

Harvesting

Functional unit: 20 ha vineyard / year

- Manual
- Mechanical



Manual



Manual harvesting is the traditional way of collecting grapes. It is made by selecting the bunch of grapes, cutting it with scissors, and then placing it in plastic or rubber boxes or bins. The boxes are transported to the winery by tractor-trailer, or they are emptied into containers.

The manual harvesting favours the selection of clusters in the vineyard, so grapes are scarcely damaged, arriving at the winery in very good condition and ensuring a quality wine.

The main drawback of this technique is that it requires a lot of manpower and long collection times.

ENVIRONMENTAL ASPECTS

- | | |
|---|--|
| <input checked="" type="checkbox"/> Energy consumption | <input type="checkbox"/> Non-hazardous waste |
| <input type="checkbox"/> Water consumption | <input type="checkbox"/> Hazardous waste |
| <input checked="" type="checkbox"/> Resources consumption | <input type="checkbox"/> Wastewater |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Atmospheric emissions |

ECONOMIC STUDY

Functional unit: 20 ha vineyard

Initial investment:
14 697.50 €

Annual expenditure:
306.40 €

CRITICAL FACTORS

- | | |
|--|--|
| <input checked="" type="checkbox"/> Large investment | <input checked="" type="checkbox"/> Organisational changes |
| <input type="checkbox"/> Improvement potential | <input checked="" type="checkbox"/> Training needs |
| <input type="checkbox"/> Technological changes | <input checked="" type="checkbox"/> Impact on vineyard quality |

Mechanical

Mechanical harvesting is carried out by means of a mechanical vine harvester. This type of farming machine is equipped with bowed rubber sticks that shake the vines, by a vibration movement, to get the vine to drop its fruit onto a conveyor belt that brings the fruit to a holding bin, leaving stalks without berries on the plant.

The main advantages of this technique are that it is faster and cheaper than the manual one and it also allows harvesting at night when temperatures are lower, which means that the grapes are cool when they arrive to the winery.

However, it is important that transport of the grapes to the winery is fast, since the mechanical harvesting generates a high number of broken berries and, consequently, a greater amount of must, which can be oxidised easily.

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- | | |
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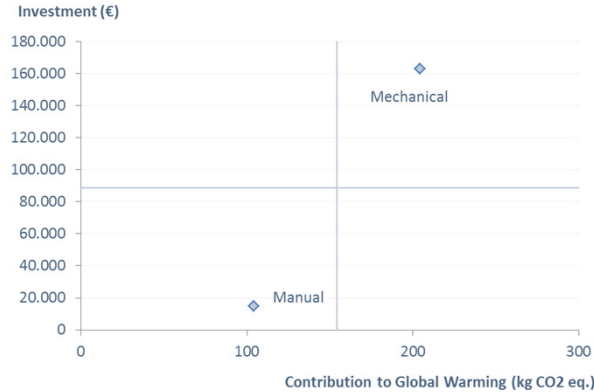
CRITICAL FACTORS

- | | |
|--|--|
| <input checked="" type="checkbox"/> Large investment | <input checked="" type="checkbox"/> Organisational changes |
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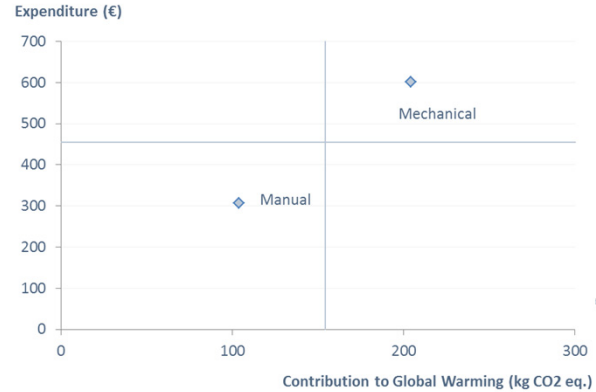


Economic – Environmental Results

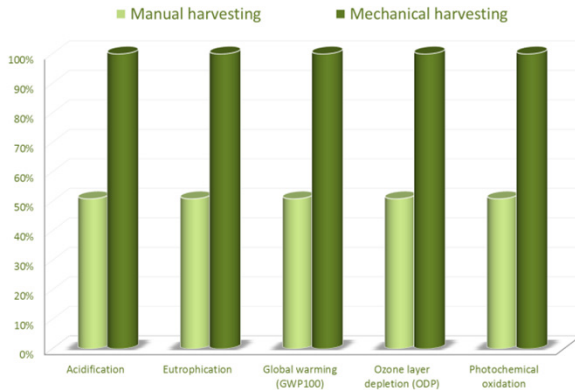
INVESTMENT - ENVIRONMENTAL LOAD



EXPENDITURE - ENVIRONMENTAL LOAD



ENVIRONMENTAL



PRIORITISATION

INVESTMENT - kg CO ₂ eq.	EXPENDITURE - kg CO ₂ eq.	TOTAL	RESULTS
3	3	6	MECHANICAL
1	1	2	MANUAL