

How Sugarcane Farmers Choose Tractors: A Qualitative Approach

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Introduction

- Limited available time to evaluate the options
- Dealers support farmers to manage their production more effectively and efficiently (Burgert 2011)
- Comparison between farmers and farm machinery industry specialists views on how sugarcane farmers choose tractors



Objectives

- What criteria sugarcane farmers use to evaluate different tractor offers?
 - Understand to which activities tractors are destined at the farm
 - Define the main sugarcane farmers' expected benefits regarding tractors and dealers
 - Compare farmers', dealers' and manufacturers' views upon the tractor buying process
 - Decompose the tractor into a bundle of attributes

Methodological Aspects

- Exploratory research
- Semi-structured interviews
- 110-185 hp range
- Three visions: Manufacturer, Dealer and Farmer

Previous Research

- Farmers' buying behavior mixes final and industrial consumer's characteristics (Kool 1994)
- Dealers play a vital role in the farm machinery industry (Kirkup and Anderson 1987)
- Dealers tend to get closer to farmers, though Brazilian farmers show little loyalty (Neves et al. 1998)
- Every product has more attributes than meet the eye (MacMillan and McGrath 1996)



Results

- Sample's profile
- Farm's profile
- Considered brands
- Purchase moment
- Purchase decision influencers
- Tractor's operations
-

Results

		Farmer							
Farmer's Characteristics	A	B	C	D	E	F	G	H	
	1,800 ha 6110D (110 hp)	2,350 ha 7185J (185 hp)	550 ha 6180J (180 hp)	270 ha MF 7180 (180 hp)	500 ha BH 180 (180 hp)	232 ha 6110E (110 hp)	600 ha BH 180 (180 hp)	300 ha 6165J (165 hp)	
Operation									
Manure application	Cane								
Soil correctives application	Cane								
Cart pulling	Soy								
Plague control	Cane								
Triple cultivation	Cane								
Stump removal	Cane								
Middle disc harrowing			Cane/soy	Cane/soy	Cane/soy				
Heavy disc harrowing			Cane	Cane/soy	Cane/soy			Cane/soy	Cane
Land leveling	Soy								
Mechanized planting			Cane/soy	Soy	Soy	Cane/soy	Cane	Cane	Soy/corn
Spraying	Cane								
Subsoiling			Cane	Cane/soy			Soy	Cane	Cane
Furrow making			Cane/soy	Cane/soy	Cane	Cane	Cane		
Infield wagon pulling	Cane								

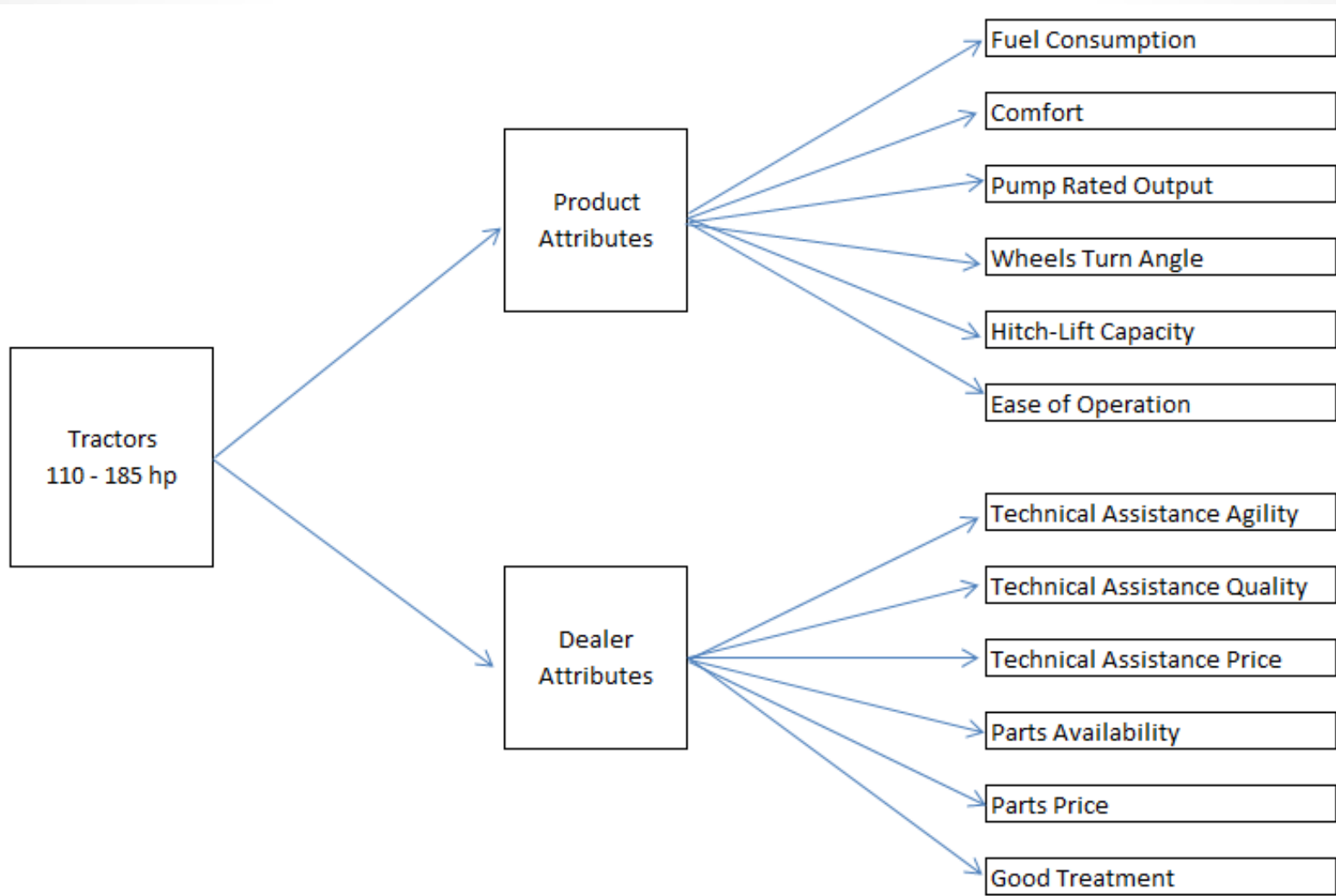
Results

- Tractor's basic attributes
- Dealer's basic attributes
- Energizer attributer

Results

Farmer			
1	2	3	4
Price/hp	Tech. assistance quality	Integrated autopilot	Tractor resistance
Maintenance price	Good treatment	Fuel consumption	Hitch-lift capacity
Negotiation flexibility	Fuel consumption	Maintenance price	Fuel consumption
Good treatment	Operational flexibility	Parts availability	Automatic transmission
Automatic transmission	Comfort	Parts price	Pump rated output
5	6	7	8
Tractor price	Tractor resistance	Tractor resistance	Tractor resistance
Tech. assistance price	Fuel consumption	Tractor price	Clutch
Tech. assistance agility	Ergonomy	Ease of operation	Front wheel drive electric actuation
Conservation (for used tractor)	Comfort	Operator's training	Power take-off electric actuation
-	Tech. assistance quality	Tech. assistance quality	Tech. assistance quality

Results



Conclusions

- Sugarcane farmers' production system peculiarities
- Versatility of the studied tractor range
- Aversion to broken tractors
- Possible evolution of the mill-farmer relationship
- Importance of dealer's attributes

References

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