Support for Farmers' Cooperatives

Sector Report Sugar

Bert Smit Kees de Bont



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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 sector report on cooperatives in the sugar sector in the EU has been written.

Data collection for this report has been done in the summer of 2011.

In addition to this report, the SFC project has delivered 7 other sector reports, 27 country reports, 6 EU synthesis and comparative analysis reports, 33 case studies, a report on cluster analysis, a study on the development of agricultural cooperatives and relevant policy measures in other OECD countries, and a final report.

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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 sugar sector.

In this context, the specific objectives of the project, and this sector 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 sugar sector. 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 level;
- 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 sugar sector.

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).

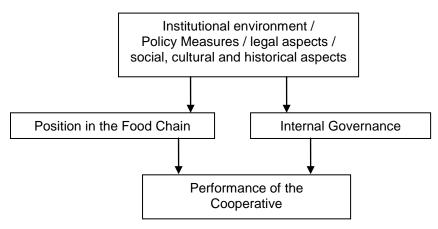


Figure 1. The core concepts of the study and their interrelatedness

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 now on shortened in the text as cooperatives) includes cooperatives of cooperatives and associations of producer organisation (often called federated or secondary cooperatives).

1.4 Method of data collection

This sector report is mainly based on the fact finding in 27 country reports, that were made earlier in this project, one per member state. In addition an inventory of policy measures at EU level was used. For these country reports 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. For member states that joined in 2004 and 2007 the focus is on the post-accession period.

2 Statistics on the evolution and position of agriculture

2.1 Special characteristics of the sector due to character of the product and the influence of the Common Agricultural Policy

Character of the product

Sugar beet is a root crop, sown in the spring (mainly in March and April) and harvested mainly in the period September-November. Sugar beet is a 'rotation crop', grown on farms in combination with other crops, e.g. cereals (wheat, barley, maize etc.), oil seeds, potatoes etc. The harvested sugar beet is transported to the plants (factories) for a large part immediately or in some days after the harvest. Sugar beet is a semi perishable product. It can only be stored for some weeks maintaining the quality of the product (sugar content).

The harvest and processing campaign between September and January is a large logistic optimisation process. The farmer wants to harvest as late as possible (but before frost sets in) in order to reach as high yields and sugar contents as possible. But the sugar beet processing plant needs a regular supply of sugar beets to keep the process going and optimize capacity use. Farmers who harvest relatively early receive an early harvest premium; others who deliver their product relatively late in the campaign receive a storage premium, compensating the decrease in sugar content during storage. Farmers are paid for net yield, sugar content and its extractability and soil and leaf tare. They can influence these variables with plant density, nitrogen fertilisation rate and harvest date.¹

This means that sugar beet is not a tradable product for farmers as for instance cereals or ware potatoes are. For the farmer it is necessary to have a destination (a factory) for the sugar beet in advance, at least before the harvest.

Influence of the CAP

The European market policy for sugar and sugar beet has some specific elements, in comparison to the regulations for most other farm products. First of all, since the policy started some 50 years ago, quota are fixed for a (maximum) volume of production that is guaranteed by minimum prices(since 2010 only for sugar beet, with a reference price for sugar). These quotas are distributed amongst member countries. Per member country the quota are distributed amongst processing plants (cooperatives and private factories) and as a next step amongst farmers.

Another important element of the European sugar policy is the agreement with developing countries (ACP, EBA a.o.) to give these countries the opportunity to export (refined or raw) sugar to the EU market at guaranteed prices, comparable with the prices for EU producers. This means that account is taken of the interests of imports from developing countries (EBA, ACP) as well as the Balkan region in the context of preferential trade agreements. Besides this, a relevant regulation is the iso-glucose scheme to stabilize the volume of production of this grain-based sugar substitute.

The European sugar producers have the opportunity to use export refunds for the export to third countries in situations that world prices are lower than internal prices. However since the

¹Smit, A.B., P.C. Struik & J.H. van Niejenhuis, 1995. Modelling the influence of plant density on yield, sugar content and extractability of sugar beet. In: Proceedings of the 58th IIRB-congress, 19-22 June 1995, France. IIRB, Brussels, 413-424;

Smit, A.B., P.C. Struik & J.H. van Niejenhuis, 1995. Nitrogen effects in sugar beet growing. A module for decision support. Netherlands Journal of Agricultural Science 43, 391-408;

Smit, A.B., P.C. Struik & J.H. van Niejenhuis, 1998. Prediction of various effects of harvest date in sugar beet growing. Journal of Agronomy and Crop Science, 180, 113-122.

revision of the sugar regime in 2006, with the decision to reduce quota with some 30%, the EU is a net importer of sugar. Besides that, given the negotiations in WTO (World Trade Organization), the use of export refunds is restricted already (1.3 mln. tons per year). The use of export refunds will be abolished in future, if Doha-round negotiations succeed in 2013.

Reform of sugar policy (2006-2009) the current regime supports a (at a more than 30% lower level than before 2006) minimum price to the growers of sugar beet and a reference price for sugar to support the production (as sugar produced from sugar been is more expensive than sugar from cane grown in (semi) tropical regions). The revision of the EC sugar regime resulted in direct payments to farmers, originally related to the volume of production (sugar quota) and now decoupled from the production and integrated in the Single Payment Scheme. Another important result of the revision of the sugar policy was, at least for the cooperatives in the sector, the introduction of a restructuring scheme to make the sugar production more effective and to reduce the volume of sugar production in the EC to a sustainable level. The restructuring scheme offered opportunities to decrease or even to stop sugar production; quota were handed over to 'Brussels'. A number of sugar companies (also cooperatives processing sugar beet) used this opportunity. These companies as well as the sugar beet growers as well as contractors were compensated by the EU.

2.2 Share of the sector in agriculture and in National Product

A study of farmers' cooperatives can best start at the farmers' side, in agriculture (Figure 2).

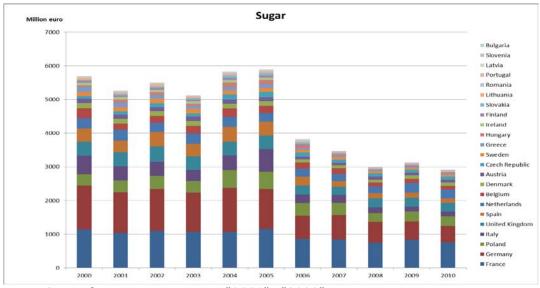


Figure 2 Trend in output per sector "2001" - "2009" Source: Economic Accounts of Agriculture, Eurostat.

Figure 2 shows that total production value of the sugar sector in the EU has decreased especially from the year 2005 on. Reasons for this reduction of production value are the reduction of the quota (production volume) and the decrease of the prices guaranteed by the EU.

Production value of sugar went down in (nearly) all countries (see Figure 3). Only some central European countries show some growth in production over the whole period 2000-2009, but compared with the level in 2005 it decreased e.g. in Poland.

France and Germany are the main producers of sugar in the EC. Together they produce approx. 50% of all sugar in the EU. The share of France in the total production of the EU increased.

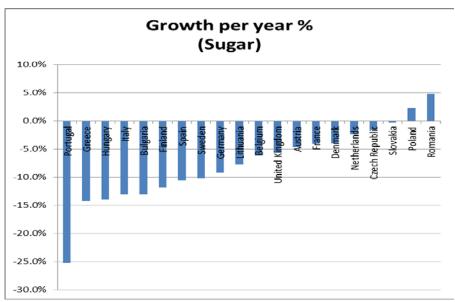


Figure 3 Change in output per year, per country. Source: Eurostat Economic Accounts.

2.3 Development in the number of farms

The number of farms in the sugar sector (farmers growing sugar beet) is given in Table 1. For all member countries data are available for the year 2007, but for the year 2000 only for the 15 (old) member countries.

Table 1 Number of farms growing sugar beet, 2000 and 2007

Country	2000	2007	Average change per year
Belgium	4350	4250	-0.3%
Bulgaria	0 1)	14860	
Cyprus	0	2400	
Czech Republic	0	1530	
Denmark	5850	5380	-1.2%
Germany	26390	20690	-3.4%
Greece	111000	87590	-3.3%
Spain	33770	25760	-3.8%
Estonia	0	1220	
France	22760	23030	0.2%
Hungary	0	8980	
Ireland	1900	410	-19.7%
Italy	85020	90430	0.9%
Lithuania	0	2560	
Luxembourg	20	10	-9.4%
Latvia	0	2250	
Malta	0	10	
Netherlands	9840	7330	-4.1%
Austria	5670	5430	-0.6%
Poland	0	79030	
Portugal	28630	6620	-18.9%
Romania	0	57500	
Finland	3640	5790	6.9%
Sweden	7430	4940	-5.7%
Slovakia	0	740	
Slovenia	0	930	
United Kingdom	10010	7500	-4.0%

Source: Eurostat, Farm Structure Survey. 0= not available, in new member countries

The number of farms growing sugar beet has decreased in most EU-15-member countries rather rapidly in the years between 2000 and 2007. The fall in the number of beet growers will have been strengthened by the reform of the sugar policy in 2006. In some countries (Ireland, Portugal a.o.) sugar beet processing was finished in recent years. Greece and Italy have the largest number of farms growing sugar beet. In the Netherlands the reduction in the number of growers goes parallel with the reduction of total area of sugar beet in the country. Thus, on average, the sugar beet area per farm has remained the same. Farms increase through taking-over other farms; the extra sugar quota c.q. sugar beet area and increasing sugar production per ha compensates at farm level the loss of general sugar quota decreases.

Sugar beets are grown on different types of farms. A large and growing part of the farms are (specialized) field crop farms (arable farms) instead of mixed farms. On practically all farms the area of beet is (only) a part of total area. Total area of sugar beet in the EU is relatively small, some 1.5 mln. hectares compared with cereals, nearly 60 mln. hectares as well as oilseeds, nearly 11 mln. ha.

Size of farms

Farms come in different sizes from small part-time farms to large exploitations. Farmers growing sugar beet have on average a relative large farm, at least in utilized area (hectares of land) as well as in most countries in esu (economic size units). Figure 5shows the distribution of farms per size class, measured in European Size Units (ESU) per country and for the EU in total.

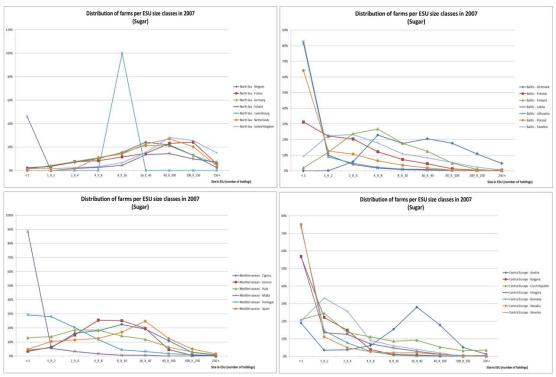


Figure 5 Number of farms per size class, measured in ESU, per specialist type of farming. Source: Eurostat, Farm Structure Survey.

Farms growing sugar beet have very different sizes. In the member countries near the North Sea a relative large part of the farms has a size between 40 and 100 esu as well as between 100 and 250 esu. The region with these countries, including France, Germany as well as Belgium, the Netherlands and the UK, is the main sugar producing region in the EU. The Baltic region shows a more diversified picture. Farm structure in Denmark and in Sweden is comparable with the structure in the North Sea countries, but many farms in Poland and other Baltic countries are

very small. In the central European countries most farms growing sugar beet have a (very) small size; Austria is an exemption in this picture. In the Southern, Mediterranean, countries most farms producing sugar beet are rather small. In Spain a larger part of the farms is larger than 16 esu than in other southern countries. The size of the farm, in fact the volume of the production of sugar beet per farm, may have an influence on the transportation costs of sugar beet to the processing plant, the costs of quality control etc. A higher production volume may result in lower costs per ton of sugar beet.

Specialisation of farm production

Cooperatives may not only have member-farmers with different farm sizes or different age. Farms also have a different composition of their production. This is even true for specialist farms, where e.g. some so called specialist dairy farmers also have beef or sheep or sell hay. In addition to that a lot of 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 6 shows.

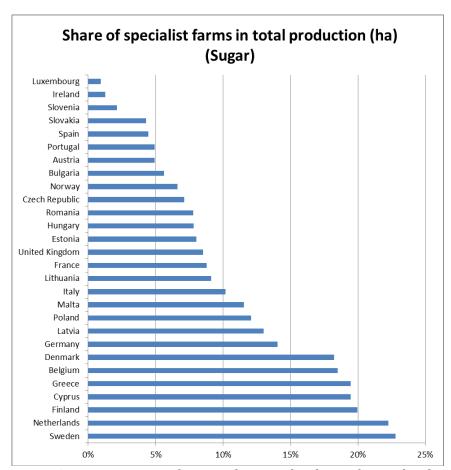


Figure 6 Heterogeneity in farm production: the share of specialist farm types in total production. Source: Economic Accounts of Agriculture, Eurostat.

Figure 6 shows that only a small part of total sugar beet production in member countries is produced on specialized arable, beet growing farms. The reason for this is that on most farms (only) a part of the total area is used for the production of sugar beet, because sugar beet is a rotation crop; in the Netherlands on average 15% of the area on arable farms (or farms specialised on field crops) is used for sugar beet.

2.4 Economic indicators of farms

Table 2 Economic indicators for farms

				Czech										
Sugar	Belgium	Bulgaria	Cyprus	Republic	Denmark	Germany	Greece	Spain	Estonia	France	Hungary	Ireland	Italy	
Economic size - ESU	82.87	3.85	25.10	116.03	83.03	116.63	14.83	40.43	7.27	113.83	23.30	-	37.20	
Total labour input - AWU	1.28	1.98	1.46	6.46	1.14	2.39	1.05	1.29	1.59	2.19	1.85	-	1.40	
Total Utilised Agricultural Area (ha)	62.66	7.89	12.94	204.59	89.79	115.83	11.00	45.63	54.06	101.85	55.51	-	21.68	
Total output €	135,931	9,772	31,672	280,096	185,712	234,755	17,053	54,917	19,915	204,485	57,707	-	46,405	
Farm Net Value Added €	76,515	6,577	14,783	99,643	73,585	104,328	14,794	37,235	9,445	92,365	26,705	-	28,901	
Farm Net Income €	54,417	4,166	8,913	35,968	636	51,447	11,608	29,953	8,803	54,337	14,276	-	21,281	
Total assets €	461,042	17,388	219,283	649,903	1,954,128	1,038,066	82,628	377,304	82,030	388,607	136,195	-	356,182	
Net worth €	355,584	15,211	218,030	528,483	1,121,867	880,267	82,031	370,193	69,431	218,800	100,511	-	352,486	
Gross Investment €	23,657	1,186	1,440	28,052	43,583	45,615	563	-1,277	5,164	29,318	7,380	-	2,695	
Net Investment €	6,722	494	-3,587	-1,854	18,083	16,548	-3,152	-4,699	1,832	-2,535	-180	-	-3,154	
Total subsidies - excl.on investm. €	29,895	1,729	4,262	53,461	35,212	44,111	11,379	14,609	6,901	38,837	13,462	-	8,312	
Farms represented	3,893	15,365	2,367	1,667	5,380	19,647	86,850	25,890	1,083	23,237	7,417	317	89,847	
														United
Sugar	Lithuania l	uxembourg	Latvia	Malta I	Netherlands	Austria	Poland	Portugal	Romania	Finland	Sweden	Slovakia	Slovenia	Kingdon
Economic size - ESU	15.83	-	11.07	-	97.93	44.57	10.17	16.50	3.50	28.53	49.37	64.10	9.95	196.2
Total labour input - AWU	1.94	-	2.34	-	1.77	1.37	2.06	1.82	1.94	0.85	1.15	7.54	1.26	2.8
											04.30	197.45	13.03	199.30
Total Utilised Agricultural Area (ha)	62.10	-	49.53	-	57.84	50.38	21.97	15.82	9.67	53.17	91.30	197.45	13.03	199.3
Total Utilised Agricultural Area (ha) Total output €	62.10 41,932	-	49.53 33,850	-	57.84 255,304	50.38 88,843	21.97 30,257	15.82 29,255	9.67 15,681	53.17 45,297	120,631	194,361	22,745	375,22
		-		-										
Total output €	41,932	- - -	33,850	- - -	255,304	88,843	30,257	29,255	15,681	45,297	120,631	194,361	22,745	375,22
Total output € Farm Net Value Added €	41,932 22,793	- - - -	33,850 13,466	- - - -	255,304 108,843	88,843 58,589	30,257 14,499	29,255 15,693	15,681 8,393	45,297 22,867	120,631 46,117	194,361 45,005	22,745 9,267	375,22 174,59
Total output € Farm Net Value Added € Farm Net Income €	41,932 22,793 20,729	- - - -	33,850 13,466 9,981	- - - -	255,304 108,843 53,154	88,843 58,589 45,346	30,257 14,499 11,161	29,255 15,693 11,873	15,681 8,393 5,858	45,297 22,867 14,426	120,631 46,117 19,001	194,361 45,005 -1,584	22,745 9,267 7,814	375,223 174,590 95,883
Total output € Farm Net Value Added € Farm Net Income € Total assets €	41,932 22,793 20,729 118,702	-	33,850 13,466 9,981 77,506	- - - -	255,304 108,843 53,154 1,697,459	88,843 58,589 45,346 391,418	30,257 14,499 11,161 93,489	29,255 15,693 11,873 72,041	15,681 8,393 5,858 39,772	45,297 22,867 14,426 276,641	120,631 46,117 19,001 693,579	194,361 45,005 -1,584 329,686	22,745 9,267 7,814 125,708	375,223 174,590 95,883 1,845,020
Total output € Farm Net Value Added € Farm Net Income € Total assets € Net worth €	41,932 22,793 20,729 118,702 100,102	-	33,850 13,466 9,981 77,506 57,397	- - - - - -	255,304 108,843 53,154 1,697,459 1,193,200	88,843 58,589 45,346 391,418 352,262	30,257 14,499 11,161 93,489 82,752	29,255 15,693 11,873 72,041 69,537	15,681 8,393 5,858 39,772 39,137	45,297 22,867 14,426 276,641 208,007	120,631 46,117 19,001 693,579 533,722	194,361 45,005 -1,584 329,686 282,993	22,745 9,267 7,814 125,708 123,363	375,222 174,590 95,883 1,845,020 1,611,14
Total output € Farm Net Value Added € Farm Net Income € Total assets € Net worth € Gross Investment €	41,932 22,793 20,729 118,702 100,102 13,853	-	33,850 13,466 9,981 77,506 57,397 13,743	-	255,304 108,843 53,154 1,697,459 1,193,200 54,450	88,843 58,589 45,346 391,418 352,262 16,671	30,257 14,499 11,161 93,489 82,752 4,817	29,255 15,693 11,873 72,041 69,537 2,515	15,681 8,393 5,858 39,772 39,137 254	45,297 22,867 14,426 276,641 208,007 15,223	120,631 46,117 19,001 693,579 533,722 22,626	194,361 45,005 -1,584 329,686 282,993 35,783	22,745 9,267 7,814 125,708 123,363 7,054	375,223 174,590 95,883 1,845,020 1,611,143 73,060

Source: DG Agri, FADN.

The average size (in esu) of the beet growing farms per member country represented by FADN (a selection of all farms represented by Eurostat, FSS) shows a wide variation see Table 2). In some countries (Czech rep., Germany, France, the Netherlands) the average size is just above 100 esu, but in some (new) member countries it is lower than 10 esu. The average area per farm growing sugar beet shows also a large variation, with some countries above 100 hectares and in Romania and Bulgaria below 10 hectares. Average labour input per farm however in all countries is more equal. It differs from 1 to 3 annual labour units per farm.

Given these differences in farm structure the average financial position and results per farm are very different. In some member countries (Belgium, Germany, France, Netherlands and UK), which are producing a large part of sugar in the EU, the income level is above 50,000 euro. In most of the countries net investments are positive. This provides an indication of the (positive) perspectives of the farms in these countries.

In this period (2007-2009) incomes on the farms growing sugar beets were influenced by a strong increase of cereal prices (especially in 2008) as well as by a high level of sugar prices on the world market. This may have influenced the willingness of the farmers to invest. On the other hand the worldwide financial economic crises started in the autumn of 2008. These financial crises with the more careful attitude of banks to finance investments has had a negative influence on investments.

3 The evolution and position of cooperatives and their performance

3.1 Description of the food chain issues in the sector

Position of the sugar cooperatives in the food chain

The (main) position of cooperatives in the sugar sector is quite simple. Their main role is to process the sugar beet produced by the farmers(members of the cooperative) and to produce (refined) sugar. The cooperatives produce (refined) sugar as their main product. This sugar is delivered to processors in the food industry as well as to retailers (mainly super market chains) and wholesalers for the distribution to other clients.

The by-products of the sugar production, pulp, molasses and others, are mainly used as animal feed. Recently the use of by products in the bio-based economy (energy) has come up the agenda.

The production of alcohol (to be used in the food sector) as well as of bio-ethanol (a motor car fuel) on the base of sugar(beet) is a rather new activity of some cooperatives. The sugar sector has to compete with the cereal sector on the production of alcohol and bio-ethanol.

The conclusion is that the sugar cooperatives have relationships in the market with different partners:

- Retailers, buying sugar for consumers;
- Food industry, buying sugar to use it for the production of food products as sweets, cake and other bakery products and soft drinks;
- Animal feed industry and feed distributors;
- Motor carburant distributors.

The major partners of the sugar cooperatives, the retail companies (super market chains) as well as the companies in the food and soft drinks industries are larger than the sugar companies. The turnover of these partners is often much higher than the turnover of the sugar cooperatives. Because sugar in fact is a 'simple' commodity (with a constant quality) the sugar cooperatives are not able to distinguish themselves on quality. However, the sugar (processing) companies in Europe tend to claim that food safety of their products is stronger guaranteed than of non-European sources.

3.2 Performance of coops (market shares, growth, other indicators)

Table 3 indicates that the market share of sugar cooperatives increased in the Netherlands and Italy. In France the two cooperatives in 2010 have the same market share as the seven cooperatives had together in the year 2000.

Table 3 Market Share of Cooperatives in the sugar sector

	"2	000"	"200)8"	Comments
Country/	Number of	Market	Number of	Market	
Cooperative	members	Share (%)	members	Share (%)	
France	n.a.	62 % (of all 7	12.000	44	Tereos is also active in Belgium, Spain,
Tereos1)		sugar coops	(2008)		UK, Italy and Czech. Rep.
		in France)			
France	n.a.	62 % (of all 7	6.000	18	
Cristal		sugar coops	(2008)		
Union2)		in France)			
Italy	n.a.	7	n.a.	20	No more info in the country report found
Netherlands	12.500	63	10.900	100	
Royal Cosun					
Spain		?	8.700	28	Turnover 0.14 bln. euro;
Acor			(2008)		
Hungary				30	The two cooperatives are producer
					groups (no processors of sugar beet)
Lithuania 3]					3 groups of producers (including
					processing) and 1 marketing group (no
					processing)
Poland					45 regional unions, no processing
UK					No data in national report on Fleggmart;
					sugar production/processing is in the
					hands of British Sugar
TOTAL EU					

Sources: country reports

- Tereos was founded in 2003 as a merger from Union SDA and Union BS, which were mergers themselves.
- Cristal Union was founded in 2000 as a merger from the cooperatives Arcis, Bazancourt, Corbeilles and Eclaron. Data for 2000 were not available.
- These four groups are all very small and data on number of members or market share are not available. The total area of sugar beet in Lithuania was 15,400 ha in 2010 and the three processors had about 1,000 employees.

There has been considerable discussion in compiling this table concerning two cases: Agrana in Austria and Südzucker in Germany. Both have been left out of this table as they cannot be classified as cooperative / producer organisations with the definition given in chapter 1. Agrana (market share 100%) has 9.000 (2008 data) farmers that deliver sugar beet and has 65% of its turnover in Austria. It is co-owned by the Raifeissen organisation and Südzucker² and there is a free float of the remaining 25% stock. It is also active in other products.

SüdZucker itself is also a remarkable hybrid. Südzucker AG is officially an IOF, not a cooperative. But sugar beet farmers own through the Süddeutsche Zuckerrübenverwertungs-Genossenschaft eG [SVZG, South German sugar beet processing cooperative], Stuttgart, 55 % of the shares of the company.³ The history of the company can be traced back to the formation of Süddeutsche Zucker AG in a merger of five sugar companies in 1926, followed by more mergers later and

²Agrana has however been added in the list of cooperatives for Austria in the Country Report for Austria, Kühl, 2011, but also with the additional remark that "producer organisations do not have any relevance in the sugar sector in Austria"). However this is debatable as it is not fully user-owned. Agrana runs around 50 facilities (not only in sugar) with production bases in Hungary, Austria, Poland, Romania, Ukraine, France, USA, and Mexico.

³Source: www.suedzucker.de/en/FAQ/Unternehmen.

investments in Agrana as well as other European countries (including Saint Louis Sucre in France, Tienen in Belgium and factories in Poland) and Mauritius in the last 20 years. Majority shareholder SVGZ started only in 1950 with the objective to start a new sugar factory. The Bavarian Ministry of Agriculture forced, with the support of the American Marshall Fund, a deal between SVGZ and SüdZucker, that made SVGZ majority shareholder⁴.

Its complement NordZucker also has a history of mergers of IOFs: The shareholders of Nordzucker AG now primarily hold their stakes via the three holding companies Nordzucker Holding AG, Union Zucker Südhannover GmbH and Nordharzer Zucker AG. The holding structure reflects the organisation of the former sugar factory companies. Some argue that the influence of farmers in Nordsucker should increase and take Südsucker as a model.⁵

Back to the cooperatives. Only some of all 27 EU-member countries have sugar cooperatives active as sugar beet processor: France, the Netherlands, Spain and Italy.

In the Netherlands in (only) one region (South-east) a producers association (CVS Covas) is representing beet growers in contacts with the cooperative Cosun, but Cosun is processing all sugar beets produced in the Netherlands (including the sugar beet delivered by the members of CVS COVAS), and the producer organisation has not been included as a separate cooperative in our data set (formally it is, but its raison d'être is mainly efficiency of scale in the mechanisation of sugar beet growing and harvesting as farms in these areas are rather small).

Hungary and Poland have only producer groups representing the growers in contacts with the factories. Slovenia had 7 cooperatives until 2007. Sugar production is now completely abolished, as a result of the EU sugar reform. Portugal is in a comparable position; Portugal had an association of beet growers (ANPROBE).

This situation is quite remarkable. A number of rather important sugar producing countries in the EU- Germany, UK, Denmark and Belgium - have no cooperatives in this field at all. However, in Belgium the French cooperative Tereos has activities. We come back to this remarkable situation later in this report.

3.3 Description of largest farmer's cooperatives in the sector

Table 4 Most important cooperatives in sugar sector, per country

Country	Names of Cooperative	Primary (P) or Secondary (S) cooperative	Turnover 2010* (billion Euro)
Netherlands	Royal Cosun	P	1.7
France	Tereos	P	3.8
	Cristal Union	P	1.7
Spain	ACOR	P	0.14
Italy	CO.PRO.B. COOPERATIVA	P	0.27
	PRODUTTORI BIETICOLI.		

^{*: 2010} or latest year available

The number of cooperatives in the sugar sector per country is small. In fact only France has two large beet processing cooperatives (table 4). These cooperatives have a high position on the ranking list of cooperatives (table 5).

Given the situation that in some countries or larger regions, sugar beet growers have only one (or more) cooperatives to sell their sugar beet and no private factories, the membership of a cooperative is somewhat mandatory. This is at least the situation in the Netherlands.

⁴Manfred Pohl: Die Geschichte der SüdZucker AG 1926 – 2001, Piper Verlag, 2001

⁵See the German farmers journal TopAgrar 4.7.2011 "Nordzucker 1:1 in das Südzucker Modell umwandeln!":

Table 5 The largest farmers' cooperatives in the food chain of sugar sector

	Name of the Cooperative	Country
1	Tereos	France
2	Cristal Union	France
3	Royal Cosun	Netherlands
4	COPROB. COOPERATIVA PRODUTTORI BIETICOLI.	Italy
5	ACOR	Spain

It is clear that the sugar market in the EU is not dominated by cooperatives. The largest sugar producers are not cooperatives, but private companies. The list of ten largest sugar producers in the EU contains only three cooperatives. Agrana (Austria) is not mentioned on this list, given the character of the firm and the fact that the turnover of Agrana is for a relative large part not based on sugar.

The ten largest sugar producers in the EU (2008, volume of sugar quota) are:

- 1. Südzucker (Germany) with 3.3 mln. tons
- 2. Nordzucker (Germany) with 2.0 mln. tons
- 3. Tereos (France) with 1.4 mln. tons
- 4. British Sugar (UK) with 1.2 mln. tons
- 5. *Cosun* (Netherlands) with 0.9 mln. tons
- 6. Pfeifer & Langen (Germany) with 0.9 mln. tons
- 7. Cristal Union (France) with 0.6 mln. tons
- 8. KrajowaSpolkaCukrowa (Poland) with 0.55 mln. tons
- 9. Azuccera Ebro Agricolas (Spain) with 0.5 mln. tons
- 10. Vermandoise (France) with 0.4 mln. tons

Source: Agrarisch Dagblad (21-02-2009).

Transnational cooperatives

Many cooperatives are internationally active. In most cases the foreign activities of cooperatives are limited to marketing, trade and sales. Usually they do not buy agricultural products from farmers, or supply inputs to them. However, there is a growing 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 could 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. Table 6 below presents the foreign transnational cooperatives and the international cooperatives active in the sugar sector.

Table 6 The transnational cooperatives and international cooperatives that are trading with farmers in the sugar sector.

Name of the	Mother	Countries involved in:
Cooperative	country	
Transnationals		
Royal Cosun	NL	Germany, Belgium [As some members of producer association CSV COVAS live and work in Germany or Belgium and deliver their sugar beets to Cosun through CSV COVAS]
Internationals	;	
COPROB	Italy	Germany
Tereos	France	Belgium, Spain, UK, Italy and Czech Rep., as well as outside the EU (Brasil)

4 Assessment of developments among cooperatives

4.1 The institutional environment

An important general aspect in the EC for sugar is the market regulation with a quota system, revised in 2006. This regulation provides, as one of the goals of the CAP, a protection to the farmer for a low price level of his product, but restricts the volume of the ('guaranteed', in quota) production. In fact the sugar factories (cooperatives as well as others) have to deal with these regulations; they are required to pay (at least) the minimum price to the farmers for the quota-volume and they have to obey the quota-regulations (administrative procedures, etcetera). These regulations have a great impact on the structure and size of the sugar production in the EU. This becomes quite clear when e.g. an abolishment of sugar quota is studied⁶.

The WTO-negotiations for liberalisation of the world market (Doha-Round) as well as developments in CAP tend to favour abolishment of all quota systems in the EU, including sugar quota and minimum prices. Such a reform (proposed to become active from 2015onwards) creates a new reality, allowing optimal production allocation in the EU with lower sugar and sugar beet prices than in 2011. Sugar (beet) production would then concentrate in EU- regions with relatively low cost prices (Smit et al., 2011). In this new reality, a difference in strategy between cooperatives and IOFs may come forward. IOFs may tend to decrease sugar beet prices in order to maximise profits under conditions of full competition and lower sugar prices. Cooperatives will probably try to maximise other income in order to be able to pay the members a sugar beet price as high as reasonably possible.

In the past, there was practically no difference in profitability of sugar beet growing between Dutch cooperative farmers and their IOF-oriented colleagues. CSM announced its final beet prices a few days after Cosun/SuikerUnie had done this. The assumption is that cooperatives will pay a higher sugar beet price to their members than IOFs. However, the IOFs will be aware of this difference. They will limit the sugar beet price reduction in order to prevent loss of popularity among sugar beet growers i.e. their market share among sugar beet growers. But they may also decide to follow an exit strategy like CSM in the Netherlands did. Competition on sugar production cost price will become even more severe than in the past, urging high production levels relative to the capacity available.

Sofar, sugar companies were mostly limited to beet processing in one country. A new situation without quota and minimum prices could induce the formation of larger sugar companies to take advantage of economies of scale. Therefore, the formation of transnational cooperatives and IOFs may be considered under the restrictions of anti-monopolistic legislation. Logistic optimisation between different IOFs and cooperatives may also be considered, e.g. through establishing joint ventures etc.

Additional regulations in some countries

Some member countries have introduced specific measures in the field of sugar (see section 5.2).

Bio-energy

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The production of bio-ethanol (motor carburant) is related to the production of sugar, especially in Brazil. The EU as well as some national governments are stimulating bio-energy production through subsidies and/or fiscal advantages. Such regulations may give opportunities for cooperatives to new investments. The production of bio-ethanol on the base of sugar however is

⁶ Smit, A.B. and C.J.A.M. de Bont, 2011, Sugar quotas: yes or no? Economic consequences for sector, chain, international market situation and third world, Management summary about the possible abolishment of the sugar quota system after September 2015, Den Haag, LEI-rapport 2011-065.

competing with the production on the base of cereals (wheat, maize) as well as biodiesel based on oil seeds. The increase in mandates to mix motor carburant with renewable energy will increase the imports of bio-ethanol in the EU. Research and innovation in the field of sugar beet production and processing is, in some countries, financed for a part by national governments.

Cooperatives only prominent in a few countries

Cooperatives in the sugar sector have a prominent position in only some countries (France, Italy, The Netherlands). The total market share in the EU sugar production (some 15 mln. tons) of the cooperatives is rather low (approx. 40%). The main role of these cooperatives is transformation/processing sugar beet. Compared with cooperatives in other sectors they are not on the top of the ranking (see COGECA); the largest sugar cooperative is ranked at position 13 on COGECA's list, based on the turnover per year. However, with some 10.000 member Tereos as well as Cosun are rather big cooperatives, compared with for instance the nearly 16.000 members of the cooperative Friesland Campina at position 1 of the list of COGECA.

Reasons for cooperatives in some countries?

Is there any reason why for instance France and the Netherlands have (strong) cooperatives in the sugar sector and Belgium and Germany have no sugar processing cooperatives? Belgium and Germany however have many cooperatives in other farm sectors, for instance in the dairy sector, livestock and meat, fruits and vegetables, animal feed, and (in Germany) for wine. This makes it unlikely that the institutional environment is the differentiating variable here.

A historical reason could be that Belgium and Germany had more experience in the 19th century in investing in capital intensive industries than France and the Netherlands. In Belgium and Germany investors had already invested successfully in for instance steel production, coal mines, and textiles industries etc. Processing sugar beet is a risk full and capital intensive activity and investors outside the farm sector were able and willing to invest in this. In the Netherlands some (small) investors in sugar cane processing in the 19th century had a negative experience with operating a sugar beet factory and many of them closed their factory after some years. In addition there was for many years a big fight between beet growers (who were paid out on weight of beets in kg, but supplied with seed that was selected on sugar content of the beet) and processors (who favoured beet with a high sugar content). As a consequence, farmers had to take initiative at the end of the 19th century to establish regional cooperatives 7In France, the Origny cooperative is considered as the birthplace of the Tereos Group. Origny was founded at Origny in 1869 as a cooperative sugar processing company. They turned into a distillery in 1932. At the time, the majority of sugar beet cooperatives were turning to the production of alcohol, which was already being used as a fuel.

4.2 The role of cooperatives in the food chain

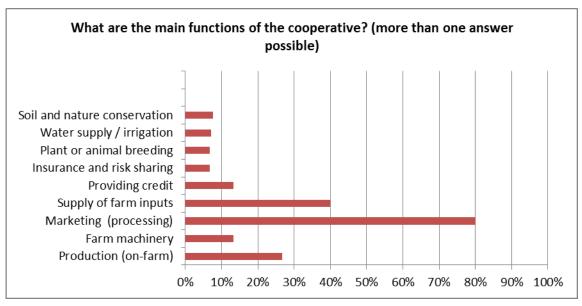
In figure 4.1 the main functions of the sugar cooperatives in the EU member states are given. The figures originate from fourteen cooperatives that have sugar processing, marketing and/or production as their core business.

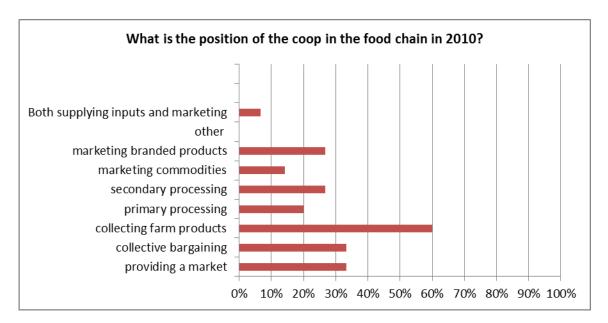
Eleven cooperatives are processing or marketing sugar; the other three are Polish cooperatives which are producing sugar beets on a common base. The Italian CO.PRO.B. does both.

⁷A strong and clear example is the history of the sugar factory "Zeeland", located in Bergen op Zoom, a city in the adjacent province Brabant. It was founded in 1863 by the Belgian (!) sugar industrialist Felix Wittouck as the SA Sucreries de Breda et Bergen-op-Zoom. That merged in 1908 and was bought in 1916 by a cooperative of farmers from Zeeland, who wanted their own sugar factory and found a new plant in

their own province unattractive, also as that region is short of sweet water.

Besides this main function some cooperatives provide more services to the farmers, such as supplying farm inputs, making farm machinery available, providing credits, insurances and farm advisory services.





In the figure above the position of the cooperatives in the food chain is given. Two third of the cooperatives have a very relevant position in collecting farm products. Further up in the chain the position of most cooperatives is less prominent. About half of the cooperatives have a relevant share in processing; only a third has a relevant position in market providing, meaning e.g. organising an auction. In marketing the position of most cooperatives is even weaker.

Name of cooperative	Country	Product 2	Product 3	Strategy		
				Cost leadership	Differenti ation	Focus
AGRANA	AT	Cereals	Fruit and vegetables	1	0	N.A.
ACOR	ES	Electricity	and biodiesel	1	0	0
Tereos	FR	Cereals		1	1	0
Cristal Union	FR			1	0	0
Kapos Cukorrépa Termel?k Szövetkezete	HU			1	0	0
Brigetio Cukorrépatermel? Szövetkezet	HU			0	1	0
CO.PRO.B.	IT	Renewab	le energy	0	1	1
"Marijampol?s regiono cukriniai runkeliai"	LT			N.A.	N.A.	N.A.
"Aukštaitijos cukriniai runkeliai"	LT			N.A.	N.A.	N.A.
"Kedaini? krašto cukriniai runkeliai"	LT			N.A.	N.A.	N.A.
CSV COVAS	NL	Betacal	Potatoes	N.A.	N.A.	N.A.
Royal Cosun	NL	Potatoes	Chicory	1	1	0
Grupa Producentów Buraka Cukrowego RAZEM	PL			1	0	0
Zalesie Sp. z o.o. Grupa producentów rolnych	PL			1	1	0
Rolnicza Spó?dzielnia Produkcyjna Rostkowice	PL	Pig meat		1	0	0

Additional information:

- 1) Strategies (according to Porter's classification):
 - a) A cost leadership strategy implies a great effort to produce as efficiently as possible(emphasis on low cost);
 - b) A differentiation strategy means the production of different products or services ((emphasis on high value);
 - c) A focus strategy implies that specific markets or consumer groups are served (emphasis on a niche market).

A combinations of differentiation and focus strategies is possible.

2) Cooperatives listed: This table also mentions a number of cooperatives, which are summarised in table 3 under 'groups of producers' (Lithuania) or 'regional unions' (Poland). These cooperatives are very small from a European point of view. However, the three Polish cooperatives are relatively large compared to the other 'regional unions'. For the Netherlands, additional cooperative is listed, which only organises the logistics of sugar beet (CSV COVAS).

Most cooperatives follow a cost leadership strategy, some also a differentiation strategy and one cooperative is involved in a focus strategy (CO.PRO.B in Italy). The differentiation strategies listed differ in the type of product that is selected. Most cooperatives choose a wider set of farmbased products like fruit and vegetables, starch, potatoes and chicory and not a strong brand in sugar or sugar products. It is probably not easy to discern between brands in sugar for direct use or for food processing.

The role of the sugar beet cooperatives in the food chain in general is explained in section 3.1. Their role is described more in detail in the national reports. The main points are presented below for France, Italy, the Netherlands, and Spain.

France:

In the sugar sector, only two cooperatives remain but those two cooperatives are leaders in the sector (table 7). They both have a diversification policy: to depend less on sugar, Tereos has chosen firstly to diversify in the production of ethanol and then in the production of starch. Cristal Union has focused mainly on ethanol production as a second branch. This diversification policy is, compared e.g. to creating branded consumer products, attractive for the members, as it processes (other) farm products (sugar beet or others).

In France, sugar is mainly obtained from beet. France is the leading world producer of sugar beet with 34 million tons in 2008 and the leading European sugar producing country. The sugar sector in France is very concentrated and the first four companies represent around 95% of the national sugar quotas.

Table 7 The leading companies in the sugar sector in France in 2009 (by turnover)

Company	Legal Form	Turnover 2009 (million	Production 2009 (1000
		euros)	tons)
Tereos	Cooperative	3,409	1,400
Cristal Union	Cooperative	1,200	892
Saint Louis Sucre	Investor-owned Firm	708	N/A
Groupe Vermandoise	Investor-owned Firm	318	N/A

Sources: Annual reports, websites 2010

As shown in Table 7 above, two cooperatives are leaders in the sugar sector. As in other European countries, the French sugar sector has concentrated strongly with the reform of the EU's sugar regime. This reform has induced a great deal of restructuring by EU producers and farmers. Tables 8, 9 and 10 show that the French sugar cooperatives were active in recent years to arrange partnerships with other companies, for a part in the cereal sector, as well merge with each other and to buy companies. On the other hand, table 10 shows the activity of the German company Südzucker on the market in France.

Table 8 Main partnerships made by cooperatives in the sugar sector in France between 2000 and 2010

Year	Partners	Name of the new company
2010	Tereos, Petrobras (Brazil)	Tereos Guarani
2010	Tereos, 8 French cereal cooperatives	Tereos Agro-Industry

Table 9 Main mergers in France between cooperatives in the sugar sector between 2000 and 2010

Year	Cooperatives	Name of the new company
2000	Arcis, Bazancourt, Corbeilles, Eclaron	Cristal Union
2006	Tereos, SDHF	Tereos
2007	Cristal Union, Sucrerie d'Erstein	Cristal Union

Table 10 Main acquisitions in France by cooperatives in the sugar sector between 2000 and 2010

Year	Cooperatives	Company bought
2001	Südzucker (GER) 1)	Saint Louis Sucre
2002	Tereos	Béghin Say
2010	Tereos	Quartier Français

Südzucker is not a cooperative, but is included in this table, because the company is the largest sugarproducer in the EU (page 20).

Italy

In the sugar sector in Italy today there is only one cooperative: CO.PRO.B. COOPERATIVA PRODUTTORI BIETICOLI. According to the national report this cooperative plays an important role in the sugar sector. After the abolition of the European aid, the Italian sugar sector now has just three companies, of which the cooperative has a market share of around 20%. In reality, the share of this cooperative in the production of sugar in Italy (as assigned by the EU) is much more

elevated (284,000 tonnes, 56% of the national share). This reveals the fact that a non-negligible portion of the national demand for sugar is covered by imports. In the last decade, in a difficult market, the cooperative was able to increase its weight in the sector. This firm was the only Italian sugar cooperative in 2000 as well, but at that time its market share was far less (7% in both production and final market) due to heavy competition from investor-owned firms.

CO.PRO.B has a business relationship with foreign agricultural entities. Following the sugar reforms in Italy, the cooperative in the last years has begun purchasing beet sugar from Germany (about 10% of the total raw materials used). This is a purely commercial relationship between German farmers and COPROB. In fact, the collection of sugar beets takes place directly in Germany through a German subcontractor who obtains sugar from the plant. COPROB receives sugar from Germany and then commercializes it together with its own products.

The Netherlands

In the sugar sector there used to be two companies processing sugar beets: CSM, a stock market listed IOF, and Cosun, the sugar beet growers' cooperative(formed in a consolidation process in the late 1960s). After earlier (even hostile) merger and acquisition processes in the 1990s, 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 with is origins in sugar cane refinery, to withdraw from the sugar industry was the lack of growth potential in the sugar industry.

The 2006 policy reform was not only an incentive to merge the sugar division of CSM into Cosun, but also to restructure the production facilities. One of Cosun's strengths is the very cost efficient production: the number of factories was reduced to two, each with a capacity of 500.000 tons of sugar (the European average is 150.000 ton). That is equivalent to 20.000 tons of beet on an average day in production⁸.

In addition to Cosun the cooperative CSV Covas exist. This cooperative (a 2009 merger of CSV and Covas) has no processing capacity but organises the harvest of the sugar beets of 2,000 growers (12,000 ha) in the south east of the country and sells the beets to Cosun. The cooperative is also active in potatoes (selling to Cosun daughter Aviko), malting barley, ginseng and cichory (for processing).

Although Cosun is a cooperative of only sugar beet growers (most of them also growing potatoes, cereals and some field vegetables), thus being rather 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: SuikerUnie 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 produces industrial alcohol and bio-ethanol. Part of its sugar beets and chicory (and Aviko's potatoes) is bought from the regional cooperative CSV Covas.

Spain

In 2009, 49,700 hectares were dedicated to the production of sugar beet. The cultivation of sugar cane in Spain has practically disappeared. Sugar production has decreased by half over the decade, going from 1,260,000 tons in 2000 to 636,000 tons in 2010. The Spanish sugar sector has been reduced to only 2 producer companies: Azucarera Ebro, an IOF with 72% of the market, and ACOR, a cooperative, which commands 28% of the market.

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⁸Data taken from an interview with Cosun's director for sugar mr. A. Markusse in Boerenbusiness 1, 2011

Sugar production in Spain is very concentrated, mainly in Castilla and Leon (69% of area and 73% of production), followed by Andalusia (24% area and 9% production). The cooperative ACOR is situated exclusively in Castilla and Leon, while Azucarera Ebro is more dispersed throughout Spain.

The review of the EU sugar policy resulted in the loss of sugar production in Spain. The companies received restructuring funds in exchange for reducing production. Community and state aid exists for producers in this sector.

The impact for Spain has been very significant, with the closure of a number of factories under the restructuring plan. As a response to the restructuring, the cooperative ACOR substantially reduced its production and closed one of its installations. In 2009 it established an alliance with a French cooperative group, TEREOS, for the production and commercialisation of sugar in Spain, through the acquisition of 40% of its social capital. As a result since 2010, the TEREOS group carries out the commercialisation of the production of both of the companies.

ACOR has diversified its activity into renewable energy through the construction of a biodiesel plant, a photovoltaic solar park and an agreement with the cooperative Group Arento for the manufacture of flour.

4.3 Internal Governance

The position of farmers as producers of the raw product (sugar beet) in combination with the ownership of the cooperative is essential. The position of the individual farmer/ member of the cooperative/ sugar beet grower depends on the regulations per cooperative and the legislation per member state (see some country reports for some information, e.g. report for the Netherlands; information on Cosun in annex of this report). As far as sugar cooperatives exist in member countries, in most cases sugar beet growers have only one cooperative to process their sugar beet (see country reports).

In the Netherlands

An exception to the general rule of Dutch cooperatives having mainly collective capital are the sugar and potato starch cooperatives. Both Cosun (sugar) and AVEBE (starch) 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 cooperatives 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 salesclasses into which the members are divided.

A farmer having production rights for sugar of Cosun has the possibility to be member of the cooperative Cosun. As a member of Cosun he has several rights: a 'member price' for the delivered sugar beets and the right to vote⁹.

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⁹http://agrarisch.cosun.nl/Over-ons-(1)/Koninklijke-Cooperatie-Cosun-UA.aspx)

Table 11. Comparison of sugar cooperatives between Western and Eastern Europe

	West	East
Average turnover (x 1000 euro)	1,286,000	1,500
Functions		
On farm production	1/7	3/8
Marketing	7/7	5/8
Farm input supply	2/7	4/8
Providing credits/insurance	0/7	3/8
Breeding	0/7	1/8
Soil, nature, water supply	1/7	1/8
Other services		
Education, Advisory	4/7	4/8
Membership		
Access	Easy 2/5	Easy 35/8
	Restricted 3/5	Restricted 3/8
Trading with non-member farmers	Yes (6/6)	No (6/7)
possible		
Management		
Board of Directors (BoD)	Only members (5/7)	Only members (8/8)
Operational management	Professionals (7/7)	Only members (7/8)
Members		
Compulsory deliverance	Yes (5/6)	No (4/8)
Specialization degree of farms	Medium (6/7)	Large variation
Marketing strategy		
Cost leadership	5/6	4/8
differentiation	3/6	2/8
focus	1/6	0/8
neither of these	0/6	3/8

Source: data gathering national reports

Western Europe

Table 11 shows some figures of cooperatives in Western en Eastern Europe. The Western cooperatives all are big organisations; the average number of members is 7,000 and the average turnover counts up to 1,300 million euro. They have marketing/processing as their most important activity. Only a few cooperatives provide other services to their members, such as advisory. Though the access to the cooperatives is often restricted, the cooperatives also process sugar beets from non-members. The management is professional. The board of Directors is formed by members, sometimes complemented by professionals. The operational management only consists of professionals. Members are obliged to deliver their sugar beets to the cooperative. The market strategy is dominated by the cost leadership strategy, followed by differentiation in 3 of the 6 cooperatives.

Eastern Europe

In Eastern Europe the situation is quite different. The cooperatives are small. The number of members varies from 5 to some hundreds at the most. The average turnover is only 1.5 million euros. Four out of seven cooperatives are processing or marketing; the other three apply themselves to on farm production of sugar beets. Besides this most cooperatives provide more services to their members, such as farm inputs, advisory or providing credits or insurances.

Generally the cooperatives restrict themselves to only the sugar beet production of their members. It is clear that the organisation of this small and uncomplicated cooperatives does not

require a professional management. The operational management is done by members of the cooperation.

4.4 Expert assessment of developments

Cooperatives traditionally follow a cost leadership strategy (report on the Netherlands, p. 59). 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.

Since cooperatives are confronted with the changes in the markets as well as in the CAP, they have to decide in future to invest more in marketing their products, development of new products, developing brands etc. to increase the added value for the farmers/ members of the cooperative.

In fact cooperatives can follow two (other) strategies to optimize farmers income besides the cost leadership strategy:

The first strategy is 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).

4.5 Are cooperatives successful?

The largest sugar processors in the EU are IOFs and not cooperatives. However, these companies, <u>Südzucker</u> as well as Nordzucker, show similar behaviour and strategy as the cooperatives in neighbouring countries. The market share of sugar cooperatives is 40%, which indicates that cooperatives are not per sé more successful in the market than IOFs. Cooperatives do not per sé pay a higher sugar beet price to the growers. However, the share of surplus or industrial sugar has an influence on the average price paid.

Turning to the building blocks, the following conclusions can be drawn:

- About the institutional environment: The decline of market protection due to WTO and CAP-developments may lead to lower profit levels in sugar production. Cooperatives will probably pay higher sugar beet prices than IOFs under conditions without sugar quota and minimum prices. They will probably also continue processing with lower net profits than IOFs. Thus, membership of a cooperative could be an advantage for sugar beet growers under uncertain conditions of decreasing market and price protection;
- The position of the (European) sugar industry in the food chain is relatively vulnerable. European sugar is relatively easy to be replaced through non-European sugar, although food safety issues may need attention and European producers of food products as sweets, cake and other bakery products and soft drinks may prefer stable contracts with nearby sugar producers. However, this is more or less the same for cooperatives and IOFs;

- Internal governance, see also the remarks on the institutional environment. Sugar cooperatives will probably stay longer in business than IOF's, providing sugar beet growers with a relatively favourable sugar beet price. On the other hand, the internal governance within a (sugar) cooperative may lead to a risk avoiding strategy and hinder innovations in processing technology, marketing strategy and product portfolio. A fruitful cooperation between the management and the cooperative leadership is required to adapt strategies in time';
- Historical and sociological aspects. Historical developments played a role whether sugar production was initiated and continued by IOF's or cooperatives. In many countries in Europe and elsewhere, monopolistic companies and traders have misused their power over the centuries, leaving farmers in a poorer state than before. Historical knowledge of such events has not seldomly created a cooperative attitude among farmers. In modern times, however, this knowledge is decreasing and anti-monopolistic regulations prevent IOFs from misuse. Moreover, the modern generation of farmers has a more individualistic attitude than their (grand) parents. This leads to a more rational attitude towards the question 'cooperative or IOF' (if relevant at all). Therefore, if cooperatives want to keep connected to their members, they need to perform at least as well as competing IOFs both in internal governance and communication and in sugar beet prices paid and returns over member shares.

5 Overview of policy measures and assessment of the influence of policy measures on the evolution and current position of cooperatives

5.1 Introduction

The performance of cooperatives (including producer organisations) is influenced by the regulatory framework. 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) and the regulations that influence the competitive position of the cooperative versus other players in the food chain.

The objective of this chapter is to identify 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 sugar sector are identified. In section 5.3 an assessment of the policy measures is given.

5.2 Overview of regulatory framework including fiscal and competition issues

Some member countries have introduced specific measures in the field of sugar, which may have an influence on the position of cooperatives:

- Spain has implemented a system of payments (in 2006) that companies having a sugar quota must partake in for the restructuring of the sugar sector. Aid is established for restructuring.
- France introduced in 2007 as an element of the EC regulation 1234/2007 provisions for the abandonment of nearly 700.000 tons of sugar quota and in relation with that 4.5 mln. tons of beet rights.
- Latvia introduced a 'Sugar industry law' in 2004 before Latvia entered the EC. But the revision of the EC sugar policy led to a complete end of the sugar industry. So this law now has no meaning in Latvia.
- Poland introduced, after the accession in 2004, sugar quota strictly divided among the sugar plants (Poland has no cooperatives). There are legal conditions: there should be an agreement signed by sugar plants and sugar beet producers on the area planted and guaranteed conditions for the farmers to deliver the sugar beets.

Besides these (very) specific points for the sugar sector, the cooperatives do not have to deal with specific regulations. The performance of the cooperatives (and producer organizations) is influenced by the (general) regulatory framework in a country (see as Study .. on the statute for European cooperative Society (SCE), 2010).

An important point regarding the agricultural cooperatives and their members is the attitude of the (national) governments on taxes. In general farmers do have to pay income taxes, but not twice (on the base of their own production as well as on the results of the cooperative). Cooperatives are exempted in several countries (a.o. France) from taxes; the results of the cooperative is taken into account in the revenue of the members.

In some countries the status of cooperatives offers advantages as well as constraints (for instance in France):

- Specificity: they can only operate in a given sector and territory;
- Equity: They are obliged to apply an equal price for the production of their members;
- Exclusism: They can only carry out transactions with members, or up to 20% with non-members.

5.3 Expert assessment of impact of policy measures

Impact of EU policy reform

One of the results of the EU sugar policy reform (2006-2009) is that the number of sugar beet processing plants has decreased very strongly, with some 45 plants in the whole EU (see e.g. report of European Court of Auditors, 2010, annex IV). In some countries (Ireland, Portugal, some Baltic countries) the complete sugar production has been dismantled in recent years. Countries with the main cooperatives in the sugar sector (e.g. France, Austria, Netherlands) continued production, but also in France five factories were closed (as well as 5 in Germany, 7 in Spain and 14 in Italy).

Perhaps it may be concluded that countries with (strong) cooperatives in the sugar sector have a higher level of ambition to survive in this production sector, but what are the countries with (strong) cooperatives in the sugar sector? Mainly France and the Netherlands have those cooperatives. But in Germany the company Südzucker, the leader on the EU sugar market, has some characteristics comparable with cooperatives: farmers have an important share in the capital. And their strategy resembles the one of cooperatives in neighbouring countries.

Impact of cooperatives?

So, an important question is: does it make a difference to have a cooperative in a member country? And what is the impact of a cooperative on the position of the farmers. Given the opportunities in a country to produce sugar beet and the CAP to support this, it is not easy to give a clear answer.

To find an answer, perhaps it is correct to:

- 1) Check whether countries (EU member states) with a (well-functioning) cooperative were more inclined to stay in (sugar) business than those without;
- 2) compare the development in Germany (without coops) and France (with coops) or in Belgium (without) and The Netherlands (with coops).

The answers to the first question can (partly) be found in table 12. The table lists the EU member states with sugar production in 2004 and simulated for 2020, results from a scenario studies by Smit et al. (2011). The table also shows which member states have sugar cooperatives. In 2020 (or earlier), Portugal, Greece, Ireland and Latvia are expected to be 'out of business'; all of these countries did not have a cooperative sugar industry. However, non-cooperative countries like Denmark, Belgium, Germany and Sweden show a significant sugar production expected in 2020. However, these four countries are North-western countries, in which growing and economic conditions are favourable compared to Southern and Eastern Europe. Thus, in North-western Europe the impact of cooperative activity on continuation is less (although not absent, see Ireland and CSM in the Netherlands) than in Southern and Eastern Europe.

Table 12: Sugar production and sugar quota per EU member state in 2004 (if any in that year) and in 2020 (simulated values in a Status quo scenario (mln. tonnes; Smit et al., 2011)

	Net production		quota	Cooperative activity ^d
	2004	2020	2020	(yes=1/no=0)
EU-27	19.4	15.2	12.9	
EU-15 ^a	15.6	12.7	10.7	
EU-10 ^b	3.7	2.4	2.1	
EU-2 ^c	0.1	0.1	0.1	
Belgium	1.0	0.7	0.7	0
Denmark	0.5	0.4	0.4	0
Germany	3.8	3.8	2.9	0
Austria	0.4	0.5	0.4	0
Netherlands	0.8	0.8	0.8	1
France	4.4	3.9	3.1	1
Portugal	0.2	0.0	0.0	0
Spain	1.1	0.5	0.5	1
Greece	0.3	0.0	0.0	0
Italy	1.4	0.5	0.5	1
Ireland	0.2	0.0	0.0	0
Finland	0.1	0.1	0.1	0
Sweden	0.1	0.3	0.3	0
United Kingdom	1.4	1.2	1.1	0
Czech Republic	0.7	0.5	0.4	0
Hungary	0.4	0.1	0.1	1
Lithuania	0.1	0.1	0.1	1
Latvia	0.1	0.0	0.0	0
Poland	2.1	1.5	1.4	1
Slovak Republic	0.2	0.2	0.1	0
Romania	0.1	0.1	0.1	0

- a) EU-15:Belgium, Denmark, Germany, Austria, Netherlands, France, Portugal, Spain, Greece, Italy, Ireland, Finland, Sweden, United Kingdom
- b) EU-10: Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Slovenia, Slovak Republic, Cyprus, Malta
- c) EU-2: Bulgaria, Romania
- d) Estonia, Slovenia, Cyprus, Malta and Bulgaria did not produce sugar (or 500,000 tonnes per year at maximum) in 2004.

To explore this issue further, perhaps it is correct to compare the development in Germany (without coops) and France (with coops) or in Belgium (without) and The Netherlands (with coops).

Figure 3 (in section 2.2 of this report) showed that the production value of sugar decreased (between the year 2000 and 2007) stronger in Germany and in Belgium than in France and in the Netherlands. On this aspect the indicator is positive for both the countries with cooperatives. The (positive) role of cooperatives in this may include: a higher level of prices of sugar (beet) and/ or a positive attitude to restrict the decrease of sugar quota after the reform of EU sugar policy in 2006.

Table 1 (in section 2.3 of this report) made it clear that the number of farmers growing sugar beets was (in the same period) more or less stable in Belgium and France, but decreased in Germany and in the Netherlands. On this the indicator is not giving a clear result. The (small) increase of the number of sugar beet growers in France might be the result of investments by the French cooperatives in the production of bio-ethanol.

Table 13 shows the level of prices of sugar beet received by the farmers. This does not give a clear answer to the question whether a cooperative is able to pay a higher price than a private company. Comparing Belgium and the Netherlands, it indicates positive for the cooperatives, but comparing Germany with France the conclusion could be the opposite. A part of the reason for the low price in France is that for sugar beet used for the production of bio-ethanol a low price is paid by the factory (probably as less as €20 per ton). The prices in table 13 are average prices for the whole member country mentioned, including the sugar beets used for the production of surplus sugar (in many years France farmers choose to grow a rather high percentage of so-called C-sugar or surplus sugar).

Table 13Prices of sugar beet in selected countries (euro/ton)

Country	2001	2006	2007	2008	2009	2010
Belgium	43.9	43.4	36.7	31.0	30.5	29.3
Germany	48.7	47.2	45.4	29.7	n.a.	n.a.
France	36.2	34.3	30.3	30.1	30.2	n.a.
Netherlands	44.9	49.4	45.3	n.a.	40.0	42.5

Sources:

A more precise view on table 2 (in section 2.4 of this report) provides the following information on these 4 member countries. In Belgium and the Netherlands the average size of the arable farms growing sugar beets is (much) smaller than in Germany and France, at least the area is (much) smaller and the input of labour is lower. Nevertheless the income per farm is nearly the same in all these four countries. This indicates that the income level per hectare on these farms is higher in Belgium and in the Netherlands. For a part this higher income level is obtained through the higher prices of sugar beets (in the Netherlands). The yields of sugar beets (in tons per ha) are nearly equal in Belgium and the Netherlands but these are lower than in France and higher than in Germany.

It seems that beet growers in France can accept a lower (average) price for the sugar beets given the larger area per farm and the higher yield per ha. Investments in bio-ethanol by the cooperatives are providing opportunities to increase the area of sugar beets and to reduce the average costs of production per ha (including machinery etc.) of this crop. It seems that the sugar cooperatives in France play an important role in this development.

Table 14 Some indicators for beet growing farms

Country	Belgium	Germany	France	Netherlands
Economic size (in ESU)	82.9	116.6	113.8	97.9
Total labour input (in AWU)	1.3	2.4	2.2	1.8
Agr. Area (in ha)	62.7	115.8	101.8	57.8
Net farm income (1.000 €)	54.4	51.4	54.3	53.2
Source: DG Agri, FADN				

a) FADN, prices including surplus and/or bio-ethanol sugar prices (2001, 2006 and 2007)

b) Eurostat, FAO (2008, 2009 and 2010).

Conclusions

- The EU sugar policy has had a major impact on the structure of the European sugar sector, especially on the number of countries and plants producing sugar;
- The effects were least in a number of countries in North-western Europe, having large and efficient cooperatives, efficient sugar beet cultivation and mostly relatively high sugar beet prices;
- However, a number of these countries do not have sugar cooperatives, but remain 'in business'. A closer look into the sugar producing IOFs in Germany shows that they have a significant influence of sugar beet growers;
- Sugar (beet) production in North-western Europe has a large scale level, on which rural
 policy, LEADER, etc. do not have an effect. This is quite different for e.g. regional wine
 cooperatives. Sugar cooperatives mainly seem to grow stronger due to the European bioenergy policy;
- Having or not having a cooperative sugar industry seems to have a mainly historical background;
- The sugar industry is a highly demanding sector concerning capital; Thus, favourable financing opportunities in legislation on cooperatives (based on delivery rights) and avoidance of double tax-paying appear to be of major importance.

6 Discussion

In the next ten years probably the EU quota system for sugar will disappear. The EU sugar market will become more open for imports of sugar from Brazil and other Latin American countries, besides the existing imports from developing countries in Africa and the Caribbean region. For cooperatives in the sugar sector this means a very strong transition after a (very) long period of protection by national policies and, during the last 50 years, by the CAP.

A major question is, given this change in policy, for the next decade: who will invest in the processing of (raw) farm products, a very capital intensive activity (0.5 bln. Euro for a sugar beet processing plant, according to Cosun chairman mr. Jos van Campen)?

Do the cooperatives - with the financial resources of their farm members – have enough power to invest in replacement as well as in innovation? Or is it desired that private capital will be invested? Sofar, the members of different strong cooperatives have shown to be able to support the cooperative, among other things through financing expansion and innovative investments. Their contribution makes co-investment by banks easier.

The perspectives of the world food markets in the coming decade are positive (OECD/ FAO, 2011). Prices of most commodities will (on average) be higher than in the last decade, but costs of processing etc. may also increase.

Will that perspective give more opportunities for farmers' cooperatives to invest in the processing plants as well as in other activities in the chain (marketing, development of new products, e.g. linked to new opportunities as health, functional foods etc.)?

Farmers have their own priorities, often in investing in their own farm. They want for instance to enlarge the scale of production, to use new innovations in machinery and ICT, to improve the quality of production and to become more sustainable. Thus, farmers will often be reluctant to invest in a cooperative. Moreover, the young generation of farmers is more professional, self-aware and individualistic. A family history of involvement in cooperatives will not necessarily lead to automatic cooperative membership of the new generation. On the other hand, in times of financial and economic crises, cooperatives may become attractive anew, because of their relative stability.

The sugar beet growers who deliver their beets to SüdZucker have an in-between arrangement with their IOF. Such a construction may be worthwhile to investigate for other countries and branches as a way out in case of capital funding issues, possibly combining the advantages of the (theoretically) more effective governance of an IOF and the stability of a growers' board enhancing investments.

At the same time, enlargement, cooperation and merging between cooperatives will continue on a European scale. Co-operation between Spanish and French partners is already established as an example. Liberalisation and globalisation are strong driving forces for creating (world) market power, especially when the sugar quota system is abolished 10. An important question is if member-farmers will be able to finance international mergers. Cooperatives have a certain attractiveness for financers because of their stability. However, internal mergers will be so capital-intensive, that surely part of the capital has to be lent from banks etc. or collected through the stock market. The latter will be especially the case when a cooperative merges with

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¹⁰A.B. Smit, C.J.A.M. de Bont, J.F.M. Helming, M.G.A. van Leeuwen, R.W. van der Meer, P. Berkhout, M. van Dijk, S.R.M. Janssens and J.H. Jager, 2011, Wel of geen suikerquotering? Economische gevolgen voor sector, keten, internationale marktverhoudingen en derde wereld (In Dutch, with English summary: Sugar quotas: yes or no? Economic consequences for sector, chain, international market situation and third world), Den Haag, LEI, Report under construction.

an IOF. This could lead to hybrids or cooperatives being demutualized in those cases were the cooperative is not able to make its role sufficiently clear to its members.

Finally, the introduction of (re)new(ed) biobased products makes the replacement of sugar through cereals, e.g. for fuel production more critical than in the past. Sugar companies will investigate the opportunities for development of new products based on sugar (beet) or even sugar cane. Depending on their strategy, they will focus on development of consumer products with high added value, large scale production of raw materials for fuel and other biobased bulk products and/or a focus on specialties. The Dutch potato starch cooperative AVEBE is a good example of a combination of three similar strategies.

In case the transition toward the biobased economy is successful and sugar, cereals, fuels, inputs for the chemical industry (and in some cases even protein) become more and more substitutes of each other, this could have consequences for strategies and the organisation of the industry. It could be that new players (e.g. like DSM or Shell or electricity companies) enter the market of buying sugar beets and other agricultural material. It is to be seen if they then need producer organisations and cooperatives to collect the products or source directly as an IOF from big farms.

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Annex

Information on sugar cooperatives

1 Tereos (France)

Tereos is a cooperative owned by 12,000 French sugar beet producers. Its cooperative status obliges Tereos to provide the industrial and commercial extension of its cooperative members' operations, to improve their profitability and thus contribute to the sustainability of their agricultural businesses.

Maximising value from agricultural production

Tereos undertakes to provide an outlet for the entire sugar beet output of its cooperative members and to expand its markets. This undertaking has become all the stronger since the reform of European sugar regime. Despite the reduction in sugar quotas and by taking advantage of new markets (alcohol, bioethanol, chemicals industry) Tereos has managed not only to maintain but to expand the acreage of sugar beet production handled by its factories. At the same time, its investments in starch, glucose and bioethanol have opened the way to the processing of nearly 3,6 million tonnes of cereals, mostly produced by French farmers.

Market globalisation

This creation of value produces a financial return on the processing of sugar beet in the form of price supplements and from diversified businesses in the form of dividends. In the 1990s Tereos began a diversification programme that took it beyond its traditional markets and into the rest of the European Union, Brazil, Africa and the Indian Ocean. This successful diversification came in response to the globalisation of markets and the increase in the critical mass of customers and competitors.

- **12,000** cooperative growers
- **17,000** permanent employees
- **35** industrial facilities
- 1 million hectares of cultivated farmland
- **3,6 million** tons of sugars
- **1.8 million** tons of starch-based products
- **1.7 million** cu.m of alcohol and ethanol
- **655**GWh of electrical power
- **3.6 billion** euros in total sales

2. Cristal Union (France)

http://www.tereos.com/en-gb/groupe/organization/modele-cooperatif.html

Cristal Union is a grower-owned cooperatives group, which produces about 18 % of the sugar beet acreages in France. Cristal Union focuses on two main activities :

- production of sugar for industry and traditional sugar under the brand names of "DADDY" and "Erstein":
- production of alcohol and ethanol (perfume, cosmetics, food, carburation).

With its 8 production units located in the East (Bazancourt, Sillery, Arcissur Aube, Bûchères, Erstein, Corbeilles en Gâtinais, Aiserey) and south of France (Deulep- close to Marseilles), an annual average production of 700.000 tons of sugar, 1.6 million hectolitres of alcohol, 1.5 million hectolitres of ethanol, Cristal Union has become a major economic actor in the sugar markets through its commercial subsidiary "Sucre Union", and in the alcohol and ethanol markets, through its subsidiaries "France Alcools, Ethanol Union/Holding and Deulep". Cristal Union is also present in the dehydrated products for animal consumption through Desialis.

Throughout Europe, the introduction of biofuel is now a major issue and a common objective. So now it's time to think of how French suppliers with major agricultural and industrial production capacities, can respond to this demand and sell ethanol throughout Europe. Adding the future production from Cristanol to the production at Arcissur Aube, Cristal Union has become a leader in the European bioethanol market.

Biomass is also one of the key issues of the coming years, if is not already so, today. Cristal Union group is working to make sure that their distilleries are not dependent on fossil fuel and are powered by biomass. But biomass does not only mean supplying energy, it will also provide us with substrates from which Cristal Union will be able to extract molecules, as polyphenols, for use in the cosmetics and chemical industries. This field will be at the heart of Cristal Union's development over the coming years.

Factories in the Cristal Union group are ISO 9001 and ISO 14001-certified, but also satisfy B.R.C, I.F.S, and I.F.I.S standards - English and German references for brands and distributors. In order to satisfy these standards, quality procedures are constantly being optimized, with protection of the product during the entire production cycle, rigorous personal hygiene standards and a dedicated delivery area with a sealed delivery door and protection from pests.

This quality process also makes it possible to trace every product that is sold.

- > 6 000 growers share holders
- >····· 1 500 employees
- >..... Consolidated turnover : 1,2 billion euros
- >..... 85,700 hectares : 25% of the sugar beet grown in France
- > Production capacity: 75 000 t / day of sugar beet
- >····· Production 2009 :
 - 850.000 t white sugar
 - 4.600.000 hl alcohol/ethanol

3. ACOR (Spain)

http://www.renovablesmadeinspain.es/ficha/pagid/24/letra/A/titulo/ACOR/len/en/

The ACOR Agricultural Cooperative has 8,560 members comprising farmers from Castilla y León. It was founded in 1962 to enable the farmers themselves to transform their agricultural produce using the cooperative's facilities. In this way, the cooperative's members are those who benefit from the "added value" created during the industrial transformation process and the sale of the products obtained. Initially, the cooperative focused on grinding sugar beet, but in 2005, it started to diversify its activities, turning to energy crops and the production of biofuels. Today, the cooperative has the largest sugar plant in Spain and a biodiesel plant (both in Olmedo, Valladolid), as well as a photovoltaic array of 3.24 MW in the same province.

Comprehensive plant

ACOR's biodiesel plant is the first in Spain to be designed and constructed to include the entire production system. In this way, the entire process is controlled "in situ" from the receipt and drying of the oleaginous seeds, and the production and refining of oil required for the process, through to the production of biodiesel.

STATISTICS

- 8,560 member farmers
- 398 permanent staff
- 100,000 hectares of crops
- 4 industrial plants
- 100,000 ton/year of biodiesel
- -65,000 ton/year of vegetable oils
- Euros 140 million of sales

4. Cosun (Netherlands)

www.cosun.com/Over-Cosun/Corporate-Governance/Cooperatie.aspx

Royal Cosun is a cooperative with approximately 11.000 members* who are arable farmers. They grow, among other crops, sugar beet which are processed in the sugar production plants of SuikerUnie. Every harvesting season, crystal sugar is extracted from the beet, an average of some 805.000 tonnes per year.

Our members supply their beet on the basis of the number of shares they own in the cooperative. These shares cannot be freely traded for example at the stock exchange.

The members have direct influence on the policy and strategy of the cooperative through elected representatives who are the members of the Members' Council. The Council elects the members of the Board and the Supervisory Board.

Profile

Cosun produces and sells natural ingredients and foodstuffs for the international food industry, foodservice channel (restaurants, caterers and wholesalers) and retail outlets. The group also processes organic residues into products for non-food applications.

Its activities are organised into four groups:

- *Basic ingredients*, sugar en inulin (SuikerUnie and Sensus).
- *Potato products*, including chilled, frozen and dried potato products and a wide range of other prepared potato specialities (Aviko).

Compound ingredients, including fruit & vegetable applications (SVZ).

As a specialist in the taste, functionality and health of ingredients, Cosun develops products concepts and applications that meet its customers' specific wishes.

Our marketing and research expertise is at the service of today's and tomorrow's food market. This expertise has been concentrated around specific customer groups and applications. For research and quality control, we have our own research and development organisation, Cosun Food Technology Centre (CFTC).

The group as a whole achieves a turnover of EUR 1.7 billion and has an average workforce of 4,200 FTEs.

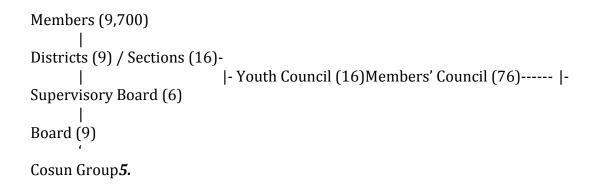
We work in the first links of the food chain through the collection and large-scale processing of farm products into high quality ingredients and foods. Together with our customers, suppliers and members, we develop products that meet the needs of the food market both now and in the future.

Corporate governance

Corporate governance at Royal Cosun is about the relationships between the members of the Cooperative, the Board, the Supervisory Board, the Executive Board and the staff. The main elements of Royal Cosun's corporate governance policy are: sound business principles, integrity,

^{*} The cooperative consists of nearly 8.000 direct members (category A). Over 3.500 beet growers are members (category B) of two regional cooperatives. Both are members (category C) themselves of Royal Cosun.

respect, supervision, transparent reporting and accountability.



Agrana (Austria)

http://www.agrana.at/en/agrana-in-austria/

AGRANA Beteiligungs-AG, the holding company of the internationally active Austrian processor of agricultural commodities, oversees operations in the Segments Sugar, Starch and Fruit from its head offices in Vienna. This company holds the shares in the Austrian holding companies which, in turn, hold those of the international subsidiaries.

More information about AGRANA companies located in Austria

AGRANA Zucker GmbH

AGRANA Zucker GmbH, the only sugar producer in Austria, operates the sugar refineries in Tulln and Leopoldsdorf, both in Lower Austria, with a total production capacity of over 400,000 tonnes.

In Austria, AGRANA Zucker GmbH produces and markets a wide range of sugar products refined from sugar beet. In addition, this company also holds stakes in the six eastern and south-eastern European AGRANA subsidiaries in Hungary, the Czech Republic, Slovakia, Romania, Bulgaria and Bosnia-Herzegovina.

Other companies owned by AGRANA Zucker GmbH

<u>ZuckerforschungTulln</u>, which combines the research activities of the AGRANA Sugar and Starch segments.

ÖsterreichischeRübensamenzucht, which is responsible for growing certified sugar beet seeds for planting in Austria. The main shareholders are AGRANA Zucker GmbH and the provincial organisations of the sugar beet growers' association (Rübenbauernbund).

<u>HELLMA</u>, which has specialised in the sale of sugar in single-portion packages.

INSTANTINA, which specialises in the development and production of instant products.

AGRANA Stärke GmbH

AGRANA Fruit Austria GmbH

AGRANA Juice Holding GmbH

AGRANA Beteiligungs-AG