

THE OPTIMISATION OF PRODUCTION CAPACITY TO THE S.C. HUȘI VINEYARD S.A.

OPTIMIZAREA CAPACITĂȚII DE PRODUCȚIE LA S.C. PODGORIA HUȘI S.A.

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Abstract. *The aim of the paper is to analyze the capacity of production for economic agents, importance that is given by the the resources that is operating this function. It is appreciate Also, the study on the efficiency of studied societies has allowed the identification of solutions for improving the economic results from farms. The quantitative and qualitative increase of production is possible only by capitalizing the national productive potential and promoting systems of perform production, stimulating the growth of farmers' performance and the competitiveness of Romanian agro-food products on internal and international market.*

Key words: optimization of production, efficiency, production capacity.

Rezumat. *Scopul lucrării este de a analiza capacitate de producției pentru unitățile economice, capacitate care decurge din ponderea mare a resurselor cu care operează această funcțiune. De asemenea studiul eficienței unității analizate a permis identificarea soluțiilor de îmbunătățire a rezultatelor economice în fermele de profil. Creșterea cantitativă și calitativă a producției agricole este posibilă doar prin valorificarea potențialului productiv național și promovarea unor sisteme performante de producție stimulându-se creșterea performanțelor producătorilor agricoli și a competitivității produselor agroalimentare românești pe piața internă și internațională.*

Cuvinte cheie: optimizarea producției, eficiență. capacitate de producție.

INTRODUCTION

The production importance for the economic units results from the large share of economic resources with which operate this function. It is estimated that 70% of employment, wages paid and the assets of the company's works in the production function. In addition the operations of technological transformation are the argument of existence of any productive enterprise.

Husi vineyard is a limited liability company located in the village Pogănești, Stanilești commune, county Vaslui, having as registration number from the Office of Trade Register: J37/617/1994; Fiscal Code: R 6242445.

The vineyard of Husi city comprises approximately 3000 Ha of life with average production of 10.000 Kg/ha. The products quality has recorded a continuous ascendance, an in term of competitiveness of wineries managed in superiority, towards originality, both in price and quality.

The great wine yard – from the glorious Busuioaca Bohotin – Husi got, expressing metaphorically, the emblem of wine bit – flavored, roe-colored and oragnoleptic – fully – optimized. Starting from the product quantity for that can be achieved the disjunction, must be determined the production capacity of the company.

The production capacity can be defined as being the maximum production realized by a firm in a given period, in the condition of efficient using of all the production factors, in a certain regime of work and for a pre-established structure of the production, quantitatively and qualitatively.

MATERIAL AND METHODS

To determine the production capacity at enterprise level, is starting ascending at level of employment, sector, workshop or production unit and, finally, is getting at enterprise level. In order to estimate, the general production capacity of Husi vineyard we look into consideration the evolution the production, rate of sales and the utilization of material resources during the last four years.

RESULTS AND DISCUSSIONS

The calculation of production capacity can be done in different ways, depending on the specific activity of production. Over the size of production capacity of production enterprises are acting the following influence factors:

- a) the number of existent machines in the enterprise and the size of production surfaces that influences directly proportional the size of production capacity
- b) the use of technical equipment and of production machinery and of production surfaces. This rules are of two types:
 - norms of intensive use
 - norms of extensive use
- c) the optimum range of fabrication. The norm of intensive use is the production that can be obtained in a unit time per characteristic dimensional unit of a machine of surface of production.

In the conditions of profound changes which may occur in the processes of production, due to continuous improvement of the fabrication technology and of the level of professional training of the staff, these norms, must be modified to suit the existing situation at a given moment in the production units.

From methodological point of view, the production units are divided into:

- enterprises in which the product is obtained after processing the materiality and materials on a single machinery or installation;
- enterprises in which the product is obtained after processing at several machines, equipments or facilities.

For the enterprises from the first group, the production capacity at level of enterprise is obtained from adding to production capacity of all subunits of production components (sections and workshops).

For the enterprises from the second group, the production capacity at enterprise level is given by the production capacity of the leading link.

The leading link of a production unit is established depending on the following criteria:

- may be leading link the production subunit with the largest share in the manual labor of the enterprise;
- can be the leading link the production subunit the largest share in total value of the production means of the enterprise.

In general, at the calculation of production capacity must be taken into account the following factors:

- total of direct productive machinery;
- work regime of the company, which determines the productive effective time;
- the degree of specialization of the production;
- existence of narrow places and the technical organizational measures for their removal;
- technical and economical norms of use of the machines;
- the possibility of introduction in production of some machineries or/and of some procedure or algorithms of advanced work

Given the presence of the productive capacity in the double aspect, both in size concretely calculable and as a degree of use, we will have factors that act on the size of production capacity and factors that acts on the degree of production capacity use.

The factors acting on the size of production capacity are:

- a) the value of investment funds for development and reusing productive units
- b) respecting the deadline of putting in function of the new objectives
- c) the size of the machinery park, rhythm of replacing the machine tools used physical and moral;
- d) the mechanization and automation the production processes;
- e) introducing and extending the new technological processes;
- f) concentrating, profiling and specialization of production;
- g) the structure on assortments of the productive unit of production

The factors that acts on the degree of use of the production capacities are:

- working schedule (working days annually, the number of exchanges, duration of exchange);

The degrees of using the production capacity.

A high degree of using the production capacity leads to:

- reducing the unit cost of products by lowering the rate of absorption conferred per unit product;
- increasing the production volume realized; increasing the benefits, on the reducing costs, which leads to an increased profitability

The utilization degree of the available production capacities must be higher, ideally 100%. But in our society the utilization degree of production

capacity is somewhere around 50%. Making an analysis of the utilization degree of the production capacity in the years 2005 -2008, can be observed (table 1) that in 2006 this indicator had the highest, obtaining an average production of 9 t/ha. in the conditions in which from a surface of 20 hectare of vineyard was harvested a smallest production being affected by the hail.

The optimal level of production capacity is given by the value of production capacity for which the total effort on the unity of production capacity is minimal. From the total effort are making part the investments made for putting in function and the afferent expenses to using the production capacity.(table 1).

Table 1

Utilization degree of the production capacity

Year	Production of grapes (kg)	Total capacity of the production	Degree of utilization the production capacity - %
2005	752000	2000000	37,6
2006	1208000	2000000	60,4
2007	985000	2000000	49,25
2008	858120	2000000	42,91

In determining the optimal level of the production capacity may be taken into account several criteria, including:

- reducing the specific investment;
- decreasing the unitary cost of production;
- obtaining a high productivity labor;
- optimization of transport costs of raw materials and of finished products;
- the forecasted demand for a period at least equal to the normal operation of investment to ensure a proper sale of the production.

Knowing the size of production capacity presents a great practical importance because it serves primarily to:

- elaborating and underlying the production and investment plan;
- sizing the production units and establishing the necessary or overplus of machineries
- preparing the development plan;
- discovering and correction evaluating of the internal production reserves;
- choosing the optimum solution of concentration, profiling, specialization and cooperation in production, technical –economic substantiation of the various types of reconstruction, re-equipment and development of the production units;
- comparison and assessment of the results obtained by various units of production on the increasing line of economic efficiency.

The company is developing its activity in a single point of work where can be found both the administrative and production space and storage.

The technical and functional status of the tangible assets is generally good, and the average degree of physical and moral wear was assessed at 48, 85%.

The production equipments are divided into the following categories:

- equipments for the culture of the grape;
- equipments for wine making;
- auxiliary equipment transport, utilities, office equipment etc).

Table 2

Lands according to the title deed

Nr. crt.	Objective name	Afferent surface -mp-	Destination	Accountable value thousand lei	Juridical situation
1	Society headquarter	12.088	administrative	84 950	In propriety

S.C. Husi vineyard are in exploitation 133,6 ha grape plantations from which 24 ha young plantation and 7 ha arable land.

Table 3

Main buildings

Nr. crt	Location	Surface mp		Old years	Accountable value thousand lei	Juridical situation
		Constr.	Desf.			
1.	Heat central	67	67	15	50.100	In property
2.	Surface wine cellar	759	759	20	149.090	In property
3.	Subterranean wine cellar	870	870	20	643136	In property
4.	Laboratory	36	72	20	4.397	In property
5.	Subterranean wine cellar	621	621	13	359.024	In property
6.	Shed station wine	198	198	27	5.728	In property
7.	Social group and eating house	792	792	15	169.775	In property
8.	Chemical fertilizer warehouse	27	27	11	1.319	In property
9	Annex building and laboratory	93	186	13	185.438	In property

Table 4

Variation of turnover in S.C. Vineyard Husi S.A. in the period 2005 -2008

Year	2005	2006	2007	2008
Turnover	5125032	3455178	1651172,8	6720127,92

Having in view the market at which refers the firm (namely Moldova), the company decided to adopt the competitive strategy based on the products offer at a reduced price. Such performance can be achieved by granting a special attention to the methods of production costs and indirect costs as trough materialization the costs generated by the marketing activity. Of course this does not mean neglecting the issues of promotion, especially in what concerns the export (which brings the biggest actual profit to the company)

The plantations are generally aged, having a length of 25 – 30 years. As a result of aging and frosts from the previous years the average density of the plantations is about 2800 logs/ha. The average production at hectare is less than 6500 kg grapes (table 5).

Table 5

Variation of average production at ha

Years	2005	2006	2007	2008
Grape production (t)	752	1208	985	858.12
Average production at ha (kg/ha)	5230	9000	7350	6550

CONCLUSIONS

This work aims to analyze the production capacity at S.C. Vineyard Husi S.A., of the activity that this carries it, as well as of the efficiency of wine production. Although the vineyard is old, the machines are old over 20 years; the society obtains an average production per hectare of over 5000 tons. The financial situation in 2008 shows an improvement beside 2007. This aging is due tit the better price obtained at the assessment of the wrack wine. In this year, the society benefited of an exemption of payment of some debts at the state budget in the amount of 1.181.523 lei, which is making not to have debts to the state and can focus its financial resources towards investments. There is a reconversion plan of sorts of surface of 30 hectares in which the state gives 40000 Ron/ha, and the difference is supported by the beneficiary.

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