

Value chain system in agriculture: role of SPA

- Area1 – SPA Overview
- Lesson 2 – Variables and Systems
- Sequence ID – 8

Rezos Brands S.A.





DISCLAIMER

A1.L2.T2 Value chain system in agriculture: role of SPA:

Eugenia Karamouzi, ekaramouzi@rezosbrands.com, Rezos Brands, Greece

Eleni Tsironi, etsironi@rezobrand.com, Rezos Brands, Greece

Panopoulos Panagiotis, Rezos Brands, Greece

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Agriculture Value Chain



A value chain consists of the actors (private and public, including service providers) and the sequence of value-adding activities involved in bringing a product from production to the end-consumer. In agriculture they can be thought of as a “farm-to-fork” set of inputs, processes and flows.

Thus, an agricultural supply chain encompasses all the input supply, production, post-harvest, storage, processing, marketing and distribution, food service and consumption functions along the “farm-to-fork” continuum for a given product (be it consumed fresh, processed and/or from a food service provider), including the external enabling environment.

These functions typically span other supply chains, geographic and political boundaries and often involve a wide range of public and private sector institutions and organizations.

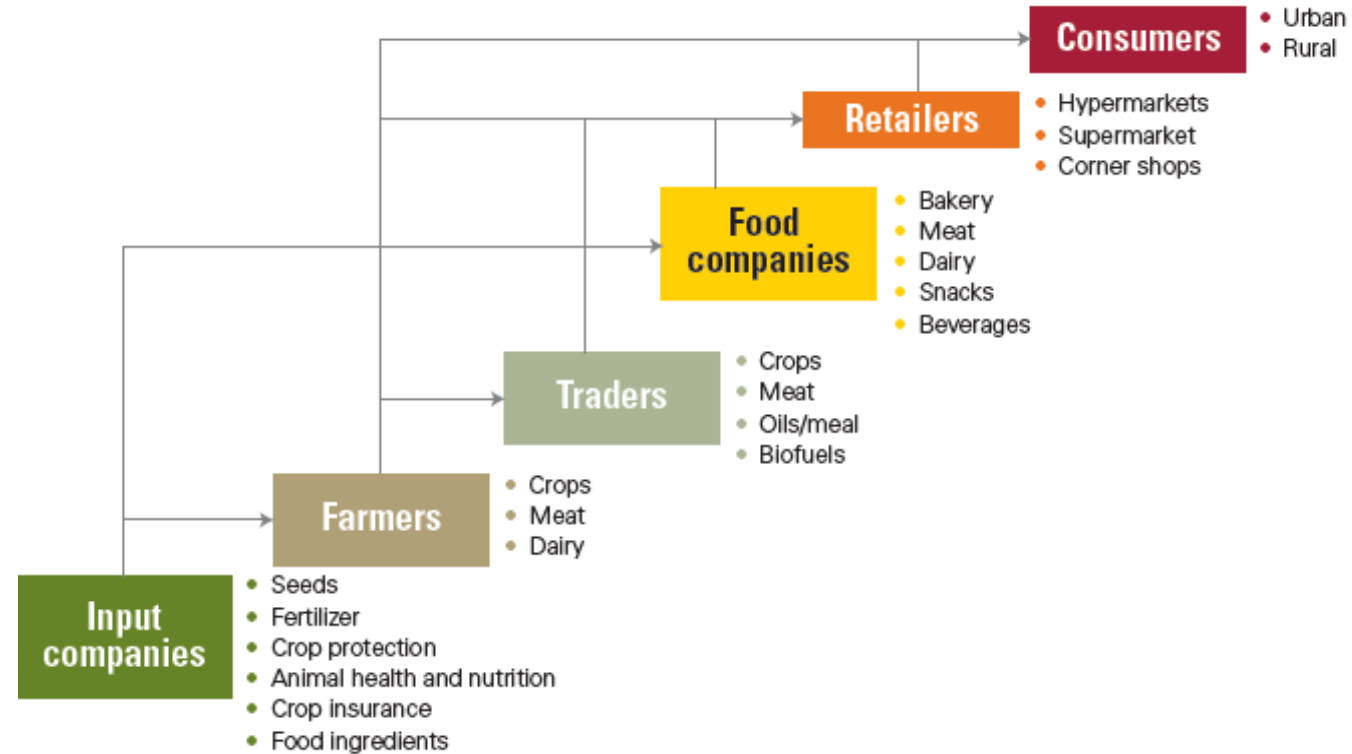


Complex - Value Chain



The agribusiness sector's complex value chain spans input companies, farmers, traders, food companies and retailers, all of whom must ultimately satisfy the varying demands of the consumer in a sustainable manner.

The sector encompasses huge diversity and variety at each stage, from R&D-based input companies to generic manufacturers, subsistence farmers to high tech agroholdings, biotech companies and SMEs to multinational corporations.



The goal of Agri - Value Chain

The goal of the global agri-value chain, which spans input companies through to the final consumer, is to provide sustainable access to affordable food, feed, fibre and, more recently, fuel. The goal is to meet today's market demand while preserving the viability of the industry's future.

However, this goal is getting harder to achieve every year due to several prominent challenges. One of the biggest **challenges** is to maximise productivity without sacrificing quality, by taking under consideration that soil and water integrity are compromised year after year.



The goal of Agri - Value Chain



On the demand side, the growing global population and economic growth combine to generate more need for increased levels of crop and food production. Policies promoting biofuels have also added a significant new source of demand to the equation. Apart from such considerations affecting the quantity of demand, there are also drivers affecting its quality as the food chain and consumers increasingly consider the environmental and social dimensions of how food is produced.

On the supply side, there is concern about declining levels of yield gain, whether due to the laws of diminishing returns or the effects of water shortages and global warming.



Sustainable agriculture



Sustainable agriculture can **benefit** nature and biodiversity, increase product value and empower agricultural communities.

The **challenge**, however, is how to get farmers and vendors -and all the different stakeholders in the agriculture value chain -to adopt more environment-friendly practices.



Benefits of sustainable agribusiness (1/2)

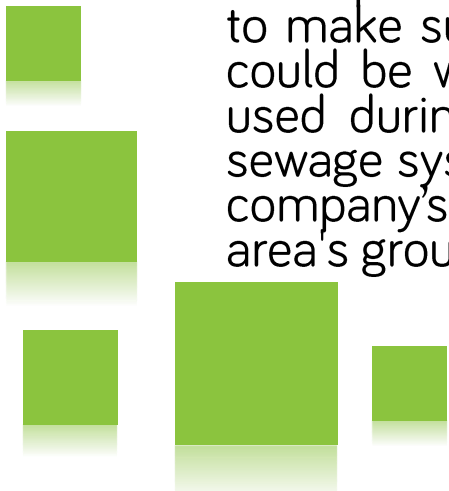


More productive fields

Usage of a variety of strategies to preserve the land and efforts to maximize yield which based on eco-friendly practices. i.e. rotate crops between fields, allow land to naturally replenish vital nutrients season after season, plant cover crops along ditches and roads through acreage to provide additional natural sources of soil nutrients, in order to help control erosion and add to overall field productivity.

Cleaner water and reduced irrigation

Water conservation is a way of life in the field. Using drip irrigation when possible, and carefully monitoring the weather, and equipment to make sure the maximum efficient water distribution. Production could be washed and packed in the field. This ensures that water used during the process goes back into the soil and not down a sewage system. Drought-resistant crops play a significant role in the company's efforts to reduce water usage and the impact on the area's groundwater supply.



Benefits of sustainable agribusiness (2/2)

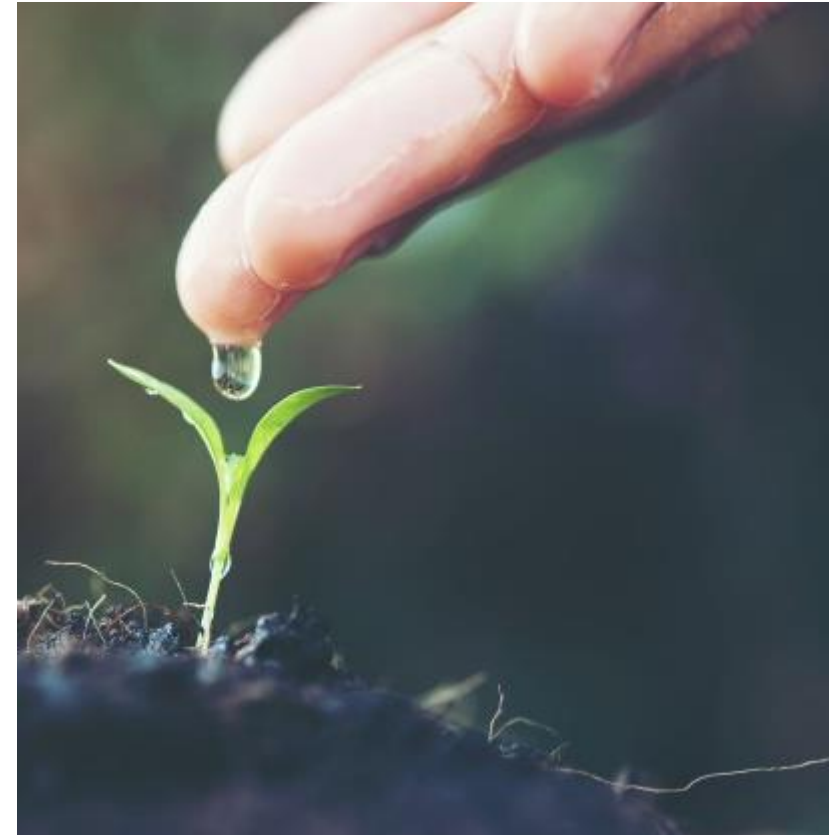


Positive contributions to communities

Provide employment opportunities, avenues for advancement, fair wages and safe working conditions,

Financial sustainability

To maintain best practices in the field and financial success allows to invest in new eco-friendly technologies. Finance research and development that improves field crop production and food safety.



New sustainable Agri-Value Chain (1/2)



New objectives

for agriculture have been introduced: whereas the primary purpose was to provide food, feed and fibre, the sector is now being asked to provide increasing supplies of biofuels, contribute to rural development and provide ecosystem services. There is also talk of agriculture providing bio-materials to underpin the 'bio-economy' of the 21st century. Another driver for change is the increasing emphasis being put on the health dimension of food as more people in the world now suffer from obesity than malnutrition. Governments are considering ways of intervening in the food chain to mitigate this trend while the development of functional foods is becoming an integral part of many food company strategies.



New sustainable Agri-Value Chain (2/2)



New solutions

Technological advances, particularly in plant genomics and IT are creating all sorts of new possibilities for agriculture. There has been a consistently high level of R&D investment across the value chain) which has resulted in a continuous stream of innovation. An increase in private sector investment in agriculture is mirrored by what has been happening in the public sector, with governments, especially those in emerging markets, significantly boosting their investment in recent years.

New markets

New customer segments are emerging: the growth of the emerging markets in both population and economic terms drives the level and composition of demand for agricultural and food products. The latest Food and Agriculture Organisation (FAO) forecasts predict that overall food demand will increase by 1.1 percent a year between 2006 and 2050, or by 70 percent of the whole period. The primary drivers of this demand are Africa, due mainly to population growth, and Asia, due to both population and GDP growth.



Thank You!

