

# Experiences from Andalucía for the development of synergies, and the involvement of farmers and value chain

Andrés Montero Aparicio

# Region of Andalusia



**Member State:** Spain

**Area:** 87,597 km<sup>2</sup> (17% of the Spanish area, 2% of the EU 28 area, 4th region of the EU in terms of surface)

**Population:** 8,4 million people that represented, in 2015, 1.7% and 18.1% of the total EU 28 and Spanish populations, respectively.

Andalusia is classified as a **Transition region** for the period 2014-2020 as its GDP/head is between 75% and 90% of the average of the EU Member States.

Andalusia is classified as **Intermediate Region** according to the OECD classification because 32% of its population live in rural areas.

# Information of the Andalusian economy

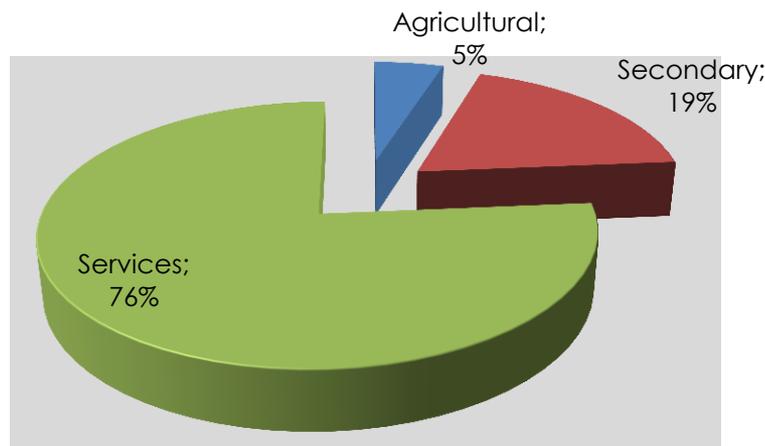
Andalusia is, in terms of the volume of **Gross Domestic Product (GDP)**, the **3rd autonomous community of Spain**, worth 148,748 million of euro in 2015 (a growth of 3.2% compared to the previous year)

The **agricultural sector in Andalusia** highly contributes to the **Gross Value Added of the region (4.7%)**, being **twice the GVA of Spain (2.5%)** and **three times the one of the EU28 (1.5%)**

The Gross Value Added of the **agricultural (4.7%)** and **agribusiness (2.6%)** sectors represent **7.3%** of the **Gross Value Added of Andalusia**.

**The Agricultural GDP of Andalusia represents a fourth part (26%) of the agricultural GDP of Spain.**

**Gross Value Added by sectors (2015)**

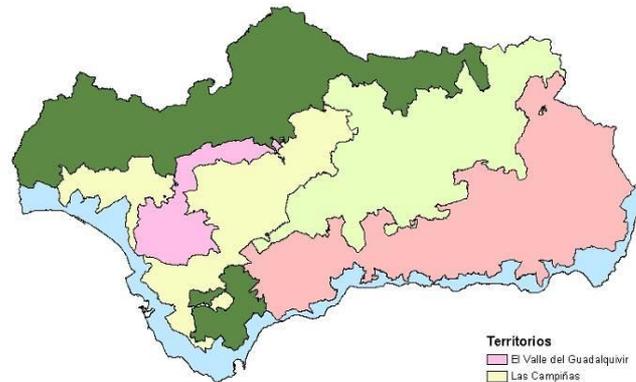


# Economic indicators and farming systems in Andalusia

The value of the Andalusian agricultural sector is **11,257 million euro**.

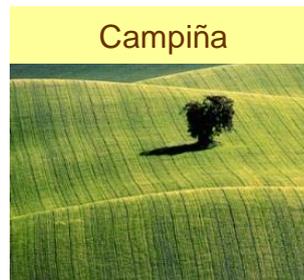
**Fruits and Vegetables** (66%) and the **olive sector** (14%) represent **80%** of the Andalusian **Production of the Agricultural Sector (PAS)**.

The Andalusian PAS represents 22.2% of the **Spanish** one and the Utilised Agricultural Area (**UAA**) represents 18.5% of the **Spanish UAA**.



**Territorios**

- El Valle del Guadalquivir
- Las Campiñas
- El Oltivar
- El Litoral
- Las Sierras Béticas
- La Dehesa



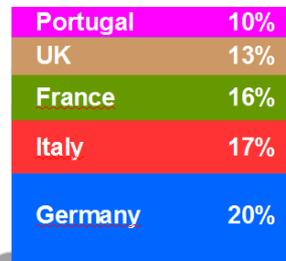
# Agrifood industry

**With 5,136 companies**, agrifood industries represent **22% of the total number of Andalusian industries**, which employ **46,465 people**, **24% of the employment** generated by the Andalusian industry and **1.8% of the total employment** in Andalusia.  
**Agrifood-industry is the 2nd industrial sector in Andalusia.**

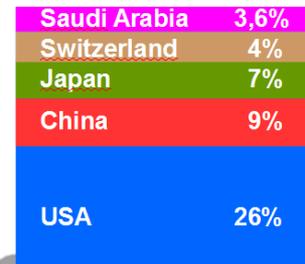
The EU is the main destination of Andalusian exports (77%)

## Agri-food balance of trade:

Positive (5,200 mill. € in 2015) with a growth of 65% in the last 10 years



EU



Outside the EU

Horticultural sector (58%)



Germany (28%)  
 France (17%)  
 United Kingdom (14%)

Fats and animal or vegetable oils (25%)



Italy (50%)  
 Portugal (17%)  
 France (14%)

**Main sectors according to the economic value of exports:**

## NEEDS OF THE AGRIFOOD SECTOR IN TERMS OF DIGITAL TECHNOLOGIES

- ❖ The agrifood value chain has **specific characteristics** and, therefore, it requires **specific data and information management systems**.
- ❖ There is a need to change from “**intuitive**” to “**smart**” **decision-making models** so as to increase the competitiveness of agrifood companies.
- ❖ It is necessary to know **consumers' demands** and incorporate them in all the stages of the decision-making process.
- ❖ There is a need to adopt new technologies based on data and information and, it is necessary to take the plunge into **digital economy**.
- ❖ Giving **transparency and a greater balance** to the whole value chain.

# Background: S3 Agrifood Thematic Platform



## SMART SPECIALISATION PLATFORM

European Commission / Smart Specialisation Platform / Sections / Thematic Platforms / **Agri-Food**

Home S3 Platform **Sections** Tools News Events Knowledge Repository

## Thematic Platforms

### Thematic Platforms

#### Agri-Food

- Expression of interest
- High Tech Farming
- **Traceability & Big Data**
- Bio-Economy

## Agri-Food

### Flash News

**Kick-off event of S3P - Agri-Food** took place on the **6-7 December 2016** in Florence, Italy.

This meeting resulted in the first group of partnerships formally joining the Agri-Food S3 Platform as members. At the same time, it resulted in agreed working arrangements to prepare partnerships in thematic areas and establish a project investment pipeline, in particular for pilots and demonstrators in the targeted areas. The European Commission is committed to develop support and advisory services to accelerate this project pipeline.

**Presentations are available [here](#).**

# Background: Why a thematic area focused on Traceability and Big Data

**Traceability of data or set of data for a specific purpose (prediction, price...)**

**Traceability of a process for a specific purpose (ej. cold chain)**

**Traceability of a product (ej. consumer information)**



**TO RESPOND TO AN IDENTIFIED  
NEED**

**PARTNERSHIP TOPICS**

# Development of the Thematic Partnership on Traceability and Big Data: Topics

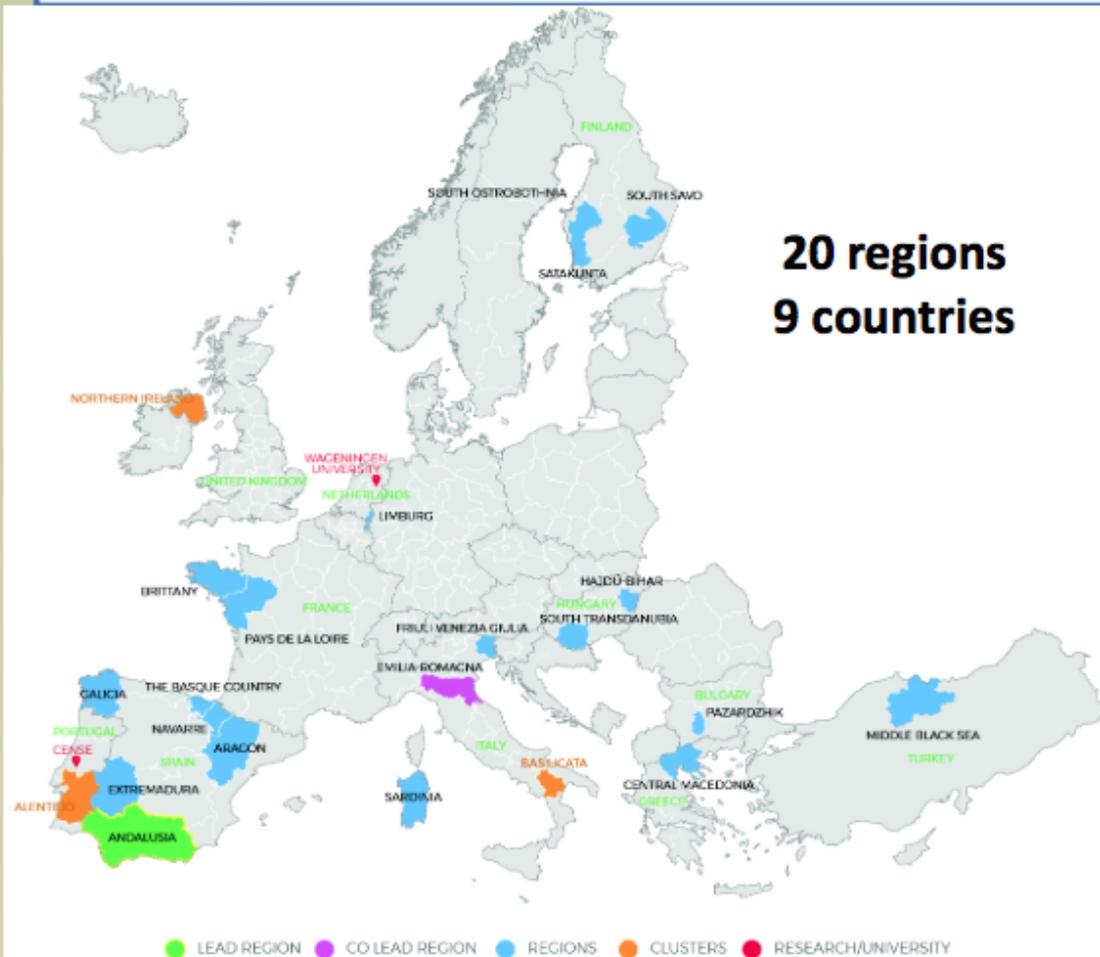
- ✓ **Specific Topic 1.** Traceability and Big Data in the *“Lifecycles of the value chain”*.
- ✓ **Specific Topic 2.** Traceability and Big Data in the *“Smart monitoring of the value chain to improve the overall competitiveness of the agri-food sector”*.
- ✓ **Specific Topic 3.** Traceability and Big Data to *“incorporate consumer experience and the different operators in the food chain in decision-making processes”*.
- ✓ **Cross-cutting Topic.** *Open data, interoperability, data governance and information security, cyber security.*

LA CADENA DE VALOR  
AGROALIMENTARIA Y EL  
ENTORNO DE LA EMPRESA



# Development of the Thematic Partnership on Traceability and Big Data: regions and clusters already involved

## S3P Agri-food on T&BD: a network of Regions



### LEAD REGION

Andalusia (ES)

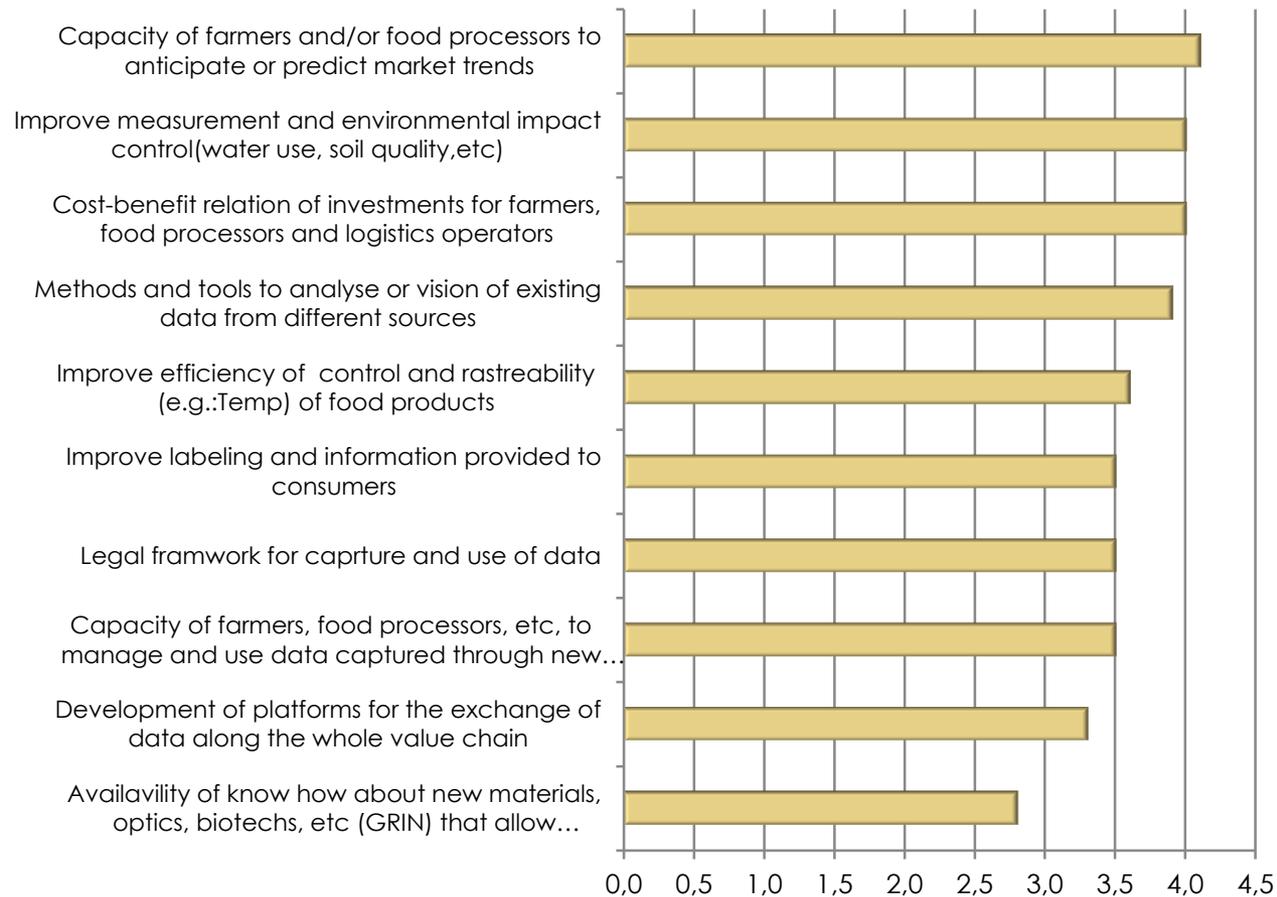
### CO-LEAD REGION

Emilia Romagna (IT)

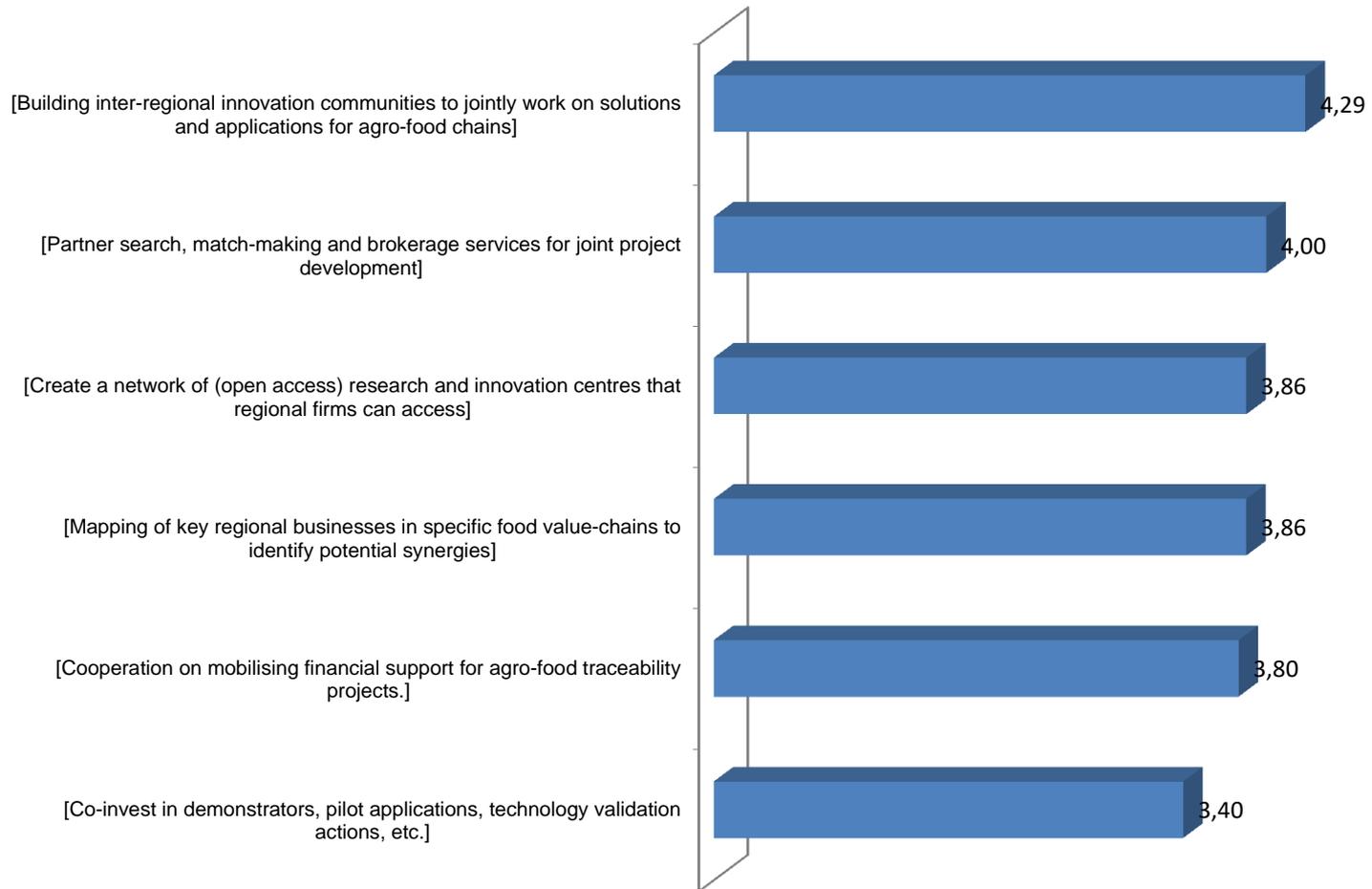
### PARTICIPATING REGIONS

Aragon (ES)  
Basque Country (ES)  
Brittany (FR)  
Central Macedonia (GR)  
Extremadura (ES)  
Friuli Venezia-Giulia (IT)  
Galicia (ES)  
Hajdu Bihar (HU)  
Limburg (NL)  
Middle Black Sea (TR)  
Navarre (ES)  
Pays de la Loire (FR)  
Pazardzhik (BG)  
Sardinia (IT)  
Satakunta (FI)  
South Ostrobothnia Region (FI)  
South Savo (FI)  
South Transdanubian, Tolna (HU)

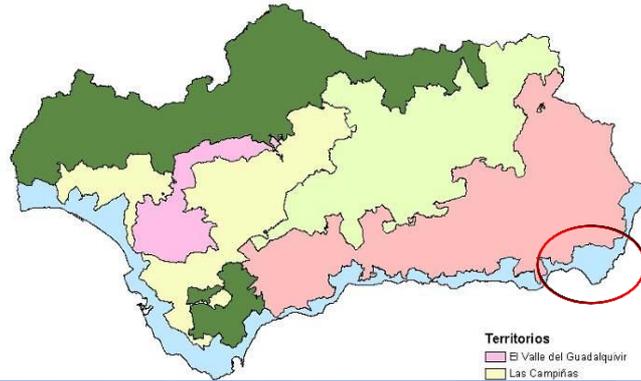
# Mapping exercise. Preliminary results: Challenges of the agrifood sector (1-not relevant; 5-Critical)



# Mapping exercise. Preliminary results: Joint actions and activities to be developed within the partnership (1-not relevant; 5-Critical



# Study within the Almería F&V coops (COEXPHAL) to better address the digitisation process

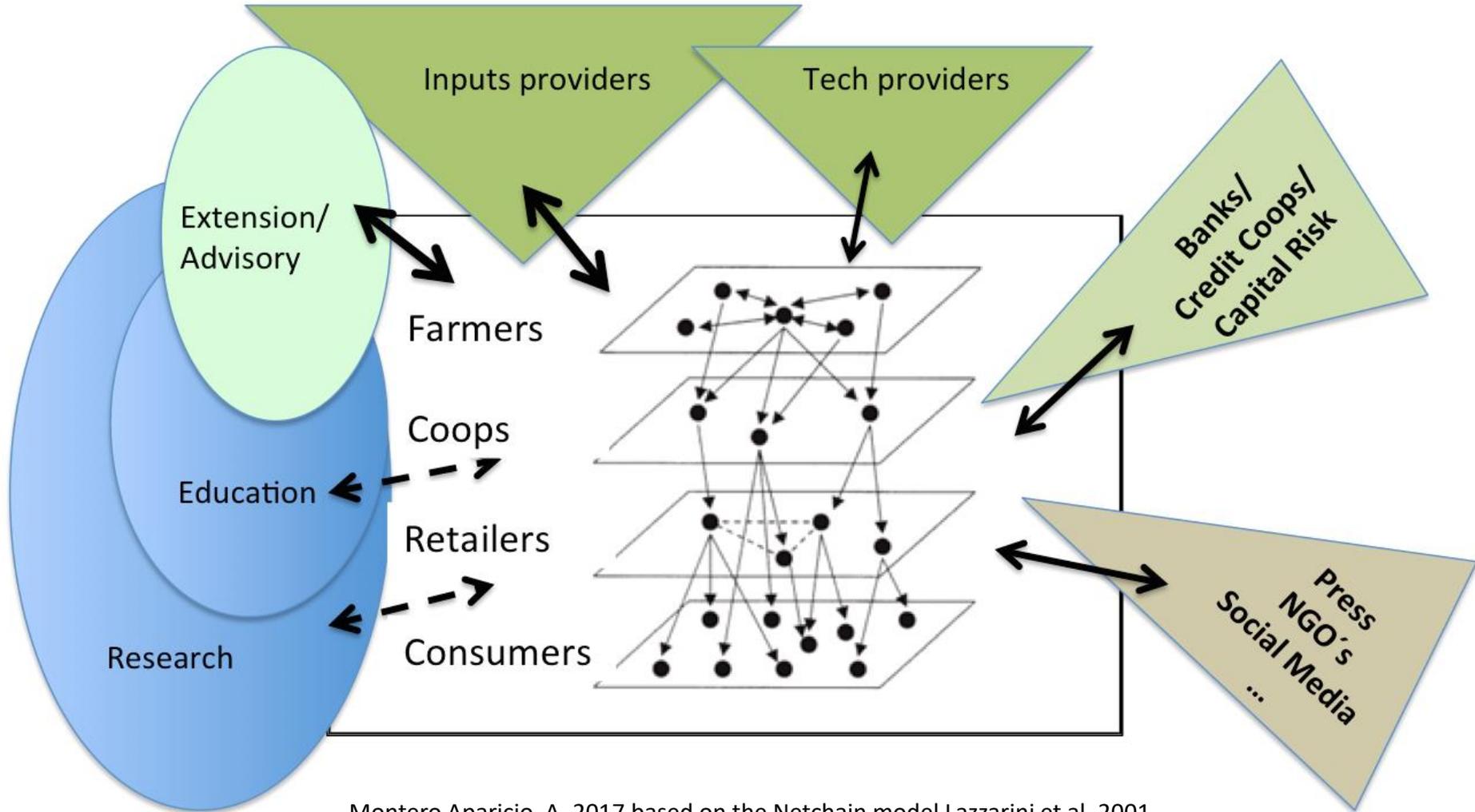


Main features of Almería F&V sector:

- Family farming (Farmers coops)
- Mid-tech greenhouse struct.
- High orientation to market (exports)



# Exercise within the Almeria F&V coops (COEXPHAL) to better address the digitisation process



Montero Aparicio, A. 2017 based on the Netchain model Lazzarini et al, 2001

# Exercise within the Almeria F&V coops (COEXPHAL) to better address the digitisation process

- **Coexphal, Coexphal-UAL chair, Fund Cajamar and Hispatec participate in the IOF2020 H2020** Project lead by Wageningen with a crucial role coordinating the trial on F&V among the five trials of the project. We also have a broad experience in digitalization activities for the sector: ERP-Agro, Hortisys, Campogest (Hispatec), Labcolor quality analysis App (Coexphal).
- The alliance through the Coexphal-UAL chair is implementing a study to be endorsed by Council of General Managers
- Three levels: Farmers/Advisors/Coop General Managers
- Five fields of study: Capacities/Infrastructures/Data Integration and flows/Challenges/Barriers
- The objectives is to work closely with the sector to address digitisation process to
  - Increase the efficiency and predictivity capacity of the sector
  - Reshape governance models to develop a more inclusive and efficient management and governance structures (family farming) based on the enhancement of the data and information fluxes among the actors at the different levels and among the organisations

## Conclusions:

# Opportunities within S3 subplatform on Big Data and Traceability

There exist a need to better connect the different initiatives, projects, infrastructures, platforms, to create synergies that will allow to:

- Increase efficiency and better use of different funding instruments
- Create better conditions to allow Impact happen
- Strengthen the EU competitiveness with a participatory approach based on the needs from local/regional level up to EU level
- Develop pilot actions contributing to build the process **beyond 2020**

