
Support for Farmers' Cooperatives

Country Report The Netherlands

Jos Bijman
Ger van der Sangen
Krijn J. Poppe
Bart Doorneweert



The 2011-2012 project „Support for Farmers' Cooperatives“ is commissioned and funded by the European Commission, DG Agriculture and Rural Development.

Contract Number: 30-CE-0395921/00-42.

The project is managed by Wageningen UR's Agricultural Economics Research Institute LEI and Wageningen University. Project managers: Krijn J. Poppe and Jos Bijman.

Other members of the consortium are:

- Pellervo Economic Research PTT, Finland: Perttu Pyykkönen
- University of Helsinki, Finland: Petri Ollila
- Agricultural Economics Research Institute, Greece: Constantine Iliopoulos
- Justus Liebig University Giessen, Germany: Rainer Kühl
- Humboldt University Berlin, Germany: Konrad Hagedorn, Markus Hanisch and Renate Judis
- HIVA Katholieke Universiteit Leuven, Belgium: Caroline Gijssels
- Rotterdam School of Management, Erasmus University, The Netherlands: George Hendrikse and Tony Hak

How to cite this report:

Bijman, J., G. van der Slangen, K.J. Poppe and B. Doorneweert (2012). Support for Farmers' Cooperatives; Country Report The Netherlands. Wageningen: Wageningen UR.

Disclaimer:

This study, financed by the European Commission, was carried out by a consortium under the management of LEI Wageningen UR. The conclusions and recommendations presented in this report are the sole responsibility of the research consortium and do not necessarily reflect the opinion of the Commission or anticipate its future policies.

Support for Farmers' Cooperatives

Country Report The Netherlands

Jos Bijman

Wageningen University, The Netherlands

Ger van der Sangen

Tilburg University, The Netherlands

Krijn J. Poppe

LEI Wageningen UR, The Netherlands

Bart Doorneweert

LEI Wagening UR, The Netherlands

November 2012

Corresponding author:

Jos Bijman

Wageningen University

Management Studies Group

Hollandseweg 1

6707 JB Wageningen,

The Netherlands

E-mail: jos.bijman@wur.nl

Preface and acknowledgements

In order to foster the competitiveness of the food supply chain, the European Commission is committed to promote and facilitate the restructuring and consolidation of the agricultural sector by encouraging the creation of voluntary agricultural producer organisations. To support the policy making process DG Agriculture and Rural Development has launched a large study, "Support for Farmers' Cooperatives (SFC)", that will provide insights on successful cooperatives and producer organisations as well as on effective support measures for these organisations. These insights can be used by farmers themselves, in setting up and strengthening their collective organisation, and by the European Commission in its effort to encourage the creation of agricultural producer organisations in the EU.

Within the framework of the SFC project this country report on the evolution of agricultural cooperatives in The Netherlands has been written. Data collection for this report has been done in the summer of 2011.

In addition to this report, the project has delivered 26 other country reports, 8 sector reports, 33 case studies, 6 EU synthesis reports, a report on cluster analysis, a study on the development of agricultural cooperatives in other OECD countries, and a final report.

The authors would like to thank Anne-Marie Niks for her help in collecting the data. We are grateful to Ruud Galle and Cynthia Griffioen, of the National Cooperative Council for Agriculture and Horticulture (NCR), for their constructive comments on a draft version of this report.

The Country Report The Netherlands is one of the country reports that have been coordinated by Caroline Gijssels, HIVA University of Leuven, Belgium. The following figure shows the five regional coordinators of the "Support for Farmers' Cooperatives" project.

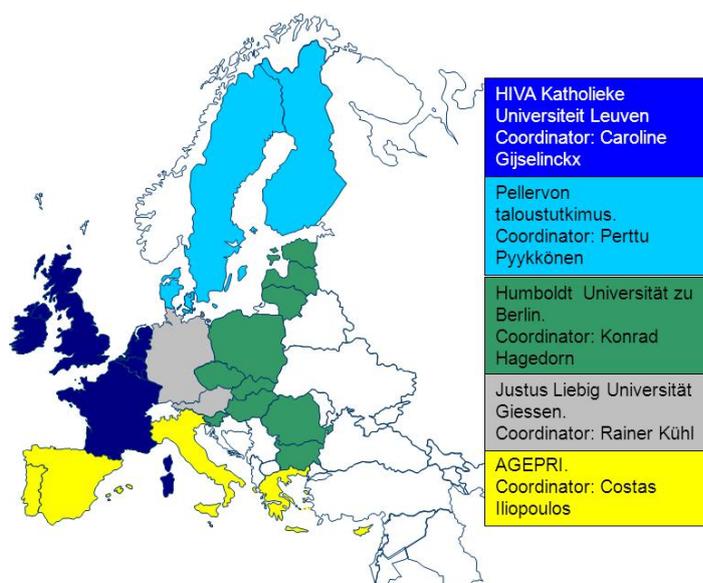


Table of contents

1 Introduction	6
1.1 Objective of the study	6
1.2 Analytical framework	6
1.3 Definition of the cooperative	7
1.4 Method of data collection	7
1.5 Period under study	7
2 Facts and figures on agriculture	8
2.1 Share of agriculture in the economy	8
2.2 Agricultural output per sector	8
2.3 Development in the number of farms	9
2.4 Size of farms	10
2.5 Age of farmers: distribution of farms to age classes	11
2.6 Specialisation of farm production	12
2.7 Economic indicators of farms	13
3 Evolution, position and performance of cooperatives	14
3.1 Introduction	14
3.2 Types of cooperatives	18
3.3 Market share of farmers' cooperatives in the food chain	21
3.4 List of top 5 largest farmers' cooperatives per sector	24
3.5 Transnational cooperatives	25
4 Description of the evolution and position of individual cooperatives	28
4.1 Data gathering per cooperative	28
4.2 Position in the food chain	28
4.3 Institutional environment	30
4.4 Internal Governance	32
4.5 Performance of the cooperatives	34
5 Sector analysis	35
5.1 Introduction	35
5.2 Cereals	35
5.3 Sugar	36
5.4 Fruit and vegetables	37
5.5 Wine	39
5.6 Dairy	39
5.7 Sheep meat	42
5.8 Pig meat	42
6 Overview of policy measures	45
6.1 Regulatory framework	45
6.2 Policy measures	46
6.3 Other legal issues: sector specific regulations	48
7 Assessment of developments and role of policy measures	50
7.1 Introduction	50
7.2 Performance	50
7.3 Institutional environment	51
7.4 Position in the food chain	53
7.5 Internal governance	55
7.6 In conclusion	57
REFERENCES	58

1 Introduction

1.1 Objective of the study

The imbalances in bargaining power between the contracting parties in the food supply chain have drawn much attention, also from policy makers. The European Commission is committed to facilitate the restructuring of the sector by encouraging the creation of voluntary agricultural producer organisations. DG Agriculture and Rural Development has launched a large study, “Support for Farmers' Cooperatives”, that will provide the background knowledge that will help farmers organise themselves in cooperatives as a tool to consolidate their market orientation and so generate a solid market income. In the framework of this study, this report provides the relevant knowledge from The Netherlands.

In this context, the specific objectives of the project, and this country report, are the following:

First, to provide a comprehensive description of the current level of development of cooperatives and other forms of producer organisations in The Netherlands. The description presented in this report will pay special attention to the following drivers and constraints for the development of cooperatives:

- Economic and fiscal incentives or disincentives and other public support measures at regional and national;
- Legal aspects, including those related to competition law and tax law;
- Historical, cultural and sociologically relevant aspects;
- The relationship between cooperatives/POs and the actors of the food chain;
- Internal governance of the cooperatives/POs.

Second, identify laws and regulations that enable or constrain cooperative development and third, to identify specific support measures and initiatives which have proved to be effective and efficient for promoting cooperatives and other forms of producer organisations in the agricultural sector in The Netherlands.

1.2 Analytical framework

There are at least three main factors that determine the success of cooperatives in current food chains. These factors relate to (a) position in the food supply chain, (b) internal governance, and (c) the institutional environment. The position of the cooperative in the food supply chain refers to the competitiveness of the cooperative vis-à-vis its customers, such as processors, wholesalers and retailers. The internal governance refers to its decision-making processes, the role of the different governing bodies, and the allocation of control rights to the management (and the agency problems that goes with delegation of decision rights). The institutional environment refers to the social, cultural, political and legal context in which the cooperative is operating, and which may have a supporting or constraining effect on the performance of the cooperative. Those three factors constitute the three building blocks of the analytical framework applied in this study (Figure 1).

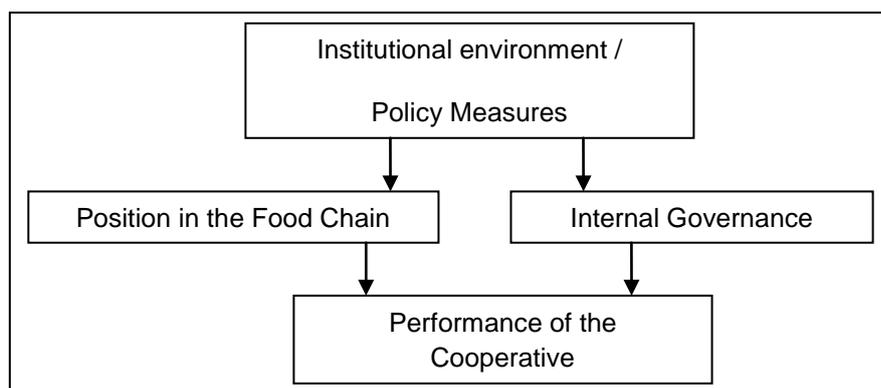


Figure 1. The core concepts of the study and their interrelatedness

1.3 Definition of the cooperative

In this study on cooperatives and policy measures we have used the following definition of cooperatives and Producer Organisations (POs). A cooperative/PO is an enterprise characterized by user-ownership, user-control and user-benefit:

- It is user-owned because the users of the services of the cooperative/PO also own the cooperative organisation; ownership means that the users are the main providers of the equity capital in the organisation;
- It is user-controlled because the users of the services of the cooperative/PO are also the ones that decide on the strategies and policies of the organisation;
- It is for user-benefit, because all the benefits of the cooperative are distributed to its users on the basis of their use; thus, individual benefit is in proportion to individual use.

This definition of cooperatives and POs (from here on shortened in the text as cooperatives) includes cooperatives of cooperatives and associations of producer organisations (often called federated or secondary cooperatives). In identifying cooperatives and producer organisations relevant for our study, we also assume that membership is voluntary. Voluntary membership is generally considered as a basic principle of cooperatives (e.g. according to ICA principles).

1.4 Method of data collection

Multiple sources of information have been used, such as databases, interviews, corporate documents, academic and trade journal articles. The databases used are Amadeus, FADN, Eurostat and a database from DG Agri on the producer organisations in the fruit and vegetable sector. Also data provided by Copa-Cogeca has been used. In addition, information on individual cooperatives has been collected by studying annual reports, other corporate publications and websites. Interviews have been conducted with representatives of national associations of cooperatives, managers and board members of individual cooperatives, and academic or professional experts on cooperatives.

1.5 Period under study

This report covers the period from 2000 to 2010 and presents the most up-to-date information. This refers to both the factual data that has been collected and the literature that has been reviewed. Where appropriate for understanding recent development among cooperatives, we will include description and assessment of important changes in legislation or company strategies that happened before 2000. An example of such change in (European) legislation that

has had a major impact on the development of Dutch cooperatives is the Regulation (EC) No 2200/96 on the Common Market Organisation (CMO) in Fruit and Vegetables.

2 Facts and figures on agriculture

The objective of this chapter is to present an introduction to the state of affairs in agriculture in The Netherlands (Section 2.1) and the evolution and food chain position of cooperatives in The Netherlands (Section 2.2). An analysis of individual cooperatives will follow in Chapter 3.

2.1 Share of agriculture in the economy

A study of farmers' cooperatives can best start at the farmers side, in agriculture. In 2007 primary agriculture accounts for 2% of GDP (Figure 2). The share of agriculture in GDP has been decreasing steadily over many years, but is stabilizing at around 2% since the mid-2000s. Primary agriculture is embedded in an important agri-food sector, partly based on imported products that are processed and exported. The total agri-food complex, including sectors that supply inputs to farmers and sectors that process and trade farm products has a share of 9-10% of GDP (LEB, 2011).

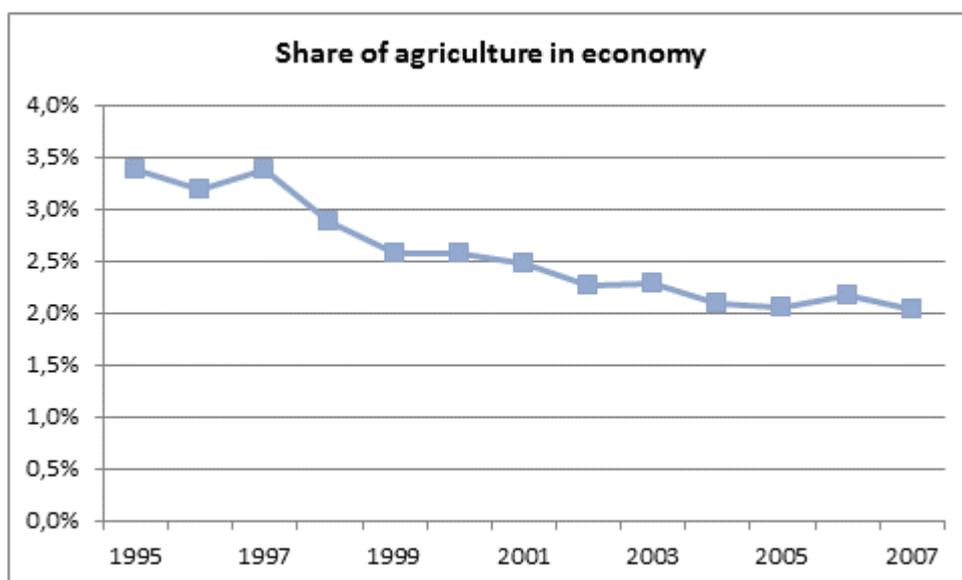


Figure 2. Share of agriculture in GDP (Source: Eurostat National Accounts)

2.2 Agricultural output per sector

Every EU Member State has its specialisation in specific agricultural sectors. Figure 3 provides information on the development of agricultural output (in million euro value of production) of the main sectors in The Netherlands. About half of total production value of Dutch agriculture is accounted for by the eight sectors in our study: sheep meat, pig meat, dairy, wine, fruit and vegetables, sugar and cereals (no olives in The Netherlands). Of these sectors, dairy is the largest one, and fruit and vegetables the second largest. The other half of Dutch agricultural production value is generated by sectors like ornamentals (which include flowers and flower bulbs), poultry and eggs, beef, and potatoes. In the Netherlands potatoes are not counted under vegetables, but are considered as an arable crop.

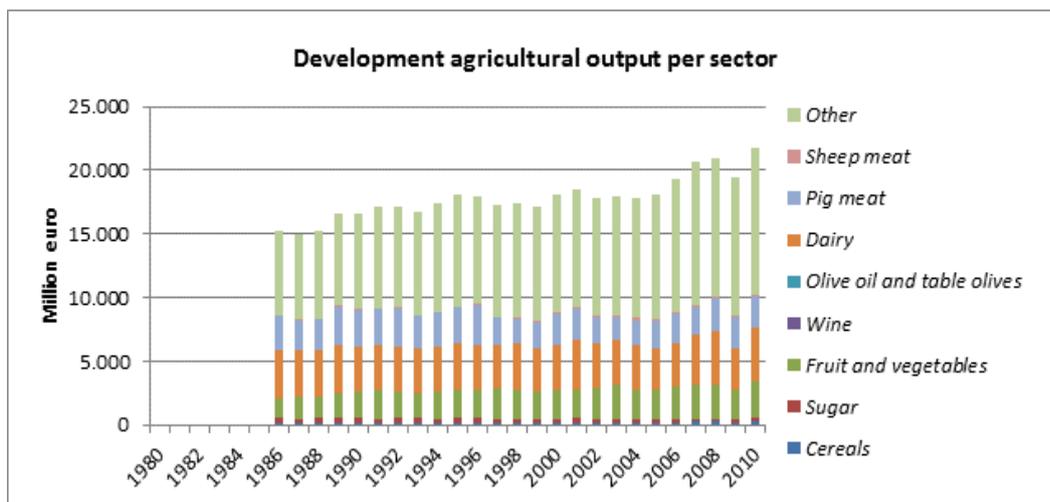


Figure 3. Development of the different sectors in agriculture, value of production at producer prices, in millions of Euro (Source: Agriculture Economic Accounts, Eurostat)

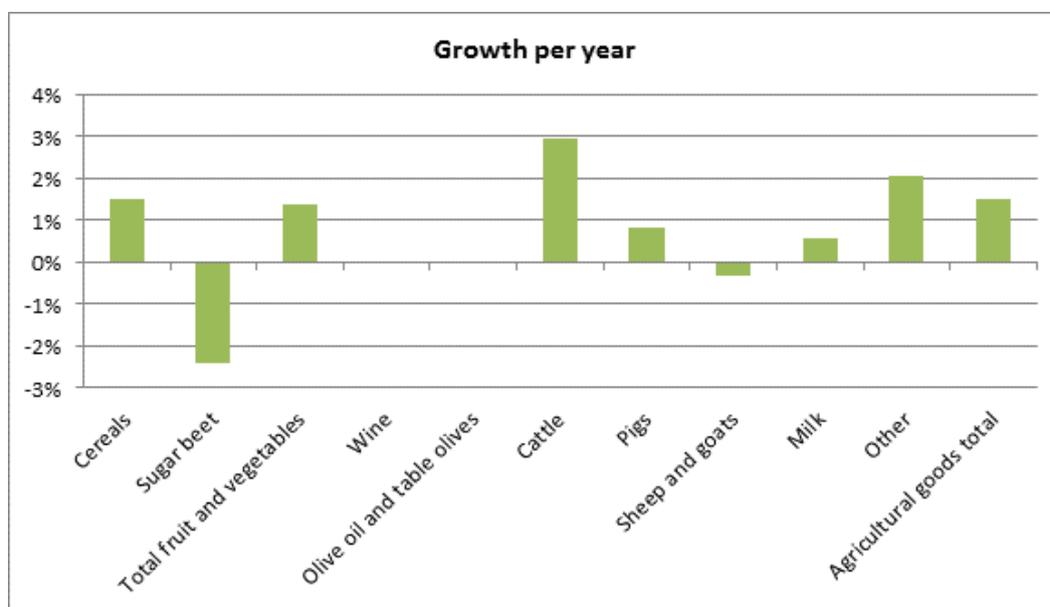


Figure 4. Trend in output per sector "2001" - "2009" (Source: Economic Accounts of Agriculture, Eurostat)

Figure 4 shows the growth in output value for the selected sectors. Only for sugar beet the value of the output has decreased over the last decade. The growth in cattle production value is mainly the result of unusual low production value in the base years 2001/2002.

2.3 Development in the number of farms

The total number of farms reduced from 100.000 in 2000 to 73.000 in 2007 (Table 1 and Figure 5). In most of the sectors many farmers have been closing their business. The steepest reduction in number of farms was in beef and dairy cattle, in pig meat, and in glasshouse horticulture. Some of these farms kept their land to grow cereals (especially silage maize).

Table 1. Number of farms (Source: Eurostat, Farm Structure Survey)

	2000	2007	% change per year
Cereals	730	1,150	6.71
Sugar	13,210	10,210	-3.61
Pig meat	8,780	5,770	-5.82
Sheep meat	17,270	17,660	0.32
Total fruits and vegetables	16,500	10,840	-5.83
Horticulture	14,110	9,050	
fruit and citrus fruit	2,390	1,790	
Olive oil and table olives	0	0	
Wine	0	0	
Dairy	26,750	18,900	-4.84
Beef	3,610	2,180	-6.95

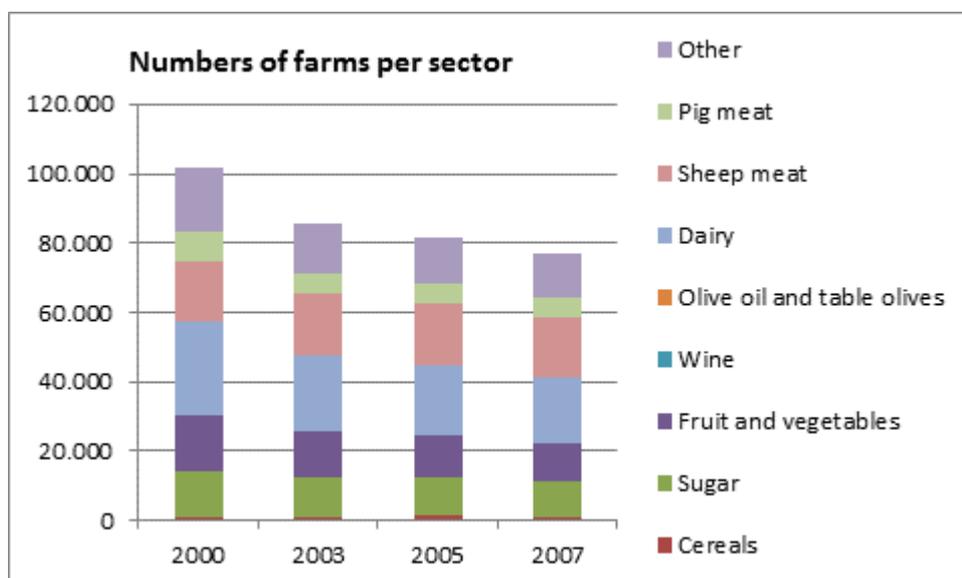


Figure 5. Number of farms 2000 - 2007 with data per specialist type of farming (Source: Eurostat, Farm Structure Survey)

2.4 Size of farms

There is a high variation in the farm size, from small part-time farms to large exploitations. Figure 6 shows the distribution of farms per size class, measured in European Size Units (ESU). Farms in the Netherlands are generally large, with most farms in the category 100 to 250 ESU. Exceptions are in cereals and sheep meat, where there are many small farms. This can be explained by the many semi-retired farmers that continue to use a few hectares for either silage maize or sheep.

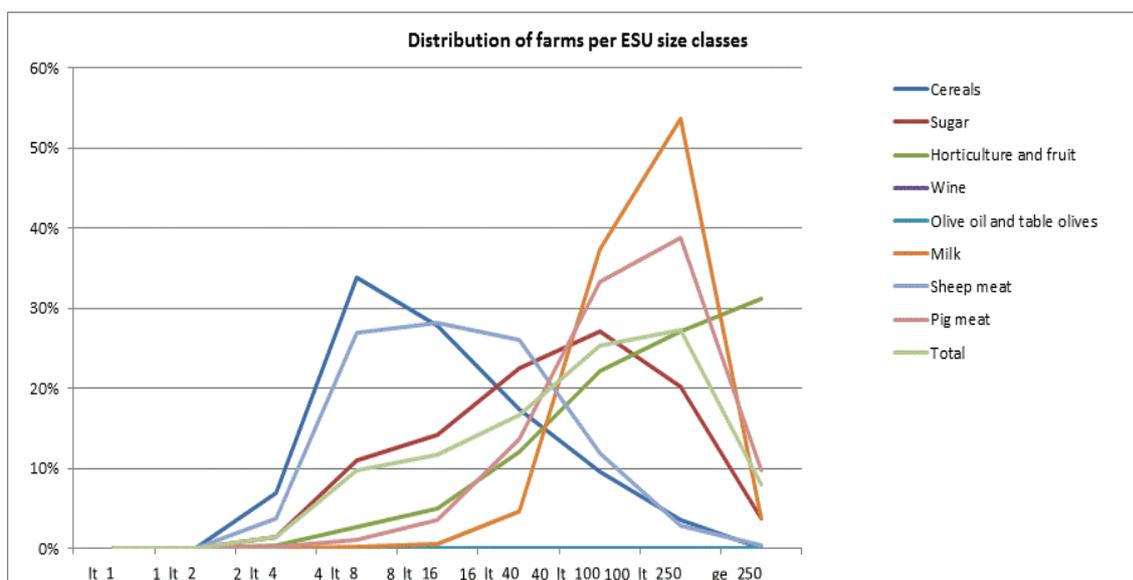


Figure 6. Number of farms per size class, measured in ESU, per specialist type of farming. Source: Eurostat, Farm Structure Survey.

2.5 Age of farmers: distribution of farms to age classes

The average age of farmers differs across the EU-27 (Figure 7). Compared to other EU Member States and the EU-27 average, the Netherlands has more young farmers (between 35 and 44 years old) and fewer old farmers (older than 65 years). This age distribution may be favourable for cooperatives, as young farmers are generally more committed to their cooperative, as they still heavily rely for their income on the functioning marketing cooperative, and are more willing to participate in the governance of the cooperative.

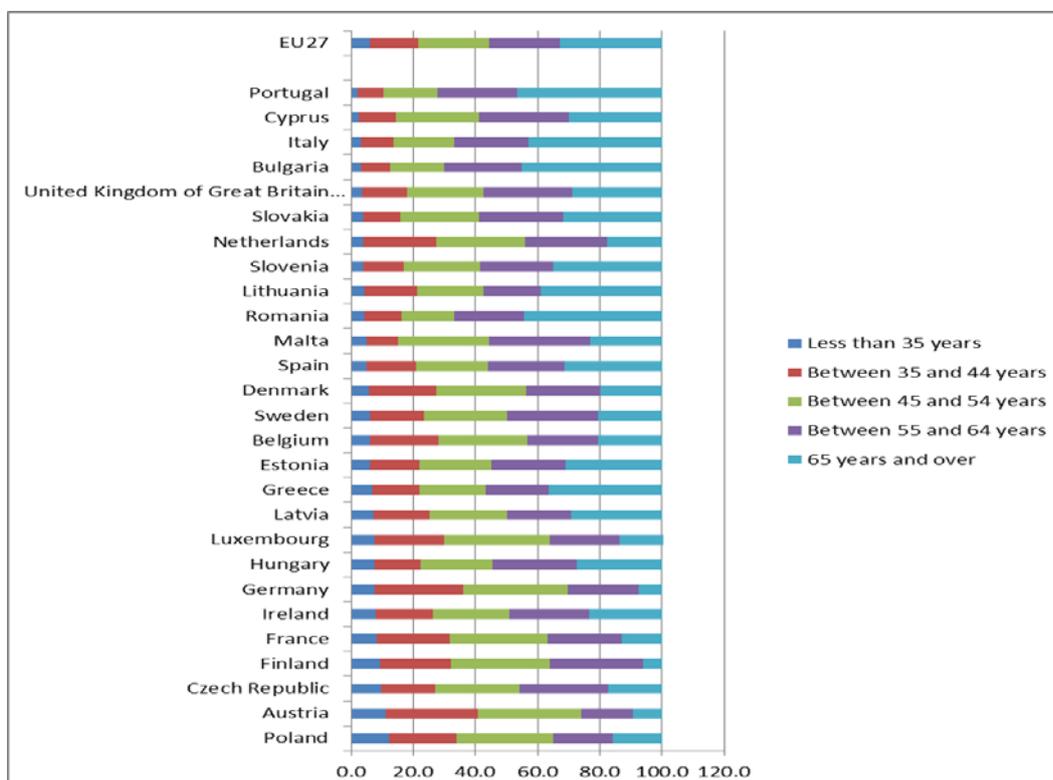


Figure 7. Percentage of farmers per age class, per Member State and EU27, 2007 (ranked with countries with the lowest percentage of young farmers on top) Source: Eurostat, Farm Structure Survey.

2.6 Specialisation of farm production

Cooperatives might not only have member-farmers with different farm sizes or different age. Farms also differ in the composition of their production and therefore in the input they use. This is even true for specialist farms, where for instance specialist dairy farmers also have beef cattle or sheep or sell hay. In addition, many mixed (non-specialized) farms exist. The heterogeneity of farming in terms of specialisation can be estimated by calculating the share that specialized farms have in the total production. This is what Figure 8 shows for plant production (8A) and for animal production (8B). Figure 8A and 8B show what share of production area used for a specific crop or herd can be found on specialized farms.

Fruit and vegetables do not seem to be produced on specialized farms. This is particularly true for vegetables produced under contract for processing, as these are often grown on arable farms. Also fruits can be found on many different farm types. However, in greenhouse vegetable production, the 1250 farms are very specialized. Sugar farms are clearly specialized, with 70% of the area on specialized arable farms. Still, often these farms also grow cereals and potatoes. Cereals can be found on many different arable crop farms, but even on animal farms, as these often grow fodder maize.

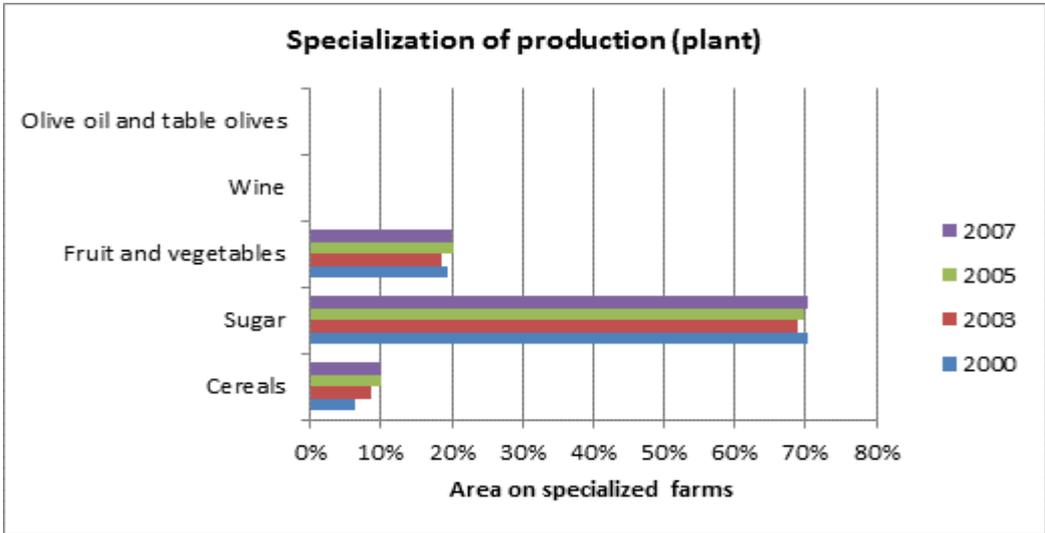


Figure 8A. Heterogeneity in plant production: the share of specialist farm types in total production. Source: Eurostat Farm Structure Survey.

In animal production, most of the animals can be found on specialized farms. This is most prominent for dairy farmers. This can easily be explained by the large investments in specialized housing and milking equipment that is needed in milk production. The economies of scale and scope involved in milk production favour on-farm specialization. Interestingly, both sheep and pigs can be found increasingly on specialized farm. For pigs this can be explained also by economies of scale and in the need to prevent animal diseases. Sheep are often held by retired farmers that want to keep their land. Having sheep is the only farming activity that they maintain.

The rate of specialization could be important for the functioning of cooperatives. When farmers are specialized, cooperatives may also be specialized. Also, farmers are likely to focus their participation in cooperative decision-making. According to the theory (Hansmann, 1996), membership homogeneity leads to efficient and effective decision-making in cooperatives.

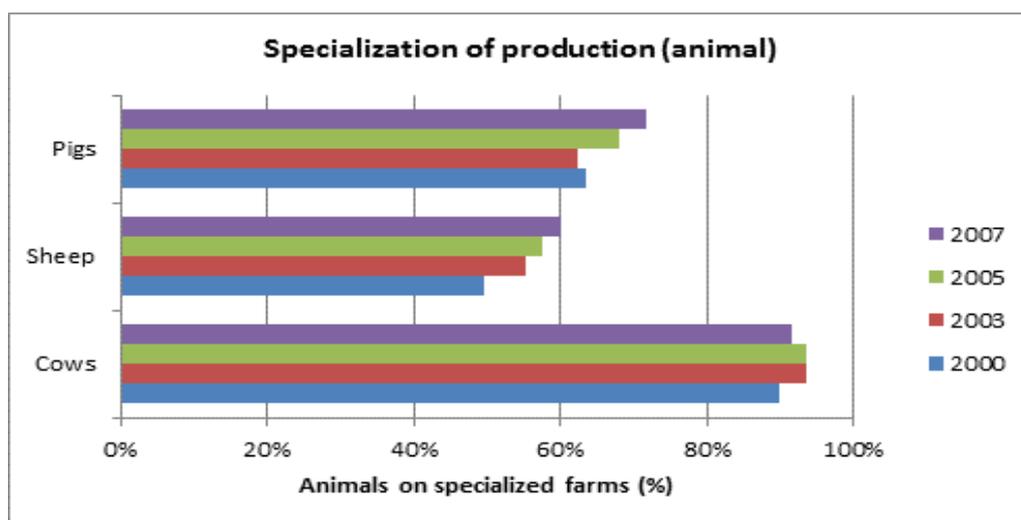


Figure 8B. Heterogeneity in animal production: the share of specialist farm types in total production. Source: Farm Structure Survey, Eurostat.

2.7 Economic indicators of farms

The description of agriculture is concluded with some economic indicators (Table 2). These indicators focus on the net value added and income from farming for farmers, as well as the level of their investment. Some of this investment might be in equity of the cooperative, but far the most will be in farm assets.

Table 2 Economic indicators, average per farm for 2006-2008.

Economic indicators average per farm (2006-2008)

	Sugar	Fruit and vegetables	Dairy	Pig meat	Sheep meat
Economic size - ESU	97.93	354.36	122.80	149.10	50.20
Total labour input - AWU	1.77	7.41	1.65	1.67	1.57
Total Utilised Agricultural Area (ha)	57.8	9.4	45.9	8.6	28.1
Total output €	255,304	933,824	237,559	592,656	127,919
Farm Net Value Added €	108,843	279,696	100,448	65,060	29,402
Farm Net Income €	53,154	53,148	56,081	9,804	-484
Total assets €	1,697,459	2,068,308	2,139,480	1,514,605	696,503
Net worth €	1,193,200	921,619	1,493,412	725,296	443,713
Gross Investment €	54,450	157,579	70,707	79,852	8,865
Net Investment €	22,124	39,358	41,479	31,796	-13,030
Total subsidies - excl. on investm. €	20,542	6,640	27,259	3,869	10,732
Farms represented	7,310	9,840	19,510	5,520	6,820

note: less than 3 years available

Source: DG Agri, FADN.

3 Evolution, position and performance of cooperatives

3.1 Introduction

The Netherlands is a country with many large cooperatives. In the ICA Global 300 list of largest cooperatives worldwide, the Netherlands is represented with 20 cooperatives (Van Bekkum, 2008a). Taking the total turnover of these largest cooperatives, the Netherlands takes a fifth position, after France (1), Japan (2), USA (3) and Germany (4). Comparing the total turnover of these 20 cooperatives with the GDP of the mother country, the Netherlands is also fifth on the list, after Finland, New Zealand, Switzerland and Denmark (all with a smaller GDP than the Netherlands). Finally, combining both dimensions, i.e. share of Dutch cooperatives in ICA 300 total turnover and the ratio turnover of Dutch cooperatives in ICA 300 / GDP, makes the Netherlands the second most cooperative country, after France.

Cooperatives in the Netherlands can be found in all sectors of the economy. Next to well-known sectors with a large market share for cooperatives like agriculture and credit (e.g. Rabobank), cooperatives can be found in food wholesale and retail, insurances, manufacturing, housing and health care. Most of the growth in number of cooperatives can be found in professional services and in healthcare. In 2006 the Netherlands had about 4000 cooperatives (Bekkum, 2008a).

Exact figures on agricultural cooperatives are difficult to get or to interpret. As cooperatives are a legal person, they have to be registered at the Chamber of Commerce. In 2006 some 500 agricultural cooperatives were registered at the Chamber of Commerce. In addition to these figures, Statistics Netherlands (CBS) is measuring the number of companies in a particular industry. CBS only measures companies that are actually performing commercial activities. CBS only counted 80 agricultural cooperatives in 2006. For our study the figures by CBS are more appropriate, as we are not interested in the large number of sleeping organisations. In consultation with experts from the National Cooperative Council for Agriculture and Horticulture (NCR), which is the national organisation representing the interests of agricultural and other cooperatives, we conclude that in 2010 there were about 80 organisations with the legal form cooperative that are providing inputs and services to farmers and/or are marketing farm products (this group includes machinery cooperatives and cooperatives providing temporary employment). In addition to these formal cooperatives there is a large group of producer organisations, usually registered as association, in fruit and vegetables, in ornamentals, and in on-farm nature conservation (see section 2.2.1 for some figures on those POs).

Over the last 5 years there has been a rapid growth in the number of cooperatives in the Netherlands, particularly in financial services. According to R. Galle, director of the NCR, the number of cooperatives has increased to 7500 in 2010.¹ This increase is partly attributed to the increasing popularity of the cooperative business model after the financial crisis of 2008, and partly due to good experiences in the health care sector where general practitioners, pharmacies, dentists and others have realised that they can maintain their own firm (and thus their own identity) while benefitting from economies of scale in joint purchase of inputs and sharing administration services. Besides these positive aspects, most of the increase is the result of changes in tax legislation.² Even the Dutch offices of large consultancy companies like Ernst&Young, KPMG and PwC are now organised as cooperatives.

The fiscal benefit results from the exemption for members (or member firms) to pay dividend tax on the profit that the cooperative distributes among its members. Until 1 January 2007 no dividend tax or corporation tax had to be paid on profit distributed to shareholders with less than 5% of all shares of the company. This rule has changed, with the result that as of January

¹ Het Financieele Dagblad, 16 May 2011 (in Dutch)

² De Accountant, May 2010 (in Dutch)

2007 companies with more than 20 shareholders need to pay dividend tax and corporation tax on the profit distributed to its shareholders. As a result, many companies in professional services, in real estate and even some foreign investment funds have changed their legal form into a cooperative.

In the agricultural sector the number of farmer cooperatives is influenced by two parallel developments. One development is the process of continuous consolidation through mergers among cooperatives. While most of the consolidation has taken place before 2000, this process continued in the 21st century. This has been the case in dairy, where the number of dairy cooperatives decreased from 6 in 2000 to 4 in 2009 (but increased to 5 in 2010). This trend is even more visible among supply cooperatives, where the number of feed cooperatives declined from 25 in 2000 to 13 in 2010.

A rapid decline in number of local cooperatives because of mergers, can also be seen in the Rabobank organisation. Rabobank is one of the largest financial companies in the Netherlands, and has its roots in rural credit. Still today Rabobank is the main provider of loans to farmers, but it has grown substantially in other financial services. For instance, it is the largest provider of mortgages in the Dutch housing market. The Rabobank organisation consists of local banks who jointly own Rabobank Netherlands, a federated cooperative. While in 2000 there were still almost 400 local Rabobanks, in 2010 the number had decreased to 141.3 Although most of the 75,000 farmers in The Netherlands are member of Rabobank, the total membership of this financial cooperative was 1.8 million at the end of 2010.

While the total number of cooperatives is declining, the number of cooperatives in the fruits and vegetables industry has increased. A large number of new cooperatives and producer organisations have been established in response to the restructuring of the auction cooperatives (in the mid-1990s) and the introduction of the 1996 EU regulation for a Common Market Organisation (CMO) for fruits and vegetables.⁴ Bijman and Hendrikse (2003) found that between 1995 and 2000 a total of 73 new POs in the Dutch fruit and vegetables industry have been established. These new POs, some taking the legal form cooperative and others the legal form association. POs registered under the EU regulation for CMO for fruit and vegetables all have the legal form cooperative.

Next to these POs registered under the EU regulation, many more producer organisations have been established, particularly in the horticulture and arable farming sectors. Farmers producing a particular crop or variety nowadays often form a PO with other farmers producing that same variety in order to promote their crop specific interests and set up a joint marketing strategy. Even farmers that are already members of an existing cooperative have set up new POs⁵. Examples are a PO of Conference pear growers who are also member of fruit cooperative Fruitmasters, a PO of chicory growers who are also member of sugar beet cooperative Cosun, and a PO of cauliflower growers who are also member of vegetables marketing cooperative Coforta/The Greenery.

Farmers have also set up new cooperatives and POs for marketing regional products, such as cooperative Oregional, which brings together farmers from both Germany and The Netherlands (Griffioen, 2011)⁶. Some of these organisations for promoting and marketing regional products have other legal forms, such as association or foundation, either because other stakeholders are involved next to farmers or because the organisation only functions as an interest organisation. In addition, we find new cooperatives and POs for collective purchase of gas and electricity, particularly among greenhouse farmers.

³ www.rabobank.nl

⁴ On 26 October 1996, the European Council adopted Regulation (EC) No. 2200/96 regarding the Common Market Organisation in fruit and vegetables.

⁵ In horticulture, these POs are called growers' associations (e.g., Hendrikse and Bijman, 2002).

⁶ See also: <http://www.oregional.nl/>.

An interesting development among farmer cooperatives that started in the 1990s is the rise of environmental cooperatives (also called nature conservation associations). These POs can have different legal forms, such as cooperative, association, or foundation. The main purpose of these POs is for the members to enter into a joint contract with local and regional public authorities to conserve nature on the land of the farmer members. The public authorities are providing subsidies to farmers, but because nature conservation is not confined to the boundaries of one farm the contract has to be with a group of farmers with adjacent land holdings and subsidies have to be shared. In 1994 there were 9 environmental cooperatives, in 2004 there were 124 and in 2006 there were 150 (Oerlemans and Guldemond, 2006). While most of these POs have been established by farmers, they often also have non-farmer members, notably citizens that promote nature conservation. The main tasks of these POs are preservation of biodiversity and development and maintenance of nature elements in the landscape, such as hedgerows, small creeks, and small areas of forest (Oerlemans and Guldemond, 2006).

A total number of membership of agricultural cooperatives does not exist. However, we know that most if not all farmers are member of at least one cooperatives. Adding up the membership figures for the 50 largest cooperatives give as total above 100,000 members. Knowing that there are only about 70,000 professional farmers in the Netherlands, and knowing that Table 3 does not include the members of Rabobank (the largest credit supplier to Dutch farms), neither the members of environmental cooperative or energy cooperatives, we can conclude that Dutch farmers in general are very cooperative minded.

Table 3. List of top 50 largest farmers' cooperatives (2010)

Rank	Name of Cooperative (popular name)	Sector/Activity	Turnover (million €)	Farmers Members*
1	FrieslandCampina	Dairy	8972	20000/14829
2	ForFarmers	Supply / Feed	4162	6300
3	FloraHolland	Ornamentals	4130	4949
4	Royal Cosun	Sugar	1766	8000
5	Coforta/The Greenery	Vegetables and Fruit	1263	1640/1007
6	Agrifirm	Supply / Feed	1983	15000
7	Avebe	Potatoes	522	2960
8	FresQ	Vegetables	480	76
9	DOC Cheese	Dairy	390	1105
10	ZON fruit & vegetables	Vegetables and Fruit	334	372
11	CZAV	Supply	304	3014
12	CNB	Flower bulbs	280	1576
13	Agrico	Potatoes	233	980
14	FruitmastersGroup	Fruit	229	505
15	Rijnvallei	Supply / Feed	225	2315
16	Horticoop	Supply / horticulture	201	2074
17	CNC	Mushrooms/compost	201	198
18	Best of Four	Vegetables	200	150
19	Boerenbond Deurne	Supply / Feed	181	585
20	CONO Cheesemakers	Dairy	175	460
21	Versdirect.nl	Vegetables	152	76
22	CRV	Cattle Breeding	140	23478
23	Coöperatie Funghi	Mushrooms	133	78
24	Delta Milk	Dairy	129	150
25	BGB	Vegetables	128	52
26	Vitelia	Supply / Feed	120	600
27	Plantion	Ornamentals	105	452
28	Pigure Group	Pig Breeding	92	2160
29	Rouveen	Dairy	87	291
30	Isidorus Nederpeel	Supply / Feed	81	256
31	Arkervaart	Supply / Feed	74	1074
32	De Valk Wekerom	Supply / Feed	68	577
33	Batavia**	Vegetables	n.a.	n.a.
34	Nedato	Potatoes	63	500
35	CSV COVAS	Sugar beet	58	1876
36	Komosa	Vegetables	60	50
37	Brameco-ZON	Supply / Feed	54	236
38	Agruniek	Supply / Feed	48	399
39	Fossa Eugenia**	Vegetables	n.a.	n.a.
40	Nautilus	Vegetables (organic)	38	50
41	CAV Wieringermeer / CAV Agrotheek	Supply	34	395
42	Veiling Zaltbommel	Fruit and Vegetables	34	219
43	CAV Den Ham	Supply / Feed	30	350
44	Fresh Produce Growers**	Vegetables	n.a.	n.a.
45	Sun Quality**	Vegetables	n.a.	n.a.
46	De Schakel**	Vegetables	n.a.	n.a.
47	CLV De Samenwerking	Supply / Feed	20	726
48	Zundert**	Fruit and Vegetables	n.a.	n.a.
49	Zuid-Limburg	Fruit	14	190
50	CAVV Zuid-Oost-Salland	Supply / Feed	11	188

Sources: Annual Reports; Company websites; Press releases; professional media. In some cases (like flower or F&V auctions) the turnover is not the turnover that the cooperative as a juridical entity generates (by charging a fee for its services) but the turnover generated by the members' use of the services of the cooperative. *: farmers/farms (some cooperatives have individual persons as members; often a farm is owned by two members (man and wife, or two brothers/sisters)); **: ranking on basis of an estimate of turnover; n.a. = not available.

3.2 Types of cooperatives

Many different cooperatives exist in the agricultural sector. Cooperatives continue to play a major role in supplying credit and inputs, such as animal feed, greenhouse products, fertilizers, seeds and seed potatoes, artificial insemination for cattle and pigs, and compost for mushroom farms.. Also there are still eleven cooperatives for providing farm help. These employment cooperatives help farmers with temporary employment services, for the harvesting season or in case farmers become ill. There are at least six machinery cooperatives in the Netherlands, which rent out farm machinery to member-farmers or provide agricultural contracting services.

For credit and insurance, few cooperatives or mutuals remain. As said above, cooperative Rabobank is the only credit cooperative in the Netherlands. In agricultural insurance, two companies dominate: Achmea Agro (brand name: Interpolis) and Univé. Achmea Agro is not a mutual or cooperative anymore, it is a subsidiary of Achmea Group. This two hundred years old insurance firm is a subsidiary of Eureka, which is a holding with two main shareholders, the association Achmea and the Rabobank. Achmea Agro has the largest market share in agricultural insurances. Univé, the second largest company in insurances for farmers, is still a cooperative. Most of its activities are outside of agriculture, and each customer is also a member. In 2011, Univé had 1,3 million members. In addition to the two large farm insurance companies, there is AgriVer, which is much smaller than the other two and still organised as a mutual insurance company.

On the output side, different marketing cooperatives can be found. Some cooperatives are mainly bargaining associations, seeking optimal contract conditions for their members, but not processing and/or marketing the products of their members. For bulk commodities like grains, the cooperatives are mainly for collecting, storing and selling (on spot markets or future markets). Other cooperatives do carry out the processing of farm products, such as in dairy, sugar beets, starch potatoes, and mushrooms. Table 4 provides an overview of the number of marketing cooperatives in different sectors as well as different types of cooperatives.

Since 2004 the Netherlands also has a wine cooperative: Coöperatief Verenigde Achterhoekse Wijnbouwers. The cooperative has 12 members who together produce a number of quality wines. While the cooperative is very small compared to international standards (with only 50,000 bottles a year), it is rapidly growing.

In the fresh produce industry different types of marketing cooperatives can be found. Historically, the cooperatives in the fruit and vegetables industry were cooperative auctions. In the 1970s, still 88 fruit and vegetables auctions existed. However, in the early 1990s a process of restructuring has taken place among these auctions (Bijman, 2002). Many of the cooperatives merged and shifted from the auction clock as dominant price determination mechanism towards brokerage, that is, direct negotiation with wholesale and retail customers. This opened the door for cooperatives to transform into trading companies, and because retailers nowadays work with preferred suppliers, the trading companies started to trade a full range of fruits and vegetables, adding non-member products to their assortment. Still, different marketing models can be found. A few cooperatives keep the auction clock alive, particularly for seasonal products like soft fruits and asparagus, while others only work with short and long term contracts with customers. Some cooperatives focus on establishing long-term relationships with major

retailers, while others have focussed on providing logistic services to members and member groups. Some cooperatives are mainly bargaining associations.

Most of the cooperatives in the Netherlands are specialized, particularly on the marketing side. They have been called single purpose cooperatives (Bekkum et al., 1997) as they focus on the processing and/or marketing of one farm product or a small range of farm products, such as only dairy, only sugar, only potatoes, only vegetables, only fruits, only mushrooms, or only starch potatoes. On the input side we find more diversified cooperatives, providing farmers with seeds, fertilizers, agrochemicals, feed, and other inputs. Even the financial services are specialised, where Rabobank provides credit, and former mutual Achmea Agro, cooperative Univé, and mutual AgriVer provide insurances to farmers.

Table 4. The number of agricultural cooperatives and POs per agricultural sector

Sector	Coops in Top 50	Other Coops and POs	Total
Marketing cooperatives			
Dairy	5	5	10
Cereals (and oilseeds)	2	3	5
Fruits and vegetables	17	>25	>42
Sugar	2	0	2
Potatoes (starch, seed and ware) ⁷	3	4	7
Mushrooms	3	0	3
Ornamentals	3	3	3
Wine	0	1	1
Goat milk	0	3	3
Regional specialties	0	>2	>2
Supply of inputs			
Supply (particularly feed)	16	1	17
Compost for mushrooms	1	1	1
Animal breeding	2	0	2
Others			
Employment	0	11	11
Machinery	0	6	6
Credit	0	1	1
Environmental Coops	0	±150	±150
Energy cooperatives	0	n.a.	n.a.
Ornamental growers' associations	0	n.a.	n.a.
Total	54	n.a.	n.a.

Source: authors' own research; total of 54 in column Top 50 is because the two cereal coops are also supply coops; the mushroom compost coop is also a mushroom processing coop; and Coforta/The Greenery is counted both in fruit/vegetables and in mushrooms; n.a. = not available.

As of 2010, all Dutch agricultural cooperatives are primary cooperatives. In 2000 the situation was slightly different. In 1998, still three federated cooperatives existed: Cebeco Group, Cehave, and Landbouwbelang.⁸ All three were multipurpose cooperatives, with activities in producing animal feed (particularly Cehave and Landbouwbelang), plant breeding (Cebeco and Cehave),

⁷ Avebe (starch potatoes); Agrico and ZAP (seed potatoes); Agrico (until 2010), Nedato, Cosun, St. Annaland, and CSV COVAS (ware potatoes).

⁸ Another federated cooperative is Rabobank, but as said above this is not a pure farmers' cooperative.

agricultural inputs (all three), retail (all three), poultry meat (Cebeco and Cehave) and egg products (Cebeco and Cehave). Cebeco had even many more activities, such as in farm equipment, airline meals, potato products (Aviko), flower bulbs and chicken hatchery.

In 1999, Cehave transformed from a federated cooperative into a primary cooperative. In 2000, Cehave merged with Landbouwbelang, which then also became a primary cooperative. The reasons given by Landbouwbelang to seek the shift from federated to primary cooperative were (1) the need to improve the relationships between farmer and the cooperative firm, both for commercial transactions and for decision-making; (2) avoiding inefficiencies in decision-making; (3) improving overall efficiency of the cooperative firm; and (4) giving business units their own financial responsibility.⁹ Recently Cehave Landbouwbelang merged with Agrifirm.

Royal Cebeco Group was the only remaining federated cooperative after 2000. Cebeco was operating on a national scale, and had 22 regional supply cooperatives as members. During the early years of the 21st century, Cebeco was encountering major losses, particularly in North America, where its subsidiary Aviko had invested to compete in the home market of the other big French fries companies (McCain, LambWeston). Also the outbreak of animal diseases in the Netherlands led to disappointing results. The member cooperatives decided to slowly phase out the federated cooperative Cebeco by selling all of its subsidiaries either to member cooperatives or to outside parties. As of 1 April 2010, Cebeco does no longer exist. One of the member cooperatives – Agrifirm – acquired all shares in the remaining Cebeco activities from the other member cooperatives. Cebeco is an interesting case of how a very large but diversified federated cooperative, with many local member cooperatives with different interests, can run into trouble (Bijman, 2005).

Cooperatives in the Netherlands have an international scope. They sell their products in many different countries or even on different continents. For instance, FrieslandCampina is earning more than 70% of its turnover outside of the Netherlands (Heyder et al., 2011). A substantial part of this turnover is not just sales from the Netherlands, but is generated by production units in other countries. While internationalisation through export and foreign direct investments is not surprising for food processing cooperatives, it is interesting to see that a substantial number of Dutch cooperatives also have members in other countries (see Section 2.2.4).

Outside the food chain, The Netherlands has a special type of agricultural marketing cooperatives that justifies some attention here. The grower-owned auction is the dominant sales organisation for ornamentals (cut flowers, potted plants) in the Netherlands, with almost 95% of domestic flowers sold through the cooperative auction. The flower auction was originally established to lower transaction costs (particularly information costs) in a non-transparent market with many different buyers and sellers and a large number of perishable products. Although information costs have been greatly reduced, due to modern information and communication technology, the market has not become less complex. The largest auction cooperative, FloraHolland, daily completes approximately 80,000 transactions between one of its 10,000 suppliers and one of the 5,000 buyers. The auction provides the growers with a low-cost marketing tool, allowing them to specialise in production activities. It provides buyers with a broad assortment of plants and flowers that they can obtain at one spot. At the flower auction most flowers are sold through the auction clock, while a substantial part of the potted plants are sold through brokerage.

In animal breeding, cooperatives have always been dominating the sector. Over the last two decades, many mergers of regional cooperatives have resulted in only one cooperative in (dairy) cattle (CR Delta) and one cooperative in pig breeding (Pigture Group). For market shares, see next section. In 2002 CR Delta (Coöperatie Rundveeverbetering Delta) merged its assets and activities with those of its Belgium counterpart VRV (Vlaamse Rundveeteelt Vereniging) into the CRV Holding.

⁹ Landbouwbelang Annual Report 1998 (in Dutch)

In plant breeding, cooperatives are only active in potato breeding (Agrico and Avebe). In the past cooperatives have been involved in breeding field crops. Until 2005 Cosun co-owned seed company Advanta that was involved in sugar beet, maize and grass breeding.¹⁰ Royal Cebeco Group has been involved in the breeding of peas and grasses until 2003, when it sold its subsidiary Cebeco Seeds to a Danish seed company (as part of an overall scheme of dismantling the federative cooperative).

Recently, two new cooperative were established for oilseeds, Carnola and Colzaco. Cooperative Carnola was established in 2004, by growers of oilseeds in the south of the Netherlands. It has 25 members, producing oilseeds on 240 hectares. The oilseeds generate 350,000 litres of oil. This oil is sold as pure plant oil (PPO) which can be used directly as fuel in motors of trucks and busses that have been modified for this fuel. There are no excise taxes on this fuel (normally on diesel taxes are 43%). Crushing the oilseeds has been outsourced to oil mill ELKOM.¹¹ Cooperative Colzaco was established in 2006, by oilseed growers in the east of the Netherlands.¹² The cooperative had about 120 members in 2010, who together cultivated 200 hectares of oilseeds. The objective of the cooperative is to help farmers get a good result from oilseed production by coordinating production, processing and sales.

3.3 Market share of farmers' cooperatives in the food chain

The market of farmers' cooperatives in the food chain has increased over the last ten years. Although exact figures are hard to get (the 2010 figures in Table 5 are authors' estimates), it can safely be stated that cooperatives as a group have expanded their market share compared to IOFs. In this section we discuss the developments of the market shares of cooperatives in the following sectors: dairy, sugar, fruit and vegetables, pork, cereals, potatoes and mushrooms. There are no cooperatives in sheep meat or olives (not grown in the Netherlands).

Table 5. Agricultural cooperatives in The Netherlands, per sector

	Agricultural Cooperatives (N°)		Market Share (%)		Farmer (only in NL)	Members
	2000	2010	2000	2010	2000	2010
Sugar	3	2	63	100	13700	9940
Cereals	3	3	n.a.	>55	n.a.	n.a.
Dairy (milk processing)	5	5	83	86	21600	15.200
Pig meat	3	0	34	0	10000	0
Wine	0	1	0	n.a.	0	12
Fruit & Vegetables ¹³	15	19	71	95	9000	4500
Potato starch	1	1	100	100	4800	1600
Seed and Ware Potatoes	7	6	n.a.	n.a.	3900	1500
Mushrooms	2	3	>50	>80	470	200
Flowers	6	3	95	95	9400	5300
Pig breeding	1	1	n.a.	85	n.a.	2300
Cattle breeding	1	1	90	80-90	34750	18000
Farm inputs	25	15	n.a.	n.a.	50000	35000
Of which animal feed	20	13	53	55	?	28000

¹⁰ In 2005, the French cooperative Limagrain acquired the Dutch/British seed company Advanta. Advanta was the result of the 1996 merger between the Dutch seed company Royal VanderHave Group (owned by Cosun) and the British company Zeneca Seeds. (Bijman and Bogaardt, 2000).

¹¹ Carnola website: www.carnola.nl (in Dutch)

¹² Official name: Coöperatieve Koolzaadvereniging Oost Nederland Colzaco U.A.,

¹³ Source for 2000 data: Commission of the European Communities (2001), Report from the Commission to the Council on the state of implementation of Regulation (EC) No 2200/96 on the Common Market Organisation (CMO) in fruit and vegetables. Brussels. COM(2001) 36 final. Including: Cooperatieve Groentenveiling Katwijk.

Source: 2000 data: NCR (Coöperatie No. 568), but adjusted by authors for number of sugar, potato, mushroom, and fruit and vegetables cooperatives; 2010: authors' estimates (n.a. = not available);

In the **dairy** industry, which is one of the most important sectors of Dutch agriculture, cooperatives continue to be the dominant actors. The share of the five cooperative milk processors is around 80%, with FrieslandCampina accounting for more than 70% of all milk deliveries. In addition to the cooperative milk processors (or cooperative dairies), there is also a cheese marketing cooperative. This cooperative, named De Producent, has existed since 1915 and is storing and selling cheese on behalf of 45 farmers that make their own cheese. A recent development among dairy cooperatives in the Netherlands is the establishment of bargaining associations, such as Eko-Holland (2003) for organic milk, and the regional associations DeltaMilk (2003), Flevomelk (2004), Noorderlandmelk (2007) and Coöperatie Hermes (2010). These associations mostly sell to IOF dairy companies but may also sell to cooperative dairies if the latter have demand that cannot be filled by their own members. DeltaMilk has become a milk processing cooperative in 2009, by acquiring a cheese factory that FrieslandCampina had to divest in order to get EU approval for their merger.

In **sugar** sector there used to be two companies processing sugar beets into sugar and sugar products: CSM, a stock market listed IOF, and Cosun, the sugar beet growers' cooperative. After earlier (even hostile) merger and acquisition processes in the 1970s, Cosun acquired all of the sugar business of CSM in 2007. The former suppliers of CSM became members of Cosun (under the requirement of paying an entry fee). The main reason for CSM, an international food industry concern, to withdraw from the sugar industry was the lack of growth potential in the sugar industry. Besides Cosun there is one other sugar cooperative in the Netherlands: CSV COVAS . This cooperative (a 2009 merger of the cooperatives CSV and COVAS) has no processing capacity but is a service provider to 2000 growers of sugar beets (on 12.000 ha) in the south east of the country. These services include bargaining on the delivery conditions to Cosun. In addition, CSV COVAS is collecting and selling potatoes (to Cosun subsidiary Aviko), malting barley, ginseng and chicory (the latter product is also processed by Cosun).

In **fruit and vegetables**, the majority of products is sold through cooperative marketing organisations. All of the major fruit and vegetables cooperatives are registered producer organisations under the EU/CMO regulation. In 2000 there were 14 formally registered POs, accounting for about 70% of all fruits and vegetables sold in The Netherlands. Together these 14 cooperatives received 30 million euro subsidies from Brussels (Bijman, 2002). In 2009 there were 21 officially registered POs in the Dutch fruit and vegetables industry, while this number reduced to 19 in 2010.¹⁴ The total value of products marketed by these POs was 2.345 billion euro. This represent approximately 95% of the production value of all fruits and vegetables produced in the Netherlands.¹⁵ Together these 21 POs received about 100 million euro subsidies under the CMO regulations for Fruits and Vegetables (Productschap Tuinbouw website).

In the **pork** sector there is no longer a farmer-owned cooperative. In 2000 there still was one cooperative slaughterhouse (Dumeco). This slaughterhouse was actually owned by three cooperatives: Dumeco, Cebeco and Cehave.¹⁶ Dumeco was acquired by Sobel in 2003. The new company was named Best Agrifund, and later became what is now known as VION Food Group, the largest pork slaughtering company in Europe. VION is fully owned by the Dutch farmers'

¹⁴ In 2010 three POs (Unistar-Brassica, Tradition and Westveg) merged into a new PO, "Best of Four". The number of 19 registered POs in 2010 includes Coöperatieve Verzendhandel, although this cooperative was announcing, in August 2010, its termination (AGD, 06/08/10)

¹⁵ Calculated by using Eurostat data (Agricultural Goods Output) and European Commission data on POs in the fruits and vegetables.

¹⁶ Formally, Dumeco was a limited liability company (BV). It was established in 1995, by merging the slaughtering activities of cooperatives Coveco and Encebe and the family-owned company Gupa. In 2001, the shareholders of Dumeco B.V. were Coöperatie Cehave Landbouwbelaag U.A. (35%), ZLTO (19%), Coöperatie Koninklijke Cebeco Groep U.A. (22%) and Coöperatie Dumeco U.A. (24%).

organisation Zuidelijke Land- en Tuinbouworganisatie (ZLTO). ZLTO is an association of 18,000 farmers in the south of the Netherlands. It is an lobbying and service providing organisation for many different farmers (among which hog producers are a minority), but it also has a number of commercial activities. It is the 100% shareholder of VION. Although most hog suppliers to VION are member of ZLTO, they have no direct influence on the strategy and the policies of VION. Although VION is farmer-owned, it does not operate like a cooperative.¹⁷

In marketing **cereals**, cooperatives have a market share of more than 55 per cent. Two large cooperatives – Agrifirm and CZAV – take care of most of this 55%. In addition, two other feed cooperative also purchase much smaller quantities of cereals from their arable crop members, Rijnvallei and ForFarmers. Most of the cereals produced in the Netherlands are used for animal feed. Thus, the same cooperative that sells grains on behalf of the arable crop farmers uses the grains in the production of feed for its livestock farmers. The fifth cooperative in selling grains is a small regional cooperative for barley: Triligran. The barley produced by the members of Triligran is used by a regional brewer.¹⁸ A sixth cooperative is becoming involved in cereals marketing. The cooperative Carnola has been set up, in 2005, by arable farmers to collectively sell oilseed rape to the biodiesel industry. In 2011 the cooperative also established a marketing pool for grains, for farmers in the North of Limburg. It is expected that some 3000 tons of wheat and barley will be sold by the cooperative.¹⁹

In the **potato** sector, which is rather important for the Netherlands, there are still seven cooperatives. Within the potato industry one should make a distinction between seed potatoes, starch potatoes, and ware potatoes (either for processing into French fries and other products, or for so called table / fresh potatoes). For seed potatoes there are two specialized cooperatives: a large one named Agrico, and a very small one, named ZAP.²⁰ For starch potatoes there is only one cooperative, Avebe. Starch from starch potatoes is partly used in food products, partly in non-food products. For ware potatoes there are basically two marketing channels: one is fresh potatoes, and the other is processed potato products (mainly French fries). In the market for fresh potatoes, several cooperatives are active: Nedato, Agrico, CSV COVAS (via its subsidiary AZN), and Veiling St. Annaland. Processing of potatoes into French fries and many other potato products is done by four large companies, all with international activities: McCain, FarmFrites, LambWestonMeijer, and Aviko. The latter is a subsidiary of sugar cooperative Cosun.²¹

For **mushrooms** there are three cooperatives. One cooperative – CNC – is both supplying compost to mushroom growers and processing the mushrooms into different products. All of the Dutch mushroom producers are member of CNC, because of the compost supply. A subset of the members of CNC is supplying mushrooms to the processing subsidiaries of CNC. Cooperative Funghi is specialized in selling fresh mushrooms. Funghi is also a registered PO under the EU/CMO regulation for fruits and vegetables. Finally, fruit and vegetables cooperative Coforta/The Greenery is also marketing mushrooms. In fresh mushrooms, Funghi and Coforta/The Greenery have about 80% of the market. In processed mushrooms there are a number of IOFs next to CNC.

Although not part of the food chain, the marketing of ornamentals (cut flowers, potted plants and flower bulbs) is very important for Dutch agriculture. With a production value of 6.3 billion

¹⁷ Still, VION is a member of the NCR.

¹⁸ This cooperatives produces, exclusively, for Gulpener brewery the following crops: barley under environmental certificate, organic barley, wheat, spelt and rye. The 40 members of Triligran all live in Mid and South Limburg, together they produce about 2500 tons of barley for the brewery, on about 475 hectare (CSV COVAS Jaarverslag 2009-2010, p. 24)

¹⁹ source: Agrarisch Dagblad, 21 April 2011 (in Dutch)

²⁰ Coöperatieve Zaaizaad- en Pootgoedtelers-vereniging Anna Paulowna b.a.

²¹ Aviko used to be a subsidiary of Cebeco (70%) and Cosun (30%). Cosun became full owner in 2002. Cosun does not present itself as a sugar beet and potato cooperative. Aviko has always been managed as an IOF, and it continues to do so, although it is owned by a cooperative. Potato producers do not have control over the strategy of the company.

euro, ornamentals are the largest agricultural sector in the Netherlands. By far the largest share of this value is generated at one flower auction, FloraHolland, with a turnover of more than 4.1 billion. The market share of cooperatives in selling cut flowers has not changed and is still around 95 per cent. For potted plants, trees and other ornamentals there are no reliable figure, but the market share of cooperatives is probably much smaller, as there is much more individual contracting between growers on one side and traders, wholesalers or retailers on the other side.

3.4 List of top 5 largest farmers' cooperatives per sector

In this study we focus on eight sectors: dairy, pig meat, sheep meat, cereals, sugar, fruit and vegetables, olives and olive oil, and wine. In three out of these eight sectors, there are no cooperatives in the Netherlands. For olives and olive oil this is quite understandable, as there are no olives grown in the Netherlands. For wine, it is actually surprising that there is a cooperative. Wine growing is a young and still small economic activity in the Netherlands. Most of the 130 vineyards started as a hobby, and many continue to be so. However, the number of commercial winegrowers is steadily increasing (for more information, see Section 4.5).

Cooperatives are particularly strong in the sectors dairy, sugar, cereals (but this is not an important crop), fruits and vegetables. Table 6 provides the names of the top 5 largest cooperatives in each of these sectors. For three sectors there are less than 5 cooperatives left. In dairy there are exactly 5 cooperatives (and a few bargaining associations). While in fruits and vegetables there are multiple cooperatives, the top 6 represent 75 % of the total domestic production.

Table 6 Most important cooperatives in the sectors studied in this project (2010)

Sector	Rank	Name of Cooperative	Turnover 2010 (million euro)*
Cereals	1	Agrifirm	1983
	2	CZAV	304
Sugar	1	Cosun	1766
	2	CSV COVAS	58
Fruit and vegetables	1	Coforta/The Greenery	1263
	2	FresQ	480
	3	ZON	334
	4	Fruitmasters	229
	5	Versdirect.nl	152
Dairy	1	FrieslandCampina	8972
	2	DOC Cheese	390
	3	CONO	175
	4	DeltaMilk	129
	5	Rouveen	87
Mushrooms	1	CNC	201
	2	Funghi	133
Potatoes	1	Avebe	522
	2	Agrico	233
	3	Nedato	63
Wine	1	Cooperatief Verenigde Achterhoekse Wijnbouwers	n.a.

* Total turnover of the cooperative; turnover in specific sector is unknown, unless the cooperative is fully specialized.

The absence of cooperatives in the pig meat and sheep meat sectors is surprising. Pig meat is an important sector in Dutch agriculture, as can be seen from Figure 1 and Table 2. Also, the

Netherlands has a long tradition of cooperative slaughter houses. However, this tradition is not a success story. Cooperatives have always had a hard time to survive in the very competitive and volatile pork market. During many decades, pig slaughtering was linked to feed supply, either within the same cooperative or through agreements between cooperative feed suppliers and cooperative slaughter houses. These so-called integration arrangements were meant to create efficient supply chains and build strong competitive positions. However, one of the key problems among cooperative slaughter houses was the free riding behaviour among their members. As pig production is located relatively close to Belgium and Germany, farmers could easily sell their pigs abroad when prices were slightly higher on the other side of the border, leaving the domestic cooperatives with idle capacity. Not only foreign processors, also domestic IOF slaughter houses often paid just a little more for the animals, giving farmers an incentive to deliver their pigs to the IOF instead of to their own cooperative.

In the sheep meat sector, most lambs are transported abroad, to be slaughtered in France or Spain. This trade in live sheep is mainly done by small trading and transporting companies. As farmers have substantial freedom in choosing to sell today or next week, as sheep is a commodity, as it is not perishable when still alive, and as there are many traders interested in buying sheep, there does not seem to be a need for a cooperative.

3.5 Transnational cooperatives

Many Dutch cooperatives have international operations. In most cases the foreign activities of the cooperatives are limited to marketing, trade and sales. These exporting cooperatives do not buy agricultural products from foreign farmers, or supply inputs to them. However, there is an increasing group of cooperatives that do business with farmers in other EU Member States. These cooperatives are called international cooperatives. They can be marketing cooperatives that buy from farmers in different countries, or they can be supply cooperatives that sell inputs to farmers in different countries. One particular group of international cooperatives is the so-called transnational cooperatives. These cooperatives do not just contract with farmers to buy their products or to sell them inputs, they actually have a membership relationship with those supplying or purchasing farmers. In sum, a transnational cooperative has members in more than one country, while an international cooperative has customers or suppliers in more than one country. Table 7 lists the Dutch cooperatives that had members in other EU Member States (in 2007). More recently we should add the regional marketing cooperative Oregional, which has members on both sides of the German-Dutch border, in the region around the city of Nijmegen (see also note 6).

Table 7 Dutch agricultural cooperatives with foreign members (2007)

Name of Cooperative	Sector/Activity	Number of NL members	Percentage of foreign members	Home countries of foreign members
Campina	Dairy	7131	22	Germany, Belgium
DOC Cheese	Dairy	1184	8	Germany
Royal Cosun	Sugar	12986	1.2	Belgium, Germany
Coforta/The Greenery	Vegetables and Fruit	1250	0.2	
ZON fruit & vegetables	Vegetables and Fruit	464	2.4	Germany
FruitmastersGroep	Fruit	674	3	??
FresQ	Vegetables	88	0	2010: 3 foreign members in UK

Avebe	Potatoes	3609	44	Germany
Agrico	Potatoes	1080	0.7	
ForFarmers	Supply / Feed	7170	5.2	Germany
CZAV	Supply	3050	0.8	Belgium
Tuinbouwcentrum Lent	Supply / horticulture	295	16	Germany
CNC	Mushrooms/compost	219	1.8	Germany
CRV	Cattle Breeding	26524	23	Belgium
FloraHolland	Ornamentals	5323	4.1	Kenya, Ethiopia, Israel
CNB	Flower bulbs	1817	1	

Source: Van Bekkum (2008b)

Table 8 presents the foreign transnational cooperatives and the international cooperatives active in The Netherlands. These are cooperatives from other EU Member States that have come to The Netherlands to directly trade with farmers, either as members or as contractual suppliers. Interestingly, a rather large group of Dutch fruit and vegetable growers is (also) member of a Belgium cooperative. According to information in the professional press, more than 1000 Dutch growers are member of Belgium auction cooperatives and other producer organisations (AGD, 09/02/10). Reasons for Dutch growers to become member of Belgium coops/POs is the use the auction clock (abolished in the Netherlands), the lost membership cost and the better price they may get.

Table 8. Foreign transnational and international cooperatives with members and/suppliers in The Netherlands

Name of the Cooperative	Mother country	Sector(s) involved in:
Transnationals		
Mechelse Veilingen; Veiling Hoogstraten; Brava	Belgium	Fruit & Vegetables
Internationals		
Arla	Denmark/Sweden	Dairy
Hochwald	Germany	Dairy
Limagrain	France	Supply (seeds)

In addition to Table 7, which lists the Dutch cooperatives that have foreign members, Table 9 lists the Dutch cooperatives that have suppliers (in case of marketing cooperatives) or customers (in case of supply cooperatives) in other countries that are not members of the cooperative.

Table 9. Dutch cooperatives that have farmer-suppliers or farmer-customers in other countries that are not members of the cooperative

Name of the cooperative	Host countries	Sector(s)
Marketing cooperatives		
FrieslandCampina	Belgium, Germany, Greece, Hungary, Rumania, France	Dairy
Coforta/The Greenery	UK, Spain and others	Fruit & Vegetables
Fruitmasters	several	Fruit
ZON Fruit & Vegetables	several	Fruit & Vegetables
Cosun	Germany	Sugar
Supply cooperatives		

Agrifirm	Germany, Poland, Hungary, Belgium, China	Feed
ForFarmers	Germany	Feed
Horticoop	Spain, Denmark, Germany, Belgium	Inputs for horticulture

Internationalisation of Dutch cooperatives is mainly limited to neighbouring countries, with some exceptions. For instance, starch potato cooperative Avebe has 44% of its members in Germany. Avebe is a very specialized cooperative and therefore dependent on one particular raw material (starch potatoes). Because growth opportunities were very limited in the Netherlands while growth was necessary because of economies of scale and scope, Avebe has expanded into Germany, by acquiring German starch potato companies, and inviting German suppliers to become member of the cooperative. Currently, the German membership steadily increases, while the number of Dutch members is decreasing.

Dairy co-operatives have become more international to benefit from economies of scope in product innovation and marketing. For example, the Dutch dairy co-operative Campina (in 2008 merged into FrieslandCampina) always had a strong position in the consumer market for dairy desserts in the Netherlands, but it has further developed along this path by acquiring dairy companies in Germany and Belgium. In 1994 Campina acquired German dairy company Südmilch, which possessed strong consumer brands (such as Landliebe) in its regional and national dairy market. Südmilch was also used as a stepping stone for international expansion into Eastern Europe. In 1997 Campina formed a joint venture with Milchwerke Köln/Wuppertal, which also was a major producer of dairy desserts. The Milchwerke Köln/Wuppertal co-operative merged with Campina in 2001.

A rather different internationalisation strategy was followed by FrieslandFoods (the merger partner of Campina). FrieslandFoods and its predecessors had been operating in South-East Asia for more than 70 years. This has its roots in colonial links with Indonesia, and in attractive export options like condensed milk and milk powder. In some cases the milk products are bought on the world market e.g. from New Zealand. Currently FrieslandFoods is also helping to set up local production, e.g. in Vietnam – also this contributes to a licence to operate from the host government.

The issue of foreign members has been and in some cases still is heavily discussed. Where some cooperatives (like the flower auction) takes its members from different continents, an internationally operating cooperative like Agrifirm (also active in feed production in Hungary and China) forces even its Dutch members to have the majority of their business in the Netherlands – if they emigrate or even produce more than 50% in a neighbouring country, they have to change from member to a non-member customer status.

In the fresh fruit and vegetables industry internationalisation is particularly important for those marketing cooperatives that supply year-round the full assortment to major retail customers. Examples are The Greenery, Fruitmasters and ZON. The Greenery and Fruitmasters both have a subsidiary that imports tropical products and products that are out of the Dutch production season. The Greenery has a subsidiary in the UK, which supplies its UK retail customers, partly from UK producers, partly from Dutch producers. Several UK producers are member of Coforta/The Greenery cooperative. FresQ also has producing members in the UK; these members are actually Dutch producers with a UK subsidiary. Finally, ZON Fruit and Vegetables has a strategic alliance with a major Spanish fruit and vegetables cooperative (Unica) to have a guaranteed supply of Spanish fruits and vegetables.

4 Description of the evolution and position of individual cooperatives

4.1 Data gathering per cooperative

The data on the individual cooperatives were collected from Annual Reports, professional journals, existing databases (mainly NCR), websites and other publications. In addition, a number of telephone interviews were held to gather the data that could not be found in written sources. These interviews were held with representatives of the individual cooperatives. Finally, several interviews with cooperative experts were held.

In total data on about 20 cooperatives and POs were collected (see Table 6). In the dairy sector there are only five processing cooperatives: FrieslandCampina, DOC Kaas, CONO, Rouveen, and Delta Milk. For all of them we have collected data. In the sugar sector, there are only two cooperatives, Cosun and CSV COVAS. Only Cosun has sugar beet processing facilities, while CSV COVAS is a supplier to Cosun. CSV COVAS is mainly providing services to sugar beet farmers from the South-East of the Netherlands, and for representing the interests of those farmers towards Cosun. For marketing of cereals we focussed on Agrifirm and CZAV, as they are by far the most important cooperatives in this sector.

In the fruit- en vegetables sector there are many cooperatives and most of them are also registered producer organisations under the EU-CMO regulation for fruits and vegetables. We collected data on the six largest cooperatives/POs: Coforta/The Greenery, FresQ, ZON Fruit & Vegetables, Fruitmasters, Versdirect.nl, and BGB. These were the six largest in 2009; in 2010 a new cooperative was established by merging three others: Best of Four. This is now the fifth largest cooperative in fruit and vegetables. As this project is about developments among cooperatives, we limited our study to the six largest ones that have existed for at least 10 years. In addition to those six fruit and vegetables cooperatives, we decided to also collect information on two other fresh produce sectors, mushrooms and potatoes. Both are important sectors in Dutch agriculture. Thus, for mushrooms we collected data on CNC, which is mainly processing mushrooms, and Coöperatie Funghi, that is catering to the fresh market. For potatoes we choose three cooperatives that each deal with different types of potatoes: Avebe for starch potatoes, Agrico for seed potatoes, and Nedato for ware potatoes.

4.2 Position in the food chain

In 1989 an influential report was published in the Netherlands arguing that the companies processing and marketing farm products were not sufficiently market oriented (Stee, 1989). They were too much focussed on bulk production of commodities, too little on consumer responsiveness, and were not sufficiently responsive to (changing) consumer preferences and shifting market conditions. The final conclusion of this report was that Dutch agriculture and agri-business were losing their competitiveness, in both domestic and foreign markets. The arguments and recommendations then were again published in an international academic journal (Dijk and Mackel, 1991).

The Van der Stee report had a major impact on Dutch agri-business. Not only the processing and marketing firms but also farmers and even the Ministry of Agriculture took these warnings seriously. Individually and collectively—agriculture and agribusiness has always been a tight network of public and private actors—firms started to develop new strategies. As a large number of these agri-business firms were (and are) cooperatives, in which farmers maintain control, changing the strategy was only possible as result of close consultation among producers, their representatives on boards of directors, and managers.

Whether due to expert reports or internal discussions, it is clear that major changes in strategies and structures have taken place among agricultural cooperatives in North-West Europe during the past 20 years. Throughout the twentieth century, cooperatives have been stable

organisations, with a strategy that had legitimacy among both internal and external stakeholders. The main forms of restructuring were the many mergers of local and regional cooperatives into larger units, but these mergers did not have a major effect on form or function. Since the early 1990s, however, the inertia of the cooperatives was no longer an asset. In a rapidly changing market environment (partly due to changing public policies), cooperatives were forced to respond to the challenges of a much more competitive market.

Nowadays, Dutch dairy cooperatives are covering almost the total food chain. They are producing branded products or private label products and selling these directly to retailers. The large supermarkets in North-West Europe are the main buyers of dairy products from Dutch cooperatives. While the four small dairy cooperatives (DOC Cheese, CONO Cheese makers, Rouveen Cheese Specialities, and DeltaMilk) specialize in cheese, the largest dairy cooperative – FrieslandCampina – has a much broader range of products. It produces both consumer products like cheese, desserts, butter, pasteurized and long-life milk, and coffee creamers, and industrial products, such as cream and lactose for the food industry, and lactose used by pharmaceutical companies as excipient for medicines.

While a number of dairy cooperatives have been selling branded consumer products for a long time, such as Mona desserts of Campina, and Friesche Vlag coffee creamer of Friesland Foods, the strategy to build and strengthen consumer brand become dominant in the 1990s. Other cooperatives have more recently introduced branded products. For instance CONO used to sell both generic cheese to wholesalers and branded cheeses to specialty cheese shops. In 2002 CONO decided to sell its Beemster brand through supermarkets and started a large advertising campaign. Within a few years, Beemster cheese was acknowledged by Dutch retailers and consumers as a premium brand.

The majority of dairy products in the Dutch supermarkets originate from Dutch cooperatives. There are a few non-cooperative dairy producers, such as Westland Cheese. Dutch supermarkets also sell dairy products from Germany, Belgium or Denmark, sold by either cooperatives or non-cooperative companies. Since Arla took over one factory of FrieslandCampina (which had to divest several factories and brands in order to get approval from European competition authorities for the merger) in 2009, it has become the second provider of fresh dairy products to Dutch supermarkets.

In the sugar industry, for a long time the Netherlands had only one cooperative sugar refinery (formed in a consolidation process in the late 1960s). Until 2007 there was another sugar company, CSM, processing 40% of sugar beets produced in the Netherlands. Although CSM had its origin in sugar refining, the company had already diversified into a broad range of food products and food ingredients. It held on to sugar refining because of the profitability of this business. The restructuring of the EU sugar policies and the effect this had on the profitability of the sugar refining have been mentioned as one of the reasons for divesting its sugar activities.

Although Cosun is a cooperative of only sugar beet growers (with most of them also growing potatoes, cereals and some open air vegetable), thus being very homogeneous on the membership side, it is a diversified food company on the market side. Cosun is a holding company with subsidiaries that produce a broad range of products, directly or indirectly related to sugar. Two business units produce branded consumer products: Suiker Unie produces crystal sugar and syrups (e.g. under the Van Gilse brand), while Aviko produces potato products (under Aviko brand). In addition, Cosun subsidiaries produce a range of ingredients for the food industry, such as fruit and vegetables preservatives, chicory-based inulin, and fine bakery ingredients. Cosun also used to produce industrial alcohol and bio-ethanol. However, in 2011, Cosun sold its alcohol/ethanol subsidiary Nedalco to Cargill. Parts of its sugar beets and chicory (and Aviko's potatoes) are purchased from the regional cooperative CSV COVAS.

Most of the grains produced in the Netherlands are used in animal feed. The relatively low protein content of Dutch wheat does not make it suitable for bread. Still, wheat is an important crop for arable farmers as it is important for improving soil fertility, and used in rotation with

sugar beet and potatoes. Barley, the second grains crop, is used for the brewery industry. Most of the wheat is sold through the cooperatives Agrifirm and CZAV. They either sell it to the feed industry or use it in their own compound feed mills. Prices paid to farmers are determined by particular pool arrangements, which use different combinations of spot market, long-term sales contracts and future markets. There is one specialized cooperative of barley growers: Triligran. This cooperative of growers in South Limburg is producing barley under a regional product certificate, specifically for the local beer brewery (Gulpen). Triligran is marketing some 3250 tons of barley each year. The actual sales operations of the cooperative are outsourced to sugar beet cooperative CSV COVAS.

An interesting development, also from the perspective of position in the food chain, is the establishment of new bargaining associations in most of the sectors. In Section 2.2.2 we already elaborated on the establishment of new bargaining associations in the dairy sector. Some of them were growing rapidly in number of members when the spot market milk prices were rapidly rising in 2007, while price paid by the cooperatives were rising more slowly. A substantial number of farmers left the large cooperatives FrieslandFoods and Campina and joined the new bargaining associations. In fruits and vegetables we have seen a continuous development of new grower associations since the early 1990s. Not all of these associations survived and many of them have merged with others to achieve a stronger bargaining position. Also in potatoes (particularly for the processing industry) and in cereals new bargaining associations have been set up. Most of these new association do not have the ambition to become direct suppliers to supermarkets; they mainly function as bargaining associations towards trading companies and processing companies. Interestingly, even among members of existing cooperatives, new associations are being established, to promote crop or even variety specific interests.

4.3 Institutional environment

The institutional environment in the Netherlands is quite favourable for cooperatives. That can partly be explained from historical and sociological backgrounds. The Dutch have a background of cooperation in self-organisations and in democratic decision-making to which they refer as the 'polder' mentality. The long history of decentralized government and the need for self-organisation in keeping the feet dry in the polder have supported the cooperative mentality. Other important sociological features of the Dutch society are its high trust and liberal business attitude. Collaboration out of self-interest is a dominant characteristics of the farming industry and beyond. The first official cooperative in the Netherlands (founded in 1877 in Aardenburg, province of Zeeland) was named Welbegrepen Eigenbelang (in English: Well-understood Self-interest).

The agricultural crisis of the 1870s and 1880s spelled hard times for the Dutch countryside. The Dutch government wanted to alleviate the distress of the farmers, without abandoning its policy of free trade and non-intervention. The policy that was developed at the time to support the agricultural sector was characterised by two main features: the establishment of agricultural colleges, research institutes and extension services; and the promotion of collaboration by farmers in organised interest groups and cooperatives. The introduction of legislation on cooperatives in 1876 opened up the possibility of founding formal cooperatives. The first cooperative provided farmers with fertiliser, feed and seed. The start up of this cooperative was motivated by the poor quality and the high prices of the farm inputs offered by private traders. Farmer unions were encouraged to set up local, regional and national cooperatives, often inspired by the German experiences with the Raiffeissen cooperatives. Particularly in the South of the Netherlands the confessional farmer unions played a major role in setting up cooperatives, often as an emancipatory instrument for the social and economic development of the many small farmers on poor sandy soils.

Although the cooperative is primarily organised for an economic purpose, the social elements of working together and solidarity should not be underestimated. Farmers were used to help one

another in emergencies (neighbour help) and to decide together on matters of common interest (for example, water management in the “Polder”). This idea of common interests was expressed in the names given to the cooperative dairies (Bijman, 2000). Frequently used names were Eendracht [Harmony], Concordia [Concord], and Ons Belang [Our Interest]. Other evocative names that bear witness to a more social or even religious bent were Goede Verwachting [Good Expectations] and Hoop [Hope]. The guiding motives of the cooperative movement can be summed up with the words ‘United in strength, focus on the future, let’s get the job done’.

The Dutch cooperatives have benefited from a flexible cooperative law. The cooperative law gives flexibility to the internal governance structure, to the financial structure as well as the type of activities the cooperative can take up. It also allows cooperatives to organise their activities in a holding structure. See below for different governance models that can be applied under the Dutch cooperative legislation

Cooperatives were not influenced by competition law. Until the end of the 20th century, competition issues were not considered relevant for mergers among cooperatives. Partly this had to do with the relaxed attitude in the Netherlands towards competition issues in general: cartels were hardly broken up. Partly it can be explained by the fact that the Netherlands is a small country and that the barriers for market entry by foreign competitors were low, especially for suppliers to the large food retailers. Nowadays, the competition authorities are much more carefully looking at collaboration among and mergers of cooperatives. When Friesland Foods and Campina merged, in 2009, the new cooperative had to divest several production facilities as well as consumer brands, and it had to make available sufficient raw milk for any competitor that wanted to enter the Dutch market.

It is unclear to what extent fiscal law has influenced the good performance of cooperatives in comparison to IOFs, but it is certainly not unfavourable. Farmers in the Netherlands pay income tax on their real income, including all payments from cooperatives, as well as the profits that cooperatives retain but allocate to individual shares or loans. That means that the net effect on household income of paying out profits is lower than in the case where farmers are in a forfait system (or not in the income tax system at all). Although the income tax system in the Netherlands is progressive, the effect of it on farmers is limited. In practice, the marginal tax rate of most of the farmers is quite low - due to low income and attractive tax facilities for entrepreneurs.

The tax system also implies that IOFs that distribute their profits among shareholders, pay two times tax on these profits, first as corporation tax in the IOF and then as income tax of the shareholder. In contrast, a cooperative that pays out its profit as a top-up of product prices see their profit taxed only once. There is no scientific evidence that this fiscal situation has clearly favoured cooperatives but on face value it seems certainly not disadvantageous. This is confirmed by the recent growth in cooperatives in the service industry to prevent double taxing.

There are no other public support measures for cooperatives in the Netherlands, with the exception of the Common Market Organisation for fruit and vegetables, which requires that only approved producer organisations (in the Netherlands registered as cooperatives) are eligible for EU financial support. The CMO for fruit and vegetables provides subsidies for POs with investments in improving sustainable production, marketing and quality improvement (organised in Operational Plans). The CMO regulation has provided clear rules for the operation of POs and for PO-member relations. Thus, growers have become more tightly connected to “their” PO, which may have strengthened their participation in the PO. While the number of approved POs has increased over the years (from 14 in 2001 to 21 in 2010), the number of POs has not increased. The increase in number of approved POs is due to the larger number of (existing) POs that have decided to obtain EU support. As said, new POs continue to be established, also in the fruit and vegetable industry. However, it is not expected that more POs will apply for EU funding. Rather the opposite is expected; due to mergers among POs, the number of approved POs is already declining.

At higher agricultural education, some attention is given to cooperatives and their role in the food chain. However, no compulsory courses exist. At the level of individual cooperatives,

members participating in governing bodies often follow special training programs for cooperative leaders. However, these courses are fully paid by the cooperatives themselves. No public support is available.

4.4 Internal Governance

Dutch cooperatives have redesigned their internal governance over the last two decades in several ways (Bijman and Van Dijk, 2009). The main developments have been (1) a legal separation between cooperative association and cooperative firm; (2) changes in the composition of the board of directors; (3) changes in the composition of the board of supervisors; and (4) introducing a member council as separate governing body in between general assembly and board of directors. These changes have led to the development of different governance models (or board models) among Dutch agricultural cooperatives (Bijman and Van Dijk, 2009).

The traditional model of cooperative governance consisted of the following bodies. A general assembly of all members has the right to elect the board of directors, to approve (or disapprove) the financial accounts of the cooperative, and to decide on mergers and dissolution of the cooperative and on major investments. The board of directors (BoD) is chosen by and from the members of the cooperative. The BoD is the main governing body, taking all major decisions both about the association and firm. Almost all cooperatives have a professional manager for the running the cooperative firm. The manager is an employee of the cooperative firm and is appointed by the BoD. The third governing body in the traditional cooperative governance model is the Board of Supervisors (BoS). Although legally not compulsory for small cooperatives, in practice almost all cooperatives have some kind of supervisory body. The BoS also consists of members of the cooperative.

Over the last 20 years major changes have taken place in the governance structure of the large Dutch cooperatives. A first change has been the legal separation between the cooperative association and the cooperative firm. The cooperative association has then become a holding company, holding 100% shares in the cooperative firm (becoming a NV (similar to Plc in UK) or BV (similar to Ltd in the UK). Often the cooperative firm becomes a sub-holding for a number of subsidiaries which either transact with the members of the cooperative or have non-member related business activities. The main reason for cooperatives to install this legal separation is the reduction of liabilities for the cooperative and the introduction of a more clear separation between the cooperative association and the cooperative enterprise (Van der Sangen (2001). This separation also made more clear the roles of the BoD of the cooperative association (composed of mainly members of the cooperatives) and the professional management of the cooperative enterprise.

This legal separation between association and firm, which is quite common nowadays among Dutch cooperatives, does not entail a change in internal governance structure as such. However, it has paved the way and is a necessary requirements for subsequent changes in the formal governance structure. One such change in structure relates to the function of the Board of Directors and that of the Board of Supervisors. A large cooperative that placed all economic activities and all assets in a separate legal entity has the statutory obligation to install a board of supervisors (in Dutch: raad van commissarissen) at the level of the firm (the NV or BV). This could lead to the situation where the management of the firm is controlled by two controlling bodies, the BoD of the cooperative and a separate board of supervisors. The solution to this undesirable situation of double control has been found in the structure where the members of the BoD of the cooperative also become member of the board of supervisors (through a personal union). As it is not allowed to have a board of supervisors consisting of only representatives of one group of stakeholders, the board of supervisors also consists of a number of persons that are not member of the cooperative. Thus, the composition of the board of supervisors of (large) cooperatives has been changing towards incorporating external experts. Even cooperatives that

do not apply this new governance model have started to invite outsiders to increase the expertise of the board of supervisors. Van Dijk (2006) found that, in 2005, 26 of the 40 largest cooperatives had outside experts in the board of supervisors.

The new governance model where the members of the BoD of the cooperative are also members of the board of supervisors of the NV/BV has been called the Corporation Model (Bijman and Van Dijk, 2009). A number of large cooperatives have applied this model, such as FrieslandCampina, Coforta/The Greenery, Agrifirm and ZON Fruit and Vegetables. The shift from the traditional model to the corporation model has major legal and fiscal implications the cooperative and its members. Therefore, we have seen this change mainly among cooperatives that have been restructuring for other reasons, such as a merger.

A second new governance model is the one where the professional manager of the cooperative has become the Board of Directors. This so-called Management Model has become increasingly popular over the last 10 years. This model implies that the BoD no longer consists of members of the cooperative. Instead of having the BoD functioning as the management of the cooperative, which is often the case in very small cooperatives, now the professional manager functions as a one-person BoD of the cooperative. The influence of members on the strategy and policies of cooperative under the Management Model is through the board of supervisors, which can consist of only members or members together with (a minority of) external experts. Examples of cooperatives with this governance model are Avebe, DOC Cheese, and CZAV.

Another major change in the internal governance of Dutch cooperatives is the introduction of a member council. This council consists of only members of the cooperatives and may have up to 210 members, but usually consists of a smaller number. In large cooperatives, members are often organized in geographical districts of product-related groupings. The chairman of the district board, who is elected by all members of the district, becomes a member of the member council. Reasons for large cooperatives to establish a member council are the needs felt by the BoD to bridge the gap between BoD and the membership and to have a group of committed members from which future board members can be selected. The member council has obtained a number of decision rights that used to belong to the general assembly, such as election of the board of directors and (dis) approving the financial accounts. Examples of cooperatives having introduced a member council over the last decade are FrieslandCampina, Cosun, Coforta/The Greenery, and DOC Cheese.

The main advantages of these new governance models are the more clear separation of responsibilities between professional management (running the business) and the representatives of the members of the cooperative. The professional management has obtained more autonomy, which provides room for more entrepreneurship at the level of the cooperative enterprise. It is also more clear who (i.e., which body) is controlling the management, as both in the Management Model and in the Corporation Model there is only one board of supervisors, consisting of mainly members of the cooperative and often a few outside experts.

Another internal governance issue relates to the financial structure of the cooperative. Traditionally, equity capital in the Dutch cooperative was fully collective. No individual ownership titles existed and no individual shares in the equity capital existed. In the 1980s it became clear product development, building consumer brands and international expansion would require additional investments. Discussions centred on taking up capital from non-members (with or without voting rights), or attract outside investors in subsidiaries of the cooperative (but keeping the control with the cooperative by a 51% majority or special voting rights). In the end not many cooperatives went this road. As suggested by Van Dijk and Poppe (1992), good investment proposals usually received approval from the members, and the membership was able and willing to finance the investment, either with loans bearing a fixed interest rates or with individualized equity (participation shares).

In order to attract additional member capital, to deal with the heterogeneity of the membership (portfolio problem) and to support accountability of investments many cooperatives started to

individualize part of the equity capital. Different types of capital arrangements (often with types between normal loans and pure equity, but contributing to the amount of capital exposed to business risks) were introduced, as well as A and B shares with different voting rights and making some of them tradable within the cooperative membership group. Friesland Foods, one of the predecessors of FrieslandCampina, had introduced individual shares that members could buy, could be traded on an internal market, and gave the right to receive an annual dividend payment. The model was relatively successful, as quite a few members invested this way in their own cooperative. As suggested above the flexible Dutch cooperative law was supportive in this. Despite the expectation a decade ago that slowly most equity capital would be individualized, currently most cooperative have only a small share of their total equity capital individualized. By far the largest part of equity capital is still owned collectively, with no individual having any claims on this capital (also not when terminating membership).

An exception to the general rule of Dutch cooperative having mainly collective capital are the sugar and potato starch cooperatives. Both Cosun and Avebe have established a direct relationship between delivery rights (which are also related to EU established quota) and member investments in the cooperative. Delivery rights go hand in hand with financial obligations.

Many Dutch cooperative do no longer apply the one-member-one-vote decision-making rule. In the sugar and potato starch cooperatives, the votes are linked to the delivery rights. Even in a small organic cooperative like Nautilus the votes are related (with an upper limit) to sales-classes into which the members are divided.

In line with discussions on liability above, most cooperatives have shifted to a model in which all liability of members in case of termination (e.g. due to bankruptcy) is restricted ('Beperkte Aansprakelijkheid – B.A.) or often excluded ('Uitgesloten Aansprakelijkheid – U.A.').

4.5 Performance of the cooperatives

Performance of cooperatives is an ambiguous concept, and therefore difficult to measure. One performance measure is surplus (or profit) of the cooperative. However, most cooperative do not have profit-making as their business objective. For instance, most marketing cooperatives seek to handle members' products against the lowest cost possible. The price the cooperative receives from its customers is translated into a price paid to the farmer by just subtracting the cost of handling the product. When supply cooperatives have a surplus at the end of the year, they often pay their members a share of this surplus in relation to the members transactions with the cooperative. Thus, profit is not an appropriate measure for assessing the performance of a cooperative.

Other performance measures of cooperatives can be market share and member satisfaction. When looking at market share, it is clear from Table 5 that cooperatives in the Netherlands already had a large market share in 2000. For most of the sectors this market share has remained more or less the same, or has increased. Clear increases can be seen in sugar, dairy, and fruit & vegetables, and mushroom sectors. On the basis of market share, we can conclude that cooperatives are very successful.

On the issue of member satisfaction there are no hard figures. Several cooperatives internally keep track of member satisfaction, but these figures are not publicly available. One indication that not all members are satisfied with their cooperative was the exit of several hundreds of members from the dairy cooperatives FrieslandFoods and Campina, in 2008, when high food prices opened up alternative market opportunities. Also the establishment of new bargaining associations among members of cooperatives can be seen as an indication of member dissatisfaction. However, there are no statistics on how member satisfaction has developed over the years.

5 Sector analysis

5.1 Introduction

In this chapter we discuss the developments in the eight sectors that are central in this study. We report on trends in the markets, important changes in (agricultural) policy and we try to link this to the strategies and performance of the investor-owned firms and cooperatives in the sector. The period of observation is 2000 – 2010.

We will present developments in the following sectors: cereals (4.2), sugar (4.3), fruit and vegetables (4.4), wine (4.5), dairy (4.6), sheep meat (4.7), and pig meat (4.8). There is no production of olive oil and table olives in The Netherlands.

5.2 Cereals

The Netherlands produces 2 million tons of grains. This is less than 1% of EU total. Of this 2 million tons, 1.4 million is wheat and 300,000 ton is barley. Most of the wheat goes into animal feed. The climate conditions in The Netherlands make it unfavourable to produce the type of quality that is used for bread and other bakery products. Wheat flour for the bakery industry is mainly imported. Domestic barley is mainly used for malting for the beer breweries. Low quality barley is used in animal feed.

The cereals produced in the Netherlands are (in order of importance): Wheat, Barley, Triticale, Rye, and Oats. Less than 10 per cent of the total cereal production in the Netherlands goes to human consumption (less than 8% of the total wheat production and 45% of the total barley production). There has been some attempt in the past few years to produce an improved quality of wheat (including a regionally produced wheat to be used for regional specialty bread, de Zeeuwse Vlegel), but most of these attempts were not economically successful. For the currently produced varieties and qualities, the yield of Dutch farmers is 8,5 tonnes per hectare, which is much higher than the European average (5.5 tonnes per hectare for soft wheat).

Some 8 million tons of cereals are imported into the Netherlands in 2010 (most of it is used in the production of the animal feeds as well). The main European exporting countries to the Netherlands are France, Germany and UK.

Prices for grains produced in the Netherlands are determined by market developments in neighbouring countries. Most of the grains are sold through marketing pools, organised by the grain cooperatives Agrifirm and CZAV or by non-cooperative traders.

Until the 2010 merger between Agrifirm and Cehave Landbouwbelang, there were several cooperatives collecting grains: Agrifirm, Agerland (daughter of Cehave Landbouwbelang), and CZAV. Until 2007 farmers in the North of the Netherlands could also sell their grains to Agrarische Unie. By the January 1, 2007, Agrarische Unie was acquired by Agerland. Blonk, a non-cooperative trading firm, is one of the few alternative buyers of Dutch grains.

Agrifirm (after the merger) is responsible for about 35% of the trade in domestically produced grains (NMA rapport on Agrifirm-Cehave merger). In 2010, CZAV traded more than 340,000 tons of grains, most of it wheat. This volume represents about 18% of total Dutch grain production.

Most of the cereal producers are located on a clay soil type, and they are concentrated in four regions (Groningen, Flevoland, North-Holland, and Zeeland), although farmers grow cereals in other regions as well. There are some 15 thousand farmers who produce cereals, of which only 1150 are specialised cereal producers (Table 1); the other farmers have multiple crops.

The effect of the high world market prices has provided extra incentives for farmers to stay involved in the cereal sector. However, the sector is still vulnerable to weather circumstances (locally and in other major producing countries) or policies and political instability.

Policies in the last decade

EU regulation played an important role in the development of the Dutch Cereal sector. One major policy change was the adaptation of new subsidies policy in early nineties (MacSharry) which aimed at deleting the link between volume of production and income support, and to introduce compulsory set aside (in years of excess supply in the EU). There are no specific national policies related to the cereal sector in the Netherlands.

5.3 Sugar

Product and market

The Netherlands is not a large player in the international sugar market and produces only sugar beet. The total production of refined sugar is more than 870 thousand tonnes in 2009. The area used to plant sugar has declined 25% since 2000, particularly after 2006. However, the productivity per hectare has improved in the same period (11 thousand kg per hectare). The production quota for the Netherlands is 805 thousand tonnes. The Netherlands import accounts to only 3.9% (410 thousand tonnes) of the total EU sugar import in 2007. The major exporting countries are Belgium, India and Pakistan. The import from developing countries accounts to 47% of the total import to the Netherlands.

The sugar sector's main product is refined sugar, while by-products are molasses, beet pulps and earth foams (Betacal). Molasses accounts for half of the total imported sugar products from the developing countries, while using the earth foams faces some restrictions due to manure regulations. In the Netherlands there are 9000 farmers who cultivate sugar beets, the number of farms declined 4% since 2000.

Farmers in the Netherlands have received, in average, a relatively higher prices for their products than sugar farmers in neighbouring countries (Belgium and Germany). The very high efficiency of the Dutch sugar industry is often credited for that high price as well as profits from subsidiaries of Cosun. The high efficiency was obtained by concentrating sugar beet refinery in only two factories, thus closing many refinery plants in the past decade.

In the last decade the Dutch sector was stable and had two main companies, cooperative Cosun and IOF CSM. Both companies were continuously trying to improve their efficiency. While in 2000 there were still 5 sugar refineries, in 2010 there were only two left. In 2006, Cosun acquired the sugar production facilities from CSM (see also section 2.2.2).

Policies in the period 2000 - 2010

The sugar industry experienced dramatic restructuring due to the reforms of 2006. This has affected the sugar industry transferring it from a market with surpluses to an importing sector. However, since these reforms, the Dutch sugar sector faces more pressure on prices, at the same time the sugar sector is required to meet other sustainability requirements. These other sustainability requirement adds more pressure on the production cost in comparison with other countries such as Brazil, which can produce sugar more efficiently and cheaper without the extra sustainability requirements. The 2006 reforms is expected to be reviewed and several option are explored to be implemented after 2015.

The effect of liberalisation of the sugar policy has affected the sugar sector and influenced its structure in increasing its productivity. There is no hard evidence to which extent the policy reform induced the merger between Cosun and CSM, but the (expected) decline in profitability

in sugar can (and is sometimes said to) have influenced CSM's decision to withdraw from the sugar industry.

The relationship between liberalisation and large increases in average farm yields is even more speculative. The yield increase would have happened anyway, as it is mainly a result of new and better varieties. At the same time the investments in bio-energy came on the agenda. Cosun is now active in producing biogas based on waste from its sugar refineries. This was reflected in investing in using cars and trucks based on bio-energy produced by the firm and by forming a coalition with regional agro-food clusters.

5.4 Fruit and vegetables

The sector Fruit and Vegetables is an important part of Dutch agriculture. As can be seen from Figure 2, fruit and vegetables represent 2.8 billion euro production value at farm gate prices. This figure excludes the value of potato production, which is another 1.2 billion euro. Among producers of vegetables, a distinction should be made between greenhouse growers and open air growers. The greenhouse farmers are the most specialized vegetables producers. The main greenhouse vegetables are cucumber, tomato and sweet peppers. Producers of open ground vegetables are sell specialized as they often grow different vegetables, for instance combining leek with cauliflower and carrots. This group includes arable farmers that produce vegetables for the processing industry, such as beans, peas, beets or spinach.

One of the most striking developments in greenhouse vegetables farms is the rapid increase in the average size of the holdings over the last decade. While growth in the average size of the farm has been a trend for many decades, this growth has accelerated over the last 10 years. Table 11 shows that average farm size more than doubled between 2000 and 2009, while the growth was only 50% over the years 1990-2000.

Table 11. Greenhouse vegetable farms

	1990	2000	2009
Greenhouse vegetables			
Number of farms	4237	2648	1463
Total area (ha)	4184	3973	4826
Area (ha) per farm	1.0	1.5	3.3

Source: LEI: LEB2010, p. 88 + LEI: Schaalvergroting in de land- en tuinbouw; Effecten bij veehouderij en glastuinbouw (2011)

One of the crops in which scale growth is most explicit is tomato. While in 2000 more than 80% of all production took place on farms with a maximum of 5 hectares, in 2008 farms with less than 5 hectare accounted for only 35% of production. Even 40% was on farms larger than 15 hectares. Farmers more and more produce year-round, with the help of growth light in the winter season. Year-round production is important for those farmers that have a close relationship with a particular retailer and want to supply tomatoes year-round to this retailer. Several farmers have also experimented with setting up (or buying) a second farm in Spain. However, most have discontinued this strategy. Some farmers have set up production facilities in the UK, because some UK retailers and consumer prefer products grown in the UK itself, as they represent fewer food miles (lower carbon footprint).

In fruits, an interesting development over the last decade is the introduction of new apple varieties whose production is restricted to certain growers. These so-called club varieties are sold through the regular fruit cooperatives, but the supply is being controlled. The varieties have been developed by InnovaFruit, in which the large fruit cooperatives participate.

Many discussions have taken place between different producer organisations about closer collaboration in sales, as well as about establishing Association of Producer Organisations (APO).

Discussions about collaboration, in a new joint organisation or even in a merger, have taken place between Fruitmasters and Coforta/The Greenery, between Fruitmasters and ZON, between Coforta/The Greenery and Funghi, Coforta/The Greenery and FresQ, Coforta/The Greenery and BGB. No results have been achieved, partly due to barriers set up by competition authorities. So far, only one APO has been established. Kompany was set up in 2009 by ZON Fruit & Vegetables, Komosa and Sun Quality, for the collective marketing of cucumber. In 2011, BGB joined Kompany, the latter now being responsible for the sales of 47% of all cucumbers produced in the Netherlands.²²

In addition to Kompany, an APO formally recognized under the EU-CMO regulation, there is another association for cucumber growers. Under the name of K8, eight different grower associations of cucumber growers have established a new organisation in 2007. Within K8 the growers particularly discuss developments in the market for cucumbers. Since 2010 they discuss the possibility of introducing a digital auction for selling cucumbers and other fresh vegetables. Currently, K8 is the association of Sun Quality, ZON, Komosa, BGB, VDT, Coforta and Best of Four. These organisations represent 90% of all Dutch cucumber growers.

In 2006, eight associations of sweet pepper growers has set up the collective organisation P8.²³ The objective of this organisation is to exchange information on markets and prices, as well as on production techniques. In 2007, aubergine growers in The Netherlands and Belgium have set up the organisation A8, with the objective of exchanging information and improving market position.²⁴

Policies

A new EU-wide policy was introduced in 1996 to support fruit and vegetable growers in adapting to the changing market situation. This offered aid for 50 % of the costs of measures taken by growers in 'operational programmes', which aimed, *inter alia*, to improve product quality, reduce production costs and improve environmental practices. The aid is only available to groups of growers that collectively market their produce in producer organisations. Member States are responsible for approving operational programmes and paying the aid. In 2009, the total EU financial support amounted to 700 million euros.

New rules have been in place for fruit and vegetables since 1 January 2008. They are designed to make the sector more competitive and market-oriented, reduce income fluctuations from crises, promote consumption (better public health) and enhance environmental safeguards. Main points of the 2007 reform:

- scheme is more flexible and adapted to local conditions
- growers are encouraged to join producer organisations (POs)
- POs now have wider range of crisis prevention and management tools
- POs and farmers given incentives to cooperate beyond national borders
- POs required to include a minimum level of environmental spending under operational programmes
- fruit and vegetables now part of Single Payment Scheme
- processing aids are totally decoupled by 2013
- more EU funding for promotion and organic production
- export subsidies are abolished

²² AGD, 04/01/11

²³ The initiative for P8 was taken by the producer organisations Best Growers Benelux, Colour Paradise/Pamosa, Growing Excellence, Rainbow, Tradition, United West Growers, Vers Direct Teelt, and Verenigde Tuinbouw (AGD, 16/02/06)

²⁴ Besides organisations like The Greenery, Rainbow Growers, Best Growers Benelux and Unistar also Belgian auctions have been involved. They are in the board of the new association. (AGD, 14/03/07)

An interesting international collaboration is the European Fruit Cooperation (EFC), which was founded in 2002, as a joint venture between three cooperatives: FruitmastersGroep from the Netherlands, Veiling Haspengouw from Belgium, WOG (Württembergische Obstgenossenschaft) Raiffeissen e.G. from the south of Germany. EFC is a cooperative society with limited liability, established under Belgium law. The principal objectives of EFC are the implementation of the operational programme about the existing legislation with regard to the Common Market Organisation in fruit and vegetables, the acquisition and the introduction of new varieties of fruit through a chain-strategy, the exchange of commercial information between the three partners and the worldwide organisation of the cultivation of trees and starting material for the new varieties. In 2005, EFC acquired the worldwide licensing rights for two apples varieties, namely Nicoter cov and Nicogreen cov, which are being marketed under the brand names Kanzi and Greenstar.

5.5 Wine²⁵

Wine is a very new sector in the Netherlands. Only since the 1980s, wine production in the Netherlands is a commercial activity. In 1997 there were 8 commercial wineries with more than 1 hectare. In the early years of commercial wine production in the Netherlands, classical grape varieties like riesling, müller thurgau, auxerrois, pinot gris, pinot noir and chardonnay were planted. These varieties, however, are rather vulnerable to fungi and in some years may not become fully mature due to the weather. Since the 1990s, other grape varieties are used, such as regent, rondo, johanniter, solaris and merzling. These varieties are less vulnerable to fungi and mature earlier. This resulted in the shift of the northern border of commercial winegrowing from South-Limburg to the north of the Netherlands.

According to a CBS press release (28 September 2011), the total area of vineyards in the Netherlands is 170 hectare in 2011. In 2006 it was only 85 hectare. The average winegrower now has 1.7 hectare, compared to 1.2 hectare in 2003. The number of professional winegrowers is 100 in 2011 (compared to 60 in 2006).

As said above, there is at least one cooperative of winegrowers. This cooperative has invested in joint facilities for making winemaking and in hiring foreign winemakers for managing the vinification process. Other winegrowers collaborate in associations and foundations, mainly for exchanging information and knowledge.

The wine produced by Dutch winegrowers is marketed as specialty wine, sold mainly in specialized wine shops or in restaurants. Many wines are sold as regional specialties and quite a number are biological wines.

5.6 Dairy

Dairy is one of the most important sectors of Dutch agriculture. The value of milk production (at farm gate) is about 4 billion euro, representing 18 per cent of total Dutch agricultural production value. Cow milk is produced by 20,000 farms, with 1.5 billion cows together producing 11.8 million tons of milk (Table 12). Between 2000 and 2010, the number of dairy farms reduced by 31%, while the number of cows remained more or less the same. The total milk production even increased. The country is very competitive in milk production, seen the fact that there is still a quota rent paid by farmers (Bouamra-Mechemache et al., 2009) and that the Netherlands is one of the very few countries (with Denmark and Cyprus) where farmers are overshooting the national quota. The average number of cows and thereby the average milk production per farm increased substantially.

²⁵ Information obtained from the main industry association of winegrowers, the *Wijngaardeniersgilde* (www.wijngaardeniersgilde.nl).

Table 12. Milk production in The Netherlands

	2000	2010	Index 2000 = 100
Total number of farms	29,467	20,268	69
Total number of cows	1,504,097	1,489,071	99
Average number of cows per farm	51	73	143
Average yield per cow (kg)	7,397	7,919	107
Average yield per farm (kg)	377,555	581,772	154
Total milk deliveries (million kg)	10,572	11,452	108

Source: Productschap Zuivel, Jaaroverzicht 2009.

The trend in the milk price was rather volatile over the years 2000-2010. After a high price of almost 35 cents per kg in 2001, the price steadily declined until 2006, when a low of 30 cents was reached. Then, in 2007 a rapid price rise was established towards 35 cents, which continued to 36 cents in 2008. Then 2009 saw a rapid decline towards and all time low of 26 cents. In 2010 the prices recovered towards 32 cents, and they continue to rise in 2011.

The steady decline of the milk price between 2001 and 2006 resulted in a lot of dissatisfaction among dairy farmers. When the spot market price increased in 2007 but cooperatives, due to their pricing system, did not immediately start paying higher prices, a number of farmers left their cooperative to benefit from other market opportunities. In April 2008 Campina lost 93 members in the Netherlands, 79 members in Germany and 17 members in Belgium (Campina press release, 05/12/07). Together these departing members represented 100 million kg of milk (2% of all milk processed by Campina). In the Netherlands, most exiting members entered into a contract with a private trader or private processor. In Germany, most departing members shifted to Hochwald cooperative.

A major event in the past decade in the Dutch dairy sector has been the 2009 merger between Friesland Foods and Campina.²⁶ Those two cooperatives were already the two largest dairy companies of The Netherlands, with joint market share of between 70 and 80% of the Dutch milk market (in volume milk deliveries). The merger had to be approved by the EU Competition authorities; this approval was received in December 2008. As part of the approval, FrieslandCampina had to divest two factories and several brands. This opened the door for a foreign dairy cooperative to enter the Dutch dairy industry. In 2008 Danish/Swedish dairy cooperative Arla Foods took over the dairy factory in Nijkerk, including a number of brands. Nijkerk Dairy is producing fresh dairy products, which are sold in Dutch supermarkets under the Friesche Vlag brand or under private label. Thus, the entry of Arla Foods into the Dutch dairy industry implied serious competition for FrieslandCampina in the daily fresh milk segment. Arla purchases its milk partly from FrieslandCampina (which is legally obliged to supply milk until 2017). For organic milk, Arla purchases milk from Cooperatie Eko Holland.

Besides the factory in Nijkerk, which was producing daily fresh milk and dairy products, FrieslandCampina also had to divest its cheese factory "De Graafstroom" in Bleskensgraaf. This opened an opportunity for the cooperative bargaining association DeltaMilk to enter into milk processing. In 2009 the cooperative took over the factory, and became the fifth dairy producing cooperative in the Netherlands.

In 2005 the first foreign cooperative became active in the Dutch dairy sector, when German cooperative Hochwald took over the Bolsward factory of Nestle. This factory is producing mainly evaporated and condensed milk products (under the Bonny brand), for the export market. From the originally 450 suppliers, only 150 continue to supply milk to Hochwald. The other 300 farmers will supply their milk to cooperative DOC Cheese (either as member or as supplier).

²⁶ The merger was preceded by merger talks in 2004/2005 between Campina and the Danish/Swedish cooperative Arla. These merger talks broke down due to a number of reasons, such as incompatibility of persons, disagreement on the financial structure (group versus individualized equity capital) and unwillingness of one of the cooperatives to introduce a more decentralized management model.

The number of dairy companies in the Netherlands grew from 15 in 2000 to 20 in 2010.²⁷ In 2000 there were five cooperatives: Friesland Foods, Campina, CONO, DOC Cheese and Rouveen. In 2010 there are still five cooperatives: FrieslandCampina, CONO, DOC Cheese, Rouveen and DeltaMilk. The number of non-cooperative dairy companies grew from 10 in 2000 to 15 in 2010. The actual number of new entrants into the market was higher than 5, because also some companies quit. In addition to these industrial producers, there are also some 400 farmers who produce dairy products on-farm. These artisanal producers.

The total production value of Dutch dairy companies was 5.3 billion euro in 2009. This was almost the same as the production value in the year 2000. As milk prices were substantially higher in 2010 compared to 2009, total production value of the dairy industry will also be higher in 2010 (but no figures are yet available). The Netherlands continues to be a major exporter of dairy products, with an export value of 3.8 billion euro in 2009 (cf. 3.5 billion in 2000). More than 60 per cent (in value) of exports goes to other EU Member States.

In the Dutch dairy market there is a trend towards more specialized dairy products. Both within FrieslandCampina and among smaller cooperatives and non-cooperative companies, dairy products for niche markets are gaining importance. Within FrieslandCampina there is the milk of farmers from only the province of Noord Holland that is used for the production of cheese under the protected Noord Holland region of origin certificate. Other separate milk streams are organic milk, bio-dynamic milk, “weidemelk” (milk that is guaranteed as coming from farms that have their cows outside in the meadow) and “waddenmelk” (from the far north of the country). Outside the (large) cooperatives there is a growth in dairy products of regional origin or dairy products coming from small producers, emphasising the artisanal character of the product.

FrieslandCampina is a dairy cooperative with a broad product portfolio, including fresh dairy products (milk, yoghurt, desserts, milk/fruit drinks), cheese, butter, cream, condensed milk, milk powder, and industrial ingredients. It also has a Dutch subsidiary that is the largest producer of fruit juices in the Netherlands with premium brands. The other cooperatives in the top 5 are not only much smaller, they are also very specialized in one dairy product. CONO Cheese makers, DOC Cheese and Rouveen Cheese Specialties all focus on producing cheese, both cheese sold under the private label of supermarkets and branded cheese. For instance Rouveen is an international exporter of kosher and halal dairy products.

Policies

Dairy farming is of course supported by the Common Agricultural Policy of the EU. It is expected that milk production in the Netherlands will increase substantially after the withdrawing of the quota system in 2015. The exact increase will depend on Dutch environmental legislation, as the production volume for manure is more or less fixed by the Nitrate Directive. As value added in dairy is higher than in pig production it is expected that dairy will outcompete the pig sector (i.e., manure disposal costs will increase for pig production). However it is very difficult to forecast the speed of that process, as it also depends on potential government intervention.

The increase in dairy production has led to some discussion whether the cooperatives should support this, or whether it should refrain from investments in capacity and restrict supply to keep prices up. Currently, strategies of cooperatives seem to support members that want to increase milk production, as the effect on the European milk price of refraining from expansion would be very limited.

Specialized regulation for dairy cooperatives does not exist in The Netherlands. Thus, dairy cooperatives are neither supported nor hindered by specific legislation. Of course, general cooperative legislation also applies to cooperatives in the dairy sector.

²⁷ Bron: Productschap Zuivel, Jaaroverzicht 2009.

5.7 Sheep meat

The professional sheep sector in the Netherlands is not very large or important (see chapter 2). In chapter 2 we reported already that in the sheep meat sector, most lambs are transported abroad, to be slaughtered in France or Spain. This trade in live sheep is mainly done by small trading and transporting companies. As there are many traders interested in buying sheep, there does not seem to be a need for a cooperative, that probably would have the same problems as in the other meat sectors: the lack of control of supplies in times of high prices.

Interestingly for a very long time there has been a cooperative that marketed the wool from sheep farmers and supplied specialized inputs for sheep farming, de Wolfederatie (the Wool-federation). This cooperative had its own retail outlets. It existed in 2000, but was restructured in 2009 through a management buy out in a company owned by four former staff members.

5.8 Pig meat

The Dutch pig sector is characterised by an intensive farming system. Over the last years sector output has remained stable. At the same time the number of farms producing pigs has declined.

The decline in the number of pig farms in The Netherlands is caused by economic selection on the fittest farms due to environmental and animal welfare regulations that increase cost prices and constrain farm level operations. These regulations demand substantial investment from farmers and put operational margins under pressure. Therefore only farmers with the most efficient performance (i.e. highest productivity, lowest employment of labour per unit output) are able to recoup enough returns on this investment to maintain a viable pig production business. Figure 9 shows that there is a top segment of producers that is able to maintain positive incomes, regardless of drops in other sector-average income. The lower segment structurally achieves negative incomes and eventually are required to shut down their operation. This particularly concerns farms that have a pig operation as a secondary activity, as small batches of pig and piglets are less valued in the market.

As a consequence of the selection on the strongest performing operations, Dutch farmers stand out at labour efficiency at a European level. Although Dutch pig farmers have the highest rate for labour, the actual cost of labour employed per unit of output is amongst the lowest in the line of several other major European competitors. Prices for pork are a bit lower as in Germany, due to the transport costs to the market.

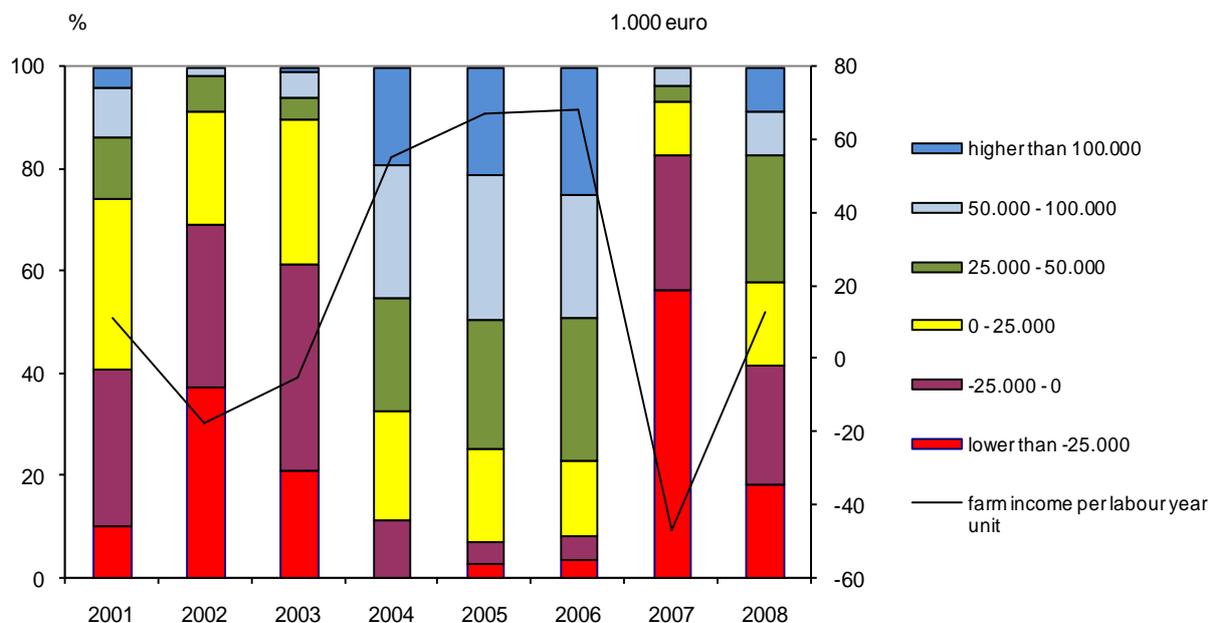


Figure 9. Income per un-paid labour year unit on pig farms in The Netherlands (based on calculations in November 2009) Source: LEI Binternet

Policy influence in sector development

Due to the pressure on margins, Dutch pig farms are inclined to look for opportunities to increase the size of their operations, to take advantage of scale economies. Expanding the size of operations to so-called mega-barns, or concentrating operations in a geographic locations are frequently proposed as sector development options. However, regardless of the development opportunities these options might provide to pig producers, there are also social concerns about scaling up operations, ranging from ethical concerns about farm-factory production, to conflicts about smell, human health aspects (antibiotics, fine particles, ammonia) and landscape pollution. Such societal concerns mostly express themselves in the permit process for construction of new production unit. The process outcome is often highly uncertain for pig producers, which in turn puts uncertainty into investments directed towards expanding operations.

Role of cooperatives in the sector

Cooperatives in the Dutch pig sector are active in supplying to the farmers, particularly in compound feed production and in pig breeding. It is interesting to note that the cooperative feed companies gave extra support to their members during the rising commodity prices in 2008. During that time cooperatives provided farmers in distress with the possibility to delay payments. They also paid out residual payments earlier in the year, not waiting for the usual year-end closing of the books.

Upstream operations in pig slaughtering is notably characterized by investor-owned firms in The Netherlands. Although the country's largest slaughterhouse VION is under ownership of the farmers' organization ZLTO, suppliers have no influence on the strategies and policies of the company. Thus, VION does not fall within the definition of the cooperative as applied in this study.

As of late, the cooperative Rabobank has realized several financial innovations which are being used by the sector. Particularly the larger pig producers are put in a position where they can issue bonds on the operations to the market. This provides them with the opportunity to obtain considerable amounts of capital on the market at favourable rates.

Propensity of the sector to further cooperative development

Due to declining margins and scaling in primary production, coupled with rising commodity prices, there are numerous incentives for farmers to strengthen vertical coordination in the supply chain. An example of such cooperation is Family Farmers. Pig farmers work under a profit sharing contract, where purchase of inputs, and the sales of the animals (and occasionally finance) is realized by the contracting organization. The advantage of the model for pig farmers is that they can take advantage of scale economies, without the need for expanding their operations. At the same time they outsource purchasing and marketing activities, taking advantage of specializing in technical performance (in turn enhancing labour productivity).

6 Overview of policy measures

6.1 Regulatory framework²⁸

The performance of cooperatives (including producer organisations) is influenced by the regulatory framework in a country. This framework is multi-level: EU regulations, national laws and – in some countries – even regional policies influence the way cooperatives can operate. In this chapter we look especially at the regulatory framework that influences the competitive position of the cooperative versus the investor-owned firm (IOF) or the competitive position of the cooperative versus other players in the food chain (e.g. the retail sector).

These competitive positions are influenced within the regulatory framework by much more than the law that establishes the rules for running a cooperative (business organisation law). Well known other examples include agricultural policy (e.g. the EU's Common Market Organisation that deals with producer organisations in the fruit and vegetables sector), fiscal policies (at the level of the cooperative and the way returns on investments in cooperatives are taxed at farm level) and competition policies. There are different types of policy measures in the regulatory framework (McDonnell and Elmore (1987):

POLICY MEASURE TYPE	DEFINITION
Mandates	Rules governing the actions of individuals and agencies
Inducements	Transfer money to individuals in return for certain actions
Capacity Building	Spending of time and money for the purpose of investment in material, intellectual, or human resources (this includes research, speeches, extension, etc.)
System Changing	Transfer official authority (rather than money) among individuals and agencies in order to alter the system by which public goods and services are delivered

The objective of this project / report is to identify regulations and support measures that have proved to be useful to support farmers' cooperatives. In section 5.2 the relevant policy measures and their potential impact in The Netherlands are identified. In section 5.3 a number of other legal issues are addressed.

In the Netherlands, producer organisations (POs) in principal may choose any legal business form that suits their needs best with the exception of a mutual which is restricted for insurance companies. From the available menu of business forms, POs—theoretically—could use the legal form of an association, a foundation, a cooperative, a European Cooperative Society (as implemented in the Netherlands), a private company limited by shares, a public company, an SE (as implemented in the Netherlands), or a partnership-type of business, like a general partnership or limited liability partnership. The legal business form most frequently used by farmers to set up an economic producer organisation is the cooperative. In some cases, the PO uses the legal business form of an association.

²⁸ The regulatory framework for cooperatives in the Netherlands has been described in the EU "Study on the implementation of the Regulation 1435/2003 on the Statute for European Cooperative Society (SCE)" published in October 2010. Although the focus of that study was on the implementation in each EU Member State of the Statute for European Cooperative Society, it also gives a detailed description of the main national legislation relevant for cooperatives. Both the Synthesis Report and the National Reports can be found at: http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/social-economy/co-operatives/index_en.htm. The national report for The Netherlands, written by Dr. Ger J.H. van der Sangen, can be found on pages 779 – 802.

The national law does not actively stimulate the use of a specific legal business form for cooperatives/POs. In the Netherlands, there is no active governmental policy to steer producer organizations towards a specific legal business form.

6.2 Policy measures

Table 13 identifies the policy measures that influence the competitive position of the cooperative versus the investor-owned firm (IOF) or the competitive position of the cooperative versus other players in the food chain. With regard to the question to identify the policy measures that influence the competitive position of the cooperative versus the IOF or towards other players in the food chain the overall conclusion is that the Netherlands does not actively seek to promote enhancement of cooperatives. Nor does the Netherlands government actively promote the use of the cooperative or the European Cooperative Society (SCE). Below, we will make an assessment of the business organizational law regulatory framework, the tax law framework, and the competition law framework.

Table 13. Policy Measure Description

Policy Measure Name	Policy Measure Type	Regulatory Objective	Policy target	Expert comment on effects on development of the cooperative
(Official) name of the policy measures	Mandate e.g. Inducement Capacity Building Technical assistance System Changing Other	Correction of market or regulatory failures Attainment of equity or social goals	Specific to cooperatives Specific to an agricultural sub-sector Applicable to business in general	Description on how the policy measure affects development of coops, by reasoning through the building blocks: - Position in the food chain - Internal Governance - Institutional environment of the cooperative
Business organizational framework	Mandate	Correction of market or regulatory failures	General Civil Code	Very flexible for internal governance structure
SCE statute	Mandate	Correction of market or regulatory failures	Special to cooperatives	Not used at all in the Netherlands
Tax regime	Inducement	Equity / Social goals	Business in general plus special provisions for cooperatives	The concept of vertical integration provides an advantage over IOF, effect is unclear. In case of profits no dividend tax, but economic effect is small. Small cooperatives can have some additional small advantages (see text)
Competition law	Mandate	Correction of market or regulatory failures	General	No special clauses for coops. Netherlands is a small country with a lot of potential imports
CMO Fruit and Vegetables	Inducement	Correction of market or regulatory failures	Specific for fruit and veg	Substantial effect on the development of cooperatives in F&V sector

Business organizational framework

The Netherlands legislation provides for the cooperative as a flexible business form. It is easy to set-up and easy to maintain in time and money. At the same time, the business organizational rules on the cooperative—which are directly linked to the Dutch rules for the legal form association—provide enough flexibility to tailor the internal governance to the needs of the incorporators/members. The SCE Statute has not been used by the Netherlands government to promote the use of the SCE or the cooperative.

Tax regime with regard to the cooperative and its members

Through a specific tax facility in article 9 of the Corporate Income Tax 1969, the Netherlands legislator has tried to enhance the economic position of ‘small’ cooperatives, aiming at facilitating a reduction of taxable profits, earned as a result of the economic transactions between natural persons/members and the cooperative. This was meant as a financial inducement, though in practice it has had little effect.

With regard to the tax position of cooperatives and their members vis-à-vis IOFs, it is important to note that in the Netherlands a tax system is used to levy taxes from corporate identities separately from its members or shareholders. In this respect, IOFs and cooperatives are corporate identities. In principal, cooperatives are treated for the purpose of taxation at the same footing as private companies limited by shares and are subject to the Corporate Tax Act 1969 (article 2). This implies that cooperatives have access to the same tax facilities as corporations like the facility of the fiscal unity (*fiscale eenheid*) between the cooperative and its subsidiaries, but cooperatives and their members in principle also suffer the same burden of taxation as corporations and its shareholders. Contrary to IOFs, cooperatives are not subject to a dividend withholding tax: distributions of profit to its members are not taxed with a 15% dividend withholding tax.

After distribution, the members are taxed for the profits either on the basis of Personal Income Tax in case the member is a natural person or on the basis of Corporate Income Tax in the case the member is a legal person. The natural person member in principle has no access — contrary to a major shareholder in an IOF — to the facility of the substantial participation (*aanmerkelijk belang*). Without any other facility available, members/natural persons would be exposed to double taxation. In case the members are legal persons — commonly a private company limited by shares — they are taxed for the profits on the basis of the Corporate Income Tax. Members as legal persons are entitled to the facility of the participation exemption (*deelnemingsvrijstelling*) preventing double taxation. In this respect, members/natural persons and members/legal persons are treated unequally.

In order to take into account the hybrid character of the cooperative as an incomplete vertical integration between the economic units of its members and the cooperative, the Netherlands legislator introduced a specific tax deduction regime for cooperatives in article 9 of Corporate Income Tax Act 1969. This tax facility was introduced to benefit small cooperatives with natural person members. The profits of a cooperative are deemed to be split in an independent profit—connected with non-cooperative activities—and a partially deductibility regime profit (PDR profit). However, cooperatives are only allowed to deduct the PDR profit, if four criteria simultaneously are met:

- the PDR profit are distributed within one year after the book year in which the profits were gained;
- the PDR profits to be distributed are restricted to the amount of profits gained in one book year, meaning that prior reservations of profits are not considered to be tax deductible, if distributed in the following years;
- the PDR profits must be distributed to the members in proportion of the value of their economic transactions with the cooperative, and

- the PDR profits are distributed to members that are natural persons; a number of five legal persons being members, however, will not be taken into account, while a minimum of € 2,269,- of profits will not be taken into account.

Another pivotal issue with regard to the tax treatment of cooperatives is considered the issue of fixing or estimating the profits of a cooperative if the cooperative does not pay for the economic transactions with its members on the basis of market prices. Profits for taxation purposes have to be fixed on the basis of market prices which may render a problem if the cooperative is the only or one of the few actors in the market.

The current system of taxation of cooperatives seem to facilitate only small cooperatives. While applying the system to 'small' cooperatives, natural persons/members are treated unequally vis-à-vis legal members/natural persons who have access to the participation exemption, leading at the same time to partial loss of the PDR-profits regime for natural persons.

Apart from the Corporate Tax Act, in the literature (Jansen 1996; Van der Geld en Van Weeghel, 2007) questions have been raised with regard to the issue whether a cooperative paying dividends on capital invested would be subject to an obligation to pay dividend tax according to the Dividend Taxation Act. This act, however, technically, only applies to companies with share capital. Cooperatives—at least that is the expressed and published opinion of the Minister of Finance—are not considered to be companies with share capital, meaning that cooperatives can distribute profits to investors without paying any taxes on dividends.

It is worth noting that the SCE is treated for tax purposes as an IOF and not as a cooperative: the PDR-profits regime does not apply to SCEs.

The competition law framework

There are no specific policy measures according to Netherlands competition law that influence the competitive position of the cooperative apart from Regulation 1184/2006, upon which cooperatives in the Netherlands have not relied in practice.

Table 14. Assessment of Policy Measurement Influence

Policy measure	Assessment score
Business organizational framework	-4 -3 -2 -1 0 1 2 3 4
SCE statute	-4 -3 -2 -1 0 1 2 3 4
Tax regime	-4 -3 -2 -1 0 1 2 3 4
Competition law	-4 -3 -2 -1 0 1 2 3 4
CMO Fruit and Vegetables	-4 -3 -2 -1 0 1 2 3 4

6.3 Other legal issues: sector specific regulations²⁹

The only sector specific regulation that influences the position of cooperatives is the Common Market Organisation in the fruit and vegetable sector. In 1996 an EU-wide policy was introduced to support fruit and vegetable growers in adapting to the changing market situation. This offers aid for 50 % of the costs of measures taken by growers in 'operational programmes', which aimed, *inter alia*, to improve product quality, reduce production costs and improve environmental practices. The aid is only available to groups of growers that collectively market

²⁹ Besides using our own know how and scanning the literature we did a search in the digital database of the official State Journal (*Staatscourant*) of the Netherlands government on the terms "cooperatie", "cooperatieve vereniging", "producenten vereniging" and "telersvereniging". This search confirmed that no other support measures or sector specific regulations apply.

their produce in 'producer organisations'. In the Netherlands for a producer organisation to become eligible for EU support it needs to obtain the legal form of cooperative.

There has been some discussion to what extent the CMO Fruit and Vegetables regulation has effected the formation and development of producer organisations. Bijman (2002) has described the developments that have lead to the establishment of many new producer organisations (*telersverenigingen*) in the Dutch fresh fruit and vegetables industry. One main reason for producers to set up new organisations was the restructuring of the traditional vegetables auctions into a marketing cooperative using different trading mechanisms (shifting from auction clock to brokerage). While selling by auction involves economies of scale, selling through brokerage can also be done on a small scale. The abolition of the auction clock provide room for entrepreneurial growers to start contract negotiations with traders and retailers directly.

The second reason for growers to establish new POs was the availability of EU subsidies under the CMO Regulations. A number of the current POs that receive EU support have been established after 1996, the year the new CMO Regulation was introduced.

The CMO Regulation has also had an impact on the development of POs. Some of the POs that currently receive EU subsidies existed before 1996, but had another legal form (e.g. foundation or association). Other POs have restructured their organisation and activities in order to be eligible for EU subsidies.

7 Assessment of developments and role of policy measures

7.1 Introduction

This chapter provides a concluding assessment on the developments of cooperatives in the Netherlands. In chapter 2 the basic statistics on agriculture and farmers' cooperatives were provided. In chapter 3 data on individual cooperatives were reported, especially concerning their internal governance, their position in the food chain and the institutional environment in which they operate.

This led to some first impressions in section 3.5 on the performance of cooperatives in the Netherlands in relation to their internal governance, institutional environment and position in the food chain.

In chapter 4 the data gathering and analysis was broadened by looking at the differences between the sectors and the influence of sectoral issues on the performance of the cooperatives. Chapter 5 looked into much more detail on how the regulatory framework influences the competitive position of the cooperatives in the food chain and vis-à-vis the investor-owned firms.

In this chapter we assess the developments and performance of agricultural cooperatives in the Netherlands, particularly over the last decade. For this assessment we use the perspective of our three building blocks – institutional environment, position in the food chain, and internal governance. But first we discuss the performance of cooperatives, in terms of their viability, their market share, the prices they pay, and the satisfaction of their members.

7.2 Performance

In general we can conclude that cooperatives in the Netherlands perform well. In many sectors they have a large market share in terms of the share of total farm production they are handling and in terms of number of farms organised. In most sectors, the market share of cooperatives has increased over the last decade. This implies that cooperatives have outperformed IOFs. For instance in the dairy industry, IOFs like Numico (now Danone), Wessanen, and Nestlé have withdrawn from raw milk processing. If they are still in the dairy industry, they focus on secondary processing into branded consumer products. In the sugar sector, the only IOF, CSM, has withdrawn from sugar beet processing as it expected that returns on investment in the sugar business would fall. Being stock listed companies, CSM, Numico, Wessanen and Nestlé have to show returns on investment that cooperatives do not need to obtain.

Maybe less surprising, but also in supplying inputs to farmers cooperatives dominate the market. This is the case for animal feed, compost for mushrooms, pig and cattle artificial insemination. Also in providing inputs for horticulture, cooperatives have a large market share, although exact figures are lacking.

Only in animal slaughtering, the situation is clearly different. The only pig slaughtering cooperative (Dumeco) has been turned into an IOF (VION). Although VION is not a cooperative, it is farmer-owned, as it is 100% owned by a farmer organisation (ZLTO). This farmer organisation had earned millions of euros with its rendering (processing of dead animals) activities, and decided to invest this profit in a non-cooperative meat company.

An issue not often mentioned so far is that cooperatives are very durable organisations. Most of them have been around for decades, some for more than 100 years. This durability has advantages for farmers. Cooperatives provide farmers with a guaranteed market. IOFs work with (short term) contracts, which leaves farmers more uncertainty. There are a number of examples of IOFs in the Dutch dairy industry and processed vegetables industry that rather suddenly decided to withdraw from purchasing farm products and forced their suppliers to

search for other customers. In a concentrated market these were often not easy to find. In sum, cooperatives provide more guarantee of market access than IOFs.

A related question is whether cooperatives pay good prices. Farmers often complain that their cooperative does not pay the highest price. Sometimes, cooperatives do not want to pay the highest price. There are good economic justifications for this, particularly in saturated markets. A higher price would induce farmers to produce more, which the cooperative can only process and sell at a loss. However, in markets with production quota (such as dairy, sugar, starch potato), this problem of a high price leading to too much production does not exist, as production already is regulated. Cooperatives may also not be able to pay the highest price. As cooperatives are market leaders with a high volume in the markets, IOF-competitors set their prices after the cooperative has decided upon a price. The largest dairy cooperative – FrieslandCampina – determines the price it pays on the basis of what other cooperatives in North-West Europe are paying. Finally, cooperatives may not be able to influence the price, as they are only small players in a large European market. In these situations, cooperatives are as much price-takers as farmers. Operating as efficient as possible is then the assignment that members give to the managers of the cooperative.

A number of cooperatives have become international agribusinesses and transnational cooperatives. Several cooperatives have members in other EU Member States, such as Avebe and FrieslandCampina in the case of marketing cooperatives, and CRV and Horticoop in the case of supply cooperatives. Other cooperatives have small numbers of foreign members. Still the issue of foreign membership is a hot topic in many marketing cooperatives. Members in the Netherlands consider foreign members as their direct competitors (assuming they produce the same products), while the marketing cooperative itself argues that it needs to obtain economies of scale and to supply its retail customers with a year-round full assortment. Instead of having foreign members, some cooperatives choose to set up strategic alliances with foreign cooperatives to guarantee year-round the full assortment to retailers.

An interesting development is that in the media the cooperative has regained popularity since the financial crisis of 2008. While the cooperative used to be seen as a rather old fashioned type of organisation, with a slow decision-making structure and low innovativeness, the financial crisis made clear that cooperatives are very durable organisations that have not invested in high risk activities and therefore were less affected by the financial crisis than other types of organisations. While this was particularly true for Rabobank, other cooperatives also have been more careful in selecting investment projects.

Cooperatives continue to be a popular organisational form when a group of farmers want to strengthen their bargaining position, when they want to invest in a joint processing and/or marketing enterprise, or when they want to organize the efficient production of services over which they want to main control. When new production or market opportunities arise, farmers in the Netherlands soon set up cooperatives. Thus, many new farmer cooperatives have been established for joint nature conservation, joint marketing of regional products, and joint development of on-farm recreation and care services. In the fruit and vegetables sector the trend towards producing and marketing more specialty products also induces the development of new producer organisations.

7.3 Institutional environment

The institutional environment in the Netherlands is quite favourable for cooperatives. That can partly be explained from historical and sociological backgrounds. The Dutch have a background of cooperation in self-organisations and in democratic decision-making to which they refer as the 'polder' mentality. The long history of decentralized government and the need for self-organisation in keeping the feet dry in the polder have supported the cooperative mentality. Other important sociological features of the Dutch society are its high trust and liberal business attitude. Collaboration out of self-interest is a dominant characteristics of the farming industry

and beyond. The first official cooperative in the Netherlands (founded in 1877 in Aardenburg, province of Zeeland) was named Welbegrepen Eigenbelang (in English: Well-understood Self-interest).

The agricultural crisis of the 1870s and 1880s spelled hard times for the Dutch countryside. The Dutch government wanted to alleviate the distress of the farmers, without abandoning its policy of free trade and non-intervention. The policy that was developed at the time to support the agricultural sector was characterised by two main features: the establishment of agricultural colleges, research institutes and extension services; and the promotion of collaboration by farmers in organised interest groups and cooperatives. The introduction of legislation on cooperatives in 1876 opened up the possibility of founding formal cooperatives. The first cooperative provided farmers with fertiliser, feed and seed. The start up of this cooperative was motivated by the poor quality and the high prices of the farm inputs offered by private traders. Farmer unions were encouraged to set up local, regional and national cooperatives, often inspired by the German experiences with the Raiffeissen cooperatives. Particularly in the South of the Netherlands the confessional farmer unions played a major role in setting up cooperatives, often as an emancipatory instrument for the social and economic development of the many small farmers on poor sandy soils.

Although the cooperative is primarily organised for an economic purpose, the social elements of working together and solidarity should not be underestimated. Farmers were used to help one another in emergencies (neighbour help) and to decide together on matters of common interest (for example, water management in the “Polder”). This idea of common interests was expressed in the names given to the cooperative dairies. Frequently used names were Eendracht [Harmony], Concordia [Concord], and Ons Belang [Our Interest]. Other evocative names that bear witness to a more social or even religious bent were Goede Verwachting [Good Expectations] and Hoop [Hope]. The guiding motives of the cooperative movement can be summed up with the words ‘United in strength, focus on the future, let’s get the job done’.

The Dutch cooperatives have benefited from a flexible cooperative law. The cooperative law gives flexibility to the internal governance structure, the financial structure as well as the type of activities the cooperative can take up. It also allows cooperatives to organise their activities in a holding structure. See below for different governance models that can be applied under the Dutch cooperative legislation

Cooperatives were not influenced by competition law. Until the end of the 20th century, competition issues were not considered relevant for mergers among cooperatives. Partly this had to do with the relaxed attitude in the Netherlands towards competition issues in general: cartels were hardly broken up. Partly it can be explained by the fact that the Netherlands is a small country and that the barriers for market entry by foreign competitors was relatively easy, especially in supplying to large food retailers.

It is unclear to what extent fiscal law has influenced the good performance of cooperatives in comparison to IOFs, but it is certainly not unfavourable. Farmers in the Netherlands pay income tax on their real income, including all payments received from the cooperative, as well as the profits that the cooperative retains but allocates to individual shares or loans. That means that the net effect on household income of paying out profits is lower than in the case where farmers are in a forfait system (or not in the income tax system at all). Although the income tax system in the Netherlands is progressive, the effect of it on farmers is limited. In practice, the marginal tax rate of most of the farmers is quite low - due to low income and attractive tax facilities for entrepreneurs.

The tax system also implies that IOFs that distribute their profits among shareholders, pay two times tax on these profits, first as corporation tax in the IOF and then as income tax of the shareholder (with a dividend tax as a pre-levy). In contrast, a cooperative that pays out its profit as a top-up of product prices see their profit taxed only once. There is no scientific evidence that this fiscal situation has clearly favoured cooperatives but on face value it seems certainly not

disadvantageous. This is confirmed by the recent growth in cooperatives in the service industry to prevent double taxing.

There are no other public support measures for cooperatives in the Netherlands, with the exception of the Common Market Organisation for fruit and vegetables, which requires that only approved producer organisations (in the Netherlands registered as cooperatives) are eligible for EU financial support. The CMO for fruit and vegetables provides subsidies for POs with investments in improving sustainable production, marketing and quality improvement (organised in Operational Plans). The CMO regulation has provided clear rules for the operation of POs and for PO-member relations. Thus, growers have become more tightly connected to “their” PO, which may have strengthened their participation in the PO. The number of approved POs has increased over the years (from 14 in 2001 to 21 in 2009). Some of these POs were newly established, some already existed but did not yet apply for EU support. Although new POs may be established – by producers of (regional) specialty products – it is not expected that the number of POs applying for EU funding under the CMO Regulation will grow. Rather the opposite is expected; due to mergers among POs, the number of approved POs is already declining.

At higher agricultural education, some attention is given to cooperatives and their role in the food chain. However, no compulsory courses exist. At the level of individual cooperatives, members participating in governing bodies often follow special training programs for cooperative leaders. However, these courses are fully paid by the cooperatives themselves. No public support is available.

7.4 Position in the food chain

The traditional position of the farmer-owned cooperative in the food chain was very close to the producer and rather distant from the consumer. This has been changing significantly over the last two decades. Cooperatives have copied the market strategies of (international) IOFs in the food industry. Those IOFs have always had a stronger focus on developing and marketing branded products. Dutch cooperatives have substantially increased their effort in product innovation and marketing branded products since the 1980s. However, as cooperatives differ, also their strategies differ.

Cooperatives traditionally followed a cost leadership strategy, continuously increasing the efficiency of their processing and sales operations. For instance, sugar cooperative Cosun is known in Europe as a low cost producer of sugar. Members have always urged their cooperative to keep operational cost as low as possible. Cooperatives were not able to influence the price, as they were price takers in very competitive markets, or prices were determined by EU market policies. This cost leadership strategy has led to many mergers among cooperatives when technological developments raised the minimum efficient scale of operation to a level beyond the size of one cooperative.

Technological progress in processing, together with a reduction in the cost of transport and communication, has led, over the last 100 years, to a continuous process of mergers among cooperatives. Mergers were also induced by low performance of cooperatives; instead of terminating the cooperative, the members chose to merge it with a neighbouring cooperative that was performing better. These developments resulted in the small number of cooperatives that have survived. Since the 1990s, this merger movement has extended towards neighbouring countries.

Besides a strategy of keeping costs as low as possible, marketing cooperatives have developed two other strategies to increase member income. The first strategy was to diversify into different products on the basis of the same commodity. Dairy cooperatives, the starch potato cooperative, the sugar cooperative, they all tried to develop new consumer and industrial products based on the ingredients of the commodity supplied by their members (milk, starch potato, sugar beet).

The second strategy, particularly followed by cooperatives producing final consumer goods, was to develop own brands. The main objective of this branding strategy was to strengthen the competitive position of the cooperative, both horizontally towards other food companies and vertically towards large food retailers (supermarkets).

Some cooperatives have also activities in the second transformation, like making special branded yoghurts or consumer specialties in sugar. Particularly at this level the competition from specialised IOFs is strong. In some cases cooperatives had to give up some of their secondary processing activities. For instance the sugar industry already many years ago sold its distillery (jointly owned by the cooperative Cosun and the IOF CSM) to a specialised drinks company. Potato cooperative Agrico sold its successful CelaVita brand and production plant to an IOF as it feared not to be able to compete with specialised international IOFs.

When marketing concepts were introduced in the 1960s (at the same time that the supermarket formula took over the grocery store), food was an important item to start with. The agricultural university in Wageningen was at that time the leading place to study marketing. Marketing of Dutch agricultural products was often done by national promotion offices, on behalf of all producers (and often coordinated by the commodity boards). For instance, Dutch cheese was promoted in Germany by Frau Antje (the typical Dutch blond lady in traditional dress). Cooperatives and IOFs equally benefitted from this generic promotion.

In the 1980s and 1990s, when branding became more important for food companies, cooperatives copied the strategies of well-established national and international food companies. In the dairy sector Danone showed the way in branding and market segmentation in the 1990s, based on its experiences in selling water. Particularly the large dairy cooperatives developed their own strong brands, both nationally (Frische Vlag, Domo, Melkunie, Mona) and internationally. When Campina internationalized into Germany it chose acquisition targets and strategic alliances among cooperatives that had well-established brands (like Sudmilch's Landliebe, and MKW's Tuffi and Fructis).

A major development in the food chain that has affected cooperatives is the rise to dominance of the supermarkets. Nowadays most food is sold through supermarkets. The dominance of supermarkets in food chains has affected cooperatives in several ways. First, supermarkets put special emphasis on quality and food safety assurance. Cooperatives have introduced quality control systems. One can argue that cooperatives, with their special relationship with their member-suppliers, have lower (transaction) costs in introducing and monitoring quality assurance system; on the other hand they have less possibilities to exclude (member) suppliers. Unfortunately, there is no empirical research on this issue, where cooperatives are compared with IOFs.

The second effect of the dominance of supermarkets is that dairy cooperatives and fresh produce cooperatives directly supplying to supermarkets need to offer, year-round, the full assortment of products. Supermarkets only want to purchase from a small group of preferred suppliers. This has been a reason for entering into strategic alliances, acquiring specialty producing companies, and, for the fresh produce cooperatives, to acquire import trading companies to be able to sell products that are not produced in the Netherlands (or only in a certain season).

The fresh produce industry has shown two contradictory developments over the last 20 years. On the one hand we have seen the establishment of many crop or variety specific producer organisations. The importance of product innovation and market segmentation was one of the drivers of this development. These POs were either an alternative for the traditional auction cooperatives, or they were complementary organisations as they were established by cooperative members that wanted to get more attention for their specific product. On the other hand there was and is an on-going trend of collaboration and mergers among POs in order to benefit from economies of scale and to become (or remain) an attractive partner for the food retail.

Cooperatives perform well in many sectors. Activities of cooperatives that are not directly related to the members' product have to fit in the marketing strategy of the cooperative and have to generate a profit. The latter is then used for strengthening the surplus of the cooperatives, and could be paid out to the members or is retained for investments. Operating at the most efficient scale of production often makes the cooperatives strong competitors for IOFs which have to make a return on capital that is in line with the stock market expectations. Financing market-oriented strategies has not been a serious problem for most cooperatives (see next section).

In some sectors of agriculture, cooperatives have traditionally been less active. The Netherlands has no tradition of cooperatives active in processing open air vegetables. Some attempts have been taken in the past, for instance by top-cooperative Cebeco, but most have not survived the tough competition from either IOFs with strong consumer brands or from foreign (low cost) competitors. Large scale open air vegetable growing is mostly governed by strict contracts with detailed instructions and requirements provided by the processing industry. Tight coordination between production, harvesting and processing is needed for efficient planning of the processing facilities, and for maintaining high quality. Direct contracting between producers and IOF processors does not mean that producers have not been organised. Often contract negotiations have been done by bargaining associations. A number of these bargaining associations have transformed over the last ten years into producer associations or cooperatives, to be eligible for EU financial support under the GMO regulation for fruits and vegetables.

Cooperatives have not been successful in the pork, beef and veal industries. These industries have traditionally been characterized by low technology (thus relatively low investment costs) and tough competition. As animals can easily be traded, domestically and across national borders, farmers always looked for the best price and often chose another buyer even when they were member of a slaughtering cooperative. This "trading" mentality does not combine well with basic philosophy of a cooperative.

7.5 Internal governance

For organizing the internal governance of the cooperatives, Dutch legislation is very flexible. The cooperative has the statutory obligation to have a board of directors and a general assembly of members. For large cooperatives there is the addition requirement to have a board of supervisors. Cooperatives often have voluntarily organised other governing bodies, such a financial committee or a member council. A member council, consisting of members, can be considered as an intermediary body between general assembly and board of directors. It usually consist of representatives of regional or product groupings within the cooperative. It has obtained some of the rights of the general assembly, such as approving the financial accounts and electing the members of the board. It also functions as a discussion platform for the board or directors and a pool of potential board members. Thus the members council has been an innovation in the governance structure of Dutch cooperatives, that seeks to reduce the distance between (active) members and the board of directors, in large cooperatives.

With the exception of some very small producer groups or cooperatives, all cooperatives have professional management. This implies that the board of directors is only taking decisions on the strategy of the cooperative, not on day to day operations. For several reasons, most cooperatives have placed their assets and activities in a limited liability company (in Dutch: BV), with the cooperative as the holding. In the large (transnational) cooperatives CEOs have been recruited from international IOF food companies, particular for their experience in marketing.

In the large cooperatives, the board of directors increasingly comprises of members and experts that are not member of the cooperative. These non-members have been appointed to insert specific accountancy management or marketing knowledge into the board of directors. Also supervisory boards often have non-member experts in their ranks. This development of more non-members in boards of directors and boards of supervisors is complementary to the

development of giving the professional management more room for entrepreneurship. The latter was necessary, particularly for those cooperatives that compete with large IOFs in branded food markets.

For organizing their internal governance, agricultural cooperatives in the Netherlands seem to choose between three board models. The first model is the traditional structure, with the board of directors elected by and from the membership, a professional manager under direct control of the BoD, and often a supervisory committee (or board of commissioners), consisting of other members, that controls the BoD. This model is still applied by all small cooperatives and several large cooperatives. One of the two new models has a legal separation between cooperative society and the cooperative firm. The cooperative society is only the holding for the cooperative firm. All economic activities are placed in the firm, which is often a holding with many subsidiaries. As large cooperatives are legally obliged to have board of commissioners, the board of directors of the cooperative society forms a personal union with the board of commissioners of the firm (this model is called the Corporation Model). The firm is led by a professional manager or a professional management board under the chair of a CEO.

In the other new model, the Management Model, the professional manager has become the (one-person) board of directors. The members are still exerting control over the BoD through the board of commissioners. Cooperatives with a Management Model all have installed a member council, partly because cooperatives with this model are large cooperatives, which wanted to reduce the distance between members and BoD, partly because these cooperatives wanted to enhance member participation in the governance of the cooperative.

Another internal governance issue relates to the financial structure of the cooperative. Traditionally, equity capital in the Dutch cooperative was fully collective. No individual ownership titles existed and no individual shares in the equity capital existed. In the 1980s it became clear product development, building consumer brands and international expansion would require additional investments. Discussions centred on taking up capital from non-members (with or without voting rights), or attract outside investors in subsidiaries of the cooperative (but keeping the control with the cooperative by a 51% majority or special voting rights). In the end not many cooperatives went this road. As suggested in 1992 by Van Dijk and Poppe, good investment proposals usually received approval from the members, and the membership was able and willing to finance the investment, either with loans bearing a fixed interest rates or with individualized equity (participation shares).

In order to attract additional member capital, to deal with the heterogeneity of the membership (portfolio problem) and to support accountability of investments many cooperatives started to individualize part of the equity capital. Different types of capital arrangements (often with types between normal loans and pure equity, but contributing to the amount of capital exposed to business risks) were introduced, as well as A and B shares with different voting rights and making some of them tradable within the cooperative membership group. Friesland Foods, one of the predecessors of FrieslandCampina, had introduced individual shares that members could buy, could be traded on an internal market, and gave the right to receive an annual dividend payment. The model was relatively successful, as quite a few members invested this way in their own cooperative. As suggested above the flexible Dutch cooperative law was supportive in this. Despite the expectation a decade ago that slowly most equity capital would be individualized, currently most cooperative have only a small share of their total equity capital individualized. By far the largest part of equity capital is still owned collectively, with no individual having any claims on this capital (also not when exiting the cooperative).

Capital as such in the Netherlands has always been relatively cheap, the sector being linked to the international capital market. The cooperative Rabobank has to be mentioned here too. It integrated farmers in the capital market and its access to rural savings made it a big player in the mortgage market in the Netherlands as well as in financing international agribusiness. It has in-depth know-how of the agricultural sector and is heavily involved in financing both farmers and cooperatives, to the level that this forces it to take a long term view - in times of a crisis it could be hard to sell the assets of those that borrowed. The high land prices in the Netherlands are a

good collateral, that in the past (when members of the cooperative were liable for the losses of the cooperative) helped to keep interest rates low for cooperatives borrowing money.

Farmers themselves realise on average a meagre return on capital and that might help in not demanding too much from their cooperative returns too. On the other hand farms are very capital intensive too and younger farmers can be heavily indebted with a high marginal opportunity cost of capital. Older farmers can face a horizon problem. This explains that in the last 20 years the issue of raising capital for cooperative investment has popped up from time to time.

7.6 In conclusion

It is hard to attribute the performance of the Dutch cooperatives to one or two factors. The performance of Dutch agriculture in the fertile delta, close to cities and ports and the institutional and cultural history of the country, as symbolized by the "polder model" and the choice for innovation in the 19th century agrarian crisis, have all contributed to the success. These factors together have developed, over decades, into an institutional system of complementary attributes.

If the narrative on Dutch cooperatives has a lesson, it is that flexible cooperative laws support experimentation and development of internal governance systems and financial arrangements between farmers and their cooperatives that do not block (and perhaps even unleash) the entrepreneurial spirit in the cooperative firm.

The development of farmers' cooperatives in the Netherlands has created leading agribusinesses, many of them operating internationally. They are competitive in food processing, at least in the "first transformation" stage, and some of them also in marketing branded food products. They provide members with durable access to the domestic and international market.

The current cooperative governance systems and financial arrangements have evolved from the more simple Raiffeisen or Rochester ideals of a cooperative. Some observers tend to see the large Dutch agribusiness cooperatives as not very different from IOFs. That is true where it concerns operational management of the cooperative enterprise, however it is not true where it concerns the governance of the enterprise. Dutch farmers, who see themselves as agricultural entrepreneurs, continue to see benefit in being a member of one or more cooperatives and continue to invest in their cooperatives. When they see new market opportunities, they easily team up with their colleague farmers to set up a new producer organisation, very much in line with what their predecessors did for the first time in Aardenburg in 1877, out of well understood self-interest.

REFERENCES

- Bekkum, O.F. van, G. van Dijk, and P. van Boekel (1997). *Agricultural co-operatives in the European Union: trends and issues on the eve of the 21st century*. Assen, Van Gorcum.
- Bekkum, O. van, (2008a), "Nederland Coöperatieland", *Coöperatie* # 594, April 2008, pages 22-23 (in Dutch).
- Bekkum, O. van (2008b), Coöperatief internationalisering: hoe doet Nederland het?, *Coöperatie* #595. August 2008, pages 21-23 (In Dutch)
- Bijman, J. (2000) "Cooperatives", in: L. Douw and J. Post (eds.), *Growing Strong. The development of the Dutch agricultural sector; background and prospects*. The Hague: Agricultural Economics Research Institute (LEI), pp. 127-133.
- Bijman, J., and Marc-Jeroen Bogaardt (2000), *Advanta monograph*, The Hague: Agricultural Economics Research Institute (PITA Final Report, Annex C3). <http://technology.open.ac.uk/cts/pita/>
- Bijman, J. and G. Hendrikse (2003), "Co-operatives in chains: institutional restructuring in the Dutch fruit and vegetables industry", *Journal on Chains and Network Science*, 3(2): 95-107.
- Bijman, J. (2002). *Essays on Agricultural Cooperatives. Governance Structure in Fruit and Vegetable Chains*. Erasmus Research Institute of Management (ERIM). Rotterdam, Erasmus University Rotterdam.
- Bijman, J. (2005). "Network and hierarchy in Dutch co-operatives: a critical analysis." *International Journal of Co-operative Management* 2(2):16-24.
- Bijman, J., and G. van Dijk (2009), Corporate Governance in Agricultural Cooperatives: A Perspective from The Netherlands. Paper presented at the International Workshop "Rural Cooperation in the 21st Century: Lessons from the Past, Pathways to the Future", Rehovot, Israel, June 15-17, 2009
- Bouamra-Mechemache, Z., R. Jongeneel, and V. Réquillart (2009), "EU dairy policy reforms: Luxembourg reform, WTO negotiations and the quota regime", *EuroChoices*, 8(1): 13-22.
- Dijk, G. van & Mackel, C. (1991), "Dutch agriculture seeking for market leader strategies", *European Review of Agricultural Economics*, Vol. 18, pp. 345-64.
- Dijk, G. van, and K.J. Poppe (1992), *Participatie in coöperatie*. The Hague: LEI (LEI working paper) (in Dutch)
- Dijk, G. van (2006). "Externe toezichthouders bij coöperatieve ondernemingen", *Coöperatie*, 588: 6-8.
- McDonnell, L. M., and R. F. Elmore (1987). "Getting the Job Done: Alternative Policy Instruments" *Educational Evaluation and Policy Analysis*, 9(2): 133-152.
- Geld, J.A.G. van der (2007), 'De belastingheffing van coöperaties in Nederland', in: G.J.H. van der Sangen, R.C.J. Galle, P.J. Dortmund (red.), *De coöperatie, een eigentijdse rechtsvorm*, Boom juridische uitgever, Den Haag, pp. 85-97.
- Griffioen, C. (2011). Gebiedscoöperatie Oregional. *Coöperatie* # 606, April 2011, page 14 (in Dutch).
- Hendrikse, G., and J. Bijman (2002). "On the emergence of new growers' associations: self-selection versus market power." *European Review of Agricultural Economics* 29(2):255-269.
- Heyder, M., Ch. Makus and L. Theuvsen (2011), *Internationalization and Firm Performance in Agribusiness: Empirical Evidence from European Cooperatives*. Paper presented at Food Chain Dynamics Forum in Igls, Austria, 2011.
- Oerlemans, N., E. Hees, and A. Guldemond (2006). *Agrarische natuurverenigingen als gebiedspartij voor versterking natuur, landschap en plattelandontwikkeling*. Culemborg, CLM. (in Dutch)
- Nilsson, J. (1999). "Co-operative Organisational Models as Reflections of the Business Environments." *Finnish Journal of Business Economics*, 4, 449-470.
- Sangen, G.J.H. van der (2001). "Corporate governance bij coöperaties. Ontwikkelingen op het gebied van de structuur en de inrichting van de coöperatie." *Agrarisch Recht* 61(7/8): 435-442.
- Sangen, G.J.H. van der, R.C.J. Galle, P.J. Dortmund (red.)(2007), *De coöperatie, een eigentijdse rechtsvorm*, Boom juridische uitgever, Den Haag.
- Stee, A.P.J.M.M. van der (1989), *Om schone zakelijkheid: perspectieven voor de agrarische sector in Nederland. Rapport van de Adviescommissie Perspectieven voor de Agrarische Sector in Nederland aan het Landbouwschap*. Den Haag: Landbouwschap. (in Dutch)
- Weeghel, S. van (2007). "Coöperaties, dividendbelasting en internationale belastingheffing". In: G.J.H. van der Sangen, R.C.J. Galle, P.J. Dortmund (red.), *De coöperatie, een eigentijdse rechtsvorm*, Boom juridische uitgever, Den Haag, pp. 99-125.