

HOW TRACTORS TRADERS SEE THE ROMANIAN QUALITY MANAGEMENT SYSTEM

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Abstract:

For the last four years the Romanian market of tractors is in constant decline. In the next 10 years, to reach the level of the European Union endowment with tractors, we should absorb 30,000 units. But currently the market absorbs only 3,000 tractors. That would take about 100 years to reach the current level of the EU endowment.. The survey results conducted from May to October 2009 shows that only 45.5% of the analyzed companies have a certified quality management system and all have less than 100 employees. In 2008, the average profit margin for tractors retailers was 8.5%. Another interesting result of the study presented in this article shows that exists a direct link between the business relationship with suppliers and the attitude of the customers.

Keywords: quality management, certification, tractor's market, turnover, profit, relationships between partners

JEL Classification: C 10, E 20, G 10, Q 11

INTRODUCTION

There is any interest in obtaining and providing high quality when agriculture is hit by the Crisis? Are the employees aware of what happens inside their firm or business, in terms of quality management system? These are only two questions with which I have started my study. During the study I was surprised by the openness with which it was received by the tractors retailers. Traders have discussed with me, sometimes for hours, about what happens with them, with their company and what they do for things to work better. Next, I will present most of the interesting results obtained after processing the data from the applied questionnaires.

PRODUCTION OF AGRICULTURAL EQUIPMENT – OFFICIAL DATA

According to data provided by the Romanian National Institute of Statistics, in the period January 2009 - January 2010, the agricultural machinery manufacturers' production has decreased. As it can be seen in figure 1, the largest decline compared with the same period from the previous year was reported in November 2009 and was with 30% less, however comparing with the same period from the previous month the decrease was only 0.8%. In December 2009 compared to December 2008, the decrease was slightly lower than the above, but compared with the previous month, the decrease was 3.9%. In April 2009 production decreased with 31.7% compared with the previous month.

In January 2010 production increased with 23.2% from the previous month but was 5.5% less than January 2009. January 2008 decreased by 6.6% from January 2007 and January 2009 was 0.1% less than January 2008. It follows that in January 2010 compared with January 2007 was with 11.82% less.

SELLING TRACTORS – HOW THE KEY MARKET PLAYERS SEE IT

To equip the Romanian farms with tractors, the market in the next 10 years should absorb 30,000 units. The main problems are: Romania produces about 1,000 units annually and that the farms managed to absorb about 3,000 units a year.

According to a study ordered by the tractor manufacturer GEDA Prodexim and created in partnership with consulting firm Deloitte, the Romanian National Park includes 174,000 tractors, serving 9.4 million hectares of arable land.

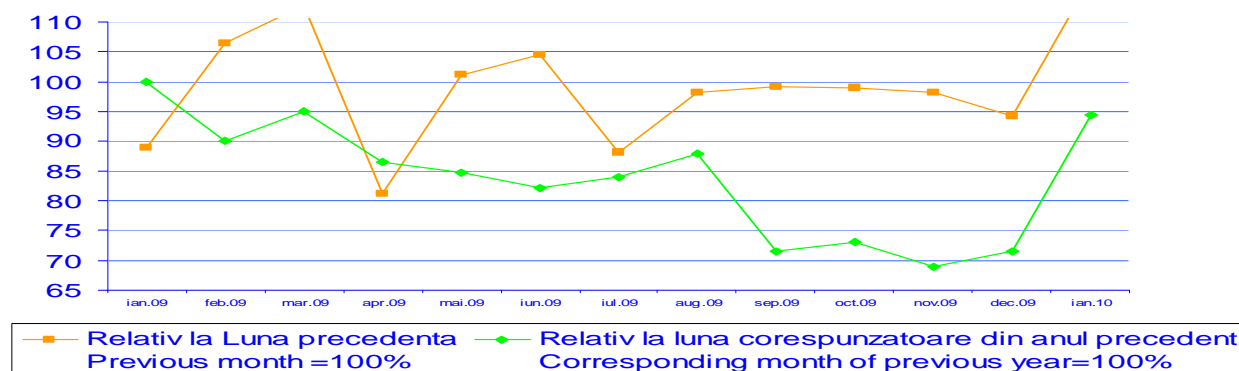


Figure 1. Agricultural machinery production in Romania

Source data: www.insse.ro

One solution for farmers would be to rebuild tractors. The rebuilding can be handling by manufacturer GEDA Prodexim. They specialized in making a new body for the old tractor and in installing a new motor on it, all at a cost of 11,800 euros. The cost is at a half of the cost for a new tractor but has the same running time with a new one, or 15,000 hours.

After the “Rabla pentru tractoare” program will start and if it would subsidize the reconstruction, then the costs for manufacturers would fall to 7,000 euros, a sum which is easier to access through a credit.

“Rabla pentru tractoare” program began on March 19 and will finish at the end of the current year. When the owner will give away a tractor he will receive a non transferable document and then with it he can buy a new tractor. He can't give away more than one old tractor for a new one. These information are provided by Director of Environment Fund Administration, Gheorghe Popescu

The sum received when giving up a tractor is 17,000 lei. For individual the amount can't overcome 50% of the purchase price of new tractor or new self-propelled agricultural machine, and for corporate 40% of the purchase price excluding VAT.

STUDY DESCRIPTION

In the current context of permanent decline of the market I decided to measure the view of manufacturers and dealers of tractors in terms of quality management system.

The study was conducted during May 2009 - October 2009. Data was collected during three specialized fairs:

- ✓ Agraria, May 2009
- ✓ RomAgrotec, September 2009
- ✓ Indagra Farm, October 2009.

Data were obtained from direct interviews and questionnaires application and were gradually processed.

The purpose of the study was to identify the main players in the tractors market. The first step was to talk to them at Agraria fair about their current situation as regards the quality management system. After I have consulted the specialized documentation and I've evaluate the answers and questions received I've created a questionnaire with opened answers. I applied it to RomAgrotec participants. Next, after I received feedback from the participants, I've improved and completed the questionnaire. The final form of the questionnaire I used it for interviewing the Indagra Farm Fair participants.

Questionnaire was applied only to those who sold tractors, not to all exhibitors. This resulted in a total of 19 valid questionnaires. The number is small, but the number of tractors dealers admitted to the "Rabla" program was 20 and the number of major producers in Romania is 4. The final form of the questionnaire contains 25 questions. Questions are of different types: open-ended questions, with multiple answers. With this questionnaire I measured the view of the market trader's regarding quality management system certification, the relationships between key market players from the traders' point of view. I also analyzed the turnover and profit over a period of 3 years for the firms analyzed.

Data were analyzed with the help of 3 software: SPSS 17 and Excel Statgraphic.

RESULTS

According to data obtained (fig. 2) the highest part of retailers are in the Bucharest area (37%) and the smallest are in the South East and Central area with only 6% each. The single area that doesn't appear in this study is the Southwest.

In 2009 none of the companies surveyed had more than 100 employees and 73% had less than 50 employees, number distributed equally among firms with less than 10 employees and more than 10. At the question **The Company has a quality management certificate** 45.5% said they own a proper certificate (company has undergone a certification process) 36.4% own only a license for products sold and only 18.2% do not have any kind of certificate. We can conclude that approximately 54.5% of firms surveyed have no certification.

The distribution of analyzed companies

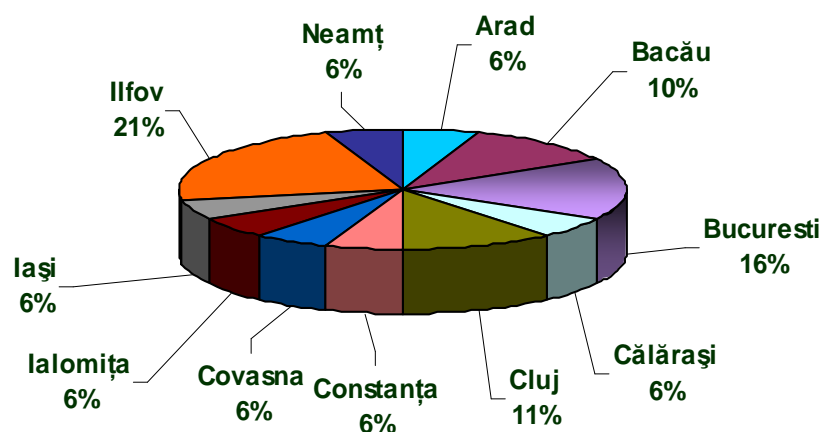


Figure 2. The distribution of analyzed firms

RELANTIONSHIP BETWEEN ANALYZED VARIABLE

Given the small number of employees and the large number of firms with no certificate I put the question: Quality management system (possible case) influence the number of employees of a company (possible effect).

After I used specific statistics tests that establish links between variables and after I processed the data the results revealed that the two variables do not influence each other. One possible explanation is that certified companies are more efficient and thus require fewer employees but on the other hand being better organized, more competitively priced, having high quality products they can move easier to other markets, so we can say that increasing the demands leads to an increase in staff.

Decreased staffs after certification and increase shortly due to expansion, tend to cancel each other. Another interesting result indicates that the quality management system does not influence the price. When asked in what ways you feel improvements after certification: money,

productivity, organization, quality products and services, reduce costs, other? Only 5.6% indicated that the main direction of improvement price. Companies analyzed did not reduce prices even if costs were reduced after certification. They preferred to compete with other companies with products /services that are better but have the same price.

Given the Romanian market particularities the question is I can afford to practice a lower price, given the small number of units sold per year?

THE TURNOVER AND PROFIT ANALYSIS

To answer this question I've analyzed the turnover and profit evolution over a period of 3 years 2006-2008. Figure 3 shows the evolution of the turnover expressed in euros. It appears that in 2008 most companies have achieved, compared to previous years a higher turnover. Only 2 of the 19 companies analyzed have achieved at least in 2 of 3 years a turnover higher than 25 million. Turnover in 2008 was with 61.11% higher than in previous year.

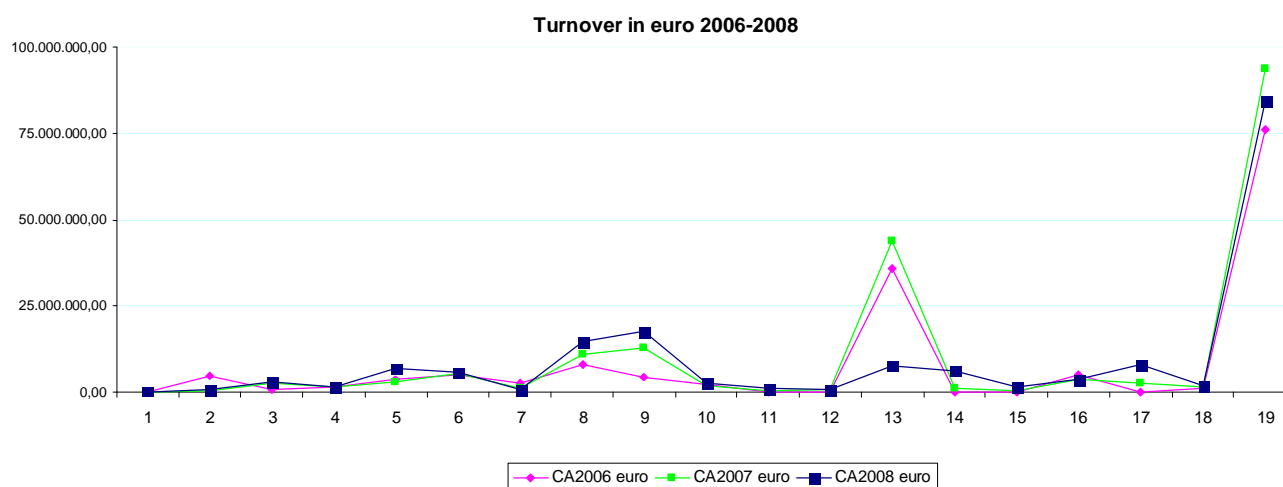


Figure 3. The evolution of the analyzed companies turnover

In proportion of 66.67% was higher than that recorded in 2007 and of 72.22% higher than in 2006. Average turnover in the 2006-2008 period and average profit can be found in Table 1. Although in more than 60% of the cases the turnover in 2008 exceeded the 2007 turnover, however, that average was higher in 2007 than in 2008. The smallest turnover was registered in 2006 and was about 7894, but in 2007 it increased by approximately 7.5 times and 22 times in 2008 compared to 2006 and 2.95 times compared to 2007.

Table 1 .Turnover and Profit 2006-2008

INDICATOR	2006	2007	2008
Turnover in euro	32.977.130,84	40.647.144,84	36.594.608,63
Profit euro	1.877.342,07	640.259,17	946.940,89

Note the analysis was done at a Euro course of 4.1179 RON (registered on 28.01.2010).

The highest turnover was recorded in 2007 and was about 386 million lei and was about 6500 times higher than the lowest turnover in 2007.

On average, and regardless the companies founded in 2006, 2007 and having no turnover in 2007, compared to 2006, turnover increased by 9.34 times, in 2008 by 29 times over 2006 and, in 2008 by 2.03 times of 2007. It appears that the ascending trend in 2008 was approximately 4.5 times less than that recorded in 2007.

In terms of profits in 2006 there were 3 companies (15.78%) which had a negative profit. The highest loss was recorded at 123,300 lei and the higher profit was of 13,148,336 lei and both were recorded in 2006. It can be noticed that the highest average profit was obtained in 2006 when

the average turnover was the lowest and the lowest profit average was obtained in 2007 when was recorded the highest turnover.

Compared to turnover, profit in 2006 was around -24% since there were 3 companies that have obtained a great difference between profit (negative) and turnover. The highest difference was about -318% profits on turnover. In 2006 the proportion was 29 lei profit to 100 lei turnover. In 2007 the average was 9.25%.

In 2007, the highest value recorded was about 72 lei profit to 100 lei turnover and the lowest value was 1.68 lei profit to 100 lei turnover. In 2008 the average was 8.5 lei profit to 100 lei turnover, the highest value was of 40 lei to 100 lei turnover and the lowest was 0.38 lei profit to 100 lei turnover. In 2007 compared to 2006 profit risen for about 2.35 times, in 2008 compared to 2006 increased by 2.23 times, in 2008 over 2007 by 4.6 times. I counted over for 2006 figures, firms which have posted profit 0 in 2006.

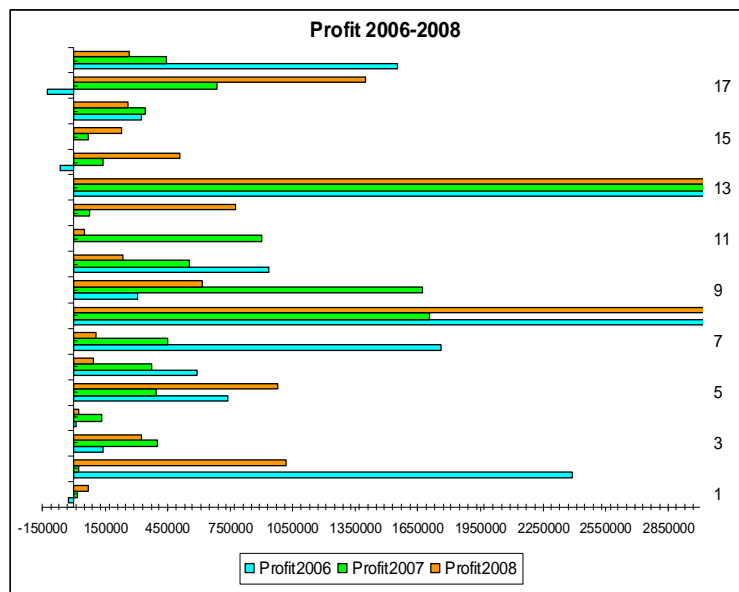


Figure 3. The evolution of the analyzed companies profit

THE NECESSITY OF A QUALITY MANAGEMENT SYSTEM CERTIFICATION

Another question at which firms responded: Why you need/ would you need a quality management system certificate: to Reply to European standards/requirements / Romanian standards/requirements, to expand, because we were ask by customers, by suppliers, to be more efficient or other reasons?

I've examined this question with the previous question. The results shows that:

- ❖ Companies that have experienced improvements in terms of prices charged, have achieved certification because of costumer requirements, (50% of reasons) and because they wanted to be more efficiently (50% of reasons).
- ❖ The main reasons behind firms that have experienced improvements in productivity responsible to carry out a certification were the Europe' requirements and standards (33.3%) and because they wanted to be more efficiency (33.3%).
- ❖ For companies that have improved product quality the reasons to obtain it were to improve the activity efficiency y (42.9%) and to respond to European requirements.
- ❖ Reduced businesses costs were obtained by those who received a certificate as a response to customer requirements result (50%) and desire to work more efficiently (50%).
- ❖ Companies that obtained it in response to European requirements and standards have also felt improvements in productivity, quality products/services and in organization.
- ❖ Those who wanted to expand and obtained quality management system certificate have felt improvements in organization.

- ❖ Some companies have obtained it because it was asked by suppliers and after the certification they too felt improvements in organization, quality products and services and productivity.
- ❖ Certification in response to customer requirements brought to organization positive changes in productivity (20%), quality of products and or services (20%) and organization (20%) and negative changes in price and cost
- ❖ None of the firms did not show other lines of improvement or other reasons for obtaining a certificate.

RELATIONSHIPS BETWEEN PARTNERS

The main types of partners analyzed were client, suppliers and staff from the state. 3.5% of the studied have a bad relationship with partners, 22.8% have a satisfactory relationship. 73.7% believe that relations with partners are good and very good.

Approximately 50% of firms have a poor relationship with partners and they consider that partner's attitude is bad and very bad, while firms that have a satisfactory relationship with them believe that attitude is good, in 41% of the cases. A much better opinion seems to have the one who consider having a good relationship with partners: 62.3% of them think that partners have also a good attitude and those who have a very good relationship at a rate of 52.6% think that attitude is good.

33.3% of companies surveyed believe they have a very good relationship with partners, a good relationship 40.4%, 22.8% a satisfactory relationship and a bad relationship only 3.5%. None of the companies consider the relationship being very bad. An interesting thing emerging from the analysis was that a good attitude, is not always attach to a better relationship. But a better relationship with suppliers is transferred in a better customers attitude

With the improving of the customer behavior the level of customer confidence in the firm increases. This leads to a more frequent company's services usage, or i.e. an increase in the sales. This increases the turnover, eventually leading to a increase in needs, materials or other goods and services purchased from suppliers. Customers with a better attitude and payment product / service is better and therefore the company can better fulfill obligations resulting in a better relationship with suppliers.

CONCLUSIONS

The Romanian tractors market is going through a difficult period. There is interest and commitment from both companies and the customers but there is insufficient funding. At time of writing this article "Rabla pentru tractoare" program is still not operational. The vast majority of Romanian farms has small size and can afford to buy a new tractor. On the other hand more and more companies invest in improving product quality and services and business efficiency through certification of a quality management system. According to the survey, QMSC does not influence the number of employees or the prices. Grounds for obtaining a QMS certificate were mainly the desire to streamline and to comply with rules / requirements of European Union and of Romanian. Unfortunately, companies have small size and market share, so all the companies examined have fewer than 100 workers. In addition, less than 10% of firms said they have managed to obtain in at least 2 consecutive years an annual turnover exceeding 25 million.

A positive aspect of the study was the relationship between business and customers. Traders, in general, are satisfied by their customer relationships and customer behavior is influenced by the relationship between firm and suppliers and vice versa.

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