FARM INPUTS DISTRIBUTION DRIVERS IN BRAZIL – CHALLENGES AND OPPORTUNITIES FOR AGDEALERS AND MANUFACTURES

Area: Consumer Orientation and Marketing

Matheus Alberto Cônsoli, PhD

Markestrat – Marketing & Strategy Project and Research Center Rua Maestro Ignácio Stábile, 520 14.025-640 Ribeirão Preto - SP - Brazil Phone: 0055-16-3456 5555 Email: consoli@markestrat.org

Lucas Sciencia do Prado, MsC

Markestrat – Marketing & Strategy Project and Research Center Rua Maestro Ignácio Stábile, 520 14.025-640 Ribeirão Preto - SP - Brazil Phone: 0055-16-3456 5555 Email: lprado@markestrat.org

Roberto Fava Scare, PhD

University of São Paulo – FEA Business School Markestrat – Marketing & Strategy Project and Research Center Rua Maestro Ignácio Stábile, 520 14.025-640 Ribeirão Preto - SP - Brazil Phone: 0055-16-3456 5555

Email: rfava@markestrat.org

FARM INPUTS DISTRIBUTION DRIVERS IN BRAZIL – CHALLENGES AND OPPORTUNITIES FOR AGDEALERS AND MANUFACTURES

Problem Statement

As the Brazilian agribusiness stronger it positioning as a global platform for production and distribution of food, biomass, fiber and biofuels, several changes have influencing channel members in such developing and complex business, economic and technical environment. Consolidation and concentration of companies and agents on the farm input sector, farm level, trading and financial services have arisen many new challenges for agdealers or farm input distributors.

When we analyze the whole chain, from inputs to food processors and retailers, most of these sectors transactions are hold by global companies. Focusing on the farm input distribution sector, crop protection, fertilizers, seeds, animal health and nutrition products' manufacturers are mainly global companies operating in Brazil. On farm level instead, the consolidation and the expansion of huge farming structures up to 250,000 ha have attracting professional companies, investment funds and international investors to produce in Brazil. In this way, "farmers" are becoming more and more global. How about agdealers? They are still predominantly small and medium sized local companies, held almost exclusively for Brazilian entrepreneurs focused on commercial and technical issues of the business.

In this way, the research objectives involve the identification and analysis of the farm input distribution drivers for the next 3-8 years that will define and reshape the structure of the future of the farm input distribution sector in Brazil. Secondary objectives include the evaluation and perspectives for manufactures, agdealers and producers in a developing country environment.

Procedures

This is an exploratory research by nature. The main procedures involved the data collection process during events were agdealers were locally concentrated. We participated on two events to collect data: one was a crop protection manufacturer's sales convention with 60 dealers; the second one was a training program sponsored by the Brazilian AgDealers Association (ANDAV) with 42 dealers.

In both events, researchers had two (02) hours to present some agribusiness trends and expected production data to participants in a workshop were they worked in groups to fill out some templates. The first template requested participants to list and prioritize issues related with how manufacturers could create value to the relationship with agdealers and farmers. The second template requested them to do the same, but about how agdealers could create value to the relationship with manufacturers and farmers. Finally, the request was regarding about how farmers could create value to the relationship with agdealers and manufacturers.

After the events, we consolidated and grouped similar statements, taking the main issues and the most cited ones as the farm input distribution drivers for manufacturers, agdealers and farmers.

The results are separated in three sections. In the first one, we start presenting some data about the Brazilian agribusiness sector, were some projections are discussed arising the challenges and opportunities to farm input companies. The second section introduces the

farm input sector in Brazil detailing its main features. Thirdly, we present the main findings of this research, discussing the farm input distribution drivers and the value creation alternatives in the manufacturer-dealer-farmer channel relationships.

Results

Brazilian Agribusiness Projections

The starting point of our research and premises are based on the projections about Brazilian agribusiness. As global population and demand are expected to grow, several changes and dynamics on farm level will happen. Following the marketing principle, as costumers (farmers) change their behaviors and decision making processes, those companies that supply them will have to change adapt themselves. These new dynamics will probably impact on the upstream channel – more specifically, in the manufacturer-dealer-farmer channel.

In the current scenario, Brazilian agribusiness production and exports are projected to increase sharply up to 2020, according with Brazilian Ministry of Agriculture (CONAB/MAPA). The main commodities are expected to increase production up to 34% and exports up to 68%. See Table 1 for details.

Table 1: Production Projections - Mains Commodities.

Product	Unit	Production			Exports		
		2010/11	2020/21	Var. %	2010/11	2020/21	Var. %
Soybean	Million ton	68.72	86.53	25.91	29.3	40.7	68.4
Soy Meal	Million ton	27.71	32.35	21.12	13.9	15.4	10.84
Corn	Million ton	52.85	65.54	24.0	9.1	14.3	56.46
Coffee	Million bags	54.0	70.6*	30.74	33.7	42.09*	24.89
Dairy	Billion liters	31.57	38.18	20.93	0.2	0.3	50.49
Poultry	Million ton	12.11	15.74	30.0	3.9	5.2	33.7
Beef	Million ton	9.16	11.35	23.97	1.8	2.3	29.42
Pork	Million ton	3.38	4.09	21.08	0.6	0.8	31.16
Celluloses	Million ton	14.51	19.45	34.02	8.9	12.5	40.6
Orange (juice exports)	Million ton	19.36	23.51	21.43	2.1	2.7	27.7
Sugar Cane	Million ton	750.11	934.59	24.59	NA	NA	NA
Sugar	Million ton	34.08	42.33	24.22	28.4	41,4	45.87

Note: Sugar cane – all production for ethanol and sugar production plus forage and beverages.

Source: MAPA (2011).

These projections also lead to a Brazilian increase of share on world exports, as shown on Table 2. However, this growth will not come at any cost. In order to be able to reach these production and export levels we believe that upstream members in the food chains – notably input manufacturers, dealers and farmers - must work together to reduce distribution and service costs to farmers, mainly for those small farmers, implement new field technologies and supply services (technical assistance) and increase yield and more efficient land use.

On the other hand, to increase service level to farmers is costly, which is also forcing some concentration trends on dealer level, so higher scale and lower costs can be achieved.

^{*} refers to 2019/20.

Table 2: Brazilian Share on World Exports.

Product	2010/2011	2014/2015	2020/2021
Sugar	54.8	54.8	54.8
Coffee (grain)	36.1	36.1	36.1
Soybean (grain)	30.8	31.8	33.2
Soy Meal	23.3	23.0	21.9
Soy Oil	15.2	14.9	14.1
Corn	9.6	10.6	12.0
Beef	28.0	29.7	30.1
Pork	10.1	10.7	11.6
Poultry	44.0	46.5	49.0

Source: MAPA (2011).

In this way, our focus on identify and analyze the farm input distribution drivers for the next 3-8 years is related to the assumption that the Brazilian agribusiness production and exports must be supported to a strong, professional and high tech farm input sector and companies. Due to this assumption and our long run involvement with farm input companies and agdealers, we believe in a redefinition and reshape in the future structure of the farm input distribution sector in Brazil. In the next section we present the sector and the main research findings.

Brazilian Farm Input Distribution Sector

This is a quite young sector, with about 40 years of development. Even that, the sector has increased the importance on supporting the Brazilian agribusiness and has a key role on sustainability issues, being a world benchmark on package return (reverse channel), application training and product traceability control.

It is important to note that food commodities, grains and sugar cane are the main farm input consumers. Although, meat and dairy production are very connected to grains production regions and feed/farm input availability. Moreover, Markestrat estimates that about 50% of crop protection products, seeds and fertilizers are distributed and/or intermediated by agdealers in the main grain areas. On cattle rise, for beef and dairy, agdealers and retailers are responsible for about 70% of the farm input supply.

Even with the expansion of new agricultural frontiers in Brazil, the development of production technologies and the consequent increase on farmers demands, distribution agents – dealers, retail, coops etc – are becoming key agents making more than selling products to farmers. In a large and complex country like Brazil, we do not believe that manufacturers will be able to serve the huge amount of farmers disperse through the country. Hence, the presence of professional and high skilled intermediaries will increase the distribution efficiency to farmers (Consoli, Castro & Prado, 2010).

The evidences that support our emphasis on the development of this channel is based first on the channel theory that states that as higher are the service level demanded by end users (frequency of services, visits and deliveries; breaking bulk, convenience etc) more efficient are intermediaries to perform marketing flows (Coughlan et al 2002; Bucklin, 1965:1966). Moreover, some country specific issues justify the presence of intermediaries in this channel: (1) service level demand by farmers and lack of manufacturers infa-structure disperse along the country to serve most farmers directly; (2) number of farms – about 5.2 million farms,

were farms with more than 1,000ha account for 43% of the arable area according to IBGE 2006 census; (3) geographical dispersion of farmers around the country, demanding services, logistics and credit.

Notwithstanding, these agdealers are generally working close and aligned to manufacturers. Despite selling products, they also support farmers' business offering services, technical assistance, credit, new technologies, managerial support, trainings etc. Again, the presence and development of dealership on agribusiness increase the distribution efficiency, improve the service level and reduce costs to final users (farms), as discussed by Coughlan et al (2002) about channel development.

According to the National AgDealers Association (ANDAV), in 2007 the sector accounted about 7,000 agricultural dealers and 15,000 retail companies focused on cattle raise. Whilst it is a disperse sector, we have seen a fast trend toward a consolidation and concentration of existing channels. What will lead to a reduction on the number of companies even increasing the number of locations. Maybe some M&A movements and even the competition with international companies can occur in the next years.

Farm Input Distribution Drivers

As main results, we can understand better the current and expected factors that will drive future relationships and structure on the farm input marketing channels. Figure 1 resumes how the current scenario on Brazilian agribusiness has created challenges for agdealers on position themselves in their relationships with manufacturers and farmers (Agdealers are majority retailers. Wholesale level is insipient yet in the country). Moreover, high pressure for better services, lower costs and higher competitiveness has happening at same time.

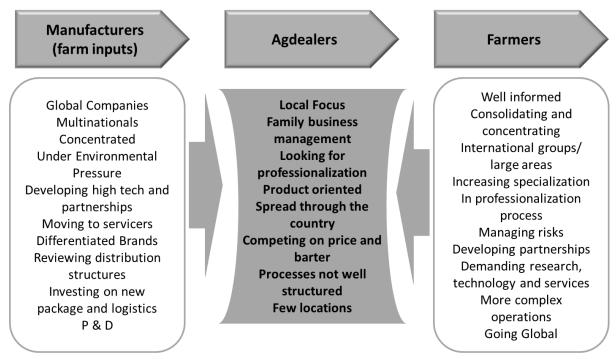


Figure 1: Main Characteristics of Farm Inputs Distribution Channel Ties. Source: Consoli, Prado & Marino (2011).

However, the focus was the understanding of the farm input distribution drivers for the future of this specific channel in Brazil. We could see that, on the agdealer point of view, the manufacturer's focus is on technology and brand development, were manufacturers can create value to farmers providing high quality products with higher efficiencies, credit, relationship marketing initiatives among others. At same time, they can create value to dealers with better product portfolio, rebates, managerial support and exclusivity for example.

Dealers, on the other hand, should focus their strategies on services, support and relationship development. They can create value to farmers differentiating their services and invest on own brand names and credibility. However, having competitive commercial, credit and barter policies are essential for the business success. Additionally, dealers also create value to manufacturers when operate strategically aligned with them. They also must provide managerial and physical structures, sales and technical teams to fill manufacturers' needs and their product/brand positioning. Moreover, being loyal is almost mandatory in the Brazilian farm input distribution channel (different from US and other countries for example).

Specifically, the nature of the inter-organizational relationships are influenced by the business environment, dimensions and evolution (Cheung &Turnbull, 1998), and in the Brazilian case, a quasi-exclusive distribution system is found. In general, there are relational contracts among manufacture and dealers to service farmers. What we have been observing is that at same time one specific dealer cannot carry competing brands, most of manufacturers also do not set strong competitors in the same region, what increase the interdependence. As we can see in the Figure 2, dealers need manufacturers' products and marketing support and manufacturers need dealers' customer base, service and logistical structure.

These findings are consistent with supply chain theory, were according to Hakansson and Persson (2004), the logic of supply chain coordination is built upon serial dependencies between activities and the efficiency of the supply chain will increase when interdependencies are well exploited.

Finally, as end users are also part of the marketing channels, farmers are more valuable for manufacturers and agdealers not only on volume basis. Upstream members look for those farmers that are loyal and that have brand preferences. The ones that provide warranties (for barter process mainly) and on time payment, adopt new techs and follow suppliers' recommendations are also preferred. Figure 2 presents a summary of the main farm inputs distribution drivers for the next 3-8 years identified during this research.

Complementary to this discussion, we have realized through others research (Marino & Neves, 2008) that as farmers are even more exigent over agdealers, existing channel members will have to develop new strategies to attract clients, which are becoming more professional and concentrated. Markestrat has also investigated managerial challenges for small and medium sized agdealers (Agrodistribuidor, 2011), approaching fundamental issues to their business value generation. The topics involve credit policies, customer management, human resources, growth strategies, finance, governance and M&A.

Manufacturer

Technology Brands

How creates value to:

Farmer

Product quality and efficiency Fill farmers' needs Status and Brand value Cost/benefit Safety and productivity Credit Process New package and application technologies Relationship marketing initiatives

Distributor

Product portfolio
Rebate/incentives
Products' profitability
Positioning (regionally and per crop)
Managerial, marketing/sales
(training) support
Preference or territorial
exclusivity
Partnership initiatives
Commercial policy
Credit
Logistics

AgDealer

Services
Support
Relationship

How creates value to:

Farmer

Local/regional credibility
Provide differentiated services
Product portfolio, quality and
results proofing
Innovation on farm
management, technical
assistance and support
Relationship and information
sharing. Fast delivery, logistics
and storage
Commercial, credit and barter
policy

Manufacturer

Strategic alignment. Being capitalized and offer warranties Managerial and physical structure Regional coverage, sales team and market penetration Credibility, relationship and access to qualified farmers Support on product development and communication Loyalty and partnership

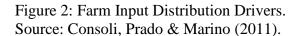
Farmer

Results Productivity Production Safety

How creates value to:

Distributor and manufacturer

Loyalty and brand preference (manuf.) and service (dist.) On time payment Warranties Provides areas for product tests and communication Positive word of mouth and regional influence Information share (yield, costs, activities, finance, results) Accept partnerships and closer relationship Follow supplier recommendations Adopt new technologies Implement farm management control and processes Obey contracts and deals Participate on events and activities promoted by manufacturer and dealers



However, to reach the production levels projected by MAPA, as presented in the previous section, farmers will need the support of more qualified agdealers in operational, technological and managerial terms, so they can be able to distribute products, services, technology and knowledge that will leverage field results for farmers and will allow higher scale, yield and production gains expected to the next years.

As the assumptions about production increase are usually based on the demand side, being for internal market or exports, mainly to developing countries, the demand from upstream members in the food chains (as the farm input case) are always derivate demand. From this point, our focus is on manufacturer-dealer-farmer relationship, and our assumption is that these members could maximize their benefits if working in a coordinated and aligned way to deliver value to farmers and other links downstream in the food chain. Our focus here is to complement the traditional and very important transaction cost approach, usually applied on inter-organizational relationship and make-or-buy analysis.

The FIDD – Farm Input Distribution Drivers presented here focus on the "central reasons" why a channel member chooses the other to stay along with. Following, we discuss each pair of the manufacturer-dealer-farmer relationship using as unit of analysis the "value" that each agent can create to the others in this limited chain scope (Consoli, Prado & Marino, 2011).

1- How do farmers create value to manufacturers and dealers?

One consequence of the FIDD analysis is that famers' value creation for manufacturers and dealers – what make them more important in an intentional relationship – are almost the same in this case, given the fact that the production tie is the responsible to implement and use products and new technologies. Farmers are the enablers of higher production and future upstream demand.

As presented on Figure 2, as more frequent and larger are the purchases, more loyal to manufacturers' brands and to dealers' services, more warranties are offered and as contracts and deals are carried out, more valuable are these farmers for both dealers and manufacturers.

But besides size, potential and payment, other relational drivers were identified, as the offer of areas for product testing, support on local communication and word of mouth among influencers, information sharing, event participation and partnership accomplishment has increased farmer's value on dealers and manufacturers side. More recent value drivers also include the technological level and willingness to adopt new techs, hold well organized managerial processes and control over agricultural activities.

However, most of channels deal with the direct sales conflict (Consoli, Prado & Marino, 2011). From the distribution channel theory point of view (Coughlan et al 2002; Bucklin, 1965:1966), as more concentrated are the clients, more information is demanded, more strategic and larger they are usually direct channel is justified or preferred. What we identified during the research is that during previous periods, these farmers used to be contacted directed by manufacturers, but recently, as farming are becoming more concentrated, farmers have demanded direct services from manufacturers, what have rising some conflicts in the channel and relationships.

Here an interesting point is noted, which is supported by transaction cost economy concerning vertical integration. In the case of agricultural services and technical assistance, large farmers are now performing these activities internally instead of working with dealers. Even for manufacturers, these very large farmers bring new challenges, once they demand less services but better prices from suppliers.

2- How do manufacturers create value to farmers and dealers?

Looking to the other side of the channel, manufacturers are the channel captains in Brazil, as defined by Coughlan et al (2002). In this way we could state that different from US for example, manufacturers "choose" their dealers and define a relational partnership so they can develop local markets usually aligned to the manufacturers' strategies.

From the dealer point of view, our research has identified that a manufacturer will be more attractive to a dealer (create more value to its business) as better product portfolio they have. Moreover, having a local (regional and crop) good positioning, provide regional preference or

exclusivity, hold a commercial and credit policy that increase the dealer competitiveness are de main drivers for dealers to accept higher control over they activities.

However, relational issues also take place here (Castro, 2008). Programs and activities that reset dealers' margins are becoming more and more important. These drivers include rebate programs, managerial, marketing and sales (training) support, the development of long term partnerships and logistical structure to support local demand.

Additionally, manufacturers also create value to farmers (through direct contact or through intermediaries) and the FIDD involve product quality, reliability and efficiency, providing security and expected yields. Moreover, having a brand positioning and status with a costbenefit balance seems to be a strong driver on farmers' decision making when defining products and brands. Here again, the interdependency issue arise and increase the importance of alignment among channel members.

Finally, some drivers as service convenience and credit options, innovative package, new application technologies and relationship marketing activities has increased its importance on the "value package" from the farmers' point of view.

3- How do dealers create value to farmers and manufactures?

Our analysis on farm input distribution channels present some concerns about the dealers' challenges. They must be valuable for manufacturers, which coordinate the channel (and could sell directly for many farmers) at same time they must add value to the farmers' business, which have the decision power and the responsibility to increase production to fill the crescent global demand.

The research results indicate that dealers could create more value to farmers as they invest and develop a strong local/regional credibility and trustful image. But it is not enough. Having a high quality and efficient product portfolio (local and crop results must be proved), attractive commercial and credit policy, and barter alternatives has becoming mandatory.

So, how can they differentiate the value equation they offer? Differentiation drivers identified include service support and technical assistance, fast delivery and storage facility (farmers do not want to keep their products on farm), which are becoming very important drivers to next years, that combined with the capacity to provide updated information and develop relationship with farmers will define the winners in the sector. On the other hand, cost leadership strategy can be an option, but scale and bargain power to compete direct with manufactures will be mandatory and just a few dealers seems fit this strategy on our point of view.

One interesting issue is that FIDD to the dealer usually involves having a good manufacturer as the main supplier. In this way, dealers' efforts must be concentrated on value creation to manufacturers. Here, the drivers that create more value to the manufacturers involve the dealers' financial capacity and warranties availability, physical and managerial structure and the strategic alignment with the main manufacturers.

Moreover, to create value to farmers the dealer must develop a good regional coverage and market penetration, hold a trained and skilled sales force, and develop relationship and access to farmers. From this point, the dealers' objectives must include the support to develop

manufacturers' products and brands, looking to a new level of partnership and loyalty that incentive more idiosyncratic investments of manufacturers on dealer business and vice-versa.

One key finding is the fact that some FIDD for manufacturers to farmers can be improved through dealers, as they develop a local service structure, the manufacturer brand and their combined reputation, what reinforce the relationship and the interdependence among these members. On our point of view this is an opportunity for manufacturers and dealers strengthen their relationship to develop together the FIDD that create value to farmers. Hence, the farm input distribution channel members could combine efforts to support the production and yield gains, reducing the need of acreage expansion and the environmental pressure over all agents during the next years.

Conclusions

Agdealers are facing important challenges as well opportunities in Brazil. Increasing demand for commodities are pressuring farmers to produce more, at lower costs and environmental impacts. Moreover, the agribusiness development and the consolidation process upstream and downstream from this channel member his huge and challenging.

Our research and previous involvement in this sector suggests that being very differentiated and competitive in the main drivers for dealers will be mandatory to succeed in the next years, when the consolidation and concentration of farmers must go on. Some discussions during the workshops we conducted with these companies indicated that the consolidation and concentration on this channel level will star soon. National movements on M&A and even the entrance of international players can also occur.

Additionally, those companies that are not properly structured, non-professionalized managed and that keep business based on price, but are not competent enough to turn their structure in a cost leadership structure will no longer exist in the coming future. Others are looking for more differentiated approach to farmers. However, it seems that both differentiation and cost strategies seem to be feasible in this sector, since companies implement the right structure to perform their strategies.

Finally, part of the future of the sector and the production performance of the Brazilian agribusiness must rely on combined efforts and increasing interdependencies of farm input manufactures and dealers on delivering value and solutions that enable farmers to reach new levels of production and yield, filling quality, economic and environmental issues of developing countries as global food suppliers. In this way, develop activities and implement structures related to the main farm input distribution drivers can be the success factors for the future of this changing distribution channel in Brazil.

References

AgroDistribuidor. O Futuro da Distribuição de Insumos no Brasil: Inovações, conhecimento e informações úteis para o setor de distribuição de insumos. Website, disponível em <www.agrodistribuidor.com.br>. Acesso em 12 dez 2011.

ANDAV, Associação Nacional dos Distribuidores de Insumos Agrícolas e Veterinários. Planejamento e Futuro do Canal de Distribuição de Insumos. In Revista Agroanalysis, Nov. 2009. Disponível em < http://www.andav.com.br/nov09.aspx>

- ANDAV, Associação Nacional dos Distribuidores de Insumos Agrícolas e Veterinários. Cenário do Setor de Distribuição 2008. Disponível em http://www.andav.com.br/setor-cenario%202008.aspx. Acesso em 15 mai 2010.
- BUCKLIN, L. P. Postponement, Speculation and the Structure of Distribution Channels. Journal of Marketing Research. v. 2, (1), p. 26-31, feb. 1965.
- _____. A Theory of Distribution Channel Structure. Institute of Business and Economics: University of Berkley, 1966.
- CASTRO, L. T. Incentivos em canis de distribuição: um estudo comparativo entre o Brasil e os EUA no setor de defensivos. Tese de Doutorado. Universidade de São Paulo. 234 f. 2008.
- CHEUNG, M. Y. S.; TURNBULL, P. W. A review of the nature and development of interorganizational relationships: a network perspective. In: NAUDÉ, P.; TURNBULL, P. W. Network dynamics in international marketing. Oxford: Elsevier, 1998. Cap. 4, p. 42-69.
- CONSOLI, MA.; CASTRO, L.T; PRADO, L.S. Uma Análise dos Principais Desafios Gerenciais no Varejo Agropecuário no Brasil. 3º Congresso Latino Americano de Varejo. FGV, São Paulo, 2010.
- CONSOLI, MA.; PRADO, L.S.; MARINO, M.K. (org.) Agrodistribuidor: o futuro da distribuição de insumos no Brasil. Atlas: São Paulo, 2011.
- COUGHLAN, A. T. et al. Canais de Marketing e Distribuição. 6ª ed. Porto Alegre: Bookman, 2002. 461 p.
- HAKANSSON, H.; PERSSON, G. Supply chain management: the logic of chains and networks. The International Journal of Logistics Management, v. 15, n. 1, p. 11-26, 2004.
- IBGE. Censo Agropecuário 2006. Available at: http://www.ibge.gov.br/ home/estatistica/economia/agropecuaria/censoagro/default.shtm>.
- MAPA. Brasil Projeções do Agronegócio 2010/11 a 2020/21. Brasília, julho de 2011. Disponível em: http://www.agricultura.gov.br >. Acesso em 12 Dez 2011.
- MARINO, M.K.; NEVES, M. F. (org). A revenda competitiva: como transformar seu negócio visando lucro. São Paulo: Atlas, 2008.
- MARKESTRAT. Centro de Pesquisa e Projetos em Marketing & Estratégia. Website, disponível em <www.markestrat.com.br>. Acesso em 14 dez 2011.