



Management and Strategic planning of agribusiness systems: the case of livestock in Goiás – Brazil

Tássia Gerbasi

USP / FEARP / MARKESTRAT - tgerbasi@markestrat.org

PhD Marcos Fava Neves

USP / FEARP / MARKESTRAT – favaneves@gmail.com

Mairun Junqueira Alves Pinto

USP / FEA / MARKESTRAT –

Rafael Bordonal Kalaki

USP / FEARP / MARKESTRAT

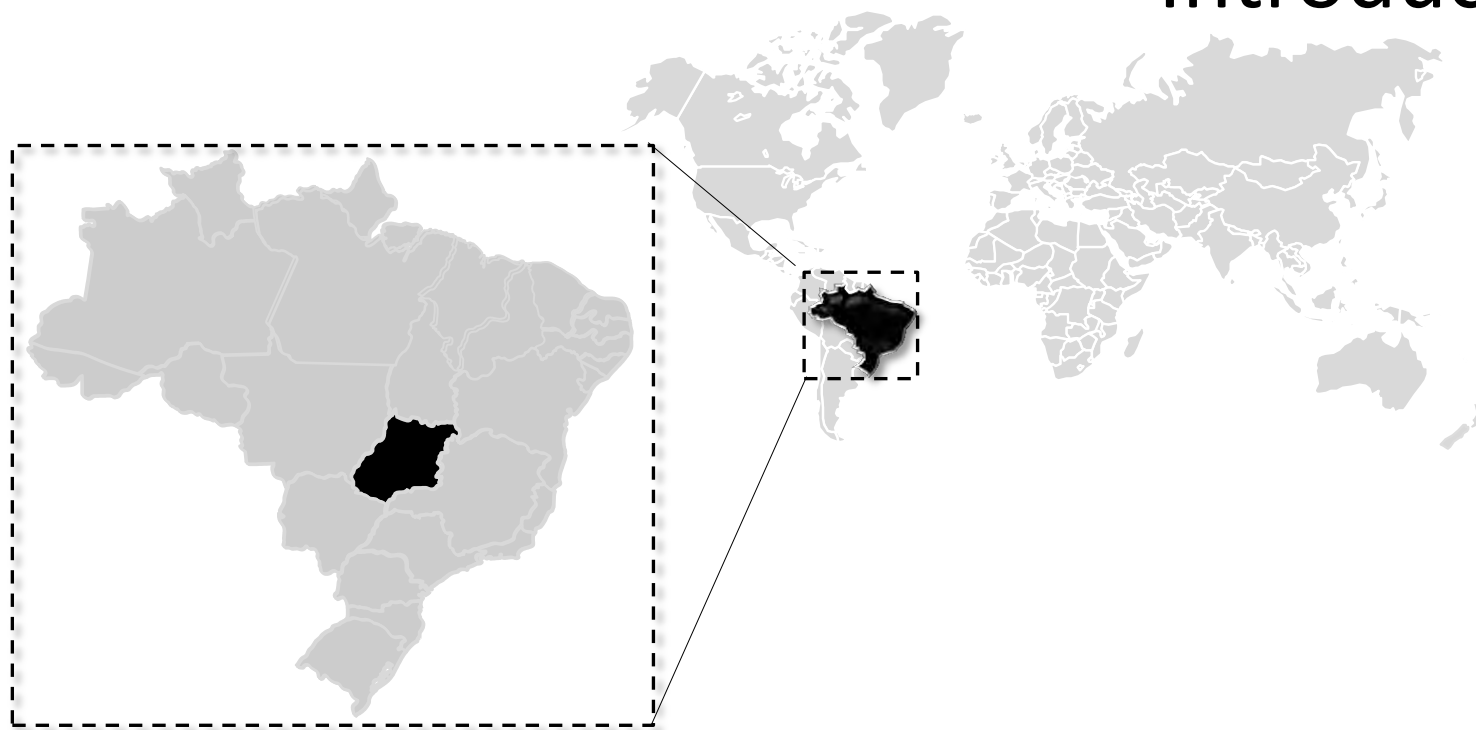


Markestrat[®]
value generation



AGENDA:

- Introduction
- Research Questions and Objectives
- Method Used
- Literature Review
- Results
 - ☐ PEST
 - ☐ Porter's Five Forces
 - ☐ SWOT
 - ☐ Objectives
 - ☐ Strategy Vector Plans
- Conclusions and Managerial Implications
- Major References



The state of Goiás:

- 9,5% of all production of Brazilian **bovine meat**
- 5.5% of Brazilian **chicken meat**
- 5% of Brazilian **pork**
- Large availability of **grains and high technology**



Objectives

Main objective:

Adapt a method of **strategic planning and management of supply chains for a state level** with the involvement of class organizations.

The specific objectives are:

- to apply the new method in **chains of bovine meat and leather, pork and poultry** in the state of Goiás – Brazil;
- **proposing strategic projects** focused on improving the competitiveness of these agribusiness systems in Brazil and abroad



Literature Review

- There are different approaches that can be used for the chain study, but two traditional approaches are found in the literature, the one developed by Goldberg (1968) and the one proposed by Morvan (1985).
- Many authors have proposed ways to organize information in order to obtain a tool for strategic planning of organizations (Campomar (1982), Westwood (1995), Las Casas (1999), Jain (2000), Kotler (2000), Lambin (2000), Wright, Kroll and Parnell (2000), Gilligan and Wilson (2002) and Wood (2004)).
- Proposed by Neves (2005), GESis method consists of five steps that are detailed in the methodology of this work. It is worth mentioning that the proposed method has been applied to several agribusiness systems such as in AGS of orange (2004), wheat (2005) and Milk (2007), and more recently in AGSs of sugarcane (2009) cotton (2011) and bovine meat (2011), being improved with each application.

Method Used

Application of the adapted GESis (Neves, 2005):

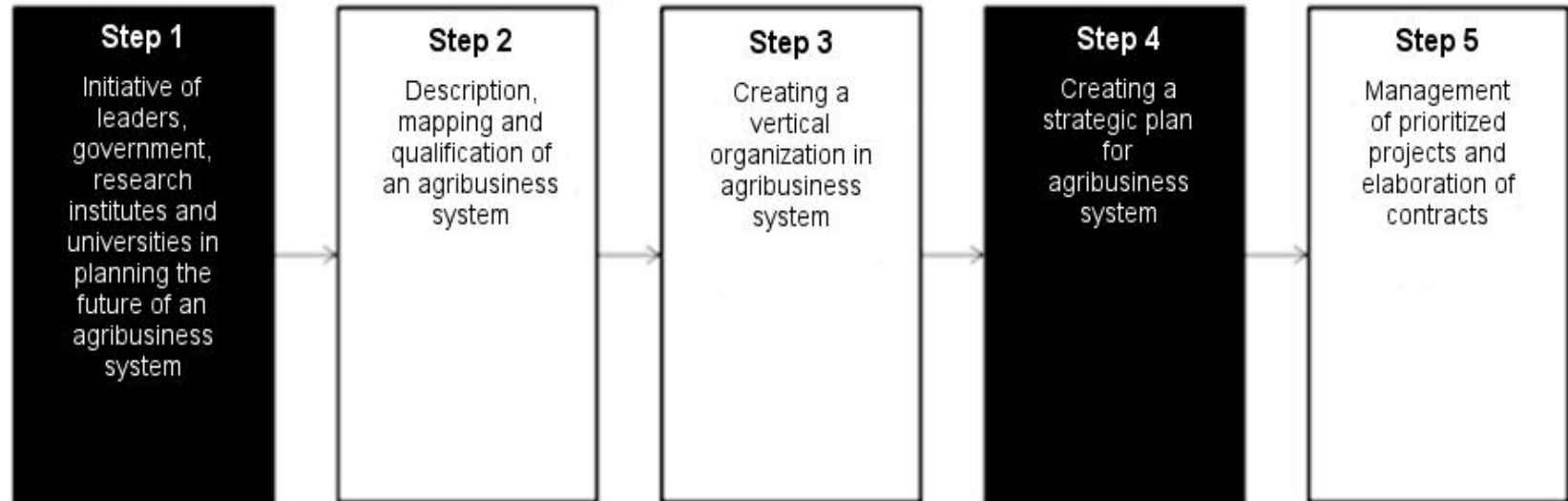


Figure 1. The GESis method for strategic planning and management of food and bioenergy chains.

Source: Neves (2005).

Method Used

Application of the adapted GESis – Step 4 (Neves, 2005):

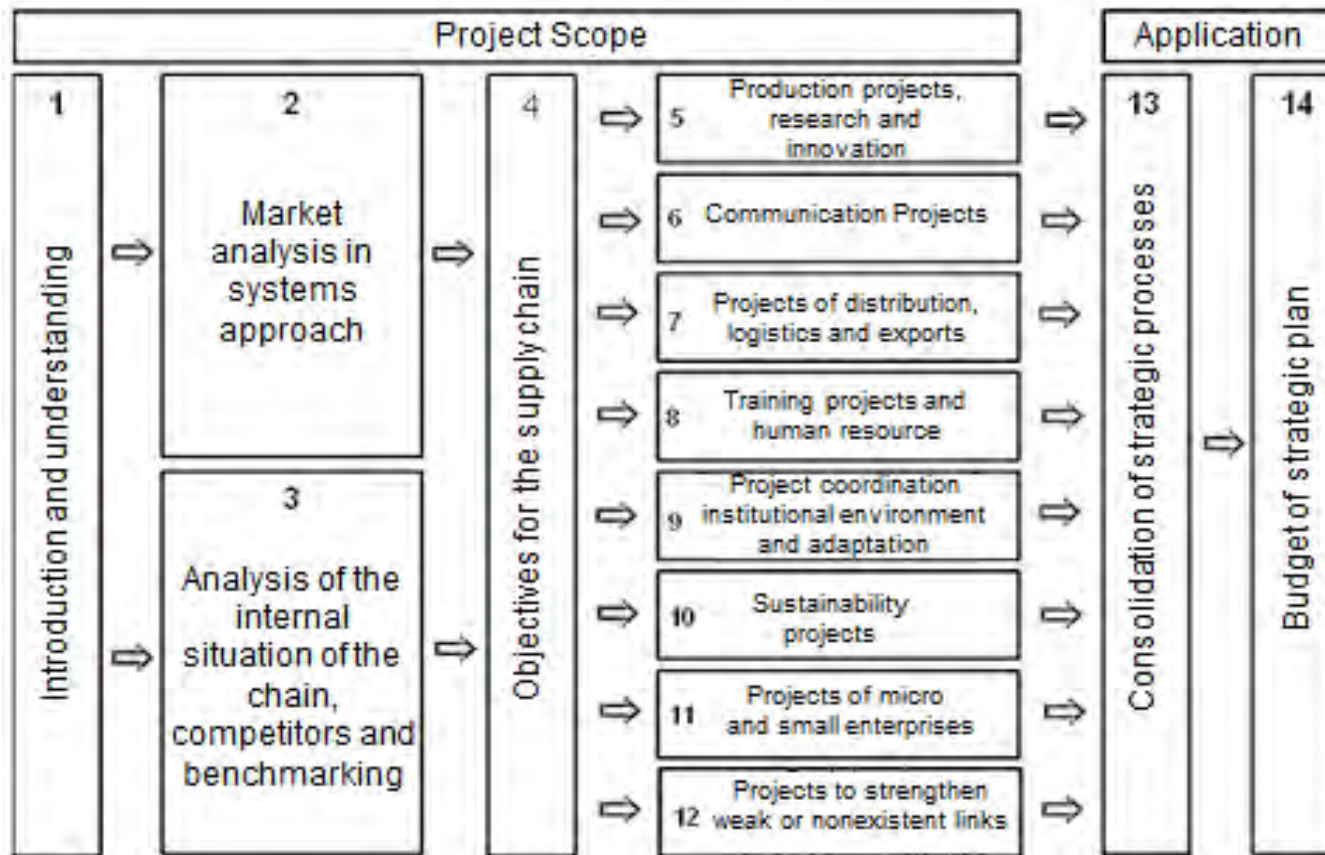


Figure 2. Project scope: fourteen steps for strategic planning of agribusiness systems of grains and sugarcane in the state of Goiás

Source: Adapted from Neves (2005).



Results:

PEST

	Opportunities		Threats	
	Political-legal	Economic-natural	Socio-cultural	Technological
	<ul style="list-style-type: none">- Economic openness through international negotiations;- Traceability system in implementation ;- Presence of certification standards	<ul style="list-style-type: none">- Improved distribution of world income providing increased consumption of meat, leather, pork and chicken;- Global economic integration;-Growth of markets that value high volumes and low prices;-Large supply of grain in Midwest region which may impact the cost of production;	<ul style="list-style-type: none">- Growth in world population and urbanization, leading to increased consumption;- Growth in the education level;- Inclusion of women in the labor market.	<ul style="list-style-type: none">- New technologies for waste reduction;- Growth of investment in R & D, both public and private;- Technologies that reduce environmental impacts.
	<ul style="list-style-type: none">- Juridical uncertainties due to environmental legislation;- Tariff barriers and non-tariff barriers in international markets;- Public policies to support the livestock are not sufficient for the size of the sector.	<ul style="list-style-type: none">- Negative impact of emissions of greenhouse gases by livestock;- Cycle appreciation of the national currency, damaging the competitiveness of Brazilian products;	<ul style="list-style-type: none">-Increase in the number of vegetarians- Concentration of large scale industries in the South.- Increased consumer demand for food safety;	<ul style="list-style-type: none">-Incompatibility between human factor and technological advances leading to inefficiency in the management process;-- Need for high technical and managerial control during the production process.



Results:

Porter's Five Forces

Swine and Poultry

Countries or states that do not compete with the meat but have been showing some competitive advantage

Bovine meat and Leather

- Meat caprine and ovine
- New proteins as soy protein

Threat of new entrants

Competitors

Swine and Poultry

Mato Grosso, Goiás, Austrália

Bovine meat and Leather

Market differentiation and higher production of US and UE

Swine and Poultry

- Retail: concentration;
- International market: high bargaining power;
- Industry: many integrated producers

Bovine meat and Leather

- Retail concentration of the commercialization channels by the increasing its bargaining power.
- International market high bargaining power on the part of international buyers who are relatively undiversified.

Power of buyers

Power of suppliers

Swine and Poultry

Input suppliers mostly deal with large industries.

Bovine meat and Leather

- High competitiveness and bargaining power of suppliers of inputs.
- Livestock producers with little bargaining power due to spraying and pack of a centralizer organ.

Threat of substitutes

Swine and Poultry, Bovine meat and Leather

Other animal protein and vegetal proteins.



Results:

SWOT

Bovine meat and Bovine Leather

Strengths	Weaknesses
<ul style="list-style-type: none">- Production in pasture, characterized as highly sustainable;- Greater availability of grains for food supplementation;- Brazilian territorial extension;- Good health status;- Traceability system already structured;	<ul style="list-style-type: none">- Lack of vertical integration between chain links;- Problems of logistics due to the condition of roads and few alternatives;- Lack of efforts and initiatives in marketing, especially in communication;- Concentration of slaughtering industry;- Extensive areas of degraded pastures.
Opportunities	Threats
<ul style="list-style-type: none">- Recovery of degraded pastures for horizontal growth of production;- Expansion of feedlots to improve productivity;- Creating or strengthening of associations / cooperatives;- Technological development in the areas of genetics and nutrition;- Projects pioneered by agribusiness for mapping "water footprint."	<ul style="list-style-type: none">- High prices and low standardization;- Pressure from environmental issues (greenhouse gas emissions);- Increased production costs and activities with greater profitability may decrease the number of farmers;- Not overcoming the logistical problems.

Poultry and Swine

Strengths	Weaknesses
<ul style="list-style-type: none">- Stable climate, vast territory, with good water availability, high grain production and low production costs;- High level of technological production;- Need for relatively small areas for production;- Strategic location of Goiás.	<ul style="list-style-type: none">- Stiffness of integration contract;- Logistics problems mainly due to the condition of roads;- Little bargaining power of producers;- Lack of a consolidated image of chains of poultry and pork;- High cost of manpower.
Opportunities	Threats
<ul style="list-style-type: none">- Increase in class C contributing to the strengthening of the internal market;- Increase pluriactivity of rural property;- Possibility of activity growth through developing regions;- Demand for new products, differentiated and higher added value.	<ul style="list-style-type: none">- Technological Obsolescence in some points of the chain;- Non-tariff barriers preventing the opening of new markets;- Unfavorable exchange for export;- Increase in price of inputs.



Objective and goals

Results

CHAINS OF BOVINE MEAT AND LEATHER

- Increase by 27% the production of bovine meat in the state;
- Increase by 5% the average slaughter weight of the state (productivity);
- Increase by 85% the number of animal feedlot;
- Achieve a 50% growth of the total of bovine meat exported by the state;
- Increase by 50% the total of leather benefited in the state;
- Performing internally tanning of finishing of 50% of the leather produced in the state.

CHAINS OF SWINE AND POULTRY

- Increase production of chicken meat by 3.5% per year;
- Increase production of pork by 2.5% per year;
- Increase exports of poultry at 4% per year;
- Increase pork exports at 3.5% per year;
- Diversify the international markets for pork;
- Access the most demanding markets of pork;
- Maintain the status "free" from diseases of compulsory notification of International Office of Epizootics.

Strategic Vectors	Strategic Actions
1. Production, products, research and innovation	<ul style="list-style-type: none"> ▪ Increase the practice of feedlots; ▪ Attract new industries to the state; ▪ Promote the approximation of the field with universities and research institutions.
2. Communication	<ul style="list-style-type: none"> ▪ Strengthen the image of meat in Goiás in consumer markets; ▪ Create actions to maximize the quality of the leather of Goiás; ▪ Promote meeting events between producers.
3. Distribution, logistics and exports	<ul style="list-style-type: none"> ▪ Improve conditions and do constant maintenance of roads; ▪ Create centers of storage and collective distribution of food; ▪ Develop a center of freights; ▪ Develop new markets.
4. Training/Human Resources	<ul style="list-style-type: none"> ▪ Provide training courses; ▪ Regulate all the work of the chains; ▪ Encourage digital inclusion of producers.
5. Coordination and adaptation to the institutional environment	<ul style="list-style-type: none"> ▪ Define a management group responsible for coordinating a system of governance of the chains; ▪ Assist in the preparation of investment projects aiming greater technical adequacy standards.
6. Sustainability	<ul style="list-style-type: none"> ▪ Map the natural resources of the state; ▪ Recover degraded pastures; ▪ Invest in treating swine waste and poultry.
7. Micro and small enterprises	<ul style="list-style-type: none"> ▪ Create cooperatives for small producers; ▪ Encourage joint purchases; ▪ Encourage credit cooperatives.



Conclusions:

Modification in the method (GESis)

- Were made the **insertion of Porter's Five Forces and Porter's Diamond model analysis**
- The fourth step of the method was focused on defining the **strategic objectives to be achieved in 2020**
- New vectors of projects were proposed **sustainability, micro and small enterprises, and strengthening the weak or nonexistent links.**

Article's goal

- The article presented the results from the **application of the method to the beef, leather, pork and poultry production chain, reaching its goal.**
- This material serves as a **stimulus to decision making** in the public and private sectors.
- The work brought **tools and subsidies for strategic decision** made by organizations belonging to chains and their agents



Major References

- BELLAYER, C.; BELLAYER, I.H. Livestock production and quality of societies' life in transtition economies. Livestock Production Science, Amsterdam, v.59, p.125-135, 1999.
- FARINA, E. M. M. Q. competitividade e coordenação de sistemas agroindustriais: um ensaio conceitual. Revista Gestão & Produção, v. 6, n. 3, p. 147-161, dez. 1999. Disponível em: <<http://www.fia.com.br/PENSA/home.htm>>. Accessed in Dec 14, 2012.
- GILLIGAN, C.; WILSON, R.M.S. Strategic marketing planning. Linacre House: Butterworth-Heinemann, 2002. 625p.
- GOLBERG, R. A. 1968. Agribusiness coordination. Boston: Harvard University.
- GRANT, R. M. Contemporary strategy analysis: concepts, techniques and applications. 4. ed. Oxford: Blackwell Business, 2002. 551p.
- INFORMA ECONOMICS FNP. Anualpec – Anuário da Pecuária Brasileira, 2012. São Paulo: INFORMA ECONOMICS, 2012.
- KOTLER, P. Administração de marketing — análise, planejamento, implementação e controle. São Paulo: Prentice Hall, 2000. 725p.
- LAMBIN, J.J. Marketing estratégico. 4.ed. United Kingdom: Palgrave Macmillan, 2012. 756p.
- LAS CASAS, A.L. Plano de marketing para micro e pequena empresa. São Paulo: Atlas, 1999. 156p.
- MORVAN, Y. 1985. Filière de Production, in fondaments d'économie industrielle. Econômica. pp. 199-231.1985.
- NEVES, M. F.; MACHADO FILHO, P. C.; CARVALHO DE T. D.; CASTRO E, T. L.; Redes agroalimentares & marketing da carne bovina em 2010. In: IV Congresso Brasileiro das Raças Zebuínas. Uberaba, 2000.
- NEVES, M. F. Planejamento e Gestão Estratégia de Marketing. São Paulo: Editora Atlas, 2005. p. 41-42.
- NEVES, M. F. Método para planejamento e gestão estratégica de sistemas agroindustriais (GESIS). Revista USP. São Paulo, 2008. v.43, n.4, p.331-343.
- PORTER, M. E. Competitive strategy: techniques for analyzing industries and competitors. New York: The Free Press, 1980.
- PORTER, M.E. A vantagem competitiva das nações. 7a Ed., Campus, Rio de Janeiro.1989.
- PORTER, M. E. Estratégia competitiva: técnicas para análise de indústrias e da concorrência. 7. ed. Rio de Janeiro: Campus, 1997.
- SAAB, M.S.; NEVES, M.F.; CLÁUDIO, L.D.C. O desafio da coordenação e seus impactos sobre a competitividade de cadeias e sistemas agroindustriais. Revista Brasileira de Zootecnia, v.38, p.412-422, 2009.
- WESTWOOD, J.O. Plano de marketing. São Paulo: Makron Books, 1995. 256p.
- WOOD, M.B. Marketing planning: principles into practice. Harlow: Prentice Hall, 2004. 379p.
- WRIGHT, P.; KROLL, M.K.; PARNELL, J. Administração estratégica: conceitos. Tradução: Celso A. Rimoli e Lenita R. Esteves. São Paulo: Atlas, 2000. 433p.
- ZYLBERNSZTAJN, D. Estruturas de governança e coordenação do agribusiness: uma aplicação da nova economia das instituições. 238p. Tese (Livre-Docência) – Departamento de Administração, Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo, 1995



Thank You

favaneves@gmail.com