

The agri-food chain

- The agrifood chain is a vertical section of the agri-food system
- Agrifood chains are the linked events in the agricultural production of food

 the process being a chain of events from production to processing,
 trading, distribution and consumption. Literally "from field to fork" (FAO).
- The combination of agents
- The series of processes by which food is grown or produced, transformed, sold, and eventually consumed.
- The functions carried out in an agricultural food chain: business functions (developed at different levels of the agricultural food chain), physical functions (i.e. stocking, transformation, shipping, etc.), and facilitative functions (i.e. funding, assumption of risks, information, etc...)
- We can identify two approaches:
 - a) product chain (output-input), starting from a final product (or group of products). From downstream to upstream.
 - b) production chain (input-output), starting from the agricultural product (raw material). From upstream to downstream.

See: https://www.bankpedia.org/index_voce.php?lingua=en&i_id=85&i_alias=a&c_id=23126-agricultural-food-chain-encyclopedia

The agri-food system

Articolazione VERTICALE (FILIERA)	FILIERA OLIVICOLA	FILIERA VITICOLA	FILIERA FRUMENTO	FILIERA ORTOFRUTTA FRESCA
Articolazione ORIZZONTALE (SETTORE)				
Produzione di fattori (input)	industria meccanica, chimica, sementiera, ecc.			
AGRICOLTURA	olivicoltura	Viticoltura	frumenticoltura	ortofrutticoltura
Primo ingrosso e con- dizionamento	raccoglitori, commercianti	raccoglitori, grossisti, import-export	Commercianti, stoccatori	raccoglitori, grossisti, mercati alla pro- duzione, ecc.
Prima trasformazione	Molitura	Vinificazione	Molitura	Condizionamento
Secondo ingrosso	grossisti	Grossisti	Grossisti	grossisti
Seconda trasformazione	raffinazione, miscelazione, confezionamento	invecchiamento, imbottigliamento	panificazione, pastificazione	IV gamma V gamma
Distribuzione finale al dettaglio	vendita diretta, GDO, HORECA, piccolo dettaglio,			
Attività ausiliari	credito, formazione, trasporti, servizi vari			
CONSUMO	Modelli di consumo alimentare			

<u>Source: Belletti,</u> <u>Marescotti – Economia</u> dell'Impresa Agroalimentare

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Production and product chain



Source: Belletti, Marescotti – Economia dell'Impresa Agro-alimentare

The wine supply chain Intermediate consumption Wine Trimming Agriculture: vine grower (auxiliary activities) grower/producer => Harvest Vertically integrated chain Wine production Key aspects=> - Added value -Limited economies of Bottling / packaging Services scale (higher costs) -Outsourcing of some phases of the production **Distribution channels** Consumers (perceived value: i.e. 10 €/bottle)

The wine supply chain



The wine supply chain



Not integrated chain

Key aspects=>

- Winegrowers sell the grapes in the market (weakness in the value distribution)

- interprofessional agreements.
- Important role of intermediate markets (both grapes and wine)
- Economies of scale in production and bottling







38 mila LE AZIENDE VINIFICATRICI. >55% vino cooperative

Coordination of the chain



Coordination of the chain



Issues relating to the agricultural sector:

- Many farmers work on relatively small family farms which operate independently of each other:
- Difficulties in the efficient management of the resources
- Supply atomisation
- perishable nature of the products and preservation costs
- Asymmetry of bargaining positions makes it difficult for farmers to defend their interests when negotiating with other actors in the supply chain (higher concentration amongst both processors and retailers).

Coordination mechanisms (aligning the productive processes, facilitating transactions and increasing efficiency)

- Horizontal coordination
- Vertical integration

Horizontal coordination:

- Efficiency objectives:
 - investments with a high minimum threshold of capital
 - economies of scale and scope
 - product supply concentration (quality and quantity)
 - increase of the range of offered products
 - economies of costs: transaction costs, supply of inputs (seed, fertilizer, fungicides, pesticides, etc.).
- Power objectives: negotiating better terms of exchange
 - Increase of the bargaining power towards upstream and downstream operators
 - Increase of the lobbying power towards public and private institutions

Producer and interbranch organisations

Producer organisations (POs) or associations of producer organisations (APOs) help farmers reduce transaction costs and collaborate when processing and marketing their products. Producer organisations strengthen the collective bargaining power of farmers by (for example):

- planning the production in relation to the demand (quality and quantity)
- concentrating supply and marketing directly the products
- providing technical and logistical assistance to their members
- helping with quality management
- transferring knowledge.

Objective: to strengthen farmers' collective bargaining power

Producer and interbranch organisations

The EU acknowledges the special role played by producer organisations and, as a result, they can ask for recognition from the EU country they are based in. POs can take different legal forms, including agricultural cooperatives. Recognised POs can benefit from:

- exceptions from EU competition rules for certain activities, such as collective negotiations on behalf of their members, planning of production or for certain supply management measures;
- in the fruit and vegetables sector, access to EU funding within 'operational programmes', for example, to support collective investment in logistics to the benefit of their members.

The cooperatives specificity:

A cooperative is "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned enterprise".

The profit maximisation is not the objective of the company but it is the **common economic interest** of the members.

The cooperative members could be:

- customers
- raw materials suppliers
- providers of production means

Cooperative typologies:

- collective purchasing (seed, fertilizer, fungicides, pesticides, etc.: horizontal integration)

- Agricultural products selling (i.e. PO)
- agricultural service cooperatives (i.e. purchase of mechanical equipment)
- worker cooperatives
- land management cooperatives
- agricultural products processing and selling

1st level cooperatives (members: farmers; *prevalently mutual cooperatives*)

2nd level cooperatives (members: cooperatives)