



A STUDY ON FACTORS INFLUENCING THE BUYING DECISION ON TRACTORS BY FARMERS IN ANTHIYUR BLOCK

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ABSTRACT

Mechanization is among the key drivers towards fostering agricultural productivity, and tractors play an extremely vital role in this revolution. This study analyzes the determinants of farm purchasing behaviour of the Anthiyur Block of Tamil Nadu. It considers parameters like price, brand loyalty, fuel efficiency, after-sales service, and finance availability. The study verifies the existence of operational determinants like fuel efficiency and government subsidy and their importance in shaping the buying of tractors. The findings provide insights to manufacturers, lenders, and policymakers on how they can enhance the supply of tractors and rural farmer demand fulfilment.

KEYWORDS : Tractor Purchase, Farmer Behavior, Fuel Efficiency, Government Subsidy, After-Sales Service.

INTRODUCTION

Agriculture remains the top sector of the Indian economy, and tractors are the principal machines for mechanized farming. Where farm work is a source of livelihood, e.g., in Anthiyur Block of Erode, the choice of an ideal tractor is one of weighing several economic as well as functional considerations. The study assists in the detection of these decision-making considerations and makes sense of farmer choices in a rapidly emerging modernized agri-economy

Statement Of The Problem

Anthiyur Block farmers cannot choose tractors because of the numerous options and factors like price, brand name, horsepower, after-sales service, and fiscal incentives. It is important to know these preferences for successful marketing, policymaking, and product development.

What are the significant factors influencing farmers' purchase decisions regarding tractors?

Which brands of tractors are most preferred by Anthiyur farmers?

Scope Of The Study

This study confines itself to farmers of Anthiyur Block and examines their behaviour and attitude regarding the purchase of tractors. It records brand awareness, financial constraints, need for service, and government subsidy impact.

Objectives Of The Study

- To identify significant determinants of the purchase decision of a tractor for farmers.
- To measure the extent of awareness of existing brands and models of tractors.
- To analyze the role of after-sales service and governmental support on the purchase decision of tractors.

Research Methodology

Research Design: Descriptive

Sample Size: 50 respondents

Sampling Technique: Convenience Sampling

Tools Used: Percentage Analysis, Likert Scale, and Ranking Method

Primary Data: Collected with the help of structured questionnaire

Secondary Data: Reports, journals, websites

Limitations Of The Study

- Carried out in Anthiyur Block alone; cannot be

generalized for other areas.

- A small sample size (50) will not be representative of the larger farming population.
- The answers can be recall biased or refusal to provide monetary data.

Finding And Interpretation

Simple Percentage Analysis:

Percentage = $\frac{\text{Number Of Respondents}}{\text{Total Number Of Respondent}} \times 100$

INTERROGATION	RESPONSE	FREQUENCY	PERCENTAGE
Size of Agricultural Land	Less than 1 Acre	14	28%
	1-5 Acres	26	52%
	More than 5 Acres	10	20%
	TOTAL	50	100%
Years of Experience in Farming	Less than 1 Year	6	12%
	1-5 Years	25	50%
	6-10 Years	12	24%
	More than 10 Years	7	14%
	TOTAL	50	100%
Does Price Influence Your Purchase?	Yes	21	42%
	No	5	10%
	Yes, to some extent	24	48%
	TOTAL	50	100%
Annual Maintenance Cost	Below ₹500	10	20%
	₹500 – ₹1000	26	52%
	₹1001 – ₹2000	10	20%
	Above ₹2000	4	8%
	TOTAL	50	100

Interpretation:

- 52% of farmers own agricultural land ranging from 1-5 acres, indicating small to medium-scale farming operations.
- Half of the respondents (50%) have 1-5 years of experience in farming, suggesting that early-stage farmers are actively investing in tractors.
- 48% of the respondents stated that price influences their purchase decision to some extent, showing a balance between cost and value.
- 52% of the farmers spend between ₹500 and ₹1000 annually on maintenance, which can guide manufacturers in offering budget-friendly service packages.

Ranking Analysis:

Table Showing Factors Affecting Tractor Purchasing

FACTOR S	RA NK 1	RA NK 2	RA NK 3	RA NK 4	RA NK 5	RA NK 6	RA NK 7	RA NK 8	RA NK 9	RA NK 10	TO TAL	RA NK
Fuel/oil Efficiency	25(10)	6(9)	5(8)	2(7)	1(6)	1(5)	1(4)	0(3)	1(2)	8(1)	383	1
Subsidy	1(10)	17(9)	16(8)	4(7)	1(6)	2(5)	0(4)	2(3)	7(2)	0(1)	355	2
Low Maintenance	0(10)	16(9)	17(8)	2(7)	3(6)	2(5)	3(4)	3(3)	2(2)	2(1)	349	3
HP	6(10)	10(9)	8(8)	10(7)	3(6)	3(5)	1(4)	5(3)	2(2)	2(1)	342	5
Low price	1(10)	6(9)	16(8)	3(7)	10(6)	4(5)	4(4)	1(3)	4(2)	1(1)	321	6
Brand name/reputation	3(10)	12(9)	7(8)	5(7)	3(6)	9(5)	4(4)	1(3)	3(2)	3(1)	347	4
Spare parts availability	3(10)	10(9)	10(8)	4(7)	1(6)	1(5)	8(4)	4(3)	6(2)	3(1)	298	8
After sales service	1(10)	11(9)	13(8)	2(7)	1(6)	1(5)	2(4)	11(3)	6(2)	2(1)	293	9
Easy availability of loans	5(10)	8(9)	13(8)	3(7)	1(6)	1(5)	4(4)	4(3)	9(2)	2(1)	306	7
Resale value & exchange value	5(10)	10(9)	11(8)	1(7)	4(6)	2(5)	2(4)	3(3)	2(2)	10(1)	270	10

Interpretation

The ranking analysis reveals that farmers prioritize fuel efficiency, government subsidies, and low maintenance costs when purchasing tractors, emphasizing cost-effectiveness. Brand reputation and horsepower also influence decisions, while factors like price, loan availability, spare parts, and after-sales service are less critical. Resale value ranks lowest, showing that immediate operational benefits outweigh long-term considerations.

Suggestion

To encourage farmer adoption of tractors in Anthiyur Block, manufacturers and policymakers will have to stress offering fuel-saving models and extending finance support with convenient loan facilities and attractive government subsidies. Awareness generation on new tractor technology through training drills and extension programs will also bridge the knowledge gap. Improved supply and quality of after-sales service, i.e., spare parts and customer care, will also improve farmer satisfaction and loyalty. Also, offering tailored financing and maintenance packages can make the purchase of a tractor more economical and viable for marginal and small farmers.

CONCLUSION

The study confirms that farmers' decisions to purchase tractors in Anthiyur Block are function- and economically oriented, and fuel efficiency, government subsidy, and low maintenance costs are the most important considerations. Brand image and horsepower are also the most important decision-making considerations, as a prerequisite for robust and reliable equipment. Even though comparatively less significant are post-sales service, spare parts availability, and resale value, others are more significant. That there is fair awareness of new tractor technologies and mixed satisfaction with post-purchase services indicates a need for improved education and support. Overall, farmers prioritize cost-effectiveness, efficiency of use, and brand trust, suggesting that policymakers and manufacturers must act in these domains to improve on farmers' demands.

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