



**Direct workforce in the  
value chain of the  
Andalusian aubergine  
industry.  
Crop year 2009/2010.**



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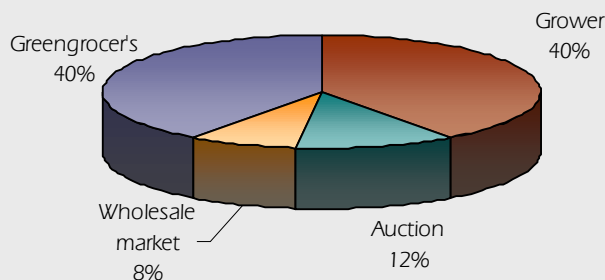
## Objective

In the current context of high competitiveness in the agri-food sector, the Regional Ministry of Agriculture, Fisheries and Environment of Andalusia has decided to carry out this study on the analysis of costs throughout the supply chain of the Andalusian aubergines produced in greenhouses in Almeria in the 2009/10 crop year. To this end, the direct workforce and the activities carried out in every link of the two main distribution channels, traditional and modern, are analysed.

## Costs of direct workforce in the traditional distribution channel

Direct workforce represents 24% of the sale price (VAT not included).

The cost of the direct workforce of the aubergine traditional distribution channel amounts to 0.33€/Kg, distributed as follows:



Activities such as harvesting, standardisation and packaging of the product as well as the transportation to the exchange are carried out in the farm. The workforce used in the aubergine farm represents 40% of the total workforce of the traditional distribution channel.

Production costs do not depend on the channel by which the product is distributed.

## Time spent by direct workforce in the traditional distribution channel

The time spent by direct workforce in the traditional distribution channel is obtained from the salary costs per hour in each link.

Hourly costs represent the basic salary calculated from the salary tables for each professional category in the crop year 2010. These costs are included in the corresponding collective agreement and are increased by the cost of social security paid by the employer.

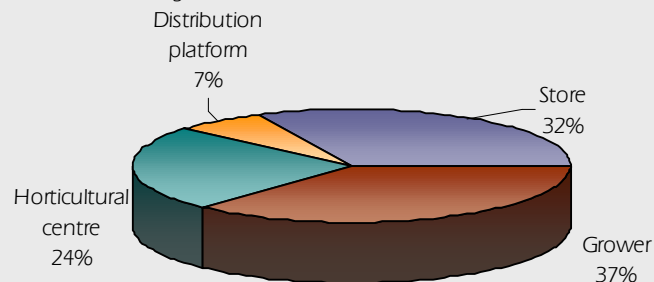


The time spent by direct workforce in the distribution of one kilo of aubergines through the traditional distribution channel is about 2.44 minutes.

## Costs of direct workforce in the modern distribution channel

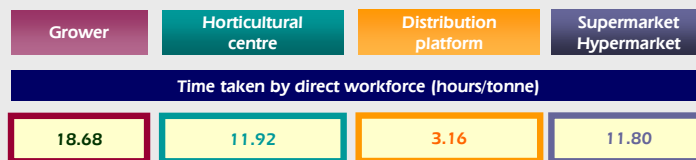
Direct workforce represents 25% of the sale price (VAT not included).

The total unit cost of the workforce of the aubergine modern distribution channel amounts to 0.35€/Kg, distributed as follows:



The costs of the farmers' cooperative are increased compared to the traditional channel as the packaging is changed. The product is classified, standardised and packaged in the horticultural centre.

## Time spent by direct workforce in the modern distribution channel



The modern distribution channel requires 2.73 minutes per kilo of aubergines distributed.

## Conclusions

- Whereas the direct workforce in the traditional distribution channel of aubergines represents 35% of the total costs generated along the supply chain, in the modern distribution channel, it represents 28%.
- Regarding the **direct workforce** required by the links involved in the distribution, the link that requires the most is the **farm**, which manages the production, harvesting and transportation to the horticultural centre.
- The workforce in the farm** is 100% direct, and the time spent in the farm represents **46% and 41% of the total time** spent in the traditional and modern distribution channels, respectively. These figures mean **19 hours of workforce per tonne of product**.
- The **retailer** is the second link in importance with regards to direct workforce in the modern distribution channel, as workforce represents 32% of the costs. Concerning the traditional distribution channel, direct workforce represents 40% of the costs in the farm and in the retailer.
- The distribution of aubergines in the modern distribution channel generates more wages than in the traditional distribution channel, **46 hours per tonne of product compared to 41**, respectively.