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## STRATEGIC MAPPING OF THE RURAL FIRM: A BALANCED SCORECARD APPROACH

Wagner Luiz Lourenzani<sup>1</sup>  
 Timóteo Ramos Queiroz<sup>2</sup>  
 Hildo Meirelles de Souza Filho<sup>3</sup>

### ABSTRACT:

The present paper aims to propose an analysis and relation methodology of financial perspective, the customer perspective, the internal process perspective and the learning and growth perspective, in the same way as treated for Balanced Scorecard (BSC). The innovation, in this sense, is the treatment of all these factors together, searching to identify the cause-effect relations. Such instrument provides the understanding of all factors together that affect in the company result. Thus, the rural managers have a map to make their business decisions. Moreover, another factor that must be detached is the idiosyncrasies of rural firms, and specifically from smallholder farms. These factors are among others, the presence of family works, small scale, and family necessities versus business targets. The intention here is to provide for rural managers a efficient tool to concentrated and control the financial and non-financial aspects from a rural firm.

**Key-words:** strategic mapping, rural firm, balanced scorecard

### INTRODUCTION

In general, the strategic management business-oriented is not practiced formally in rural enterprises. Considering the smallholder agriculture, or small size farms, this affirmation is still more incisive. However, it is the strategic vision, and its execution, the way more important and efficient one to reach the family's and its business objectives.

The business of an enterprise characterized for smallholder agriculture is complex, because it interacts necessities of the family – life style – with the business requirements – enterprise's goal.

“The family business mixes emotions and sentimentality with objectivity and rational calculation. The family and the business are inseparably linked despite the relative incompatibility of the two components. The family business, unlike a corporate, must deal with the demands of family relationships as well as the demands of the market place.” (ROBBINS e WALLACE, 1992).

Generally, these objectives are conflicting. It fits to the family, then, to brighten up this conflict, looking for a balance of the commitments (family/business) necessary for the reach of its aspirations. In accordance with SHADBOLT e RAWLINGS (2000), for a smallholder

<sup>1</sup> Doctorating on Production Engeneering by Universidade Federal de São Carlos (UFSCar). Professor of Business Managment and Agribusiness – Univesidade Estadual Paulista UNESP/Tupã – Brazil. (e-mail: wagner@tupa.unesp.br)

<sup>2</sup> Doctorating on Production Engeneering by Universidade Federal de São Carlos (UFSCar). Professor of Business Managment and Agribusiness – Univesidade Estadual Paulista UNESP/Tupã – Brazil. (e-mail: timoteo@tupa.unesp.br)

<sup>3</sup> Professor of Production Engeneering at the Universidade Federal de São Carlos (UFSCar) – UFSCar: GEPAI - Grupo de Estudos e Pesquisas Agroindustriais. (e-mail: hildo@dep.ufscar.br)

<sup>4</sup> In this paper the expression “smallholder agriculture” follows the definition of “family management agriculture” from GUANZIROLI et al. (1996).

agriculture to survive and to have success its necessary to take care of a series of conditions: it must have the capacity to answer the pressures and challenges impose for the external aspects; it must grow or, at least, to be capable to pay its production cost (survival); to improve the production process and the marketing activities to keep the financial balance of the business; and, it must still be prepared continuously to take care of to the members family necessities and aspirations.

In all most all cases, the aim of family business – including smallholder agriculture – is to grow up sustainability, improving its viability and preparing its transition for the next generation. The family-controlled business has to be, therefore, managed in search of the short-term viability and the wealth in the long run (SHADBOLT e RAWLINGS, 2000).

Traditionally, the performance measurement of a rural business is based only on financial and productive perspectives. Indicators linked with personal and family objectives are rarely used in this kind of measurement. In this context, RAWLINGS et al. (2000) they consider the use of a Balanced Scorecard to assist the farmers to visualize the interactions that occur in theirs business, supplying an overview of its necessity beyond the productive and financial perspectives. In the same way, SHADBOLT e RAWLINGS (2000) explore the use of the Balanced Scorecard to improve the agricultural business-oriented planning and control.

In this way, adopting the approach of Balanced Scorecard (KAPLAN & NORTON, 1992), this paper objective to elaborate a characteristic strategic map of an enterprise characterized for smallholder agriculture. That structure allows the family farm manager (decisions takers) to look at the different components (indicators) of its strategy.

### **Balanced Scorecard**

The organizations dynamic environment is characterized by fast changes and constant uncertainty. In this way, for a correct taking organization decision its necessary precise and readily available information. In consequence of the advance in the information technologies (IT), to collect information is not problem; but, to use them in efficient and efficient way is a challenge. The organization depends, therefore, of mechanisms to spread, to filter and to use information appropriately and, thus, to create a process of continuous learning.

In this context, the systems performance measurement are tools developed specifically to explore and to disclose organization information in a strategic approach. It is stand out that the performance measured term represents a way of an organization performance can be understood, but not necessarily controlled (TODD, 2000).

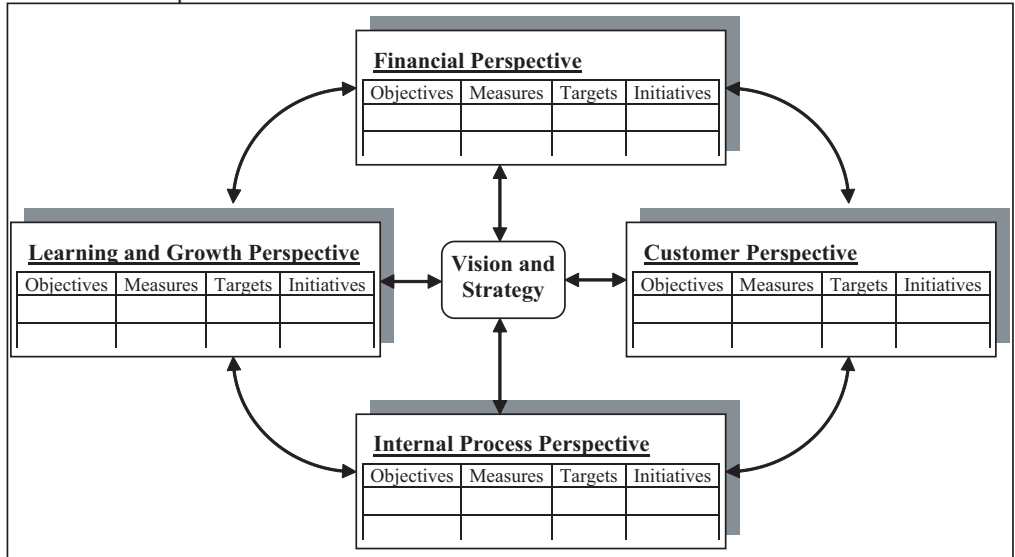
For a long time, several systems performance measures had been developed, with the intention of characterize enormous amounts of information in excellent indicators for the decision takers. Looking for to extend the implications associates to the traditional tools, Robert Kaplan e David Norton, developed, in the earlier 90's, the Balanced Scorecard (BSC); motivated, mainly, for the necessity of a change in the form to develop and to implement systems performance measures (KAPLAN e NORTON, 1992).

That “new” structure of performance indicators tries to supply the decision taker a clear and concise vision of his/her “business health” (business condition). It refers a more systemic strategic management tool (FERNANDES, 2002). In this way, the BSC intents to fill the gap between the strategic business-oriented vision and the operational taking decision of day-by-day (TOWLE, 2000).

The BSC is based on the notion that the organization needs one mix indicators in a systems performance measurement and these indicators cannot be randomly defined (TODD, 2000). Its necessary connect financial and non-financial indicators, since the financial dimension pre-



dominantly is guided by past facts not very analytic (FERNANDES, 2002). Therefore, the BSC includes financial indicators, that show the result of the actions from the past, and complement them with operational indicators, related with the customer satisfaction, the internal processes and the capacity of the organization in learning and improving - activities that stimulate the future financial performance.



Source: KAPLAN e NORTON (1996).

Figure 1 –The Balanced Scorecard structure.

In this way, the structure of the Balanced Scorecard is based on 4 perspectives, or dimensions, mainly: the financial perspective, the customer perspective, the internal process perspective and, finally, the learning and growth perspective. As show in the Figure 1, the structure of BSC is represented by the integration of these 4 perspectives, through connections that establish interactions them (KAPLAN e NORTON, 1996; NORREKLIT, 2000; TODD, 2000; RAWLINGS et al., 2000):

- Financial perspective: it shows if the implementation and the execution of the strategy on the company are contributing for the results improvement. The traditional indicators as cashflow, incomes, profitability, market share and Return on Investment (ROI) are monitored.
- Customer perspective: it refers about dedicated indicators that effectively reflect the important factors to the customers. The customers' interest tends to be fit in factors as, cost, period to pay, quality, performance and services. Indicators related to consumer satisfaction and the time of reply must be measured.
- Internal Process Perspective: the internal indicators of the Balanced Scorecard should reflect the organizations processes that exert the biggest impact on the customer satisfaction. That perspective aim abilities, competences and technology in terms to add value to the customer. Indicators as productivity, efficiency and manufacture quality are examples of this perspective.
- Learning and Growth Perspective: the capacity of the organization to innovate, improve itself and to learn, relates directly to the value of the company. But only with the capacity to develop new products, to add more value to its customers and to improve continuously

the operational efficiency the company will be capable to enter new markets and to increase its incomes and earnings. The learning curve and employee qualification are examples of indicators.

KAPLAN and NORTON (1992) stand out the importance of simplicity in the construction of a performance measurement system. According to these authors, many indicators shuffle the analysis process, instead of elucidating it. Moreover, on the elaboration of a BSC, the indicators definition that will be used in the diverse perspectives has to be based on an organization including and strategic vision.

An adequate BSC must understand indicators that have cause-effect relations, like a chain, representing the strategy organization (TODD, 2000). According to RAWLINGS et al. (2000), a good BSC makes possible the creation of a system that facilitates the shared agreement.

No isolated indicator is capable to supply clear performance goals or to concentrate the attention in the critical areas of the business. In this direction, the BSC searches a set balanced of financial and not-financial indicators. According to TODD (2000), a competitive strategy must prioritize the balance between the four presented previously perspectives.

METHODOLOGY

Based on literature revision from KAPLAN and NORTON (1992, 1996); TODD (2000); NORREKLIT (2000) and empirical research (diagnostic), the Balanced Scorecard here proposes attempt, conceptually, to develop an approach of enterprise strategy under the following perspectives: the financial perspective, the customer perspective, the internal process perspective and, finally, the learning and growth perspective.

The empirical approach was based of studies from ROBBINS, WALLACE (1992); SHADBOLT, RAWLINGS (2000); RAWLINGS, PARKER, SHADBOLT (2000); QUEIROZ (2004). For the elaboration of the strategic map adopt concepts from FERNANDES (2002).

Strategic Mapping of the Rural Firm

- Financial Perspective

The Financial Perspective try to evidence as the strategy adopt by the enterprise affects the business health. It is treated, therefore, of a perspective directly related with economic indica-

Table 1 – Objectives, measures, targets and initiatives to the family rural managers under the financial perspective.

Objectives	Measures	Targets	Initiatives
To gain <u>activity earning</u>	Returns	To increase the incomes and/or to decrease the costs	<ul style="list-style-type: none"> <li>- To increase the incomes of farm and non-farm activities;</li> <li>- To identify and to eliminate unnecessary fixed and variable costs.</li> </ul>
To increase the <u>operational cash margin</u>	Cash Margin	To increase the sealing price and/or to decrease the variable cost.	<ul style="list-style-type: none"> <li>- To add value in the product, looking for better prices;</li> <li>- To reduce variable costs, by a efficient production.</li> </ul>

Source: developed by the authors.

tors. The majority of the rural managers follow objectives and financial goals; however, the ability in identifying economic measures depends directly on the level of financial analysis that they do.



The identified indicators generally don't cover all the business; moreover, they tend to aim operational measures related to the enterprise's production and profitability. Therefore, under the financial perspective, the objectives, measures, targets and initiatives are presented in Table 1.

To control the indicators is necessary a system to collect and to operate the information, as the variable costs, the fixed costs, the incomes (of farm and non-farm activities), the selling price, among others.

According to QUEIROZ (2004), the "business financial health" is excellent not only in the operational aspect, but, also, for the income improvement and family life quality. In this direction, small adequacies in the financial aspects can to make possible the sprouting of new productions, collaborating with the diversification in the productive strategy.

### - Customer Perspective

The consideration that the agents of the distribution channel are consuming of the agricultural producers isn't so evident to the farmer's producers. Thus, to identify performance indicators, under the perspective of the customer, isn't an easy task.

In this way, based in the requirements and difficulties faced for the main agents of the distribution channel (supermarkets, varejões, sacolões and quitandas ) the rural enterprises and its respective indicators had been established strategic objective for (Table 2).

**Table 2 – Objectives, measures, targets and initiatives to the family rural managers under the customer perspective.**

Objectives	Measures	Targets	Initiatives
To develop the firm <b><u>demand</u></b>	<i>Demand</i>	To increase and/or maintain the costumer number	<ul style="list-style-type: none"> <li>- To look for more profitable distribution channel;</li> <li>- To satisfy each customer requirements</li> </ul>
To set up a high level of <b><u>customer satisfaction</u></b>	<i>Costumer Satisfaction</i>	To satisfy the costumer, through the increase of its criteria	<ul style="list-style-type: none"> <li>- To improve the product quality level;</li> <li>- To set up competitive prices;</li> <li>- To provide offer regularity</li> </ul>
To set up <b><u>competitive prices</u></b>	<i>Selling price</i>	To offer compatible price to the market and production costs	<ul style="list-style-type: none"> <li>- To follow the price market behavior;</li> <li>- To define the price in function of production costs</li> </ul>

Source: developed by the authors.

The targets and initiatives established for each strategic objective show the integration necessity with the market, because the possibilities of increase of production sales as the demands of the distribution channel agents are satisfied.

Thus, it should be salient that the search for more income channels is a strategy that must be pursued by the rural managers. For in such a way, it is necessary that the quality and the offered products price to be able to satisfy the necessities imposed by the potential customers.

It's possible to perceive that this perspective indicators are composite for internal information (productive) and external of farm (marketing). The identification and the control of this information are mainly relevant to take strategic decisions.

- Process Perspective

The internal processes perspective is better satisfied for the rural managers. Because, probably, for a bigger ability technique of these managers in comparison its managerial abilities. In this way, they are more comfortable actions to be treated inside the farm.

The strategic objectives are proposed in the Table 3, as well as the respective objectives, measures, targets and initiatives that have to be managed by the family rural managers under the internal process perspective.

Table 3 – Objectives, measures, targets and initiatives to the family rural managers under the internal process perspective.

Objectives	Measures	Targets	Initiatives
To increase the level of <b>productivity</b>	<i>Productivity</i>	To up grade the productive efficiency	- To use equipments and techniques that improve the level of productivity
To increase the level of product <b>quality</b>	<i>Level of perceived quality</i>	To up grade the level of costumer perceived quality	- To identify the level demanded for the costumer; - To make decisions that increase the costumer perceived quality

Source: developed by the authors.

In accord with the customers’ perspective, the indicators used for the internal processes perspective look for to satisfy the market strategy integration. However, the main problem isn’t inside farm’s techniques that, inside of the reality of each producer, are fully available. These problems are, over all, in the understanding the markets performance and in the management productive process practices ones.

- Learning and Innovation Perspective

The strategic analysis under the growth and learning perspective is extremely poor. The family rural managers aren’t capable to establish measures related to its personal or professional development. Regarding the lack of knowledge and managerial abilities, these seem to be don’t consider it as an area of priority to the enterprise.

However, in according with QUEIROZ (2004), the objective of the learning and growth is to offer the necessary infrastructure to develop the objectives of the three previously perspectives. Thus, it is the vector that takes resulted to the perspective financial perspective, the cus-

Table 4 – Objectives, measures, targets and initiatives to the family rural managers under the learning and innovation perspective.

Objectives	Measures	Targets	Initiatives
To improve the <b>managerial and technical competences</b>	<i>Capacity Level</i>	To advance in the learning curve	- To provide training opportunities; - To develop the managerial and technical competence; - To look for relevant information
To provide <b>employee motivation</b> (from family or contracted)	<i>Employee satisfaction level</i>	To put employees’ and enterprises’ targets together	- To recognize the employees’ necessities (security and welfare); - To develop employee’s competences

Source: developed by the authors.





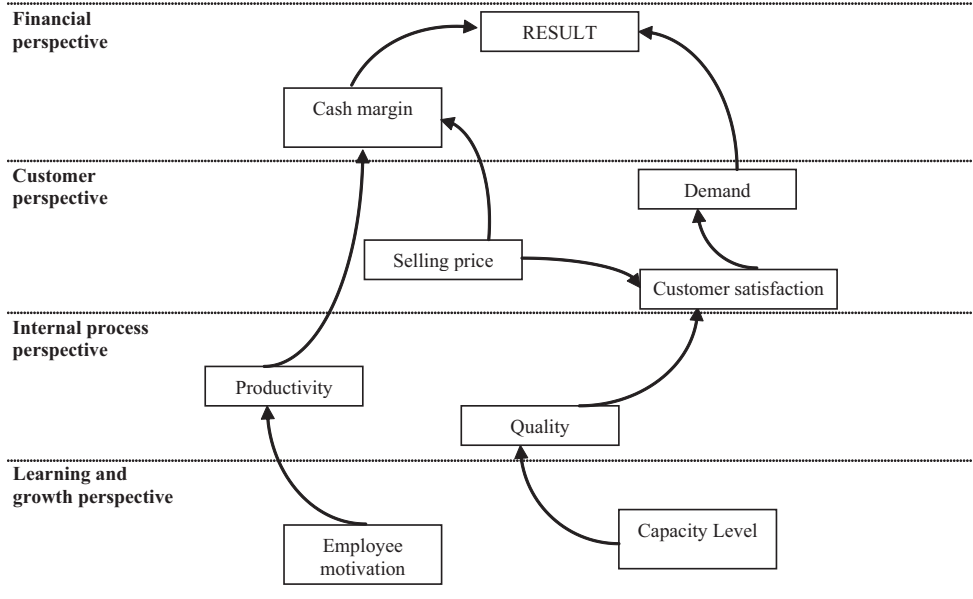
customer perspective and the internal process perspective.

Thus, the Table 4 shows, under the learning and growth perspective, that basic the strategic objectives are: the improvement of the managerial ability and technique of rural manager and, the employee motivation (from family or contracted). They are presented still, the Objectives, measures, targets and initiatives to be used for each one of the objectives.

The capacity to get and to process information and the ability in the use of agricultural techniques and more sophisticated management methods also determines the enterprise's success. In this direction, the best performance of determined groups of family growers is, in general, also affected by better education level.

Special emphasis must be taken to the employee satisfaction and productivity. Considering that biggest part of workers came from family, it is really important that the activities provide welfare and motivation (QUEIROZ, 2004).

A scorecard must expose the relations between the indicators of the diverse perspectives, making possible the strategy management. Each selected indicator must be an element of a cause-effect relations (like a chain) that flow away the enterprise strategy meaning (FERNANDES, 2002). The result serves as a map, like a guide to aim the objectives (Figure 2).



Source: developed by the authors.

**Figure 2 - Strategic BSC map of a rural family farm: cause-effect indicators.**

## REMARKS

Based on the KAPLAN and NORTON (1992) proposals, it stood out that the strategic map presented here considers the importance of the system simplicity, because many indicators confuses the analysis process, instead of elucidates it.

Therefore, this map aims to supply excellent information, under four different perspectives, and that, when analyzed jointly, they elucidates to the rural managers a holistic vision of its business. Through the identification of indicators, financial and non-financial indicators, considered critical for the enterprise success, as well as its cause-effect relations, the BSC map leads the managers to visualize if the improvement in a determined area is in function of others.



This is about the performance indicators development that can be tested. Thus, from the study of the correlation of the indicators it is possible to generate strategic sets, serving as a structure to the sharing of information, creating, thus, a learning cycle.

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