



Study of the best ways for producer organisations to be formed, carry out their activities and be supported

Final report

This report has been prepared by Arcadia International E.E.I.G., EY and independent experts

May 2019

EUROPEAN COMMISSION

Directorate-General for Agriculture and Rural Development

E-mail: agri-evaluation@ec.europa.eu

European Commission
B-1049 Brussels

**Study of the best ways for
producer organisations to be
formed, carry out their
activities and be supported**

Final report

***Europe Direct is a service to help you find answers
to your questions about the European Union.***

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

LEGAL NOTICE

The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<http://www.europa.eu>).

Luxembourg: Publications Office of the European Union, 2019

ISBN: 978-92-79-98775-5

Doi: 10.2762/034412

Catalogue nr: KF-01-19-015-EN-N

© European Union, 2019

Reproduction is authorised provided the source is acknowledged.

Report written by (in alphabetic order):

Laurence Amat, Arcadia International, Belgium

Aleksandra Chlebicka, PhD, Warsaw University of Life Sciences, Poland

Ines Ferreira, Arcadia International, Belgium

Francesco Montanari, Arcadia International, Belgium

Carlo Russo, Associate professor in agricultural economics, University of Cassino and Lazio Meridionale, Italy

Alessandro Sorrentino, Full Professor - Agri-Food Economics and Policy, Dept. of Economics and Business, Tuscia University, Viterbo, Italy

Gábor G. Szabo, Senior Research Fellow, Institute of Economics Centre for Economic and Regional Studies of the Hungarian Academy of Science, Budapest, Hungary

Daniel Traon, Arcadia International, Belgium (project leader)

Table of Contents

| | |
|--|-----|
| PART 1: INTRODUCTION | 1 |
| 1.1. Context of the study | 1 |
| 1.2. Objectives and scope | 2 |
| 1.3. General approach to the study | 3 |
| 1.4. Structure of the report | 8 |
| PART 2: BACKGROUND AND EU POLICY CONTEXT | 9 |
| 2.1. Farmers within the EU agri-food supply chain | 9 |
| 2.2. The reasons behind farmers' cooperation | 12 |
| 2.3. POs: notion, characteristics and variety of legal forms | 14 |
| 2.4. The EU legal framework for POs | 19 |
| PART 3: INVENTORY OF RECOGNISED POS/APOS ACROSS EU COUNTRIES (THEME 1) | 25 |
| 3.1. General figures on recognised POs/APOs in the EU | 26 |
| 3.2. Analysis of the production of recognised POs/APOs in the FV sector | 38 |
| 3.3. Variety of functioning and activities of recognised POs/APOs across Member States..... | 44 |
| PART 4: OVERVIEW OF NON-RECOGNISED PRODUCER ORGANISATIONS (THEME 2) | 63 |
| 4.1. Relative importance of recognised POs/APOs vs non-recognised POs at EU level. | 64 |
| 4.2. General information on cooperatives at Member State level | 65 |
| 4.3. Activities of non-recognised POs..... | 68 |
| PART 5: ANALYSIS OF INCENTIVES AND DISINCENTIVES OF PRODUCERS TO CREATE POS AND THE IMPACT THAT POS HAVE ON THEIR MEMBERS AND THE FOOD SUPPLY CHAIN (THEME 3) | 71 |
| 5.1. Introduction | 72 |
| 5.2. Estimating the economic efficiency of recognised POs/APOs in the FV sector | 73 |
| 5.3. Incentives and disincentives for setting up or joining a PO..... | 78 |
| 5.4. Incentives and disincentives to be recognised as a PO | 105 |
| 5.5. Factors influencing the effective functioning of a producer organisation after its creation | 106 |
| 5.6. Impact of POs/APOs on their members and on the entire food supply chain | 128 |
| PART 6: GENERAL CONCLUSIONS | 145 |
| 6.1. Overarching conclusions..... | 145 |
| 6.2. Inventory of recognised POs and APOs..... | 148 |
| 6.3. Overview of non-recognised POs | 150 |
| 6.4. Analysis of incentives and disincentives of producers to create POs and the impact that POs have on their members and the food supply chain..... | 151 |

Acronyms

| | |
|--------------------|---|
| AI | Arcadia International |
| AOC | French geographic indication - Appellation d'origine contrôlée (in French) |
| APOs | Association of producer organisations |
| AMAP | French association for peasant agriculture - association pour le maintien de l'agriculture paysanne (in French) |
| AMTF | Agricultural Market Task Force |
| B2B | Business to business |
| B2C | Business to consumer |
| CAP | Common Agricultural Policy |
| CATE | Technical centre created by the PO SICA Saint Pol de Leon (FR) |
| CMO | Common Market Organisation |
| COPA COGECA | European farmers and European agri-cooperatives |
| CUMA | Cooperative for the use of agricultural equipment - coopérative d'utilisation de matériel agricole (in French) |
| DG AGRI | Directorate-General for Agriculture and Rural Development |
| DG COMP | Directorate-General for Competition |
| DG SANTE | Directorate-General for Health and Food Safety |
| EAFRD | European Agricultural Fund for Rural Development |
| E.E.I.G. | European Economic Interest Grouping |
| EC | European Commission |
| EU | European Union |
| EUR | Euros |
| EY | Ernst & Young |
| EZG | Type of producer association in Germany - Erzeugergemeinschaften (in German) |
| FAO | Food and Agriculture Organization |
| FV | Fruit and vegetable |
| GAEC | Groupement Agricole d'Exploitation en Commun - shared group operation (in French) |
| GDP | Gross domestic product |
| IFS | International food standards |
| IOF | Investor-own firm |
| IR | interim report |
| LAVA | Logistieke en Administratieve Veilingassociatie, APO in FV in Belgium |
| MS | Member State |
| NCA's | National Competent Authorities |
| OECD | Organisation for Economic Cooperation and Development |
| OJ | Official Journal |
| PAs | Producer associations |
| PDO | Protected Designation of Origin |
| PG | Producer group |

| | |
|----------------|---|
| PGI | Protected Geographical Indication |
| POs | Producer organisations |
| Q | Question |
| QC | Quality control |
| QCP | Quality control plan |
| R&D | Research and development |
| RDP | Research and development programme |
| SAPARD | Special Accession Programme for Agricultural and Rural Development |
| SAT | Production type cooperative in Spain - Sociedades Agrarias de Transformación (in Spanish) |
| SFSC | Short food supply chain |
| SICA | French type of cooperative - Société d'intérêt collectif Agricole (in French) |
| TEAGASC | The Agriculture and Food Development Authority in Ireland |
| TFEU | Treaty on the Functioning of the European Union |
| TSZ | Production type cooperatives in Hungary |
| UTP | Unfair trading practice |

List of Member States

| | | | |
|-----------|----------------|-----------|----------------|
| AT | Austria | IE | Ireland |
| BE | Belgium | IT | Italy |
| BG | Bulgaria | LT | Lithuania |
| CY | Cyprus | LU | Luxembourg |
| CZ | Czech Republic | LV | Latvia |
| DE | Germany | MT | Malta |
| DK | Denmark | NL | Netherlands |
| EE | Estonia | PL | Poland |
| EL | Greece | PT | Portugal |
| ES | Spain | RO | Romania |
| FI | Finland | SE | Sweden |
| FR | France | SI | Slovenia |
| HR | Croatia | SK | Slovakia |
| HU | Hungary | UK | United Kingdom |

List of tables

| | |
|---|-----|
| Table 1 - The three themes of the study | 4 |
| Table 2 - Data collection tools for Theme 3 of the study | 8 |
| Table 3 - Objectives that POs may pursue in accordance with Article 152 (1) (c) of the CMO Regulation | 20 |
| Table 4 - Conditions to be fulfilled by recognised POs and APOs to benefit from a derogation from Article 101 (1) TFEU | 23 |
| Table 5 - Total number of recognised POs/APOs per Member State and per sector (n=3505)..... | 31 |
| Table 6 - Relative economic importance of recognised POs/APOs in the FV sector | 42 |
| Table 7 - Relationship between recognition, legal form and the themes of the study | 63 |
| Table 8 - Estimation of the total number of producer organisations in the EU (recognised POs/APOs and non-recognised POs) | 65 |
| Table 9 - General information on cooperatives per Member State | 65 |
| Table 10 - General information on economic importance of cooperatives per Member State and per sector..... | 67 |
| Table 11 - Cases when cooperatives have a market share higher than 90% in specific sectors at Member State level | 68 |
| Table 12 - Top production areas for the apple, peaches and tomato EU sector selected for the estimation on the economic efficiency of POs | 73 |
| Table 13 - Comparison between BE and PL of the main factors influencing the effective functioning in the FV sector..... | 125 |

List of figures

| | |
|--|----|
| Figure 1 - Main selling channel used by independent pig producers (not members of any PO) interviewed during the study (n=120) | 7 |
| Figure 2 - The EU food and drink industry (at a glance) | 12 |
| Figure 3 - Number of recognised POs and APOs in the EU | 26 |
| Figure 4 - Distribution of recognised POs/APOs per Member State | 27 |
| Figure 5 - Distribution of recognised POs/APOs per group of sectors (n=3,505) | 28 |
| Figure 6 - Distribution of recognised POs/APOs per sector (n=3,505) | 28 |
| Figure 7 - Relative frequency of recognised POs/APOs | 29 |
| Figure 8 - Number of sectors in which POs/APOs are recognised per Member State (n=3,505) | 32 |
| Figure 9 - Number of recognitions of POs/APOs by spaces of time (n=3,358) | 34 |
| Figure 10 - Evolution of the number of recognitions of POs/APOs (n=3,358) | 35 |
| Figure 11 - Date of recognition of POs/APOs per Member State (n=3,358) | 36 |
| Figure 12 - Diversity of production of recognised POs/APOs in the FV sector (n=1,685) | 38 |
| Figure 13 - Diversity of production of recognised POs/APOs for the FV sector per Member State (n=1,685) | 39 |
| Figure 14 - Distribution of value of turn-over per recognised PO/APO in the FV sector (in Euro) (n=1,659) | 40 |
| Figure 15 - Distribution of value of marketed production per recognised PO/APO in the FV sector per Member State (n=1,659) | 41 |
| Figure 16 - Relative economic importance of recognised POs/APOs in the FV sector (in %) | 43 |
| Figure 17 - Distribution of the legal forms of recognised POs/APOs (n=3,237) | 44 |
| Figure 18 - Distribution of the legal forms of recognised POs/APOs per Member States (n=3,237) | 45 |
| Figure 19 - Number of members per recognised PO/APO per Member State (n=3,505) | 47 |
| Figure 20 - Objectives of POs/APOs excluding FV & milk sectors (n=749) | 49 |
| Figure 21 - Objectives of recognised POs/APOs for the FV sector (n=767) | 50 |
| Figure 22 - Objectives of recognised POs/APOs for the milk sector (n=207) | 51 |
| Figure 23 - Activities of recognised POs/APOs excluding FV & milk sectors (n=603) .. | 54 |
| Figure 24 - Activities of recognised POs/APOs for the FV sector (n=757) | 55 |
| Figure 25 - Activities of recognised POs/APOs for the milk sector (n=234) | 56 |
| Figure 26 - Transfer of ownership per Member States (n=1,110) | 59 |

| | |
|---|-----|
| Figure 27 - Marketing approach per PO/APO per Member State (n=779) | 60 |
| Figure 28 - Percentage of products sold directly by POs members in the FV sector (n=1,180)..... | 61 |
| Figure 29 - Percentage of products sold directly by POs members in the FV sector per Member State (n=1,180) | 62 |
| Figure 30 - Activities of non-recognised POs (n=300)..... | 69 |
| Figure 31 - Level of farmers' cooperation in agriculture (summary) | 70 |
| Figure 32 - Data collection approach and geographic coverage for Theme 3 | 71 |
| Figure 33 - Percentage of farmer members of recognised POs in each of the top producing regions in three FV major crops (apple, peach and tomato) | 75 |
| Figure 34 - farmers' willingness to join forces (n=85) | 78 |
| Figure 35 - Expectations when joining the PO for pig holders that are members of a PO/APO (n=120)..... | 79 |
| Figure 36 - Services that would be of interest to pig holders that are not members of any PO (n=120) | 80 |
| Figure 37 - 'Other services' that would be of interest to pig holders that are NOT members of any PO (n=120)..... | 81 |
| Figure 38 - The added value generated by POs/APOs (n=85) | 82 |
| Figure 39 - Improvement of the commercialisation of agricultural products for the members of POs (n=85) | 83 |
| Figure 40 - Contribution by POs/APOs to the strengthening of their members' bargaining power vis-à-vis other stakeholders operating in the same sector (n=85) | 85 |
| Figure 41 - Contribution by POs/APOs towards the payment of a fair price to their members for their agricultural products (n=85) | 86 |
| Figure 42 - Contribution by POs/APOs to improving their members' responsiveness to crisis situation (n=85) | 89 |
| Figure 43 - Role of POs/APOs in facilitating investments that support the farming activities of its members(n=85) | 91 |
| Figure 44 - Contribution by POs/APOs towards a higher level of efficiency of their members (n=85) | 92 |
| Figure 45 - Contribution by POs/APOs towards a higher level of efficiency of their members for pig holdings (n=120)..... | 92 |
| Figure 46 - Contribution by POs/APOs towards a higher level of efficiency of their members for pig holders (n=120) | 93 |
| Figure 47 - Hurdles or barriers for creating or joining POs/APOs (n=85) | 100 |
| Figure 48 - Legislative/policy disincentives for joining or establishing a PO (n=85) . | 102 |

PART 1: INTRODUCTION

1.1. Context of the study

Agricultural producers may use collective action to achieve common interests related to their agricultural activities. Such cooperation might range from the planning of production to placing products on the market. Producer organisations (POs) often also sell products of their members and perform activities such as e.g. joint purchase of inputs, storage, transport and logistics, quality control but also many other activities.

The Common Agricultural Policy (CAP) actively promotes organisations among agricultural producers and considers collective action an important self-help tool for strengthening the positions of farmers in the food supply chain. Regulation (EU) No 1308/2013 (Common Market Organisation - CMO Regulation)¹ expressly recognises the added value of horizontal cooperation at primary production level when it states that *“producer organisations and their associations can play useful roles in concentrating supply, in improving the marketing, planning and adjusting of production to demand, optimising production costs and stabilising producer prices, carrying out research, promoting best practices and providing technical assistance, managing by-products and risk management tools available to their members, thereby contributing to strengthening the position of producers in the food supply chain”*.²

Therefore, the CMO Regulation establishes rules for the recognition of producer organisations (recognised POs) and associations of producer organisations (recognised APOs). Recognised POs/APOs can obtain certain start-up funding under the rural development rules or financing via operational funds in the fruit and vegetable (FV) sector, and they can profit from certain derogations from EU competition rules.

Previous EU-wide studies that have been conducted in this area fall short of providing a general overview of the number, legal forms and type of activities carried out under horizontal cooperation arrangements, which European farmers resort to today. In addition, the functioning of POs/APOs as well as the incentives and disincentives of producers to create POs and the impact that POs have on their members and on the food supply chain has not been described in detail in the majority of EU Member States.

Against this background and based on a European Parliament initiative, the Directorate-General for Agriculture and Rural Development (DG AGRI) of the European Commission commissioned an *“analysis of the best ways for producer organisations to be formed, carry out their activities and be supported”* that started in December 2017 for a duration of 15 months.

¹ Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007

² Recital 131 CMO Regulation.

1.2. Objectives and scope

This project is primarily aimed at fulfilling specific data needs at EU level in terms of recognised POs/APOs as well as other forms of cooperation that operate on the various EU agricultural markets. In addition, the study aims to identify POs/APOs' good practices through an in-depth analysis of their internal organisation and operational processes. This data collection is a necessary foundation for any meaningful analysis of whether and to which degree the cooperation between agricultural producers requires further reflection and possible support.

Under this study, POs are defined as any type of entity that has been formed on the initiative of producers in a specific sector (horizontal cooperation) to pursue one or more of the specific aims listed in the common market organisation (CMO) Regulation, whether or not it is formally recognised; POs are controlled by producers and can take the legal forms e.g. of cooperatives, different forms of associations, and private companies in which agricultural producers are shareholders.

POs vary in terms of number and size of their members and, also, regarding the degree of cooperation, e.g. for the types and numbers of products covered, the size of the geographical area in which the PO operates, and the kind and number of activities that the PO carries out for its members. Some POs are recognised by Member States based on Articles 152 and 154 CMO Regulation. APOs are entities formed by POs that can be recognised by Member States. They may carry out any of the activities or functions of POs according to Article 156 CMO Regulation. Agricultural producers also operate outside the form of recognised POs and APOs, and this to a very significant extent. There are sometimes significant differences in the degree of farmers' organisation between Member States and the different food supply chains, which this study will establish.

In addition to specific quantitative data needs highlighted above, the project also aims at gaining a better understanding of the factors that may motivate farmers to opt for a given form of cooperation at primary production level (e.g. recognised or non-recognised PO) with a view to achieving their common interests or that may act as a deterrent in that respect. Similarly, it provides the opportunity to perform a qualitative assessment of the gains that individual farmers can obtain from joining forces under collective organisations as well as of the benefits that other food supply chain actors may receive from a more efficient organisation of primary production. Such analysis is a necessary starting point for any reflection which instruments could be used to increase producer cooperation and to make the work of POs and APOs more efficient to the benefit of their members and the food supply chain.

On that basis, the tender specifications single out three main specific 'themes' that the project is meant to cover, namely:

1. The **development of an inventory of POs/APOs that are formally recognised at Member State level.**

2. The **provision of an overview on the number of other forms of horizontal cooperation that farmers currently rely on** to achieve their common interests (non-recognised POs/APOs) at EU level and for each Member State in the main agricultural sectors.
3. A **qualitative analysis** of:
 - a) **incentives and disincentives that may influence farmers' decision to join or not join a PO;**
 - b) **factors that condition, positively and/or negatively, the effectiveness of POs;**
 - c) **impacts of POs/APOs on the primary sector and on the overall agri-food supply chain;** and
 - d) **benefits that individual members of POs as well as other business operators down the food supply chain may draw from farmers' collective action.**

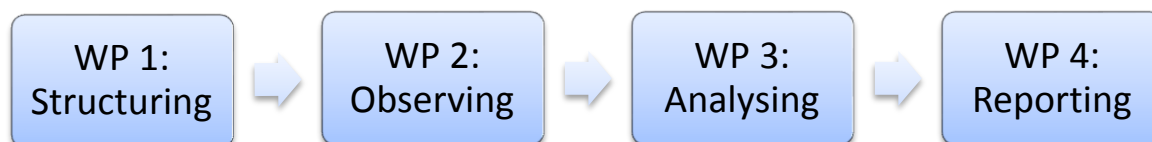
In terms of geographical scope, **the project covers all EU 28 Member States.** Regarding **the sectors to be analysed during the execution of the project,** these **are all the agricultural sectors listed in Article 1(2) CMO Regulation.** However, as far as the objective referred to under Theme 3 is concerned, the data collection in support to the qualitative analysis is limited to two specific sectors identified by the tender specifications, i.e. the FV and the pig meat sectors. Other sectors are covered by a review of the scientific literature.

Finally, time wise, the examination period of the project covers the period from 1 January 2014 onwards, which coincides with the entry into force of the currently applicable CMO Regulation. Earlier data have been collected, processed and used as appropriate.

1.3. General approach to the study

This chapter presents the overall approach to the study based on the work carried out, comprising the definition of the empirical approach to the study (i.e. methodologies and analytical tools), the data collection and validation.

The consolidated methodology is organised in a sequence approach, which is divided in four work packages.³



³ For a more detailed description, see Section 2.2.6 of the tender specifications, http://ec.europa.eu/agriculture/calls-for-tender/tender-documents/2015/216343/specs_en.pdf

The methodology addresses throughout these work packages the three themes on which this assignment focuses.

Table 1 - The three themes of the study

| Theme | Description | Type |
|----------|--|-------------|
| 1 | Inventory of recognised POs and APOs | Descriptive |
| 2 | Overview of non-recognised producer organisations | |
| 3 | Analysis of incentives and disincentives of producers to create producer organisations and the impact which producer organisations have on their members and the food supply chain | Analytical |

A number of methodologies were used in the conduct of this study. They are briefly described below. For Theme 3, we also present the profile of the respondents.

1.3.1. Data collection addressing the descriptive part of the study

This data collection process targeted two complementary objectives:

- **Theme 1 consists of an inventory of recognised POs/APOs.** This theme covers all recognised POs/APOs in all CMO sectors in all EU Member States.
- **Theme 2 provides an overview of the non-recognised POs/APOs all over the EU.**

For Theme 1, the data collection was initiated through the national competent authorities (NCAs) that have been invited to complete a survey that the Commission addressed to Member States in 2017. The preliminary inventory of POs/APOs recognised in each Member State was compiled based on responses to the Commission survey.

The required characteristics of these POs/APOs may not all have been described in the responses provided by Member States to the Commission survey and therefore data gaps were identified. In case data gaps were observed, individual NCAs were invited to complete and validate the data set. Individual contacts with national farmer and cooperative associations as well as information from the literature have also been used to validate and triangulate the information obtained through the survey.

For Theme 2, the overview on non-recognised POs/APOs was developed based on the same approach as for Theme 1. More emphasis has been put on contacts cooperative associations at both EU and national levels. And a literature review has also helped identify non-recognised POs/APOs other than cooperatives.

1.3.2. Data collection addressing the analytical part of the study

Theme 3 involves a qualitative analysis on incentives and disincentives for agricultural producers to form and join POs and the benefits that POs might bring to their members and the food supply chain. It focuses on two agricultural sectors (FV and pig meat) and investigate both recognised POs/APOs and non-recognised POs.

Data collection started with a general literature review and desk research that covered any agricultural sector. The objective was to gather as much relevant data and (academic and grey) literature as possible. The literature review was dynamic in that it was updated with information coming to light throughout the project.

For **the FV sector the qualitative analysis that has been performed relies on the output of two main activities**, which are:

- A **mapping** based on background information collected by DG AGRI on POs, APOs and producer groups in the FV sector for three different crops (apple, peach and tomato) and additional interviews (30). These interviews have been carried out with regional economic actors, mainly members of recognised and non-recognised POs, in each of the top producing regions (13 in total) for the three main FV crops listed above. The main objective of each interview was to discuss and identify concrete evidence as related to the price paid to members of POs in comparison to independent producers not members of any PO. These interviews have also been used to collect evidence in support to the qualitative analysis of Theme 3.
- An analysis of the incentives and disincentives to set up or join POs and the benefits and disadvantages deriving from POs for their members and other food supply chain stakeholders based on the **results and findings from 70 face-to-face and phone-based semi-structured interviews in eight different Member States (BE, CZ, DE, FR, HU, IT, PL, and RO)**. In each of these eight Member States, interviews have been conducted with:
 - National authorities in charge of recognition of POs.
 - Members of recognised POs/APOs as well as non-recognised POs.⁴
 - Economic actors present in the food supply chain that are the main commercial partners of such POs/APOs.

For the **pig meat sector**, the approach was different, as no mapping has been performed. A total of **65 interviews with NCAs, POs/APOs and commercial actors in the food supply chain (processors and retailers) has been conducted in eight Member States (DK, DE, ES, FR, HU, IT, NL, and PL)**. For this sector, the highest number of interviews was carried out with non-recognised POs (21). Between the Member States under study for this sector (see above), only in DE more interviews took place with recognised POs. In DK, as there are currently no recognised POs in the pig meat sector, the interviews targeted solely non-recognised POs.

In addition to these interviews with NCAs, POs/APOs representatives and supply chain actors, additional interviews have been conducted with individual farmers, as follows:

- **120 farm holdings that are members, at least, of one PO in eight Member States (DE, DK, ES, FR, HU, IT, NL, PL) with a total of 15 farmers in each Member State.** The majority of the respondents has

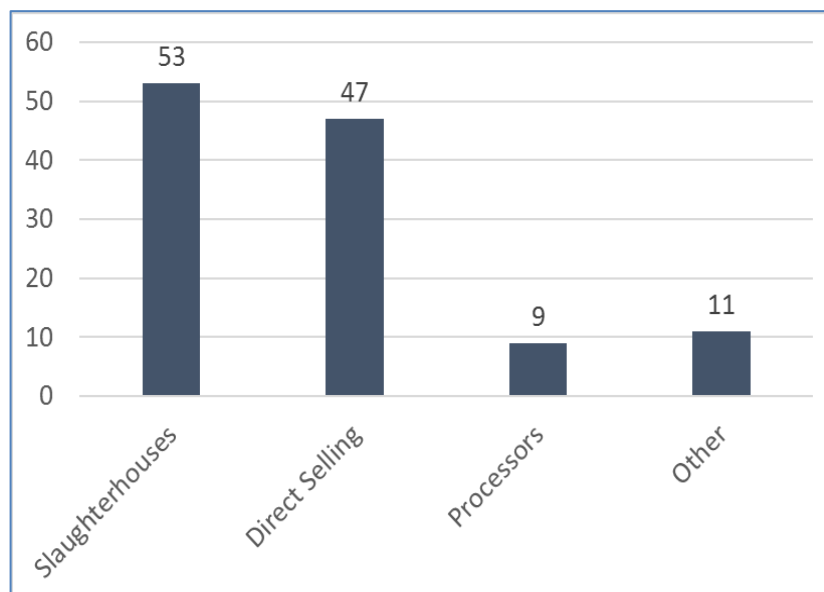
⁴ In the majority of Member States, the highest number of interviews were performed with recognised POs, with the exception of IT where the same number of interviews was carried out with both recognised and non-recognised POs. In the case of BE, all respondents are recognised POs.

medium-sized farms (49%), followed by pig farmers with large farms (28%) and, lastly, by pig farmers with small farms (23%).⁵ However large differences across Member States are observed ranging from a large majority of large farms in DK (73%) to a majority of small farms in PL (93%). The largest number of respondents have been members of a PO for at least 15 years and up to 22 years, which corresponds to approximately 29% of the sample surveyed. In total, more than 70% of the respondents have been members of a PO for more than 15 years. Only 15% of the surveyed farmers stated to be involved in the decision-making process of their PO, namely at the level of the governing bodies.

- **120 farm holdings, from the same Members States as above, that are not members of any POs and that are selling their products independently through different channels**, as illustrated in Figure 1 below. From that figure it is interesting to note that the percentage of small farms in this sample is higher than in the sample of farm holdings that are members of a PO in all Member States under study to the exception of PL. Thirty-six respondents declared to have been a member of a PO in the past. Out of these 36 respondents, 13 respondents indicated that they have been members from one up to six years. Another nine respondents belong to the group of farmers who have been a PO member for at least six years up to a maximum of 11 years. Fewer respondents have been members of a PO for longer periods of time (i.e. 11-16 years and 16-21 years). Eighteen respondents opted for leaving the PO more than five years ago, followed by the farmers who decided to leave from three up to five years ago and from one up to three years ago, with seven respondents each. Only three farmers decided to leave a PO less than a year ago. As regards the different modalities whereby the surveyed pig farmers sell their products, it can be observed that the highest number of farmers sell their products to slaughterhouses (53 pig holdings), while another significant number undertakes direct sales (47). Conversely, a relatively low number of respondents sell to meat processors. The remaining 11 pig holdings sell their products to other actors or through other channels, namely, to private entities, at events, etc. Finally, it emerges that 49 of these pig farmers currently cooperate with other farmers or actors informally. Conversely, 71 of them state they do not cooperate with other farmers or actors at all.

⁵ Classification based on self-assessment by respondents

Figure 1 - Main selling channel used by independent pig producers (not members of any PO) interviewed during the study (n=120)⁶



Source: Compiled by AI based on results of the pig producer survey

As regards the **interviews with representatives of POs/APOs in both the FV and pig meat sectors, a total of 85 interviews have been conducted in 11 Member States (BE, CZ, DE, DK, ES, FR, HU, IT, NL, PL and RO)**. The majority of the respondents represents a recognised PO/APO (52), whereas the remainder (33) belongs to a non-recognised PO. Within the sample surveyed, only five POs (provide services to their members without planning production, concentrating supply or performing joint marketing).

Of the 33 respondents belonging to non-recognised POs/APOs, 22 declared to have sought or intend to seek recognition, whereas 11 have never sought recognition. Eighty respondents are aware of the possibility to be recognised in their Member State, whereas the other five ones are not. Amongst the 22 respondents who have sought recognition in the past or intend to seek recognition in the near future, the increased credibility and visibility that recognition offers at the level of the food supply chain is the justification most frequently mentioned (16).

Other reasons frequently given by the 85 respondents are the opportunity to benefit from financial support and from more legal certainty vis-à-vis the regulatory environment where POs operate, with 46 and 35 respondents, respectively. Conversely, benefitting from derogations from competition rules does not appear to be a primary incentive for seeking recognition, with only 12 respondents indicating this reason. Only one respondent indicated that recognition may be useful to get more visibility at the level of public authorities.

Among the respondents who have never sought recognition (11), the reason most frequently mentioned is that the benefits of recognition are not clear (8 respondents).

⁶ n refers to the size of the sample of available data.

During the interviews some other reasons for not seeking recognition were mentioned, among which: the fact that the PO is already sufficiently known by all stakeholders and for that reason does not need any recognition; the lack of financial advantages associated with recognition; the lack of clarity and stability of the legislative framework for creating or joining POs; the PO works well as a non-recognised entity and there is therefore no reason to add an extra layer of administrative burden.

The following table summarises the data collection tools that have been used for Theme 3 of the study.

Table 2 - Data collection tools for Theme 3 of the study

| Objectives of Theme 3 | Data collection tools |
|--|--|
| <u>FV sector</u> | |
| Mapping based on background information (All EU Member States) | Stakeholders interviews (Survey 1) |
| Analysis on incentives and disincentives for farmers for setting or joining a PO (8 Member States) | |
| Analysis of the impacts of POs on farmers and other stakeholders (8 Member States) | |
| <u>Pig meat sector</u> | |
| Analysis on incentives and disincentives for farmers for setting or joining a PO (8 Member States) | Stakeholders interviews (Survey 2) Farm interviews (Survey 3) |
| Analysis of the impacts of POs on farmers and other stakeholders (8 Member States) | |

1.4. Structure of the report

In addition to this initial part, this preliminary final report is structured as follows:

- Part 2 describes the background and the EU policy context of the study.
- Part 3 presents the results of the inventory of recognised POs/APOs across EU countries (Theme 1).
- Part 4 presents an overview of non-recognised POs (Theme 2).
- Part 5 contains an analysis of incentives and disincentives of producers to create POs and the impact that POs have (Theme 3).
- Part 6 summarises the main conclusions and discusses the results.

PART 2: BACKGROUND AND EU POLICY CONTEXT

This chapter provides an overview of the overall market and policy context in which this study has been carried out. In the first place, Section 2.1 illustrates the place that farmers occupy in the EU agri-food supply chain and the current economic imbalances in terms of market and bargaining power that characterise that chain. Secondly, Section 2.2 analyses the main reasons that may motivate and lead farmers to join forces and create collective organisations as self-help tools through which they can eliminate or mitigate the adverse economic consequences of the existing market inefficiencies. From this perspective, under the general notion of POs, the different types of horizontal cooperation that agricultural producers may establish and that currently exist in the EU, including agricultural cooperatives, other legal forms and APOs, amongst others, are presented under Section 2.3. Finally, Section 2.4 provides an overview of the current EU legal framework that is relevant to POs, whose provisions are mostly enshrined by the current CMO Regulation. These include requirements for the recognition of POs and the benefits associated with such a recognition, in addition to specific derogations from EU competition law for recognised and non-recognised POs operating in the agricultural sector.

2.1. Farmers within the EU agri-food supply chain

The agri-food sector plays a vital role in the EU economy in terms of overall contribution to the EU gross domestic product (GDP), with the food and drink industry and agriculture, respectively, accounting for 2.1% and 1.5% of EU GDP⁷, exports (around EUR 110 billion in 2017)⁸ and employment opportunities (around 44 million people across the EU food supply chain as a whole, half of which are rural workers).⁹

A little over 171 million hectares of land in the EU were used for agricultural production in 2016 – about 40% of the EU's total land area, with the largest areas located in FR (27.8 million ha), ES (23.3 million ha) and the UK (16.7 million ha).¹⁰ There are more than 10 million agricultural holdings in the EU. About a third of them (3.1 million) is concentrated in RO and their area is, in most cases, smaller than 5 ha. PL, IT and ES account for other significant shares of agricultural holdings in the EU (13.5%, 11% and 9%, respectively).¹¹

⁷ Food and Drink Europe, European Food and Drink Industry - Data & Trends 2018, 2018. Figures are based on Eurostat data and refer to 2015.

⁸ Food and Drink Europe, European Food and Drink Industry - Data & Trends 2018, 2018.

⁹ The EU's Common Agricultural Policy (CAP): for our food, for our countryside, for our environment – A partnership between Europe and farmers, European Commission, 2016, in particular p. 8. Figures are based on Eurostat data and refer to 2013.

¹⁰ Farm Survey 2016, Eurostat, News release, 105/2018, 28 June 2018 available at <https://ec.europa.eu/eurostat/documents/2995521/9028470/5-28062018-AP-EN.pdf/8d97f49b-81c0-4f87-bdde-03fe8c3b8ec2>.

¹¹ Agriculture, forestry and fishery statistics, 2018 edition, Eurostat, in particular p. 18. Data refer to 2016.

Agricultural holdings in the EU tend to be of a relatively small size (65.6% have less than 5 ha). Holdings with an area equal to or greater than 50 ha and 100 ha, account for only 3.6% and 3.3% of the EU total, respectively.¹² In terms of economic size, of the 10.5 million EU farms 4.0 million have a standard output¹³ lower than EUR 2,000; for less than 3% of them the standard output is equal to or higher than EUR 250,000. Overall, the agricultural holdings in FR, DE, IT and ES account for more than half of the overall standard output generated by farming activities in the EU.¹⁴

In terms of age, the largest share (32%) of EU farmers are more than 65 years old, whereas only 11% is less than 40 years old. Gender wise, more than one third of the 10.3 million farmers and farm managers present in the EU are women.¹⁵ The farm workforce is composed mostly by farmers and their family members, with 96% of all EU farms relying exclusively on family work.¹⁶ Only 16.4% of the total agricultural workforce works in agriculture on a full-time basis.¹⁷

As upstream actors in the food supply chain, EU farmers may interact with several different players down the chain. Their customers may be consumers in case of direct sales, but also businesses, such as primary and secondary processors, manufacturers, wholesalers, retailers and mass-caterers, when agricultural produce is destined to further processing or distribution on a larger scale.

The food and drink industry, which encompasses a wide variety of business operators, ranging from intermediate processors to manufacturers of finished products, is the largest manufacturing sector in the EU, with an annual turnover of over EUR 1.1 trillion. There are currently some 294,000 companies active in this sector in the whole EU, providing employment to 4.6 million people, with each food and drink company having 15 staff, on an average. In this context, small and medium-sized enterprises (SMEs) represent 99% of the companies operating in this sector, generate 48% of the turnover of the sector and employ 61% of its labour force. Overall, in 2017 EU food and drink products accounted for 18% of exports of these products worldwide: with a EUR 110 billion value, they contributed to an overall positive trade balance for the EU in this sector (EUR 35 billion). Dairy and meat products together with wine and spirits and other food preparations are amongst the top EU exports in the agri-food sector, value wise.¹⁸

In the agri-food supply chain wholesalers are intermediate traders that buy unprocessed products from farmers or processed products from other food business operators to sell them to other operators, including processors, manufacturers, retailers, and caterers in the context of purely business-to-business (B2B) relations.

¹² Agriculture, forestry and fishery statistics, 2018 edition, Eurostat, in particular p. 18. Data refer to 2016.

¹³ In accordance with Eurostat Glossary, the standard output of an agricultural product (crop or livestock), abbreviated as SO, is the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per head of livestock. See [https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Standard_output_\(SO\)](https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Standard_output_(SO)).

¹⁴ Agriculture, forestry and fishery statistics, 2018 edition, Eurostat, in particular p. 19. Data refer to 2016.

¹⁵ <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/WDN-20171218-1>

¹⁶ Agriculture, forestry and fishery statistics, 2018 edition, Eurostat, in particular p. 18. Data refer to 2016.

¹⁷ Agriculture, forestry and fishery statistics, 2017 edition, Eurostat, in particular p. 33. Data refer to 2013.

¹⁸ Food and Drink Europe, European Food and Drink Industry - Data & Trends 2018, 2018. Available at: <https://www.fooddrinkeurope.eu/publication/data-trends-of-the-european-food-and-drink-industry-2018/>

There are around 277,000 wholesale companies active in the food supply chain in Europe, generating a turnover of over EUR 1,032 billion annually and employing almost 2 million staff.¹⁹

Conversely, retailers engage in the sales of food and non-food products to the final consumers and therefore operate in a business-to-consumer (B2C) environment, serving 500 million consumers in the EU. In the food sector, the retail industry in the EU generates a turnover of over 1,128 billion annually, employs 7.4 million professionals and accounts for 904,000 companies and stores.²⁰

Over the last few decades, the retail sector has reached relatively high levels of concentration in the EU, with supermarkets, hypermarkets and discounters accounting for 71% of sales of prepacked food products. In 2016, the concentration ratio of the five largest operators in the retail sector was estimated as being above 60% in half of all EU Member States, above 80% in SE and FI, and below 40% only in IT, BG and EL.²¹

Caterers represent also an important link of the EU food supply chain. Like retailers, they are in direct contact with hotels, bars, restaurants or canteens pertaining to schools, hospitals, companies and public authorities, amongst others. The European organisation representing the catering sector estimates that one in four meals is consumed outside the home and one in every two at the workplace.²² Overall, in the EU in the hospitality sector there are currently 1.9 million companies, of which 90% are micro-enterprises, employing 11 million people in total.²³

¹⁹ Food and Drink Europe, European Food and Drink Industry - Data & Trends 2018, 2018.

²⁰ Food and Drink Europe, European Food and Drink Industry - Data & Trends 2018, 2018.

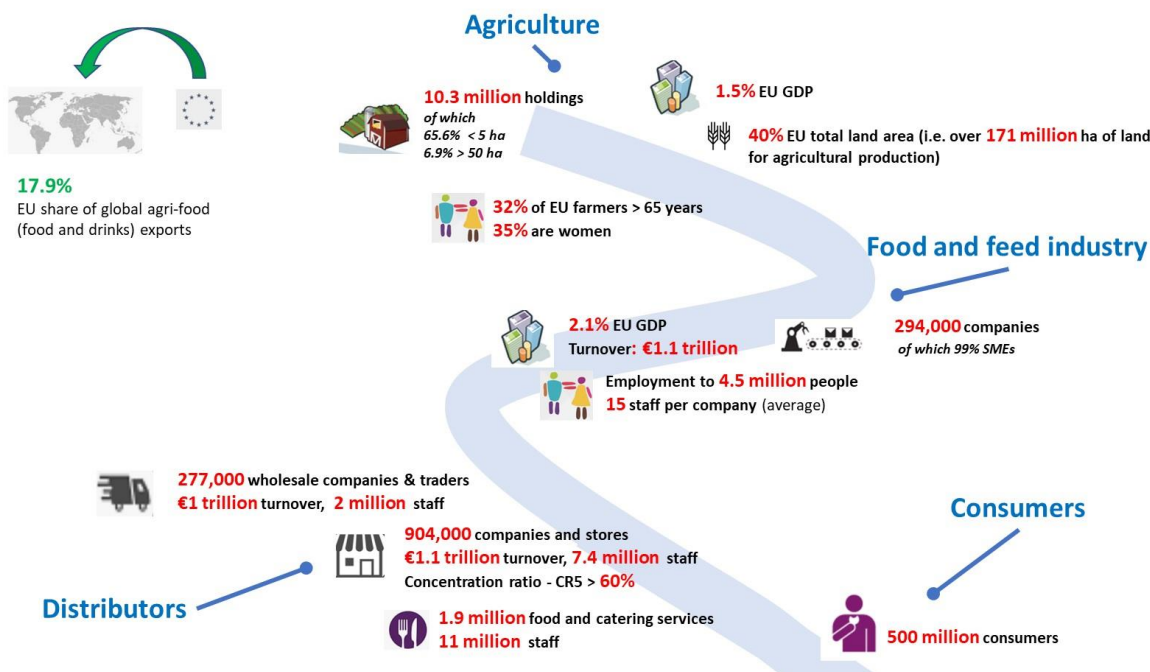
²¹ Commission Staff Working Document Impact Assessment Initiative to improve the food supply chain (unfair trading practices) Accompanying the document Proposal for a Directive of the European Parliament and of the Council on unfair trading practices in business-to-business relationships in the food supply chain, SWD(2018) 92 final, Brussels 12.4.2018.

²² Food Service Europe, European Industry Overview, available at <http://www.foodserviceeurope.org/en/european-industry-overview>.

²³ HOTREC Facts and Figures, quoting: The hospitality sector in Europe, EY report, September 2013, available at <https://www.hotrec.eu/facts-figures/>.

In summary the main characteristics of the EU food and drink industry are presented in Figure 2 below.

Figure 2 - The EU food and drink industry (at a glance)



Source: Compiled by AI based on: Agriculture, forestry and fishery statistics, 2017 and 2018 editions, Eurostat; Food and Drink Europe, European Food and Drink Industry - Data & Trends 2018; Ernst&Young, The hospitality sector in the EU, 2013.

2.2. The reasons behind farmers' cooperation

While other players down the agri-food supply chain have, over time and in many instances, consolidated and strengthened their economic position within the EU market, the EU agricultural sector has been unable to do so, primarily due to its high level of fragmentation resulting from the relatively small average size of farm holdings (as shown in Section 2.1) and, in certain national contexts, due to a cultural mindset in the agricultural sector that distrusts cooperation.

This situation has been also progressively aggravated by other circumstances, some of which are inherently linked with or favoured by the above referred fragmentation, such as the carrying out of unfair trading practices (UTPs) by stronger food business operators to the detriment of agricultural producers. This is a particular aspect that the High-Level Forum for a Better Functioning Food Supply Chain²⁴, which was established by the European Commission in the aftermath of the 2007-2008 food price crisis. The Agricultural Market Task Force (AMTF)²⁵ examined and discussed this issue

²⁴ Activities and documents produced by the High-Level Forum are available at https://ec.europa.eu/growth/content/high-level-forum-better-functioning-food-supply-chain-extension-deadline-apply-0_en.

²⁵ The full report of the AMTF is available at the following link https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/market-measures/unfair-trading-practices_en.

in depth, and it is now being addressed with a directive on UTPs.²⁶

Overall, these factors have prevented, and still prevent, EU farmers from developing sufficient bargaining power in their dealings with food processors, manufacturers, retailers and other relevant commercial partners of the agri-food supply chain. They have consequently engendered economic imbalances in that chain, in particular, to the detriment of the competitiveness of the farming sector as a whole. These effects may be exacerbated by economic and market risks to which mostly farmers are exposed (e.g. price volatility, prolonged period of low prices).²⁷

Against this background, stakeholders of the EU agricultural sector as well as EU policy makers have started attaching more importance to strengthening horizontal cooperation between farmers. The latter is an instrument that may help countervail the economic asymmetry within the EU agri-food supply chain.

From this angle, horizontal cooperation between farmers may give rise to a wide range of activities that greatly benefit individual farmers, thereby generating an added value that farmers could not achieve on their own.

Such activities may involve the provision of assurances of a better market access (e.g. through the concentration of supply, the joint marketing or distribution of agricultural products, or promotional activities). They may also contribute towards farmers' greater contractual leverage vis-à-vis their customers (e.g. regular payments, fair prices for all producers) and suppliers of agricultural inputs (e.g. shared and hence reduced costs). Finally, they may also ensure greater access to technical knowledge for improving the safety and the quality of the agricultural production as well as cater for crisis management mechanisms allowing, for instance, the mitigation of economic downturns or environmental, phytosanitary or veterinary risks.

The objectives of horizontal cooperation at the level of agricultural production are also clearly spelled out in EU legislation. In particular, Regulation (EU) 2017/2393 – known as Omnibus Regulation – states with specific reference to POs and APOs that "[...] *their activities, including the contractual negotiations for the supply of agricultural products by such producer organisations and their associations when concentrating supply and placing the products of their members on the market, therefore contribute to the fulfilment of the objectives of the CAP set out in Article 39 of the Treaty on the Functioning of the European Union, since they strengthen the position of farmers in the food supply chain and can contribute to a better functioning of the food supply*

²⁶ The Directive of the European Parliament and of the Council on unfair trading practices in business-to-business relationships in the agricultural and food supply chain was adopted on 17 April 2019, <http://data.consilium.europa.eu/doc/document/PE-4-2019-INIT/en/pdf>.

²⁷ Competition Issues in the Food Chain Industry, 2014, DAF/COMP(2014)16, OECD Report, 15 May 2014.

chain".²⁸

2.3. POs: notion, characteristics and variety of legal forms

With a view to reinforcing their position in the agri-food supply chain, EU farmers may join forces and cooperate by setting up collective organisations that ensure the fulfilment of their objectives and needs. These entities are generally called POs.

At EU level, while the CMO Regulation lacks a proper normative definition of POs, the online glossary of DG AGRI defines it as *"a legally-constituted group of farmers and growers. Producer organisations assist in the distribution and marketing of products. They also promote a higher quality of products and encourage their members to adopt good environmental practices"*.²⁹

As highlighted under Part 1, in this study a PO is considered to be any type of entity that has been formed upon the initiative of producers in a specific agricultural sector, irrespective of its recognition status³⁰ and legal form.

From this perspective, POs are entities managed and controlled by agricultural producers with a view to pursuing – jointly and more efficiently – common interests and objectives. These objectives may be of commercial nature, but they might also encompass other concerns (quality, sustainability, animal welfare, innovation and research, etc.).

POs may vary from one to another in terms of number and type of members, functions, geographical scope (e.g. local, regional, national and transnational) and products.

Associated to POs, the CMO Regulation defined specific legal forms that recognised POs may take in order to carry out their activities. These are mainly the APOs and the transnational POs and APOs:

- **APOs** are associations of POs. Generally, they are created to carry out activities that the POs do not perform or cannot perform efficiently, or that are similar to those already performed by POs, but they do so on a larger territorial scale (i.e. regional, national). From this perspective, APOs can add further value to the role that POs already play in the agri-food supply chain.
- **Transnational POs and APOs:** While POs and APOs tend to work at local, regional or national level, in certain instances these entities may share the same interests and objectives of other organisations that are based in other

²⁸ Recital 52 of Regulation (EU) 2017/2393 of the European Parliament and of the Council of 13 December 2017 amending Regulations (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), (EU) No 1306/2013 on the financing, management and monitoring of the common agricultural policy, (EU) No 1307/2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy, (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products and (EU) No 652/2014 laying down provisions for the management of expenditure relating to the food supply chain, animal health and animal welfare, and relating to plant health and plant reproductive material, OJ L 350, 29.12.2017, p. 15.

²⁹ https://ec.europa.eu/agriculture/glossary/producer-organisation_en_en

³⁰ Common criteria for the granting of recognition of POs and their associations by Member States' competent authorities are currently regulated under Chapter III, Section I of the CMO Regulation (notably, articles 152-154). For more details on recognition, see further Section 2.4.

Member States. Such commonalities may be the driving force behind the establishment of a common structure that allows a broader geographical coverage and that involves organisations from two or more Member States. Such organisations are known as transnational POs and APOs.

Currently, different types of organisations and entities exist in the EU that fall under the notion of PO. The following paragraphs provide an overview of their main characteristics.

2.3.1. Agricultural cooperatives

Agricultural cooperatives are another specific type of POs. They are present in most Member States, although, mainly due to historical reasons, to varying degrees. Depending on the specific agricultural market they operate in, agricultural cooperatives may have different market penetrations.

All cooperatives, including those operating in the agri-food supply chain, generally abide by a tripartite set of basic principles, namely:³¹

- 1) The User-Owner Principle, i.e. those who own and finance the cooperative are those who use the cooperative.
- 2) The User-Control Principle, i.e. those who control the cooperative are those who use the cooperative.
- 3) The User-Benefits Principle, i.e. the cooperative's sole purpose is to provide and distribute benefits to its users on the basis of their use.

Agricultural cooperatives are generally regulated under commercial law at Member State level and they may take the legal form of cooperative companies with limited or unlimited liability, of economic interest groupings, or of joint stock companies. Further details on cooperatives as one of the most important examples of non-recognised POs are provided under Part 4.

2.3.2. Other legal forms

As regards the 'other legal forms', in addition to associations and private companies, the following main types of POs have been identified during the study (sorted by alphabetic order):

- **'Cooperatives d'Utilisation de Matériel Agricole (CUMAs)'** in FR and BE: A CUMA (agricultural resource use cooperative) is a form of agricultural cooperation where farmers pool resources (machinery, labour, sheds, workshops, etc.) needed for their agricultural activity.

In BE, CUMAs are integrated in the list of cooperatives. It can be estimated that 37% of the Belgian cooperatives (about 100 out of 301) can be regarded as CUMAs.

³¹ Dunn, J.R. (1988), Basic cooperative Principles and their Relationship to Selected Practices, Journal of Agricultural Corporation, 3:83-93.

In FR, CUMAs are not integrated in the lists of cooperatives. This form of PO was formed in 1945 as part of the Marshall Plan. Overall, CUMAs promote access to mechanisation in regions where small-scale farms are unable to individually buy farm machinery due to the high costs of such equipment. There were more than 11,000 CUMAs established in FR in 2017 owning 250,000 pieces of farm equipment with a combined value of EUR 18 billion. Harvesting remains the main activity of the CUMAs (88% of the CUMAs engage in harvesting activities), though over time these organisations have diversified their activities into, among soil cultivation, transport, fertilisation, seed drilling, land maintenance, and crop protection. In FR, nearly one in every two farmers is a member of a CUMA. This number has remained stable over the years. On an average, a CUMA has 25 members. However, the number of members per CUMA is far lower in BE. In most cases, CUMAs are managed by unpaid administrators, elected among their members.

Some CUMAs in FR have paid employees (1,600 are employers and 4,700 employees are paid by these CUMAs) but not in BE.

Although the large majority of CUMAs are located in FR, some Member States are interested in such form of cooperation. In IE, the Agriculture and Food Development Authority (TEAGASC) is reflecting whether this type of cooperation could help foster economic performance of small producers by diminishing investment costs.

- **‘Erzeugergemeinschaften (EZGs)’** in DE: Legally, EZGs (producer associations) are not organised as cooperatives but as registered for-profit associations. EZGs can be regarded as a special form of marketing cooperatives, mainly dedicated to the commercialisation of products of their members. These EZGs are founded in accordance with the 1968 German Law on Market Structures (Marktstrukturgesetz). This law provides for exceptions from general laws on anti-competitive behaviour in the agri-business sector if cooperative behaviour allows the supply and marketing of agricultural products to be better tailored to market requirements. Therefore, EZGs not only organise the marketing and sales and transport of agricultural products, but also set up rules that improve the quality and homogeneity of products produced by farmers. Therefore, they typically establish close relationships with farmers requiring them to market all their products to and through them.
- **‘Groupement Agricole d’Exploitation en Commun (GAEC)’** groups farmers for shared agricultural operation in FR. Cooperation starts when at least two producers decide to join forces for certain activities and establish a legal form. The smallest legal form that exists in the agricultural sector is the French GAEC which allows farmers to work together under conditions that are comparable to those existing in family-run farms. Most GAEC have only two members and about 10% of French holdings take part in GAECs (there were 36,200 GAEC in FR in 2017).
- **‘Maschinenring’** in DE: There exist instances where farmers cooperate by sharing heavy machinery as well as exchanging knowledge and support each other in difficult situations. This form of non-recognised POs/APOs is called ‘Maschinenring’ and allow farmers to acquire expensive heavy machinery by

sharing the costs within a group. The use of the acquired machine is, then, shared among the group as well. There exist around 240 Maschinenringe in DE, with a total membership of around 192,000 agricultural enterprises. They are organised as registered associations, and at times have subsidiaries organised as limited liability companies. The Bundesverband der Maschinenringe serves as an umbrella organisation on a national level and is also organised as a registered association.

- **Producing cooperatives providing ancillary services** in EE: Despite being called 'cooperatives', these entities operate independently from their members and even provide ancillary services (such as tillage or grain drying) to non-members under the same conditions applied to their own members. Their operations are more similar to those of agricultural companies and limited liability companies. The objective of these structures is to make a profit. Their day-to-day business is organised by managers, who in some cases are not members of the organisation. Their structure does not provide the members with exclusive services.
- **Producer groups (PGs)**. Prior to the current CMO Regulation, EU legislation governing the organisation of the common market of FV supported the establishment of producer groups (PGs). Currently, Regulation (EC) No 1305/2013 provides that PGs may be established in Member States that had acceded the EU after 1 May 2004, in the EU outermost regions, or in the smaller Aegean islands.³²

Overall, a PG is a temporary organisational structure that a group of farmers may create, as a single legal entity or as part of another legal entity, with a view to obtaining financial aids to support the formation of a PO, to facilitate the administrative operation of the latter, or to cover the costs incurred for obtaining the recognition as a PO (further details on recognition are given in Section 2.4). From this perspective, the setting up and the preliminary recognition of a PG by Member States is the first step towards the establishment of a recognised PO.³³

Based on the information reported by Member States in the annual reports for the FV sector, 98 PGs were operational in 2016: 96 PGs in five Eastern European Member States (12 in BG, 15 in HU, 2 in LV, 50 in PL, and 17 in RO) and two additional ones in the outermost regions of FR.

- **Production type cooperatives (TSZ)** in HU: Under these structures, producers are at the same time members and employees of the cooperatives. The cooperatives are operating in a wide range of activities and sectors (machinery services, financial services, warehousing, etc.).
- **'Reti D'Imprese' (networks of enterprises)** in IT: Cooperatives are by far the most common and long-standing organisation model for cooperation at the

³² For instance, Article 27 of Regulation (EC) No 1305/2013.

³³ Article 103a Regulation (EC) No 1234/2007.

level of primary production in IT. The rise of the cooperative movement in IT can be traced back to the creation of the first consumer cooperative in the City of Turin in 1854.

Based on the type of members, farmer cooperatives can be:

- Primary cooperatives – as a rule, members are natural persons (farmers) that provide raw agricultural materials to the cooperative (in the case of processing/marketing cooperatives) or who purchase farm inputs from the supply cooperatives.
- Secondary cooperatives (also commonly known as cooperative consortia) - members may be exclusively legal persons (i.e. other cooperatives or farms) or both legal person and natural persons (i.e. cooperatives, farms and farmers) that collect first processed and then cater for additional transformation or commercialisation.

Beside cooperatives, in recent years, Italian national legislation has provided for an additional instrument through which business operators, including primary producers, may join forces, i.e. networks of enterprises (Reti d'impresa). Their characterising element consists of being long-term agreements of two or more business operators about a common project, which distinguishes them from other forms of business cooperation foreseen by national law (notably, consortia and temporary associations of enterprises). Under a network of enterprises, while any of the partaking business operators maintain their independence and identity, the cooperation that the network is supposed to foster may scale up and in certain cases lead to mergers or creation of more structured common legal entities, including private companies and cooperatives. In the agri-food sector, this legal form has been used on a few occasions especially because it guarantees some fiscal advantages, which are more appealing than those for cooperatives. Generally, networks of enterprises only provide services to their members and therefore do not engage in processing activities as cooperatives often do.

- **'Sociedades Agrarias de Transformación (SAT)'** in ES: Limited liability companies (sociedades limitadas) and public limited companies (sociedades anónimas) are private limited liability companies and overall are less used by farmers if compared to cooperatives and SATs. The difference between a SAT and a cooperative resides mainly in the fact that the former is a civil law company, whereas the latter adheres to the cooperative model, which results in different sets of rules, for instance, about partners and relations with third parties, formalities, and responsibilities. Overall, from a farmer's perspective, if the objective is to carry out an activity, or a part of it, in a common way, by jointly using means of production or doing joint marketing, the most appropriate legal form would be a cooperative. If the goal is to e.g. improve the production, transformation or marketing, but to maintain some independence and full responsibility, the most appropriate option would be to establish a SAT.
- **'Société d'Intérêt Collectif Agricole (SICA)'** in FR: Several different legal entity forms are considered to be part of the 'cooperatives group' in FR (of which the main one: the SCA (société Coopérative Agricole) and additional

ones e.g. the SCoP, SAPO, SCAEC, SCIC, SCE, SICA, UES, etc.). All of which could be grouped under the label 'cooperatives'. The legal form SICA is present in several sectors in FR, and mainly in the FV sector SICAs members can come from different professional branches. The main difference with a SCA is that SICAs allow more than 20% of members to be non-farmers, whereas the percentage of non-farmers in SCAs is limited to 20%.

A few other legal forms of cooperation have been mentioned (e.g. 'non-profit organisations' in BE, 'entities governed by public law' in CY, 'economic clubs' in DE, 'economic associations', 'public profit organisations' in HU, and 'federations' in PL.

In addition, while all these forms of cooperation have been developed within the conventional food supply chain, it should be highlighted the development of new types of cooperation for other agricultural types e.g. organic agriculture and short supply chains). By way of example, the 'Associations pour le Maintien de l'Agriculture Paysanne (AMAP)' in FR and the 'Reciproco' in PT can be mentioned. Detailed information can be found in a study published by the European Commission - Joint Research Center describing the state-of-play of short food supply chains (SFSC) in the EU. In that report, SFSCs are understood as being the chains in which foods involved are identified by, and traceable to, a farmer and for which the number of intermediaries between the farmer and the consumer should be minimal.³⁴

All these types of new cooperation could also be considered as POs/APOs as they are, in most cases, initiated by farmers.

2.4. The EU legal framework for POs

Throughout the most recent reforms of the CMO, the EU legislator has laid down specific rules for the recognition of POs and APOs. Against this background, the following paragraphs provide first an overview of the requirements laid down in the current CMO Regulation for the recognition of POs and APOs (Section 2.4.1). Subsequently (Section 2.4.2), an overview of EU competition rules as laid down in EU primary law is provided, as well as an overview of the general derogations from EU competition rules foreseen for the agricultural sector by the Treaty on the Functioning of the European Union (TFEU) and the current CMO Regulation.

2.4.1. Recognition in the CMO Regulation

In accordance with Article 152 (1) CMO Regulation, EU Member States' authorities may grant, upon request, recognition to POs, provided that the latter:

1. Are constituted and controlled in accordance with point (c) of Article 153(2), by producers in a specific sector listed in Article 1(2).³⁵

³⁴ Kneafsey et al. (2013) Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics. JRC scientific and policy reports. Available at [http://publications.jrc.ec.europa.eu/repository/bitstream/JRC80420/final%20ipts%20jrc%2080420%20\(online\).pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC80420/final%20ipts%20jrc%2080420%20(online).pdf)

³⁵ Article 152 (1) point (a) CMO Regulation.

2. Are formed upon the initiative of the producers and carry out **at least one of the following activities:**

- (i) joint processing;
- (ii) joint distribution, including by joint selling platforms or joint transportation;
- (iii) joint packaging, labelling or promotion;
- (iv) joint organising of quality control;
- (v) joint use of equipment or storage facilities;
- (vi) joint management of waste directly related to the production;
- (vii) joint procurement of inputs;
- (viii) any other joint service activities pursuing one of the objectives referred to in the following point;³⁶ and

pursue at least one of the objectives listed in Table 3.

Table 3 - Objectives that POs may pursue in accordance with Article 152 (1) (c) of the CMO Regulation

- | |
|---|
| <ul style="list-style-type: none">a) Ensuring that production is planned and adjusted to demand, particularly in terms of quality and quantity.b) Concentration of supply and the placing on the market of the products produced by its members, including through direct marketing.c) Optimising production costs and returns on investments in response to environmental and animal welfare standards, and stabilising producer prices.d) Carrying out research and developing initiatives on sustainable production methods, innovative practices, economic competitiveness and market developments.e) Promoting, and providing technical assistance for, the use of environmentally sound cultivation practices and production techniques, and sound animal welfare practices and techniques.f) Promoting, and providing technical assistance for, the use of production standards, improving product quality and developing products with a protected designation of origin, with a protected geographical indication or covered by a national quality label.g) The management of by-products and of waste to protect the quality of water, soil and landscape and preserving or encouraging biodiversity.h) Contributing to a sustainable use of natural resources and to climate change mitigation.i) Developing initiatives around promotion and marketing.j) Managing of the mutual funds referred to in operational programmes in the FV sector referred to in Article 31(2) of this Regulation and under Article 36 of Regulation (EU) No 1305/2013.k) Providing the necessary technical assistance for the use of the futures markets and of insurance schemes. |
|---|

Furthermore, pursuant to Article 154 (1) CMO Regulation, national recognition is subject to the fulfilment of further conditions by POs, namely that the PO in question:

- a) Possesses the minimum number of members and/or covers the minimum value or value of marketable production that is set out to this effect by national legislation in the area where it operates.

³⁶ Article 152 (1) point (b) CMO Regulation (as amended by the Omnibus regulation).

- b) Can perform its activities adequately, both over time and in terms of effectiveness, provision of human, material and technical support to its members and as appropriate concentration of supply.
- c) Has statutes that are consistent with the activities that POs may carry out in accordance with the CMO Regulation and the other conditions set by the same regulation for their establishment.

Following the entry into force of the Omnibus Regulation, the CMO Regulation now provides for the possibility for one PO to be granted multiple recognitions at national level for the different agricultural sectors in which it operates.

The CMO Regulation also contains special provisions for recognition of POs in certain agricultural sectors. In the FV sector, Regulation (EU) 2017/891³⁷ contains specific requirements for recognition of producer organisations in this sector. And, in the milk and milk products, FV, olive oil and table olives, silkworm and hops sectors, recognition of POs by Member States is mandatory (Articles 161 (1) and 159 (a) CMO Regulation).

The CMO Regulation lays down specific requirements also for the recognition of APOs. These reflect, overall, the same principles that regulate the recognition of POs (Article 156 (1)). Finally, through the adoption of Regulation (EU) 2016/232, rules for the recognition of transnational POs and APOs, amongst others, have been established.³⁸

2.4.2. EU competition law in the agricultural sector

The following sections provide a general overview of EU competition rules (as laid down in EU primary law), as well as of the general derogations from EU competition rules foreseen for the agricultural sector by the TFEU and the current CMO Regulation.

2.4.2.a. EU competition rules

The rules of EU competition law are laid down in the TFEU. In particular, Articles 101 and 102 address the behaviour of undertakings under competition rules. While Article 101 TFEU addresses agreements between undertakings, Article 102 TFEU deals with the abuse of a dominant position of an undertaking.

Article 101 (1) TFEU prohibits agreements between two or more independent market operators that restrict competition within the internal market. Joint sales, joint production, and supply management measures of competitors are normally considered restrictions of competition covered by this provision. A competitor can be 'actual' or potential. An actual competitor is active on the same relevant market. A competitor is a potential one if, while not actually active on the relevant market, is likely to enter it when it becomes attractive to do so. The definition of the relevant market in terms of

³⁷ Commission delegated Regulation (EU) 2017/891 of 13 March 2017 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council with regard to the FV and FV sectors and supplementing Regulation (EU) No 1306/2013 of the European Parliament and of the Council with regard to penalties to be applied in those sectors and amending Commission Implementing Regulation (EU) No 543/2011, OJ L 138, 25.5.2017, p.4.

³⁸ Commission Delegated Regulation (EU) 2016/232 of 15 December 2015 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council with regard to certain aspects of producer cooperation, OJ L 44, 19.2.2016, p. 1.

product and geographic market is subject to an assessment in each individual case. Agreements covered by Article 101 (1) TFEU can be horizontal, i.e. concluded between actual or potential competitors on the same level of the chain (e.g. farmers) or vertical, if concluded between actors operating on different levels of the chain (e.g. farmers agree with processors).

Pursuant to Article 101 (3) TFEU, Article 101 (1) may be declared inapplicable if the agreement:

- a. Contributes to improving the production or distribution of goods or to promoting technical or economic progress.
- b. While allowing consumers a fair share of the resulting benefit.

while it does not:

- c. Impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives.
- d. Afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

Article 102 TFEU prohibits market operators holding a dominant position on a given market to abuse that position, e.g. by charging unfair prices or by limiting output. The Commission's Guidance on the application of Article 102 TFEU contains a description of how the market power of an undertaking should be assessed, stating that market shares provide a first indication, but that the assessment will take place in light of the relevant market conditions. For the purposes of the CMO Regulation, Article 208 CMO Regulation states that *"dominant position means a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained in the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers."*

2.4.2.b. Derogations from EU competition rules for the agricultural sector

Article 42 TFEU confers upon the EU legislator the power to determine the extent to which competition rules apply to production and trade in agricultural products, having regard to CAP objectives as set out in Article 39 TFEU.

Accordingly, in Article 206 CMO Regulation, the EU legislator provided that EU competition rules apply to agriculture *"save as otherwise provided in this Regulation"*.

In line with this approach, the CMO Regulation contains several derogations from EU competition rules. Besides the specific derogation from Article 101 (1) TFEU with regard to recognised POs and APOs referred to above (Section 5.2.3), some general derogations are currently laid down in Articles 152, 209 and Article 222 CMO Regulation. Other provisions of the same regulation provide for derogations that apply only to certain agricultural sectors. Some of the derogations in the CMO Regulation address producer organisations or farmers associations. Quite a number of the derogations apply however only to recognised POs and APOs.

Derogations applying to all agricultural sectors:

In particular, following the entry into force of the Omnibus Regulation, Article 152 CMO Regulation now contains an explicit derogation for recognised POs and APOs from Article 101 (1) TFEU, which prohibits agreements between undertakings with

anticompetitive object or effects (see below in particular Section 5.3). This derogation applies to all agricultural sectors. To benefit from it, a PO or APO must fulfil the conditions of recognition pursuant to Article 152 (1) CMO Regulation as well as the additional conditions that are illustrated in Table 4.

Table 4 - Conditions to be fulfilled by recognised POs and APOs to benefit from a derogation from Article 101 (1) TFEU

According to Article 152 1a CMO Regulation, a PO may – on behalf of its members for all or part of their total production – plan production, optimise production costs, place on the market and negotiate contracts for the supply of agricultural products.

This requires in particular that the PO:

- genuinely exercises one of the activities mentioned in Article 152 (1) (b) (i) to (vii); and
- concentrates supply and places the products of its members on the market, regardless of whether the ownership for the products has been transferred to the PO.

APOs can benefit from the same derogation from Article 101 (1) TFEU, as long as they meet the above requirements.

POs and APOs that merely provide services to their members, without integrating an activity, can be recognised, but cannot benefit from the above competition derogation.

Article 209 CMO Regulation, as amended by the Omnibus Regulation, provides farmers and their associations, as well as recognised POs and APOs, with the possibility to ask the Commission for an opinion on whether their agreements, decisions and concerted practices related to the production, sale of agricultural products, or use of joint facilities benefit from the derogation from Article 101 (1) TFEU. The derogation applies to all agricultural sectors, but it contains three negative criteria, namely it does not apply to agreements and practices that (i) jeopardise the CAP objectives, (ii) entail an obligation to charge an identical price, or (iii) exclude competition.

Article 222 CMO Regulation gives farmers and their associations, as well as recognised PO/APOs, the right to ask the Commission for the adoption of an implementing act in times of severe imbalance of markets to allow producers to collectively take certain measures, which otherwise might be prohibited under Article 101 (1) TFEU. In this case, and under the strict condition that such agreements do not undermine the proper functioning of the internal market and that they are temporary and strictly aim to stabilise the sector concerned, producers can collectively plan production or withdraw products from the market. After the Omnibus Regulation it is no longer necessary that such acts are preceded by public measures for market stabilisation. This derogation applies to all agricultural sectors.

Sector specific derogations

As regards derogations from competition rules that apply only to certain sectors, in accordance with Article 149 CMO Regulation, in the milk sector, recognised POs are

allowed to conduct contractual negotiations, i.e. bargain on behalf of their members a price for the sale of raw milk, without the need to integrate any activity for their members or to concentrate supply or put the products on the market.

Additionally, pursuant to Article 150 and 172 CMO Regulation, which concern protected designation of origin (PDO) and protected geographical indication (PGI) ham and cheese, producers can take certain supply management measures. According to Article 167 CMO Regulation, such measures are also possible in the wine sector, although the right to ask for these measures is in particular granted to interbranch organisations (that can have producers as members and in any event an interbranch organisation can only be legally formed if the production side forms part of the interbranch organisation).

Finally, under Article 160 CMO Regulation and in line with the principles established in the 'Endives judgment' (C-671/15 APVE),³⁹ POs and APOs in the FV sector can also market the products of their members, and they can take certain measures to prevent and manage crisis situations (Article 33 CMO Regulation).

The 'Endive judgement'

With regard to the 'Endive judgement' referred to above, the case concerned the predecessor to the current CMO Regulation, Regulation (EU) No 1234/2007.

The Court of Justice of the European Union clarified that practices *between* recognised POs or between recognised and non-recognised entities relating to the collective fixing of minimum sale prices, a concertation on quantities put on the market or exchanges of strategic information are subject to competition rules and notably to the prohibition of the agreements, decisions and concerted practices laid down in Article 101(1) TFEU.

Conversely, practices that relate to a concertation on prices or quantities put on the market or exchanges of strategic information *within* a recognised PO or a recognised APO may not fall under Article 101(1) TFEU if said practices are strictly necessary for the pursuit of one or more of the objectives assigned to the PO/APO concerned in accordance with EU legislation.

³⁹Judgment of the Court (Grand Chamber) of 14 November 2017 *Président de l'Autorité de la concurrence v Association des producteurs vendeurs d'endives (APVE) and Others*, C-671/15, ECLI:EU:C:2017:860

PART 3: INVENTORY OF RECOGNISED POS/APOS ACROSS EU COUNTRIES (THEME 1)

This chapter presents an inventory of recognised POs/APOs recognised⁴⁰ at Member State level in all CMO sectors.⁴¹

The inventory is based on the results of the 2017 Commission survey completed by an investigation aiming at filling the identified data gaps, when data was available, in the output deriving from said survey in all 28 Member States. The data collection methodology applied to fill the data gaps is presented in Part 1. All collected information was assessed and triangulated, resulting in the present inventory. Raw data have been inserted in an Excel database which is attached to this report.

Following discussions with the Commission services, the following cut-off dates for the inventory have been agreed:

- For FV, the cut-off date is end of 2016 as the latest FV annual reports available for all Member States are the ones from 2016 and the 2017 reports are not yet available.
- For all other sectors, the cut-off date is the date of submission of the latest lists of recognised POs/APOs by NCAs. In most cases, this cut-off date is mid-2017.

By means of graphs or charts allowing comparisons and descriptive texts, this inventory is presented below in three sub-chapters:

- General figures on recognised POs/APOs in the EU.
- Analysis of the production of recognised POs/APOs in the FV sector.
- Variety of functioning and activities of recognised POs/APOs across Member States.

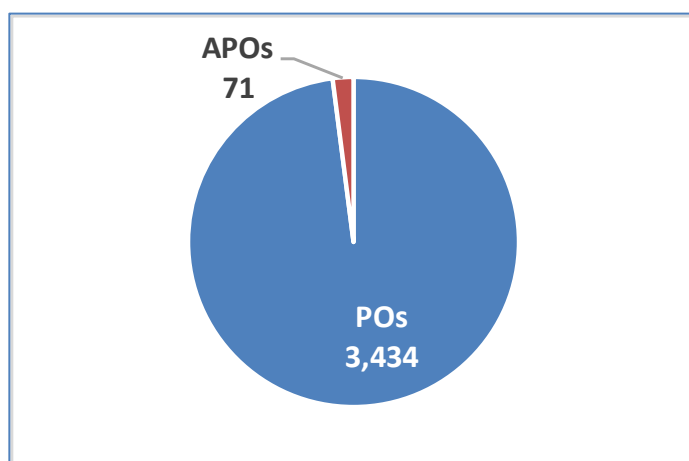
⁴⁰ According to Article 152 of Regulation (EU) No 1308/2013. PG which are recognised based on Article 27(2) of Regulation (EU) No 1305/2013 are NOT included in this inventory.

⁴¹ See Annex I of Regulation (EU) No 1308/2013 which lists products referred to in Article 1(2) of the Regulation.

3.1. General figures on recognised POs/APOs in the EU

The data collection led to the identification of 3,505 recognised POs/APOs in the EU of which 3,434 recognised POs and 71 recognised APOs (Figure 3).

Figure 3 - Number of recognised POs and APOs in the EU



Source: Compiled by AI based on 2017 EC survey

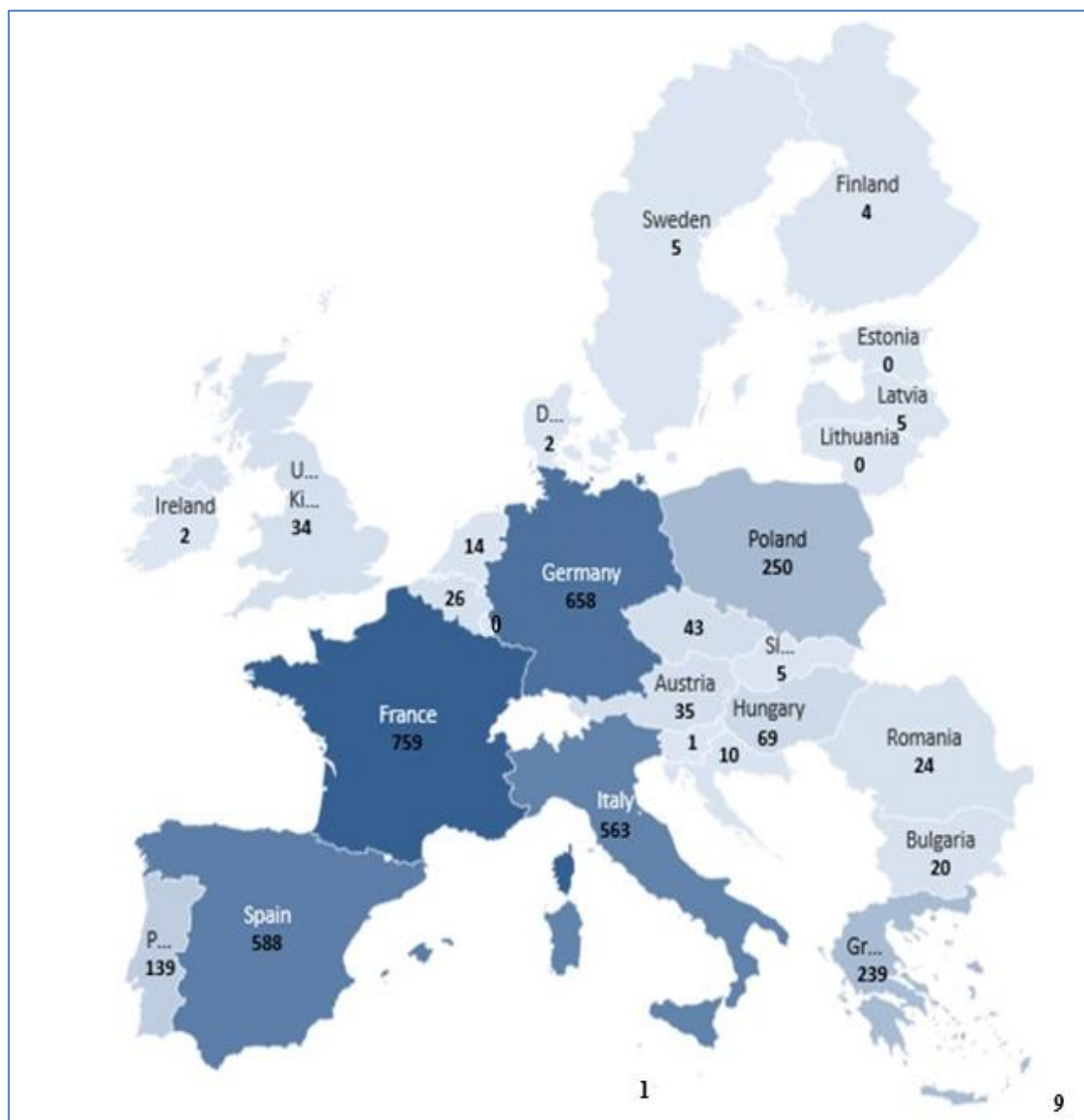
3.1.1. Total number of recognised POs/APOs per Member State

POs/APOs are recognised in a large majority of Member States (25) (Figure 4). EE, LT and LU are the only three Member States in which there is no recognised PO/APO in any of the CMO sectors. In these Member States, no request for recognition has been received to date by NCAs.

DE, ES and FR are the top three Member States in term of number of recognised entities. FR reported that 759 POs/APOs are currently recognised within its national territory. DE is the second ranking Member State for the number of entities with a total of 658 recognised POs/APOs, and ES is the third Member State with 588 recognised entities. Together, the number of recognised POs/APOs in the top three Member States amounts to 2007 (about 60% of the total number).

In addition to that, four Member States have recognised more than 100 entities on their territory (IT: 563, PL: 250, EL: 239, and PT: 139). The remaining 18 Member States (AT, BE, BG, CY, CZ, DK, FI, HR, HU, IE, LV, MT, NL, RO, SE, SL, SK, and the UK) have recognised less than 100 entities on their territory and, all together, recognised 309 POs/APOs. Recognised APOs are present in only five Member States (FR: 30, IT: 18, DE: 7, EL: 5, and ES: 7).

Figure 4 - Distribution of recognised POs/APOs per Member State



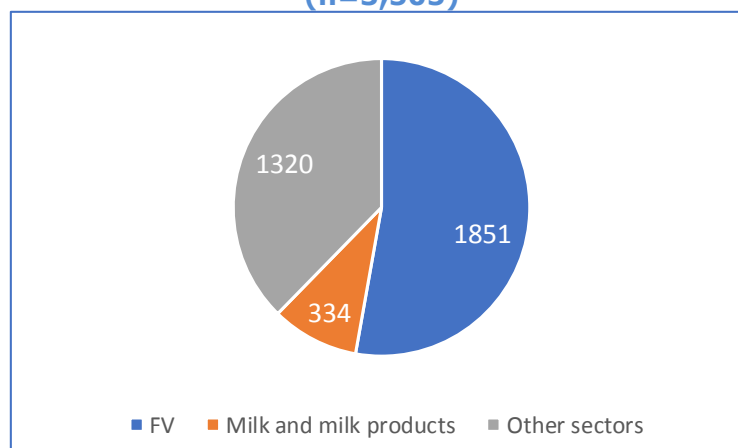
Source: Compiled by AI based on 2017 EC survey

3.1.2. Total number of recognised POs/APOs per sector

Recognised entities are present in 22 CMO sectors out of 24. No POs/APOs are currently recognised in the ethyl alcohol of agricultural origin and silkworms' sectors.

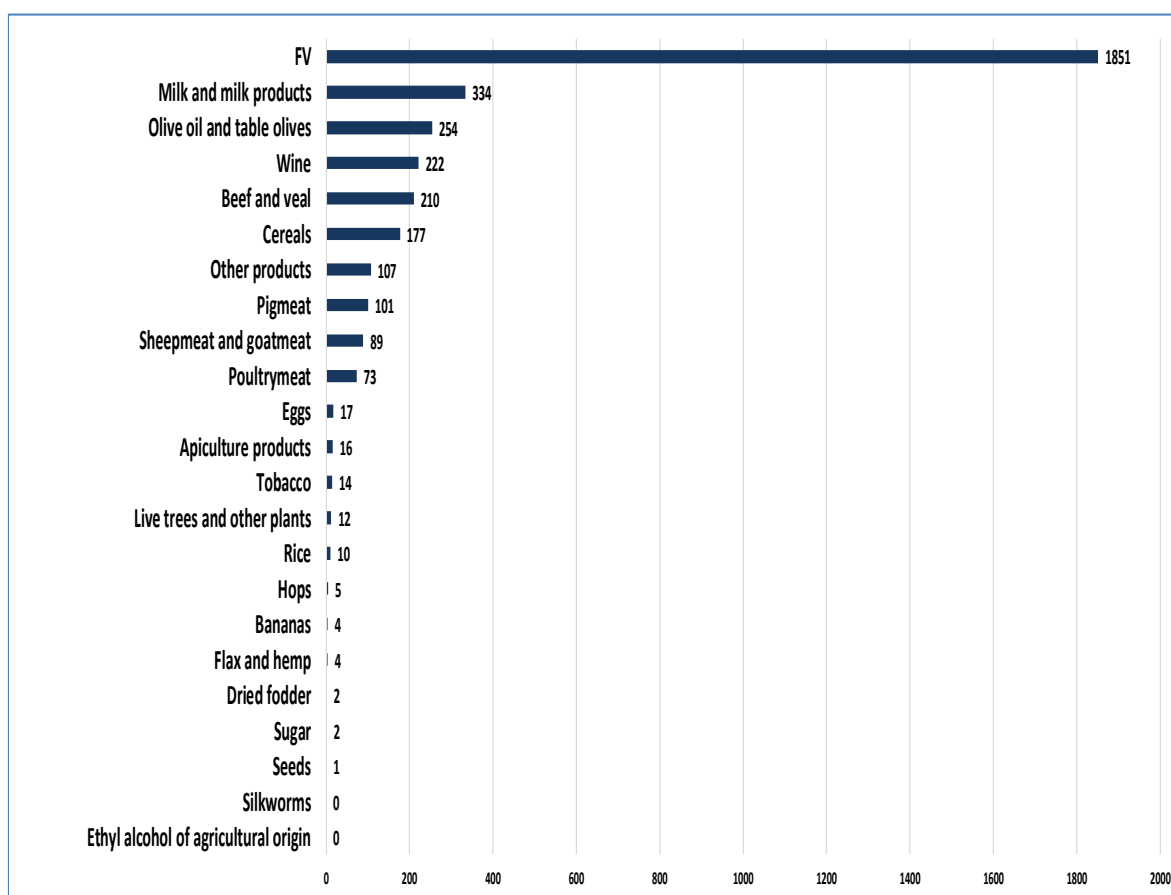
More than 50% of the recognised POs/APOs are in the FV sector (1,851). In addition, 334 other POs/APOs are recognised in the milk and milk product sector and 1,320 in the other 20 sectors (Figure 5).

Figure 5 - Distribution of recognised POs/APOs per group of sectors (n=3,505)



Source: Compiled by AI based on 2017 EC survey

Figure 6 - Distribution of recognised POs/APOs per sector (n=3,505)⁴²



Source: Compiled by AI based on 2017 EC survey

In addition to the 1,851 POs/APOs recognised in the FV sector, more than 100 recognised POs/APOs have been recognised in the following seven sectors: milk and milk products (334), olive oil and table olives (254), wine (222), beef and veal

⁴² The FV sector includes both fresh sector and the processed one

(210), cereals (177), other products (107), and pig meat (101). The sector 'other products' (according to Article 1(2) of the CMO) contains 107 recognised POs/APOs for a wide variety of products, the main being potatoes (46 entities) and rabbit-rearing (20 entities). A total of 249 entities are distributed in the remaining 12 sectors, mainly in the sheep & goat meat and the poultry meat sectors, 89 and 73 respectively (Figure 6).

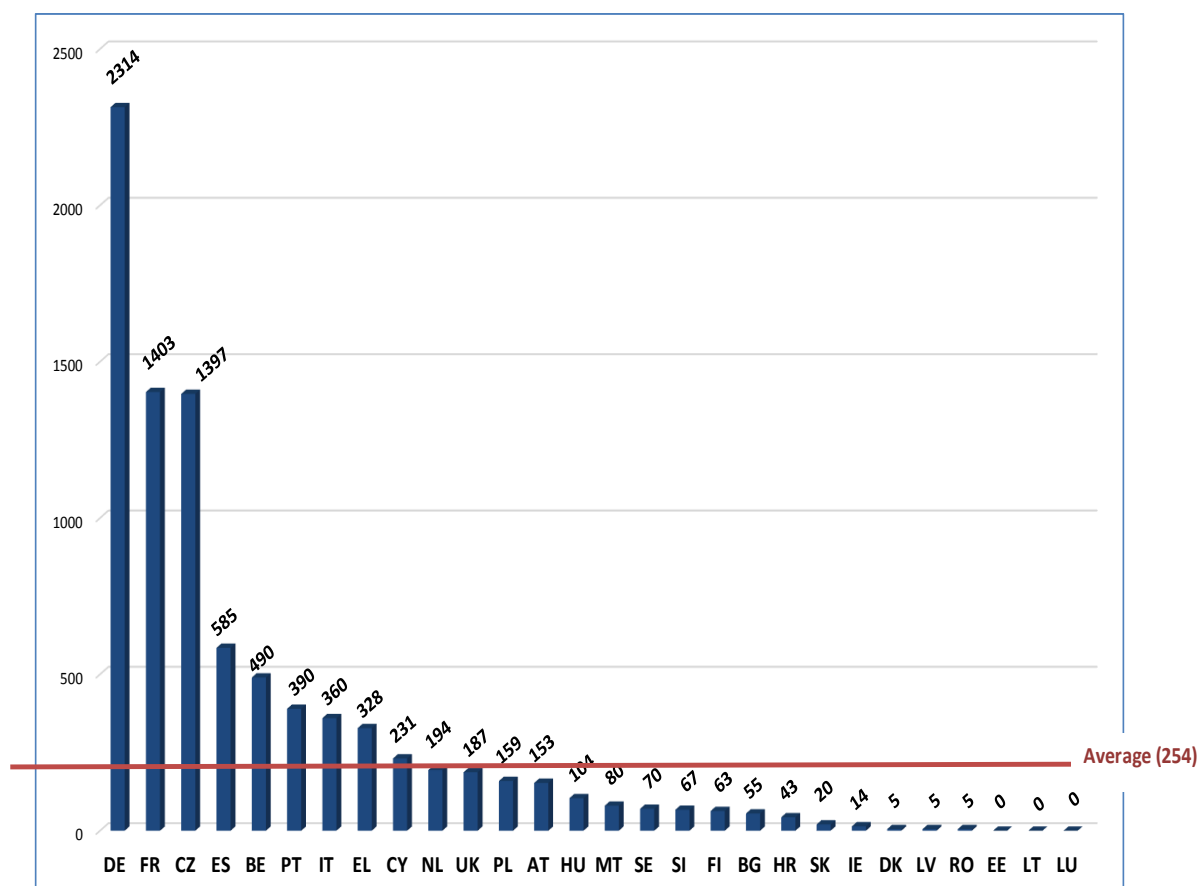
The total number of recognised entities is significantly higher in crop production than in animal production (only 500 entities when considering beef and veal, pig meat, sheep and goat meat, and poultry meat together). This can be explained by the large number of recognised entities in the FV sector (about 56%; this includes fresh and processed FV products - sectors IX and X of Annex I to CMO Regulation).

This analysis includes the specific cases of recognised POs in DE where several entities (33 in total) are recognised in several sectors (mainly meat production) and in several states. For these cases, we have listed the entity once and the sector reflects the main production within each entity.

3.1.3. Relative importance of recognised POs/APOs in the EU

The total number of recognised POs/APOs has been analysed in comparison to the total number of agricultural holdings per Member States in each of the 28 Member States.

Figure 7 - Relative frequency of recognised POs/APOs per holdings (1,000,000) in the EU (n=3,505)



Source: European Commission, 2018

The relative frequency of recognised POs/APOs is the highest in DE where 2,314 entities are recognised per million of holdings. This frequency is, also, relatively high in CZ and FR (1,402 and 1,397 recognised entities per million holdings, respectively). For all other Member States, this frequency is lower than 600. The frequency average is estimated at 254 (Figure 7).

3.1.4. Total number of recognised POs/APOs per Member State and per sector

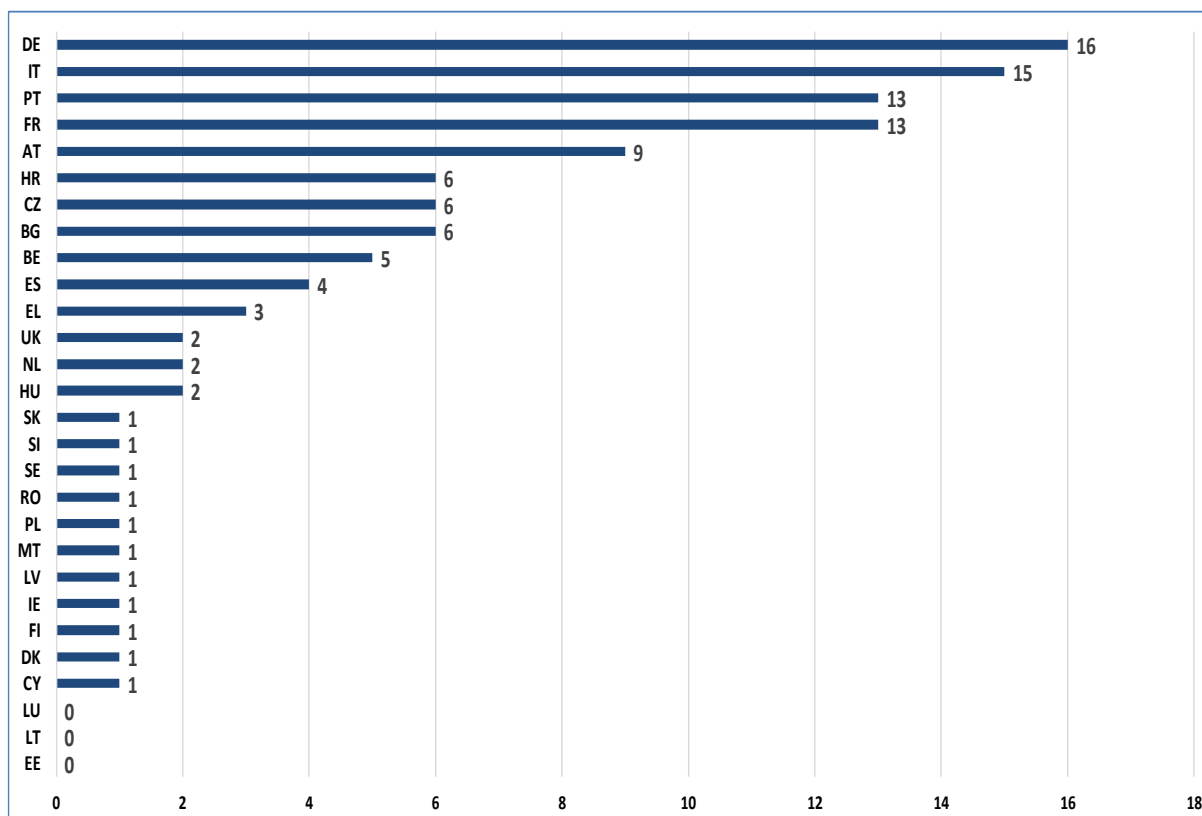
The breakdown per Member State and per sector is presented in Table 5 and Figure 8 on next pages.

Table 5 - Total number of recognised POs/APOs per Member State and per sector (n=3,505)

| Sector | AT | BE | BG | CY | CZ | DE | DK | EE | EL | ES | FI | FR | HR | HU | IE | IT | LT | LU | LV | MT | NL | PL | PT | RO | SE | SI | SK | UK | Total |
|--------------------------------------|-----------|-----------|-----------|----------|-----------|------------|----------|----------|------------|------------|----------|------------|-----------|-----------|----------|------------|----------|----------|----------|----------|-----------|------------|------------|-----------|----------|----------|----------|-----------|-------------|
| Cereals | 6 | | 3 | | | 143 | | | | | | | 1 | | | 9 | | | | | | | 15 | | | | | | 177 |
| Rice | | | | | | | | | | | | | | | | 1 | | | | | | | 9 | | | | | | 10 |
| Sugar | | | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | 2 |
| Dried fodder | | | | | | 1 | | | | | | | | | | 1 | | | | | | | | | | | | | 2 |
| Seeds | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hops | | | | | | 2 | | | | 1 | | 2 | | | | | | | | | | | | | | | | | 5 |
| Olive oil and table olives | | | | | | | | | 98 | | | | | | | 151 | | | | | | | 5 | | | | | | 254 |
| Flax and hemp | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | 4 |
| FV | 10 | 19 | 11 | 9 | 22 | 31 | 2 | | 140 | 574 | 4 | 259 | 3 | 64 | 2 | 304 | | | 5 | | 13 | 250 | 63 | 24 | 5 | | 5 | 32 | 1851 |
| Bananas | | | | | | | | | | | | 2 | | | | | | | | | | | 2 | | | | | | 4 |
| Wine | 1 | | 1 | | | 105 | | | | | | 104 | | | | 4 | | | | 1 | | | 6 | | | | | | 222 |
| Live trees and other plants | | | | | | 10 | | | | | | 0 | | | | 1 | | | | | | 1 | | | | | | | 12 |
| Tobacco | | | | | | 3 | | | | 2 | | 2 | | | | 7 | | | | | | | | | | | | | 14 |
| Beef and veal | 8 | | | | 1 | 45 | | | | | | 134 | 1 | | | 8 | | | | | | | 13 | | | | | | 210 |
| Pig meat | 4 | 1 | | | 1 | 52 | | | | | | 33 | 1 | | | 3 | | | | | 1 | | 5 | | | | | | 101 |
| Milk and milk products | | 4 | 2 | | 17 | 163 | | | 1 | 11 | | 71 | 3 | 5 | | 49 | | | | | | | 5 | | | 1 | | 2 | 334 |
| Sheep meat and goat meat | 2 | | | | | 12 | | | | | | 66 | | | | | | | | | | | 9 | | | | | | 89 |
| Eggs | 1 | 1 | | | 1 | 3 | | | | | | 11 | | | | | | | | | | | | | | | | | 17 |
| Poultry meat | 1 | | | | | 25 | | | | | | 44 | | | | 3 | | | | | | | | | | | | | 73 |
| Ethyl alcohol of agricultural origin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| Apiculture products | | | 2 | | | 4 | | | | | | | 1 | | | 4 | | | | | | | 5 | | | | | | 16 |
| Silkworms | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| Other products | 2 | 1 | | | 1 | 58 | | | | | | 27 | | | | 17 | | | | | | | 1 | | | | | | 107 |
| Total | 35 | 26 | 20 | 9 | 43 | 658 | 2 | 0 | 239 | 588 | 4 | 759 | 10 | 69 | 2 | 563 | 0 | 0 | 5 | 1 | 14 | 250 | 139 | 24 | 5 | 1 | 5 | 34 | 3505 |

Source: Compiled by AI based on EC 2017 survey

Figure 8 - Number of sectors in which POs/APOs are recognised per Member State (n=3,505)



Source: Compiled by AI based on EC 2017 survey

The analysis of the distribution of recognised POs/APOs per sector and per Member State shows different patterns. Four main groups of Member States are observed:

- Member States (four) where POs/APOs have been recognised in a large number of sectors (>10). This group includes DE, IT, FR, and PT. IT and DE are the Member States in which there is the largest variability of recognised POs/APOs as regards the sectorial coverage (16 sectors in DE and 15 sectors in IT in which POs/APOs are recognised).
- Member States (eight) where POs/APOs have been recognised in a lower number of sectors (between three and nine). This group includes AT, HR, CZ, BG, BE, ES, ES, and EL.
- Member States (13) where POs/APOs have been recognised in less than three sectors. In HU, NL and the UK, POs/APOs are recognised in only two sectors (FV for the three Member States; and milk for both HU and the UK and pig meat for the NL). In eight other Member States, POs/APOs are recognised in the FV sector, only (CY, FI, IE, LV, PL, SK, SE, RO). Finally, in SL and MT, entities have been recognised in a single sector, respectively in milk and wine.
- Three Member States (EE, LT, and LU) in which there is no recognised POs/APOs.

As already mentioned, the top-three sectors in which POs/APOs are recognised are the FV sector (1851 recognised entities), the milk and milk products sector (334) and the olive and olive oil sector (254).

In the FV sector, 23 Member States have recognised POs/APOs (not in EE, LT, LU, MT and SL). About 27% of the total number of recognitions in that sector have been granted in ES. FR, IT and PL are the three other Members States in which a large number of entities (> 250) have been recognised to date.

In the milk and milk product sector, about 50% of the recognised POs/APOs are in DE (163 out of a total of 334). The other main contributors are FR and IT in which 71 and 49 entities are recognised, respectively. The other 10 Member States group 51 recognised POs/APOs (BE: 4, BG: 2, CY: 17, EL: 1, ES: 11, HR: 3, HU: 5, PT: 5, SL: 1, UK: 2).

POs/APOS have been recognised in only three Member States for the olive and olive oil sector (IT: 151, EL: 98, and PT: 5).

The large majority of the recognised POs in the wine sector covered by the inventory are located in DE and FR while other large producing countries (IT, PT have proportionally less recognised POs (IT: 4) or no recognised PO at all (ES).

When analysing in deeper details the number of recognised POs in certain Member States, the following findings are of interest:

- Thirteen out of 14 POs/APOs recognised in the NL are for the FV sector. Large Dutch economic sectors such as the ornamental sector are not organised through POs/APOs.
- IT allows recognition of POs/APOs under national legislation for certain sectors that are currently not listed under Article 1(2) Regulation (EU) No 1308/2013 to that effect (e.g. organics, agri-energy and officinal plants). Similarly, in FR, POs (12) are recognised in the forestry sector. These POs/APOs are not included in this inventory.
- In PL, all recognised entities are in the FV sector. A high number of POs/APOs have been recognised in that sector (250 in total) and none in all other sectors.
- DK is not a Member States where recognition is largely used as only two entities have been recognition in the FV sector.

There is less than 10 recognised POs/APOs in each of the following sectors (sugar: 2, dried fodder: 2, seeds: 1, hop: 5, flax and hemp: 4, banana: 4). In addition, there is no recognised entities the ethyl alcohol of agricultural origin and silkworm sectors.

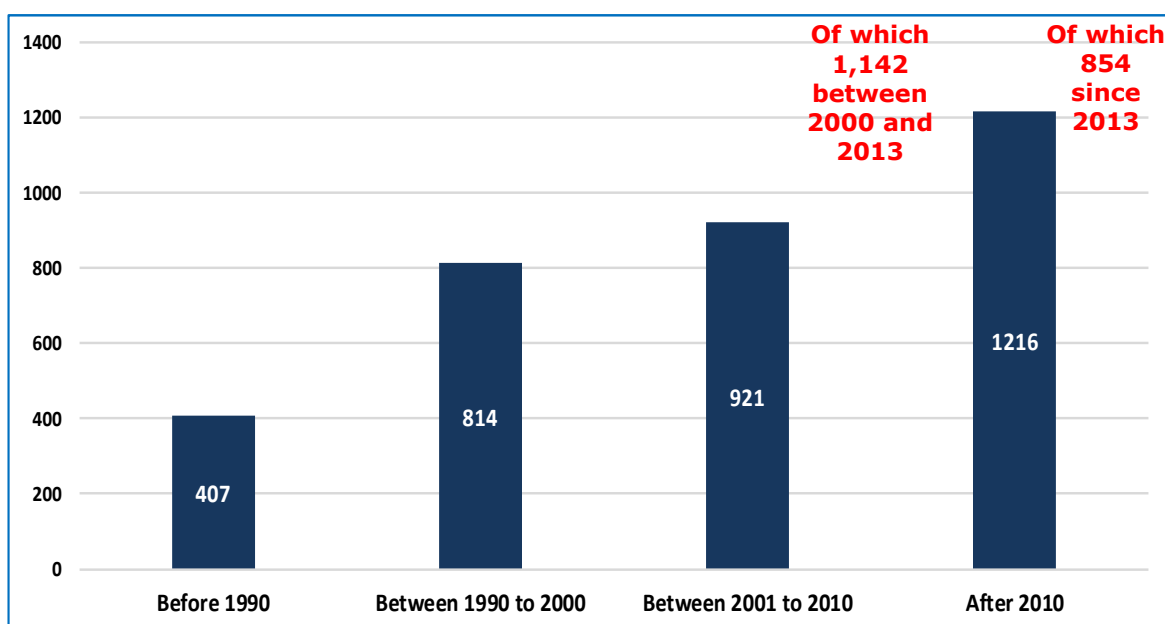
One could argue that this pattern illustrates the diversity of the agricultural sector in each Member State. However, despite a large diversity of production, in terms of crop and animal production, the number of sectors in which POs/APOs are recognised is rather low in ES (only four sectors in which POs/APOs are recognised) and the NL (only two sectors). This tends to demonstrate that the decision to request recognition is rather supply food chain specific and depends on how each food supply chain is structured in the Member State. For example, there is no recognised POs/APOs in the

beef sector in FR as the sector was already structured through strong cooperatives (horizontal cooperation) as POs.

3.1.5. Distribution of recognised POs/APOs per date of recognition

The total number of recognised POs/APOs has continued to grow since the 1990s and especially during the period 2000-2013 (by 1,142 entities in 13 years). The number of POs/APOs recognised since 2013 until the cut-off date of the present study (854) represents about 25% of the total number of recognised POs/APOs during a period of only four years (Figure 9 and 10).

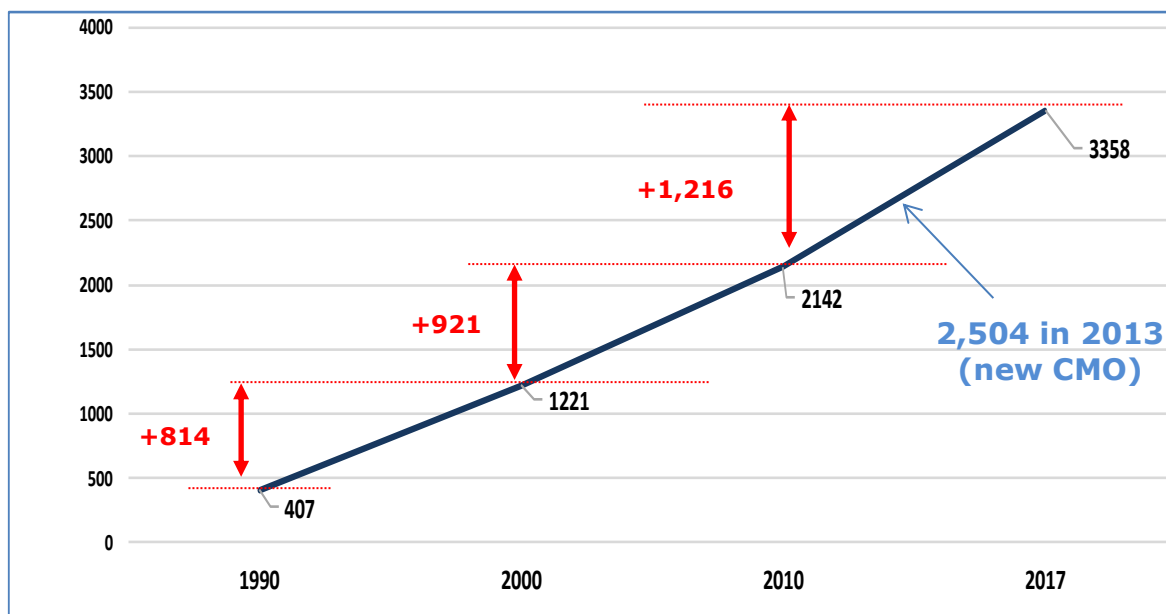
Figure 9 - Number of recognitions of POs/APOs by spaces of time (n=3,358)⁴³



Source: Compiled by AI based on EC 2017 survey

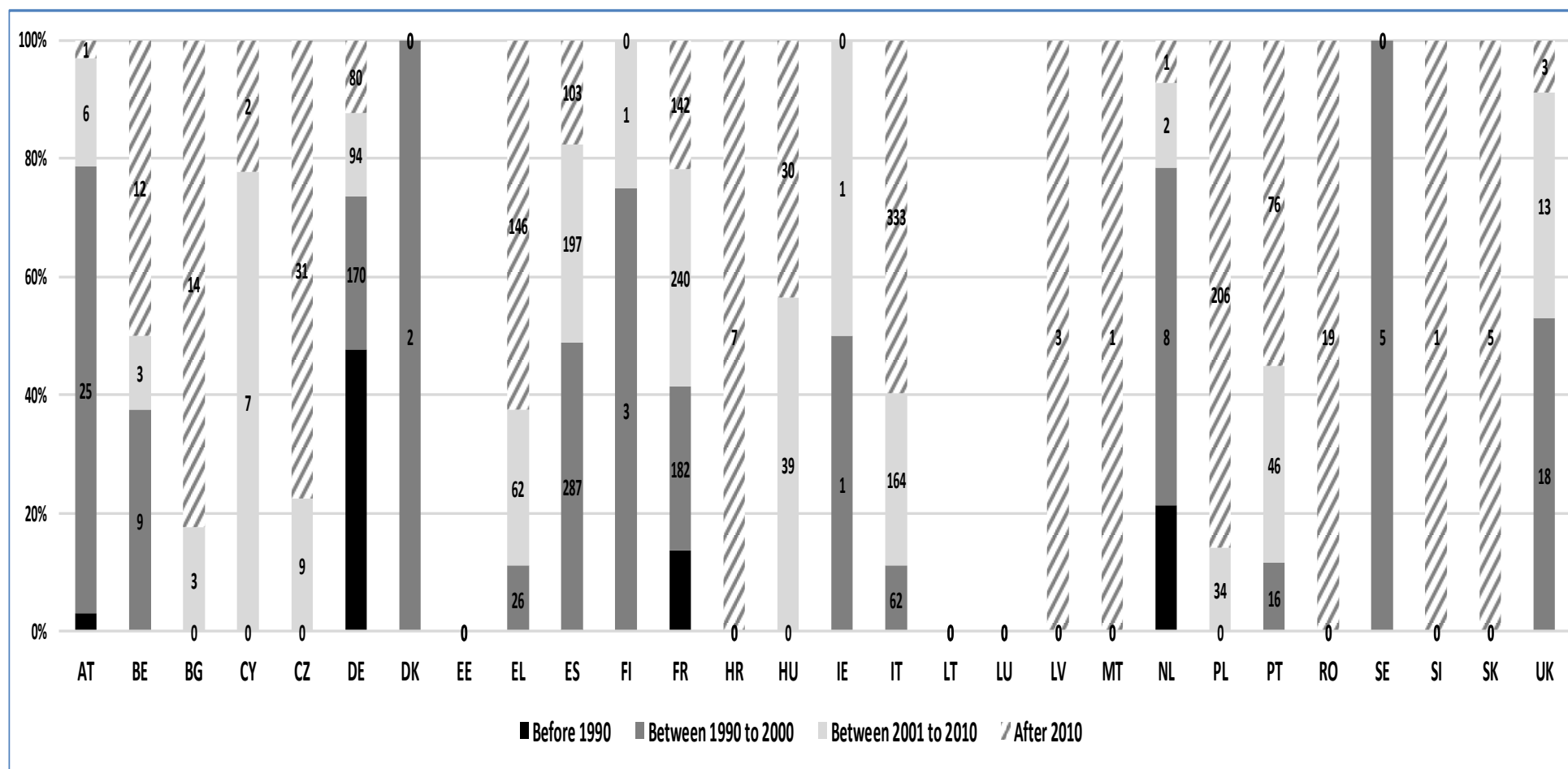
⁴³ Data not available for the French POs/APOs (104) and for 39 other entities

Figure 10 - Evolution of the number of recognitions of POs/APOs (n=3,358)



Source: Compiled by AI based on EC 2017 survey

Figure 11 – Date of recognition of POs/APOs per Member State (n=3,358)



Source: Compiled by AI based on EC 2017 survey

The breakdown per Member State above shows that FR and DE have been the first two Member States to recognise POs and APOs before 1990. In DE, about 50% of the entities (313 out of 658) have been granted recognition before 1990. AT, ES and the NL, also, started to recognise their first entities at an early stage (Figure 11).

During the period 1990-2000, the five above-mentioned Member States continued to grant recognition (AT recognising about 25 additional POs/APOs during that period, DE: 170, ES: 287, FR: 182, NL: 8). Nine other Member States (BE: 9, DK: 2, EL: 26, FI: 3, IE: 1, IT: 62, PT: 16, SE: 5, and the UK: 18) started granting recognition to POs/APOs.

Over the period 2001 to entry into force of the new CMO (2013), an additional nine Member States (BG: 4, CY: 9, CZ: 19, HU: 47, LV: 2, PL: 99, RO: 2, SL: 1, and SK: 1) started to recognise POs/APOs on their territory. Finally, HR and MT initiated recognition after 2013 with respectively seven and one recognitions over that period.

3.1.6. Distribution of recognised POs/APOs per geographic coverage

This issue of geographic coverage rises several questions. Based on discussions with competent authorities, the concept of 'regional' versus 'national' POs/APOs appears not always that clear-cut.

Firstly, it seems that no national law restricts the geographic perimeter for being member of a given recognised PO/APO. There are also cases in which national law provides criteria to determine the regional competent administration for granting recognition in cases farmers are located in different regions. For example, producers located in southern IT could in principle ask to members of a PO located in northern IT if they consider that such type of membership will be of added value for them. Generally, recognised POs/APOs follow the geographic pattern of the production zone; however, nothing stops a given PO from producing in southern IT and processing in another region, which e.g. is closer to the marketing area.

Secondly, in some Member States recognition is granted at regional level (BE, ES, DE, and IT) by regional authorities. If existing or new members of the POs are located outside the region, these entities remain 'regional'. This is, for example, the case in BE where Dutch farmers are members of regional POs. An exception to this rule has been observed in ES: when new members are not located in the region in which recognition has been granted; then, the required administrative tasks (e.g. for keeping recognition, control, etc.) is being performed by national authorities and not, any longer, by regional ones. There is a transfer of responsibilities from the region to the national authorities.

Finally, several recognised POs/APOs are registered in Member States capitals or regional capitals as their managers want to be close to administration and decision makers. Therefore, the localisation of the legal entity doesn't provide any information as regards the localisation of the recognised PO/APO.

However, three major exceptions have been identified:

- In FR, 16 POs in the FV sector have been granted a national recognition. This recognition allows them to have their contracts and agreements to all other

producers of the same crops all over the country extended by the Member State (extension of rules according to Article 164 CMO Regulation). Only these entities which have been granted national recognition can ask for extension.

- In BE, non-Belgian farmers can be members of Belgian FV POs/APOs. These are mainly originating from the NL and to a less extent from DE and FR.
- One transnational APO is recognised in BE under the name of FRESHCOOP in the FV sector. This APO groups the French APO CERAFEL and its three POs and the Belgian APO LAVA with three POs too. FRESHCOOP has been created in December 2012 with the objective to work on market transparency and information exchange between the two production areas. A second initial objective was to develop transnational operational programmes and to extent the partnership to other actors in the NL and in ES.

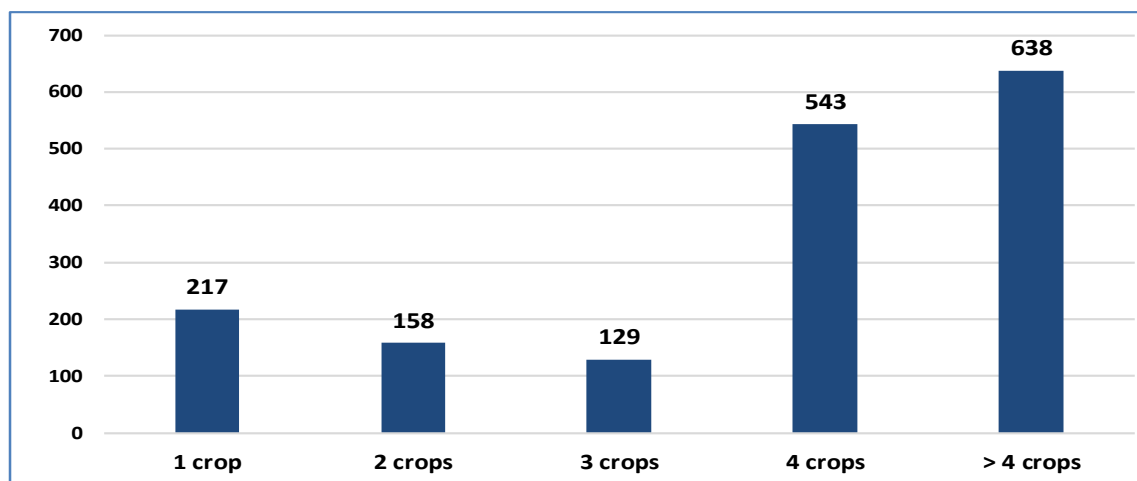
3.2. Analysis of the production of recognised POs/APOs in the FV sector

Information included in the FV annual reports allow us to extract additional interesting information on the structure of the recognised POs/APOs in the FV sector which is hereafter presented.

3.2.1. Analysis of the main crops produced/marketed by recognised POs/APOs in the FV sector: degree of diversification of the production

The large majority of recognised FV POs/APOs (1,181) are producing and marketing more than three crops, whereas only 217 POs/APOs are producing only one crop (Figure 12).

Figure 12 - Diversity of production of recognised POs/APOs in the FV sector (n=1,685)⁴⁴



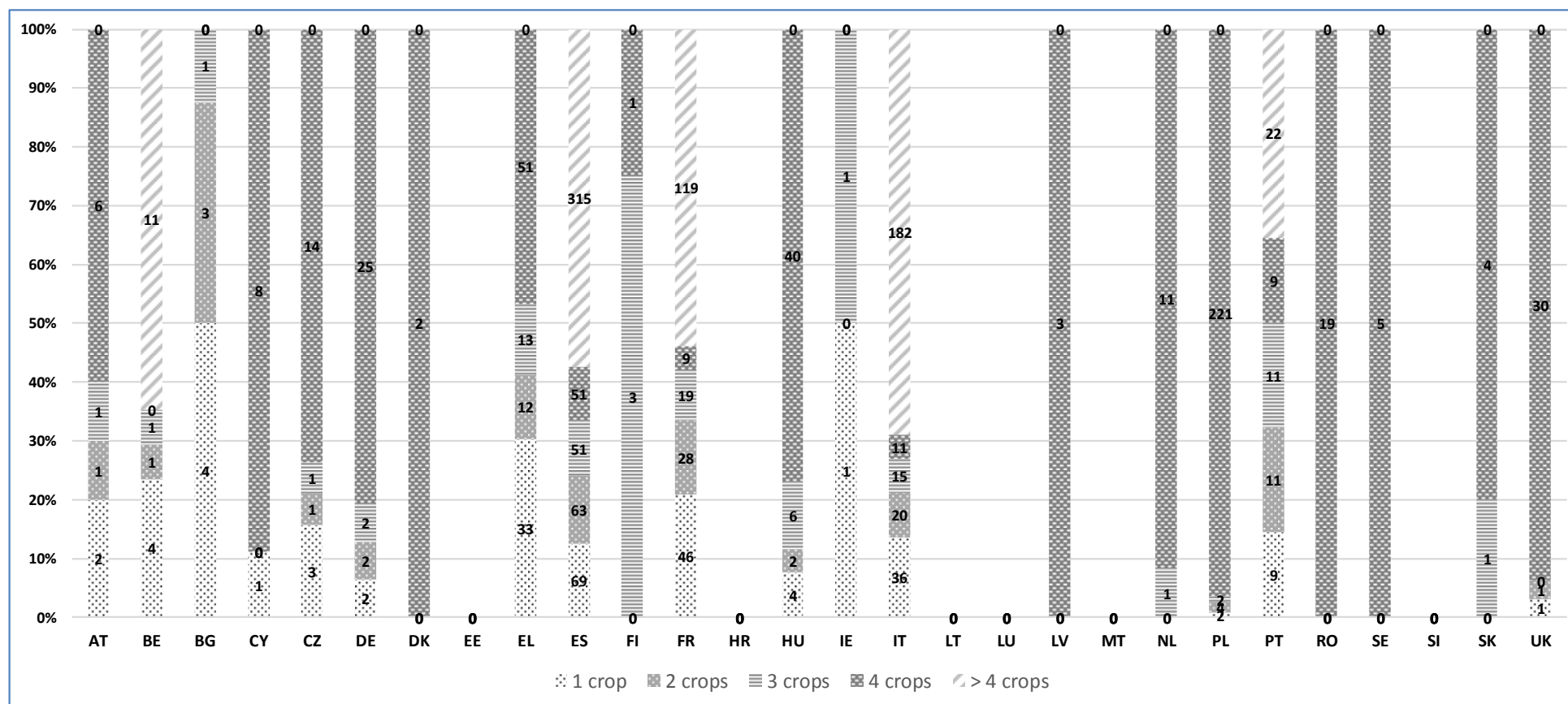
Source: Compiled by AI based on EC 2017 survey and FV 2016 annual report

The pattern (Figure 13) shows a large variability across Member States. In ES, FR and IT, the four categories are present with about the same frequency. In DE and HU only,

⁴⁴ Data not available for 166 POs/APOs.

multi-crop POs/APOs (i.e. more than four FV categories) are recognised. In BG, EL and IE, about 50% of the recognised FV are producing only one crop.

Figure 13 - Diversity of production of recognised POs/APOs for the FV sector per Member State (n=1,685)

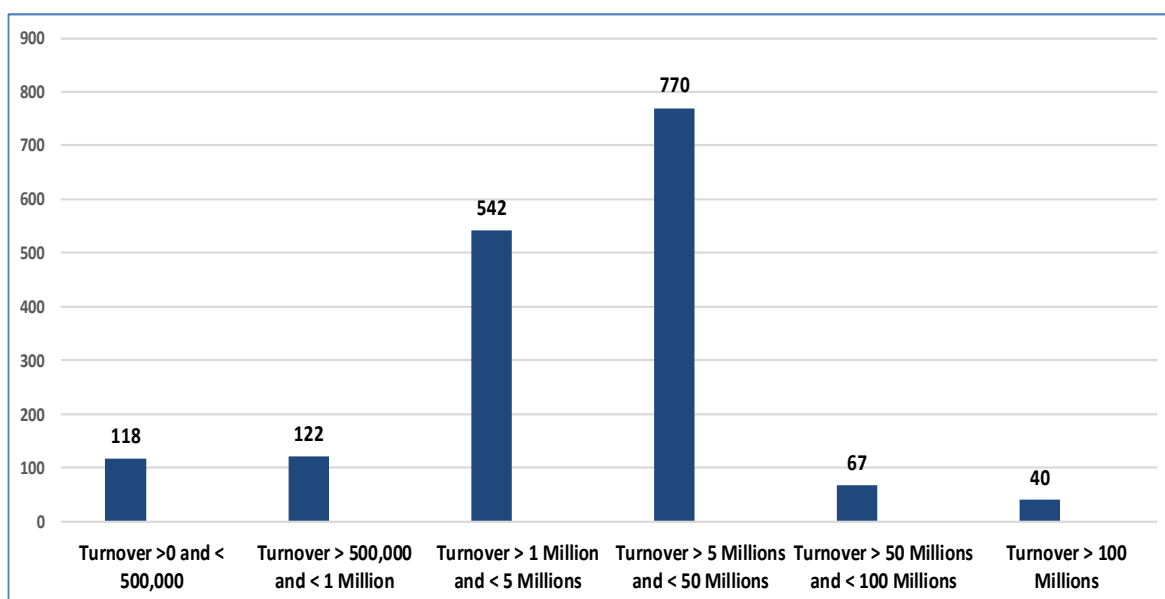


Source: Compiled by AI based on EC 2017 survey and FV 2016 annual report

3.2.2. Total value of the marketed production for POS/APOs

Respondents to the 2017 EC survey were requested to provide information related to the turn-over or/and volume of production for each recognised PO and APO. Information that has been provided can hardly be aggregated to draw conclusions as several different units have been used for this purpose (litres, tons, number of eggs, euros, etc.). The FV annual reports contain most of the values of the marketed production for each recognised FV POs/APOs. Therefore, we limit our analysis of the FV sector against this criterion.

Figure 14 - Distribution of value of turn-over per recognised PO/APO in the FV sector (in Euro) (n=1,659)⁴⁵



Source: Compiled by AI based on EC 2017 survey and FV 2016 annual report

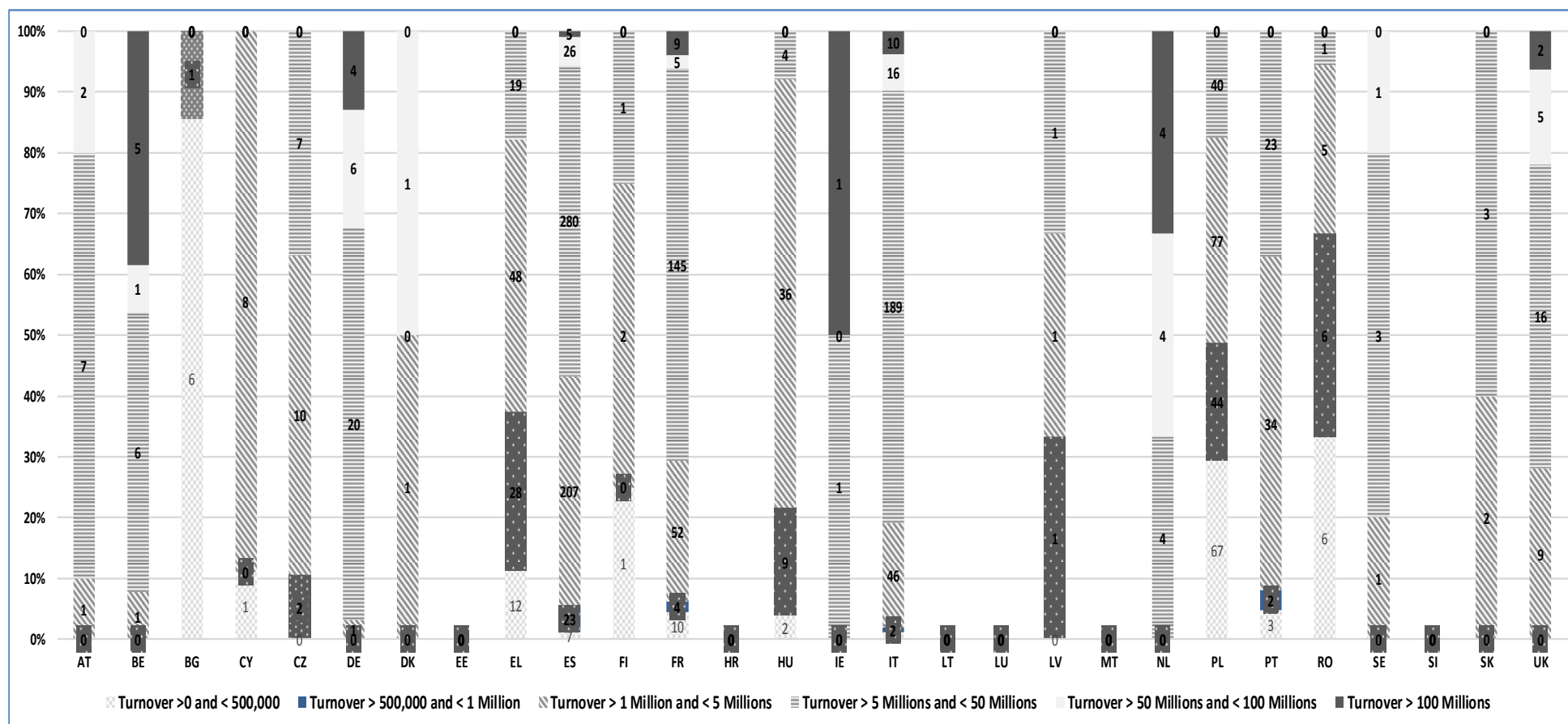
The large majority (80%) of recognised POs/APOs in the FV sector (1,312) have an annual marketed production of a value which ranges from EUR 1 and 50 million of which 40% (542) with a value of the marketed production that is less than EUR 5 million (Figure 14).

A total of 40 POs/APOs reports having marketed production of a value larger than EUR 100 million per year (IT: 10, FR: 9, BE: 5, ES: 5, DE: 4, HU: 4, IE: 1 NL: 4, and UK: 2).

(Figure 15).

⁴⁵ Data not available for 192 POs/APOs.

Figure 15 - Distribution of value of marketed production per recognised PO/APO in the FV sector per Member State (n=1,659)



Source: Compiled by AI based on EC 2017 survey and FV 2016 annual report

240 POs/APOs have an annual turnover lower than EUR 1 million with about 60% of these (111) located in PL. Others are in BG (7), CY (1), CZ (2), EL (40), ES (30), FI (1), FR (14), HU (11), IT (5), LV (1), PT (5), and RO (12).

3.2.3. Relative value of the marketed production for POs/APOs

The overall contribution of POs/APOs to the overall national FV output value has been estimated taking into consideration based on 2016 Eurostat data and data available in the 2016 FV annual reports.

The following results have to be considered carefully for the following reasons:

- About 10% of data related to POs/APOs turnover are missing in the 2016 FV annual report. In our simulation in the next table, overall turnover per Member States has been increased by 10% to reflect this lack of complete data set.
- Unreliable data have been observed for two Member States. For example, based on our estimation, in BE the overall turnover of POs/APOs in the FV sector is 60% higher than the overall output of the sector based on Eurostat figures. Data from BG, HR, MT, and SL have also been excluded from the estimation.
- Eurostat data relate only to the fresh sector and doesn't include turnovers of the canning or freezing industries when data presenting in the FV annual reports may include turnover of such activities.

Taking into consideration these limits, the following statistics have been compiled.

Table 6 - Relative economic importance of recognised POs/APOs in the FV sector

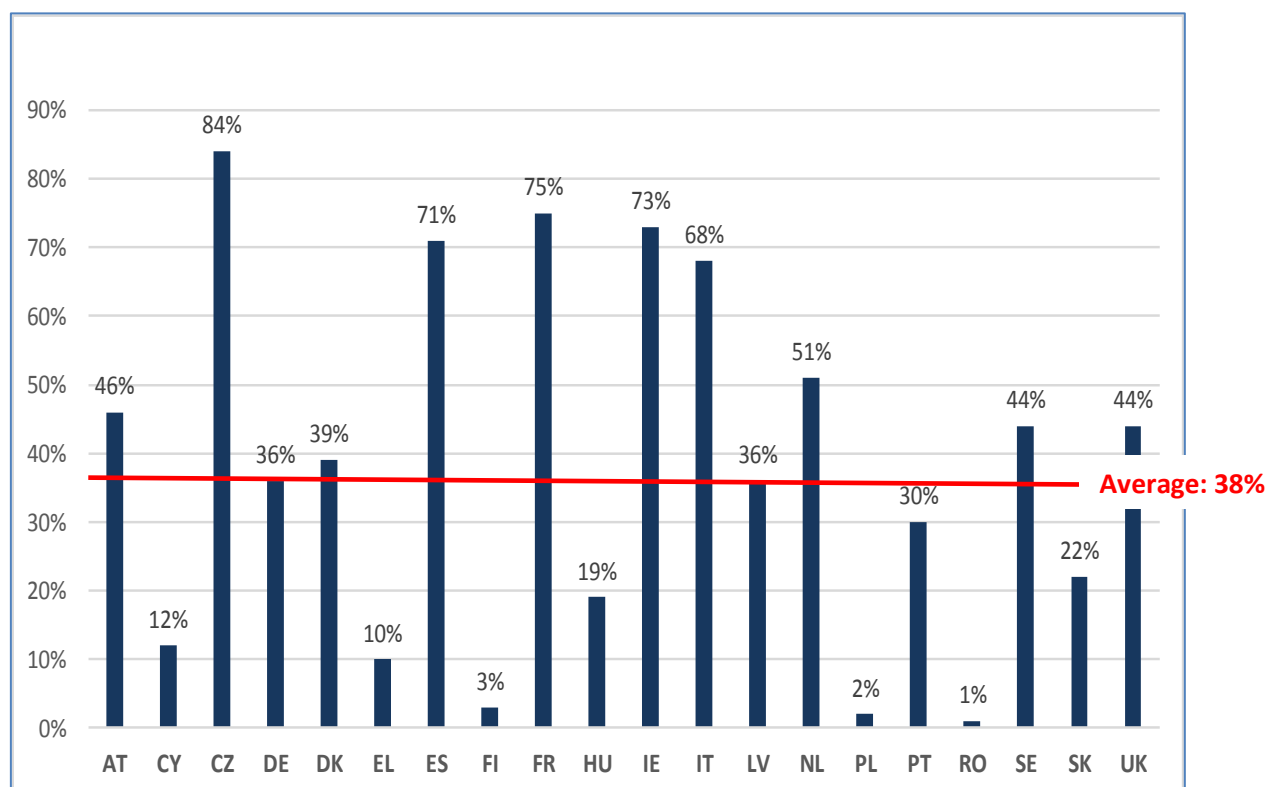
| Member State | Overall added value of the fresh vegetable and fruit market (in million EUR) | Estimated overall added value of the recognised POs/APOs in the FV sector (in million EUR) | Relative economic importance of recognised POs/APOs in the FV sector (in %) |
|--------------|---|---|--|
| AT | 465 | 214 | 46% |
| CY | 195 | 23 | 12% |
| CZ | 114 | 96 | 84% |
| DE | 3,970 | 1,439 | 36% |
| DK | 234 | 92 | 39% |
| EE | 21 | | |
| EL | 3,193 | 304 | 10% |
| ES | 11,186 | 7,980 | 71% |
| FI | 435 | 13 | 3% |
| FR | 5,629 | 4,248 | 75% |
| HU | 770 | 147 | 19% |
| IE | 277 | 202 | 73% |

| Member State | Overall added value of the fresh vegetable and fruit market (in million EUR) | Estimated overall added value of the recognised POs/APOs in the FV sector (in million EUR) | Relative economic importance of recognised POs/APOs in the FV sector (in %) |
|--------------|---|---|--|
| IT | 10,131 | 6,934 | 68% |
| LT | 89 | | |
| LU | 6 | | |
| LV | 55 | 20 | 36% |
| NL | 3,005 | 1,541 | 51% |
| PL | 33,347 | 635 | 2% |
| PT | 1,337 | 401 | 30% |
| RO | 2,942 | 29 | 1% |
| SE | 323 | 142 | 44% |
| SK | 156 | 34 | 22% |
| UK | 2,264 | 1,000 | 44% |

Source: Compiled by AI based on FV 2016 annual report and Eurostat

This estimation leads to an average level of recognised POs/APOs standing at 38% for the 20 Member States included in the analysis (Figure 16).

Figure 16 - Relative economic importance of recognised POs/APOs in the FV sector (in %)



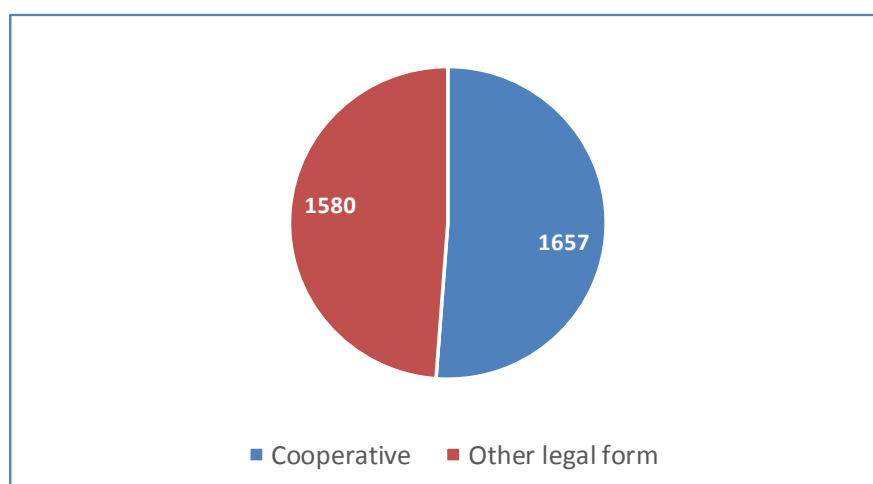
Source: Compiled by AI based on FV 2016 annual report and Eurostat

3.3. Variety of functioning and activities of recognised POs/APOs across Member States

3.3.1. Distribution of the legal forms of recognised POs/APOs.

About 50% of POs/APOs currently recognised in the EU are cooperatives (Figure 17).

Figure 17 - Distribution of the legal forms of recognised POs/APOs (n=3,237)⁴⁶



Source: Compiled by AI based on 2017 EC survey

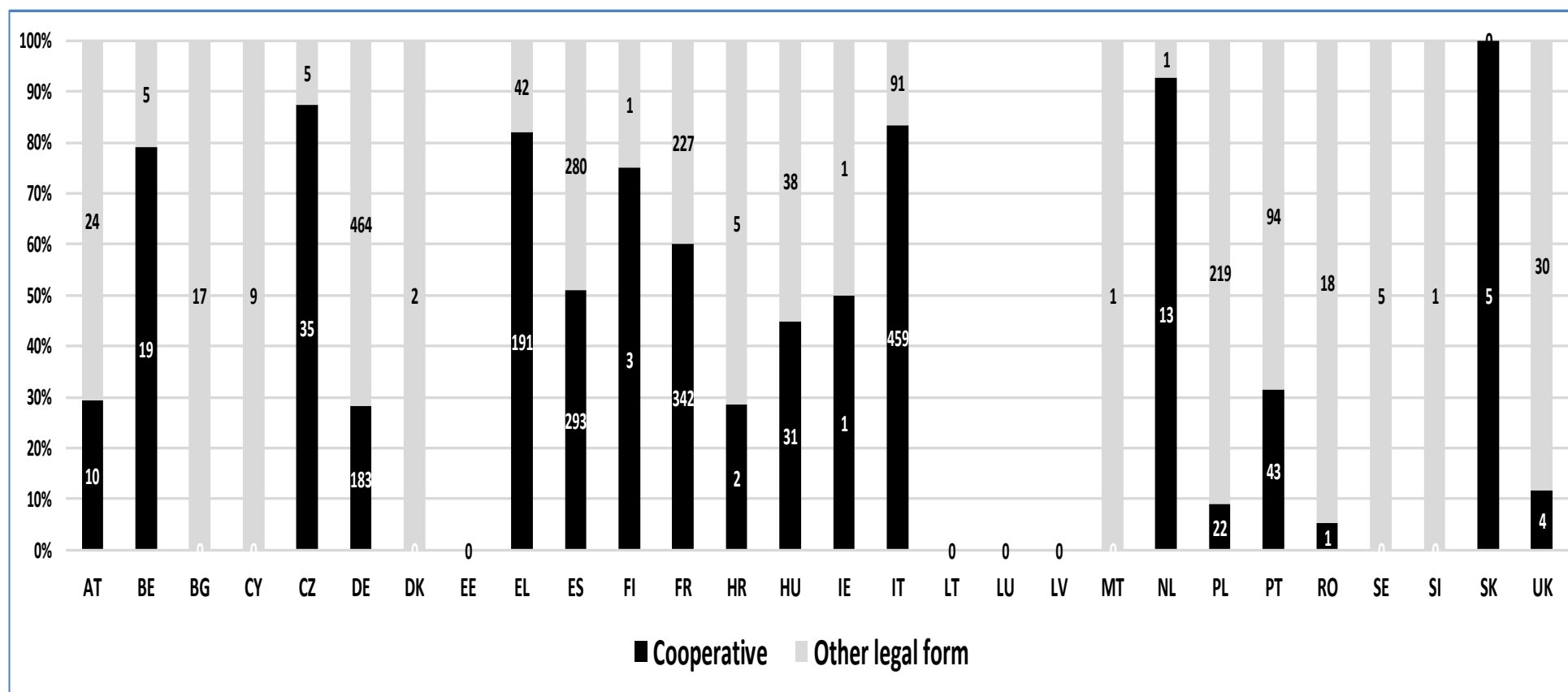
The breakdown per Member State (Figure 18) clearly identified three groups of countries:⁴⁷

- Member states (six) in which the large majority of recognised entities (in %) are cooperatives. This group includes BE; CZ, EL, IT, the NL, and SK.
- Member States (12) in which the large majority of recognised entities (in %) are NOT cooperatives (AT, BG, CY, DE, DK, HR, MT, PL, PT, RO, SE, SL, and the UK).
- Member States (six) in which recognised entities have mixed legal forms (cooperatives vs non-cooperatives (FI with 75% of cooperatives, FR: 60%, ES: 50%, HU and IE: 45%).

⁴⁶ Data not available for 268 POs/APOs of which 140 wines POs/APOs in FR

⁴⁷ Data not available for LV

Figure 18 - Distribution of the legal forms of recognised POs/APOs per Member States (n=3,237)



Source: Compiled by AI based on 2017 EC survey (data not available for LV)

The survey shows that a large variety of '*other legal forms*' exists, and many different legal forms are used for facilitating horizontal cooperation amongst farmers. The main legal forms are described in general terms under Part 2.

The 1,580 entities that do not have the legal status of a cooperative can be part of a cooperative without being a cooperative themselves. About 40% of these entities are in the situation where they do not have the legal form of a cooperative, but they are part of a cooperative. When analysing the breakdown of this data series per Member State, some inconsistencies in the responses could be observed. Therefore, this statistic must be considered carefully.

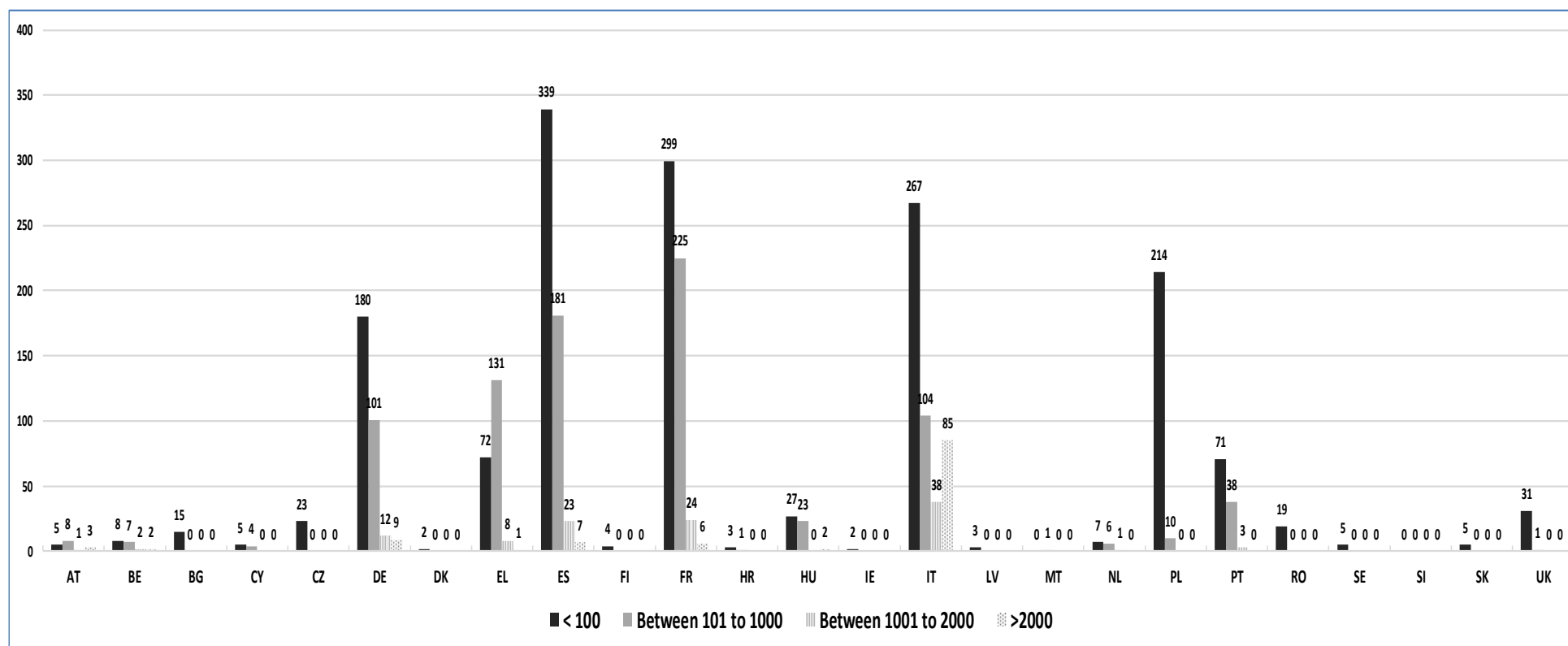
3.3.2. Number of members

The analysis of the number of members per recognised PO/APO shows that, in 38% of cases (1,327 out of 3,505), the number of members per PO/APO is lower than 100. In addition; about 90% of entities have less than 1,000 members.

Figure 19 shows that:

- In EL, the size of POs is generally between 100 and 1,000 farmers (83 entities out of 93).
- On an average, the number of members in French POs seems to be slightly higher than in other countries such as ES, IT and DE.
- Polish and Romanian POs have less members than most other countries. The 250 FV recognised POs/APOs in PL are very small in terms of numbers of members.
- The Italian situation stands out in that IT has many POs with a large membership: about 25% of POs have more than 2,000 members each.

Figure 19 – Number of members per recognised PO/APO per Member State (n=3,505)



Source: Compiled by AI based on 2017 EC survey

3.3.3. Objectives of the POs/APOs

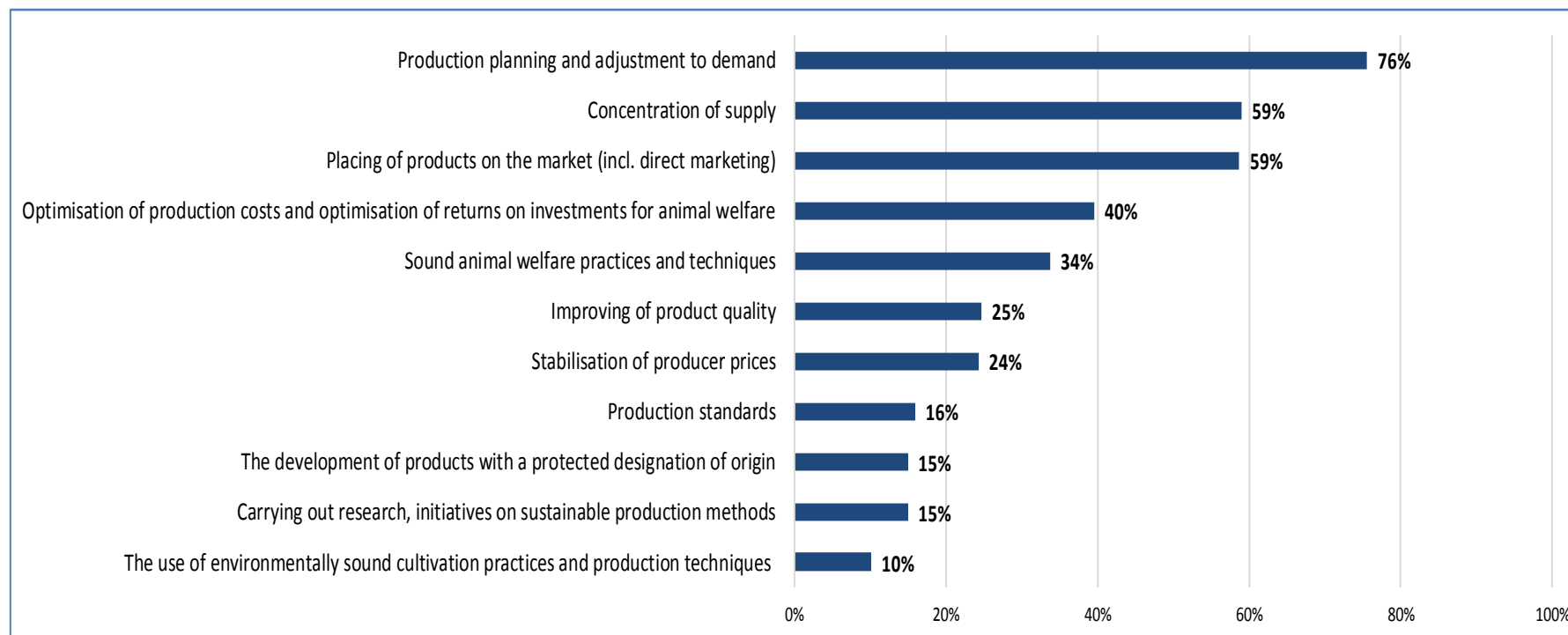
As the objectives that POs/APOs can pursue are different and specific to sectors and groups of sectors, we present the results of the analysis based on three groups of sectors, as organised in the 2017 EC survey:

- All CMO sectors with the exception of FV and milk and milk products.
- FV.
- Milk and milk products.

The list of objectives presented below corresponds to the ones listed in the 2017 EC survey.

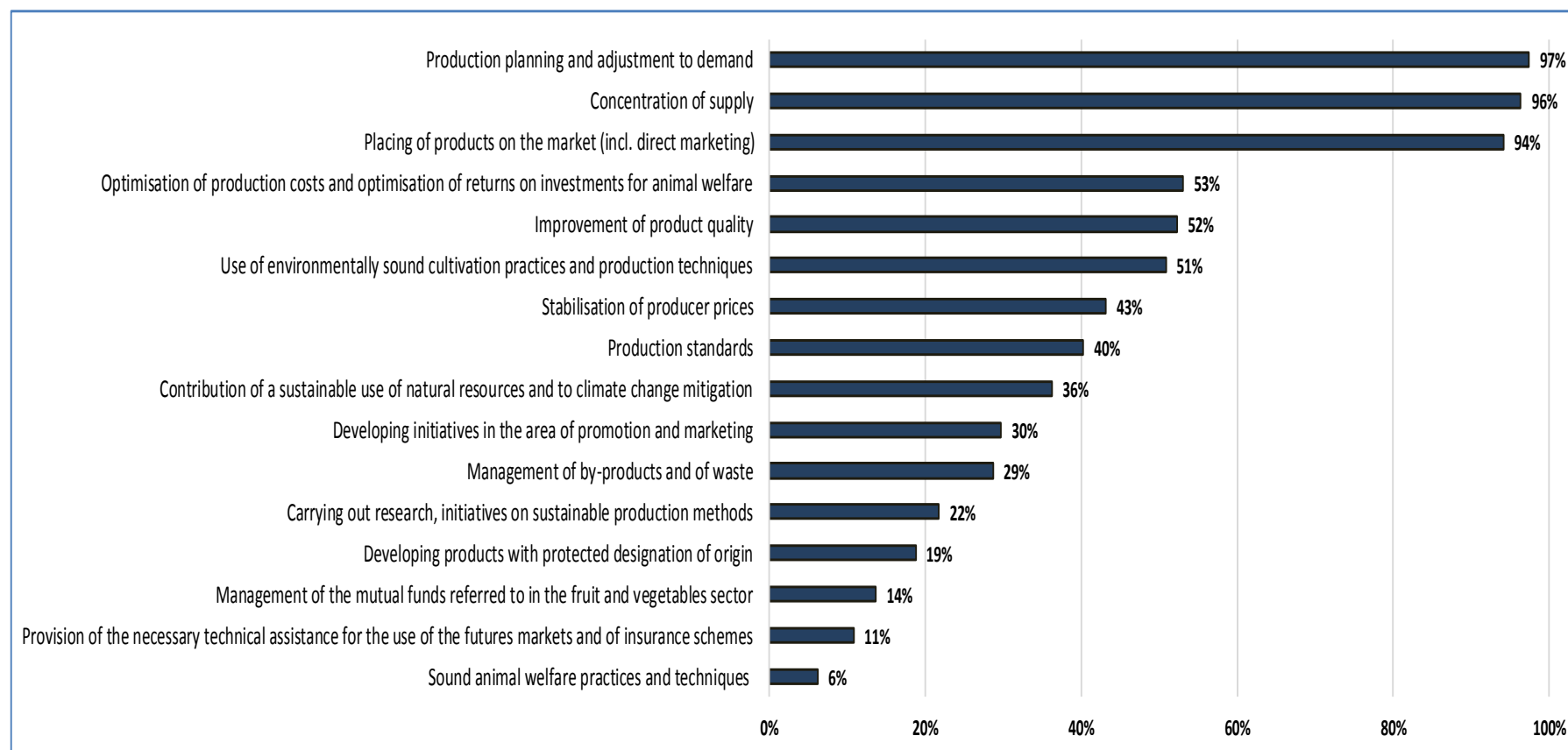
Based on the analysis, the three most important objectives of POs/APOs across sectors are the planning of production, the concentration of supply and the placing of products on the market. In more details, the objectives per group of sectors are presented in the following three figures.

Figure 20 - Objectives of POs/APOs excluding FV & milk sectors (n=749)



Source: Compiled by AI based on 2017 EC survey

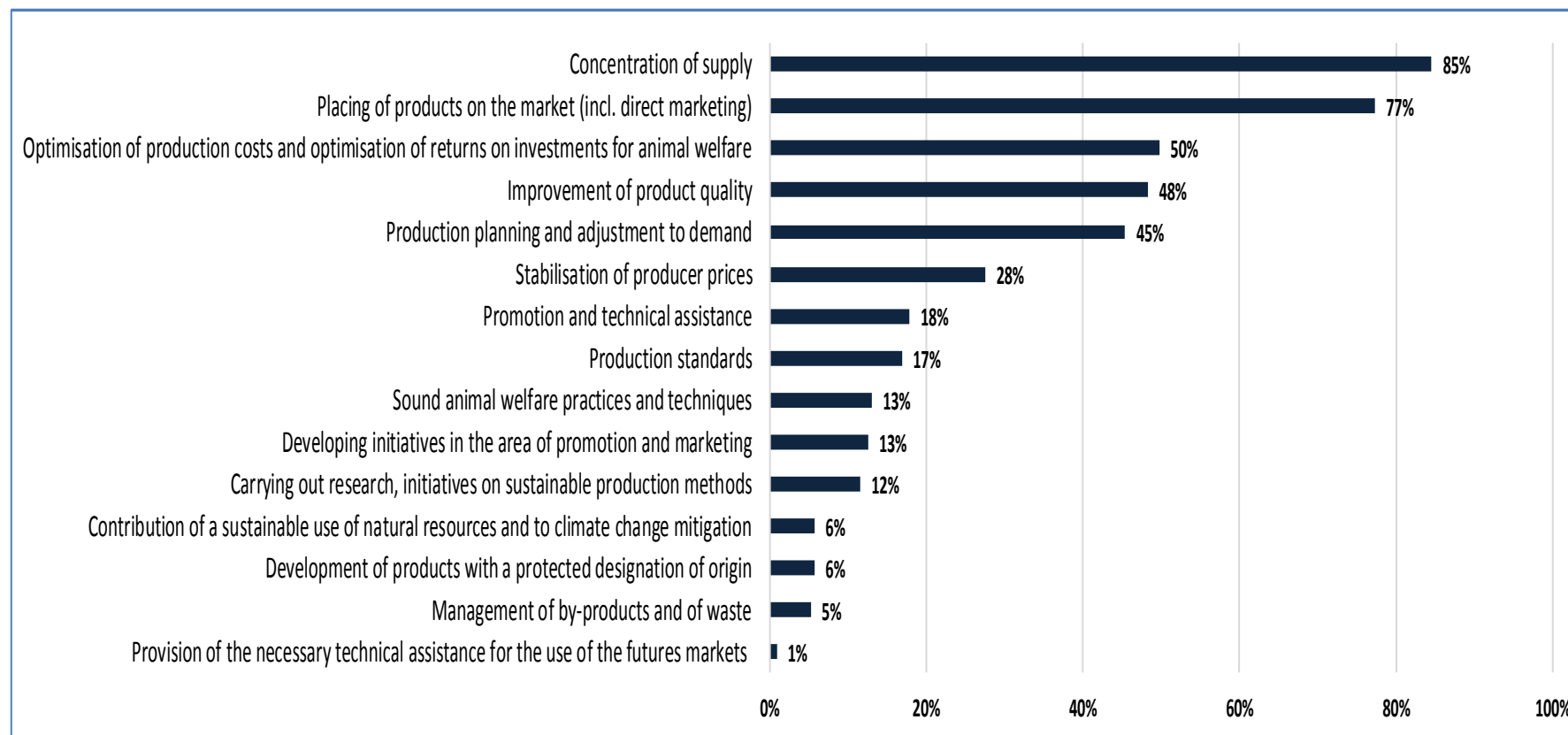
Figure 21 - Objectives of recognised POs/APOs for the FV sector (n=767)⁴⁸



Source: Compiled by AI based on 2017 EC survey

⁴⁸ The low size of the sample is explained by the fact that several national authorities (ES, FR, EL, DE, and IT) provided information on activities for all POs, on the basis of a sample of only 60 POs/APOs.

Figure 22 - Objectives of recognised POs/APOs for the milk sector (n=207)



Source: Compiled by AI based on 2017 EC survey

From these three figures, the following conclusions can be drawn:

- With regard to **recognised POs/APOs in the FV sector**, the three highest scores for objectives (concentration of supply and placing on the market of the production) are explained by the requirements of Regulation (EU) 2017/891 which stipulates that these two objectives are mandatory for the recognition of FV POs (Article 11 para. 1). It is interesting that, under Figure 21, these objectives are not reaching 100% for the two above-mentioned objectives. Besides those objectives, planning of production, optimisation of production costs and optimisation of returns on investments, for instance, for environmental standards, improvement of production quality and use of environmentally sound cultivation practices and techniques are relevant for more than half of the recognised POs/APOs surveyed.
- With regard to **recognised POs/APOs in the milk and milk product sectors**, the objectives that these entities may pursue in accordance with Article 161 (1) a of Regulation (EU) No 1308/2013 have different importance or relevance based on the responses assessed; in particular, the concentration of supply and placing on the market of the production are relevant for a large majority of recognised POs/APOs in this sector (84% and 78%, respectively), whereas optimisation of production costs, planning of production and adjustment to the demand and stabilisation of producer prices are important for a more limited number of recognised entities (49%, 46% and 26%, respectively); conversely, objectives such as the development of protected geographical indications and quality labels, management of waste and by-products and the contribution towards a sustainable use of natural resources and to climate change mitigation are pursued only by a relatively limited number of entities within the sector under exam. The improvement of product quality is the objective with the highest score (47%) amongst those not expressly referred to in Article 152 (3) b) Regulation (EU) No 1308/2013.
- As regards **the other agricultural sectors** – excluding FV and milk and milk products - where recognised POs/APOs are established, the vast majority of the entities inventoried focus on the planning of the production and adjustment to demand as the main objective (74%); the concentration of the supply and the placing of the market of the production are similarly important objectives for a large number of POs/APOs across the EU (59% and 57% respectively); conversely, objectives such as the development of protected geographical indications and quality labels, the joint performance of research activities in the view of developing and implementing sustainable production methods and the use of environmentally sound farming practices and techniques rank lower amongst the objectives pursued by POs/APOs in the EU.

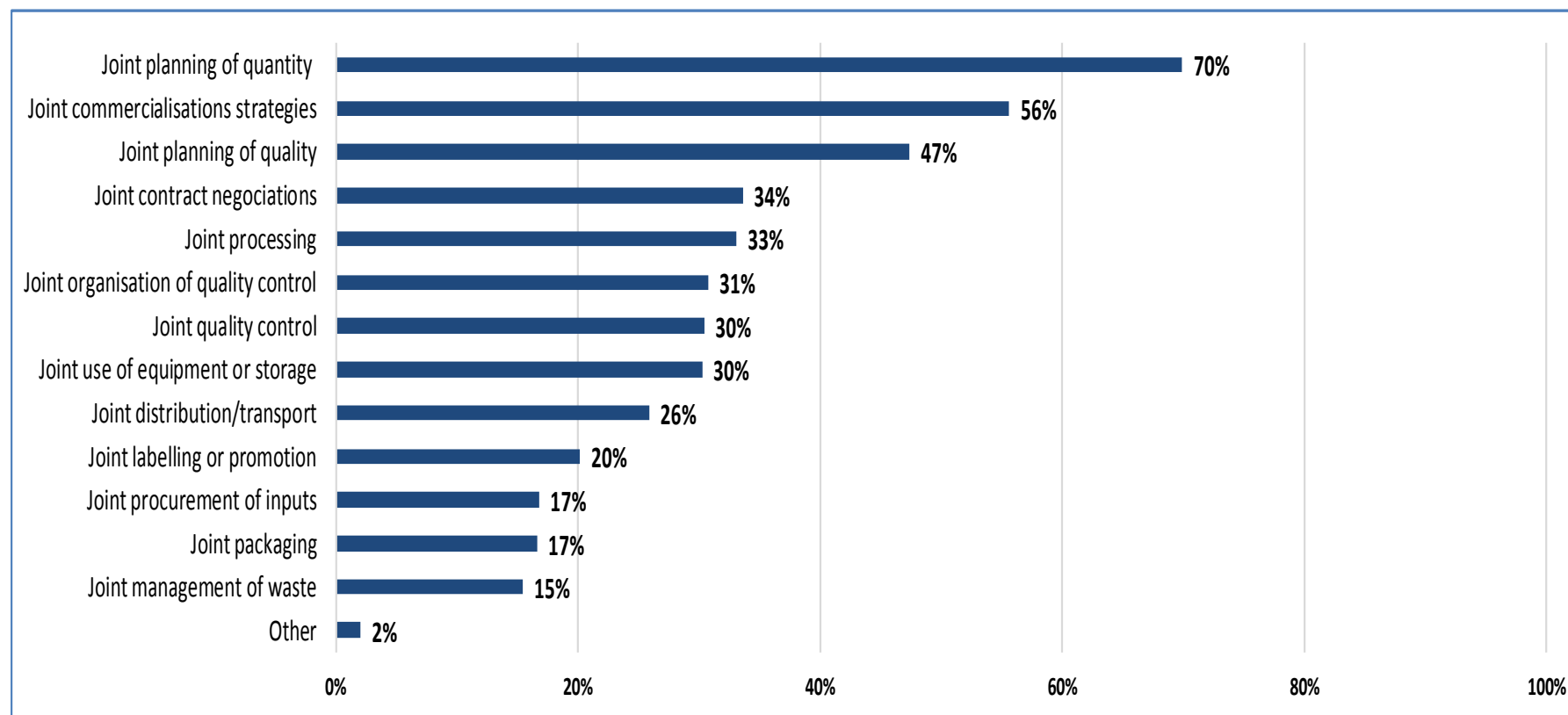
3.3.4. Activities of the recognised POs/APOs

As the activities that POs/APOs can perform are different and in certain instances specific to sectors and group of sectors, we present the results of the analysis based on three groups of sectors, as organised in the 2017 EC survey:

- All CMO sectors, with the exception of FV and milk and milk products.
- FV.
- Milk and milk products.

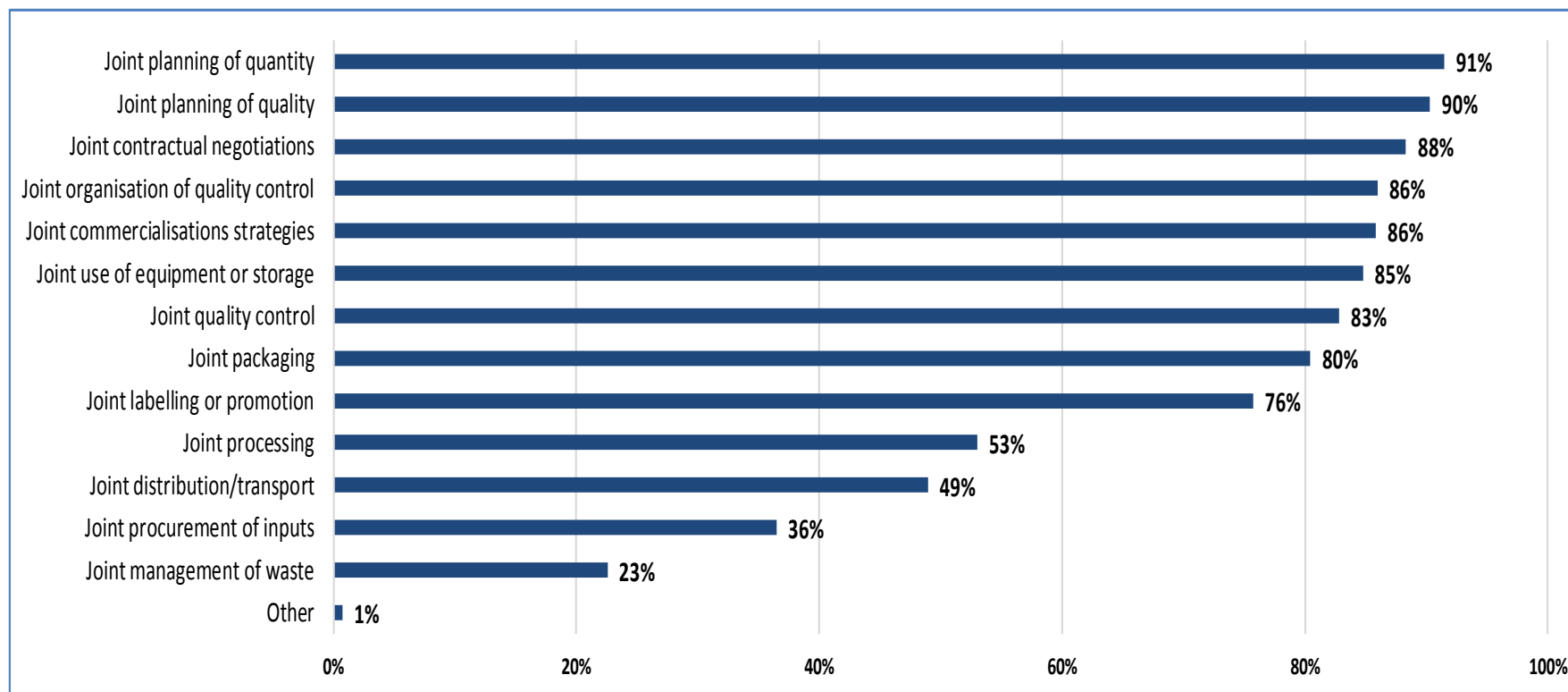
The main activities across the three groups of sectors are rather similar. They consist in the joint planning of quality and quantity, the development of joint commercialisation strategies and the joint negotiations of contracts. More information per group of sectors are presented in the following three figures.

Figure 23 - Activities of recognised POs/APOs excluding FV & milk sectors (n=603)



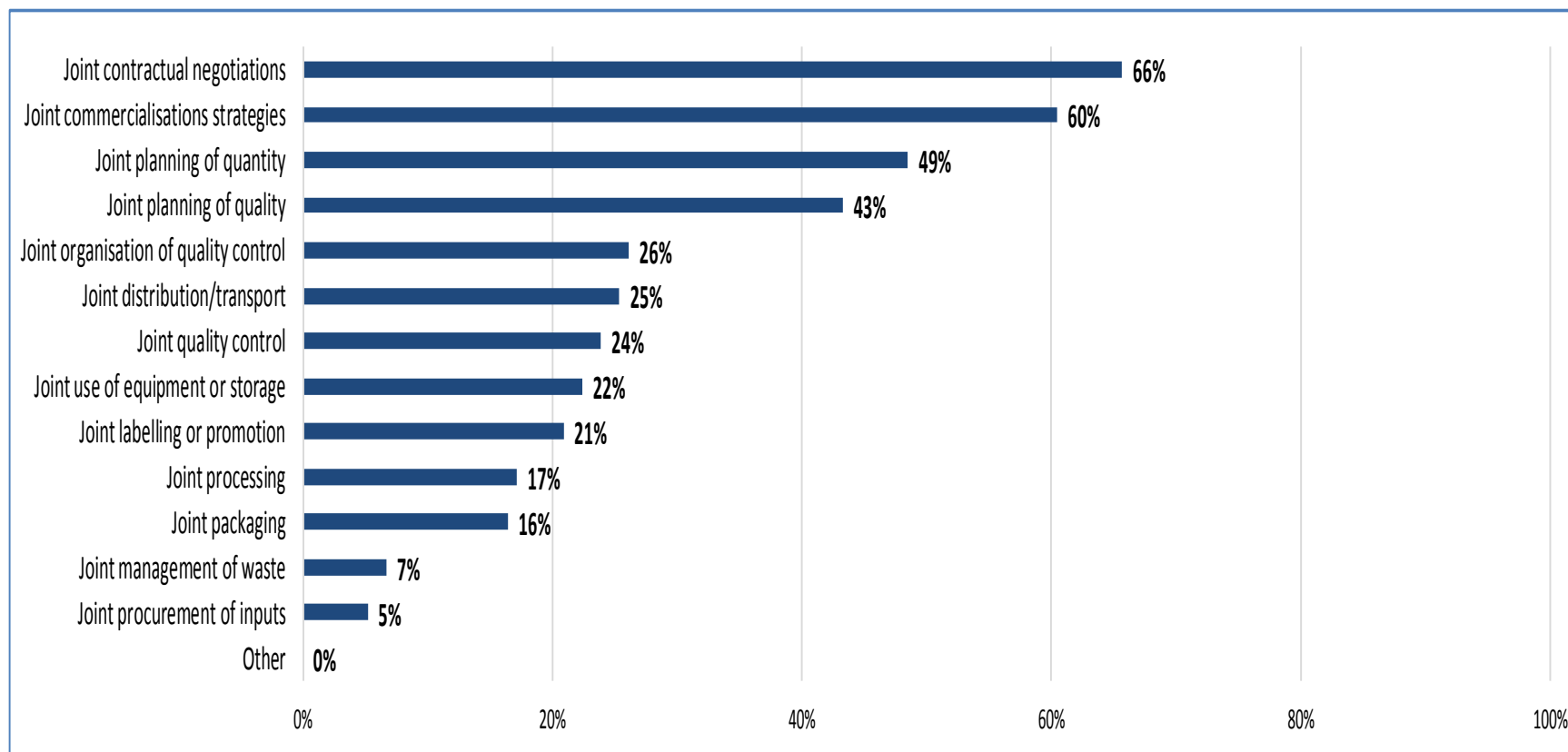
Source: Compiled by AI based on 2017 EC survey

Figure 24 - Activities of recognised POs/APOs for the FV sector (n=757)



Source: Compiled by AI based on 2017 EC survey

Figure 25 - Activities of recognised POs/APOs for the milk sector (n=234)



Source: Compiled by AI based on 2017 EC survey

From these three figures, it can be concluded that:

- As regards **recognised POs/APOs operating in agricultural sectors other than FV and milk and milk products**, more than 2/3 of the surveyed entities are engaged in the joint planning of quantity, which is fully consistent with the ranking objective referred above under Section 3.3.3. By the same token, joint commercialisation strategies and joint planning of quality are also relevant for a large part of recognised POs/APOs entities (around 55% and 47%, respectively). Conversely, joint procurement of input, joint labelling and promotion joint packaging and joint management of waste are activities performed by less than 20% of the POs/APOs surveyed.
- As regards the **activities of recognised POs/APOs in the FV sector**, overall data collected reveal that this agricultural sector is characterised by a high level of homogeneity with most entities carrying out activities of the same nature; in particular, joint planning of quantity, joint planning of quality and joint contractual negotiations are the top three activities recognised POs/APOs perform in the FV sector, immediately followed by other equally important activities such as joint commercialisation strategies, joint organisation of quality controls, joint use storage or equipment and joint packaging, amongst the others; conversely, joint procurement of inputs and joint management of waste are all in all relevant for a more limited number of recognised POs/APOs belonging to this sector.
- Finally, as regards the activities of **recognised POs/APOs in the milk and milk sector**, the information gathered from the entities surveyed indicate that the carrying out of joint contractual negotiations is the most common activity performed (over 2/3 of the total number of entities surveyed) followed immediately after by the development of joint commercialisation strategies (64%); conversely, the joint procurement of inputs, the joint use of equipment or storage and the joint quality control are activities pursued by a more limited number of recognised POs/APOs (within a range of 9%-16%).

3.3.5. Ownership transfer of products from the member to entity

From the perspective of the transfer of ownership, based on the replies gathered and assessed, Member States can be divided in three main groups (Figure 26):

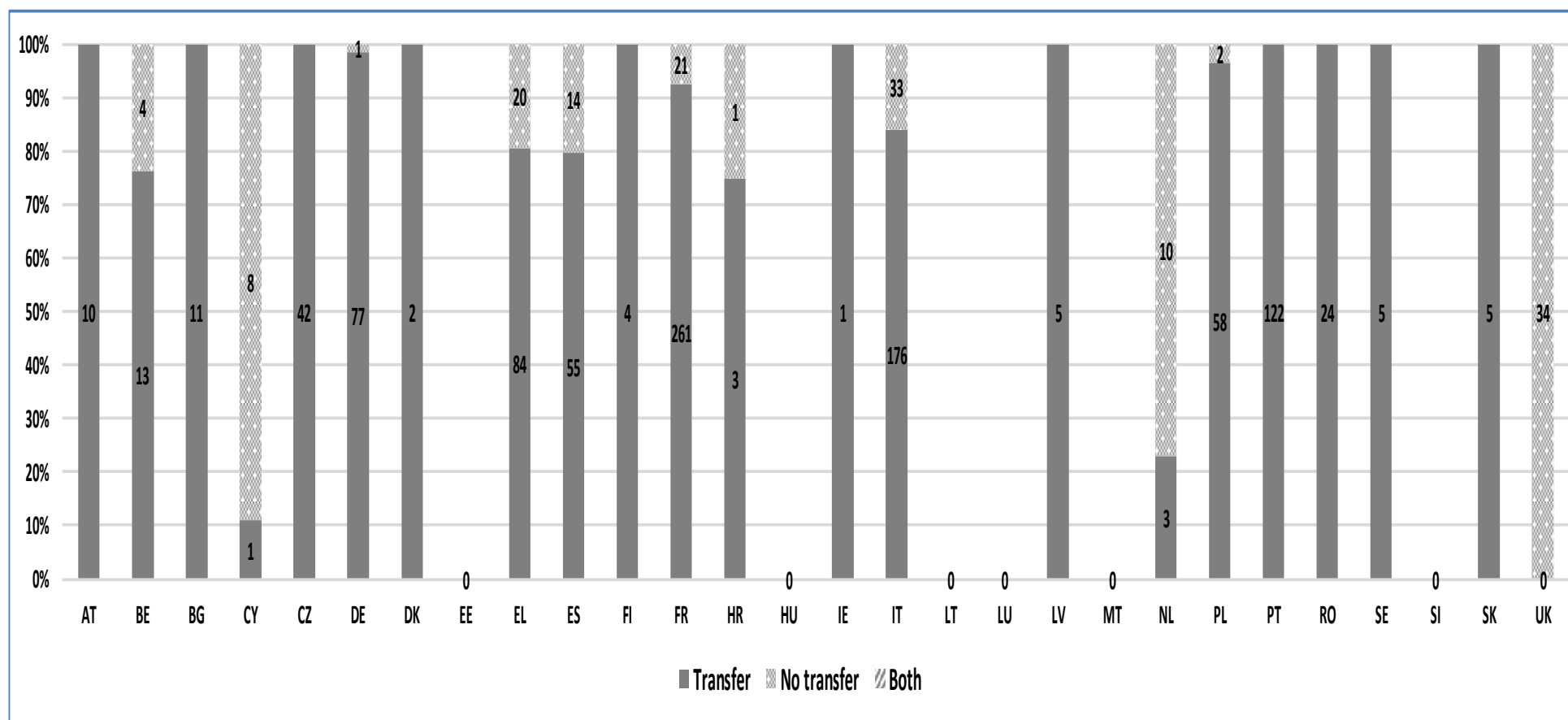
1. Member States (13) where transfer of ownership takes place in the case of all recognised POs/APOs (AT, BG, CZ, DE, DK, FI, IE, LV, PL, PT, RO, SE and SK).
2. Member States (7) where there is a mixed approach (transfer and no transfer) with regard to transfer of ownership, i.e. the latter takes place in the case of some but not all POs/APOs (BE, CY, EL, ES, FR, HR, IT and the NL). In most of cases, there is no transfer of ownership in the meat sectors as well as in the milk sector in which recognised POs are collectively negotiating the framework contracts but are not buying the milk production of their members⁴⁹.

⁴⁹ A few exceptions have been reported by interviewees from several Member States (BE, FR and IT)

3. Member State (1) where transfer of ownership is reported not to take place (the UK).

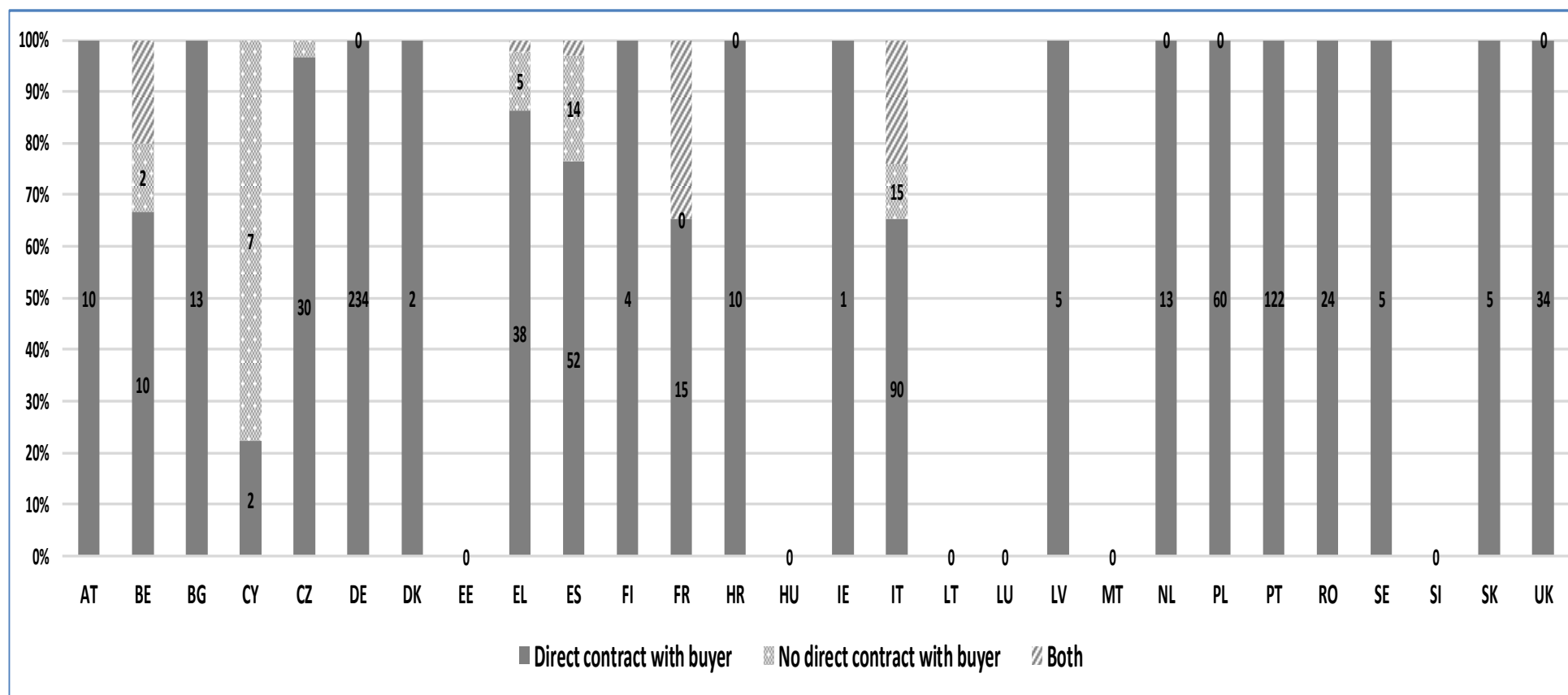
In case the PO/APO is active in joint contractual negotiations, the large majority of recognised POs/APOs acquire the property of the products from the members, in nearly all Member States. Exceptions are, mainly, present in CY, the NL and the UK (Figure 27).

Figure 26 - Transfer of ownership per Member States (n=1,110)



Source: Compiled by AI based on 2017 EC survey

Figure 27 - Marketing approach per PO/APO per Member State (n=779)



Source: Compiled by AI based on 2017 EC survey

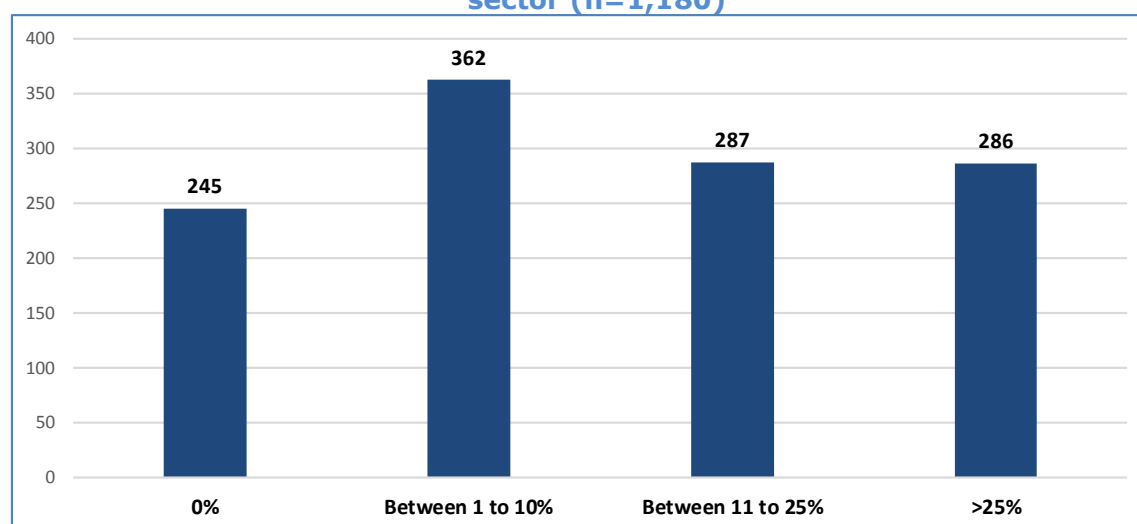
3.3.6. Percentage of production (in the FV sector) that individual farmers can sell directly and not through the PO they are members of

Regulation (EU) 2017/891⁵⁰ stipulates in its Article 12 para. 2 that “the percentage of the production of any producer member marketed outside the producer organisation shall not exceed 25% in volume or in value. However, Member States may set a lower percentage. Nevertheless, Member States may increase that percentage up to 40% in case of products covered by Council Regulation (EC) No 834/2007 or where producer members market their production through another producer organisation designated by their own producer organisation”.

Wherever use of this option is made, the replies show that overall the maximum quantity that can be sold by individual producers may range in practice from 1% up to 40% of their production.

In the case of 362 POs, the maximum that may be sold corresponds to a range of 1-10% of the individual farmer’s production, with such entities being located mostly in ES, FR, IT, PL, and PT. A total of 287 recognised POs/APOs allow their members to sell their products outside the PO in the range of 11 to 25% of their own production. These recognised POs/APOs are mostly located in DE, FR, IT, HU, PL. In addition, in eight Member States (CY, DK, HU, IE, LV, NL, RO, and SK) all POs can directly sell a minimum of 25% of their own production outside the recognise PO. Finally, 245 POs do not allow their members to sell any quota of their production (0%). These organisations can be found mostly in FR, IT, PL, and PT (Figure 28).

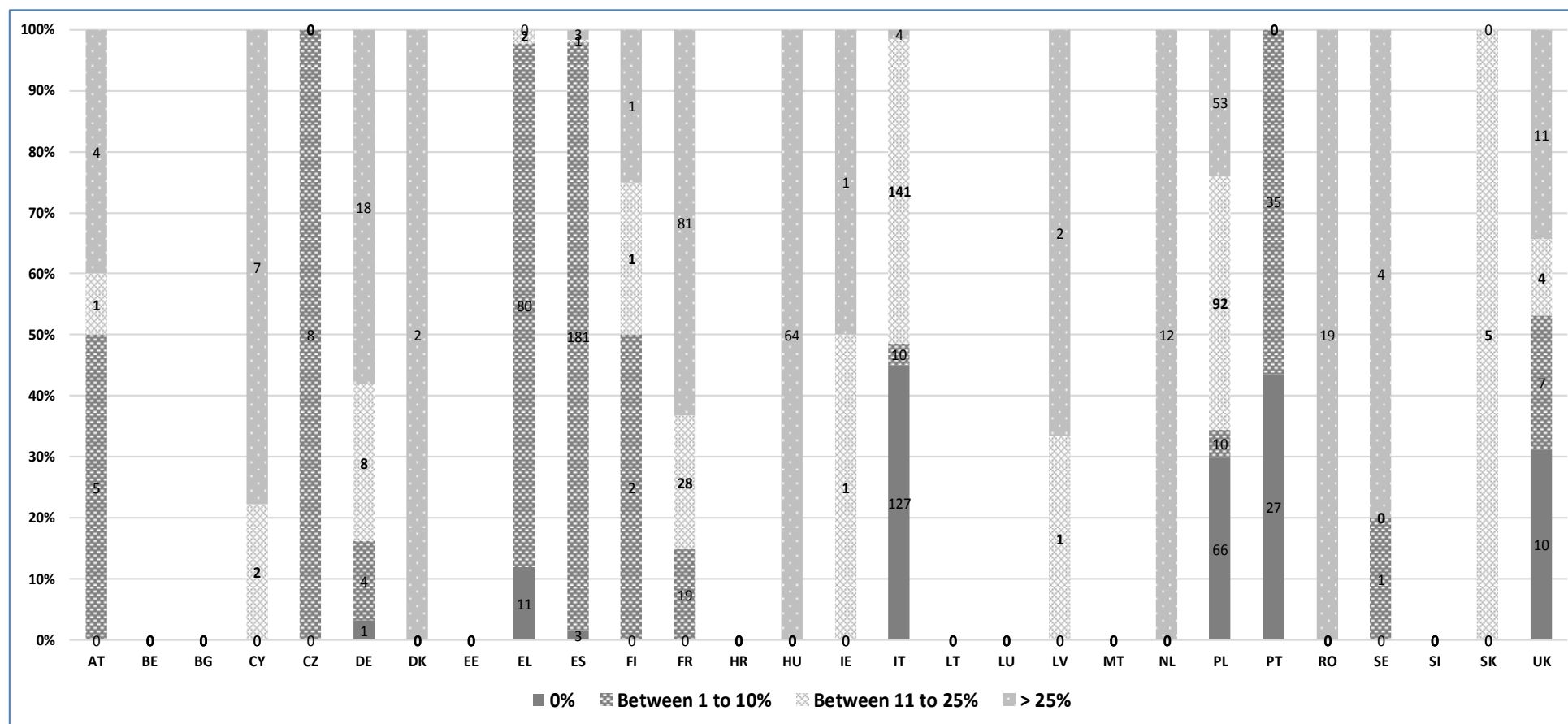
Figure 28 - Percentage of products sold directly by POs members in the FV sector (n=1,180)



Source: Compiled by AI based on 2017 EC survey

⁵⁰ Commission Delegated Regulation (EU) 2017/891 of 13 March 2017 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council with regard to the FV and processed FV sectors and supplementing Regulation (EU) No 1306/2013 of the European Parliament and of the Council with regard to penalties to be applied in those sectors and amending Commission Implementing Regulation (EU) No 543/2011

Figure 29 -Percentage of products sold directly by POs members in the FV sector per Member State (n=1,180)⁵¹



Source: Compiled by AI based on 2017 EC survey

⁵¹ Data not available for BE and HR

PART 4: OVERVIEW OF NON-RECOGNISED PRODUCER ORGANISATIONS (THEME 2)

Theme 2 aims to obtain more information on the number of non-recognised POs, in particular cooperatives, in the Member States and the activities they typically carry out.

As requested in the tender specifications of the study, the following information is presented in this chapter:

- A reliable estimate of the total number of non-recognised POs in the EU and for each Member State.
- A reliable estimate of how many non-recognised POs are presented in the main agricultural sectors.
- Per Member State, for a representative sample of the most important POs for the main agricultural sectors a description of the activities that the non-recognised POs carry out.

Several stakeholders from cooperative associations that have been met during the interviews indicated that this segmentation between recognised vs non-recognised organisation should not be considered as central in the analysis of the structure of any supply chain. According to them, farmers do not create recognised POs, they decide to group themselves in an entity that has a legal form for one or several objectives; and, then, reflect whether or not the legal entity should get recognised by the competent authorities. Recognition is, simply, a characteristic (or not) of organisations and legal forms present in the chain.

For the purposes of the study, quantitative figures on non-recognised POs are collected with a view of (i) giving a more complete picture on the degree of producer cooperation in the European Union (EU) and (ii) to show, at least by way of approximation, to which degree POs take the additional step of obtaining recognition by their Member State.

It is important to bear in mind that any non-recognised PO, whether organised e.g. as a cooperative or in any other legal form, can ask for recognition by the MS and may obtain such recognition, provided that the requirements of the CMO Regulation are complied with (see above Part 2). In the CMO Regulation the legal form does not matter for recognition process.

Table 7 - Relationship between recognition, legal form and the themes of the study

| Legal form | Recognised POs/APOs | Non-recognised POs |
|--------------|---------------------|-----------------------------------|
| Cooperatives | Theme 1 | Theme 2 (see Section 4.1 and 4.2) |
| Others | | Theme 2 (see Section 4.1 and 4.3) |

When it relates to the importance of cooperatives in the agricultural sector, two important reports have to be analysed in addition to other available literature and data collected by the EC during the 2007 survey. First, the DG AGRI study in 2012 on “*support for farmers’ cooperatives*”⁵² and the COPA-COGECA study on the “*development of agricultural cooperatives in the EU in 2014.*”⁵³ Both studies have provided relevant information for our analysis. To the extent that was possible, data presented in these two reports have been updated with more recent statistics, which have been collected during the interviews or through desk research. The different sources of information used to develop the analysis presented in this section are therefore the data collected through the 2017 EC survey and the results and findings of the two above-mentioned studies, which were completed and updated by findings of the interviews with national cooperative associations and of our desk research.

Data and information collected for this theme are specific to Member States and, within the country, are sector specific. What is true in one country may not be true in all countries. Therefore, we have adapted our reporting by presenting a summary in the core part of the report and adding national country fiches that report these Member State and sectorial specificities.

4.1. Relative importance of recognised POs/APOs vs non-recognised POs at EU level⁵⁴.

From our data collection, in addition to the **21,769 cooperatives** which are present in the food supply chain⁵⁵, we estimate that more than **20,000 other legal forms** entities are present in the primary sector of the food supply chain in the EU. This includes the 11,500 CUMAs⁵⁶, reported by the COPA-COGECA report, and the other legal forms identified during the data collection.

⁵² Available at https://ec.europa.eu/agriculture/external-studies/support-farmers-coop_en

⁵³ Available at http://zadruga.coop/upload_data/site_files/development-of-agricultural-cooperatives-in-the-eu_2014.pdf

⁵⁴ Figures related the ratio: number of non-recognised entities / recognised POs is substantially higher (approximately 1/11) than the ration for three sectors in DG COMP’s study (available at: <http://ec.europa.eu/competition/publications/reports/kd0218732enn.pdf>). These differences can be explained by the fact that this study includes all legal forms of cooperation while the DG COMP studies includes only cooperatives and no other legal forms such as e.g. CUMAs.

⁵⁵ Source: COPA-COGECA report available at http://zadruga.coop/upload_data/site_files/development-of-agricultural-cooperatives-in-the-eu_2014.pdf

⁵⁶ CUMAs are cooperative of farmers that group to buy and use agricultural equipment such as seeders, combines, etc.) See more description below.

Table 8 – Estimation of the total number of producer organisations in the EU (recognised POs/APOs and non-recognised POs)

| | Producer organisations in the EU | | |
|--|----------------------------------|-----------------------|------------------------------|
| | Total number | Of which cooperatives | Of which 'other legal forms' |
| Estimation of the total number of entities | >41,000 | 21,769(*) | >20,000(**) |
| Number of recognised POs/APOs | 3,505(***) | 1,657(***) | 1,848(***) |
| Percentage of recognised POs/APOs | 8% | 8% | <9% |

Source: (*): COPA-COGECA report, (**): Own estimation, (***) : Inventory-Theme 1

On that basis, it can be estimated that, across all sectors, less than 9% of POs/APOs are recognised (all types of entities, regardless their activities, included).

These figures provide a reliable estimation when it relates to cooperatives and less reliable for other legal forms for the main reason that no estimation on the exact number of other legal forms than cooperatives exists in the EU.

4.2. General information on cooperatives at Member State level

The following table presents the total number of cooperatives per Member State and the total number of memberships. The figures below consider that a given farm holding can be member of several cooperatives and other cooperation (multiple memberships). In addition, we provide the average turnover of all cooperatives per Member State.

Table 9 – General information on cooperatives per Member State

| Member States | Total number of cooperatives | Cooperatives recognised as POs/APOs | Total number of members | Turn over (Million EUR) | Market share of cooperatives across sectors |
|---------------|------------------------------|-------------------------------------|-------------------------|-------------------------|---|
| AT | 217 | 10 | 306,300 | 8,475 | 50-55% |
| BE | 301 | 19 | 10,734 | 3,257 | n.a. |
| BG | 900 | 0 | | | n.a. |
| CY | 14 | 0 | 2,4917 | 62 | <30% |
| CZ | 548 | 35 | | | 40-60% |

Study of the best ways for producer organisations to be formed, carry out their activities and be supported

| Member States | Total number of cooperatives | Cooperatives recognised as POs/APOs | Total number of members | Turn over (Million EUR) | Market share of cooperatives across sectors |
|---------------|------------------------------|-------------------------------------|-------------------------|-------------------------|---|
| DE | 2,400 | 183 | 1,440,600 | 67,502 | 30-45% |
| DK | 28 | 0 | 45,710 | 25,009 | >50%. |
| EE | 9 | | 2,036 | 512 | <15% |
| EL | 550 | 191 | 690,000 | 711 | n.a. |
| ES | 3,844 | 293 | 1,179,323 | 25,696 | 40-50% |
| FI | 35 | 3 | 170,776 | 13,225 | 50-70% |
| FR | 2,400 | 342 | 858,000 | 84,350 | >50% |
| HR | 613 | 2 | | 167 | n.a. |
| HU | 1,116 | 31 | 31,544 | 1,058 | <20-25% |
| IE | 75 | 1 | 201,684 | 14,149 | >50% |
| IT | 5,834 | 451 | 863,323 | 34,362 | 25-35% |
| LT | 402 | | 12,900 | 714 | <5-10% |
| LU | 55 | | | | n.a. |
| LV | 49 | | | 1,111 | 15-25% |
| MT | 18 | 0 | 1,815 | 204 | 45-55% |
| NL | 73 | 13 | 121,552 | 33,200 | >80% |
| PL | 136 | 22 | | 15,311 | n.a. |
| PT | 735 | 43 | | 2,437 | 45-55% |
| RO | 68 | 1 | | 204 | n.a. |
| SK | 597 | 5 | | 1,151 | 10-20% |
| SL | 368 | 0 | 16,539 | 705 | n.a. |
| SW | 25 | 0 | 160,350 | 7,438 | 50-60% |
| UK | 200 | 4 | 138,021 | 4,686 | <3% |

Source: Compiled by AI based on 2017 EC survey, DG AGRI study (2012) and COPA-COGECA study (2014). n.a.: not available

The economic importance of cooperatives varies considerably among sectors and no detailed statistics per Member State exist. Qualitative data have been collected during the interviews and triangulated with data from the DG AGRI cooperative and the COPA-COGECA studies mentioned above. This approach led to the results presented below.

Table 10 – General information on economic importance of cooperatives per Member State and per sector

| Member States | Economic importance of cooperatives per sector (market share of cooperatives in the relevant domestic market in percentage of total volume traded) |
|---------------|--|
| AT | Cereals: 70%, FV: 50-60%, milk: 85%, sugar: 95%, wine: 15% |
| BE | FV: >85%, milk: 66%, pig meat: > 25%, sugar: 0%, |
| BG | Not available |
| CY | Not available |
| CZ | Cereals: <10%, FV: 60-70%, milk: 60-70%, wine: <10%. |
| DE | Cereals: 40-50%, FV: 40-50%, milk: 65%, pig meat: <20%, wine: 30% |
| DK | Milk 97%, pig meat: 85-90% |
| EE | Cereals: 10%, milk: 35%, other sectors: <5-10%. No cooperatives in sugar and sheep meat. |
| EL | Milk, olive oil and table olives and wine: significant market shares Pig meat, sheep meat, sugar: negligible presence ⁵⁷ |
| ES | Cereals: 35%, FV: 50%, milk: 40%, pig meat: 25-30%, sheep meat: 25-30%, sugar: 25-30%, wine: 70% |
| FI | FV: up to 25% (for tomatoes), meat sectors: 81%, milk: 97%, |
| FR | Cereals: 74%, beef meat: > 65%, FV: >65%, milk: 50%, pig meat: 85%, sugar: 62%, wine (with PGIs): 72%, wine (with AOC): 35-40%, |
| HR | Not available |
| HU | Cereals: 12%, FV: 15-20%, milk: 30%, pig meat: 25%, sheep meat: 20%, sugar: 30%, wine: 9% |
| IE | Livestock sales: 65%, milk: nearly 100% |
| IT | Cereals: 25%, FV: 40-50%, meat: 25%, milk: 40-50%, olive oil and olive table: 5-8%, sugar: 20%, wine: 40-50% |
| LT | Milk: 15-20%, other sectors: <5% |
| LU | Not available |
| LV | Cereals: 37%, milk: 40%, FV: 13% |
| MT | FV: 21%, milk: 90%, pig meat: 100%, wine: 70% |
| NL | Cereals: 60%, FV: 95%, milk: 86%, potatoes: 100%, sugar: 100% |
| PL | Milk: 75%, other sectors: <10-15% |
| PT | FV: 25-30%, milk: 70%, olive oil: 25-30%, wine: 45% |
| RO | Not available |
| SK | Cereals: 15%, FV: 10%, milk: 25%, pig meat: 11%, potatoes: 20% |
| SL | Not available |
| SW | Milk: 100%, pig meat: 50-55%, sheep meat: 50-55% |
| UK | < 5% in all sectors |

Source: Compiled by AI based on 2017 EC survey, DG AGRI study (2012) and COPA-COGECA study (2014)

⁵⁷ No detailed statistic available

The analysis of these two tables show that cooperation through cooperatives is Member States and sector specific. There are large differences between Member States, but we can identify three groups of Member States which fall into a different typology as regards the economic importance of cooperatives in the country:

- Low (from 0 to 20% market share of total traded volumes): EE, EL, LT, HU, PL, SK, and the UK.
- Medium (from 20 to 50%): BE, CY, CZ, DE, ES, IT, LV, and PT.
- High (more than 50%): AT, DK, IE, FR, and the NL.

In addition, the research shows that cooperation through cooperatives is higher than 90% in a limited number of sectors as presented in the following table.

Table 11 - Cases when cooperatives have a market share higher than 90% in specific sectors at Member State level

| Sector | Member State (market share in the sector) |
|-------------------|---|
| Milk | AT (95%), DK (97%), FI (97%), IE (nearly 100%), SW (100%) |
| Pig meat | DK (90%), FR (95%), MT (100%) |
| FV | NL (95%) |
| Others (potatoes) | NL (100%) |
| Sugar | NL (100%) |

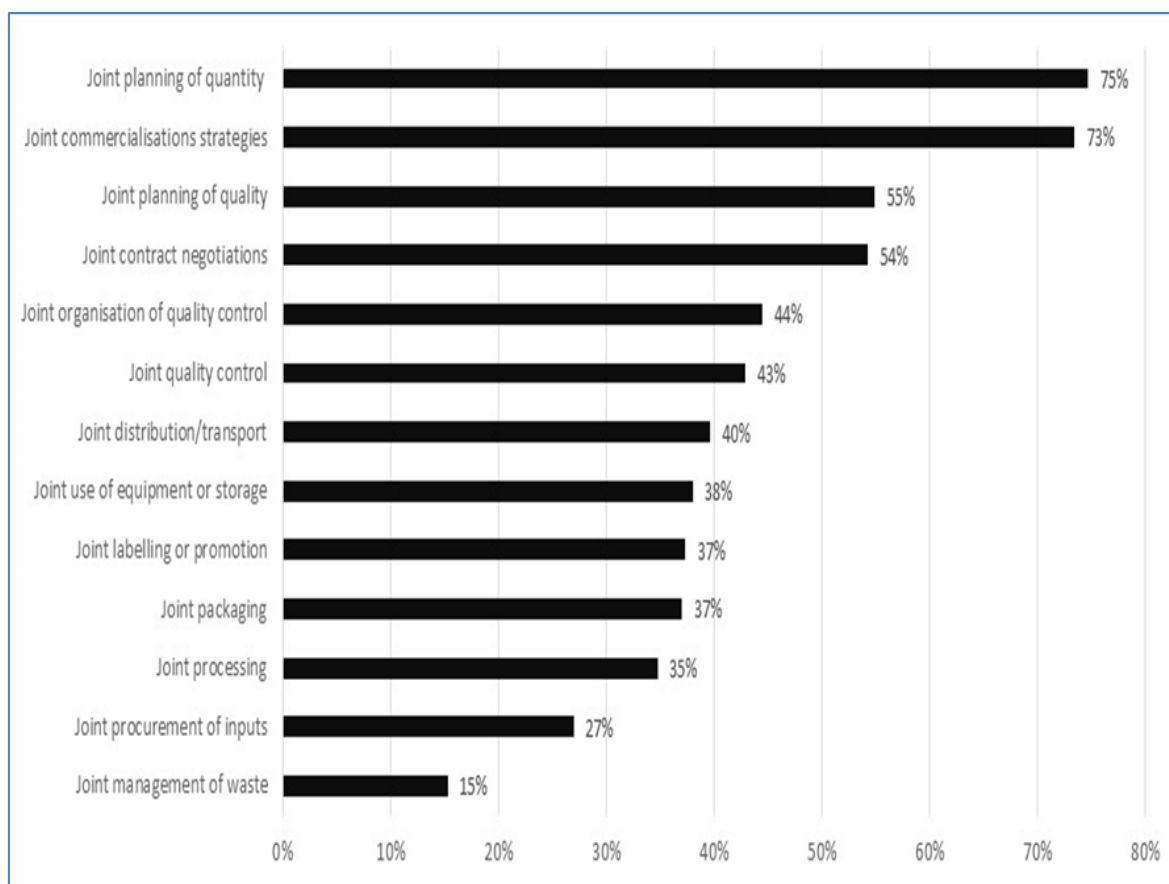
Source: Compiled by AI based on 2017 EC survey, DG AGRI study (2012) and COPA-COGECA study (2014)

4.3. Activities of non-recognised POs

The analysis of the activities of the non-recognised POs which have been inventoried demonstrates that the non-recognised POs pursue the same activities as the recognised POs. Figure 30 below consequently has the same profile as the ones presented in Section 3.3 in Part 3.

Activities of non-recognised POs largely depend on the characteristics of agricultural production and on the organisation of the different supply chain. Several supply chains can exist in the same sector, and even for a given crop within one sector. For example, the supply chain for fresh tomatoes produced in greenhouses in the NL is not the same as the one on tomatoes produced in open field for the processed industry in IT. Processing of the primary agricultural product is mainly done in animal supply chains and less in crop sectors. In addition, the classification of activities which POs carry out for their producer members, as done for recognised POs under Article 152 of Regulation (EU) No 1308/2013, hides practical organisational differences.

Figure 30 - Activities of non-recognised POs (n=300)⁵⁸



Source: Compiled by AI based on 2017 EC survey

The analysis of the data as regards the activities of POs per crop and per Member State shows that:

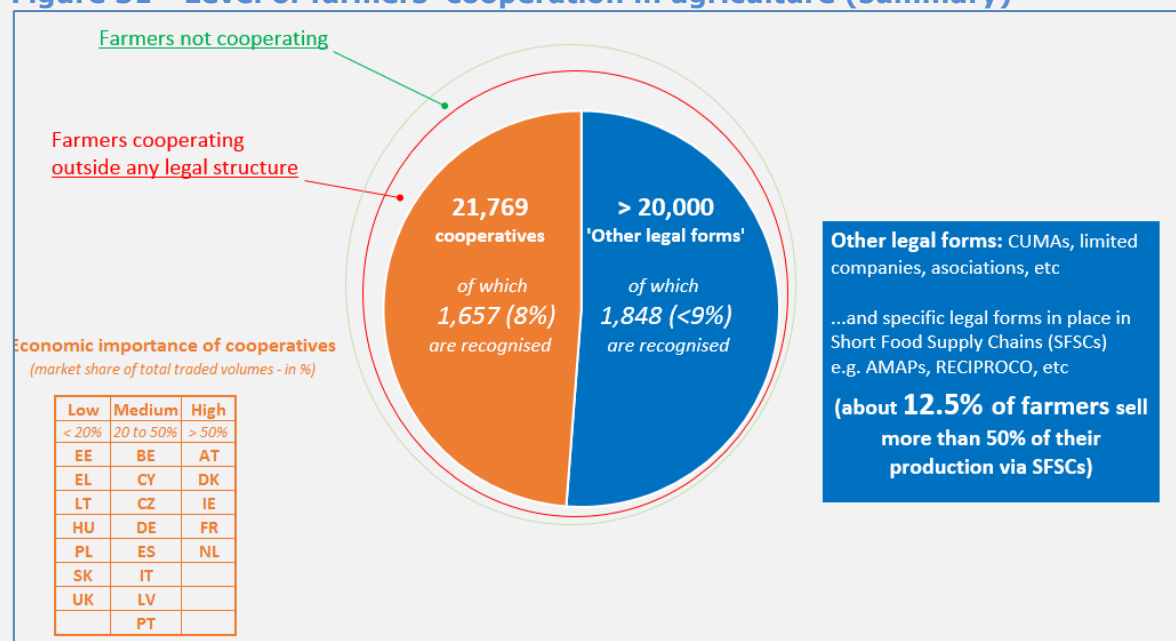
- The activity 'joint use of equipment or storage' is rather high in BE, DE and FR in comparison to other countries due the presence of specific cooperation groups in these countries (CUMAs in BE and FR and Maschinenringe in DE).
- 'Joint procurement of inputs' is an activity which is largely present in crop production, but less in animal production. In crop production, cooperatives are buying agricultural inputs such as seed, fertilisers, pesticides and reselling them to their members with associated advisory services. In animal production, non-recognised POs may buy veterinary medicines for their members.
- Cooperation of producers in non-recognised POs seem to focus less on 'contractual negotiations' in the majority of Eastern Member States and in the UK than it does in western Member States.
- 'Joint processing' and 'joint packaging' largely depend of the organisation of the different sectorial food supply chain. For example, in FV, cooperatives and other forms of cooperation are largely involved in packaging activities that

⁵⁸ Representative sample from the Excel database which includes the biggest non-recognised POs.

could already take place in the fields. In cereals, cooperation is more limited to the collection of grain from farmers, the storage and the shipment via trains or boats of the bulk grain. For these cases there is no packaging nor processing. In other sectors such as wine, processing is largely developed as one of the first of objective of the cooperation is to collectively collect grape and produce wine.

In conclusion to Parts 3 and 4, Figure 31 summarises the general statistics on the level of farmers' cooperation in agriculture which have been presented under Themes 1 and 2.

Figure 31 - Level of farmers' cooperation in agriculture (summary)



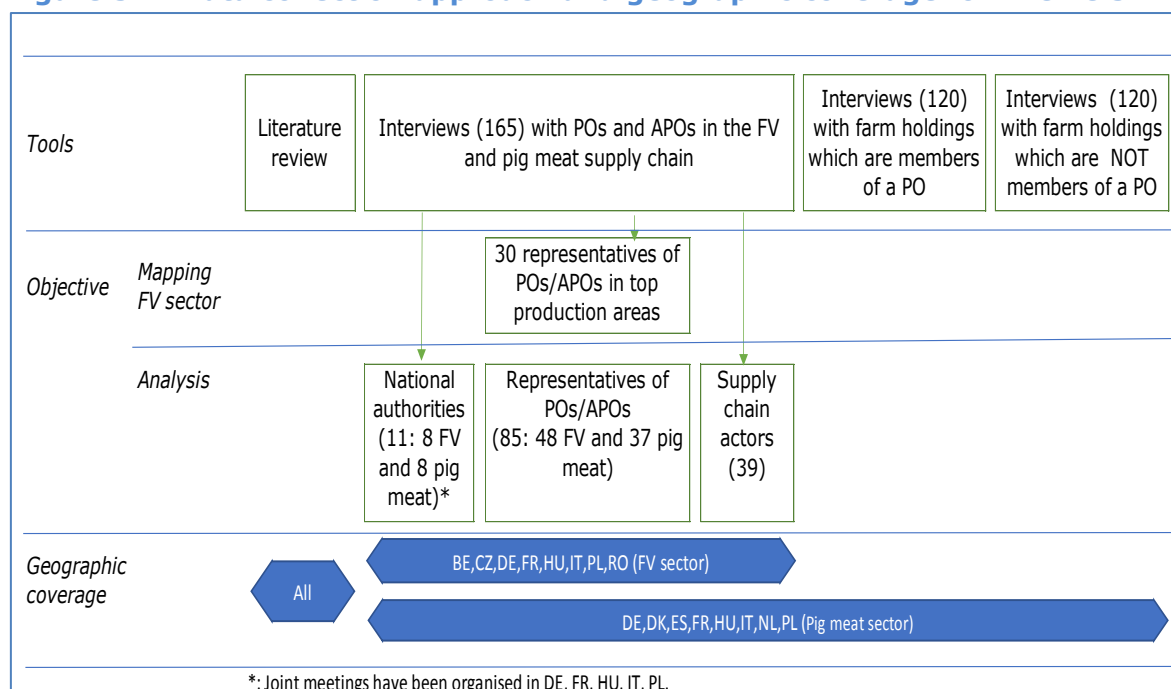
Source: Compiled by AI

PART 5: ANALYSIS OF INCENTIVES AND DISINCENTIVES OF PRODUCERS TO CREATE POS AND THE IMPACT THAT POS HAVE ON THEIR MEMBERS AND THE FOOD SUPPLY CHAIN (THEME 3)

This chapter presents the findings of Theme 3: analysis of incentives and disincentives of agricultural producers to join POs, the performance of POs and the benefits of POs for their members and other food chain stakeholders. These findings provide a first basis to develop an understanding of the best ways for producer organisations to be formed so that they attract members, carry out their activities in an effective manner and be supported. For the latter aspect it is in particular important to also understand the reasons why producers choose not to organise themselves in POs and which factors might stand in the way of an effective operation of the PO.

The data collection for this part is based on four different sets of interviews (interviews with competent authorities, representatives of POs and APOs being both members and administrative staff of the organisations in the FV and pig meat sectors, pig producers members of a PO, and pig producers not members of any PO) in eight different Member State (Figure 32). The overall methodological approach and profile of the interviewees for each of these three groups is presented in detail under Section 1.3.2 of this report. A review of literature (covering all agricultural sectors) has also been performed and completes the analysis.

Figure 32 - Data collection approach and geographic coverage for Theme 3



Part 5 is structured as follows: After an introduction providing some general findings from the interviews with the different stakeholders and from the literature review

(Section 5.1), Section 5.2 aims at estimating, in monetary terms, the efficiency of POs by analysing the top regions (in volume of production) for three FV crops: tomatoes, apples and peaches. Then, the in-depth qualitative analysis on incentives and disincentives for agricultural producers to form and join POs is presented under Section 5.3. In Section 5.4 we present an analysis intended to better understand which factors influence the decision of producers to cooperate with each other, and which factors negatively influence the efficiency functioning of POs. The analysis of the benefits, or disadvantages, that POs generate for their members and the food supply chain (Section 5.5) might serve as a basis to understand to which extent and in which manner POs should be supported.

5.1. Introduction

This section provides some general findings from the interviews with the different stakeholders and the literature review. The remarks outlined hereinafter do not answer directly the questions about which incentives and disincentives exist for agricultural producers to work together, or how a PO can work efficiently. However, they still provide useful insights into how stakeholders perceive POs and their differences in the various sectoral supply chains.

During the inception of several interviews mainly in BE, FR, IT and the NL; interviewees have indicated that their understanding is that 'POs' are only recognised entities whilst other forms of cooperation between farmers lacking recognition are not and cannot be named as 'POs'. The definition that has been used for the purpose of this study implies that any farmer cooperation is a PO. To avoid any confusion during the interviews, the definition used during the study has been clearly explained to interviewees before interviews took place.

According to management literature,^{59,60} any organisation moves from inception period to growth, to maturity, to decline or redevelopment (the so-called organisational life cycle model). There are certain attributes of an organisation specific for each stage of the cycle (connected to the organisational structure, entrepreneurship, culture, socio-economic context, etc.). The stage reached by a given PO is crucial to understand its managerial challenges, benefits for members, overall strategy, economic results and effects on the supply chain. In that context, a clear division can be observed between pre-2004 Member States – the EU 15 – and Member States that joined the EU more recently where POs are generally less mature (the longevity of cooperatives in post-socialist countries was interrupted after the end of socialism; moreover, the support for POs under the CAP started much earlier in the EU 15 Member States). Such a division is clearly reflected in the findings from the various Member States under analysis.

Each sectoral supply chain has its own characteristics. For instance, FV production is characterised by a relatively high crop fragmentation, a broad range of products, the

⁵⁹ Cook, M. L. et al. (2009) A cooperative life cycle framework. Unpublished manuscript. Columbia, Mo.: University of Missouri Dept. of Agricultural Economics.

⁶⁰ Kimberly, J. R. et al. (1980) The organizational life cycle: Issues in the creation, transformation, and decline of organizations. Jossey-Bass Inc Pub.

seasonality and perishability of production, and a high intensity of inputs. FV is characterised by a dual market (processed and fresh products), the latter of which can be seen as an incentive for growers to capture financial benefits by shortening the supply chain. In contrast, e.g. the pig meat supply chain has other characteristics, such as a high level of integration, e.g. through contractualisation, or more supply chain stages.

There are also differences across countries. For example, the pig meat sector in ES is rather different from the one in DK in terms of integration and concentration. In DK, the first processing stage is integrated in primary production, and about 70% of the production is managed by Danish Crown, a globally operating limited company. In Spain, in contrast, primary production is organised through a large number of multi-level cooperatives (the first level cooperatives being very often small entities with a low number of members).

Finally, in response to different business and legal environments, there is also a large diversity of POs in term of their legal form, functions, and marketing strategies (scale, assortment, distribution channels, and pricing).

This remarkable heterogeneity in the actual organisation of POs, driven by market factors (e.g. relationship with buyers, market size, structure of the supply chain) and by members characteristics must be kept in mind when reading this analysis for Theme 3. All these different characteristics may have different impacts on the incentives and disincentives for growers to establish or join a PO. They may also affect the governance of the POs, which can lead to different benefits of the PO for its members and the food supply chain.

5.2. Estimating the economic efficiency of recognised POs/APOs in the FV sector

This section aims to assess whether or not members of recognised POs/APOs receive a better price for the products they sell through the PO/APO than neighbouring farmers who are not members of any recognised PO (economic efficiency). A microeconomic approach has been applied to assess the economic efficiency of POs in the FV sector. This approach has considered three major crops in the FV sector (apples, peaches and tomatoes) in the top producing areas for each of these crops (Table 12).

Table 12 - Top production areas for the apple, peaches and tomato EU sector selected for the estimation on the economic efficiency of POs

| Crop | Top production areas in the EU |
|--------|---|
| Apple | <ul style="list-style-type: none"> • Grojecko-Warecki and Sandomierz regions (PL) • Bodensee (Lake Constance) (PL) • South-West (FR) • Trentino Alto Adige (IT) |
| Peach | <ul style="list-style-type: none"> • Emilia-Romagna (IT), • Campania (IT) • Macedonia (EL) • Catalonia (ES), • Rioja/Navarra/Aragon regions (ES) |
| Tomato | <ul style="list-style-type: none"> • Extremadura (ES) • Brittany (FR) • Emilia-Romagna (IT) • The Netherlands (whole country) |

Two group interviews with regional economic experts (mainly part of the largest regional recognised POs) from the selected regions have been conducted. Based on the findings of the interviews with these local stakeholders, completed by an analysis of the literature, this section intends to assess the economic efficiency of POs/APOs in the FV sector in monetary terms based on the cases presented above.

The main question is to what extent the selling through POs achieves the objective of improving the price paid to producers to improve their net income. The answer to this question must also be analysed according to the different forms of POs. It is therefore the question of efficiency in relation to the objective 'price paid to producers' which is at stake.⁶¹

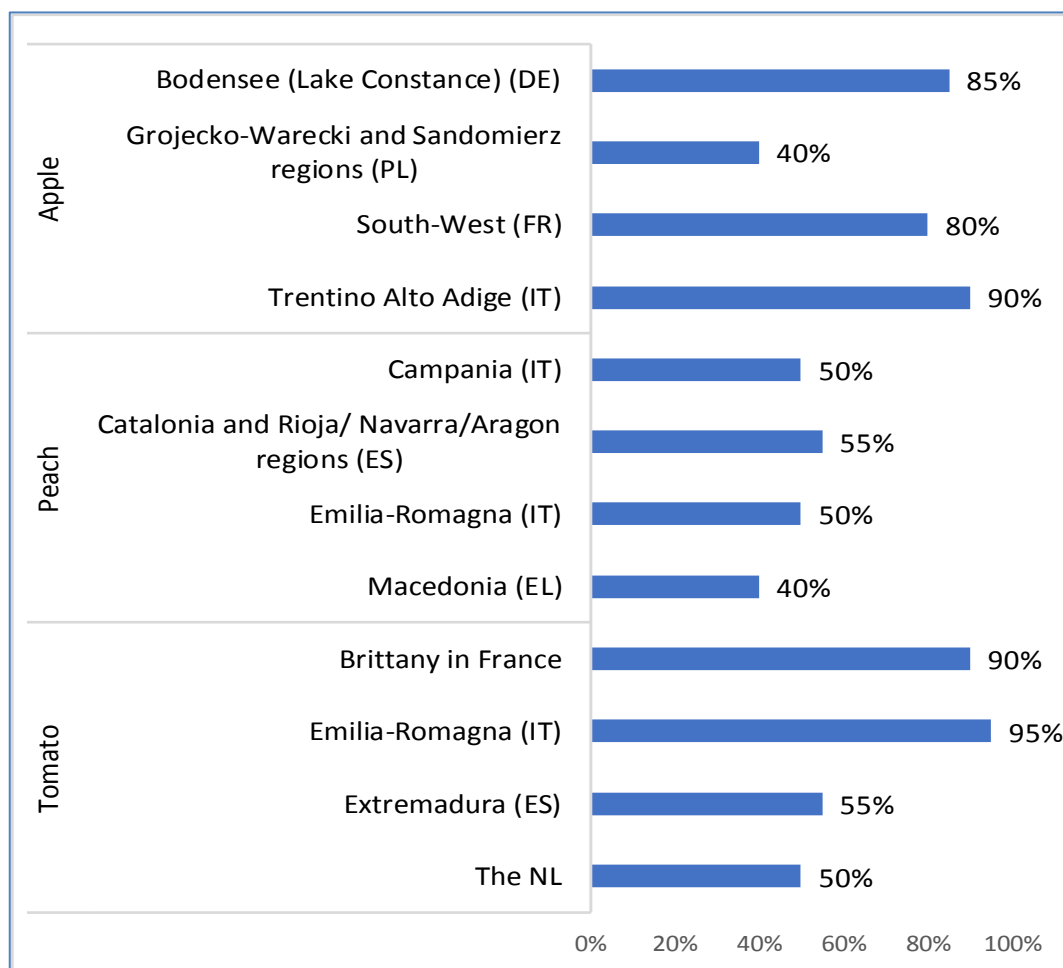
A literature review that compared the performance and efficiency between POs and investor-own firms (IOFs) reached the conclusion that *"although there are mixed results, most of the evidence suggests that there exist no major differences in the performance of POs compared to IOFs, despite the fact that POs have to balance between attaining the needs of the POs members and the general corporate goals."*⁶²

Against this background, the analysis of the structure and the organisation of the POs and IOFs of the main producing areas in each of the three above-mentioned crops lead to several conclusions. The first main interesting finding relates to the percentage of producers in these areas who are members of recognised POs, which is significantly higher than the national average (Figure 16). In all regions under study, the percentage of farmers who are selling or marketing their products through recognised POs/APOs is high, especially in the tomato and apple sectors (Figure 33).

⁶¹ Van Herck, K. (2014) Assessing efficiencies generated by agricultural producer organisations.

⁶² Van Herck K. (2014) Assessing efficiencies generated by agricultural Producer Organisations.

Figure 33 - Percentage of farmer members of recognised POs in each of the top producing regions in three FV major crops (apple, peach and tomato)



Source: Compiled by AI based on findings from interviews

The two regions in FR show a high percentage of farmers who are members of recognised POs (>75% for the South-West region for apple production and about 90% for the tomato sector in Brittany) in comparison to the national average for the FV sector, which is estimated at about 50%. A similar situation is observed in PL where e.g. about 40% of farmers are members of POs in the Grojecko-Warecki and Sandomierz regions in comparison to the national average, which is estimated at about 10-15% only. Therefore, it could be concluded that concentration of the offer through (recognised) POs is higher in top production areas.

In the period 2000-2010 many new POs were established due to the restructuring of the traditional vegetables auctions into a marketing cooperative using different trading mechanisms (shifting from auction clock to brokerage). The second main reason for growers to establish new POs was the availability of EU subsidies under the operational programmes of the CMO Regulations.

The only exception is the significant decrease of members of recognised POs in the tomato sector in the NL (-50% since 2010). This decrease is, mainly, due to two main

factors. First, a merger of POs has taken place and secondly, several POs went bankrupt during the last years.

The main other conclusions of this analysis of the economic organisations at primary production level read as follows:

- A network of recognised POs/APOs is observed in all the regions studied. In most cases several POs/APOs, which are competing to each other's, are present in the same production area;
- Recognised POs are in place for several years and even decades in the majority of the areas considered.
- Proximity remains largely intact in the researched regions. When consolidation took place (e.g. merger of organisations or auctions), multi-level organisations have been set-up to secure proximity of the POs to their members.

During our research, interviewees have been invited to provide evidence related to prices received by members of a PO versus farmers who are not members of any farmer cooperation. The majority of the interviewees have commented on the unfeasibility of quantifying, in monetary terms, prices paid to producers who are members of PO versus prices paid by buyers to independent producers for the following reasons:

- Often, independent producers are marketing different product references than producers who are members of POs, and therefore a direct comparison is not possible. For example, for a given apple variety, such as Golden Delicious, more than 600 product references exist. Independent producers that are close to a PO, in geographic terms, will often try to differentiate their production and therefore will market product references (e.g. sizes, packaging, production approaches, etc.) that are different from the PO.
- Prices paid by buyers to independent producers on the spot market through private treaty, commission sales, pre-agreed contracts or telephone order, are not known as such information is not released nor made public.
- Similarly, prices paid by buyers to PO members are not public. As an exception, when purchases are made through an auction, prices become known. Auctions are present in the FV sector in several Member States, mainly BE, ES, FR, and the NL. In ES, a web-based portal called Agropizzara was created in 2014 and publishes on a daily basis auction prices of major vegetable auctions in the provinces of Almeria, Granada and Murcia. In these cases, farmers not selling through the auctions can easily compare, on a daily or weekly basis, the price differences. Competitive POs/APOs that are not selling through the auctions can, also, easily monitor selling prices over the production period. However, the price comparison (prices paid by auction and price paid outside the auction) is not straight forward as, in general, the set-up and the management of the

auction has a cost which is not known by producers and POs not participating to the auction and which has to be deducted from the public price.⁶³

One French interviewee, a farmer, has indicated that its PO distributes, to its members only, a summary of the prices paid by the PO (on a weekly basis) to its members at the end of the season. The same farmer indicated that these summaries are discussed with neighbouring farmers who are members of different POs on an *ad hoc* basis, but that no regular compilation of such information that compares the prices paid by different POs seems to exist. For this farmer, these types of exchanges between farmers are frequent and may lead to decision to join another PO that seems to pay a better price.

However, several remarks highlighting differences between PO members and other producers have been reported by interviewees who are located in regions with local auctions:

- Generally, in the FV sector, when the bulk of the products are sold through POs, buyers buy products from IOFs at a lower or equal price (for the same product reference). The following example of prices differences have been reported by interviewees (members of POs): in the apple sector in PL, the price paid by POs to their members is on average 0.2 PLN (~0.05 EUR per kg) higher than the market price.⁶⁴
- In certain cases where there is a known price-determining mechanism in the supply chain (e.g. auctions), price-setting for independent transactions is often based on the prices of the auction. Several interviewees (ES, FR, BE, NL) have highlighted that buyers who are buying through auctions may pay more than the reference price. This leads to the situation that PO members get a better price than independent farmers at auction level. However, this doesn't necessarily mean that the net price paid to PO members is higher as all costs linked to the functioning of the auction, which are not known, have to be deducted from the gross price paid by the auction.

In addition, elaborating on the efficiency of POs, a few representatives of POs/APOs from the vegetable sectors in FR and BE indicated that, in their opinion, the key incentive for being member of a PO has more to do with the 'comfort' that a PO could bring rather than the price it pays. The main objective of most POs is to enhance the performance of their member's operations through collective actions (regarding technical support or marketing and selling activities), thus making the performance of the PO itself subordinate. For the same interviewees, the main business goal for an independent producer is driven by short-term growth and profit maximisation, while value created by POs is, also, captured in the mid and long-term growth and profitability of their members' businesses. The same interviewees added that a PO is often established to achieve objectives that are wider than those pursued by an

⁶³ Reported by one group of farmers interviewed during the interviews with POs/APOs

⁶⁴ Another piece of evidence has been recorded during the interviews, but for the pig meat sector: In Brittany (FR), a representative of the major regional PO indicated that the PO is paying 182 EUR more per live animal than the reference price set-up by the auction.

independent producer, namely focusing not just on financial performance but also on the development of social capital and member satisfaction.

5.3. Incentives and disincentives for setting up or joining a PO

This chapter presents incentives and disincentives for setting up or joining a PO or an APO⁶⁵. Under Section 5.3.1 (incentives), different possible factors that motivate EU farmers to join POs are grouped in three groups:

- 1) Direct economic incentives.
- 2) Incentives connected to the technical/technological processes of first (production) and second stage (e.g. processing, marketing) activities.
- 3) Social-human considerations.

Disincentives for joining or establishing a PO, which are presented under Section 5.3.2 are, also, grouped in three groups:

- 1) Economic disincentives for joining or establishing a PO.
- 2) Legislative or policy disincentives.
- 3) Social-human disincentives.

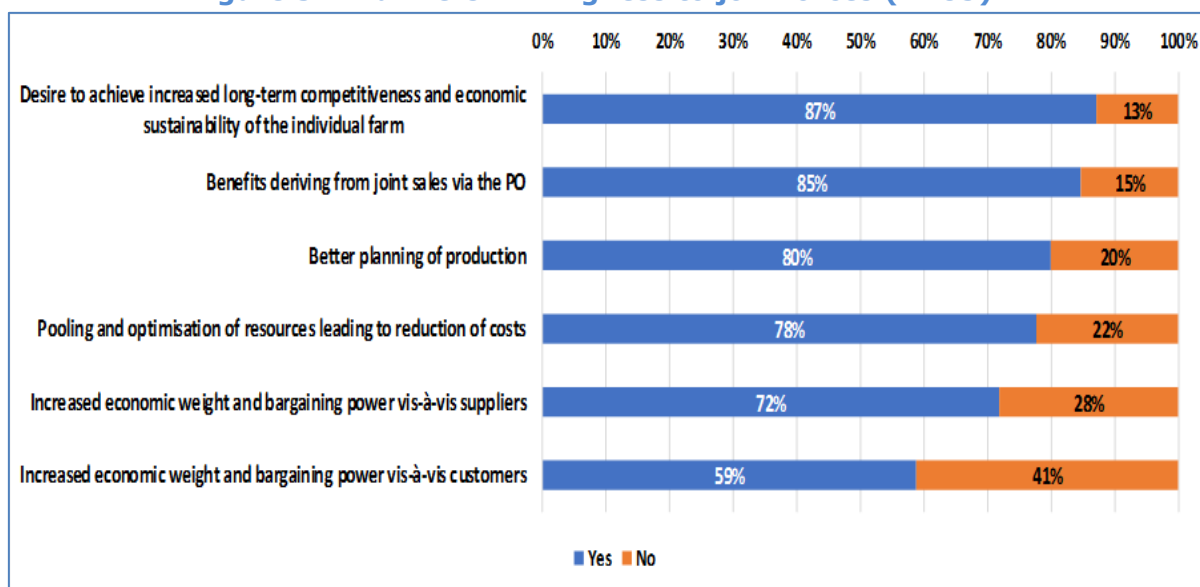
5.3.1. Why may farmers decide to join or establish a PO (incentives)?

In principle, farmers join or establish POs to achieve economic, commercial, or technological objectives, to get access to services they cannot reach by themselves, or to perform activities they could carry out themselves only at much higher costs.

Farmers' willingness to join forces has been discussed during the interviews with POs/APOs as well as with individual farmers from the pig meat sector. These interviews show the following main reasons for joining or creating POs.

⁶⁵ Van Herck K. (2014) Assessing efficiencies generated by agricultural Producer Organisations.

Figure 34 - farmers' willingness to join forces (n=85)

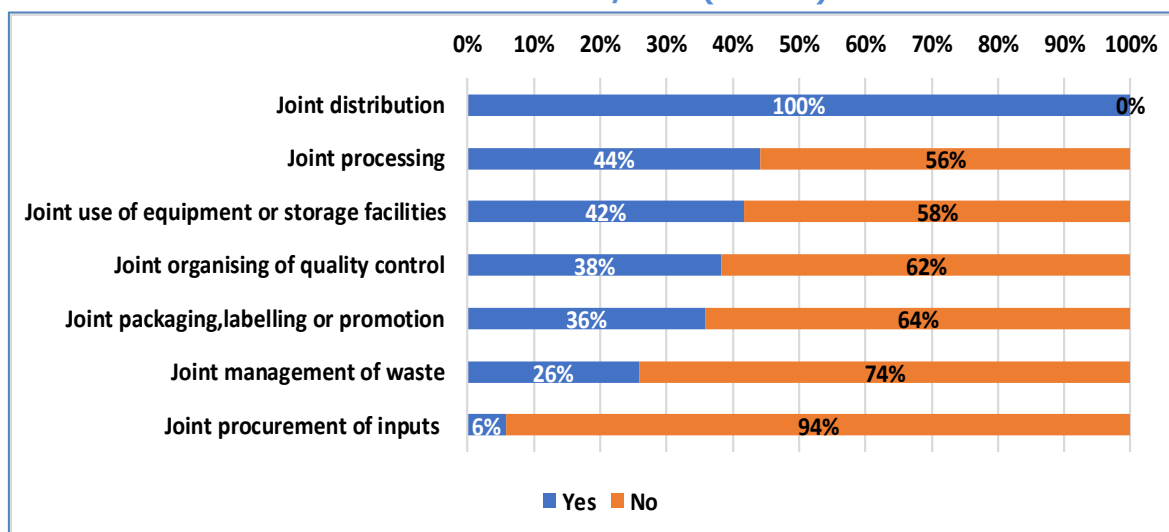


Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

Figure 34 shows the drivers behind farmer's willingness to join forces as indicated by the respondents. Overall, all the reasons listed in the figure above are considered relevant in this respect by most respondents. The 'desire to achieve increased long-term competitiveness and economic sustainability of the individual farm' and the 'benefits deriving from joint sales via the PO' have the highest percentage of positive responses (87% and 85%, respectively). The 'increased weight and bargaining power vs customers' is the justification that was less frequently mentioned by interviewees, but still relevant in 59% cases.

The 120 pig holdings have also been invited to provide their views as regards incentives for joining a PO (Figure 35). The majority of the respondents (93%) declared not to have faced difficulties in joining the PO of which they are currently members. When they joined the respective POs, all the pig farmers surveyed expected that the PO would carry out 'joint distribution'. Overall, less than 50% of the pig farmers surveyed had expectations with regard to all the other services listed above: amongst these, the 'joint processing' and the 'joint use of equipment or storage facilities' show the highest percentage (around 44% and 42%, respectively). Conversely, the 'joint procurement of inputs' appears to be the service about which the farmers in the sample had less expectations. Of the other joint activities of services mentioned by the respondents, the organisation of quality control was the service most frequently mentioned.

Figure 35 – Expectations when joining the PO for pig holders that are members of a PO/APO (n=120)



Source: Interviews of pig holders that are members of a PO (120 interviews)

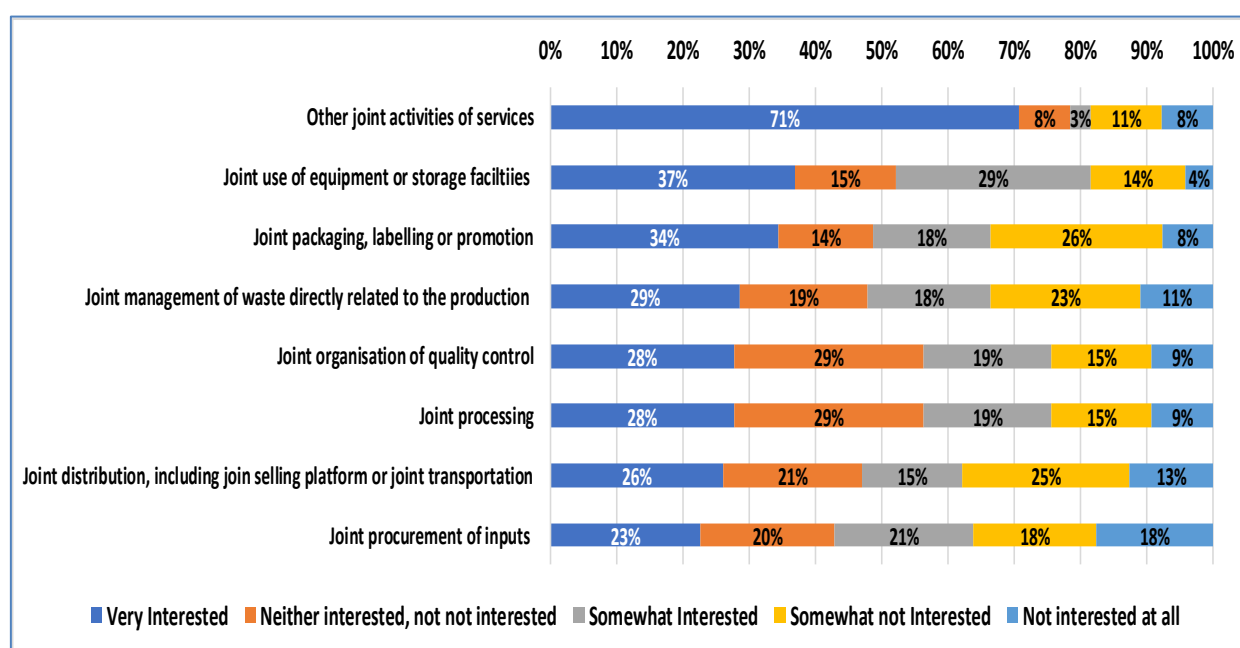
From the same pig holder interviewees that are members of a PO, it emerged that:

- 88% of the pig farmers surveyed are not members of any other PO or do not take part in any other form of cooperation at primary production level. Conversely, 12% of them are members of other POs (for production other than pigs) or take part in another form of cooperation. Most of the respondents who answered positively to this question justified their answer claiming that the other PO they joined offered a wider range of services.
- 95% of these respondents have never left an existing PO in order to join a new one, whereas the remaining 5% have. The respondents who did, justified their decisions mostly based on the lack of appropriate support, few programmes and structures to help farmers.

In the survey of the 120 pig holdings that are not members of any PO, respondents have been invited to consider the extent to which the regular services a PO offer could be of interest for them.

Figure 36 - Services that would be of interest to pig holders that are not members of any PO (n=120)

Study of the best ways for producer organisations to be formed, carry out their activities and be supported



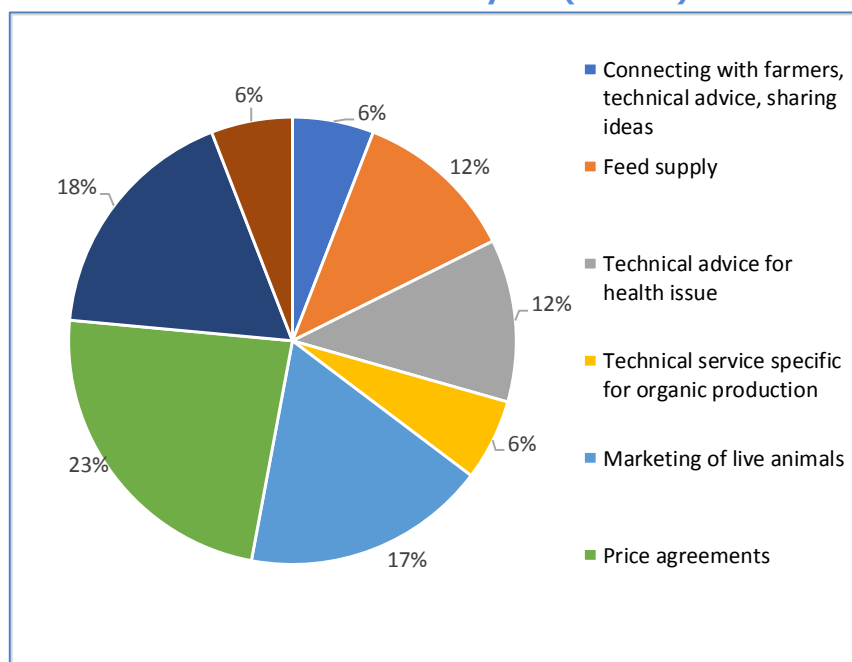
Source: Interviews of pig holders that are NOT members of any PO (120 interviews)

Of the various services listed in Figure 36, the 'joint use of equipment or storage facilities' and the 'joint packaging, labelling or promotion' are the activities that appeal more to the surveyed pig farmers who are not members of any PO (37% and 34%, respectively). The 'joint organising of quality control' has been mentioned by 28% of respondents who indicated that they have their own selling channels which is in place for several years and, therefore, they are not looking for such service from any producer organisation. Contrary to that, the 'joint distribution, including joint selling platform or joint transportation' (26%) and the 'joint procurement of inputs' (23%) are the least interesting activities for the respondents.

Seventeen pig farmers stated to be interested in 'other services'⁶⁶ than those listed above. Their responses are represented in Figure 37. Overall, 'price agreements' is the activity mentioned by most farmers (4) corresponding to 23% of the responses, followed by 'joint manure processing' (referred to by 3 farmers). Besides that, 'shared veterinarian services', 'connecting with farmers, technical advice, sharing ideas', 'technical services specific to organic production' and 'marketing of live animals' are other services which were mentioned by only one farmer.

⁶⁶ Interviewees have been given the possibility to add additional services that were not listed in the survey questionnaire (open list)

Figure 37 - 'Other services' that would be of interest to pig holders that are NOT members of any PO (n=120)



Source: Interviews of pig holders that are NOT members of any PO (120 interviews)

A key concern of POs is to increase the motivation of farmers to join a PO.^{67,68} There are many advantages and functions performed by POs that can help achieve that result: these have been grouped into three main groups by the study team and are systematically reviewed in the next subsections:

- 1) Direct economic incentives.
- 2) Incentives connected to the technical/technological processes of first (production) and second stage (e.g. processing, marketing) activities.
- 3) Social-human considerations.

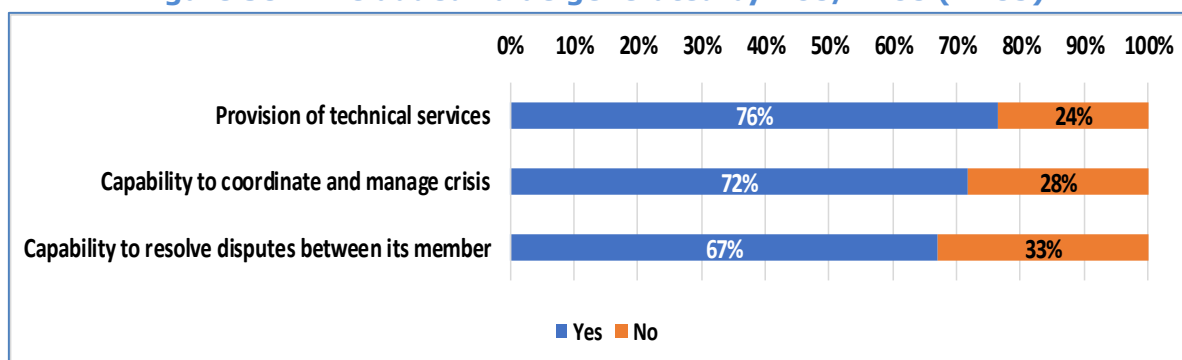
5.3.1.a. Direct economic incentives to join or establish a producer organisation

Based on the results of the interviews conducted with representatives of POs/APOs, the main added values generated by POs/APOs are presented under Figure 38.

⁶⁷ Cook, M. L. et al. (2004) Advances in cooperative theory since 1990: A review of agricultural economics literature. Erasmus University Rotterdam, Rotterdam School of Management.

⁶⁸ Bijman, J. et al. (2014) Shifting control? The changes on internal governance in agricultural cooperatives in the EU. *Annals of Public and Cooperative Economics* 85(4): 641–661. doi: 10.1111/apce.12055.

Figure 38 - The added value generated by POs/APOs (n=85)



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

When combining the two sets of findings (from the literature and interviews), direct economic incentives can be sorted into four main groups according to the type of coordination that POs, recognised or not, can offer, and the type of service they can carry out:

- 1) Horizontal incentives, which relate to the market and the bargaining power of producers.
- 2) Vertical incentives related to the position of farmers in the food supply chain, e.g. by dealing more effectively with other operators downstream.
- 3) Incentives connected to the capacity of POs to mitigate economic risks better than individual producers acting on their own, including during crises.
- 4) Incentives based on the advantages that POs may deliver regarding more efficient ways of purchasing inputs jointly from upstream suppliers, including through a better flow of information.

The following **incentives connected to the market and bargaining power** have been reported by a majority of interviewees, with most of them being reported in the literature as well:

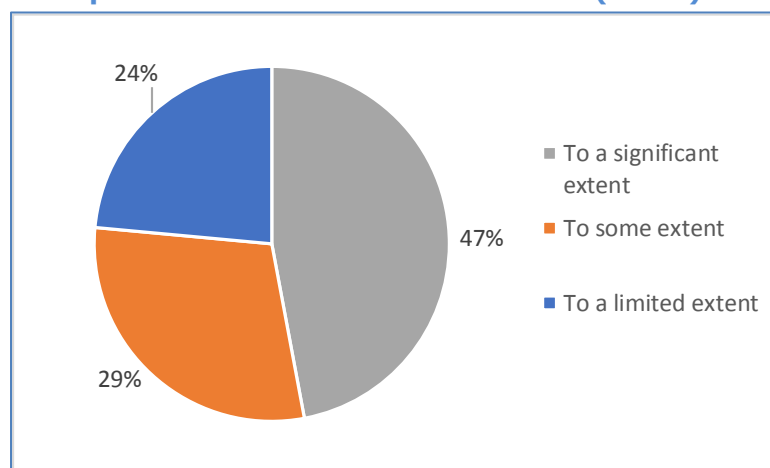
- Stable, long-term access to markets and improved market penetration is the most important incentive to join or establish a PO reported by a majority of the POs/APOs⁶⁹ that have been interviewed. These reasons are also referred to in the literature.⁷⁰ Obtaining a greater share of the market, through the help of a PO, is a key incentive for farmers to join. Nearly 50% of the POs/APOs that have been interviewed during the study reported that their PO is providing added value for its own members in this way. Among the activities most frequently mentioned as value-adding, access to new market stands out.

⁶⁹ Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors (farmers included).

⁷⁰ Markelova, H. et al. (2009) Collective action for smallholder market access. Food Policy, 34(1), 1-7

For the interviewees of representatives of POs/APOs,⁷¹ the commercialisation of agricultural products has improved thanks to the activities performed by their PO/APO. The majority of the respondents (47%) considers that the commercialisation has improved to a significant extent, followed by the interviewees who think that it has improved to some extent (29%). Finally, 24% considered that the commercialisation of agricultural products has improved to a limited extent (Figure 39).

Figure 39 - Improvement of the commercialisation of agricultural products for the members of POs (n=85)



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

- Market knowledge is an important incentive among the economic activities of POs, as also mentioned in the literature.⁷² When producers start new activities, like production of a new produce, or they operate on a quickly and dramatically changing market, they often do not know all potential buyers of their products. In general, as reported in a large majority of the interviews conducted with the POs/APOs, most farmers have not enough time and expertise to study the market in full detail themselves, but they neither want to risk not finding buyers for their products. The same interviewees have added that many farmers prefer to join a PO that will sell their products on their behalf, thus offering greater financial certainty. POs can offer their members a convenient access to relevant markets, as well as greater security that products will be placed on the market successfully. This is true for all products, but it is much more important for perishable products in the FV and dairy sectors. Most vegetables, some fruits, and also milk and other dairy products cannot be stored long and have to be kept in cold storage, with little time for selling at the best possible price.

⁷¹ Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors (farmers included).

⁷² Hueth, B. et al. (2006) Information sharing and oligopoly in agricultural markets: the role of the cooperative bargaining association. American Journal of Agricultural Economics, 88(4), 866-881

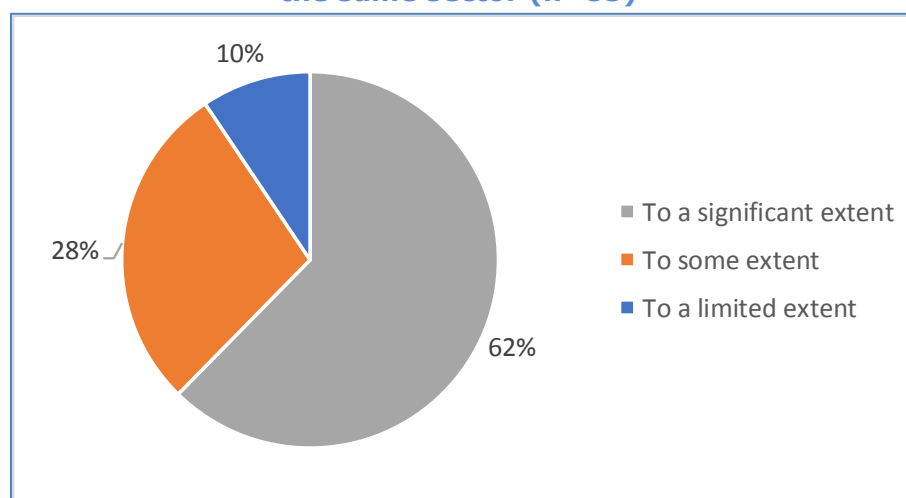
- Improving producers' bargaining position⁷³ with buyers by joint selling:⁷⁴ Individual producers find themselves in transactions as price takers. In the case of a large number of small suppliers and a greater concentration on the side of the buyers, it is relatively easy for buyers to change a supplier. This significantly lowers the bargaining position of each supplier. However, if the same suppliers sell through a more limited number of POs, the buyers have fewer alternative suppliers to choose from. In turn, this helps POs sell their members' products at better prices or conditions. For farmers, joint negotiations may thus balance their bargaining power vis-à-vis more powerful buyers. On the other hand, a PO can negotiate agreements involving large volumes, which lowers the transaction costs of big buyers since they do not have to negotiate with dozens or hundreds of individual farmers to fill their demand, but only with one PO. Furthermore, POs can sell baskets of products and varieties, thereby exploiting the marketing complementarities of their members' production. For example, apple POs can use the demand for one variety (e.g. Pink Lady) to sell also other apple varieties to the same buyer.

Interviews conducted with POs/APOs have clearly stated that their PO/APO has contributed to strengthening the bargaining power of its members vis-à-vis other stakeholders operating in the same sector. A large majority of respondents (90%) considers that the PO has contributed towards this objective to a significant extent or at least to some degree (Figure 40). Only 10% of the surveyed representatives of POs/APOs consider that the contribution of their PO in this regard has been limited.

⁷³ This is a combination of the previous two points. It refers to the possibility of increasing the value of the outside option.

⁷⁴ This is a typical role of cooperative. Literature dates back to 1920s. See Sapiro I and II types of coops in Cook, M. L. (1995). The future of US agricultural cooperatives: A neo-institutional approach. American Journal of Agricultural Economics, 77(5), 1153-1159. See, also, Hueth, B. et al. (2003) An essay on cooperative bargaining in US agricultural markets. Journal of Agricultural & Food Industrial Organization, 1(1).

Figure 40 - Contribution by POs/APOs to the strengthening of their members' bargaining power vis-à-vis other stakeholders operating in the same sector (n=85)

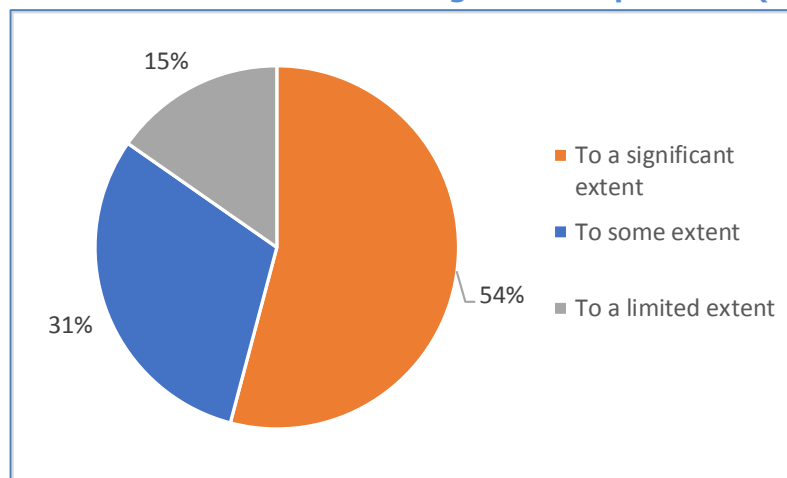


Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

- **Widening the market outlets.** Several profitable sale channels (export markets, mass markets, etc.) require a minimum scale of production. Small farmers cannot reach such volumes alone, but they can still obtain access if they join forces with other producers. Similarly concerning quality rules, large processors and retailers often prefer to deal only with POs because of the higher assurances these organisations guarantee in terms of compliance with quality certifications requirements. Furthermore, widening market outlets can help POs improve their bargaining position,⁷⁵ as long as they can choose among several buyers.
- **Lowering competition among producers,** at least locally or regionally, could be a significant advantage stemming from establishing a PO, especially in case of niche markets. Farmers expect that, by sharing rules for the marketing of their products, POs may soften and regulate the competition amongst them.
- **More predictable prices.** Due to POs' negotiation power, based on a robust understanding of the market(s) they are supplying and their dynamics, they can secure predictable prices for the products of their members. Interviews conducted with POs/APOs have clearly indicated that this has contributed towards the payment of a fair price to their members for the sale of their agricultural products. As presented under Figure 41, the majority of the respondents (54%) considers that the contribution of their PO towards a fair price has been significant, while 31% considers that their PO has contributed to some extent. Conversely, 15% of the sample surveyed considers that the PO has contributed to a limited extent.

⁷⁵ For definitions of the difference among bargaining power, bargaining position and negotiation power see: [http://www.europarl.europa.eu/RegData/etudes/STUD/2016/573428/IPOL_STU\(2016\)573428_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2016/573428/IPOL_STU(2016)573428_EN.pdf) page 237-250

Figure 41 - Contribution by POs/APOs towards the payment of a fair price to their members for their agricultural products (n=85)



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

- Reduction of transaction costs:⁷⁶ Belonging to a PO spares the farmer the costs of searching a buyer (ex-ante transaction costs). It also transfers to the PO the fallout of possible buyer opportunism (ex-post transaction costs), which the PO is in a better position to deal with. However, the PO is also subject to possible opportunism by its members (e.g. free rider problem, when farmers by-pass the PO and sell on the spot market, thus weakening the position of the PO).

As regards **the participation and better position of farmers in relevant food supply chains**, the following vertical incentives have been reported by respondents:

- Shortening the supply chains (in FV sector) bringing farmers and consumers closer (leaving out middlemen and intermediaries such as wholesale traders) thus directly introducing changes in market demand (lifestyle changes, consumer preferences, special diets, quality/price ration, etc.).
- Link to the downstream sector (in FV sector). An individual farmer often encounters difficulties in selling to large retailing or processing companies. For example, a major part of fresh FV is sold by supermarket and discount chains that require big assortments of lots of products, meeting quality standards and providing additional services like packaging and transportation. Conversely, a PO may deliver the required quantity and quality to other supply chain operators. This is the reason why above a certain size (turnover) POs in the FV sector tend to deliver to retail chains rather than individual corner shops or wholesalers. This is a big opportunity since retail chains can absorb large quantities of POs products, but if such business connections are

⁷⁶ Reported by two interviewees and mentioned in literature by Sykuta, M. E. et al. (2001) A new institutional economics approach to contracts and cooperatives. American Journal of Agricultural Economics, 83(5), 1273-1279.

broken, POs may encounter difficulties in finding alternative buyers for marketing all the products of their members.

- Ability to produce products with higher added value,⁷⁷ thus making farming activities more profitable can be a point of consideration as well. Usually, even the relatively big producers are too small to carry out and to invest into activities with higher added value (like processing and retailing). Even to buy a suitable site and to establish a cold storage depot for FV is a huge investment to be made by individual farmers. Of course, this advantage can be reached only at a higher level of cooperation, like in DK and NL, where cooperatives very often carry out second-stage activities. However, cooperation on that level is a result of more than 100 years development.
- Following a recent trend, more developed POs (e.g. in DK or in NL) establish new marketing strategies (higher market shares and penetration into new, sometimes foreign markets instead of price leadership). In order to fulfil requirements connected to the marketing strategies, they also implement new organisational strategies (in most of cases resulting in a sort of holding system or in mergers, acquisition etc.) and new financing strategies (trying to involve members in financing new activities with a higher added value in new ways, like introducing transferable "B" shares with higher interest rate etc.).

According to the above-mentioned examples, the most efficient and profitable way of cooperation is a vertical integration (adding higher value) based on horizontal cooperation of farmers (producing raw materials). This is especially true in the case of single-purpose cooperation (PO) dealing with only one or with only a few similar products. However, since members must consider their investment into their own farms versus into the PO and sometimes banks cannot finance more capital demanding activities, the lack of capital to invest to activities with higher added value even on the level of a PO can be an obstacle for some POs. This is a bottleneck for POs working in old Member States as well, but the lack of capital is especially a problem for POs which are newly founded and/or established in new Member States. In this sense, EU and national investment support schemes are important for furthering cooperation between farmers and for the development of POs.

Related to the above incentive, a higher share of the income of the supply chain offered for farmers with the reposition of some parts of incomes from other stages (e.g. processing, retailing) of the value chain makes POs a socially more acceptable form of distribution of income.

⁷⁷ Royer, J. S. (1995) Potential for cooperative involvement in vertical coordination and value-added activities. *Agribusiness*, 11(5), 473-481.

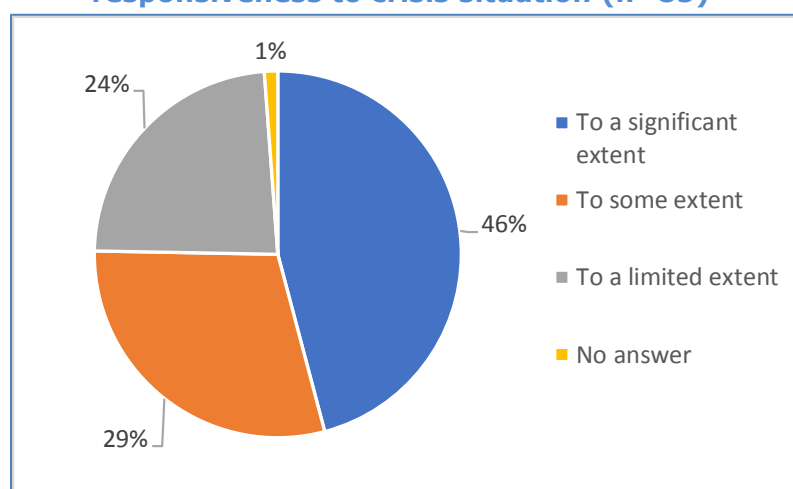
Several incentives **connected to avoiding economic risks including** crises have been identified in literature and reported by interviewees as follows:⁷⁸

- Risk management, including reduction and sharing market (and of course technological) risks means greater certainty of transactions by building a stable network of buyers; more stable and predictable prices. Cooperatives (and other forms of POs) can have risk sharing/management programmes (such as pooling prices, insurance schemes or income stabilisation).
- Higher market (and production/technological) security and predictability, including delivery and payment security is very important for some farmers.
- Risk sharing in investments connected with technical infrastructure (like buying a site for headquarters, establishing a cold storage depot or processing facilities etc.) is especially important when activities with higher added value are planned.
- A special incentive for farmers to joining or establishing a PO can be to avoid or minimise the risk of hold up problems (which is a risk in existing contractual relations). Members of POs are not so vulnerable to (sometimes the last-minute decision of) their downstream partners who at times may change the details of the contracts, including (and especially) prices and terms of delivery. They may do that knowing and taking advantage of that products of the (individual) producers are perishable and/or farmers had made specific investments, so they cannot easily change their activity and/ or sell to other operators. Of course, if there are more operators in the food supply chain or market, it is easier to find another channel, but still finding a new buyer quickly entails some additional transaction (mainly information) costs. Therefore, if PO members are suppliers and owners of their organisation at the same time, then they could think of the PO as their own organisation which will never act against them and always represent their interests.
- Moreover, for farmers it is easier and safer to access to the payment through the PO than alone against to a contractor. Terms of payment can be better as well if the PO negotiates on behalf of the farmer. Contract enforcement is easier also and the costs associated with it are significantly lower per transaction or per member through a PO versus trying to get the payment separately in case of opportunistic behaviour. Following some recent developments in the EU and changes in legislation, a PO can give a kind of protection from UTPs for its members.
- Support in situation of crisis. Usually POs are too small to able to handle crisis situations alone. However, they can help their members in selling their products first or coordinate their withdrawal from the market.

⁷⁸ Zeuli, K. A. (1999) New risk-management strategies for agricultural cooperatives. American Journal of Agricultural Economics, 81(5), 1234-1239.

Interviewees from POs/APOs consider that their organisation has contributed to improving the responsiveness to crisis situations of the farmers who are members of the organisation. As shown on Figure 42, the majority of the respondents (46%) considers that the PO has contributed to a significant extent in this respect, followed by those who think that their organisation has contributed to some extent (29%). Finally, 24% considers that the contribution by their PO/APO to improving responsiveness to crisis situations has been so far relatively limited.

Figure 42 - Contribution by POs/APOs to improving their members' responsiveness to crisis situation (n=85)



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

Natural disasters (e.g. floods, frosting) that affected members crops, pig epidemics (e.g. African Swine Fever), the *E. coli* crisis that hit several EU Member States in 2011, were the most recurrent situations mentioned by the respondents when asked to provide examples of situations of crisis in which POs played an important role ensuring, among others, an appropriate level of communication between the stakeholders involved and/or coordinating market withdrawals of their members.

The last type of incentives for farmers to join POs is related to the advantages that POs bring to individual producers regarding more **efficient ways of purchasing input/resources**:⁷⁹

- Reducing transaction,⁸⁰ especially information and enforcement costs connected with the search of a seller, negotiating price and other terms of

⁷⁹ Staatz, J. M. (1987) Farmers' incentives to take collective action via cooperatives: a transaction cost approach. Cooperative theory: New approaches, 18, 87-107.

⁸⁰ Ortmann, G. F. and al. (2007) Agricultural cooperatives I: History, theory and problems. *Agrekon*, 46(1), 18-46. The paper is focused on South Africa, but it has a nice discussion of transaction cost economics and cooperatives. It can be used to support previous points

transaction, monitoring contracts, etc. is one of the classical incentives to join or establish a PO.

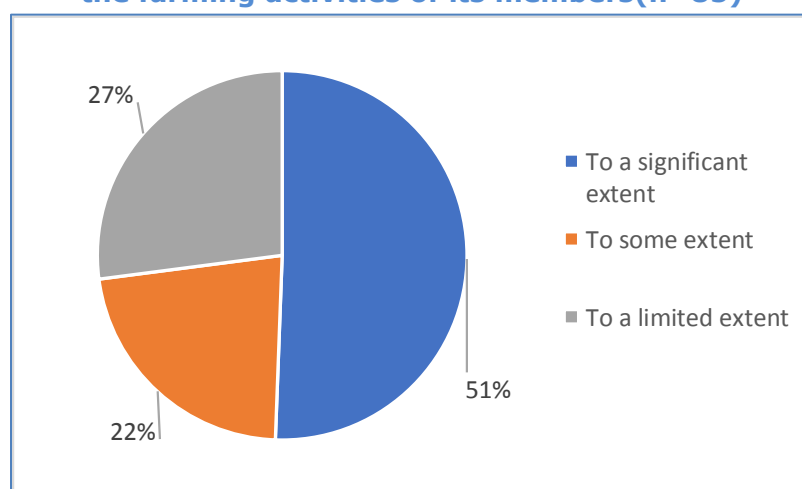
- Joint procurement of inputs/resources can be a much more economical input sourcing resulting in lower prices and/or better terms, like delivery services, payment terms, etc. It could be one of the first and most general advantages a PO can offer even without investing very much or gaining any supports. As a first step of cooperation, this incentive is frequently mentioned in the interviews with POs made in new Member States, like for example in HU. However, it must be noted that incentive could differ to a significant extent according to sectors and countries. For example, in a few cases, input suppliers offer temporary a better price and better terms (like inputs delivered to the site of the farmer free of charge etc.) for bigger farmers to bind them. However, farmers are usually too small to enjoy long-term discounts of input suppliers and they would gain more if they purchased inputs jointly through a PO.
- Input selection and purchase.⁸¹ A typical PO action is the collective purchase of production input (including durable inputs such as machinery). Also, while individual farmers may have a limited capability to compare performances of alternative inputs, the PO may have the resources to carry out a critical assessment of new inputs that are proposed by the industry, thus helping farmers to have better quality inputs.
- Access to club varieties.⁸² PO can obtain the right to use patented varieties for their members. In this case, farmers willing to grow the club variety may have the incentive to join the PO. This is for example the case in the apple sector where clubs based on specific varieties are being set-up, the most famous one being the Pink Lady club.
- An additional incentive, which was mentioned frequently in POs' interviews, even in new Member States, is the service of temporary pre-financing of the purchase of inputs by farmers through a PO. This could be such a strong incentive that acts as a contract enforcement tool as well. If producers do not deliver the contracted quantity (and of course quality), they will be (temporarily) excluded from using such a service. One bottleneck of pre-financing of input purchasing is that the PO needs an event bigger amount of revolving funds to be able to finance this service. Usually, a bank or members' loans can help to fill the gap.

⁸¹ Abebaw, D., et al.. (2013) The impact of cooperatives on agricultural technology adoption: Empirical evidence from Ethiopia. Food policy, 38, 82-91.

⁸² Club varieties are patented vegetable varieties. They can be produced only on licence (e.g., pink lady apples, yellow pulp kiwis, etc.). In some cases (for example Trentino apple sector) the cooperative/PO is able to negotiate with the breeder the production rights on the behalf of farmers.

- Access to financing investments and/or revolving funds is a significant point of considerations.⁸³ In certain cases, it is easier to access bank loan through a PO or as a PO member. Unfortunately, this is usually not the case in HU, where some big members, usually members of the board, are behind the loans, since banks do not accept POs as debtors as they are not legally accepted organisations. However, especially in local savings banks or credit cooperatives, being a member of a PO gives enough personal credit to get a loan. Also, if a producer is a member of a PO and he sells through it, then its activity is transparent and has probably a high enough turnover which could be a basis for a loan versus farmers selling on black/grey market without any contract or paper.
- Interviews conducted with POs/APOs have reported that their organisations have facilitated investments that support the farming activities of their members. The majority of the respondents (51%) considers that the PO has contributed to a significant extent in this regard, whereas 27% of respondents think that the PO/APO has played a limited role so far. The remainder of the sample surveyed (22%) considers that the PO has contributed to that only to a certain degree (Figure 43).

Figure 43 - Role of POs/APOs in facilitating investments that support the farming activities of its members(n=85)



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

5.3.1.b. Incentives mainly connected to the technical-technological process

This section groups ideas connected to the technical-technological process in three different sub-chapters:

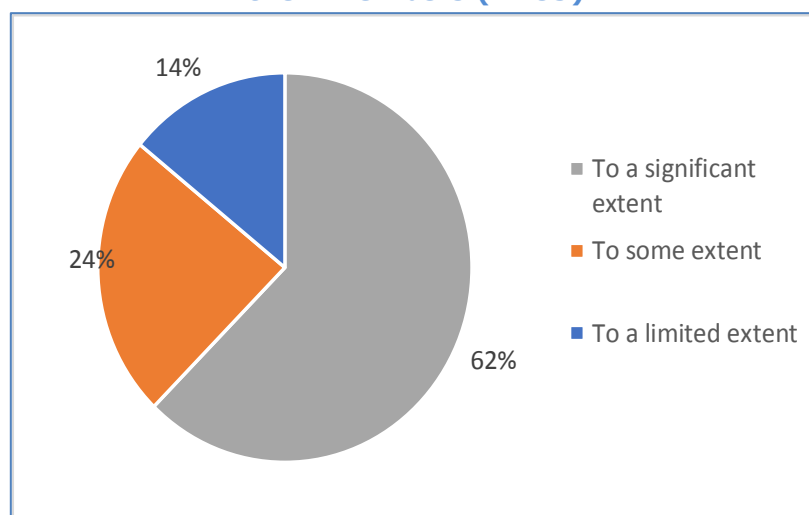
- 1) Improving market efficiency.
- 2) Services offered at cost (including services for production and for marketing).

⁸³ Ortman, G. F. et al. (2007) Agricultural cooperatives II: can they facilitate access of small-scale farmers in South Africa to input and product markets? *Agrekon*, 46(2), 219-244. Most recent literature concerns developing countries

3) Sharing knowledge, information and technical assistance/support.

Interviewees with POs/APOs have acknowledged that their PO/APO has contributed to ensuring a higher degree of efficiency of the farmers who are members of the organisation. As shown on Figure 44, the majority of the respondents (62%) considers that the PO has contributed to a significant extent, whereas 24% considers that the PO has contributed to some extent. Finally, 14% of the sample surveyed considers that the contribution of the PO in this regard has been relatively limited.

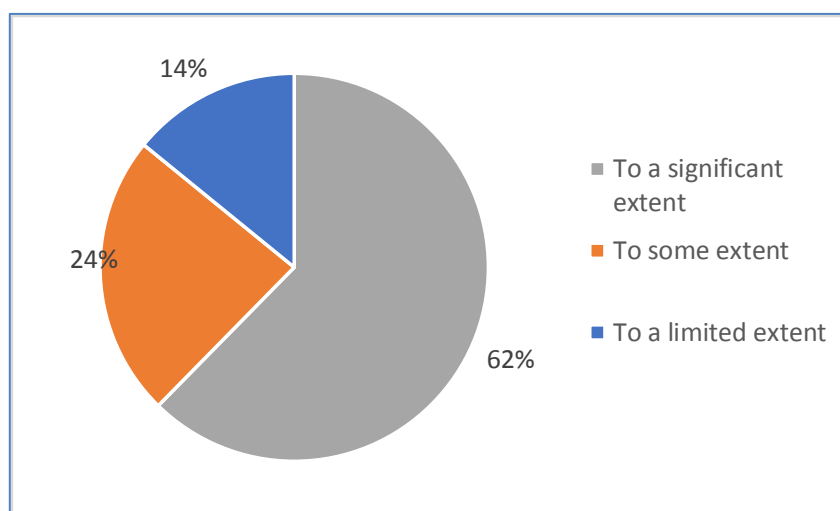
Figure 44 - Contribution by POs/APOs towards a higher level of efficiency of their members (n=85)



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

The 120 pig holdings which are members of a PO have also been invited to reflect on the added value their PO bring to their production. The opinion of the interviewees on whether the services provided by the PO of which they are currently members add value to their production (Figure 45) shows that the 'joint packaging, labelling or promotion' has the highest percentage (73%) of the respondents who think so, followed by 'joint processing' with 63%. Contrary to that, 97% of the respondents indicated that the 'joint procurement of inputs' is the service with less added value to their production, followed immediately by the 'joint management of waste directly related to the production' with 94% of the respondents.

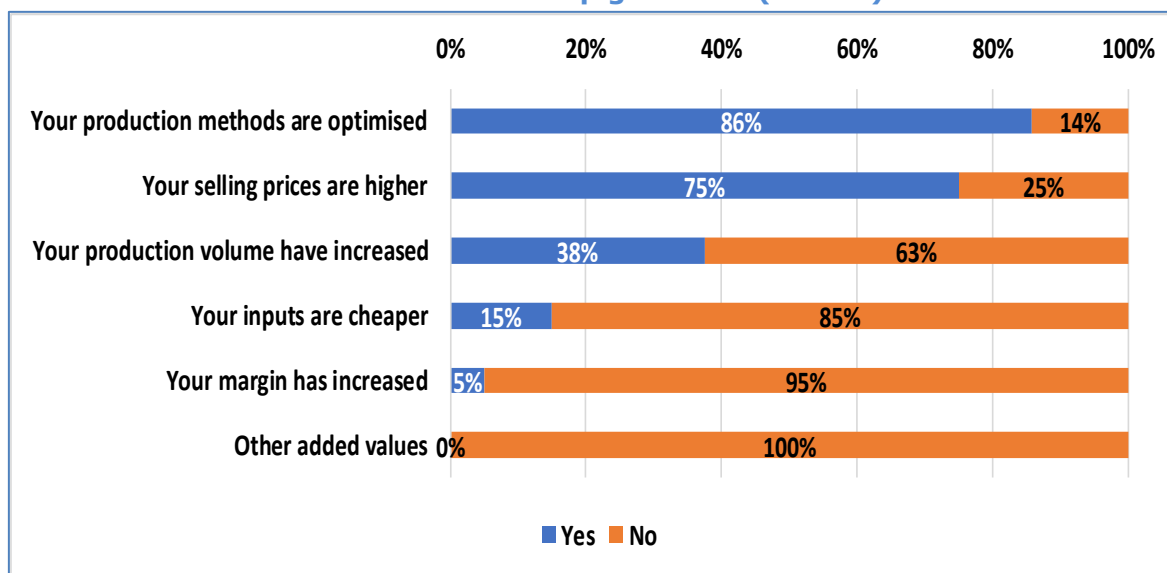
Figure 45 - Contribution by POs/APOs towards a higher level of efficiency of their members for pig holdings (n=120)



Source: Interviews of pig holders that are members of a PO (120 interviews)

For the same group of interviewees, it can be seen in Figure 46 below that the majority of them considers that the PO delivers some added value to their benefit when production methods have improved (86%) and when products are sold at higher prices (75%). Conversely, the majority of the respondents do not consider that their PO provides significant added value to their production when production volumes or margins have increased and when agricultural inputs are purchased at lower costs.

Figure 46 - Contribution by POs/APOs towards a higher level of efficiency of their members for pig holders (n=120)



Source: Interviews of pig holders that are members of a PO (120 interviews)

We will list some specific incentives to be recognised as a PO regarding the technical-technological process at the end of the subchapter.

As regards **improving market efficiency**, there are a number of ways in which POs **increase the market efficiency of the farming activity following technical optimisation** and namely achieving economies of scale⁸⁴ in handling and processing members' products. In most cases it is impossible for an individual grower able to provide the necessary infrastructure for effective storage, sorting, packaging and logistics of the produce. Examples of economies of scales which have been reported by interviewees during the data collection and supported by literature read as follow:

- Search for technical and administrative services in a market with increasing public intervention and regulation. Such services require often scale economies.
- Access to logistic, marketing and negotiation services. Such services require scale economies that are not achievable by small farms. Integrating these services allow to increase the added value accruing to farmers and improve their negotiation power.
- Access to collective storage, processing and marketing facilities. Investment and management of such facilities require scale economies not achievable by small farms. This collective equipment allows more flexibility in market timing and outlets.
- Access to research outputs and innovation. Collective investment in R&D driving innovation in farming and marketing may improve reduction of production costs and/or creation of new product.
- Traceability of the products sold by the PO is another advantage, since chain partners can be sure about quality, food safety issues etc. It may give to the products of members of the PO a competitive advantage and it is very useful for the whole chain since it does whiten it. However, for some farmers this traceability means far too much concern about quality and/or some of them would like to operate hidden, i.e. selling on the black/grey market if the taxation system so allows or, in a few cases and, especially when the VAT is high, it does 'support' it.
- Quality control systems⁸⁵ like GlobalGap in FV are more and more required if producers intend to sell to retail chains or processors. It is beyond the capacity of the individual farmer to establish or run a quality control system but by joining a PO could help him to access to them.
- Better coordination of production according to market demand.^{86,87,88,89} As it has been previously mentioned, shortening the marketing chain means that

⁸⁴ Schroeder, T. C. (1992) Economies of scale and scope for agricultural supply and marketing cooperatives. Review of Agricultural Economics, 14(1), 93-103.

⁸⁵ Gonzalez A.A. et al. (2005) Smallholder participation and certification of organic farm products in Mexico. Journal of Rural Studies 2005: 21(4): 449– 460.

⁸⁶ Kyriakopoulos, K. (1998) Agricultural cooperatives: organizing for market-orientation. In Comunicación presentada en el IAMA World Congress VIII, Punta del Este. It is just a paper presented to a conference, but it is an interesting discussion of the role of cooperatives in promoting market-oriented agriculture.

⁸⁷ Kyriakopoulos, K. et al. (2004) The impact of cooperative structure and firm culture on market orientation and performance. Agribusiness 20(4): 379–396. doi: 10.1002/agr.20021

POs could really respond to market demand and also consider changes in consumer preferences. For example, in some of the more developed cooperatives in the NL so-called business units grouping members who produce the same high-quality raw material (e.g. milk) exist; hence the cooperative could produce exactly the same high-quality products (like special desserts and dairy products with higher added value) that consumers need. Of course, producers who belong to the same business unit receive the same price for the raw material supplied, which is usually higher than the average price paid by POs. A PO can plan and harmonise the production process on behalf of its members.

- Market intelligence (gathering information on PO's markets and analysing it specifically with a view to supporting accurate and confident decision-making in developing strategy concerning anything connected to markets, like market penetration, development, etc) and business intelligence (strategies and technologies used by POs for the data analysis of business information) can really improve PO's market efficiency. Individual farmers have limited access to information about profitable yet 'distant' markets' (spatially or economically). By joining the PO, the farmer can benefit from superior business intelligence, obtaining information about profit opportunities.

POs can provide services offered at competitive cost (including services for production). In addition to marketing and selling activities, especially when starting new activities, the production has to be organised, thus any information related the available of species, methods of production, etc. is very important in this respect. Different services connected to marketing/selling activities are important, but also services regarding a more efficient production process can be incentives perceived with high value, especially if offered at competitive cost. As reported by interviewees, these include:

- Better use of resources for production - including production planning - is essential and can be performed by the PO for the farmers more easily. Usually, being a member of a PO means cost reduction for the farming activity because (most of) the services are offered at competitive cost or sometimes even for free. There is no exact information on the changes of productivity of farmers in natural terms for being a member of a PO but probably it has increased due to the better-quality input (breeding material, better quality machines, pesticides, fertilisers, etc.) and better flow of technical/production information POs supply to their members.

⁸⁸ Bijman, J. (2010) Agricultural cooperatives and market orientation: a challenging combination? In Market orientation, transforming food and agribusiness around the customer, ed. Lindgreen, A., Hingley, M., Harness D. and Custance, P., 119–136). Aldershot, UK: Gower Publishing.

⁸⁹ A specific issue of interest is the ability of coops to develop brands (individual farmers cannot). See Beverland, M. (2007) Can cooperatives brand? Exploring the interplay between cooperative structure and sustained brand marketing success. Food Policy 32: 480–495. doi: 10.1016/j.foodpol.2006.10.004

- Production planning. POs can – under specific circumstances – coordinate their members' production. This can be an incentive to join, if the farmer can be sure that overproduction can be prevented.
- Integrated production and processing can be achieved in most sectors after a certain level in cooperation has been ensured, which makes the members' farming activity far more efficient but, at the same time, leaves less freedom for the producers.
- Technical support. POs can give members technical support in production. This is particularly important for the adoption of (high) quality standards and third-party certification.
- Provision of technical services can improve technological efficiency on site at level of the individual holding as well as at the level of the PO. Sometimes the above technical services are offered in the form of extension services, which in the case of recognised POs are compulsory. According to the interviews carried out with food supply chain actors, production control and technical services coupled with extension services in a PO are of a great interest for those dealing with such organisation.
- Joint use of infrastructure. Those members who are too small for building specific infrastructures (storage, processing, packaging, etc.) can join a PO in order to benefit from the collective use of common investments. Logistic infrastructure and investment are the classical example of this point. In creating more added values to the products, for example, access to technical infrastructure/support enabling storage, packing, sorting, processing, transportation etc. are essential since they could not be performed by the farmers or at a much lower level. Those services are also needed to eliminate negative effects of the seasonality and perishability of products and to ensure and preserve the high quality of products. Sharing of facilities, storage and other types of equipment, as well other means of production, like machinery can also be a huge incentive to join or establish a PO. However, as it emerged frequently during interviews carried out with POs during the study, EU level special investment measure schemes do not really support POs. There are 2 main problems from that point of view. Firstly, farmers get extra points to be a member of a PO, although the PO itself cannot apply for such supports. Secondly, because of the availability of investment supports to farmers, these farmers are not willing to cooperate formally in sharing equipment and machinery. If they had to cooperate at all in this field, they would prefer to do it informally, like lending to each other tractors etc.

As regards the **sharing of knowledge, information and technical assistance/support**, several incentives have been reported during the data collection.

Sharing knowledge and experience with other producers is one of the hidden secrets of successful POs.⁹⁰ This knowledge transfer can be about anything related to the producers' farming activity from market news till how to apply for a certain EU support measure, etc. The existence and the functioning of POs do have an impact on the productivity of farmers, especially in case of small producers. In POs where small and big farmers work together, there is a flow of information between members. Moreover, there is a demand for supplying unified quality for a certain market which can be fulfilled by helping smaller farmers increase the quality of their products.

In addition to that:

- A better flow of information can reduce ex ante and ex post transaction costs as well.
- Education, extension services and technical assistance for farmer-members is a key point in order to improve the level of farming.
- Help in administration. A PO can help in reducing the cost of complying with EU and national regulations, which can lead to improved business management.
- Access to policy measures. The administrative cost of accessing policy measures (payments, investments, etc.) can be high for the individual farmer. A PO can provide support and services in this regard.
- Marketing regulation. Selling products in export markets may require compliance with complex and heterogeneous regulations, including trade authorisations, sanitary rules, etc. A PO can effectively meet the requirements at a lower cost.
- Creating a level-playing field amongst farmers is necessary to put together a high-quality marketable commodity fund, but it can be an advantage since it does improve the efficiency of farming and profitability of the farmers.

A limited number of **specific incentives to be recognised as a PO regarding the technical-technological process** has been reported as follows:

A concrete example, in HU there are not so many different incentives regarding the technical-technological process for recognised and non-recognised POs, apart from the national and EU support. However, other food supply chain members have found useful to deal with recognised POs since they are controlled, so the quality they deliver is homogeneous and high-quality control systems are implemented (e.g. International Food Standards - IFS). The same actors are also very pleased with continuous and planned delivery in the right quantity and in the right time slots.

Maximisation of public EU and national support for investment into storage, headquarter site, technology etc. is a great incentive for recognised POs. However, it should be noted, that without real economic incentives, like improving market

⁹⁰ Hueth, B. et al. (2006). Information sharing and oligopoly in agricultural markets: the role of the cooperative bargaining association. American Journal of Agricultural Economics, 88(4), 866-881.

efficiency, flow of information, technology, logistics and other services a PO cannot survive despite to all supports.

5.3.1.c. Social-human considerations⁹¹

Several socio-human considerations have been identified as incentives for joining existing forms of cooperation.

- Relatively high degree of freedom to make business and technological decisions compared to total contract farming explains why POs are popular among farmers compared to signing a binding complete contract with a processor or a retailer. Relative freedom is the most important difference between a PO and another form of integration like integration by (long-term) contracts offered by input suppliers, processors or retailers.
- Linked to the above incentive, open membership (easy to join and also to exit) is one of the most important incentives in most POs, especially in cooperatives. However, the exact legal form of a PO determines how new members could join.
- School of democracy. Since usually in POs decision making is democratic (e.g. in case of cooperatives a one member - one vote principle is valid), members can exert their power and democratic rights directly (e.g. through general assembly) or, in case of bigger organisations, indirectly (through assembly of delegates). Members learn how to act (speak) in front of many people and also how represent their own interests against others. Members can select PO's officers and they can be selected as leaders as well, options which for some farmers are an incentive to join as they can be a part of a community.
- Social interactions among members in general, as well as with the leaders of the PO in particular is important, especially for older members. They feel to belong somewhere or to someone as a member. That is certainly the case in some new Member States where in the so-termed production-type cooperatives members were employees of their own organisation.
- Increasing the level of social capital and trust. In spite of its many economic and non-economic advantages, cooperation activity is relatively low in the EU, especially in the new Member States. Since, one the most important obstacles of cooperation can be traced back to the very low level of trust and social capital in general in a number of Member States increasing the level of trust can be a very important advantage both for farmers and for the community. Especially since trust become a direct factor of economic development. The high level of trust is inevitable for the efficient and well-functioning cooperation as well. Trust, however, is a strange phenomenon since it is an input (you need a certain level of trust to be able to cooperate) and output at the same time because if cooperation works (may be in a form of a PO) it does increase the level of trust.

⁹¹ Chloupkova, J. and al. (2003) Building and destroying social capital: The case of cooperative movements in Denmark and Poland. Agriculture and Human values, 20(3), 241-252.

- Future plans, which, of course, are different in the case of old and young farmers, do influence farmers' decision to join or establish a PO. Empirical experiences show that younger farmers are usually more open to cooperation, especially as they are more open towards new types and forms of joint marketing and organisation strategies. However, experiences in HU and PL show the contrary as the age of farmers increases; they are slightly more open to cooperate in one or in other, not necessarily in a form of PO.
- Increasing the level of standard of living rural livelihood with securing jobs in the countryside can be an important socio-economic consideration that influence the establishment of a PO. A PO (regardless if it is recognised or not) can directly employ people as employees while indirectly it could help farmers to earn their living from farming thus allowing them to remain in the countryside.
- Education is the most important factor that contributes to increasing the development of cooperation. On the one hand, it is an incentive for farmers, since in a PO its members - through extension services, technical assistance and direct post-school education - may acquire knowledge on farming, taxation, EU support measures etc. to which otherwise they would not have access very easily. On the other, like trust, education is an important condition for achieving a higher level of cooperation.⁹²
- Lack of business skills may lead to become a member of a PO since some farmers are not familiar, or not comfortable, with how to make business (e.g. market their products, negotiating with buyers etc.). They join the PO hoping this will carry out these kinds of activities on their behalf so that they can focus on their production activity.
- Saving time is an important factor for medium or big farmers since they can concentrate on their core activities; services like marketing, processing, purchasing etc. are implemented by the PO.
- Eventually, among the specific incentives to be recognised regarding social-human considerations, extension services and technical assistance can be mentioned. Extension services are compulsory in recognised POs in FV sector, which is an advantage for the member, but they are very important securities for the commercial partners in the chain as well, since the latter can be sure that quality supplied by the PO is controlled. Extension service can be one of the supported aims of a PO in FV sector when applying for national supplementary support (for example in HU). Education in POs can be an important aspect as well; however, one can say that social-human considerations are not the most important incentives when considering recognition.

⁹² See, for example, bishop Grundtwig's activity in increasing the level of education (in the countryside) by the means of the Folk High School movement, which began in Denmark in the mid-19th century and established the cultural base for the later become famous Danish cooperative movement.

5.3.2. Disincentives for joining or establishing a PO?

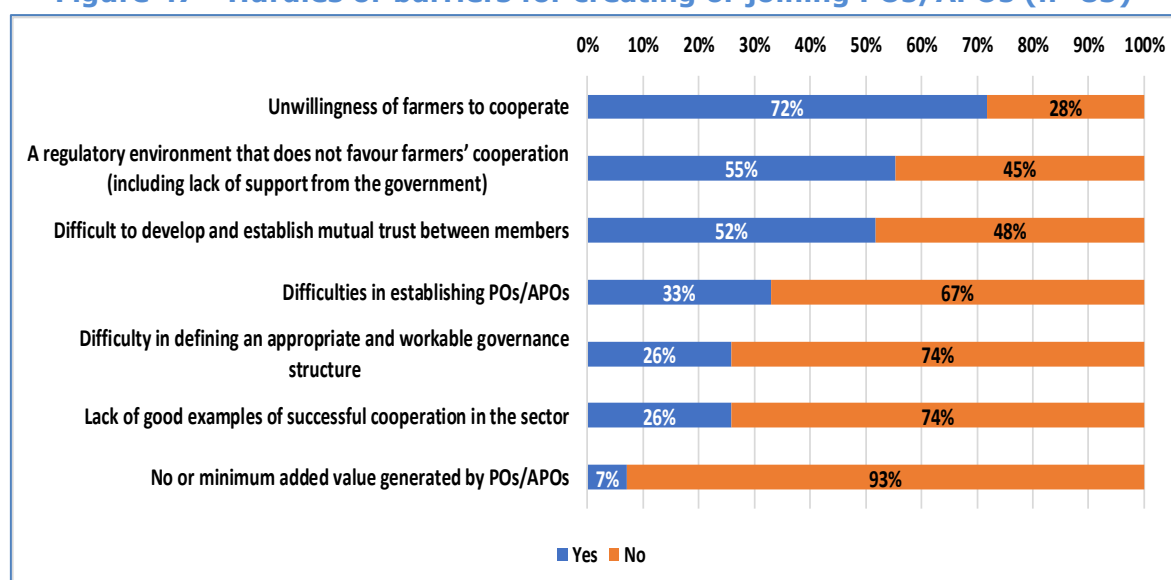
Disincentives for joining or establishing a PO can be sorted into three main groups:

- 1) Economic disincentives.
- 2) Legislative/policy disincentives:
 - Non connected to the recognition.
 - Connected to the recognition.
- 3) Social-human disincentives.

These disincentives, especially the economic and social-human ones, vary from country to country and from sector to sector. Nevertheless, they should be duly considered when trying to increase the level of cooperation among farmers in the EU.

The main hurdles or barriers for creating or joining POs/APOs reported by the FV and pig meat PO and APOs representatives are presented in Figure 47.

Figure 47 - Hurdles or barriers for creating or joining POs/APOs (n=85)



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

In accordance with the views of the respondents on the different factors that may constitute hurdles or barriers to setting up or joining a PO/APO, the 'unwillingness of farmers to cooperate' is the hurdle/barrier most frequently mentioned by interviewees. This is mainly because of the fear that certain farmers may lose their identity and autonomy (in total 61 respondents, corresponding to 72% of the sample surveyed). This is followed by the existence of a 'regulatory environment that does not favour farmers' cooperation' and by the 'difficulties in developing and establishing mutual trust between members', with 55% and 52%, respectively. The reason 'no or

minimum added value generated by POs/APOs' is by far the least relevant in this context with only 7% of positive answers.

5.3.2.a. Economic disincentives for joining or establishing a PO

In more details, the main economic disincentives for joining or establishing a PO which have been reported during the interviews with representatives of POs/APOs and further substantiated by the literature, can be summarised as follows:

- Lack of information on benefits and different models of POs is an issue EU and NCAs have to be aware of. Farmers do not know about the possibilities that POs offer and about good examples at home and abroad, and therefore they do not see the benefits of joining a PO.
- Short-term orientation of a farmer who often seeks higher prices that can be achieved on the spot market.
- Loss in flexibility.⁹³ Some farmers may feel that they enjoy a limited control on marketing and other activities. Naturally, especially if the organisation becomes bigger the influence of the members will be more and more indirect on marketing and other activities of the PO and some farmers may not like that.
- Joining an existing PO is less risky and costly than establishing a new one but can be less attractive in terms of ownership structure. If a product is a niche one or just a few family members and friends would like to set up a PO, establishing a PO cannot be considered as an economically rational decision. Likewise, if a company does exist already, there are (mainly administrative) costs associated with recognition and subsequently connected to the noting and reporting requirements. Of course, if a PO does not want to be recognised and get support, these costs are not present.
- High access cost. Complying with PO requirements (adoption of standards, investments, monitoring, etc.) can be costly and it can discourage farmers. This is especially true for older farmers who have limited time to recover the initial investments (horizon problem).^{94,95} Some other type of access costs, like paying contributions for joining a PO and its operation, delivery costs to the site of the PO, etc. have to be taken into consideration as well. Reluctance to share the costs connected with the membership in the PO (different fees and the cost of investments), including (cooperative) shares of POs and operational costs, can be seen among farmers.
- Satisfaction from alternative distribution channels (direct sales to intermediaries, retail chains, processing companies, auctions, etc.) could

⁹³ Russo, C. (2009) Le imprese cooperative nell'UE e negli USA. Le cooperative di "nuova generazione" possono realmente apportare benefici ai produttori europei?. *Economia e Diritto Agroalimentare*, 13(2), 47-62. Note that delivery obligations are considered as strength of new generation cooperatives. See:

Coltrain, D. et al. (2000) Differences between new generation cooperatives and traditional cooperatives. Department of Agricultural Economics, Kansas State University

⁹⁴ Sykuta, M. E. et al. (2001) A new institutional economics approach to contracts and cooperatives. *American journal of agricultural economics*, 83(5), 1273-1279.

⁹⁵ Fahlbeck, E. (2007) The horizon problem in agricultural cooperatives—only in theory? In *Vertical markets and cooperative hierarchies* (pp. 255-274). Springer, Dordrecht.

determinate whether a producer consider joining a PO or whether there is a room for establishing a new PO. If the market system is efficient and existing market channels are trustworthy then there is less room for a PO.

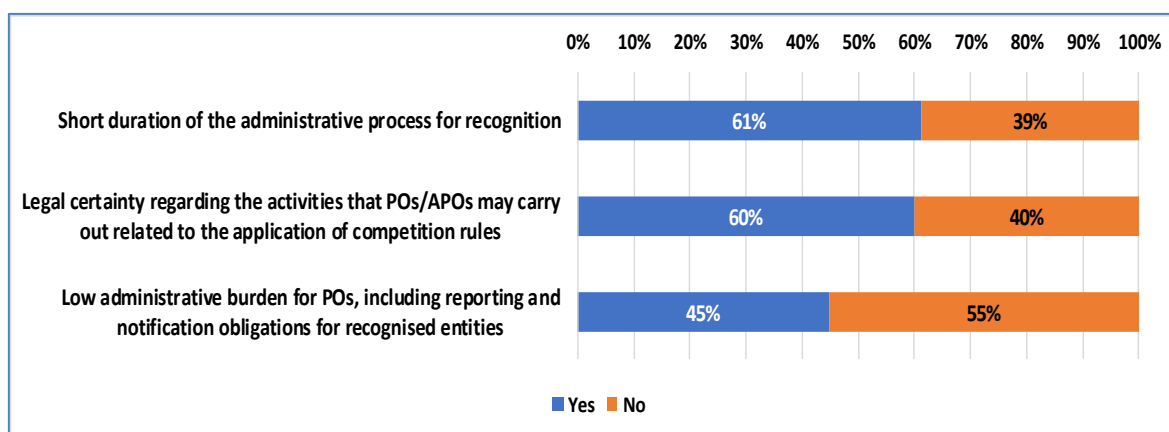
- Conflicting between producers – PO members or potential members – can be a sensitive issue. Members' heterogeneity is one of the biggest issues in the more developed POs as well, since young and old, small and big farmers usually think differently about the future of the PO.
- In some rural areas, a key factor discouraging participation to POs and collective actions in general is the cost of complying with existing regulation. A PO member is subject to monitoring and control for several reasons such as adoption of quality standards, monitoring of possible opportunistic behaviour (a farmer who does not comply with regulation benefits from an unfair competitive advantage).
- A high level of activities in the grey and black economy may be a reason for not joining POs. According to several interviewees representing POs/APOs from new Member States (HU and RO), the existence of grey/black markets and, to some extent, taxation issues surrounding farming activities (income taxation, level of VAT etc.) also counteract the development of a higher level of cooperation among farmers. A few interviewees from the same two Member States claimed that the opportunity to avoid paying taxes by selling exclusively on local or regional markets or directly to foreign traders (who pay in cash and without any documentation) can be a reason for some farmers to stay out of POs. If farmers join a PO (unless the PO operates with derogations that allow members to sell a certain percentage of their products outside the PO), they have to deliver all of their products to the PO; according to the same interviewees from the FV sector, sometimes they feel this obligation binds them too much.

5.3.2.b. Legislative/policy disincentives for joining or establishing a PO can be divided between disincentives connected or not to recognition.

Interviewees conducted with POs/APOs have indicated to which extent the regulatory environment in which farmers operate favours horizontal cooperation and the main reasons for that. As shown under Figure 48, the 'short duration of the administrative process' is the reason with the highest percentage of positive answers, with approximately 61%, followed closely by the 'legal certainty regarding the activities that POs/APOs may carry out related to the application of competition rules', with 60%. The 'low administrative burden for POs' is the reason that, overall, appears to motivate farmers to cooperate the least amongst the options listed above.

Figure 48 – Legislative/policy disincentives for joining or establishing a PO (n=85)

Study of the best ways for producer organisations to be formed, carry out their activities and be supported



Source: Interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

In more details, several **legislative/policy disincentives for joining or establishing a PO not connected to recognition** have been reported during the interviews of POs/APOs as follows:

- In some Member States, lack of administrative support to POs by national authorities can be a strong motivational disincentive for farmers. One reason for the lack of political support is that the political and economic elites may not like the possibility that an alternative political structure develops since it could be dangerous for them.
- In certain cases, there is a support for POs but the lack of institutions supporting and promoting development of POs is a major issue. This problem has been reported from most of Member States that have been consulted during the interviews.
- In some Member States (probably instead of a good network of social security policy), there is a special taxation for farmers. This could mean that for them it is better to keep a very low profile in order to avoid paying tax thus they have a bigger interest to stay in grey or black market⁹⁶ instead of engaging in the transparent joint (PO) way. This argument goes both ways. For example, in IT the special taxation regime (income is taxed based on a conventional value of farmland instead of actual revenues and costs) is a strong incentive to participate to POs because the income benefits obtained are not taxed (VAT is still an issue).
- Failure stories of POs that did not succeed on the market or have ceased to exist after many successful years and growth in terms of membership and turnover (like the first-ever recognised and leading Hungarian PO: Mórakert Cooperative). Other 'failures' are observed e.g. in the south-east part of FR where recognised POs in FV had to pay back subsidies after audits performed by the European Commission.

⁹⁶ See above some considerations regarding that issue.

- 'Bad press' and criticism of POs spreading out in media in Eastern European Member States do not help POs become more popular.
- According to some opinion, unfavourable competition policy and unfavourable tax system (including double taxation) regarding POs are serious problems as well.
- Historical reasons. Since the collectivism the word cooperative sounds bad in eastern European countries.
- Financial support for farmers makes them somehow comfortable so that they do not feel the real necessity of cooperation.

Regarding **legislative/policy disincentives for joining or establishing a PO connected to recognition**, the following reasons have been mentioned during interviews with the representatives of POs/APOs:

- Lack of information on recognition and/or recognition criteria are out of date as well as the lengthy and complex recognition procedures are the cornerstones why farmers avoid establishing a PO.
- Lack of legal clarity. In this respect, there is an important question to be asked and notably: is the PO a legal person? In the majority of Member States, POs are not legally accepted forms; for example, as a PO they cannot easily have access to bank loans. "PO versus cooperative" is another long-debated question.⁹⁷
- Bureaucracy and very high level of complex administrative burden⁹⁸ connected with establishing and running a PO. In general terms, POs have a lot of advantages but are not popular in some countries at present because of the high administrative burden involved with their management. Administrative burden regarding the recognition process as well as the noting and reporting phases are the biggest problems. For example, submitting an operational programme (in the FV sector) is complex and difficult. Some organisations feel that the increasing administrative burden which has been observed over the past years is not proportionate to the support they may receive in return. Another obstacle is that smaller organisations have no budget to employ staff for putting together the necessary documentation for being eligible for support.
- There is a need for better legal certainty, since EU legislation is perceived as too complex besides being very hard to implement in practice. The main issues reported by the interviewees from the FV sector read as follows:
 - The lack of legal certainty as regards the application of competition law to the FV sector is creating confusion, as reported by interviewees from FR, BE, IT and NL, on what can be done and cannot.

⁹⁷ Producer groups (PGs) in Hungary for example can only be established as a cooperative.

⁹⁸ More details provided under Section 5.4.4.

- The operational programmes in the FV sector, which have been audited by the Commission services, led to penalties in several Member States. Several interviewees have indicated that more detailed and precise information is required to avoid such types of issues in the future. There should not be any difference, in terms of results, between the controls performed by national authorities and the audits performed by the EC.

5.3.2.c. Social-human disincentives for joining or establishing a PO

In relation to social-human disincentives for joining or establishing a PO; *individualism - that is the fear to lose control over their business activity* - has emerged as one of the current biggest obstacles to cooperation in several Member States.⁹⁹ Being part of POs makes that individuals are no longer visible and that they are considered as one 'producer' among many. POs' rules may constrain farmers and coordination may imply a loss in their entrepreneurial freedom,¹⁰⁰ such as choices in production process and marketing solutions. Farmers may hesitate to join a PO because they may prefer to be free and act independently.

PO bureaucracy and privacy concerns: Joining PO may add further administrative tasks and costs for individual farmers; furthermore, as a PO member, a producer is subject to more administrative and legal controls and to the disclosure of sensitive business data.

In addition to that, it is important to distinguish between *full-time versus part time farmers*. Full-time farmers fully depend on the services of the PO. Small, part-time farmers can sell their products on the local market. This is mainly true in countries e.g. PL where the number of farms is high, and their size is relatively low.

As it has been mentioned earlier, a *low level of social capital*, in general, and a very *low level of willingness to cooperate* in particular, especially in new Member States, represent a basic problem. There is also a *lack of trust towards other producers and towards POs*. Lack of transparency in POs can lead farmers to think that the PO is not working in their best interest. Farmers might feel like they are better off on their own rather than with business partners they cannot trust. It is a long-term development to change this unfortunate attitude.

Additional (external) disincentives for producers to set up or join an existing PO have been identified:

- *Extreme downstream bargaining power*.¹⁰¹ If the bargaining power of the buyer is so strong that the PO cannot counter it at all, there is no reason for the farmer to join the PO. In this case, the PO can be seen as a tool to transfer buyers' requests and practices onto farmers.

⁹⁹ From the interviews of representatives of POs/APOs in the FV (48 respondents) and pig meat (37 respondents) sectors

¹⁰⁰ Garrido, S. (2007) Why did most cooperatives fail? Spanish agricultural cooperation in the early twentieth century. Rural History, 18(2), 183-200.

¹⁰¹ Sorrentino, Russo, Cacchiarelli.

[http://www.europarl.europa.eu/RegData/etudes/STUD/2016/573428/IPOL_STU\(2016\)573428_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2016/573428/IPOL_STU(2016)573428_EN.pdf) page 237-250

- *Identity of the farm and its output.* PO's joint supply may obscure or hide the farm's identity in the food market where consumers are increasingly concerned about the origin of the product they purchase.
- *PO as one more middleman.* Returns to PO as additional middleman may offset the efficiency gains. It may increase the marketing margin and the farmer may have weak control over the PO surplus.

5.4. Incentives and disincentives to be recognised as a PO

The incentives mentioned above concern all types of POs, recognised or not. Several additional specific incentives to be recognised as a PO have been reported during the interviews with representatives of POs/APOs and national authorities:

- One of the main aims of requesting recognition as a PO, especially in new Member States, is to get access to different EU programmes, funds and support schemes connected to the CMO (for recognised POs) or to the European Agricultural Fund for Rural Development (for recognised POs and PGs). In the case of recognised POs active in the FV sector, funding of recognised POs via operational programmes is also a strong incentive.
- Access to financing investments supported by CMO measures can be a strong incentive for recognised POs in the FV sector. Under certain EU support measures being a member of a recognised PO is an advantage. Sometimes, it is strange that POs cannot apply for a certain measure (like investment support), while their members can and possibly get extra points because of their membership in a specific recognised PO.
- Recognised POs often refer that they enjoy some regulatory visibility. Of course, sometimes, it is something that could fire back against POs since they are checked and controlled more strictly by authorities. However, they act as markers in the supply chain; smaller farmers try to copy them.
- In general terms, being a recognised PO could ensure a higher market visibility and differentiation. However, it can be also a disadvantage since all competitors look at the recognised PO as a benchmark player in delivering the right quality and quantities using quality control systems. Indeed, the compulsory use of extension services and quality control systems (like GlobalGap) applied by FV recognised POs are of interest to most retail chains since they can be sure that products are of high quality, strictly controlled and with a very high level of traceability.
- In some cases, legal certainty and exemption from competition rules can be an extra advantage as well.¹⁰² However, in some Member States, like in HU, it is not always a relevant aspect, since all recognised POs are very small, and their market share is limited. From a legal point of view, the cooperative form is a special case since, in some countries, if by-laws of coop are in harmony of the

¹⁰² See EC-DG COMP study on Producer Organisations and their activities in the olive oil, beef and veal and arable crops sectors available at: <http://ec.europa.eu/competition/publications/reports/kd0218732enn.pdf>

ICA Statement on the cooperative identity¹⁰³ (including the definition, values and principles of cooperatives) revised and published in 1995, it could benefit from some advantages in terms of taxation or other type of support. In jurisdictions outside Europe, cooperatives may be exempted from competition rules with an original reference to the (American) Capper-Volstead Act (1922).¹⁰⁴

5.5. Factors influencing the effective functioning of a producer organisation after its creation

This section considers the factors that are affecting the effective functioning of a PO after its creation. The internal and external success factors are presented under Sections 5.5.1 and 5.5.2, respectively, while other factors that may impact the functioning of POs (positively or negatively) are described under Section 5.5.3. In conclusion to this chapter, a comparison between BE and PL of the main factors influencing the effective functioning of a PO in the FV sector is presented (Section 5.5.4).

The success (or failure) of a PO is defined in the literature in very different terms, for instance by referring to its longevity, business growth, profitability, and member satisfaction.^{105,106,107,108,109,110} Successful POs coordinate the exchange between farmers and buyers, and they operate at per unit costs that do not exceed the per unit costs of alternative ways to organise transactions, such as decentralised exchanges or intermediation by other agents.¹¹¹

Due to specific and complex external environments and internal expectations of the members of different POs, it is not possible to identify one best, universal way for a PO to become successful. In fact, there are numerous ways that a PO can be

¹⁰³ <https://www.ica.coop/en/whats-co-op/co-operative-identity-values-principles>

¹⁰⁴ “The Co-operative Marketing Associations Act is a federal law adopted by the United States Congress on February 18, 1922. The act exempted certain types of voluntary agricultural cooperative associations from the application of antitrust laws. It authorized various kinds of agricultural producers to form voluntary co-operative associations for purposes of producing, handling and marketing farm products. The act is an example of legislative aid to agricultural cooperatives and of the delegation of adjudicative power to an administrative agency. The Co-operative Marketing Associations Act is referred to as the Magna Carta of Cooperation.” (<https://definitions.uslegal.com/c/capper-volstead-act/>)

¹⁰⁵ Van Herck K. (2014) Assessing efficiencies generated by agricultural producer organisations

¹⁰⁶ Sexton R.J. et al. (1998) Factors Critical to Success or Failure of Emerging Agricultural Cooperatives. Giannini Foundation Information Ser. 3, 1-18.

¹⁰⁷ Fulton, M. (1999) Cooperatives and Member Commitment, Finnish Journal of Business Economics, Volume 4, 418-37.

¹⁰⁸ Bruynis et al. (2001) Critical Success Factors for Emerging Agricultural Marketing Cooperatives. Journal of Cooperation, Volume 16, 14-24.

¹⁰⁹ Rafat A. et al. (2009) Performance Measurement of the Agricultural Marketing Cooperatives: The Gap between Theory and Practice, Applied Economic Perspectives and Policy, Volume 31, Issue 3, 446-469.

¹¹⁰ Grashuis J. et al. (2017) An Examination of New Generation Cooperatives in the Upper Midwest: Successes, Failures, and Limitations, Annals of Public and Cooperative Economics.

¹¹¹ Menard, C. (2007) Cooperatives: hierarchies or hybrids? In Vertical markets and cooperative hierarchies (pp. 1-18). Springer, Dordrecht.

organised so that it achieves its members objectives and carries out its activities to that end in the most effective manner.¹¹²

5.5.1. Internal success factors

This section has been drafted based on findings from the literature but, also, based on findings from the interviews with PO representatives who consider their PO as successful. FV cases, mainly from BE and NL, have been considered for this analysis as the organisation rates (recognised POs) in the FV sector in these Member States are the two highest in the EU.

Internal success factors of POs are very much linked to the organisational model and strategy they choose to follow. On the one hand, a PO develops a strategy to increase the value it can create for its stakeholders. Finding the right strategy to respond to changes in the needs of customers or actions of competitors, just to mention a few, is a complex issue POs face. On the other hand, the internal design of a PO determines how effectively the organisation responds to various factors in its environment.

5.5.1.a. Long history in cooperation

The most important success factor that has been reported by all the Belgian and Dutch interviewees (i.e. POs/APOs representatives and national authorities) is the long history in cooperation and, especially, in commercial cooperation in both NL and BE.

In NL, the history of agricultural cooperation (via cooperatives) dates back to the end of the 1880s, when farmers created more and more agricultural associations. With the entry into force of the first cooperative legislation in 1876, the first formal cooperatives were established, specifically for purchasing inputs and processing milk. It took another decade before cooperatives became popular, but a rapid increase in the number of newly established cooperatives had been observed since the 1890s. The expansion of the world economy between 1890 and 1930 was favourable for Dutch agriculture, and thus for the founding of cooperatives.

The development of agricultural cooperatives took place over the same period in BE where the first law on cooperatives was established in 1870.^{113,114} In BE, the first agricultural cooperatives, called at that time 'Agricultural Syndicates' made their appearance around 1885-1890 (Landen Agricultural Syndicate and Liège Agricultural Syndicate). The agricultural cooperative movement played a vital role in organising the economic channels for the consumption and distribution of agricultural products.

¹¹² Sexton R. J. and al. (1988) Factors critical to the success or failure of emerging agricultural cooperatives (Vol. 88, No. 3). Davis: Division of Agriculture and Natural Resources, University of California.

¹¹³ Ministry of Economic Affairs (1996) The cooperative approach under new Dutch agri-environment climate change. Background, procedures and legal institutional implications. Available at https://toekomstglb.nl/wp-content/uploads/LR_95078_Dutch_Agri_Enviromentdef.pdf

¹¹⁴ Frenken, K. (2014) The evolution of the Dutch dairy industry and the rise of cooperatives: a research note. Journal of Institutional Economics, 10(1), 163-174.

This is how the horticultural auctions, and the dairy and cereal cooperatives were created.¹¹⁵

In both countries, farmers first set up cooperatives to jointly purchase raw materials and fertilisers before cooperating on joint activities such as storage or marketing of their products. This is how the horticultural (meaning FV and ornamental plants) auctions were created at the end of the 1800s; first in NL and, soon after, in BE. Therefore, both Dutch and Belgian agriculture are, based on a long tradition, market oriented. In particular the Dutch agriculture is export oriented. In addition, the concentration, specialisation and internationalisation of the food retailing sector in both BE and the NL that took place in the early 1980s (the market share of the two biggest food retail groups in BE was already reaching 30% in 1982) led to the reinforcement of agricultural cooperatives in the FV sector. When POs became the cornerstone of the EU regime for the FV sector following the 1996 reform with the aim of strengthening the position of producers in response to the concentration of the downstream sector, most of agricultural cooperatives immediately saw the benefits of the recognition.¹¹⁶

The majority of interviewees from other Member States have also indicated that history plays an important role. In DE and FR, POs have been recognised for several decades.

In contrast, the history in Poland shows a different pattern.¹¹⁷ Similarly to other European countries, cooperatives in Poland started at the end of nineteenth century, at the time when today's territory was annexed by Prussian, Austrian and Russian empires. Before the Second World War agricultural co-operatives associated about one million members. After the war, under Soviet rule, co-operatives and their unions were included in the central planning system. Most of the time, member registration was compulsory, and the executives were appointed by authorities. Cooperatives were subject to rigid state planning, with state control extended to instructions and directives concerning a broad scope of managerial aspects. Before the transition into market economy in 1989, about 60% of fruit and vegetable output was marketed via cooperatives. Adoption of legal changes in the organization and operation of cooperatives that followed the transition resulted in the need to liquidate cooperative unions. The assets of these unions were scattered and degraded, and the existing supply and purchase channels of agricultural products were dissolved. Following the transition that started in 1989, the process of creating formal structures of cooperation among farmers in Poland had to begin anew. The perception of cooperatives among Polish farmers was at that time so negative that, when the first comprehensive legal arrangements concerning formal cooperation among farmers were developed in 2000, the term 'agricultural producer group' was introduced instead

¹¹⁵ Duquesne et al. (2009) Present and future of the co-operative entrepreneurship in the Walloon agricultural sector. Available at: http://www.gembloux.ulg.ac.be/eg/publicationseconomieagricole/doc_download/121-present-and-future-lines-of-the-co-operative-entrepreneurship-in-the-walloon-agricultural-sector

¹¹⁶ Chloupkova, J. et al. (2003) Building and destroying social capital: The case of cooperative movements in Denmark and Poland. *Agriculture and Human values*, 20(3), 241-252.

¹¹⁷ Extracts from the EC-DG AGRI study (2012) Support for farmers' cooperatives – Country report Poland written by Piotr Matczak.

of the word 'cooperative'. The so-called 'non-cooperative attitude' and low social capital are pointed out in the public debate as reasons for the low organisation of agricultural producers in Poland, including fruit and vegetables growers.

5.5.1.b. The internal governance consistent with the strategy

Agricultural producers in EU Member States can choose any legal business form that suits their needs for the formal organisation of their cooperation. The legal form is a framework for the internal governance of any company. From the available menu of business forms, farmers can choose between cooperatives, associations, foundations, private limited companies by shares, public companies, or partnership-type businesses. The legal form used most frequently by farmers to set up a jointly owned business is the cooperative. Therefore, most of the success factors of POs already described in the literature relate to cooperatives.

POs may perform different tasks in the food supply chain, from the simple collective bargaining to the marketing of branded consumer products. Choosing an explicit strategy helps POs to manage internal operations and external strategies.

Two models of cooperation of agricultural producers can be distinguished.¹¹⁸ The first one, associated with traditional cooperatives, is **the countervailing power cooperative model**. The user-benefit principle (also called 'business at cost') of cooperation, which requires that benefits of membership are distributed to members equally on the basis of the volume of sales, is the principle in the countervailing power of POs: a PO attempts to meet its members' needs at the least possible cost.¹¹⁹ This strategy is viable when economies of scale occur and the sales price the PO receives for its products does not depend on the PO's sales volume. This model works generally well when relatively small investments are needed (mostly in capacity) and investments are made at farmers' level.

The second model, the **entrepreneurial cooperative model** tends to be associated with a new generation of POs and favours product differentiation and consumer loyalty.^{120,121,122,123,124} Preserving the traits of the countervailing model in this strategy would result in numerous agency problems. Some members may try to take advantage of the cooperative services without paying their membership fees. Free-rider problems arise as some members may try to take advantage without paying, since some investments are not in the interest of all members. The efficiency of a PO

¹¹⁸ Bekkum, O. F. et al. (1997) Agricultural co-operatives in the European Union: trends and issues on the eve of the 21st century. Assen, Van Gorcum.

¹¹⁹ Although the literature about PO overlaps with the one about cooperatives, the business-at-cost principle is distinctive of cooperatives. In principle, incorporated PO can work for maximum profit.

¹²⁰ Cook, M. L. et al. (1999) Beginning to inform the theory of the cooperative firm: Emergence of the new generation cooperative.

¹²¹ Coltrain, D. et al. (2000) Differences between new generation cooperatives and traditional cooperatives. Department of Agricultural Economics, Kansas State University

¹²² Fulton, M. et al. (2000) New generation cooperatives. Centre for the Study of Co-operatives. University of Saskatchewan.,

¹²³ Cook, M. L. et al. (2004) Redesigning cooperative boundaries: The emergence of new models. American Journal of Agricultural Economics, 86(5), 1249-1253.

¹²⁴ Chaddad, F. et al. (2013) Control rights, governance, and the costs of ownership in agricultural cooperatives. Agribusiness, 29(1), 3-22.

may be limited by the lack of control mechanisms on members' production quality and quantity. There are several options to deal with the problems mentioned above: the lack of capital by members can be overcome by introducing, to some extent, tradable shares or bringing outside investors as co-owners of the cooperative. Defining fixed membership fees which are clearly communicated to members allows reducing unpaid fees; and, introducing delivery contracts allows improving quality and quantity of products.¹²⁵

Effective POs should reflect the characteristics of their stakeholders in their organisational structure.^{126,127} One of the key issues in POs' governance is ensuring optimal member control that translates into allocation of decision rights between boards of directors and professional management.¹²⁸ The board of directors, representing the membership, needs to maintain sufficient decision rights so as to control the strategic development of the organisation. At the same time, professional management demands room for entrepreneurship, both for being successful in competing in the market and for venturing into new strategic directions and attracting good quality managers. The key question then becomes how many decision rights the board of directors' delegates to the professional managers.

5.5.1.c. Membership homogeneity^{129,130,131}

Homogeneous POs with similarities in the production capacities and farm structure of members are more likely to achieve a higher cooperation rate. Heterogeneity of members poses a challenge for farmer-owned POs. It relates to the number of different crops delivered to the PO, the differentiation in farm size and distance and other characteristics of farms and farmers. With the growing heterogeneity in the membership, decision-making may become more laborious, coordination between member farms and the collective company may become more difficult, both member commitment and member willingness to provide equity capital may decrease. The

¹²⁵ Issues mentioned above are discussed in the literature on New Generation Cooperatives; see among others: Sexton R.J. et al. (1993) What do we know about the economic efficiency of cooperatives: An evaluative survey. *Journal of Agricultural Cooperation* 8:15- 27; Fulton M. (1995) The future of Canadian agricultural cooperatives: A property rights approach. *American Journal of Agricultural Economics* 77(5):1144-1152; Sykuta, M.E. et al. (2001) A New Institutional Economics Approach to Contracts and Cooperatives, *American Journal of Agricultural Economics* 5: 1273-1279.

¹²⁶ Van Bekkum et al. (1997) Agricultural cooperation in the European Union

¹²⁷ Russo et al. oppose to this statement. See: Russo, C et al. (2000). Effects of managers' power on capital structure: a study of Italian agricultural cooperatives. *The International Food and Agribusiness Management Review*, 3(1), 27-39.

Russo, C. et al. (2005) Equity management in Italian Agricultural Cooperatives: power and trust as alternative strategies to build an effective equity base.

¹²⁸ See among others Cook, M. L et al. (2000) Ill-Defined Property Rights in Collective Action: The Case of US Agricultural Cooperatives, in C. Menard (ed.) *Institutions, Contracts and Organizations*, London, UK, Edward Elgar Publishing, 335-48.

¹²⁹ Staatz J. M. (1983) The cooperative as a coalition: a game-theoretic approach. *American Journal of Agricultural Economics*, 65(5), 1084-1089

¹³⁰ Fulton M. et al. (2001) Organizational commitment in a mixed oligopoly: Agricultural cooperatives and investor-owned firms. *American journal of agricultural economics*, 83(5), 1258-1265.

¹³¹ Iliopoulos C. et al. (2009) Influence costs in agribusiness cooperatives: evidence from case studies. *International Studies of Management & Organization*, 39(4), 60-80.

member heterogeneity usually increases with the growth of a PO and its international expansion.

Heterogeneity may be revealed through marked discrepancies in member equity contributions relative to the use of a PO. Differences in average production costs among members can lead to different expectations for prices. The PO may offer an array of incentives distinguishing among member needs and preferences.

A common strategic vision that fosters shared beliefs and values within the PO can also be an effective response to member heterogeneity. Some examples might be a commitment to sustainable practices or being a low-cost provider. A specific role of a PO's member as both customer and owner creates challenges in the formulation of a strategic vision.¹³²

5.5.1.d. Member commitment and loyalty^{133,134,135,136}

It is important for a PO to develop a reputation for being effective as an agent for its members, which works to enhance members' economic and social benefits. This will allow a PO to engender loyalty and commitment from its members. POs build their members' commitment around trust and the sense of identity with a collective organisation owned by its members.

A few interviewees, members of POs/APOs from BE, DE, DK, ES, FR and IT, have reported that, in order to gain members' commitment and loyalty, it is not enough to offer good value for money and quality services. Members seem also to be guided by drivers such as emotional value and affective commitment, which enable them to identify with the PO and retain their loyalty to it.

5.5.1.e. The size of a PO membership¹³⁷

An adequate size of a PO is necessary to benefit from economies of scale. Also, the level of transaction costs can be decreased by increasing the frequency of transactions, which can be achieved in the PO through the increase in the number of its members.

Additionally, enlarging the number of PO members might decrease the danger of opportunistic behaviour by members. Nonetheless, enlarging the number of group members increases internal coordination and bureaucracy costs as larger groups find it harder to communicate and coordinate their actions.

5.5.1.f. Strong leadership¹³⁸

¹³² Members' heterogeneity in agricultural cooperatives was widely investigated in the cooperative literature. For recent studies on members heterogeneity see Iliopoulos, C.; Valentinov, V. Member preference heterogeneity and system-lifeworld dichotomy in cooperatives: An exploratory case study. *J. Organ. Chang. Manag.* 2017, 30, 1063–1080; Fulton, M.; Hueth, B. Cooperative conversions, failures and restructurings: An overview. *J. Coop.* 2009, 23, i–xi.

¹³³ Fulton M. (1999) Cooperatives and member commitment. *LTA*, 4(99), 418-437.

¹³⁴ Österberg P. et al. (2009) Members' perception of their participation in the governance of cooperatives: the key to trust and commitment in agricultural cooperatives. *Agribusiness: An International Journal*, 25(2), 181-197.

¹³⁵ Cechin A. et al. (2013) Decomposing the member relationship in agricultural cooperatives: Implications for commitment. *Agribusiness*, 29(1), 39-61.

¹³⁷ Chlebicka A. et al. (2018) Size of Membership and Survival Patterns of Producers' Organizations in Agriculture—Social Aspects Based on Evidence from Poland, *Sustainability* 2018, 10(7).

Internal coordination costs might be decreased by leadership. A strong central coordinator enables the group to save on both total transaction information transmission and decision-making costs. The leader contributes to saving on internal transaction and coordination costs and thus is expected to have a positive impact on the likelihood of the formation of successful POs up to a point; however, an overly dominant leader reduces the likelihood of success.

5.5.1.g. Strategic planning and competitive position in an industry

A PO needs a well-defined scope and growth direction and not simple extrapolations of past performances to project into the future.

Achieving competitive advantage requires a firm – or any other market-oriented organisation – to make a choice about the type and scope of its competitive advantage. According to the generic competitive strategies described by Porter¹³⁹, any firm's relative position within an industry, such as POs, is given by its choice of competitive advantage (cost leadership vs. differentiation) and its choice of competitive scope (broad industry segments or a narrow segment). POs have traditionally followed a cost leadership strategy, continuously aiming to improve the efficiency of their processing and sales operations.^{140,141}

Besides a strategy of cost leadership, POs have developed a differentiation strategy to increase member income. This strategy was followed mostly by POs producing final consumer goods, i.e. fruits, vegetables, eggs, meat. These POs used constant and high-quality product, and uniform and effective packaging as instruments in implementing this strategy. They also used branding (including quality labels, environmental labels, geographical origin) as a powerful tool of product differentiation.

The third type of competitive strategy implemented by POs is a 'focus strategy'.¹⁴² This strategy requires adding value to the agricultural product, which will be in particular appreciated by a specific market segment. Innovative production and marketing are necessary for an effective implementation of a focus strategy. Porter added that POs may be interested to use this strategy because many agricultural and food products are in the maturity stage or the saturation stage of the product life cycle. At this stage consumers are familiar with the product and have developed specific demands and needs with respect to that product. By serving the specific wants and needs of a particular market segment, POs may establish consumer loyalty.

5.5.1.h. Professional managers and employees¹⁴³

¹³⁸ Banaszak, I. et al. (2007) The role of leadership in establishing and sustaining cooperation. Evidence from producer groups in Poland. In: A. Knierim A. et al. Managing Economic, Social and Biological Transformations. Proceedings of the First Green Week Scientific Conference Weikersheim: Margraf Publishers, 180–187.

¹³⁹ Porter, M. E. (1985) Competitive Advantage. Ch. 1, pp 11-15. The Free Press. New York.

¹⁴⁰ Porter, M. E. (1980) Competitive Strategy - Techniques for Analysing Industries and Competitors.

¹⁴¹ Chlebicka A. et al. (2018) Size of Membership and Survival Patterns of Producers' Organizations in Agriculture - Social Aspects Based on Evidence from Poland, Sustainability 2018, 10(7).

¹⁴² Porter, M. E. (1985) Competitive Advantage. Ch. 1, pp 11-15. The Free Press. New York.

¹⁴³ Bijman, J. et al. (2014) Shifting control? The changes of internal governance in agricultural cooperatives in the EU. Annals of Public and Cooperative Economics, 85(4), 641-661.

Managerial staff of POs must have sufficient authority to develop and implement market-oriented strategies. Such an authority is, first of all, linked to the quality of managers. In order to attract competent managers, a PO has to offer adequate salaries and give managers sufficient room for decision-making. Human capital at the top and middle management level is essential for strategy development. For instance, the planning function in POs is unique when compared with other business models. It is necessary for a PO to define its mission and vision, determine its objectives at the PO's level by considering the objectives of individual farmers – members of a PO. In contrast, traditional approaches to planning place emphasis on enterprise as the unit from which the entire process of creation, implementation, evaluation and controlling plans unfolds. In many POs, the board represents the membership and is accountable to it when corporate actions need justifying. Hence, directors play a role in assessing the competitive environment of the PO, setting the objectives for the PO to pursue, and setting overall guidelines for using resources to implement steps for achieving those objectives.

The majority of the interviewees, mainly from the FV sector in BE, DE, FR, and IT and from the pig meat sector in DE, DK and ES, also, referred to the important role of professional staff for the PO success. They declared that it is difficult to hire and keep good quality staff in contexts where young educated people in agricultural businesses.

Some authors consider professional managers as a potential problem because their objectives may conflict with the members' ones.¹⁴⁴

5.5.2. External success factors

POs, like other enterprises outside the agribusiness, have to adapt to a changing environment. It means that the organisational design should be changed and adapted over time if a PO wants to remain effective.

5.5.2.a. New technologies and innovation

Several PO interviewees, mainly from the FV sector in BE, FR and the NL, have provided concrete examples of innovations that led to added value for their members. These interviewees have indicated that several POs have created research centres, partly funded by the PO members and by national and EU funding (through the operational programmes) to support (and improve) their own production systems.

Indeed, innovation and technological developments create new opportunities for POs to develop new products or to lower the cost of production. Innovations in transport and storage technology increase the opportunity for using logistics as a marketing tool. The presence of POs allows collecting resources to fund such research projects which may be difficult (or impossible) to launch for individual farmers/producers.

5.5.2.b. Building collaborative partnerships with buyers

According to the majority of respondents from the FV and pig meat sectors from BE, CZ, DK, DE, ES, FR, IT, and NL long-term partnerships are built on respect and trust. POs need to build long-term, collaborative relationships with their buyers to gain a strategic insight into the large buyer's perspective on the future growth areas. The

¹⁴⁴ Trechter et al. (1997) Case studies of executive compensation in agricultural cooperatives. Review of Agricultural Economics, 19(2), 492-503.

other important reason is to lock customers into innovative investments that are usually high risk. A vital element to the effective management of a partnership based on trust, acknowledged by respondents, is improved information flow. For example, the French national APOs in the FV sector are working on developing a close relationship with wholesalers and retailers. This relationship relies on the exchange of information to adapt supply to demand as well as to anticipate (new) consumer needs without entering any negotiation on volumes of production nor prices. Indeed, the monitoring of accurate, timely and relevant information allows a PO to continually enhance its competitiveness not only through improving their interaction with its members but also with suppliers and buyers when individual producers, often, do not have time nor resources to perform such monitoring.

The same interviewees have added that costs are an important area of data collection and information sharing. For these interviewees, the ability of a PO to measure costs is necessary for effective resource allocation. It gains even more importance with the pressure on POs to deliver additional and higher levels of services. Better cost measurement and control can prevent a situation when a PO accepts the demands of its buyers too fast, only to discover that the business is no more profitable. This in turn may provoke tensions in business relations and end up in the closure of the partnership or at least the perception of being exploited.

From the list of interviewees mentioned above, some of them expressed scepticism over the large manufacturers and retailers' approach to partnerships. They pointed at the central role of the buyer, which has not changed much in recent years, and the internal strategy of retailers of rotating buyers on a regular basis, which makes it difficult to build up long-term relationships. The same respondents also claimed that effective measures preventing unfair B2B commercial practices in the food supply chain should be implemented. In their opinion, numerous initiatives (national and EU) undertaken so far, have failed to adequately address imbalances of bargaining power between POs and supermarkets or large processing companies. To be effective, remedies should be based on a fundamental principle of fair dealing, they also need to be better enforceable and binding.

5.5.2.c. Cooperation among POs

POs are usually established as small organisations, very often based in a community, neighbourhood or region. However, when growth opportunities exist, local POs need a larger scale to perform certain operations effectively. For these particular tasks, the most 'natural' procedure is to start collaborating with other local POs and form federated organisational forms or create associations of POs in the case of recognised entities.

For example, the CERAFEL in Brittany (FR) has recently launched a joint project which includes the three main regional POs (CERAFEL, SAVEOL and SOLARENNE) and which consists in tomatoes produced under greenhouses being produced without the use of any pesticides of synthetic origins.

5.5.2.d. Access to effective extension services

Interviewees, from both the FV and pig meat sectors, also stressed the role of extension system in establishing and subsequent functioning of POs. Extension systems and services disseminate and communicate information to farmers through

messages that are clear, tailored to the learning needs of audiences and locally relevant.

Specialised knowledge provided by agricultural advisors helps to develop market-oriented strategies, improve the overall productivity and quality of products and it can also be a support in the changing legal environment.

Extension services can help POs with a range of issues, including agronomic practices, natural resource management, accessing financial support, just to mention a few. Several respondents have indicated cases when farmers have decided, by themselves, to create and finance such type of advisory services when it was not available or sufficiently present. In Brittany (FR), the PO SICA Saint Pol de Leon, created a research station, called CATE, in the 1980s to provide such type of support. In BE, the APOs LAVA funds research activities of public agronomic centres located in the Flemish part of the country.

However, the extension services seem to be particularly important for establishing farmers' cooperation in the broader context of unfavourable social conditions, such as low level of social capital resulting in the reluctance to act together. Effective extension services promoting POs affect positively social cohesion and governance in a broader sense.

5.5.2.e. Farmers' social capital

In addition to institutional factors, of key importance are also the resources available to farmers—not only tangible assets such as land, machinery or funds, but also resources that are less obvious and more difficult to evaluate. This may include, among others, the ability to cooperate, or resources derived from established social relations, the accompanying social standards, and trust. POs cannot be effectively created and maintained unless they are supported by the required amount of social capital.¹⁴⁵

5.5.3. Other factors that may impact the functioning of POs

This section presents other factors that may impact positively or negatively the functioning of POs.

5.5.3.a. Hurdles for the recognition process

This section discusses the main issues faced by applicants and related to the recognition process itself. It doesn't consider the hurdles related to the creation and establishment of a PO which are discussed under Section 5.2 above.

As this analysis is largely based on data collected from the FV sector, hurdles related to the design, submission and management of the operational plans have also been reported. Some respondents, mainly from new Member States, have clearly mentioned that, into their opinion, it was not so clear to differentiate between the recognition itself and the processing of the operational programmes. Guidelines that have been developed by authorities, often, combine the recognition process with the design and submission of the operational programme, thereby leading to a very

¹⁴⁵ Fałkowski J. et al. (2017) Social relationships and governing collaborative actions in rural areas: some evidence from agricultural producer groups in Poland, *Journal of Rural Studies*, Volume 49, 104–116.

complex process. The same interviewees have clearly reported that this process is far too cumbersome and that they do not have the required expertise to develop such complicated application dossiers.

In addition, this section doesn't discuss the added value of the recognition or reasons why recognition is not sought.

Apart from the issues related to the operational programmes in FV, the three main hurdles related to the recognition process which have been identified during the research read as follows:

- The recognition criteria are out of date and unclear.
- The recognition procedure is lengthy.
- Low support by (some) Member States.

For a majority of respondents, the recognition criteria are considered to be out of date and unclear. In Member States where there is a large number of recognised FV POs, these criteria were developed more than 20 years ago after the 1996 CMO reform in which producer organisations became the pillar of support for FV growers. These recognition criteria have not been further developed since and are considered outdated by farmers' representatives but, also, by national authorities themselves. For example, the French authorities have indicated that the list of POs for the wine sector was not available because the overall recognition process, including the list of recognition criteria, was outdated and needed to be completely reviewed. A Decree was published on 28 April 2018¹⁴⁶ in order to clarify the criteria for recognition in terms of number of members and minimum value of market production for the FV and meat sectors.

The second hurdle is linked to the time that the recognition procedure takes. As reported by many interviewees this procedure takes too much time ranging from a few months to nearly one year.

The last main hurdle, as reported by several interviewees, is related to the lack of support to complete a registration dossier by authorities. According to these interviewees, clear guidelines exist but in a too limited number of Member States, such as e.g. the UK¹⁴⁷ and MT¹⁴⁸. When the process is not clearly known, which is the case in the majority of new Member States, applicants expect to receive administrative support to understand how to complete the application form and dossier as well as legal support to fully understand the consequence of such application. When the application for recognition runs in parallel with the creation of the legal entity of the PO, members of POs may not have established the secretariat of

¹⁴⁶ Décret no 2018-313 du 27 avril 2018 relatif aux organisations de producteurs, aux associations d'organisations de producteurs et aux groupements de producteurs NOR: AGRT1805045D

¹⁴⁷ Guidance on Recognition as a Dairy Producer Organisation (DPO) available at: <https://www.gov.uk/government/collections/dairy-producer-organisations-guidance>

¹⁴⁸ Available at: https://agriculturecms.gov.mt/en/agric/Documents/Regulatory%20Section/GUIDELINES%2018042012_wit hout%20PA_.doc

the organisation, and, therefore, do not have all necessary skills and resources to fulfil recognition requirements.

5.5.3.b. Administrative burden

Administrative burden are costs imposed on businesses and on administration, when complying with information obligations stemming from legislation (national and European). Information obligations are the obligations arising from legislation to provide information and data to the public sector or third parties. An information obligation does not necessarily mean that information has to be transferred to the public authority or private persons but may include a duty to have information available for inspection or supply upon request.

A large number of legal obligations stemming from EU and national legislations applies to food supply chain stakeholders, including producer organisations. This ranges from obligations coming from the CAP but, also, from many other legislations (e.g. environmental, food and feed safety, etc.).

In the context of this study, administrative burden is understood as costs arising from legal obligations for recognised POs that are beneficiaries of CAP/public money. Internal PO costs engaged to the formalisation (establishment) and running POs (contracts, quality schemes, collective decision-making, etc.), other than the recognition process and the operationalisation of the operational programmes, are not included in this analysis.

In more details, this analysis identifies and assesses the administrative burden for businesses and administration according to the obligations related to the obligations of recognition in both the FV and pig meat sectors and the use of the scheme of support to operational programmes in the FV sector.

Regulation (EU) No 1308/2013, Regulation (EU) No 1305/2013¹⁴⁹, and Commission Delegated Regulation (EU) 2017/891 specific¹⁵⁰ to the FV sector list the main obligations as regards recognition of POs, PGs and administration of the financing of operational funds and operational programmes in the FV sector. the main ones read as follows.

Information obligations identified in Regulation (EU) No 1308/2013:

- The recognition of producer organisations and their associations should be encouraged in order to strengthen the bargaining power of producers and to foster a fairer distribution of added value along the supply chain. This has to be achieved while respecting national legal and administrative structures (Article 152).

¹⁴⁹ Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005.

¹⁵⁰ Commission Delegated Regulation (EU) 2017/891 of 13 March 2017 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council with regard to the FV and processed FV sectors and supplementing Regulation (EU) No 1306/2013 of the European Parliament and of the Council with regard to penalties to be applied in those sectors and amending Commission Implementing Regulation (EU) No 543/2011.

- The statutes of a producer organisation in the FV sector shall require its members to market their entire production through the producer organisation (Article 160).

Information obligations identified in Regulation (EU) No 1305/2013:

- Financial support has become part of the rural development policy and rules on notifications and recognition regarding PGs formed pursuant to Article 125 of Regulation (EC) No 1234/2007 that are necessary to implement the provisions of the aid scheme have to be respected by notifiers and maintained by authorities.

Information obligations identified in Regulation (EU) 2017/891 (FV sector only):

- Provisions for the recognition of producer organisations in respect of the products they request should be laid down. Producer organisations should have at their disposal the structures necessary to ensure their functioning. Structure and activities of producer organisations shall be monitored (Articles 7 and 10);
- To implement an operational programme, producer organisations should be required to achieve a minimum value or volume of marketed production, which should be laid down by the Member State (Articles 8 and 9).
- Producer organisations shall keep records, including accounting documents, for at least five years, which demonstrate that the producer organisation concentrated supply and placed on the market members' products for which it is recognised (Article 11).
- In some cases, producer members should be allowed to sell a certain percentage of their production outside the producer organisation where the producer organisation so authorises and where this follows the terms and conditions of the Member State and the producer organisation. The total percentage of sales outside the producer organisation should not exceed a maximum threshold that has to be controlled by authorities (Article 12).
- To facilitate the use of the scheme of support to operational programmes, the value of marketed production of producer organisations should be clearly defined and controlled by authorities (Article 8 and 22).
- Member States' authorities shall carry out checks, based on a risk analysis, on voting rights and shareholdings (Article 17).
- To ensure the correct use of the financial support, rules should be laid down for the management and bookkeeping of operational funds and members' financial contributions. Notification of estimated amount of Union financial assistance and contribution to the operational funds shall be notified to NCAs (Article 26).
- Member States shall monitor and evaluate the national strategy and its implementation through operational programmes (Article 27).
- For reasons of financial security and legal certainty, a list of operations and expenditure which may not be covered and a non-exhaustive list of operations which may be covered by operational programmes should be drawn up.

Member States have to verify that only covered operations are included in the operational programmes (Articles 31 and 32).

- Provisions for appropriate monitoring and evaluation of ongoing programmes and schemes in order to assess the effectiveness and efficiency by both POs and Member States have to be set-up.
- Specific control activities should be carried out by authorities to monitor potential irregularities in the implementation of the operational programmes.
- Rules concerning the entry price system for FV should be adopted. Rules for the provision of a guarantee in certain circumstances to ensure that the system is correctly applied have to be established and monitored.

This listing of the main administrative and information obligations clearly shows that the main obligations concern the FV sector when it relates to the operationalisation of the operational programmes, for which however – contrary to the pig meat sector – EU funding is available.

Therefore, it is logical that the results obtained from the research show that the main administrative burden is being faced in the FV sector. Interviewees from the pig meat sector indicate that burden exists for the recognition procedures (both POs and PGs) but that this administrative workload is proportionate and does not constitute a real issue negatively impacting the operational and business environment in which they operate.

The situation is rather different for the FV sector. Representatives of POs/APOs provided evidence of the workload individual POs face:

- In the NL, representatives of national producer associations estimate that about 2 to 3 FTEs per recognised PO are required to perform all administrative tasks required by the legislation. This workload continues to grow year after year. The main workload comes from obligations for the operationalisation of the operational programmes, especially the control of the volumes of production, but that application of Article 160 of the CMO legislation also leads to significant burden. Producer representatives have indicated that the burden is so high that several POs may decide to withdraw their recognition in the near future. Four of them are considering this option as they consider that costs are higher than benefits.
- Italian FV POs have estimated that 2 FTEs are required to fulfil administrative and reporting obligations. The representatives of these POs, also, consider that these costs are very high. One interviewee highlighted that the major difference with the situation in the NL is that FV POs in IT are larger (larger membership) and therefore the amount of burden is more easily accepted.
- Several French interviewees have mentioned that about 10-13 experts (staff of national POs and independent experts) are fully dedicated to providing support to POs/APOs staff to comply with obligations in the framework of the operational programmes.
- A French APO, which groups seven POs for a total of 2,500 members (turn-over of EUR 400 million), estimates its costs at about 0.6 FTE per year for the

fulfilling of its legal obligations. It considers that the related workload is rather high but that costs are nevertheless proportionated.

- Another French interviewee from the fruit sector considered that the controls in place in the context of the operational programmes are too heavy and that the protocols to control certain obligations are not adequate (e.g. control of yield per ha). For this interviewee, the way the controls are applied cannot lead to robust and indisputable results.

National authorities from BE and FR¹⁵¹ have also provided information related the workload for the recognition of the POs and the control of the operational programmes:

- In FR, it is considered that one FTE is managing about 15-20 operational plans, maximum, per year.
- In BE, NCAs estimate that about six FTEs are dedicated to the recognition of the POs and the administrative control of POs (of which less than 0.5 FTE for the recognition procedure). Three additional experts provide part-time training (corresponding to 1 FTE) on operational programmes to POs' staff.

Evidence presented by interviewees from the POs/APOs clearly show that meeting legal requirements is time consuming and very often requires professional support provided by advisory services. For these interviewees, the complexity of the obligations and the various control mechanisms are associated to frequent changes in the national legislation and significant changes in the EU regulatory framework, as well as possible legal retortion on the EU level (audits), leading to legal uncertainty and perception by PO members that they might lose funding after many years. In addition, the long decision-making process may reduce POs flexibility (e.g. delays in investment).

5.5.3.c. Financial measures

Financial support from public sources is also an important factor to promote collective actions of farmers and support PO initiatives, especially at the process of POs' formation.

POs can receive financial support from two complementary regimes:

- The measure provided for in Article 27 of Regulation (EU) No 1305/2013 supports the setting up of producer groups and organisations, especially in the early years, when additional costs are incurred so as to face jointly market. This measure has a clear incentive role. It was already implemented during the 2007-2013 period but only in the EU 12 Member States. The following main new elements have been introduced for the 2014-2020 period:
 - The measure can be implemented in all Member States;
 - it covers also the setting up of POs;
 - it includes all agricultural sectors listed in the CMO, including FV;

¹⁵¹ National authorities from other Member States have indicated that they had no quantitative data as regards the operationalisation of the operational programmes in the FV sector.

- PGs and POs in forestry can, also, be supported; and
- the measure is restricted to PGs and POs falling under the EU definition of SMEs.

To be eligible for support, PGs and POs must be recognised by NCAs on the basis of a business plan which should describe the planned activities of the PG or of the PO addressing one or more of the following objectives: (a) adapting the production and output of producers who are members of such groups to market requirements; (b) jointly placing goods on the market, including preparation for sale, centralisation of sales and supply to bulk buyers; (c) establishing common rules on production information, with particular regard to harvesting and availability; and (d) other activities that may be carried out by PGs/POs, such as development of business and marketing skills and organisation and facilitation of innovation processes.

- Regulation (EU) No 1308/2013 provides aids for the FV sector only (Chapter II, Section 3). Growers are encouraged to join POs and may receive support for implementing operational programmes, based on a national strategy. Aid is also granted to mitigate income fluctuation from crises. Support is offered for crisis prevention/management measures under operational programmes, i.e.: product withdrawal, green harvesting/non-harvesting, promotion and communication tools, training, harvest insurance, help to secure bank loans and cover administrative costs of setting up mutual funds (farmer-owned stabilisation funds). The Commission has set a fixed level of financial assistance that can be paid towards the PO's operational fund expenditure. Assistance will be paid at either 50% of the eligible expenditure or 4.1% of marketed production, whichever is lower. An additional 0.5% funding is available for crisis prevention and management measures for POs whose funding is based on 4.1% of their marketed production. As reported by the Commission, the 2017 EU budget for this measure is estimated at about EUR 800 million.

Several interviewees (7) have clearly mentioned that financial support provided through Article 27 of Regulation (EU) No 1305/2013 has the potential to contribute to several EU priorities for rural development, for example by enhancing job opportunities and the development of rural areas and fostering resource efficiency. However, the same respondents added that the financial support is provided for a too short period at inception of the POs or PGs and that a longer support would secure sustainability of such organisations. Granting is provided mainly to establish PGs or POs, but only at the first stage of their operation. In addition, the relatively low requirements to establish a PG or PO, even if a business plan must be provided by applicants, may result in the establishment of organisations aiming at receiving public money instead of looking for ways to achieve sustainable real economic goals and benefits from cooperation. This may result in weakening the reputation of PGs/POs on the market.

The same interviewees consider that support should, also, incentivised the increase of the membership base of already established entities to attain the critical volumes of production and marketing. If such entities remain small, their bargaining power will stay weak.

Other interviewees have questioned the level of harmonisation and the lack of level playing field due to different types of national support measures. As an example, it can be mentioned that major differences exist between the Belgian and the Dutch measures which pushes producers from Dutch POs to join Belgian POs. It seems that in BE, a larger set of actions are eligible for the fund and not only investment as it seems to be the case in the NL.

Another challenge relates to the beneficiaries of the fund: should funding go at the level of POs and their members or should it be restricted to the level of POs? Using EU funding at the level of the POs prevents producers from moving from one PO to another and reduce competition among producers as not all individual producers request for investment funding.

For reaching the goals of eco-friendly cultivation and production, the FV scheme requires POs to dedicate at least 10% of spending of the operational programmes on environmental actions that go beyond mandatory environmental standards. Alternatively, programmes must include at least two of such actions. For some interviewees, this obligation is not translated in clear measures by national authorities, leading to uncertainties of what is covered by the operational programme and what is not.

Finally, respondents suggested that current support schemes for POs should be supplemented with measures that address the issue of longevity of these entities. For example, policy measures might include special support for the continuation of the operations of previously supported groups, aimed at increasing their membership. Moreover, respondents perceived other programmes aimed at developing social capital and networking very useful in the context of building relations among farmers necessary for establishing and operation of POs.

5.5.3.d. Other legislations¹⁵²

Legal regulations influence POs in many ways, both positively and negatively. First of all, legislation on POs shapes the degree of flexibility with regard to establishing a PO and tailoring internal governance to the needs of the members. For example, the development of entrepreneurial model of cooperatives may be hampered by the national legislative framework that favours the countervailing power of the cooperative model. As a result, cooperatives can be more encouraged to adapt a private limited company framework and solutions.

However, several interviewees have clearly indicated that, while the issue of legal certainty under the competition rules is important in particular in FR, it is of less importance in the new Member States since POs are simply too small if one considers the referential market.

Several representatives from recognised POs/APOs that have benefited from EU funding through operational programmes, and also some national authorities, have

¹⁵² For the ongoing CAP reform, COM has suggested in the Strategic Plan Regulation to extend the FV system (operational programmes) to all other agricultural sectors – but that it is up to the MS to decide whether to support sectors in that manner or not (see proposal at https://ec.europa.eu/info/law/better-regulation/initiatives/com-2018-392_en)

highlighted that legal uncertainty exists. This issue, under the so-called clearance of accounts procedure, has already been reported in several publications and, in particular, by Bijman (2015)¹⁵³ who refers to “*the different interpretation of rules by the policy units of the Commission and the national authorities discussing with the Commission on the one hand, and the Audit Service of the Commission on the other hand*”. This money has to return to the EU budget because of non-compliance with EU rules or inadequate control procedures on agricultural expenditure. Member States are responsible for paying out and checking expenditure under the CAP, and the Commission is required to ensure that Member States have made correct use of the funds.

These differences of interpretation have resulted in several cases when POs have had to pay back all investment subsidies. Interviewees have reported that in the NL and in South East of FR, this risk has caused several producers to leave recognised POs. In BE penalties were also applied in 2013, although they were paid directly by the government and, therefore, producers were not asked to reimburse part of their subsidies.

On the basis of these multiple cases, there is today the perception of very high risks of losing the public financial aids when audits are carried out by the European Commission. Producers have difficulties in understanding why they are penalised when audits are performed when NCAs are already controlling and monitoring the processes. This regulatory uncertainty is a limitation factor for the submission of operational programmes in the FV sector.

In addition, respondents from some rural areas mentioned another key factor discouraging participation to PO and collective action. In general, PO members are officially registered and monitored by public authorities. Some farmers, instead, prefer to stay ‘undetected’; in order to benefit from reduced public control (participating to grey or black markets).

5.5.4. Comparison between BE and PL of the main factors influencing the effective functioning in the FV sector

Table 13 presents a comparison between BE and PL of the main factors influencing the effective functioning of a PO in the FV sector.

¹⁵³ Bijman J. et al. (2015) Study for the European Parliament: “Towards new rules for the EU’s fruit and vegetables sector: an EU Northern Member States Perspective”. Available at: http://www.europarl.europa.eu/RegData/etudes/STUD/2015/540347/IPOL_STU%282015%29540347_EN.pdf

Table 13 – Comparison between BE and PL of the main factors influencing the effective functioning in the FV sector

| Belgium | | | Poland | | |
|--|--------|------------|---|---------|------------|
| Importance of the FV sector (source: Eurostat, <i>The fruit and vegetable sector in the EU - a statistical overview, 2016</i>) | | | | | |
| | Fruit | Vegetables | | Fruit | Vegetables |
| Number of holdings | 37,600 | 35,000 | Number of holdings* | 133,000 | 120,000 |
| Production area - share of EU 28 (in %) | 0.6 | 2.7 | Production area - share of EU 28 (in %) | 11.1 | 10.4 |
| Area (1,000 ha) | 18.0 | 59.2 | Area (1,000 ha) | 337.5 | 241.1 |
| Output value - share of EU 28 (in %) | 2.0 | 2.3 | Output value - share of EU 28 (in %) | 5.1 | 7.4 |
| <p>Most recognised POs in the vegetable sector target the fresh market, whereas a number of smaller POs are involved in further processing.</p> | | | <p>(*): of which 160,000 specialised in FV.</p> <p>Recognised POs are not specialised as regards the market they target (fresh vs for further processing).</p> | | |
| Economic importance of recognised POs | | | | | |
| <p>The share of the total value of the production marketed by recognised POs/APOs is estimated at 85% for the FV sector.</p> | | | <p>The share of the total value of the production marketed by recognised POs/APOs is estimated at 4.4% for the FV sector (considering the 160,000 specialised FV holdings and not the 253,000 total of holdings).</p> | | |
| History of cooperation (see detailed information under Section 5.5.1) | | | | | |
| <p>Strong cooperation via cooperatives.</p> | | | <p>Negative perception of cooperatives among Polish farmers after the Second World war.</p> | | |
| Governance | | | | | |
| <p>More than 85% of the Belgian FV producers are members of a recognised PO. This percentage is even higher in the Flanders region (>90% of the existing 6,000 FV producers). All recognised POs in the FV sector (13 in total) are located in that region and none in Wallonia. Recognition was mainly granted in between 2000 and 2010. The</p> | | | <p>At the end of 2017 about 250 FV POs were registered in Poland, of which 60% obtained recognition in between 2009-2012. These organisations associated approximately 7,000 thousand growers. If we compare the number of members of POs and the total number FV growers (300.000), it turns out that in 2017 as little as less than</p> | | |

relative importance of recognised POs is rather similar all across the sector as a whole and it cannot be concluded that one crop is less or more organised than others.

2% of FV producers were members recognised POs. The relative importance of POs is also clearly illustrated by the fact that, in 2016, their share in the value of domestic production of FV amounted to 28%. However, there are large differences across crops, for example, for apples the value produced by members of recognised POs represented about 17% of the total domestic value. For greenhouse tomatoes, the respective share amounted to 27%. The current state of organisation of the FV sector cannot be considered sufficient. However, it should be borne in mind that the first group of FV producers in Poland after the transition to market economy (1989) listed in the national register of FV producer groups and organisations was established in 2004. The above data indicate that the progress in establishing POs in the FV sector has been in any event significant so far.

CAP or national incentives/disincentives

All recognised POs in Belgium have developed an operational programme.

The Commission audit on the operational programmes which has been performed in 2016 has been perceived negatively by producers even if the fine of 5 million EUR (representing about 5% of the funding) was paid by the authorities.

The main specificity of the Belgian approach is that all funding opportunities are accepted by authorities, whereas e.g. in the NL only investments made by POs are accepted.

The drafting of the operational programmes is coordinated by the recognised APOs (e.g. LAVA) which then defines which actions are performed by the POs members of the APO and by the APO itself. The combined operational fund for the Flemish POs amounts to about 100 million EUR each year. Almost 90% of this amount is spent by APOs. If all POs are considered together, 14% of such funding was dedicated

The majority of FV POs currently operating in Poland have benefited from aid granted to them as producer groups. According to the data for 2013-2016, the average annual aid over this period for Poland amounted to 172 million EUR (90% of the support came from the scheme for pre-recognition of producer groups).

Only 16 POs implemented their operational programmes between 2010 and 2016 (in 2010 there were 38 recognised FV POs in Poland, and in 2015 already 194 entities were recognised). Due to the short duration and the low number of programmes implemented, it is difficult to work out valuable assumptions for the following national strategy of operational programmes of FV POs. Being recognised as a PO grants a privileged status when applying for funds from RDP 2014-2020, e. g. under the measure supporting the processing and marketing of agri-food products. However, FV producers are currently excluded from this measure, which makes it practically impossible to receive support in the case of a newly established producer associations. Growers consider a serious

to expenditure on fixed assets, 1% to expenditure on the other acquisition of fixed assets and 85% on expenditure on actions. The reason for the rather low amount on expenditure on fixed assets is that POs have already been investing for years in fixed assets at PO level. As the most interesting projects have already thus been carried out, there has been a shift from expenditure on fixed assets to expenditure on actions. The small POs in the fresh market are still young and therefore invest on average more in fixed assets and in improving product quality. This is logical and plausible given that first and foremost it must be possible to guarantee product quality before being able to optimise sales. The POs aiming at the industrial segment also concentrate mainly on promoting product quality.

shortcoming the lack of incentives in the support system for POs in Poland with a view to encouraging existing organisations to increase the number of members.

Administrative burden

The Belgian recognised POs have a strong in-house expertise in drafting operational programmes. Most of the work is performed by the LAVA APO. Three staff of the Flemish authorities are dedicated to the approval of the operational programmes and three others to the administrative control of POs. Three additional experts provide training and technical support to recognised POs on how to draft operational programmes. This effort is considered as proportionate to the funding granted by the Flemish authorities.

According to the representatives of FV POs, the submission of an operational programme requires the employment of a specialist and/or the use of external advisory services. The application documents for recognised FV POs are numerous and detailed. Respondents also pointed out that frequent changes in regulations, both European and national, as well as some ambiguity in their interpretation, discourage organisations from creating operational programmes. They also suggested that recently the biggest problem seems to be the controls of proper recognition of Polish POs. Many organisations are unsure of their future despite the fact that their activities have been monitored and approved during the various stages of the recognition process. The benefits of implementing a co-financed operational programme under conditions of ambiguous interpretation of regulations and increased controls are perceived as insufficient.

5.6. Impact of POs/APOs on their members and on the entire food supply chain

The present section considers the impact that POs and APOs have on their members and on the entire food supply chain.

The analysis that is presented hereinafter is based on the responses gathered from representatives of recognised and non-recognised POs (FV and pig meat sectors), individual farmers (pig meat sector) and other food supply chain stakeholders (FV and pig meat sectors). It is completed by literature.¹⁵⁴

Against this background, in the first place, Section 5.6.1 examines in particular the benefits and disadvantages that POs and APOs offer individual farmers who are their members – mostly in terms of bargaining power, productivity and commercialisation of agricultural products.

Secondly, Section 5.6.2. considers the impact that POs and APOs have with regard to other food supply chain stakeholders of the food supply chain, including, in particular, processors, manufacturers retailers and final consumers.

5.6.1. Benefits/disadvantages for producers

This section illustrates the positive and negative consequences for individual farmers and their holdings, which are generally associated with being a member of a PO. These can be grouped in three main areas: farmers' bargaining power, efficiency in productivity, and marketing.

Finally, consideration is given to other possible reasons why POs and APOs may be deemed beneficial not only to farmers, but also to the rural areas in which they are located.

5.6.1.a. Bargaining power of farmers

Overall, POs are regarded as entities that effectively contribute to increasing farmers' economic weight in the context of the negotiations that are held with other business operators that are:

- Supplying agricultural inputs (e.g. fertilisers, plant protection products, feed, veterinary medicines, etc.).
- Providing non-agricultural services that are nevertheless particularly important for farmers (e.g. insurances, banks).
- Buying directly from agricultural producers (in particular, processors, wholesalers and retailers).

Based on the results of the survey targeting POs, 62% of the respondents have indicated that their PO has increased the bargaining power of their members to a significant extent, while for 28% of the respondents the relevant POs have contributed to that effect to some extent (see Figure 35 under Section 5.3.1). From this

¹⁵⁴ Of which Falkowski, J. et al. (2016) Factors Supporting the Development of Producer Organizations and their Impacts in the Light of Ongoing Changes in Food Supply Chains: A Literature Review (No. JRC101617). Joint Research Centre (Seville site).

perspective, POs contribute to increasing the contractual power of farmers vis-à-vis their business partners, while at the same time ensuring their full integration in the modern supply chains.

In many of the surveyed Member States (e.g. CZ, FR, DE, HU and IT), it appears that the benefits stemming from a PO membership in terms of bargaining power would be particularly evident in the case of small farmers.

Interviewees carried out in the Belgian FV sector have all indicated that the concentration of the offer through POs has been highly beneficial for producers. The number of buyers in BE is rather limited and, therefore, bargaining power of producers is rather high. Interviewees have highlighted in this context the importance of LAVA, which is the umbrella organisation to promote cooperation among the FV POs in the country. The products of all these POs carry the Flandria quality mark. Out of the five POs that currently exist in BE, four are members of LAVA. The most important system to sell the produce supplied on a day-by-day basis is the auction clock. The produce supplied is classified (blocked) according to standards of equal quality, packaging and method of cultivation, and is then sold through the electronic sales system. In addition, the various POs are connected with each other through a computer network so that customers can buy products from the four different auctions via internet sales. This system intensifies the concentration of the offer, as a result, the bargaining power of the producers through LAVA and its auctions. In addition to coping with the fluctuating prices as a result of the day-by-day sales at auctions, a system of forward sales is put in place. About 30% of the expected produce can be sold using fixed prices. Within this system, the number of packaging units of a certain product, the price and period of delivery are fixed in advance.

Higher selling prices at origin and more advantageous contractual conditions. In practical terms, POs may secure the application of better contractual terms for their members, as opposed to the scenario where farmers negotiate such terms individually with their suppliers and customers.

This would result not only in higher selling prices compared to current market prices, but also in long-term contracts and/or regular orders, advance payments, and additional guarantees whose inclusion in supply contracts would be more difficult to achieve for individual farmers.

However, with regard to the prices of agricultural products, there is currently no systematic evidence that members of a PO would benefit automatically from higher prices.¹⁵⁵ The analysis which is presented under Section 5.2 confirms that statement.

Membership in a PO, in general, can provide farmers also with several indirect economic benefits, including, for instance, the application of fairer and more advantageous contractual conditions that POs can secure and that contribute towards

¹⁵⁵ Extensive literature exists about the ‘yardstick effect’ e.g. Cotterill, R. W. (1983). Competitive yardstick school of cooperative thought. Staff paper-University of Connecticut, Department of Agricultural Economics and Rural Sociology or Liang, Q., & Hendrikse, G. (2016). Pooling and the yardstick effect of cooperatives. *Agricultural Systems*, 143, 97-105.

the reduction of costs and economic risks associated with agricultural production. In this respect, it is worth adding that the results of the survey targeting pig farmers who are members of POs show that, overall, the majority of the respondents (85%) attach more value to indirect economic benefits that POs can bring (namely, the improvement and/or the optimisation of the agricultural production methods at level of the individual holding) rather than to higher prices as a direct economic advantage.

Contractual negotiations. In this context, contractual negotiations carried out by POs would be able to eliminate or minimise the occurrence of unfair trading practices by downstream operators to which the single farmer, especially in the case of agricultural holdings of a small size, has no leverage to counteract.

Indeed, from some of the interviews performed during the study it emerged that the presence of a PO would avoid to some extent situations that individual farmers had experienced before joining the organisation, including:

- Sudden cancellations of commercial orders or return of goods by their customers, often with no justification or even under false pretexts (e.g. lack of safety and/or quality required, non-compliance with agreed delivery schedules etc.).
- Undue delays in payments.

Concerning cancellation of orders and return of foods, this is a risk which may be in fact particularly exacerbated in the case of certain sectors (e.g. FV) more than in others (e.g. pig meat) due to the perishability of the food and/or the high dependence of the demand on climatic conditions, which altogether make very difficult to find alternative buyers in the meantime.

Regarding late payments for the supply of agricultural products, this practice tends to engender situations in all agricultural sectors where farmers may not be able to pay their employees and/or their suppliers of agricultural products, making difficult, if not impossible in certain cases, to plan any future production.

Under these circumstances, even when a regular supply contract is in place, a single farmer would hardly be in the position or, in any event, be willing to challenge decisions of the type described above taken by his/her customers, for the fear to be blacklisted and therefore to lose future business opportunities.

Conversely, because of their negotiating power and the professional skills of their staff, POs would be better placed than single farmers to dispute customers' decisions that are perceived as unfair towards farmers or not in line with contractual terms. For the same reason, they would be able to react in a timely manner when the nature of the products so requires (e.g. FV) avoiding, for instance, that customers send back or return goods to their origin before the situation has been duly clarified. This point has been made clear by several interviewees from POs and APOs and especially from the LAVA PO in BE and the CERAFEL APO in FR. Both organisations have dedicated staff to follow the correct delivery of products to customers and check whether or not contractual agreements are fully respected. In BE, the same staff also secure that no unfair trading practices are applied to the four POs which are members of LAVA during the delivery of products.

All this has obviously a positive economic impact on farmers' activities as it contributes to mitigating inherent business risks such as loss of profits and loss of goods. In other words, a PO acting as a contractual negotiator is able to ensure greater legal certainty and protection with regard to the terms of sale applicable to farmers' products.

Moreover, unlike most farmers, POs often rely on staff with appropriate commercial negotiation skills or who may have been trained to that effect. This further contributes to the effectiveness of the contractual negotiations in the agricultural sector when carried out by POs: through their professionalism such entities are able to build long-term business relations and position themselves as trustable business partners.

From this perspective, POs may also help their members in identifying better commercial alternatives and/or in ensuring that the range and the type of products commercialised by them suitably match and are constantly adjusted to the evolution of the demand observed in targeted markets.

Ultimately, all the above translates into a higher and stable income for the individual farmer as well as into a higher share of the final price which will be paid by consumers when purchasing the relevant food product at retail level.

Perceived differences in farmers' bargaining power. Notwithstanding the above, the contribution that POs make towards a greater farmers' bargaining power appear to vary considerably depending on the national or regional context and the sector that is being considered, in addition, of course, to the history and level of maturity of any specific PO.

There are therefore instances (e.g. CZ, DE, ES, FR, HU, IT, NL and PL), in which POs are said to have contributed to enhancing farmers' negotiating power to a significant extent, by representing their members and protecting their interests in the dealings with suppliers and buyers at regional, national or even international levels. This seems particularly true in the case of POs with a relatively large number of members and with a certain level of maturity.

Conversely, in the case of relatively small and/or newly established POs, the contribution towards increasing farmers' bargaining power is sometimes perceived as only partially satisfactory or unsatisfactory as the dependence on other stakeholders of the relevant food supply chain is still regarded as high to the extent that, in some cases, it may condition market access as such (e.g. CZ, FR, PL and RO). For example, about 200 POs are recognised in the apple sector in PL. Each of these organisations is composed of a few producers only. For such cases, the farmers' bargaining power is weak.

Also, the presence of powerful operators down the chain (e.g. international or foreign manufacturers and large retailers) and the occurrence of crisis situations affecting the sector are factors that may adversely affect farmers' bargaining power and, in particular, the determination of fair prices in return of the sale of agricultural products. Factors such as the ratio between supply and demand, product quality and product variety, amongst others, are referred to as elements that impact on the determination of price of the different agricultural products commercialised by the same PO (e.g. CZ, and DE).

Collective bargaining power versus loss of commercial and contractual autonomy of the single farmer. Notwithstanding the benefits illustrated above, it is important to note that while POs are generally regarded as entities that globally reinforce farmers' bargaining power collectively, in several instances, interviewees from some Member States (e.g. CZ, DE, FR, IT and PL) have reported that for certain farmers joining a PO involves a number of obligations that are perceived as limiting their individual commercial and contractual autonomy.

Indeed, once joined a PO and owing to what the statutes of this organisation lay down, farmers are no longer in the position to decide, as they may deem appropriate, whether and/or which amount of their agricultural production they should market directly or via the PO.

Often it is the PO that leads the contractual negotiations on behalf of its members, and for that reason statutes of the PO might require producers to market their entire production via the PO.¹⁵⁶

Most interviewees justify this apparently contradictory situation explaining that whereas most farmers, as a rule, are keen on taking advantage from the activities and the services of the PO of which they are members, some of them still struggle with the fact that being member of a PO comes not only with rights but also with specific obligations.

Eventually, in certain instances (e.g. DK), it is felt that, in spite of the democratic principles that generally regulate the functioning of POs (for instance, equal voting rights for all farmers), the decisions, including those of more commercial nature, are often politically driven and taken in the interest of the biggest farmers instead of all members.

Somehow these considerations are also relevant with regard to the overall reluctance that certain farmers currently show towards joining POs afraid as they are of losing their own business identity and autonomy, an aspect which is discussed under Section 5.2.

5.6.1.b. Productivity of farmers and farm investments

The services that POs may provide are often regarded as value-adding activities that contribute towards greater efficiency of the relevant agricultural production system as a whole, overcoming, in some instances, situations of underinvestment observed at the level of individual farms.

As such, services provided by POs are apt to lead to increased and improved productivity at the level of the individual holding, thereby guaranteeing a better and long-term economic positioning of agricultural producers vis-à-vis expectations and demands of other business operators and consumers alike, in addition to paving the way for a higher degree of vertical coordination across the food supply chain.

¹⁵⁶ Legally, the CMO does not require that producers market their entire production via the PO, except in the FV sector, for which Article 160 CMO contains such an obligation. However, this obligation is altered by Regulation (EU) 2017/891, which allows producers to market up to 25% of their production outside the PO.

At the same time, the joint organisation and the management of such services via POs may generate significant reductions in terms of costs for the members of these entities especially if one considers the investments that internalising and/or externalising such costs would entail for the individual farmer.

Based on the interviews carried out during the study with POs and APOs in the FV and pig meat sector, the following paragraphs consider the type of services that POs tend to offer to their members and that most contribute to the efficiency of the productivity at the level of single holdings. Aspects related to the joint marketing of agricultural products via POs are instead presented and discussed separately.

POs as providers of technical know-how. First of all, it seems quite widespread across the EU the pattern whereby POs make available to their members the technical knowledge and the training tools that are necessary to ensure the implementation of good agricultural practices, providing in many cases on-site assistance through their technical staff (e.g. veterinarians, agronomists) (reported by at least one interviewee from BE, CZ, DE, FR, IT for the FV sector and DE, DK, ES, FR, IT, NL for the pig meat sector).

In so doing, POs overall contribute to the fulfilment by farmers of safety and quality requirements that may be imposed, in turn, by law, private standards and/or by the technical specifications set out by farmers' own customers, while guaranteeing, at the same time, the presence of a continuous modernisation process of agricultural holdings.

Other technical services provided may involve data collection and monitoring (e.g. pig registration), in addition to more administrative tasks, including the management of operational funds in the context of operational programmes in the FV sector (reported by the large majority of interviewees from POs/APOs) and the lodging of compensation requests on behalf of their members.

Beyond primary production. Some POs are also directly involved in processing (e.g. owning facilities where, for instance, FV are washed, sorted and/or packed or live animals slaughtered and/or cut), in addition to providing storage rooms (e.g. warehouses, cold stores), distribution and/or logistic services.

A fewer POs then advise and carry out the joint selection and/or purchase of the most adequate agricultural inputs (e.g. feed, fertilisers, plant protection products, machinery and equipment) to be used in agricultural production. Generally, entrusting POs with this type of tasks allow buying agricultural inputs in bulk and at lower prices compared to purchases made by single farmers.

There are also a few cases in which POs are working to take horizontal cooperation amongst their members to an unprecedented level.

For instance, an Italian PO in the pig meat sector is currently planning to expand its activities so to encompass all stages of the food supply chain, from primary production through processing to sale to the final consumer with a view to increasingly acquiring independence from other business operators. Nevertheless, this approach is rather uncommon and appears to be at present the exception rather than the rule.

POs as enhancers of agricultural quality. In several instances, POs (e.g. CZ, FR, HU and IT) carry out the functions of third-party certification bodies as they run fully-fledged quality assurance schemes. This often involves the development of specific agricultural production standards and the subsequent verification of their compliance during regular audits to be performed on their members.

In other POs (e.g. LAVA in BE), a quality department has been created. Within LAVA, the quality department is responsible for the control of the high standards concerning quality. To achieve the top quality of the produce, the quality department performs different tasks (e.g. management of the guidelines for production and quality for the Flandria trademark, ensuring uniform quality standards across the different POs).

This way POs make sure that all agricultural products of their members meet exactly the same quality standards and that there is therefore a level playing field amongst the concerned farmers in this respect.

POs as catalysts of funding and investments. In the FV sector, most of the interviewees pointed out that the operational programmes managed and implemented by recognised POs and APOs under the CMO Regulation have secured considerable co-financing by the EU over time. This is said to have been often employed for the modernisation of the agricultural production through investments aimed, amongst others, at e.g. CZ and FR:

- The introduction of new technologies in agriculture.
- The upgrade of existing machineries or the purchase of new ones.
- Mainstreaming more sustainable production methods across POs' membership.

In some Member States (e.g. DE, PL and RO), however, access to EU funds in the view of implementing operational programmes is currently perceived by some POs as an overly excessive administrative burden to the extent that, in certain instances, both POs and individual farmers prefer eventually to resort other sources of financing (e.g. bank loans).

For example, a Polish interviewee from the FV sector has made clear that, in its opinion, most Polish POs in that sector are not ready to develop operational programmes as they do not have the dedicated staff for such exercise. They lack competence for drafting operational programmes. In addition, the same interviewee has indicated that, to date, he has not been able to identify any organisation/entity in the country which may support him in the drafting of such a programme.

POs in the pig meat are also able to secure funds for their members, although, it would appear, to a lesser extent as opposed to POs in the FV sector: these funds are used for different purposes, including manure processing and phosphate reduction (e.g. the NL).

POs as drivers of innovation. The interviews carried out during the study have revealed that a number of POs (e.g. CZ, DE, DK, FR and IT) invest considerable resources in innovation and research and development activities (e.g. by encouraging varietal conversions, performing agricultural trials of new species in the case of FV) whose output, if satisfactory, is eventually employed and applied to the advantage of all their members.

For example, the LAVA PO in BE cooperates with several public funded research organisations and various testing centres such as e.g. the Provinciaal Agrarisch Centrum Blauwe Stap – Herent and the Proefcentrum Hoogstraten in Flanders.

In a limited number of cases, research can be performed by entities directly funded by POs themselves. For example, the PO SICA Saint Pol de Léon created a research and testing station more than 30 years ago to support the production of regional FV (e.g. cauliflowers, artichokes, onions, etc).

Nevertheless, these POs seem to represent a minority amongst the entities surveyed and they are generally POs of large dimensions and quite high financial capabilities.

In any event, innovation, in general, has been often mentioned by several interviewees as an area where in future POs could provide more assistance and services and, in so doing, deliver further added value for their members (e.g. BE, CZ, FR and the NL).

5.6.1.c. The marketing of agricultural products

Together with the concentration of supply, most interviewees surveyed in the context of the study have pointed out to the joint marketing of agricultural products as one of the most useful and value-adding activities that POs can perform for the benefit of their members.

Indeed, POs are generally regarded as well-placed entities for designing the overall commercial strategy of their members right from its conception in terms of identification of markets, products, customers, other business partners and economic objectives down to its actual implementation, including promotional activities and actual sales.

Through the joint marketing of agricultural products POs allow their members to reach out to distribution channels to which they would not have access and/or be able to explore individually, contributing, at the same time, towards the development of stable business ties on the national and international markets.

Also, in several instances (e.g. BE, CZ, DK, FR and IT), POs have reported to have played a key role in effectively redesigning or readjusting their members' market strategies by identifying alternative business opportunities during situations of crisis faced by the sector (e.g. overproduction, Russian embargo, outbreaks of animal diseases such as the African Swine Fever).

Joint promotion. Most of them also actively promote (or are planning to do that to a greater extent in future) agricultural products of their members by participating in national and international trade fairs (e.g. Fruitlogistik) and other raising-awareness events (e.g. national events associated with the EU School Fruit Scheme). Promotion through websites, social networks and like, however, seems to take place to a more limited extent amongst the POs which were surveyed in the study.

For example, in BE, together with VLAM (Flanders' Agricultural Marketing Board) and VBT (the national association of fruit and vegetable producer organisations), the PO LAVA handles the marketing and promotion of the Flandria quality label with a clear focus on its communication towards consumers.

Promotional activities deployed by POs are often designed to highlight the link that exist between the quality of agricultural products and the regional or local territory from where they originate, whether or not under the auspices of one of the current EU quality schemes.

Other activities contributing to the efficiency of joint marketing. While the notion of joint marketing is, in the first place, generally related to the actual selling of agricultural products carried out by POs and the commercial and promotional activities that are intended to facilitate the placing of such goods on the market, based on the feedback received from interviewees, in fact, it is often interpreted in a broader way.

As such, this notion would encompass also other activities performed by POs that support the commercialisation of agricultural goods indirectly with a view to increasing their competitiveness on the market and, ultimately, boosting their sales.

From this standpoint, in several of the interviews carried out, when discussing joint marketing by POs, it emerged that these entities play a fundamental role in ensuring that the agricultural products of their members are of the desired quality so that they can withstand the competition of products of other farmers in the markets where they are commercialised.

Indeed, POs are regarded as stakeholders that can foster the implementation of higher quality standards at the level of primary production, by developing their own requirements for that purpose or implementing other internationally agreed standards (e.g. Global Gap), in addition to auditing their members to ensure their products fulfil systematically the minimum level of quality required. If one considers the pig meat sector, the survey of holdings that are members of a PO shows that 85% of the sample surveyed think that POs contribute to increasing farmers' efficiency namely through the optimisation of production methods (Figure 46). Moreover, amongst the holdings that are currently not members of any PO, a lower but still significant percentage of pig breeders (50%) indicated that they would be interested in the joint organisation of quality controls by a PO (Figure 35).

In so doing, several POs also encourage product diversification across their membership as a strategy that allows individual farmers to be more competitive on the marketplace by being able to supply a wider range of agricultural products to their customers, but also to remain competitive in the long run, by minimising the risks ensuing from market downturns that may affect one or more specific crops at a time.

In this context, some of the most evolved and structured POs also foster innovation in production, supporting – with cooperation through research and development bodies and/or through direct and indirect financing in a few instances – initiatives aimed at improving the quality and the variety of agricultural products with the objective to ensure that the latter enjoy a higher and long-term marketability.

Most of the aspects referred above have already been discussed also in Section 5.3 as, in fact, in addition to having been referred to by several interviewees as being relevant for the joint marketing of agricultural products by POs, they also contribute to the overall productivity of all the farmers who are members of POs.

Other complementary services. In the most structured and advanced POs, the joint marketing may be supported – and in many cases is – by other complementary services that facilitate the placement of the agricultural products on the market.

These may entail activities such as collection, distribution and/or transport services of agricultural products, but also joint packaging and labelling.

In some cases, POs have reached a level of professionalism and ownership of the relevant production chain that have developed and commercialise their own-brand product lines (e.g. CZ, DE, FR and IT) and this on the top of the agricultural products that they supply to other operators (e.g. retailers) and that are normally marketed under their brands. For example, the set-up of the club 'Pink Lady' brand in FR has benefitted all apple producers selling apples through this club. The LAVA PO in BE and the CERAFEL APO in FR have both developed a dedicated label called 'Flandria' and 'Prince de Bretagne', respectively. In IT, in the pig meat sector the PO OPAS/ASSOCOM has been developing activities such as joint packaging, labelling and promotion of the production under its own brand called OPAS.

The performance of such complementary joint services by POs is in general regarded by its members as a positive element that contributes towards the reduction of the costs normally associated with them or that may generate additional income.

Taking this into consideration and in addition to the presence of qualified staff and of the business network they rely on, POs seem able to offer and guarantee a relatively high level of professionalism in terms of marketing services to their members.

5.6.1.d. Other reasons

This section considers in particular other advantages and disadvantages, which have reported by at least one interviewee, that POs may bring about for farmers and, in general, for the surrounding communities that inhabit the rural areas where members of POs operate.

Impact on the labour market and the local economy. Through the multiple activities they may carry out POs are generally regarded as entities that have a positive impact on the rural communities where the farmers who are their members are geographically located.

Indeed, by creating added value for their members in terms of increased productivity at the level of individual agricultural holdings, stronger collective negotiating power and implementation of more far-reaching joint marketing strategies, POs contribute to improving the economic conditions of the relevant rural communities as a whole.

The very setting of a PO may create *per se* the need to hire qualified staff who may be found locally or from other areas in the region / country and who has the skills and competences (e.g. managerial / executive / administrative profiles, marketing and/or production experts, accountants etc.) which are necessary for the attainment of the objectives pursued by the organisation. As in certain instances it may prove difficult to find the technical profiles on the local or national market, some POs finance and organise *ad hoc* trainings to that effect. This is the case of the PO Agrintesa in IT, a cooperative that has considerably invested in vocational trainings of young people with the hope to develop human capital to employ on a permanent basis.

Of course, the staff members of a PO may vary in number depending on the size, membership and financial resources that the organisation has when it is established. Also, depending on how each PO evolves during its existence and to the extent that it is effective or not, its staff may increase or decrease in number accordingly.

Certain POs may also decide that certain job profiles are not strictly necessary to work in their secretariat or central office on a permanent basis. Under these circumstances, a PO would generally opt for outsourcing the provision of certain services (e.g. legal, fiscal or specific technical advice) and, in so doing, it still contributes, though indirectly, to economic growth creating business opportunities for the professionals who are able to provide those services. For example, in IT, several POs of the FV sector located in the Lazio and Campania regions rely on the service of the same team of fiscal consultants, including for the elaboration and submissions of operational programmes.

Similarly, from the perspective of their members and, in particular, of individual farmers, the benefits that POs can secure for them in terms of better market access, increased productivity and, ultimately, higher incomes contribute to the preservation of rural jobs and, possibly, to the creation of new employment opportunities within the local rural community where the members of the PO are situated.

As entities that may foster the creation of jobs, both directly and indirectly, POs are therefore regarded as a factor that supports a higher inclusiveness of the local communities into the economy of rural areas and, in so doing, creates trust and community building.

Promotion of regional and local rural areas. By representing farmers located in specific regional or local areas, through certain activities (e.g. joint sales, marketing and advertising campaigns, labelling and other consumer information tools etc.) POs may also ensure promotion of such areas, on a national or on a larger scale. From this perspective, POs can showcase amongst others:

- The quality and the variety of the local agricultural production.
- The link between said production and the preparation of traditional local food products or dishes.
- The preservation of traditional farming methods.
- The practice of organic or sustainable agriculture or the introduction of more innovative agricultural techniques.

For example, in IT the PO Agrintesa oversees the production and commercialises several traditional fruits of the Emilia-Romagna region that are recognised PGIs at EU level, including peaches, nectarines and pears.

Sustainable agricultural production. While POs may play a role in stepping up safety and quality standards in agricultural production across their membership by ensuring compliance with their own and third-party requirements, from the interviews carried out the impact that such entities have in promoting environmental protection and, in general, sustainable farming methods seem to vary to a significant extent amongst EU Member States.

Accordingly, in eastern Member States (e.g. CZ or RO) the implementation of agricultural production methods that are respectful of the environment does not seem to be at present a top priority for the POs located in those countries which were surveyed during the study. Members of such POs are mostly interested in the implementation of operational activities, such as concentration of supply, joint negotiations and sales, on the one hand, and on modernising production so as to further improve quality, on the other. There are nevertheless a few cases of POs located in Eastern Europe for which their members' compliance with environmental obligations is a relatively well-established area of work (e.g. PL).

Conversely, if one considers older Member States (e.g. DE, DK, FR, IT and the NL), overall sustainability:

- Has been a priority area for several of the POs surveyed for already some time now by fostering, amongst others, organic agriculture, integrated production, the implementation of animal welfare best practices and increased awareness amongst farmers for instance through actions financed under the operational programmes in the FV sector.
- Is destined to become more and more prominent on the agenda of the remaining POs in the coming years.

For example, the Verbond van Belgische Tuinbouwcoöperaties (VBT)¹⁵⁷ in BE has recently presented to the press the third responsibly fresh sustainability report. The first one was launched in 2012 by the same organisation along with its marketing cooperatives and the associated growers. The 2017 dossier includes 52 sustainability criteria and minor revisions have been made compared to the 2013 and 2015 editions. The dossier relies on the input of 2,428 growers, all those with a turnover of more than EUR 25,000. Six years after the inception of the programme, this third sustainability report gives a snapshot of what the PO achieved. The participants have made definite progress in terms of sustainable development. There have been positive developments in economic, environmental and social terms alike.

In IT, following closure of the Russian market and the difficulty to identify alternative export markets, the PO ASPROFRUIT has helped some of its members reorienting their production towards niche markets (e.g. organics, EU quality schemes etc.) as a way to secure higher economic returns.

However, even in Member States with more prominent sustainability agendas, there have been a few cases (e.g. DK) in which some retailers have been reported to putting additional market pressure on POs for not complying with their sustainability standards (notably, animal welfare practices) and which has resulted in their refusal to buy the products commercialised by the POs in question.

Communication during food crises and the like. In several of the interviewees carried out during the study it emerged that POs play a fundamental role during food scares or the occurrence of other risks (mostly veterinary and phytosanitary) and events

¹⁵⁷ Association of Belgian Horticultural Cooperatives

(e.g. floods or other adverse climatic conditions) that may threaten the agricultural production of their members and, in general, of the rural areas where these are based.

During the occurrence of crises of the type above referred, POs generally ensure that communication on outbreaks, risk management and preventive measures to be taken takes place effectively. In this context, POs ensure basically that all relevant information flows without delay from national, regional or local competent authorities down to their members as well as in the opposite sense. In some cases (e.g. DE, RO), they may also help their members to obtain compensations established by law from the competent authorities or provide direct financial support (e.g. PL).

POs that have played such a role in one or more occasions are located in various of the Member States surveyed in the context of the study (e.g. CZ, DE, ES, IT, NL, RO).

The *E. Coli* outbreak that was triggered by sprouts and seeds for sprouting in the EU in 2011 and, more recently, outbreaks of African Swine Fever and other pig diseases at level of pig farms were mentioned by several interviewees as examples of crisis in which POs facilitated communication between the relevant competent authorities and farmers.

Representation of political and economic interests of farmers. Conversely, from the findings of the study it emerges that, with the exception of a very few cases (e.g. the NL), POs do not seem to engage to a relevant extent with competent authorities in order to represent the political and economic interests of their members whenever, for instance, draft laws are being discussed or economic crises need to be addressed.

All in all, this somehow confirms that POs are more economic rather than political entities to the extent that they engage in activities that have economic relevance, such as concentration of supply, joint negotiations and sales. Representation of farmers interest lies therefore mainly with other stakeholders at national, regional or local level, i.e. farmers' trade bodies or professional associations.

5.6.2. Benefits/disadvantages for the entire food supply chain

In addition to benefitting their members and the surrounding local communities, POs are as having a positive impact also on the specific supply chain in which they operate.

The large majority of representatives of the food business operators that were interviewed during the study (80%),¹⁵⁸ who include processors/manufacturers, wholesalers as well as retailers, have generally indicated that, in addition to fostering a higher level of vertical integration across the food supply chain, working with and through POs presents several specific advantages for them, as well as a few disadvantages. Most of the advantages that have been reported in particular by processors/manufacturers and wholesalers are common to several of the Member States that were surveyed (e.g. CZ, FR, HU, IT and RO).

The following paragraphs therefore present and discuss the main advantages and disadvantages that were reported by interviewees and other advantages and

¹⁵⁸ 39 group interviews

disadvantages that, in spite of being mentioned in the relevant literature on POs, were not corroborated by the evidence collected during the study.

5.6.2.a. Effective planning of supplies, stable prices and lower costs

First of all, buying agricultural products on a regular basis from one or more POs, whether fresh or destined to further processing, allows sound and effective planning, coordination and diversification of supplies and of their quantities, avoiding the risk of shortages and/or undue delays in business processes that involve food production, distribution and/or preparation.

Secondly, it also guarantees that prices of the agricultural products paid tend to remain relatively stable over time and are not subject to significant variations that may occur while entering in commercial negotiations with multiple suppliers.

Lastly, dealing only with POs as suppliers of agricultural products instead of several individual farmers is also regarded as advantageous by some food business operators who were interviewed during the study, in particular, in new Member States (e.g. CZ, HU and RO), as it contributes e.g. to lower costs, because a limited number of suppliers can ensure a more efficient organisation of deliveries of outstanding orders.

In the context of the relationship between POs/APOs and their customers, the presence of recognised national APOs¹⁵⁹ in the FV sector in FR allows a close relationship between actors to discuss how to adjust offer and demand. As such, APOs can discuss with their customers many aspects (e.g. market evolution, customer needs, quality, etc.) and provide their sector with information that helps producers adjust their production.

Notwithstanding the advantages referred to above, according to a limited number of interviewees (3) during the study in FR, HU and the NL, certain food business operators (e.g. processors) consider that collective organisations, such as POs, undermine their bargaining power and economic positioning in the supply chain. For this reason, these operators are more inclined to entering into commercial negotiations with individual farmers, which provides them with more leverage to impose their own terms on supply deals.

5.6.2.b. Safety and quality of supplies

Developing stable business relations with POs allows business operators not only securing supplies of the desired quality and in the needed quantities to meet their customers' expectations.

Effectively, POs often ensure that their members strictly abide by the safety and quality standards that may be required by law, good agricultural practices and/or private standards and thus offer buyers a reliable supply.

From a food safety point of view, seven between processors and wholesalers operating in the CZ, FR, HU and RO have indicated that buying from POs, as opposed to individual farmers, provides food business operators greater assurance in terms of the traceability of a product or an ingredient up to the level of primary production. In fact,

¹⁵⁹ Allowing to apply the extension of rules to all producers of the same crop production. These entities represent the whole sector as they have the possibility to extend their rules to all producers.

two Romanian processors have indicated that the lack of a reliable traceability system at level of primary production is a decisive element that pushes certain operators to purchase agricultural supplies abroad.

In DK, where no recognised POs exist at present in the pig meat sector, agricultural cooperatives are regarded by two business operators (one processor/manufacturer and one retailer) and by a national trade association representing the processing and manufacturing sector as one of the key factors for the development of a high level of food safety and traceability across the whole value chain.

By monitoring and ensuring farmers' compliance, therefore, POs certify that the agricultural products that they sell to other operators down the chain meet agreed standards. They also work as a single contact point in case there are any issues with the products that have been supplied.

Of course, this greater reliability translates into greater added value on the market. From this viewpoint, POs may generate efficiency gains for downstream operators, which helps them to increase their competitiveness and market share, and it also benefits consumers who have access to food products of higher quality.

5.6.2.c. Sourcing locally

For some food business operators, buying from POs offers some additional market advantages on the top of those illustrated above.

In particular, consumer demand in certain Member States (e.g. FR, HU and IT) is more and more driven by the desire to buy, preferentially, food products that are sourced locally as a way to favour national agricultural production and/or reduce the environmental impact allegedly caused by the global food supply chain.

Buying from POs as entities whose members are inherently linked with a specific rural area help therefore certain food business operators to meet this demand.

National authorities may be similarly interested in the geographical coverage that POs ensure when running public campaigns aimed at supporting the purchase of locally grown and processed agricultural products as well as in the context of public procurement procedures intended to secure the supply of such products, for instance, for the catering of certain public establishments such as schools, hospitals and local offices of public authorities.

5.6.2.d. Innovation

Although POs may be drivers of innovation and invest in such activities, this may be hardly regarded as a feature of most collective organisations grouping farmers in the EU.

From this viewpoint, downstream food business operators who are willing to explore innovative products, create or enter emerging and/or niche markets may face difficulties to meet their needs if they must deal with POs that are not performing any activity in the area of research and development.

Based on the feedback received from some interviewees in this respect, such difficulties would be often experienced with well-established and large POs which, because of the number of farmers they represent, would face more difficulties in investing and subsequently mainstreaming innovation across their members. At the

same time, for independent agricultural producers who are investing in innovative products, if too small, it might be hard to have access and be listened by other food business operators down the chain.

5.6.2.e. Competitive yardstick effect

Literature on POs^{160,161} generally refers that through their activities these entities may have indirect beneficial effects also on farmers that are located in the same geographical areas of the members of the PO, but who do not adhere to the latter.

These benefits would consist, in particular, in higher prices and better commercial conditions – and ultimately, therefore, in higher incomes – for all farmers, including non-members, as a consequence of the stronger negotiating power that POs may come to enjoy in certain agricultural markets at national or local levels.

In the context of the present study, however, evidence allowing to draw such conclusions has not emerged.

5.6.2.f. Recognition

In a few instances (e.g. BE, FR, HU and RO), some food business operators have indicated that the fact of a PO being formally recognised at national level is to a certain extent a desirable feature.

For being subject to regular monitoring by and reporting to competent authorities, recognised POs would be from this perspective particularly credible and trustable commercial partners to choose for downstream operators. From the interviews conducted with food business operators who deal with POs, no evidence emerged that recognition results somehow in higher prices being paid to the farmers who are members of such organisations.

In spite of that, agricultural cooperatives that are not recognised remain also privileged commercial partners for food business operators. This is evident, in particular, in those Member States where there are no recognised POs (e.g. pig meat sector in DK) or their presence is relatively low and agricultural cooperatives are the preferred organisational model national farmers choose to cooperate amongst themselves.

¹⁶⁰ Cotterill, R. W. 1984. “The Competitive Yardstick School of Cooperative Thought.” In *American Cooperation 1984*, edited by American Institute of Cooperation, 41–53. Washington, DC: American Institute of Cooperation

¹⁶¹ Liang, Q. et al. (2013) “Pooling and the Yardstick Effect of Cooperatives.” Paper presented at the 17th annual conference of The International Society for New Institutional Economics, Florence, Italy, June 20–22.

PART 6: GENERAL CONCLUSIONS

6.1. Overarching conclusions

This study primarily aims at fulfilling specific data needs at EU level in terms of recognised POs/APOs as well as of other forms of cooperation that operate on the various EU agricultural markets. In addition, the study identifies POs/APOs' good practices through an in-depth analysis of their internal organisation and operational processes. This data collection is a necessary basis to determine, whether and to which degree the cooperation between agricultural producers requires further analysis and possible support.

For the inventory of recognised POs/APOs¹⁶² (Theme 1) it was possible to establish precise figures by contacting the relevant stakeholders, including the competent authorities. The number of non-recognised POs (Theme 2) is more uncertain and thus given as an estimate only. In addition, the conclusions of the analysis of the main incentives and disincentives for producers to create POs, and of the impact that such organisations have on their members and the food chain, are presented (Theme 3).

By mid-2017, a total of 3,434 POs and 71 APOs had been recognised by national authorities **across 25 Member States**. (There were no recognised POs/APOs in EE, LT and LU.) The total number of recognised POs/APOs continues to grow in the EU (it **increased by 33% since the last CMO reform**).

More than half the recognised POs/APOs operate in the FV sector (1851). Over 100 POs/APOs have been recognised in seven other sectors: milk and milk products (334), olive oil and table olives (254), wine (222), beef and veal (210), cereals (177), other products (107), and pig meat (101). A total of 249 entities are distributed across the remaining 12 agricultural sectors. No POs/APOs are currently recognised in the 'ethyl alcohol of agricultural origin' and 'silkworms' sectors.

DE, ES and FR are the Member States with most recognised entities (759, 658 and 588 recognised POs/APOs, respectively). Together, these three Member States harbour about 60% of all recognised POs/APOs. **About 50% of all currently recognised POs/APOs are cooperatives.** Yet, a large variety of other legal forms exists, with the main ones being associations and other types of private entities.

Concerning the estimated numbers of **non-recognised POs**, a distinction has been made between agricultural cooperatives and other legal forms of producer cooperation. Indeed, in addition to the **21,000 agricultural cooperatives** (recognised as POs or not) that are present in the EU, it has been estimated that **more than 20,000 entities with different legal forms are present in the EU agricultural sector**. Therefore, if all agricultural sectors are considered, to date less than 9% of POs are recognised.

¹⁶² According to Article 152 of Regulation (EU) no 1308/2013. PG which are recognised based on Article 27(2) of Regulation (EU) No 1305/2013 are NOT included in this inventory.

The **main three objectives pursued by recognised POs/APOs** are overall similar across the different agricultural sectors:¹⁶³

- **Production planning and adjustment to the demand** (e.g. in terms of quality).
- **Concentration of supply.**
- **Placing of products on the market** (incl. direct marketing).

The **three main activities carried out by recognised POs/APOs** reflect the objectives referred to above and, across sectors, consist in '**joint contractual negotiations**', '**joint commercialisation strategies**', and '**joint planning of quantity**'. In this context, POs/APOs in the milk sector have a particular focus on 'joint contractual negotiations', which is the first priority and most important activity for 66% of them.

As regards the **activities of non-recognised POs**, it can be concluded that, overall, **these entities pursue activities of the same kind as the recognised ones**. There is no reason to consider that recognition is privileged by specific groups of POs carrying out dedicated activities.

Overall, the **incentives that drive EU farmers to set up or join POs** may be of an economic, technical or social and human nature:

- In terms of economic incentives, **POs strengthen farmers' position in the food supply chain** by ensuring, among others, higher market penetration and greater bargaining power vis-à-vis their business partners.
- As far as technical incentives are concerned, **POs add value to the business activities of their members** when they provide, for instance, technical assistance to production; infrastructures for production, storage or processing plants; logistic services; or research and development activities.
- Considering the incentives with a social or human dimension, most POs refer to their **democratic functioning**, which over time helps consolidate and maintain trust in horizontal cooperation.

In terms of **disincentives**, farmers may decide not to join POs primarily for the **fear to lose their identity as well as their entrepreneurial freedom**, a feeling which, especially in the new Member States, is often coupled with low trust towards collective organisations. Moreover, the lack of information on the benefits that POs may bring, the lack of concrete examples of successful POs, and concerns over costs that membership in these organisations may involve are additional factors that may deter farmers from joining POs.

On a more general level, a **well-established tradition in agricultural cooperation** nationally is **a particularly fertile ground on which POs may thrive**. Looking at

¹⁶³ With regard to recognised POs/APOs in the FV sector, the three highest scores for objectives (concentration of supply and placing on the market of the production) can be explained considering that Regulation (EU) 2017/891 stipulates that these two objectives are mandatory for the recognition of FV POs (Article 11 para. 1)

the **elements that may contribute to the success (or failure) of a PO** after its establishment, the study indicates that also other internal and external factors play a role.

Amongst the **internal factors**, the **suitability of the governance model** chosen by the PO to pursue its objectives, its **capability to take and implement business decisions effectively**, and the **degree of homogeneity across its membership** are other key factors that can contribute to the success of the organisation.

As regards the **external factors**, it is essential that, as any other business organisation, POs are able to **operate and compete in the current globalised markets**, by implementing continuous adjustments and improvements in terms of product differentiation, technological innovation and marketing strategies to the advantage of their members.

With particular regard to **recognised POs in the FV sector**, according to some stakeholders, their functioning is negatively impacted by a **relatively high administrative burden**, due to several legal obligations and the associated public monitoring. Conversely, **EU funds for the establishment of POs (and PGs)** are portrayed as **key incentives and success factors** for the development of these entities.

Considering the **benefits POs may bring to their members**, these translate, in essence, into **greater bargaining power** and **increased efficiency and effectiveness in agricultural productivity and marketing**.

With regard to **farmers' bargaining power**, **POs can often secure the application of more advantageous contractual terms for their members** when compared with the outcome of negotiations conducted by individual farmers. Such terms may involve higher selling prices for agricultural products, but also ensure long-term supply deals, regular orders, or advance payments.

As far as **farmers' productivity** is concerned, **POs often provide technical services that ultimately contribute to a higher level of efficiency of their members' production system**. Said services may range from the provision of technical know-how for production purposes to the development of agricultural quality standards or the joint use of infrastructures and equipment. Likewise, on the marketing front, POs are well-placed entities for designing the overall commercial strategy of their members. Finally, **POs do not only benefit their members, but also the local communities where POs are located**. POs create direct and indirect employment opportunities in the areas where they operate, besides giving visibility to the quality of the products of the regional or of local agriculture.

Considering the **food supply chain** as a whole, processors and retailers interviewed during the study have generally indicated that working with POs presents several specific advantages for them, but also a few disadvantages.

Amongst the **disadvantages**, **some downstream operators consider POs a threat to their bargaining power** and for this reason prefer to deal with individual farmers. Also, some innovation-driven downstream operators claim that if well-established and large POs do not invest in research and development to create new

products, this can constitute an obstacle for downstream operators that are looking for innovative products to differentiate themselves on the market place.

In terms of **advantages, doing business with POs allows downstream operators to plan supplies more efficiently**, avoiding, for instance, shortages or delays in deliveries; it also contributes to maintaining food prices relatively stable, while reducing transaction and logistics costs, as opposed to what would normally happen with multiple suppliers. Moreover, **buying from POs provides additional guarantees regarding the safety, quality and origin of the agricultural products supplied**. Finally, in various Member States, **recognition** stands out as an element that **contributes to the credibility of POs as business partners**, although in Member States where recognitions are limited, other specific business models enjoy equally good reputation.

More detailed conclusions are presented by study themes in the following subsections.

6.2. Inventory of recognised POs and APOs

6.2.1. General figures on recognised POs/APOs in the EU

The analysis carried out during the project leads to the identification of **a total of 3,505 POs/APOs (as of mid-2017)** that have been **recognised by national authorities in 25 different Member States** (there are no recognised POs/APOs in EE, LT and LU), out of which 3,434 are recognised POs and 71 recognised APOs.

DE, ES, FR, and IT are the top Member States in terms of number of recognised entities with 759, 658, 588, and 563 recognised POs/APOs, respectively. **Together, the number of recognised entities in these Member States amounts to 2,570, representing more than 70% of the total number of recognised entities**. Three other Member States have recognised more than 100 entities (PL: 250, EL: 239, and PT: 139). The remaining 18 Member States (AT, BE, BG, CY, CZ, DK, FI, HR, HU, IE, LV, MT, NL, RO, SE, SI, SK, and the UK) have, all together, recognised 309 POs/APOs. **As far as recognised APOs are concerned, they are present in only five Member States** (30 in FR, 18 in IT, 7 in DE, 7 in ES, and 5 in EL).

The total number of recognised POs/APOs in the EU has increased by 33% since the last reform of the CMO in 2013.

FR and DE have been the first two Member States to recognise POs and APOs before 1990. In DE, about 50% of the entities (313 out of 658) have been granted recognition before 1990.

Recognised entities are present in 22 CMO sectors out of the current 24. No POs or APOs are currently recognised in the 'ethyl alcohol of agricultural origin' and 'silkworms' sectors. **More than 50% of the recognised POs/APOs operate in the FV sector (1,851). Over 100 recognised POs/APOs have been recognised in seven other sectors: milk and milk products (334), olive oil and table olives (254), wine (222), beef and veal (210), cereals (177), other products (107),**

and pig meat (101). Within the sector 'other products'¹⁶⁴ POs/APOs have been recognised for a wide variety of products, the main being potatoes (46 entities) and rabbit-rearing (20 entities). A total of 249 entities are distributed across the remaining 12 agricultural sectors, mainly in the sheep & goat meat and the poultry meat sectors, with 89 and 73 recognised POs/APOs, respectively.

The analysis of the distribution of recognised POs/APOs per sector and per Member State shows different patterns. On this basis, four groups of Member States can be identified:

- Member States (DE, FR, IT, and PT) where POs/APOs have been recognised in several sectors (>10). IT and DE are the Member States with the highest number of sectors where POs/APOs have been recognised (16 sectors in DE and 15 sectors in IT).
- Member States (AT, BG, BG, CZ, EL, ES, HR, ES, and EL) where POs/APOs have been recognised in fewer sectors (between 3 and 9).
- Member States (CY, DK, FI, HU, IE, LV, MT, NL, PL, RO, SE, SK, SI, and UK) where POs/APOs have been recognised in less than three sectors. In HU, NL and the UK, POs/APOs have been recognised in only two sectors (FV for the all three Member States whereas milk for both HU and the UK and pig meat for the NL). In eight other Member States, POs/APOs have been recognised in the FV sector only (CY, FI, IE, LV, PL, SK, SE, RO). Finally, in SI and MT, entities have been recognised in a single sector, respectively in milk and wine.
- Member States (EE, LT, and LU) in which there is no recognised PO.

The total number of recognised POs/APOs has kept growing since the 1990s. The number of POs/APOs recognised since the last reform of the CMO until the cut-off date of the present study has increased by about 33% on a four years period.

As regard their geographical scope, POs/APOs are recognised at national level in a large majority of Member States with the exception of BE, DE, ES, and IT, where recognition is granted by regional authorities. Entities that have a regional scope are generally active and have members on a local level. In FR, 16 POs in the FV sector have been granted recognition at national level, which allows them to extend their contracts and agreements to all other producers of the same crops across the country (principle of extension of rules). One transnational APO, grouping the French APO CERAFEL and the Belgian LAVA, is recognised in BE under the name of FRESHCOOP in the FV sector.

6.2.2 Analysis of the production of recognised POs/APOs in the FV sector

Data contained in the FV annual reports provide additional interesting information on the structure of the recognised POs/APOs in the FV sector.

The large majority (80%) of recognised POs/APOs in the FV sector (1,312) have an annual marketed production value that ranges from EUR 1 million to 50 million, while the marketed production value of 40% (542) of this group is less than EUR 5 million. **A total of 40 POs/APOs report a marketed production of a**

¹⁶⁴ According to Article 1(2) of the CMO, the sector 'other products' contains 107 different products.

value larger than EUR 100 million per year (10 in IT, 9 in FR, 5 in BE, 5 in ES, 4 in DE, 4 in HU, 4 in the NL, 2 in the UK, and 1 in IE). Taking into consideration the high number of recognised POs/APOs in DE; recognised POs/APOs weight far less, in economic terms, than e.g. in ES, FR and IT. This reveals that, in general, recognised POs have a relatively small size and the largest POs are not recognised.

6.2.3 Variety of functioning, objectives and activities of recognised POs/APOs across Member States

The project shows that **the main three objectives pursued by recognised POs or APOs are overall similar across the different agricultural sectors:**¹⁶⁵

- **Production planning and adjustment to demand.**
- **Concentration of supply.**
- **Placing of products on the market** (incl. direct marketing).

The three main activities carried out by recognised POs/APOs reflect the objectives referred above to and, across sectors, consist in 'joint contractual negotiations', 'joint commercialisation strategies', and 'joint planning of quantity'. In this context, the milk sector represents an exception as for 66% of recognised POs/APOs 'joint contractual negotiations' are the first priority and most important activity.

About 50% of POs/APOs currently recognised in the EU are cooperatives. A large variety of other legal forms exists, and many different legal forms are used for facilitating horizontal cooperation amongst farmers. The main ones are associations or other types of private entities.

Across the EU, the analysis of the number of members per recognised PO/APO shows that **in 38% of cases (1,327 out of 3,505), the number of members per PO/APO is lower than 100. In addition, about 90% of entities have less than 1,000 members.** In this context, IT stands out as about 25% of recognised POs in the country have more than 2,000 members.

6.3. Overview of non-recognised POs

Based on the definition of PO used for the study, any farmers' cooperation based on a legal entity, regardless of its specific legal form, is a PO.

The study identified that **on top of the 22,000 agricultural cooperatives (recognised as POs or not) which are present in the EU, more than 20,000 entities with different legal forms are also present in the primary sector of the food supply chain in the EU.** Therefore, if one considers all agricultural sectors, less than 9% of POs are recognised to date.

¹⁶⁵ With regard to recognised POs/APOs in the FV sector, the three highest scores for objectives (concentration of supply and placing on the market of the production) can be explained considering that Regulation (EU) 2017/891 stipulates that these two objectives are mandatory for the recognition of FV POs (Article 11 para. 1).

Cooperation through cooperatives (the most common form of POs for which data is most readily available) **differs by Member State and sector**. Three groups of Member States can be identified on the basis of the economic importance that cooperatives (recognised or not) play in the relevant national context and notably:

- Low (less than 20% market share):¹⁶⁶ EE, EL, LT, HU, PL, SK, and the UK.
- Medium (from 20% to 50%): BE, CY, CZ, DE, ES, IT, LV, and PT.
- High (more than 50%): AT, DK, IE, FR, and the NL.

However, given that agricultural cooperatives represent less than half of all POs, the market share of all POs combined will be greater. Moreover, as the composition of all POs (cooperatives versus other POs) can be different across Member States, the market share of cooperatives does not necessarily reflect the relative importance of all forms of POs in above grouping of Member States.

As regards the activities of non-recognised POs, it can be concluded that, overall, these entities pursue activities of the same kind as the recognised ones. There is no reason to consider that recognition is privileged by specific groups of POs carrying out dedicated activities.

6.4. Analysis of incentives and disincentives of producers to create POs and the impact they have on their members and the food supply chain

The conclusions which are presented under this section are based on data collection in two sectors (FV and pig meat) in eight Member States. Therefore, this sample cannot be considered as representative of all CMO sectors.

6.4.1 POs: incentives and disincentives to join a PO

A literature review and stakeholder interviews performed during the study has allowed a better understanding of the incentives for farmers to actively contribute towards the setting up of a PO or to join an existing one. Essentially, these **incentives may be of economic nature, fulfil technical or technological needs that farmers may have, or be linked to social and human considerations**.

In the first place, as far as the **economic incentives** are concerned, it has been observed that, **overall, in all Member States farmers tend to join POs as collective organisations of this type generally contribute to reinforcing their position in the food supply chain** (mentioned by 62% of the interviewees). POs not only provide farmers with market knowledge, secure long-term market access and penetration and, as a result, step up farmers' bargaining power vis-à-vis downstream operators (mentioned by 59% of interviewees), but also ensure that agricultural production is in the quantity and of the quality that the market demands (horizontal incentives). **In Member States where farmers' cooperation has already reached a significant degree of development** (mostly in the older Member States), **several POs act as catalysts of further integration of farmers in the food supply chain**.

¹⁶⁶ In percentage of total volume traded

For instance, such POs carry out complementary activities which, with a varying degree of sophistication, support primary production (e.g. packaging, sorting, processing) in addition to the traditional activities of production planning and joint selling, or by ensuring direct access to consumers (vertical incentives).

Furthermore, as collective organisations **POs contribute to mitigating the economic risks and minimising the costs that are typically associated with agriculture, by ensuring, inter alia, stable commercial relations, security of payments, sharing of investments, support in situations of market crisis, and marketing of the members' entire production** (mentioned by 87% of the interviewees). Another incentive of economic nature that may bear weight in the decision of a farmer to join a PO is linked to the role that POs can play with regard to the procurement of agricultural inputs. This is especially the case for the FV sector, far less for the pig meat sector (only 7 pig holders out of a total of 120 mentioned this expectation when joining a PO). Unlike individual farmers, **POs have oftentimes the market knowledge (e.g. prices, products) and, therefore, are better equipped to develop and implement sourcing policies that ensure the purchase of agricultural inputs of the appropriate quality at an optimal price.**

In addition, **with specific regard to recognised POs, funds that are made available to these entities at EU and/or national level** (e.g. EAFRD, financial support for the operational programmes for POs of the FV sector) **constitute likewise an incentive for farmers to cooperate with their peers** within such organisations. As previously shown by many evaluations of the national strategies for operational programme in the FV sector,¹⁶⁷ POs' operational programmes are usually mostly addressed to support individual investments. Therefore, operational programmes bring a strong economic incentive for individual farmers to join a recognised PO.

Farmers may have an interest in joining a PO for technical and technological added value that such organisations can offer them (provision of technical services has been mentioned by 76% of the interviewees); which they consider they would not be able to achieve on their own. Depending on the PO, this added value may consist, *inter alia*, in the provision of logistic services, technical assistance to the production so as to meet mandatory or voluntary standards, infrastructures for production, storage or processing, support for accessing EU and national funds, research and development activities, and exchange of technical knowledge between the members of the PO.

Lastly, looking at the **social and human dimension**, the study indicates that **most farmers appear to attach particular value to the openness that such entities have towards new members, to the democratic functioning of the decision-making bodies that govern them** (67% of the interviewees mentioned the capability of POs to resolve disputes between members), **and to the transfer of knowledge from the PO to its members.** Overall, these are perceived as essential elements to build the trust that is necessary to start cooperation between farmers and

¹⁶⁷ See for example: <https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/5828>

maintain it over time. **Age is also a differentiating factor as young farmers are more inclined to cooperate with their peers than older farmers.**

One of the main aims of requesting recognition as a PO, especially in new Member States, is to get access to different EU programmes, funds and support schemes connected to the CMO (for recognised POs) or to the European Agricultural Fund for Rural Development (for recognised POs and PGs). In the case of recognised POs active in the FV sector, funding of recognised POs via operational programmes is also a strong incentive.

In terms of **disincentives**, a majority of stakeholders surveyed during the study have indicated that **farmers might not be join POs mostly because of their unwillingness to cooperate due to the fear to lose their identity and entrepreneurial freedom** (mentioned by 72% of the interviewees), a feeling which, especially in Member States with a history of compulsory collective organisations, is often coupled with low or no trust towards such organisations. Moreover, several other factors that can possibly deter farmers from joining a PO have been reported:

- The lack of:
 - information on the benefits that POs may bring;
 - concrete examples of successful POs; and
 - political endorsement and adequate technical support by national authorities.
- Concerns over costs for setting up POs, for obtaining recognition, and for complying with POs' statutes or production standards set up by POs.

Finally, a few farmers from the FV and pig meat sectors (subjectively) feel that the visibility ensuing from the membership in a PO would expose them to a greater public scrutiny, thereby ruling out the possibility to benefit from occasional opportunistic behaviours (e.g. operating in the grey and black economy).

6.4.2 POs: success factors following their establishment

With regard to the factors that contribute to the success of a PO after its establishment, the research conducted during the study shows that **there is currently no simple formula that a PO can follow to achieve that objective**. Indeed, as for any other collective entity, **the success of a PO depends on a number of different elements** (for instance, the level of its economic growth, maturity, longevity, profitability and/or the satisfaction and the loyalty of its members). **These elements may vary substantially from one case to another** and should ideally be measured against the actual expectations of the members of a PO and the complex economic, legal and social environment in which that organisation operates. **Nevertheless**, the **scientific literature** analysing the functioning POs and the **evidence** that was **obtained** from stakeholder interviews **during the study**, **suggest some internal and external factors that appear to determine the success of a PO more often and to a larger extent than others**.

A long tradition in agricultural cooperation, as it is the case in certain Member States (e.g. BE, DK, FR, NL), **is generally considered a particularly fertile ground**

on which POs may thrive in the long run, as opposed to a national or local context where farmers are not used to or are reluctant to working together. Besides that, **the consistency of a PO's governance model (i.e. its legal form) with the nature of its objectives, coupled with a capability to take consensual business decisions, plays a major role in the long-term success of the organisation.** Likewise, **the degree of homogeneity of the PO membership in terms, inter alia, of dimension of farms, age of farmers and range of agricultural products, together with a size of the PO that allows to achieve economies of scale, are other key factors that may contribute to the success of a PO.** In this context, the investment in terms of human capital (i.e. the recruitment of adequate managerial and administrative staff for the daily operating of the PO) is a first main element that can ensure lasting success of a PO. A second success factor is the farmers' willingness to actively cooperate with their peers, as well as farmers' trust and loyalty vis-à-vis their PO (social capital).

As far as the **external success factors** are concerned, although the geographical scope of POs is oftentimes national, if not regional or local, **POs operate today in an ever more globalised market. Such a scenario calls for continuous adjustments and improvements in terms of product differentiation, technological innovation and marketing strategies, if POs want to be and remain competitive.** In addition, **the building of close and long-term partnerships with other operators in the food supply chain**, such as processors and retailers, **may considerably reinforce the capability of POs to respond to market dynamics and expectations.** Such close partnerships go beyond traditional commercial negotiations on quantities and prices and aim at exchanging information, for instance on market trends and consumer preferences. The provision of advisory services; that improves productivity and product quality; is an area where POs' investments pay off in the medium or long term. Relevant services include the provision of technical assistance, the dissemination of marketing tools and techniques, and the provision training, which are in themselves ancillary to the traditional functions of production planning and joint sales performed by POs.

The findings of the study indicate there are, however, a few additional areas in which POs should seek improvements to guarantee their economic effectiveness and sustainability in the long term. In particular **recognised POs in the FV sector** are direct beneficiaries of EU and national funds. As such, they must comply with significant **information and reporting obligations**, and they are subject to the **public monitoring** that comes with these funds, i.e. they are subject to a relatively high administrative burden. A more harmonised approach across all competent authorities – European as well as national – that play a role in the management of the funds would be desirable to lower the administrative burden and ensure more legal certainty for POs.

6.4.3 POs: benefits and disadvantages for their members

The majority of the stakeholders that have been interviewed during the study have reported that **POs can bring a wide range of benefits to their members, most notably greater bargaining power** (mentioned by 62% of interviewees) **when POs rather than individual farmers negotiate with other businesses** (e.g. input

suppliers, customers, insurance companies, banks, etc.), **as well as increased agricultural productivity and greater effectiveness in subsequent marketing.** Thus, there is a certain correspondence between the motivational drivers that push farmers to join POs, on the one hand, and the actual benefits that the former actually draw from the latter, on the other.

With regard to bargaining power, in interviews stakeholders confirmed that **POs are generally regarded as entities that can secure more advantageous contractual terms for their members than individual farmers can negotiate for themselves.** Those terms may set higher prices for the sale of agricultural products of the members of the PO, but also cater for long-term supply deals, regular orders or advance payments. In this way POs can ensure direct and indirect economic benefits for their members. POs are also better placed than individual farmers to resist practices by business partners that are perceived as unfair towards farmers or that are not in line with contractual terms. **Nevertheless, perceptions of the extent of farmers' bargaining power vary considerably depending on the national or regional context and the sector that is being considered, in addition to the particular characteristics of any specific PO.** A PO's bargaining power is often perceived as increasing with the number of its members and its maturity. Conversely, in the case of newly established POs interviewees reported these POs' bargaining power to be less satisfactory. Finally, some respondents considered the **greater collective bargaining power of a PO as insufficient to compensate the loss of contractual autonomy of its members** (disadvantage).

As far as **farmers' productivity is concerned,** the technical services that POs may provide are often regarded as value-adding activities that contribute towards greater efficiency of the relevant agricultural production system. Such services may consist in the provision of technical know-how to be applied to the production, the development of agricultural quality standards, or the joint use of infrastructures and equipment. In some instances, those services help overcome situations of underinvestment that can be observed at the level of individual farms. In general, they lead to a higher degree of vertical coordination of farmers in the food supply chain.

Together with the concentration of supply, the joint marketing of agricultural products stands out in the present study **as one of the most useful and value-adding activities that POs can perform for their members** (mentioned by 85% of the interviewees). POs are in fact well placed for designing the overall commercial strategy of their members, from its conception to its implementation, which includes the organisation of promotional activities and the management of the sales. **Overall, through the joint marketing of agricultural products, POs allow their members to use distribution channels to which they would not have otherwise access individually,** contributing, at the same time, to the development of stable business ties on national and international markets.

6.4.4 POs: benefits and disadvantages for the other operators in the food supply chain and for the local communities

Considering the food supply chain as a whole, representatives of processors and retailers who were interviewed during the study **have generally indicated that,** in addition to fostering a higher level of vertical integration across the food

supply chain, **working with and through POs presents several specific advantages for them, but also a few disadvantages.**

Amongst the disadvantages that have been reported by interviewees, **some food business operators perceive POs as threats to their bargaining power.** They are therefore more inclined to deal with individual farmers whom they consider less powerful and less effective in negotiations. Some business operators also claim that well-established and large POs do not invest enough in innovation and development, which makes it more difficult for themselves to source innovative agricultural products.

Most of the advantages that have been reported are common in several of the Member States that were surveyed. In particular, **doing business with POs instead of individual farmers allows downstream operators to plan supplies more efficiently, avoiding, for instance, shortages or delays in deliveries.** Dealing with fewer suppliers also helps business operators reduce transaction and logistics costs (compared to contractual negotiations with multiple suppliers), which contributes to more stable food prices. Moreover, **buying from POs gives business operators more assurance regarding the food safety and quality of the agricultural products, as POs act as certifying body of their members' produce and as single contact point for their customers in case any issue arises.** POs are able to guarantee the authenticity of the origin of their products, which is of interest to a growing number of consumers who want to purchase e.g. locally produced food. Finally, respondents from various Member States reported that **recognised POs are seen by other operators in the food supply chain as more trustworthy and credible business partners** than non-recognised POs, but in Member States where recognitions are limited, other business models may enjoy equally good reputation. Lastly, **POs can play a central role in crisis communication – when food scares, outbreaks of animal or plant diseases, or other adverse events occur** – mostly by ensuring that relevant information is swiftly and effectively shared between competent authorities and their members.

The study also shows that **POs not only benefit farmers but also the local communities where they are located.** The presence of e.g. a cooperative in a market can trigger higher prices for all farmers in the area (the competitive yardstick theory).¹⁶⁸ **POs also create employment opportunities, and they promote the quality of regional or local agriculture.** In addition, particularly in older Member States, POs oftentimes promote sustainable farming practices, thereby contributing e.g. to the preservation of biodiversity and to animal welfare.

¹⁶⁸ Cotterill, R. W. (1984) The Competitive Yardstick School of Cooperative Thought. In American Cooperation 1984, edited by American Institute of Cooperation, 41–53. Washington, DC: American Institute of Cooperation, and Cotterill, R. W. (1987) Agricultural Cooperatives: A Unified Theory of Pricing, Finance, and Investment. In ASC Service Reports: Vol. 18. Cooperative Theory. New Approaches.

