

# THE MANAGEMENT CHALLENGES OF BRAZILIAN GRAIN PRODUCERS

**Author 1:** Roberto Fava Scare

**Institution:** University of São Paulo - School of Business, Economy and Accounting of Ribeirão Preto.

**Mailing address:** Avenida dos Bandeirantes, 3900 - Ribeirão Preto - SP - Brazil, zip code 14040-905

**Telephone:** + 55 (16) 3602-3888

**Email:** rfava@usp.br

**Author 2:** Frederico Fonseca Lopes

**Institution:** MARKESTRAT - Marketing & Strategy Project and Research Center.

**Mailing address:** Rua Maestro Ignácio Stábile, 520 - Ribeirão Preto - SP - Brazil, zip code 14025-640

**Telephone:** + 55 (16) 3456-5555

**Email:** fflopes@markestrat.org

**Author 3:** Rodrigo Alvim Afonso

**Institution:** MARKESTRAT - Marketing & Strategy Project and Research Center.

**Mailing address:** Rua Maestro Ignácio Stábile, 520 - Ribeirão Preto - SP - Brazil, zip code 14025-640

**Telephone:** + 55 (16) 3456-5555

**Email:** ralvim@markestrat.org

**Author 4:** Flavio Ruhnke Valerio

**Institution:** University of São Paulo - School of Business, Economy and Accounting of Ribeirão Preto.

**Mailing address:** Avenida dos Bandeirantes, 3900 - Ribeirão Preto - SP - Brazil, zip code 14040-905

**Telephone:** + 55 (16) 3602-3888

**Email:** frvalerio@fearp.usp.br

**Author 5:** Janaina Gagliardi Bara

**Institution:** University of São Paulo - School of Business, Economy and Accounting of Ribeirão Preto.

**Mailing address:** Avenida dos Bandeirantes, 3900 - Ribeirão Preto - SP - Brazil, zip code 14040-905

**Telephone:** + 55 (16) 3602-3888

**Email:** janainabara@fearp.usp.br

# THE MANAGEMENT CHALLENGES OF BRAZILIAN GRAIN PRODUCERS

## *Abstract*

Brazil is one of the most important players in the global agribusiness. However, the Brazilian agriculture has a historical deficiency in the management of rural ventures that affects the profitability of the producers. In a moment that the country is becoming more demanded to be one of the world's suppliers of food this issue needs to be resolved and the identification of the main difficulties at the production process is the cornerstone of the problem. Because of that this paper seeks to address the main challenges that Brazilian grain producers have to face in order to succeed in their business. The research was based on literature review, market experts opinion and the answer of 247 questionnaires applied with grain producers through the country. The results shows the eight main challenges that those producers need to pay attention and also presents the differences in the importance of the challenges by country region and farm size.

**Key words:** Farm Management; Grains; Challenges

## **1. Introduction**

The expression "farm management" was defined by Nagaoka (2011) as the management of available and potencial resources aiming a better use of soil, water, machinery, tools and human resources in a rural property.

The rural endeavors are inserted in the agribusiness segment. This word comprehends the sum of all activities in the agricultural sector as the agricultural inputs suppliers, machinery and tools manufacturers, the industrial processing and the distribution of products and services and comprising also the livestock production chain according to Pinto et al. (2010).

Brazilian agribusiness is one of the most important sectors in the country, the balance of trade is only positive because of agriculture and livestock. The GDP of agribusiness represented over than 22% of the Brazil's total GDP in 2013 in the data from Cepea (2014). Besides that, the sector has been growing in terms of worldwide importance and in financial results.

In grains cultures the significance of Brazil is also expressive: the production of the 2013/2014 crop was the fifth greatest in the world. Mainly in soybeans that Fao (2014) expects that Brazil will achieve the first position in the global ranking in this crop.

According to Lourenzani (2006) several variables have influence in the performance of a rural endeavor like obtaining funds, decision making process, buying a technological solution, the input's purchase, commercialization of the production, negotiation, market access and others. And to deal with this amount of variables, management skills are demanded from the rural producer.

However the Brazilian agriculture has a historical deficiency in the management of rural ventures that affects the profitability of the producers. In a moment that the country is becoming more demanded to be one of the world's suppliers of food this issue needs to be resolved and the identification of the main difficulties at the production process is the cornerstone of the problem.

Lourenzani (2006) states that this deficiency causes negative impacts in the development of the sector and hence in the integration with more dynamic industries and markets. The technical issues are well handled and the farmer has easiness in dealing with them but the problem lies in the management practices. Also a portion of rural producers ignores the market evolution and the changes in consumer habits looking only to the activities "inside the farm" as if it is disconnected from the chain.

Additionally the post production moment is also very important. The producer needs to take into account a variety of commercialization tools and a great price oscillation to obtain the best of their harvest. In many situations the farmer is not prepared or does not have the information and skill to accomplish that.

Therefore the farmers have a big challenge in the management of their properties and the qualification and the development of management skills can further better conditions for the international insertion of those producers.

With that we come to the research question that is: "What are the main management challenges faced by the managers of rural properties?"

## **2. Objectives**

The general objective of this paper is to identify the challenges in management practices of Brazilian rural endeavors in order to raise the efficiency and profitability of the grain producers in Brazil. This analysis may foster a qualification process of the farmers in the future.

The secondary objectives are:

- Collect data about the main challenges of the producers in managing their properties nowadays;
- Comprehend the differences between the Brazilian geographical regions and the size of farms;
- Analyse the results and identify needs for training and qualification process of those farmers.

### **3. Literature review**

A professional management demands that the manager thinks the process as a whole, the challenge is the identification of competitive advantage during the process and the development of strategies to obtain those advantages. The strategic management for Nell and Napier (2000) can be successful when is addressed in a multidisciplinary way and performed in a integrated manner. In the literature review we discussed the main themes related to the complete farm management.

#### **Strategic planning**

The environment that agribusiness is inserted has been through a lot of structural changes. For Lopes and Ross (2013) the strategic planning of organizations in the segment also should adapt to this new context so that the performance of those enterprises continues to present good results.

The market changes and the peaks or crop failures makes that the predictions and planning process that are too tight can be an obstacle for the rural endeavors and therefore is necessary to modify the strategic planning practices. Besides that, Lopes and Ross (2013) believes that two activities related to strategic planning seems to have a strong positive relationship with the companies performance: mission and objectives statement and external analysis of the industry.

For Boehjile, Roucan-Kane and Bröring (2011) the structural changes of the sector like the convergence of industries and the evolution of the value chain will require management skills from the rural managers.

#### **Governance and Succession**

The majority of farmers in several countries like Japan and United States are family-owned business and the managers who are ahead of those companies also have an advanced average age according to the Ministry of Agriculture Forestry and Fisheries (2010) and the USDA (2012).

In Brazil the scenario is very similar according to IBGE (2006) 77% of the employees of Brazilian farms have family ties with the owner what shows that the structure of those companies are also family-owned.

These numbers become a challenge for the managers in agribusiness because only one third of the organizations achieves the second generation in the family. Besides that only half of these achieves the third generation in the data of SBA (1996).

The challenges are even bigger because as Cohn (1991) states only 5% of the companies do a preparation of the successors that will manage the enterprises. Burkart, Panunzi and Shleifer (2003) also demonstrated that the family transitions are often important and delicate what requires that the managers have great management skills to do the succession process.

Another important issue is the maintenance of the family power on the company since that Mizumoto (2007) says that with the natural growth of the business, the trend is that the control will be diluted. Therefore is necessary that through a corporate governance system the rural endeavours be professionalized. The corporate governance according to IBGC (2006) develops the rules between the agents involved in the management and control of the organizations.

### **Sustainable Management and Legal Aspects**

For Jones and Sands (2013) the governmental pressure on the international level for the reduction of green house gas emission have decreased the amount of gas because these actions that do not pollute are encouraged by the governments as the food demand have grown in the last years.

As the food consumption have increased the governments both locally and globally have pushed the industry so they have better soil management, water usage, energy and inputs. That will demand among other things a highly advanced management capacity from the rural producers to Neves and Scare (2013).

Besides that we have to consider that the World Bank (2013) says that one quarter to one third of the global green house gas emissions are due to farm's activities and the conversion of not used land in arable land.

### **Production Costs Management**

The cost efficiency needs to be Always better so that a company can survive and maintain itself competitive in today's market. Gaigné and Mener (2013) shows that a price reduction in inputs can make the less efficient organizations in using these inputs leave the industry and generate an industry concentration with the most productive surviving. The authors state that this can occur because of the relation between input's cost and work productivity what makes that the marginal cost of the most efficient organizations become even lower than the least efficient ones.

When the production costs are high, they are a threat to the competitiveness of the rural endeavours and several factors that compose the production cost appear as challenges to the rural producers according to Lopes (2012).

The Imea (2014) presents the factors that compose the production cost of producing soybeans in the region of Sorriso in the Mato Grosso state: seeds, fertilizers, agrochemicals, operations and maintenance of machinery, labor force, taxes, financial expenses, land depreciation, land cost, insurance, storage and transport of the production.

An interesting issue pointed out by Lopes and Ross (2013) in their study is that in the twenty years between 1992 and 2012 there was a significant increase in company's intention in the sample to invest in renewing or buying fixed assets for their organizations.

In a recent study Colleta (2012) shows that in the research sample, 44% of the grain producers do not own an inventory that identifies the patrimonial equity of the property which includes storage assets, facilities, equipment and machinery.

### **Human Resource Management**

As agribusiness has been changing and growing, new technologies were incorporated and the business became more global and complex but Lyons and Connolly (2012) believe that the society was not fully conscious of this change and to attract good employees has become each time more challenging for the rural producer because people do not seek for jobs related to agribusiness. For Neves and Scare (2013) that is the case of skillful young people that seek other industries by the image that those are more exciting than agribusiness.

Lyons and Connolly state that besides the recruiting challenges, the education and training of the employees also is a challenge to be faced by the sector. As the innovations in agribusiness are developing in a very fast pace and the industry is very technical, the demand for employee's knowledge is high, also the direct contact with consumers and influencers are done by them so the labour force must have not only a advanced education level but also ongoing education to adapt and performe well on this scenario.

This reality applies to Brazil that in the last years changed from a period of high unemployment rates in which there was available labour force to the industry to a current situation in which there is a lack of workers. Coupled with the fact that this workforce is expensive and poorly trained has made this challenge one of the biggest of the Brazilian farmers according to Neves and Scare (2013).

Another reason for the sector to be worried is in the words of Neves and Scare (2013) that this challenge is not easily countered and the actions take time to be effective. Massive investments in education must be done to ensure that in the future this frame be different.

The agribusiness as shown by Noel and Qenani (2013) have demanded different skills of the workers, nowadays creativity and critical thinking have played na important role for the employees of the sector. Social skills like interpersonal communication, hability to work in groups also are valuable in this new scenario but not easily found in the available professionals.

In a recent study that involved several american agribusiness companies Lopes and Ross (2013) compared the company's satisfaction with the management activities that they developed in 1992 and twenty years later. The only factor that presented reduction in the satisfaction of the research sample was the recruitment of new and qualified employees.

### **Process Management and Quality**

According to Colgan, Adam e Topolansky (2013) some process management practices like the application of lean production principles can bring benefits to the agricultural property in terms of waste reduction and improvements in the final quality of the products.

The lean production process seeks to divide the activities in stages and to reduce the inefficiency in each stage, in a rural property it can include land, inputs, time, facilities and equipments. This practice allows that the rural producer to differentiate his or her products in the value chain and achieve a higher competitiviness.

## **Financial Management**

The high investments and costs of a farm and the great amount of revenues earned by the farmers features the business as one with high working capital. For this reason Colleta et al. (2012) state that the control over the financial movement is important so that the entrepreneur define the strategies for the business sustainability and it involves the financial health.

The financial manager does several activities and functions in the farms that assure the operational efficiency and support the acquisitions and investments of the company. Gloy and Ladue (2013) believe that it comprehends the maintenance of control systems and historical performance in addition to analyse the business profitability.

In all farms and specially in those that are in growth and expansion phase, the financial decisions to be made, have received more importance. Because of the impact that the financial decisions like the origins of the farmers funds have in the profitability of the rural endeavour Hirschauer (2011) believes that they should have the same importance of investment decisions.

Farmers that are used to realize a detailed financial analysis and/or investment analysis were identified in the study of Gloy and Ladue (2003) as achieving a greater profit than the rural producers that do not realize these analyses.

The study of Dong, Lu and Featherstone (2012) shows that without credit restrictions the average yield of the farm can increase. What makes that a good financial management in obtaining funds is critical in the sector.

According to Hirschauer (2011) is not unusual that farmers maintain bank relations with only one financial institution even though this bank has interest rates bigger than the other financial options available in the market.

The farms need to acquire and process several informations for the management and in financial decisions it is not different because the farm's records are used to analyse the profitability, ability to pay and cash availability of the organization to Wolf, Lupi and Harsh (2011).

The utilization of budgets, sales projections and cash flow of the company can be importante to the performance of the agricultural organization as Lopes and Ross (2013) present. However in their study Gloy and Ladue (2003) show that less than half of the farmers do not



do a budget every year. The measurement of return rates and NPV also are not often used by the farmers that composed the sample.

In a research done in the Mato Grosso do Sul state Colleta et al. (2012) show that 90% of the sample's farmers do expenditure's control, 70% calculate the economic margins and despite not being statistically significant one can note that there is a relation between the size of the farm and the utilization of electronic means for registering the financial information: as the property is bigger also is the bigger the percentage of computer's usage.

### **Commercialization**

The commercialization is a challenge to be faced by the rural producers as several are the factor that have influence in the price formation of agricultural commodities. Chen et al. (2014) argue that price fluctuations that affect agricultural products in global markets have intriguing behaviour because they challenge what the economic theory postulates. The authors point out as one of the factor responsible for that being the variation in dollar's exchange rates because the international prices are established according to the dollar.

The oscillations in the price of inputs for grain production is another factor that has impact on the price for the final consumer of the commodity and therefore in the product commercialization. Holt and Craig (2006) say that it happens because the production costs can define the final price of the product.

Holt and Craig (2006) also point out that decisions in the commercialization process should consider the urban consumers demand for the product and the costs of transportation and logistics. The authors exemplify that the price relation of two different commodities caused by the offer and demand can change the decision in the production and commercialization of grains.

For Goodwin, Holt and Prestemon (2011) the market value of homogeneous products can vary according to the geographical localization of the product's sale this occurs because of transportation cost and transaction costs like insurance, contracting, legal and licensing fees, and risk premium.

### **4. Research Method**

The research was realized with two phases, the first one was qualitative and the main themes in farm management were identified. The second phase was quantitative because

questionnaires were applied with farmers to identify which of these themes are considered more important.

The research method that better achieved the objectives was the descriptive. According to Sampieri, Collado e Lucio (2006) these research models describe the relations between two or more categories of concepts or variables in determinate moments.

In order to obtain the perspective of the main challenges in management practices, a bibliographic review in the subjects of agricultural endeavour's management and the opinion of eight experts of the sector through in depth interviews. These experts included researchers, association members, employees from private companies and even large and structured grain producers. From the analysis of the interviews and literature review were identified eight themes that are considered the most important in the management of grain production in Brazil.

Before the second phase ten pretests were realized with grain producers as suggested by Malhotra (2001) to validate the eight themes identified in the first phase and for potential adjustments in the language and arrangement of the questions presented.

In the second phase another procedure was conducted with the application of questionnaires with soybeans producers from all regions of the country. We received 247 valid answers in this phase. These producers were selected from the nine most significant Brazilian states in terms of harvest area and soybean production. These selected states are in alphabetical order: Bahia, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Rondônia, São Paulo and Tocantins.

During the questionnaire application the producers were requested to assess in a five-point scale the eight themes in two different variables:

1. The importance of the themes for the farmer's business future (1 being not important at all and 5 being very important);
2. The current knowledge of the farmers about the themes (1 being any knowledge and 5 being great knowledge about the theme).

We did normality tests with both "importance to the future" and "current knowledge" for all the eight themes. None of them were characterized as normal distribution and because of that the next step was performing nonparametric tests to understand if there were differences between the theme's score. As we found in the paired Wilcoxon's test with all the eight

themes, they are significantly different with a confidence level of 95% so allowing us to rank the themes.

The combination of the 247 answers of these two constructs generated the main challenges to be faced by the farmers in the future.

Apart from a general perspective of the country, two segmentation criterias were utilized for developing the knowledge about the challenges faced by the grain producers:

- Country region – three Brazilian regions were utilized in this segmentation (Northeast, Midwest and South) according to their importance to the grain production in the country;
- Size of the farm – the farmers were divided in three size ranges: big farmers (harvest area equal or bigger than 200 hectares for properties in the South region and in São Paulo state, and equal or bigger than 500 hectares for the other states); medium farmers (farms bigger than 50 hectares and lower than 200 hectares in the South region and in São Paulo state, and bigger than 200 hectares and lower than 500 hectares for the other states); and small farmers (lower than 50 and 200 hectares for the South region and São Paulo state, and other states respectively).

#### **4. Results and Discussion**

The first phase of the study that involved in-depth interviews with market experts revealed eight themes that would be important topics in rural endeavours management for today and a nearby future.

Several topics were raised e quoted by the experts and throughout our analysis it was grouped in eight themes. For this reason some of these themes involve a variety of issues and will be explained below:

Commercialization – the commercialization theme was quoted by all the experts as one important challenge to be consider by grain producers because of price fluctuations that takes place in the market and the lack of general information over the theme. The theme involves from the ability to learn and comprehend the market and develop likely scenarios to the knowledge and utilization of commercialization tools for selling the production.

Cost Management – as a result of the raise in production cost that several crops have faced in agriculture, the interviewed experts indicated the cost management as another great challenge. Therefore the structuring of an adequate cost system, financial information controls and utilization of this structure for the decision process will be important in the sustainability of these organizations.

Financial Management – another theme that comes very connected with the need for professionalizations of the farms. The challenge in this case involves understand and manage revenues and expenses, the cash flow management, budgets aligned with farm's strategic planning and concepts of investment analysis. Another topic that was included as important in this theme is the funding structure of the rural endeavours.

Management and Development of Human Resources – this challenge involves several themes on human resources management like leadership issues, motivation of employees and recruitment and selection of workers for the farms. It was quoted by the experts issues like training and qualification of these professionals too, in other words the biggest challenge for grain producers will be attract, develop and maintain talented people.

Process Management – the interviewed stated that the demand and requirement for high quality products is increasing. This implies in a lot of consumers worried with the identification of “where” and “how” their foods are being produced. A tool to be used to support the quality management is the process mapping. To be suitable to this reality was pointed out as a challenge to be faced.

Strategic Planning and Management – the majority of rural producers do not have a long-term vision of the business management and together with the capacity of planning their actions is characterized a present problem in Brazilian properties. Even in cases that the farms have a more structured planning process, the manager still has to solve the problems of execution and monitoring of action and projects that resulted from the strategic planning.

Succession Process and Governance – this theme is important because many rural producers do not have a professionalized management and they run their business in a very weak way without any technical groundwork and it includes the corporate governance mechanisms. Besides that, the topic of succession in farms is also included in this theme because of being very common in rural business that the farmer give the control of the company to their relatives or they assume the responsibilities when the manager passes. Bernhoeft and Gallo (2003) argue

that the succession process in family-own companies is very delicate and can jeopardize the business sustainability if not well done.

Sustainability and Standards Adequation – according to the experts interviewed, this theme is very wide, it includes two legislation pathways, and that is the reason why the topics were grouped together. The first one is the sustainable management of the company that involves topics of water usage, waste, chemicals application and their consequences, and suitability to the environmental legislation and specially to the new forestry code in Brazil. The second one we identified the challenges in labour legislation adequation, for example, the use of security equipments, payment of labor charges and providing optimal conditions for the workers.

In table 1 we developed a list of the eight themes raised by the experts and a brief explanation of the challenges:

**Table 1 – Brief description of the eight challenges**

<b>Challenges</b>	<b>Description</b>
Commercialization	Commercialization tools, scenario building and market interpretation
Cost Management	Involves the production cost and assets management
Financial Management	Revenues, profitability and cash flow management
Management and Development of Human Resources	Training and selection of human resource and legislation adequation
Process Management	Involves quality and certification in the processes
Strategic Planning and Management	Planning and management of the rural endeavors
Succession Process and Governance	Continuity of the rural endeavors and governance
Sustainability and Standards Adequation	Legislation adequation and ambiental management

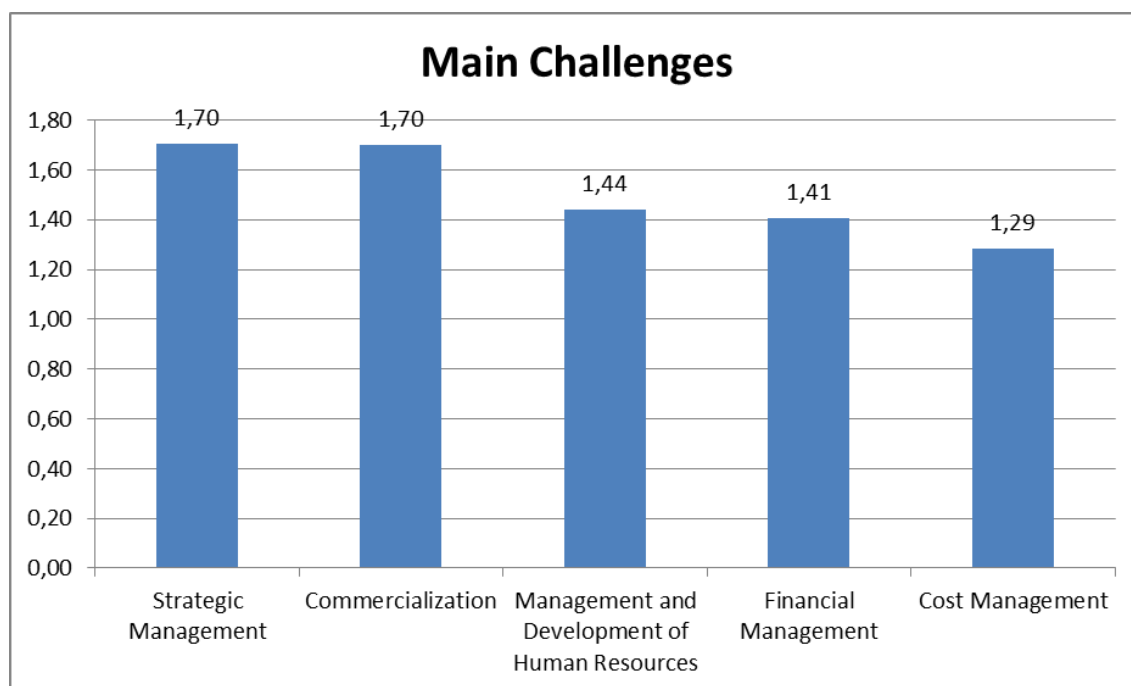
After this first phase 247 questionnaires were applied with grain producers. As result the five biggest challenges that Brazilian grain producers will have to face in the next years in order to increase their efficiency and possibly their profitability were identified.

These five challenges in order of importance are: Strategic Planning and Management; Commercialization; Strategic Planning and Management; Financial Management; and Cost Management. The match between current knowledge of the farmers about the themes and the importance that the theme has to the future of the business, resulted in a score that indicated which are the biggest challenges as we can see in chart 1.

Including all the eight challenges pointed out by the experts, the themes that had the higher scores considering only the importance in the the future of the property were Strategic Planning and Management, and Cost management (average score of 4.62). On the other hand, the theme with the lower score in this factor was Process Management (average score of 3.96).

## COMENTÁRIO

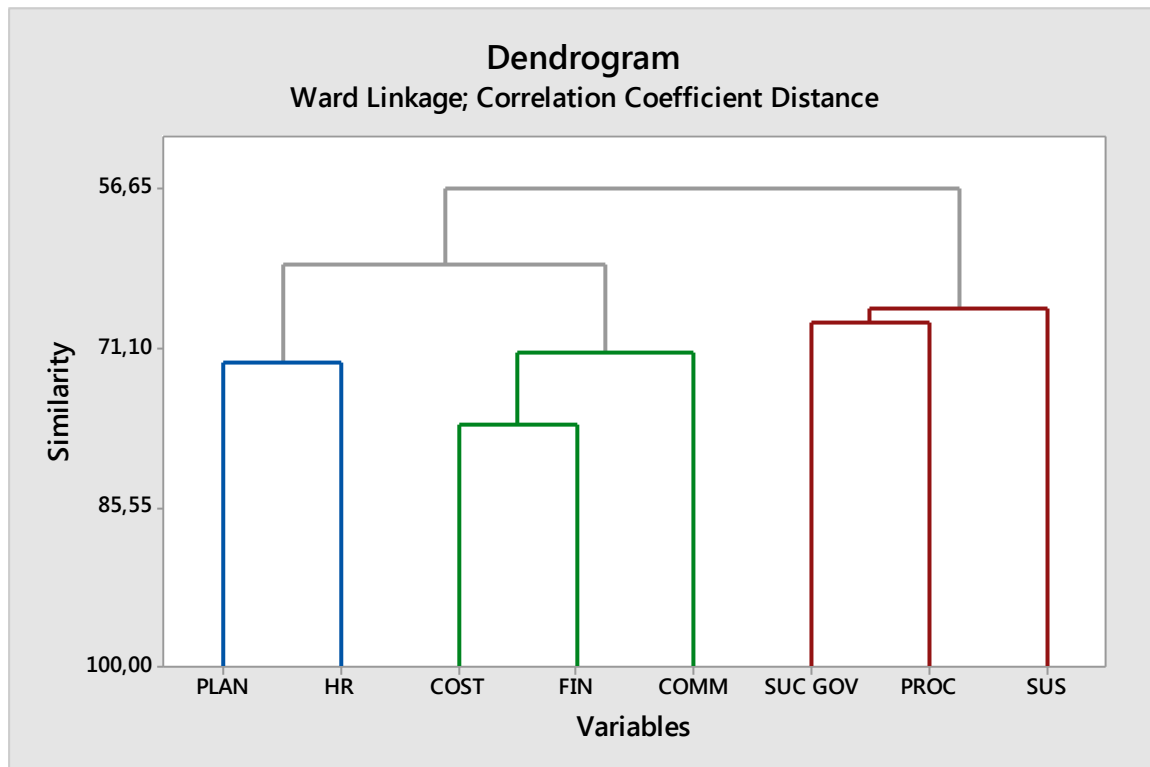
**Chart 1 – Five main challenges**



In the other question, current knowledge of the producers about the theme, the challenge that received the lower score (and because of that higher qualification demand) was Commercialization with an average score of 2.88. The challenge that presented the higher score in this question was Cost Management with 3.33.

We also did a cluster analysis for the eight themes using the correlation distance and the Ward linkage. The result was the grouping of themes in 3 different sets that we called “solutions” as presented in the dendrogram:

Chart 2 – Cluster Results



The three resulting clusters were:

- Administrative Challenges – both the challenges of Strategic Planning and Management, and Management and Development of Human Resources were grouped together and it characterizes a more administrative side of the farm management;
- Finance and Risk Challenges – this solution features the challenges of Cost Management, Financial Management, and Commercialization and because of that we can consider that it involves the management of money flow and the risk management on the properties;
- Legal and Procedural Challenges – the three remaining challenges of Succession Process and Governance, Process Management, and Sustainability and Standards Adequation gathered shows that this solution gathers challenges related to legal issues and how producer can suit themselves to the standards and procedures.

These solutions can help private companies and the government to establish investments or policies to improve the Brazilian competitiveness of management at grain farms.

In order to understand better each of of Brazilian's productive region, we tested the challenge analysis another time but this time we compared the data from three different regions of Brazil: Northeast, Midwest and South.

#### **4.1 Northeast region**

To the northeast region a different challenge from the Brazilian average showed up as one of the most importante in the rural endeavour management. The biggest challenges are: Strategic Planning and Management; and Sustainability and Standards Adequation (both tied as the biggest challenge); Financial Management; Commercialization; Cost Management.

The theme with higher score in current knowledge was Cost Management with an average of 3.00 and the lower considering only this factor was Process Management (1.82). If we consider only the answers on the question of importance to the future of the business, we identified as the higher scores the themes of Commercialization and Sustainability and Standards Adequation (both with 4.62) and as the lower score Process Management (3.45).

#### **4.2 Midwest region**

The Midwest region also presented the same management challenges identified in the the analysis of the full sample. However the biggest highlight was that there were few changes in the order of importance: Commercialization; Strategic Planning and Management; Financial Management; Cost Management; Management and Development of Human Resources.

The theme with higher average score in current knowledge was Cost Management (3.98) and the lower score considering only this variable was Process Management (2.28). Considering only the importance of the theme to the future of the businesse we can see the higher score being Commercialization (4.61) and as the lower score also Process Management (3.85).

#### **4.3 South region**

The South region also presented the same management challenges identified in the the analysis of the full sample of 247 soybean producers in Brazil. Just with one change in the importance order, there are the challenges for the region: Strategic Planning and Management; Commercialization; Financial Management; Management and Development of Human Resources; Cost Management.

The higher score on importance in the future for the producers of South region was Cost Management (4.75) and the lower was Process Management (4.07). Considering only the



current knowledge of the producer, the higher score became also from the Cost Management theme (3.32) and the lower score was from Process Management (2.40).

Table 2 serves as comparative between the challenges in the three different regions and the full sample. It evidences the rank of themes that were considered the five main challenges after the questionnaire application.

**Table 2 – Main challenges by Brazilian region**

<b>Theme</b>	<b>Brazil</b>	<b>Northeast</b>	<b>Midwest</b>	<b>South</b>
Commercialization	2nd	4th	1st	2nd
Cost Management	5th	5th	4th	5th
Financial Management	4th	3rd	3rd	3rd
Management and Development of Human Resources	3rd		5th	4th
Process Management				
Strategic Planning and Management	1st	1st	2nd	1st
Succession Process and Governance				
Sustainability and Standards Adequation		1st		

We can observe that in Brazil and also considering only the Midwest or South regions, the challenges to be faced corresponds to only two identified solutions: “Finance and Risk” and “Administrative”. Only the Northeast of the country needs focused policies and investments also in the “Legal and Procedural”.

### **Property size**

On the second segmentation that we done in the paper the results are compared by the size of the farm. Some producers chose not to answer the harvest area of their properties in the questionnaire and because of that the sample is smaller than the regional sample (142 valid answers).

### **Small**

Generating an analysis that considered only small properties the rank of challenges to be faced are: Sustainability and Standards Adequation; Commercialization; Strategic Planning and Management; Succession Process and Governance; Cost Management.

The most important theme in the future of the business in the perspective of small farm-owners was Strategic Planning and Management (4.92) and the least important was Process Management (4.23).

The current knowledge of small farmers of the sample is lower when we are talking about Process Management theme (1.93). However as the most mastered theme on the self analysis of the farmers we found Cost Management (3.29).

### **Medium**

When the size of the farm is bigger, new challenges appears and the importance order is different. For this rural producer profile the biggest challenges to be faced are: Strategic Planning and Management; Sustainability and Standards Adequation; Cost Management; Financial Management; Management and Development of Human Resources.

The theme of Management and Development of Human Resources appears as a challenge for these farmers because as they own a bigger property they also need more workers to produce and manage the farm.

Considering only the importance to the future variable it was identified that the theme Strategic Planning and Management (4.80) was considered as the most important for this sample and as the least important was quoted again the Process Management theme (4.25).

The medium rural producers state that they have more knowledge on Cost Mangement; and on Management and Development of Human Resources (both with 3.45) and the theme of Process Management it also not very dominated by this segment.

### **Big**

The questionnaire analysis revealed that for big grain producers the main challenge to be overcome is Commercialization which involves the outflow of production and brings financial returns. Followed by the themes of Strategic Planning and Management; Management and Development of Human Resources; Cost Management; Financial Management.

The challenge of Management and Development of Human Resources appears once more as one of the biggest challenge to be observed because with the increase of the property size the complexity of this task is expected to be higher.

A greater importance is given to the Cost Management theme (4.61) and these farmers that answered the questionnaire do not observe much importance to the future of business on the Process Management (3.96) theme that was ranked as the lower on the eight themes.

The knowledge of this profile of farmer is bigger on the Cost Management (3.43) theme and with na average score of 2.47, the theme os Process Management was pointed out as the least

known by them. This perspective of big farmers stating that they have more knowledge on costs can be explained by Colleta (2012) that identified that these farmers maintain more records on their expenditures and do more cost's analysis in their farms.

The comparison between the size ranges can be better analysed with the table 3. It presents the rank of the five more demanding challenges for each range and considering the entire sample also.

**Table 3 – Main challenges by farm size**

<b>Theme</b>	<b>All</b>	<b>Small</b>	<b>Medium</b>	<b>Big</b>
Commercialization	2nd	2nd		1st
Cost Management	5th	5th	3rd	4th
Financial Management	4th		4th	5th
Management and Development of Human Resources	3rd		5th	3rd
Process Management				
Strategic Planning and Management	1st	3rd	1st	2nd
Succession Process and Governance		4th		
Sustainability and Standards Adequation		1st	2nd	

Analyzing the Table 3 we can see that the big farms lack the solutions of “Finance and Risk” and “Administrative”. The “Legal and Procedures” is found only at small and medium farms of the sample.

## **5. Conclusions**

Big farms already have a good structure, so issues such as legislation does not affect them more as affecting small and medium producers. So it's possible to conclude the big farmers are not concerned about “Legal and Procedures” like small and medium ones. However, big farmers have more employees and they need do deal with it, so they are concern about the lackness of people to work.

For the small farmers the succession process is a challenge, because they have a family business and often have problems with someone to take over the company. And issues like sustainability and standards adequation is important in small and medium farms, probably relate with increasing environmental pressures that they are suffering nowadays.

At Northeast region the issue sustainability and standards adequation is important, probably this is a new region procuder, so the farms are not struturade as well and the fiscalization is

less than others regions. In this region, the farmers know about commercialization and this issue is very important in the future.

The least issue is succession process and governance, maybe the farmers are not concern about the business future, and concern about the challenges at the moment. The solutions “Administrative Challenges”, “Finance and Risk Challenges” and “Legal and Procedural Challenges” could help private companies and the government to establish investments or policies of management at grain farms, offering different solution dependend on the size and the region of the farms. This investment could improve the competitiveness of Brazillian food producers and improve the country's economy.

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