



Grape production costs: a comparative analysis based on different cropping condition (soil position and qualitative level of the production) in the Campania region.

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Abstract

The proposed paper aims first to evaluate the full unitary cost of the grape production in different condition of soil position and targeting different quality objectives. In addition, the paper evaluate analytically the composition of the production cost and the opportunities to optimise the single cost items in the different conditions. As the grape production cost is becoming and increasing competitive factor in the wine business, the general purpose of the paper is to make available for the scientific and professional community a set of production cost analytically demonstrated and clearly related to specific contexts. This information about cost can be useful to orient research and extension efforts and to develop consistent budget in the firms. Data are obtained in restricted areas but the results of the analysis can be generalised to other areas with similar climatic conditions.

Four cases are discussed. One case in very sloped conditions: production of grape for superpremium wine in Ischia Island; three cases with a ordinary soil position: production of grape for top basic (or popular premium), premium and ultrapremium wines in the Taburno area. In the selected areas has been collected information about the standard cultural practices (trellis systems and canopy management, soil management, pest control, nutrition, harvest) and yields concerning the different qualitative objectives and on the base of this information, has been defined the set of representative production processes. The cost investigation has been applied to these processes.

Data analysis allowed to compute the threshold price able to completely remunerate the initial and current cost of the cultivation in the different studied cases and shown that the canopy management represent always a very critical cost item, varying from 35 to 60% in the different cases. Data therefore indicates that it is necessary to optimise canopy management in order to reduce as much as possible his aggregate cost and to maximise his efficiency, targeting to obtain the planned yield.

The comparison between the computed full unitary costs and the current paid grape prices reveals that grape producers obtain a price able to cover all costs only producing standard grape; the production of value and high value grape in non completely remunerated and only the annual cost are covered.

The technical analysis of the studied processes shown that is possible to define in the different cases specific path to optimise the cropping practices (canopy management and other cultural practices), maximising the crop efficiency, moving in some cases from manual to mechanized operations or optimising the manual operations; the economic analysis allowed to quantify the cost reduction that can be obtained following the defined improvement path and to develop a set of optimised unitary cost for the different studied cases. With regard to the introduction of mechanical operations, the proposed paper considers the constraints in terms of farm dimension or area served by a single machine and, in addition, analyses in detail the consequences in terms of vineyard operations organisation and risk management of the different improvement path. Finally, the analysis demonstrate that also in an optimised situation in terms of cropping practices the production cost for grapes destined to premium and superpremium wines remain very high and emerge the urgency to understand completely the trade-off between grape quality and yield in order to explore the possibility to increase the target yield determining a relevant positive effect on the unitary cost.