

Economic organisations in agricultural sectors and impacts on farmers' incomes

By grouping together, agricultural producers can collectively structure the sale of their products to improve their position in agri-food value chains. This grouping, more or less advanced, may or may not involve ownership transfer of agricultural products and is based on a variety of legal structures. At the request of the French Ministry of Agriculture and Food (MAA), a study was carried out on these economic organisation tools. Conducted by ABCIS and Blézat Consulting, it analysed their place in various sectors and their impact on the income of member farmers. This note presents the main findings.¹

The 2017 French national conference on food (*États généraux de l'alimentation*, EGA) highlighted once more the very unequal market powers within the agri-food sectors, between the highly atomized upstream sector, the processing chain, and the increasingly concentrated retail sector. This dissymmetry is a source of pressure on agricultural prices. Faced with these imbalances, some farmers have formed collective organisations since the end of the 19th century to improve their market power. At the request of the MAA, the research consultants ABCIS and Blézat Consulting conducted a study on the implementation of these economic organisations, the obstacles to their use and their effects on farmers' income.²

Economic groups of producers are essentially composed of farmers and directed by them; they function according to the logic of vertical coordination of the marketing of agricultural products. Among these groups, the most structured ones are the agricultural cooperatives, which were created in the 1880s and are now widespread in the French agri-food sector. Other models exist, ensuring, depending on the case and the sector, more or less advanced coordination of the marketing of their members' products. They can also fulfil other functions (advice, supervision, information), in connection with their main commercial activities (marketing, sale of inputs). Depending on the case, some groups may be recognised as "producers organisations" (PO) by the MAA.³ The role, nature and level of involvement of the groups in the commodity chains, as well as their size or diversification, differ widely from one sector to

another. The study therefore analysed the level of organisation of supply (number and weight of structures per sector), the diversity of types of organisation, and the factors and obstacles to this grouping of supply. Five sectors were studied: cow's milk, beef, sheep meat, pig meat, fruit and vegetable. The work also aimed to analyse, in an exploratory manner, the effects of economic organisation on farmers' income.

This note presents the main lessons learned from the study. The first part describes the levels and types of collective organisation in the dairy, meat and fruit and vegetable sectors. The second part is devoted to the effects of economic organisation on farm income and to the difficulties encountered in isolating these effects.

1-Different degrees of structuring depending on the sector

The level and forms of collective organisation vary widely according to the agricultural sectors. The characteristics of the products themselves - perishable, storable, heavy, transportable, generic or differentiated - are decisive, but the history of each sector has also shaped these organisations.

In cow's milk, an advanced and evolving organisation

The organisation of the marketing of cow's milk stems from the recent deregulation of this sector, which had been characterized since 1984 by supply quotas that contributed to freeze relations within the pairs of breeders-

deliverers and collectors-processors, but guaranteed breeders an outlet for all their production.

Introduced in 2010, four years before the end of quotas, mandatory contracting intended to prepare for the smooth transition from an administered economy to a contracted economy. Buyers were required to offer a contract to their suppliers. However, this measure was less favourable than expected for producers, as it did not counterbalance the inequities in market power. The first generation of individual contracts, established before farmers were able to organise themselves into POs (from 2012 onwards), actually reinforced the link of subordination to collectors on prices and volumes. Apart from the cooperatives, the sector's collective organisation is therefore composed of recent structures whose place and role remain to be consolidated, and continues to evolve.

From these elements stems the current structuring, between groups with transfer of ownership (GTO) of the members' production to the collective structure, and groups without transfer of ownership (GWT). While GTOs, mainly cooperatives, buy the production of

1. This note reports the findings of the study authors, as of December 2019.

2. Buczinski B., Duflo B., Le Clerc L., Joya R., Oudin B., You G., *Comment l'amont des filières de production agricole se saisit-il des outils d'organisation économique et comment mesurer l'impact qu'ont ces choix sur les revenus des agriculteurs ?* Study financed by the Ministry of Agriculture and Food, ABCIS and Blézat Consulting

3. On producers organisations: <https://agriculture.gouv.fr/organisation-economique-les-organisations-de-producteurs>

their members, GWTs are mandated by their members to negotiate and manage collectively the commercial relations with the collectors.

The GTOs in the dairy sector are: collecting and pre-processing structures, which collect milk from their members and resell it as is or pre-processed (accounting for 7% of the volume of milk collected nationally, according to this study); or cooperatives specializing in dairy processing (30% of both the volumes collected and processed in France); or cooperatives backed by multi-purpose and/or multi-farming groups (18% of the national collection and 14% of the processing).

GWTs (23% of collection and processing in 2018) have mostly been formed within the private dairies (49 of the 66 GWTs recognized as POs in 2019 by the MAA are single-buyer). They often operate by collection area and by company.

Finally, there are producers outside the collective organisation, who are now in the minority (22% of collection). They nevertheless supply almost half of the milk destined for private dairies.

The evolution of these GWTs, which were born at the end of quotas and are still recent, has taken different paths: grouping into vertical associations to increase their market power; taking over certain functions from the processors (invoicing, milk quality measurement, cold management, etc.); emergence of horizontal multi-buyer structures, thus diversifying outlets and evolving towards transfer of ownership by taking over the collection. According to the conclusions of the study, because of their current size, the autonomy of the GWTs remains conditional on public support, and the subsequent evolution towards horizontal structures, which is more hypothetical, can only take place if the balance of power between supply and demand is more favourable to producers.⁴

Ruminant meat industries with little collective structure

In beef, the situation is different: production is not much organised, even if the situation differs according to the products (grazers, young cattle, heifers and cull cows). Cooperatives account for a third of the large cattle marketed, including 48% of the young cattle. The GWTs account for nearly 20% of national production. However, 95% of sales of large cattle happen on a *spot* market, in terms of price and volume, including most sales under cooperative status. This situation can be explained by the nature of the product, which can be stored on the hoof and has a high potential value, making it possible to adjust sales according to the market, and transportable over long distances. However, it is explained even more by the diversity of marketers. This keeps the sector in a logic of pushed flows (determined by supply more than by demand) and weak coordination between the links. Commercial contracts including

volumes and prices only concern 10% of the young cattle and remain marginal for large cattle. They therefore have little structuring effect. The inter-professional strategy aimed at developing the Label Rouge could, if the large and medium-sized retailers play along, develop contracting and improve structuring.

In sheep meat, the rate of organisation is higher. The GTOs managed 53% of the volume of lamb slaughtered in 2016, compared to 10% for the GWTs, a share that is still low but growing (6% in 2011). Various constraints are forcing the sector to organise itself better, starting with production itself, which is far from the consumption areas, with high collection costs and seasonality. However, it is above all the segmentation of the French offer that leads to structure the sector: the official signs of identification of quality and origin (SIQO) account for 16% of volumes, competing with competitively priced imported products that account for a large share of consumption.

A highly organised pork industry

In the pork sector, the rate of collective organisation accounts for more than 90% of volumes, due to the historical dynamics of the western basin around the Plérin auction market. With the concentration of industries over time, this advanced organisation leads to GTOs segmented according to their links with the rest of the sector. There are:

- industry groups (29% of national volumes), which have shares in all the links, from feed manufacturing to charcuterie, with cooperative capital controlling downstream tools;
- groups linked to private downstream groups (9% of national volumes), where private capital is the majority shareholder in the slaughtering-cutting and processing facilities;
- independent groups in the sector (24% of national volumes) which do not have shares in the other links;
- upstream groups, linked to a multi-purpose, cooperative or private animal feed manufacturer (30% of volumes).

Despite this high level of organisation, pork prices are essentially determined by the European or world market. Contracting with downstream players is in its infancy. Various pork structures are seeking to develop the segmentation of their products and markets, including a project for an association of groups in the Grand Ouest region, which aims to make supply massive, in order to give back market power to producers and strengthen some of their functions (segmentation, promotion, support for transfers). This would be a major development.

Fruit and vegetable: diversified forms of structuring

The fruit and vegetable sector comprises more than 100 different sectors, each organised in its own way, which benefit

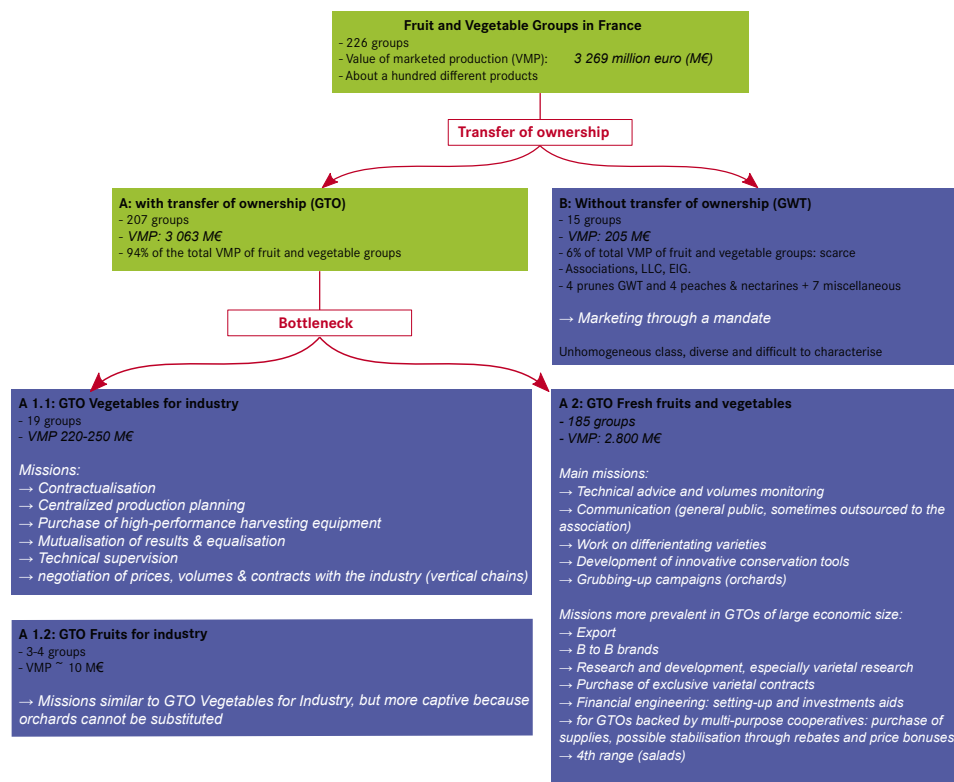
from a European regulatory framework that encourages grouping. The study estimated that, on average, 55% of fruit and vegetable (by value at the production stage) are marketed *via* collective structures, with the rate of organisation varying greatly from one product to another. The vast majority are GTOs, with various functions (Figure 1). Associations of groups (without a negotiating function) account for more than three quarters of the volumes produced.

In short, the ways in which the sectors are structured differ. This structuring depends on a) the product marketed: perishability and aptitude for storage, the need to process it (bottlenecks), the investments required for installation, etc.; b) geographical factors: proximity or remoteness of consumption basins, wholesale platform, etc.; c) the market concerned: diversity of marketers, need for coordination of decisions, weather-sensitivity of demand and supply, importance of the mass distribution sector (referencing, need for segmentation), importance of quality channels, importance of European competition and competitiveness differential between countries, importance of export markets; d) micro-economic factors: size of farms, technicality of production, varieties with more or less added value, management of price volatility.

The future development of the economic organisation of producers will depend on the general trends in the agricultural sector, which will encourage the consolidation and concentration of existing structures rather than the creation of new ones: a decline in the number of farmers, an overall reduction in the value attributed to the agricultural link, increasingly complex market access, etc. This concentration should lead to an increase in the size and market power of collective organisations, but also to intervention in organic farming, where the density of producers and collections remains low. This concentration should lead to an increase in the size and market power of collective organisations, but also to intervention in organic farming, where the density of producers and collection remains low. The evolution of the regulatory framework and the arbitrations of the future Common Agricultural Policy (CAP) (individual aid / aid to collective structures) will be powerful determinants in certain sectors, especially if new sectoral programmes are created. The emergence of groups and associations, in sectors that did not include them, could also upset the balance of trade unions and inter-professional organisations.

4. Demand that exceeds supply strengthens the position of producers and allows them to compete with collectors; conversely, in a market with a surplus, a horizontal grouping risks not finding takers for all of its volumes. See the difficulties encountered by the *France MilkBoard* in terms of massification, in a context of excess supply, and the success of the *Seine et Loire* organic farming PO, in a context of demand exceeding supply.

Figure 1 - Organisation of the fruit and vegetable sectors in France



Source: from the final report of the study, p. 135, prepared by Blézat Consulting

2 - The effects of upstream agricultural structuring on producers' income

What influence do the different functions of producer groups have?

The objective of these collective economic structures is to guarantee the farmer a higher and more secure income, and to improve his position in the value chain. To achieve this, beyond the roles of technical support or production planning, three major levers stand out: a) strengthening bargaining power, by grouping supply, *via* control of marketing or collection resources, etc.; b) prioritising the group's capacity to differentiate (better marketing or sector segmentation), to open up and structure higher value-added markets; c) integrating one or more links in the value chain, particularly industrial tools.

The study developed a classification based on several criteria: group or association of groups, type of property transfer, type of bargaining power, structural links with the downstream. Figure 2 presents this classification in five categories and mentions the different levers affecting producers' income.

The second objective of the study was to measure the impact of economic organisation on farmers' income. This measurement was hampered by the number and quality of the available data, but two case studies were carried out (beef and pork), which show the difficulties of such an exercise but make it possible to formulate some recommendations for achieving it.

Beef: what impact do GTOs have on members' income?

The BoviClic database⁵ for the Allier department was used. The results obtained do not allow us to conclude that suckler-cow farmers in the department who sell their animals to GTOs have a significant commercial advantage. The sample studied (90 suckler-cow farms) was divided into four groups according to the proportion of cattle sold to GTOs. With 60% of the farms selling more than 75% of their cattle to GTOs, and conversely less than 20% selling only to traders, this sample is very different from all French suckler-cow farms (33% of cattle sold to GTOs).

The differences in the average selling price of cattle between the different groups are small, and much smaller than the differences in meat productivity between the herds. The difference in selling price between the groups is due more to the technical profile and commercial strategy of the farmers than to their relation with the GTOs. However, the groups operating in the Allier seem to perform better in terms of prices for fat cattle, particularly females intended for SIQO channels, than for lean cattle. This would be linked to the smaller number of operators on the fatty market, to a logic of contracting for these females under the quality approach, and to sales in batches which are common on the lean market.

The study confirms that the "farm gate" selling price is an interesting but incomplete indicator. It does not include certain logistical costs deducted from the amount paid to the farmer (transport and operating of the

structure), nor does it include the additional income paid to members (incentives for contracting, rebates and price bonuses for labelled meat), nor certain costs specific to products under the SIQO system (certification, feed). It would be advisable to analyse the food margins or gross margins to go further, which is not possible with BoviClic.

Pork: what impact do GTOs have on members' income?

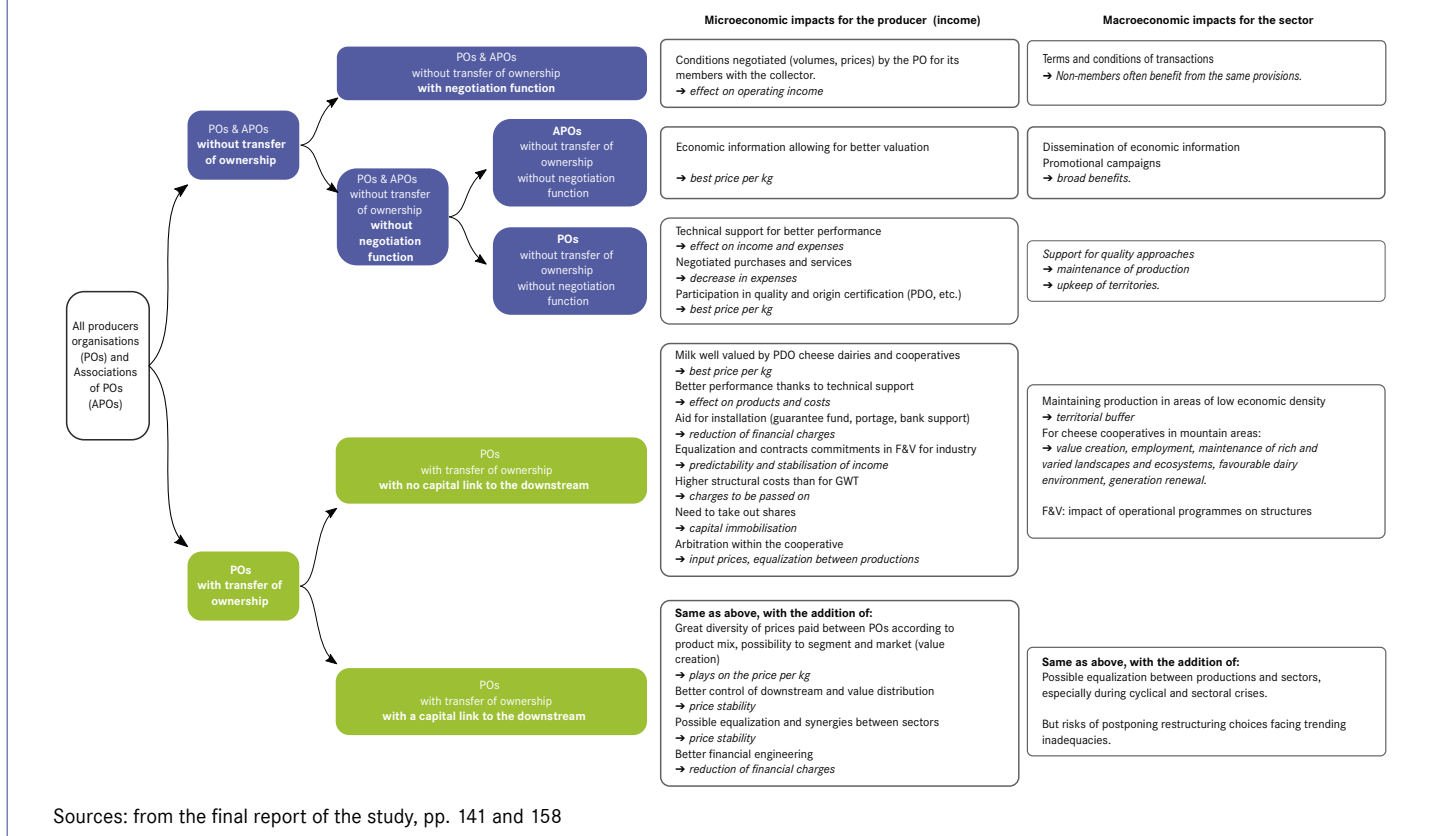
The technical and economic management database (GTE⁶) was used for the pig sector. The margin on feed cost and renewal (hereinafter referred to as "gross margin") is calculated for all member farms. The price of pork and the overall cost of animal feed, which explain the gross margin, are also taken into account. Based on 3,500 annual results, from 2012 to 2015, the study analysed the differences in gross margin between the groups to which the farmer belongs, depending on whether they are linked to the downstream (slaughterhouses), upstream (feed manufacturers), both, or, conversely, independent.

The groups linked to both upstream and downstream activities are the most likely to have positive returns on farmers' margins. On the other hand, the study does not show

5. BoviClic gathers demographic, zootechnical and commercial information on nearly 1,200 livestock farms, mainly suckler-cows, in the Allier and Saône-et-Loire departments.

6. GTE gathers information on the technical performance and economic results of pig farms.

Figure 2 - Classification of the studied structures and mechanisms of influence on producers' income



differences in margins between the other types of structure. Paradoxically, producers whose group is linked to the downstream sector have lower feed costs, which compensate for a slightly lower pork price. These structures are often involved in value-adding differentiation, and the SIQO themselves have a positive effect on the gross margin. Farmers who use on-farm feed production (FAF), by reducing the price of feed, benefit from a higher gross margin. SIQO and FAF are linked to the geographical conditions of the farms (soil and climate conditions, animal density, availability of raw materials), and to the services provided by the groups (demarcation of the offer and search for outlets for SIQO, technical support for FAF). The larger farms also seem to have better margins.

Although the analysis seeks to isolate the specific effects of region and type of grouping, the correlation between these two variables makes interpretation difficult. Not all types of GTOs operate under equivalent geographical and economic conditions. Differences within the same type are observed, linked to several variables (technical support, negotiating power, differentiation, etc.). Non-SIQO specifications are not included in the database and the impact on farmers' income is not assessed.

The available studies on the effect of collective economic organisation on farm income are mainly qualitative. The first obstacles to quantification are related to the availability of data and to the size of the available samples, which must be large enough to develop counterfactual analyses. There is a lack of information to categorize producers according to their buyer and their membership in a

collective structure. Furthermore, accounting data cannot suffice without information on the volumes produced and the type of production. Finally, it is even more difficult to have data on producers outside the collective organisation, who are less monitored, for the counterfactual analysis. Beyond the problems of data collection, the work carried out clearly shows the difficulty of interpreting the results and raises several methodological and theoretical questions (e.g. the case of independent producers who benefit indirectly from the work of the structures by the halo effect).

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In addition to the results of the sectors analyses, this study shows how much the structuration of these agricultural chains helps producers organise themselves in order to rebalance power and gain greater control over the value chain. The direct economic effect of producer groups on their income remains difficult to assess, due to a lack of information but above all because of the complexity of this income and of its formation. However, all the qualitative results, numerous and well documented, plead for a better structuring of the production. This need, in unison with the desire of institutional players, has been taken up in the national diagnosis for the post-2020 CAP. With the aim of improving the position of farmers in the value chain, the study makes recommendations, by sector, concerning the functions performed by collective structures: strengthening their negotiating power, improving their demarcation capacity, integrating industrial links.

Other recommendations aim to improve the evaluation of impacts on income. For this purpose, the information provided by the networks of technical institutes could be enhanced. But above all, a promising avenue of work would be to match the Rica database with the one that will be produced by the 2020 Agricultural Census for such an analysis. Thanks to the new questions introduced in this Census, on a sample of farms, the latter could be classified according to their marketing channels (with the share of GTOs in outlets) and according to their membership of GWTs. This last point, surveyed in a generic manner in the census, could be specified by type of product, thanks to a matching with detailed monitoring databases of recognized POs (still to be established). The analysis of the economic results of the farms could then take into account these differences in organisation.

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