



# Direct workforce in the traditional distribution channel of **WATERMELONS. 2010/11**



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## Objective

The Regional Ministry of Agriculture, Fisheries and Environment of Andalusia has published studies of direct workforce in the value chains of vegetables, citrus and strawberries for 2008/09 and 2009/10 crop years in order to examine in greater depth the impact that workforce can have in the value chain of vegetables and in the retail price.

In order to widen the range of products analysed, we have conducted, for the first time, the study on the traditional distribution channel of watermelons during the 2010/11 crop year. This study aims at examining in greater depth the impact of the cost of direct workforce on the price paid by the consumers of vegetables grown in Andalusia in greenhouses in greengrocers' which are main retail establishments in the Spanish market. It also aims at determining the time spent by direct workforce along the value chain from the farm to the greengrocers'.

## Costs of direct workforce in the traditional distribution channel

The costs of direct workforce in the various links include the share of social security that employers pay.

COSTS OF DIRECT WORKFORCE (€/Kg)

FARM	AUCTION	WHOLESALE MARKET*	GREENGROCERS**	TOTAL
0.067	0.005	0.008	0.021	0.101

\*The cost of the transport of the product from the auction centre to the wholesale market has been included in the link of the wholesale market.\*\* The transport to the greengrocers' is carried out mainly with own means

The highest unit costs of workforce fall in the producer. The seasonal nature of the watermelons produced in greenhouses in Almeria from April to June has been taken into account.

## Cost of direct workforce in the traditional distribution channel (continuation)

Watermelons are a product that do not require too much direct workforce for their growing. Most of the direct workforce used is in harvesting, loading and transport to the horticultural centre or the auction centre.

While costs at origin are specific to the product analysed, the costs of the direct workforce used in retail and destination distribution are average costs of the range of fruits and vegetables distributed by the channel operators.

## Time spent by direct workforce

The following table shows the time spent by each link in the distribution of watermelons through the traditional channel:

TIME SPENT BY DIRECT WORKFORCE (Hours/tonne)

FARM	AUCTION	TRANSPORT	WHOLESALE MARKET	GREENGROCERS
9.40	0.65	0.52	0.35	2.95

Regarding the direct workforce required by the links involved in the distribution, the link that requires the most is the farm.

## Conclusions

The **direct workforce** used in the production and distribution of the product to the retailer represents **16%** of the costs generated in the watermelon traditional channel.

Direct workforce represents **10%** of the **price paid by the consumer** in the greengrocers' (RSP VAT not included).

Regarding the time spent by direct workforce in the different links, the **farm** stands out as it accounts for **68%** of the **total direct workforce** of channel.

Direct workforce in the traditional distribution channel represents about **14 hours** of per tonne.

A **watermelon\*** requires **4.6 minutes** of direct workforce on average.

\*A watermelon with an average weight of 5.5Kg.

