiums were requested. In total some 7.3 million hectares in the EU-12 had been set aside in accordance with policy in 1994, or 10% of the arable land in the EU. In Octo-

ber 1994, at France's suggestion, it was decided to reduce the set-aside percentage for the normal, rotating set aside from 15 to 12 and that for fixed set aside from 20 to 17. As a result, the area set aside in the EU will decrease in 1995.

The market situation for cereals further improved in 1994/95. Cereal production fell by approximately 1.5 million tons to 161.5 million tons, while consumption increased on estimate by 2.5 million tons to 145 million tons. As a result, the export surplus of cereals worked out at some 16 million tons, which was about half that before 1993 and also clearly less than the 23 million tons that the EU may export with refunds to the world market under the GATT agreement.

Sugar consumption in the EU has in recent years been above the quota for A sugar, for which the producer receives a high price. Partly on the strength of the fairly favourable situation on the world market, it has been decided to extend the existing sugar policy to the year 2000/01, including the quota system and the self-financing. As regards the southern products, wine policy in particular is under discussion. According to the EU-Commission, national reference quantities ought to be fixed that lie considerably below the present production level. Spain and Italy in particular have objections to the proposals.

Milk production in the EU is stable thanks to the quota system and the dairy consumption is somewhat increasing. Therefore the intervention stocks in this sector remained low in 1994 and expenditure on dairy policy was falling. Drastic changes in policy for this sector have not occurred in the past year; only the intervention price of butter for the 1994/95 season was lowered. For a possible further reform of beef policy no concrete proposals have been made as yet. The sheepmeat regulations are at present not the subject of discussion.

3.5 Structural, rural and environmental policies

The agricultural environmental regulation, one of the three accompanying measures of the Mac Sharry reform, emphasizes the dual role of the farmer as producer and as protector of the environment and the countryside. It encourages farmers to take measures with a positive effect on the environment and the countryside. In exchange for this they can qualify for income compensation that is paid partly by the EU and partly by the Member State. Meanwhile programmes with measures from the agricultural environmental regulation are in operation in most Member States. The Dutch programme lays a fairly strong stress on demonstration projects. In addition it consists of management agreements, measures for biological farming and support for public access to agricultural land. The second accompanying measure of the Mac Sharry reform is aimed at the use of farm land for afforestation. On estimate the wooded area in the EU will increase by nearly 2% in the period 1993-1999. The third accompanying measure, which relates to early retirement of farmers, has been introduced in all Member States, except the Netherlands, Luxembourg and the United Kingdom. The EU had earmarked over 200 million ECU for the three accompanying measures in 1993, but for 1995 and 1996 has reserved an annual amount of about 2 billion ECU. The latter amount corresponds to some 5% of the EU agricultural budget.

4. PRODUCTION AND TRADE IN THE NETHERLANDS

4.1 Production and prices

The volume of production of Dutch agriculture and horticulture decreased in 1994 by 1%. That was the first fall since 1987, when the volume dropped by 0.5%. However, the value of production increased as a result of the average price rise of 4.5%. The percentages stated conceal large differences per sector (table 4.1).

The volume of arable production declined in 1994 by 10%. The recovery of the prices of arable products, that took shape in 1993, continued. On average the prices of arable products rose by more than 25% in 1994, thanks above all to the much more expensive potatoes. The volume of production of fruit and vegetables fell in 1994 by 4.5%. The average price of this group of products, which had fallen since 1991 by some 25%, recovered in 1994 with approximately 16.5%. The volume of ornamental products increased in 1994 by some 3%, while the prices rose on average by 2%.

Table 4.1 Development of volume and prices of agricultural and horticultural production in the Netherlands

Product (group)	Value (mln. DFL)	Changes in % in relation to previous year					
		volume			price		
		1993 (prov.)	1992	1993 (prov.)	1994 (est.)	1992	1993 (prov.)
Arable products	2,932	2.8	1.4	-10.0	-18.1	7.1	28.0
Fruit and vegetables	4,452	15.2	2.4	-4.5	-20.3	-5.5	16.5
Ornamental products	8,086	2.6	2.3	3.0	-3.1	1.1	2.0
Milk	8,666	-1.6	1.0	-1.0	2.5	-1.7	-3.5
Meat and eggs	12,536	1.7	1.9	-1.5	1.8	-14.4	2.0
Total/average	36,672	2.8	1.8	-1.0	-3.4	-5.1	4.5

Because much of the Dutch horticultural produce is exported, prices depend greatly on the developments on the international market. There Dutch horticulture is confronted with an oversupplied market and the effect of the hard guilder. The large supply came into being also because many arable farmers in the EU have made the change-over from products subject to a strong market organization to horticultural products. In particular the supply from

Spain and the Canary Islands of vegetables grown under glass is increasing strongly. This is caused by modernization of the greenhouses, improvement of the infrastructure, a switch from outdoor cultivation to cultivation under glass and an extension of the production season. The traditional season in those parts of the world covered only the winter months. This has now been extended by the month of May and the next step - insofar as possible - will be an extension to year-round production. Part of the investments in horticulture under glass in Spain and on the Canary Islands, but also in other Southern European countries, is being financed by the Structural Funds of the EU, to the great indignation of the Dutch horticultural producers. The structural policy of the EU, which is directed towards improving the infrastructure in underdeveloped regions, results in new competitors being added in all kinds of fields. This is now happening in horticulture. The hard guildler causes the competitive position to deteriorate, since Dutch products become more expensive in devaluing countries. In addition, the devaluing countries, and these include the Southern European countries, can offer their products more cheaply on traditional Dutch export markets, whereby the danger exists that they drive the Netherlands out of the market.

Milk production was 1% lower in 1994 than in 1993. Nearly 53% of this milk was intended for cheese-making, as against 51% in 1993. Cheese production increased in 1994 by 3.5% to over 650,000 tons. The production of butter, whole milk powder and condensed milk fell by 11-14% and that of skimmed milk powder even by 27%. The selling price of milk fell by 3.5% in 1994.

For meat and eggs there was a production fall of 1.5% and an average price rise of 2%. In the beef sector production declined by 6%. Sheepmeat production fell in 1994 by 9% and prices rose by 13%. The production of pigmeat decreased in 1994 by 2%. Pig prices, which reached an all-time low in 1993, recovered with an increase of 7.5%. Nonetheless, they remained far below the level of previous years. In 1994 somewhat more poultry meat was produced than in 1993. The production of eggs too was greater in 1994 than in the year before (1%), but egg prices fell by over 10% and ended up at a very low level.

4.2 Processing and consumption of agricultural products

The income that is earned by Dutch agribusiness (i.e. agriculture and the delivering and processing industries) lags in the course of time behind that of the total domestic economy. Thus its share in national income in the period 1948-1993 fell from over 21% to 8% (table 4.2). Shifts in shares have also occurred within agribusiness. In proportion less income is earned in the primary sector, the share of which fell from over 60% in 1948 to 35% in 1993. This fall was due entirely to agricultural prices lagging behind. For instance, the prices of all goods and services tripled between 1970 and 1994, whereas the prices of agricultural products rose by only some 40%. The volume of net production of the agricultural sector grew somewhat more strongly in the above period than that of national income. The contribution of the food, drink and tobacco industry and the supplying businesses to the income of agribusiness rose from over

Table 4.2 Share of the agribusiness in Gross Domestic Product in the Netherlands, 1948-1993 (in %)

	1948	1960	1970	1975	1980	1985	1990	1993 (est.)
Agriculture and horticulture	13.1	10.2	5.8	4.6	3.2	3.5	3.7	2.8
Food and drink industry a)	2.0	2.0	2.0	1.7	1.3	1.5	1.4	1.4
Supplying industries	2.9	3.2	2.4	2.4	2.3	2.8	2.4	2.7
Subtotal	18.0	15.4	10.2	8.7	6.8	7.8	7.5	6.9
Distribution b) (r)	3.6	3.3	2.4	1.8	1.3	1.3	1.2	1.2
Total agribusiness	21.6	18.7	12.6	10.5	8.1	9.1	8.7	8.1

a) Exclusive of processing of foreign raw materials; b) Trade, transportation, etc. from the food and drink industry to the consumer.

Bron: Dutch Central Bureau of Statistics, Input/output-tables, adaptation LEI-DLO.

22% in 1948 to somewhat more than 50% in 1993. Total employment in Dutch agriculture decreased from 536,000 labour units in 1948 to 253,000 in 1993. For the total agribusiness these figures were 720,000 and 460,000. The latter figures respectively correspond to 19% and 8.5% of the total employment in the Netherlands.

In 1993 more than 60% of the total production of Dutch agriculture and horticulture on estimate was sold within agriculture or supplied to the food industry and other branches of industry. That was over ten percentage points less than in 1970. The cause of the decrease of these intermediate supplies lies above all in the increased importance of horticulture within the agricultural sector. For the horticultural sector the processing link in the production column is much less important than for livestock and arable farming. In livestock farming in 1993 nearly 90% of the production was sold as intermediate supplies and in arable farming over 75%. In 1993 37% of primary agricultural and horticultural production was directly destined for export; that was twice as much as in 1970. This direct export relates above all to horticultural products; in 1993 over 90% of the production of horticulture under glass and more than 60% of the other horticultural production was exported, as against some 25% of arable production and over 10% of livestock production. A relatively small part (approximately 7%) of agricultural and horticultural production was supplied in unprocessed form to the consumer.

4.3 Agricultural imports and exports

The value of agricultural exports from the Netherlands increased in 1994 by some 8% to over 67 billion guilders. The volume rose on estimate by over 5% and prices went up by approximately 2%. Agricultural imports increased by 14% to some 40 billion guilders, as a result of which the agricultural trade bal-

ance worked out as in 1993 at some 27 billion guilders. With the EU Member States the Netherlands has a positive agricultural trade balance of on estimate 30 billion guilders, but with non-member countries a negative balance of approximately 3 billion guilders.

Agricultural exports represented in 1994 a quarter of the total Dutch exports of goods; for imports the share of agriculture was 17%. These shares lie far above the EU average, which for exports works out at 9% and for imports at 12%. After France the Netherlands is the largest exporter of agricultural products and foodstuffs in the EU. Some 32% of the agricultural exports in 1994 was destined for Germany and more than 20% for countries outside the EU. Over 55% of the value of Dutch agricultural imports in 1994 originated from EU countries. In the course of time the share of non-member countries in Dutch agricultural trade has become somewhat less: in 1985 these countries still supplied half of the imports and took a quarter of the exports.

In recent years the Netherlands has had to cede the position of the world's largest dairy exporter to Germany. In 1994 Dutch dairy exports amounted to 7.2 billion guilders, as against 7.4 billion guilders at the start of the eighties. The fluctuating development of exports of butter and skimmed milk powder is strongly determined by EU policy with regard to these intervention products. Exports of cheese have, however, increased uninterruptedly. A steadily growing part of Dutch dairy exports is sold within the EU. In 1994 this was 70%, as against 53% at the start of the eighties.

In 1994 the Netherlands imported cut flowers to the value of nearly half a billion guilders. This corresponds to over 1% of the value of total agricultural imports and to some 10% of horticultural imports. Over 80% of the imported cut flowers came from countries outside the EU, in particular from Israel, Kenya, Zimbabwe and Colombia. The greater part of the imported cut flowers consists of roses and carnations. Some 70% of the imported cut flowers are re-exported. In that way foreign flower growers utilize the services of the auction system in the Netherlands. Expressed in percentages, the share of imported flowers in the total supply to the Dutch auctions was 18% in 1994 as against some 10% in the mid-eighties. The steadily increasing imports of flowers is a thorn in the flesh of Dutch flower growers. They fear pressure on the prices, inter alia because the cost price in other countries is lower than in the Netherlands. The differences come about through the higher costs of labour, investments and environment in the Netherlands. Against that, the imported flowers are faced through transport by air with high transport costs, which form about half the cost price. In 1994 there was a great commotion about the importing of roses, which was inspired above all by the expected considerable expansion of the area under roses in Africa. Under pressure from the rose growers this led in September to stringent restrictions on the supply of all imported flowers at the auctions in the Netherlands. As a reaction to the import restrictions the foreign flower growers directed themselves towards alternative market outlets.

5. RESULTS OF SECTORS AND HOLDINGS

5.1 Returns and costs of the arable and livestock sector

After the very sharp fall of 18% in 1992/93, the net value added of Dutch agriculture (arable and livestock farming) declined in 1993/94 by some 10% to 6.1 billion guilders (table 5.1). Once again there was a deterioration in the price ratio: the selling prices fell by over 3% on average and the prices of non-factor costs by 1.5%. The volume of value added decreased because, with production remaining at the same level, the volume of non-factor costs rose by 0.5%. For 1994/95 some recovery (+6.5%) of value added is estimated. True, productivity falls again through a contraction of the volume of production, but the price ratio (+9.5%) is strongly improved. The selling prices rise by 3%, while the average price of non-factor costs increases by 0.5%. The ratio between value added and the factor costs - the so called cover percentage - has deteriorated strongly since 1991/92. In 1993/94 it worked out at over 49%. This was the lowest percentage since the compilation of this sector account started at the end of the sixties. For 1994/95 a slight rise in the cover percentage to 51 is estimated.

Table 5.1 Sector account of arable and livestock farming

	Value (mln. DFL)			Changes in % in relation to previous year			
	1992/93	1993/94 (prov.)	1994/95 (est.)	volume		price	
				93/94 (prov.)	94/95 (est.)	93/94 (prov.)	94/95 (est.)
Return	25,090	24,245	24,655	0.0	-1.0	-3.0	3.0
Non-factor costs	18,305	18,100	18,115	0.5	-0.5	-1.5	0.5
Net value added	6,785	6,145	6,540	-2.0	-3.0	-8.0	9.5
Factor costs	12,620	12,420	12,775	-1.0	-0.5	-0.5	3.5
Total costs	30,925	30,520	30,890	0.0	-0.5	-1.0	1.5

5.2 Returns and costs of the horticulture under glass sector

The net value added of horticulture under glass, which had already fallen in 1992 by over 600 million guilders (nearly 22%), again declined in 1993 (table 5.2). The latter fall was caused by the fact that both the volume and

Table 5.2 Sector account of horticulture under glass

	Value (mln. DFL)			Changes in % in relation to previous year			
	1992	1993	1994 (est.)	volume		price	
				1993	1994 (est.)	1993	1994 (est.)
Returns	8,085	8,150	8,580	1.5	1.0	-1.0	4.5
Non-factor costs	5,665	5,825	5,885	2.5	0.5	0.5	0.5
Net value added	2,420	2,325	2,695	-0.5	1.0	-4.0	14.5
Factor costs	3,515	3,480	3,515	0.5	-0.5	-1.5	2.0
Total costs	9,180	9,305	9,400	1.5	0.0	-0.5	1.0

price development of the returns lagged behind that of the non-factor costs. In vegetable growing under glass and pot plant growing the net value added fell by 13% and 7.5% respectively. In cut flower growing, after the decline in 1992, there was an increase in net value added (+5%). Since the factor costs fell less strongly than the net value added, the cover percentage of horticulture under glass deteriorated from 69 in 1992 to 67 in 1993.

For 1994 an increase in the net value added of horticulture under glass by almost 16% is estimated. The recovery is caused almost entirely by improved price ratios. The cover percentage rises again to 77, but still remains far below the level of 1991 (92%). It looks as if horticulture under glass will again be faced with declining results in 1995. In the first half of 1995 auction returns are lower than over the same period in 1994. It is expected that the reduced return value will result in a sharp decline in sector income.

5.3 Results of arable farms

Family farm income on the arable farms doubled in 1993/94 in respect of the previous year to on average nearly 40,000 guilders per farm holder (table 5.3). Over 65% of the arable farms achieved a better result than in 1992/93. Total family income, which includes income from outside the farm, was nearly 72,500 guilders. Through considerably lower taxes and lower family spending the savings were on average just positive (900 guilders per farm). For 1994/95 once again more than a doubling of the family farm income is estimated. Savings are expected to recover to a level of 54,000 guilders per farm. In normal circumstances profitability in 1995/96 would have been clearly lower than in 1994/95. However, as a result of the drought in the summer it looks as if above all potatoes will again become expensive, which will have positive consequences for the income of most arable farmers.

Table 5.3 Family farm income on farms, x 1,000 guilders per farm holder

	Number of farms in 1993/94	Income				
		1990/91	1991/92	1992/93	1993/94	1994/95 (est.)
Arable farms	10,900	72.2	52.1	18.7	38.4	91.0
Dairy farms	32,800	68.4	56.8	64.0	57.7	49.0
Pig and poultry farms	8,700	103.2	121.5	40.3	-1.2	35.0

5.4 Results of dairy farms

On average a family farm income of nearly 58,000 guilders per farm holder was achieved on dairy farms in 1993/94. That was more than 6,000 guilders less than in 1992/93. In the second half of the eighties family farm income was on average 20,000 guilders higher. Outside the farm some 21,000 guilders in income were achieved in 1993/94, somewhat less than in the previous financial year. Total family income per farm fell to just below 100,000 guilders. Savings worked out at 23,000 guilders per farm, which was 9,000 guilders lower than in 1992/93. For 1994/95 a further fall in family farm income to on average 49,000 guilders per farm holder is estimated (table 5.3). According to the estimate savings will fall to 12,000 guilders per farm. It is expected that dairy farms in 1995/96 will again be confronted with a deterioration of the results.

The national milk quota in 1993 was some 10% lower than in 1984. The number of dairy farms has strongly declined since 1984 and the remaining farms have become larger and more extensive. The dairy farmers who have stopped with milk production managed in many cases to sell their quota for a good price. In the first years after the introduction of the quota system they received on average some 2.50 guilders per kilogram. In recent years this has risen to about 3.50-4.00 guilders per kilogram. The proportion of farms that buy quota has also risen strongly: from some 8% in the mid-eighties to approximately 17% in 1993/94. A purchasing farm buys on average about 40,000 to 50,000 kg.

5.5 Results of pig and poultry farms

The average family farm income on the pig and poultry farms fell in 1993/94 from over 40,000 guilders per farm holder in 1992/93 to over 1,000 guilders negative in 1993/94 (table 5.3). This picture was largely determined by the poor results in pig-keeping. On only 20% of the pig and poultry farms were savings made. On average dissaving of 58,500 guilders per farm occurred. Many of these farms have liquidity problems: financing costs exceeded cash flow in 1993/94 by on average 27,000 guilders. Capital formation on the pig-breeding farms reached a new low. These farms ate into their capital to the tune of nearly 2,000 guilders per week. For layer-keeping 1993/94 showed better re-

sults: savings, which were highly negative in 1992/93, again worked out positively at an average 35,000 guilders per farm. For 1994/95 a family farm income of on average 35,000 guilders per farm holder is estimated for the pig and poultry farms. Total family income then averages over 60,000 guilders per farm. The improvement that occurs in 1994/95 applies in particular to the pig-breeding farms. In contrast, the incomes on the layer-keeping farms will fall by nearly 100,000 guilders per farm holder. For the pig and poultry farms an average dissaving of 3,000 guilders per farm is estimated. The pig farms were faced in the first months of 1995/96 with low prices for meat and piglets. Low selling prices also attend to a poor start to 1995/96 for the poultry farms.

The manure legislation that has been in force since 1987 has entailed extra costs for many livestock farms. Manure costs averaged between 1987 and 1992 about 5 guilders per fattening pig and 15 guilders per sow per year. From 1992/93 onwards manure costs have risen sharply under the influence of the stricter phosphate standards and worked out in 1993/94 at approximately 11 guilders per fattening pig and 33 guilders per sow. For the whole of pig-keeping this means an increase in the share of manure costs in the total production costs of 0.4% in 1987 to 1.4% in 1993/94.

5.6 Results of horticultural holdings

The horticulture under glass holdings are also at a low ebb. In recent years cost-effectiveness has fluctuated around 90% and an average family income of between 30,000 and 50,000 guilders per farm holder is made from the holding. That is barely better than in intensive livestock farming and worse than on the arable and dairy farms. These low incomes are accompanied by dissavings: cumulatively over 1992, 1993 and 1994 about 110,000 guilders was withdrawn from own financial resources. The income figures of the various types of holding are closely bound up with the trend of the returns. The vegetables under glass holdings gained in 1993 a negative family income from the holding (table 5.4). Under the influence of the price recovery a family income of on average 57,000 guilders per farm holder is estimated for 1994. The cut flower holdings have likewise seen their incomes fall. In 1993 there was a slight recovery, as a result of which family income rose from 48,500 to over 60,000 guilders per entrepreneur. However, for 1994 a sharp deterioration is estimated: a family income of 36,000 guilders per farm holder (table 5.4). The pot plant holdings continue to be among the most remunerative types of agricultural business in the Netherlands, but here too the declining returns are causing lower profitability and falling incomes. For 1994 a recovery of savings up to the modest amount of 6,000 guilders plus per holding is estimated for the vegetables under glass holdings. On the cut flower holdings, on the other hand, there will be considerable dissavings. On the pot plant holdings too own financial resources will decrease somewhat. The expectations for 1995 are not hopeful. The cut flower and pot plant holdings were confronted in the first half of 1995 with stagnating prices. For vegetables under glass holdings too the first half of 1995 was poor. In tomato growing in particular allowance must be

Table 5.4 Family farm income on horticultural holdings, x 1,000 guilders per holder

	Number of holdings in 1993	Income				
		1990	1991	1992	1993	1994 (est.)
Vegetables under glass holdings	3,400	105.5	125.2	5.8	-16.6	57.1
Cut flower holdings	3,350	76.5	81.5	48.5	60.6	36.3
Potplant holdings	900	127.8	103.1	78.7	89.4	79.8
Field vegetable growers	1,000	98.0	54.0	46.2	44.1	-
Flower bulb growers	1,800	69.9	93.9	109.5	153.4	-
Fruit growers	1,350	87.4	94.4	-25.0	1.8	-
Tree nurseries	1,000	101.5	106.0	106.3	70.4	-
Mushroom growers	650	83.4	51.6	31.6	62.5	95.2

made for a sharp fall in operating results. That would then mean eating into one's own financial resources for the fourth year in succession.

The field vegetable holdings have gained mediocre results in recent years (table 5.4). After the good year 1990 profitability fell back in 1993 to a level that just allowed savings to be made. For 1994 a limited recovery is estimated. The flower bulb holdings have since 1990 been able to record a constant increase in their returns. The estimate for 1994 indicates that the profitability level of 1993 will be more or less maintained. The favourable development of income on the flower bulb holdings results in a clear strengthening of own financial resources. Between 1990 and 1993 savings rose from 30,000 to 150,000 guilders per holding. For 1994 too the savings will be clearly positive. Things are going considerably less well with the fruit growers. After two good years the returns fell sharply in 1992, declining still further in 1993. In that year a return of 66 guilders was made per 100 guilders' costs. At that profitability level family income from the fruit grower's holding was practically nil. For 1994 a recovery of profitability is estimated, with which there will again be a positive income, but savings will probably have been negative. On balance it has therefore been impossible for the fruit growers to make any savings since the beginning of the nineties. The tree nurseries were confronted in 1993 with an obvious decline in profitability. After three years with a family income from the holding of over 100,000 guilders per holder, income fell in 1993 by 30% to 70,000 guilders and savings became negative. After the low in 1992 the mushroom growers have found the way upwards again. For 1994 it is estimated that 96% of the costs are covered by the returns. After family income from the holding had fallen to more than 30,000 guilders per holder in 1992, it doubled in 1993. For 1994 an income is estimated of over 95,000 guilders per holder. Incidentally, for 1995 allowance must be made for clearly lower results.

Table 5.5 Distribution (%) of farmers by family farm income of some farming types (1993/ 94) a)

Income (guilders per holder)	Total	Arable farms	Dairy farms	Intens. livestock farms	Veg- etables under glass holdings	Cut flower holding	Pot- plant holdings
Less than 0	19	18	3	60	51	24	16
0 - 25,000	17	23	17	14	12	10	11
25,000 - 50,000	24	22	32	9	15	24	11
50,000 - 75,000	17	17	24	4	15	15	18
75,000 - 100,000	8	6	11	6	2	4	11
100,000 - 150,000	9	10	10	4	3	9	10
More than 150,000	5	4	3	3	2	14	23
Average income	44,800	38,400	57,700	-1,200	-16,600	60,600	89,400

a) Horticultural holdings: 1993.

5.7 Distribution of family farm incomes

As in the previous year, in 1993/94 more than one out of three entrepreneurs in Dutch farming and horticulture earned a family income of less than 25,000 guilders (table 5.5). More than half of the vegetables under glass growers and 60% of the intensive livestock farmers had a negative family income. On the other hand, only a very small share of the dairy farmers had a negative income. Only 14% of all entrepreneurs achieved an income of more than 100,000 guilders from their business, among whom a relatively large number of pot plant growers.

6. FINANCING AND INVESTMENTS

The savings of the joint arable and livestock farms amounted to less than 200 million guilders in 1993/94. In particular the dissavings to the amount of 500 million guilders in pig-keeping were responsible for this. The investments on and off the farm fell slightly to 4.6 billion guilders. In 1993/94 20% less milk quota was purchased. Against that, the sum invested in land increased from more than 700 million guilders in 1992/93 to over 900 million guilders in 1993/94. The dairy farms in particular bought a great deal of land, viz. to the value of nearly 800 million guilders. That was about as much as the value of the purchased milk quota. In arable farming, pig and poultry farming little was invested in land. One out of five farms invested more than 100,000 guilders in the farms in 1993/94, while one out of six farms disinvested. Among those disinvesting holdings there were relatively many pig and poultry farmers.

The balance sheet total (excluding lessors' capital) of the arable and livestock farms represented by the LEI-DLO accountancy network was 99.7 billion guilders at the end of April 1994 on the basis of the current business economic value. That corresponds to 1.64 million guilders per farm. In dairy farming the value of the assets is the highest at an average of 1.84 million guilders per farm (table 6.1). On the arable and livestock farms over 80% of the capital is tied up in durable means of production, of which a large part (on average 615,000 guilders per farm) in land. The value of the farm buildings comprises about one fifth of the total value of the farm (including private properties).

The average solvability of the arable and livestock farms fell in 1993/94 from 74% to 72%. This figure has never before been so low. Solvability on the arable farms is on average the highest (77%). The pig and poultry farms, which own little land, displayed the lowest solvability (60%). The fall in the solvability of these farms, which amounted to 4 percentage points in 1993/94, continued in 1994/95 (-5 percentage points). One out of three pig and poultry farms finances more than half of the assets with outside capital. In dairy farming the solvency has declined by 2 percentage points to on average 73%, partly because of many new long-term loans.

The own financial resources of the arable and livestock farms have in the last two years remained constant and amount on average to 1.18 million guilders. On the dairy farms own financial resources increased further in 1993/94, while a slight fall occurred on the arable farms. At the end of April 1994 the pig and poultry farms possessed on average 868,000 guilders in own financial resources. That was over 100,000 guilders less than two years before. Total long-term outside capital on farms increased in 1993/94 by 10% to 26.8 billion guilders. About 3.2 billion guilders comes from family-members. Short-term outside capital plays only a limited role: on average 19,000 guilders per farm.

Table 6.1 Average balance sheet a) per farm type, x 1,000 guilders per farm

	Arable farming	Dairy farming	Pig and poultry farming	Horticult- ure under glass
ASSETS				
immaterial assets	32	127	14	-
material assets	1,138	1,542	1,182	1,385
financial fixed assets	18	29	12	42
current assets	247	147	247	323
Total	1,434	1,845	1,455	1,751
LIABILITIES				
own financial resources	1,099	1,348	868	935
long-term outside capital	316	483	547	722
short-term outside capital	19	14	39	94
Total	1,434	1,845	1,455	1,751
Solvability (in %)	77	73	60	53

a) Arable and livestock farming as at 30-4-1994, horticulture under glass as at 31-12-1993; calculated on the basis of the current business economic value.

Through the large dissavings of 300 million guilders in 1993 own resources in horticulture under glass were under considerable pressure. The investments in above all glasshouses, machinery and plantings fell from 1992 to 1993 by 40%. They also clearly lagged behind the depreciations, which means that the production machinery is ageing. In 1993 the joint balance sheet of the glasshouse holdings was 15 billion guilders. Per holding that is on average 1.75 million guilders (table 6.1). That was about 50,000 guilders less than in 1992. In horticulture under glass too the share of long-term outside capital is climbing. Solvability worked out in 1993 at 53%, as against 54% in 1992; in 1988-1991 it was still at some 58% on average.

7. STRUCTURAL DEVELOPMENTS IN DUTCH AGRICULTURE

7.1 Development of the number of holdings

In May 1994 there were over 116,000 farms and horticultural holdings. This meant a fall of 2.5% in respect of May 1993. In the period 1987-1993 the percentage of decrease averaged 1.7 per year. Three quarters of the holdings are full-time ones. In all farming types there was a decline in the number of full-time holdings. Relatively speaking, this was the strongest in intensive livestock farming, where the number of full-time holdings fell by 3.8%, above all through a strong decline in the number of pig farms.

In general one may speak of an ageing of the registered farm holders. In 1984 46% of the farm holders were younger than fifty; in 1994 this was 42%. On the other hand, the proportion of those aged 65 and over increased from 12% in 1984 to 16% in 1994.

The total production capacity of Dutch farming and horticulture, measured in Dutch size units (dsu, see Annex for explanation), fell between May 1993 and May 1994 by nearly 2%. The decline was the greatest in intensive livestock farming at nearly 3%. Within this sector a still greater decline occurred in pig and poultry farming. The calf-fattening sector, on the other hand, expanded by 5%. After years of fairly strong growth in the beef cattle and sheep sectors, the production capacity there fell considerably last year. In dairy farming the production capacity has been falling for years. For the first time in years the production capacity of horticulture also declined in 1993/94. In outdoor horticulture there was a slight growth of 0.4%, but in horticulture under glass a decline in production capacity occurred of 0.8%. This was bound up with a decrease in the area under glass. True, there was an expansion of flower growing under glass and of the perennials, but that was less than the contraction of vegetable growing under glass. The slight decline in the arable sector was above all the consequence of a somewhat more extensive cropping plan.

In the past fifteen years the full-time holdings in farming and horticulture - measured in dsu - have on average become considerably larger. The intensive livestock farms displayed the strongest growth (+79%). The average horticulture (under glass) holding expanded by over 50%, as did the average mixed farm. The farming types tied to land (arable and dairy farming and other) grew only slightly in comparison with the other farming types, viz. by a quarter to a third. Horticulture under glass holdings are on average by far the largest and the drystock farms the smallest. The average size of the part-time farms stayed unchanged in the period 1979-1994.

7.2 Labour

In May 1994 a total of over 280,000 persons were working on Dutch farms and horticultural holdings. This number is exclusive of the irregular or temporarily employed workers. In respect of May 1993 this meant a fall of 2.8%. Because the number of holdings fell by about the same extent, the average labour force of the holdings barely changed.

For the first time since the mid-seventies the number of non-family workers fell in 1993/94. Before then it had always risen through a growing number of workers in horticulture. The recent decrease was accounted for almost entirely by horticulture under glass. Incidentally, there was a considerable difference between holdings growing vegetables under glass and growing flowers under glass. On the vegetables under glass holdings the number of regularly employed workers fell by over 1,000 between May 1993 and May 1994, whereas on the flowers under glass holdings an increase of over 500 could be noted. The contraction of the labour force is also reflected in a rise in the number of unemployed in agriculture and horticulture.

In the period 1989-1994 the share of women in the total labour force rose from 29% to 31%. The increase was caused partly by the growing popularity of the husband/wife partnerships. In 1994 a husband/wife partnership occurred on over 13,000 holdings, which corresponded to over 40% of the total number of partnerships in agriculture. In mid-1994 the agricultural industry and the government concluded the 'Working Conditions Covenant', which aims to improve working conditions in agriculture with a wide range of measures. These conditions are not favourable in comparison with other sectors. Thus in the agricultural sector many back and leg complaints, many respiratory diseases and many farm accidents occur.

The number of full-time farms holders fell between 1984 and 1994 from 105,000 to 83,000 in 1994. In the same period the number of part-time farmers remained fairly constant in the vicinity of 28,000. Because the number of holdings has fallen, the proportion of holdings with a part-time farmer in the total number of holdings rose from a fifth in 1984 to nearly a quarter in 1994. The subsidiary activities of the part-time farmers relate above all to trade in agricultural and horticultural products, such as potatoes, fruit, vegetables and cattle, and to agricultural and other services, such as agricultural contract work, fruit-picking and caretaker service. The proportion of part-time farmers differs per province: it varies from approximately 30% in Gelderland and Overijssel to 5% in Flevoland. The differences can be explained above all by variation in farm size. Part-time farmers account for about 9% of the volume of production and till some 12% of the land under cultivation in the Netherlands.

7.3 Land use and landscape conservation

In 1994 the average price of unlet arable land without buildings was 37,700 guilders per hectare and that of grassland without milk quota 38,100 guilders per hectare. In let state the respective prices were 19,100 and 20,700

guilders per hectare. The prices of land were thus practically the same as those in 1993. In recent years 12-15% of the holdings have been acquiring land, involving a total of some 30-40,000 hectares. Above all the somewhat larger holdings, dairy farms and holdings with intensive land use purchase relatively large amounts of land. Leasing is being rather drastically changed in 1995. Above all in regions with dairy farming and intensive livestock farming the leasing standards in the new system are higher than in the old one. In most arable farming areas little or nothing changes. The leasing standard for horticultural land, on the other hand, will fall considerably under the new system.

The registered area of land under cultivation decreased between May 1993 and May 1994 by 16,000 hectares (-0.8%). The areas of grassland, arable land and horticultural land decreased to about the same percentage. The area under green fodder crops (chiefly green maize) remained unchanged for the first time after a long period of expansion. The area of set-aside land increased by nearly 4,000 hectares to 31,000 hectares in 1994.

In 1994 more was invested in land development projects for the first time for years. At the end of 1994 500,000 hectares was in the implementation phase, 309,000 hectares in preparation and 127,000 hectares in the application stage. The investments in land development projects were some 20% higher than in 1992 and 1993. The greater part of the expenditure on these projects is for the account of the central government.

As regards expansion of the landscape conservation and reserve areas, plans had been drawn up at the end of 1994 for a total area of 108,820 hectares. In these areas reserve land can be acquired by nature protection bodies and conservation agreements can be concluded with farmers. By the end of 1994 over 19,000 hectares of reserve creation had been completed and a conservation agreement had been concluded for 36,000 hectares. More than 5,200 farmers were involved in this. The average area with a conservation agreement per farmer increased from 6.0 hectares in 1988 to 7.0 hectares in 1994.

The reserve areas will not be distributed evenly across the country. In proportion to the area of land under cultivation a large reserve area must be introduced in the provinces of Utrecht and North Holland, viz. over 7% of the total area. To a somewhat smaller extent that also applies to Friesland, Drenthe and Limburg (approximately 6%). In Zeeland and Flevoland the share of the planned area of reserve land in the area of cultivated land is confined to 2.5%.

With the entry into office of the Kok Cabinet in 1994 renewal of the countryside has become high on the Dutch political agenda. In the Change and Renewal Memorandum the contribution of the Ministry of Agriculture, Nature Conservation and Fisheries to this theme is delineated. By European standards the Dutch countryside is a big city garden. The Ministry favours a region-oriented approach to the problems of the countryside, whereby the partitions between the various government services and schemes must be demolished. The initiatives for development of the countryside have to come from the region itself. The rural policy of the EU, which has been in existence for some time and proceeds from the same points of view, can be easily fitted into national policy.

ANNEX

Definitions

Dutch Size Units (dsu): A unit for the economic size of agricultural holdings. The dsu is based on the standard gross margins (sgm), which are calculated by deducting related specific costs from the gross returns per hectare or per animal. The sgm is expressed in ECU (current prices). On the EU level the size of farms is not measured in sgm, but in the more workable European Size Units (ESU). Dsu is the Dutch variant of the ESU. The dsu is recalculated frequently in such a manner that the average farm size in dsu corresponds with the development of the volume of the value added of the average farm. Some examples: 1 hectare wheat = 0.85 dsu; 1 hectare sugarbeet = 1.83 dsu; 1 dairy cow = 1.24 dsu; 1 sow = 0.26 dsu and 1 hectare tomatoes under glass = 151.37 dsu

Factor costs: (imputed) costs of labour, capital and land

Non-factor costs (intermediate consumption): costs of goods and services purchased from other sectors (including depreciations)

Net value added: gross returns minus non-factor costs

Family farm income: income of the farm family out of the farm business; this is a remuneration for the labour of all family members and the private capital and land

Entrepreneurial income: the remuneration for the farmer's own labour and for his own capital and land; this income results after deduction of a remuneration for the labour of the other family workers from the family farm income

Total family income: family farm income plus income from non-farm activities and social security of the farmer and his spouse

Disposable income: total family income minus current social security premiums and taxes on income and wealth

DFL: Dutch guilder. In 1994 one guilder equalled 0,465 Ecu or 0,559 US dollar.