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**ADOPTION AND USE OF TECHNOLOGY IN BEEF PRODUCTION IN
THE SOUTH OF BRAZIL: A MULTIPLE-CASE STUDY
INVESTIGATION OF FARMERS' ATTITUDES**

**A thesis presented in partial fulfilment of the requirements for the degree of
Master of Applied Science in Agribusiness**

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Abstract

In the last decade, the agricultural sector in Brazil has been undergoing significant structural changes as a result of the economic situation of the country and the modernisation process required by globalisation. The South of Brazil, after achieving status as a “zone free of foot-and-mouth disease”, has enlarged its export market and faces new productivity requirements. It is assumed that increases in the rate of adoption of technologies in beef production can promote improvement in productivity and quality. The research aim was to identify farmers’ attitudes towards adoption and use of technologies in beef production and their reasons for using/not using them. The purpose is to assist the increase in the rate of adoption of technologies in the Brazilian beef sector by the adequate formulation and recommendation of new technologies.

The study was conducted in the South of Brazil, using multiple-case study and qualitative analysis. Nine beef farmers were interviewed in Rio Grande do Sul, concerning the use of five technologies: artificial insemination, use of salt/urea, use of fertilisers and soil correction, parasite and disease control and soil testing. Rogers’ five attributes of innovation were used as a framework for analysis and compared with farmers’ perceptions of the technologies.

The research findings suggest that Rogers’ attributes of innovations, although not all of the same importance, exert influence in the adoption decision. Farmers’ very positive attitudes towards the adoption of new technologies was also identified. However, adoption and use of technologies are limited by financial constraints. It was concluded that further research and extension should focus on the financial and environmental circumstances of the farmers when developing and recommending the use of technologies, in order to increase the rate of adoption. Further research on this subject is suggested to confirm the study findings and to assist improvements in the sector.

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TABLE OF CONTENTS

Abstract	i
Acknowledgments	ii
Table of Contents	iii
List of Tables and Figures	v
CHAPTER ONE : INTRODUCTION	1
1.1 Background	2
1.2 Problem statement	8
1.3 Objectives of the research	9
1.4 Justification	9
1.5 Definitions	11
CHAPTER TWO : BACKGROUND AND PROBLEM DISCUSSION	14
2.1 The Brazilian economy and agriculture profile	14
2.2 The Brazilian beef sector	17
2.3 Rio Grande do Sul beef sector	20
CHAPTER THREE : LITERATURE REVIEW	25
3.1 Definition of technology	25
3.2 The adoption of technologies	27
3.3 Technology adoption in developing countries	30
3.4 The qualitative research	36
3.5 The multiple-case study	37
3.6 Quantitative data in qualitative research	39

3.7	Matrices	40
3.8	Qualitative data analysis	42
CHAPTER FOUR : METHODOLOGY		44
4.1	Questionnaire design	44
4.2	Data collection	46
4.3	Data analysis	47
CHAPTER FIVE : RESULTS AND DISCUSSION		49
5.1	Farmers' profile	49
5.2	Farmers' perceptions and use of the five selected technologies	58
5.3	Farmers' attitudes towards the adoption and use of technologies	68
5.4	Discussion	70
5.5	Limitations of the research	77
CHAPTER SIX : CONCLUSIONS		78
REFERENCES		81
Appendix		87
Cover letter		
Questionnaire 1		
Questionnaire 2		

List of Tables and Figures

Table 1.1: Beef supply and utilisation in Brazil 1970-1996	5
Table 1.2: Brazilian beef imports “in natura” per origin	6
Figure 1.2: Map of Brazil	7
Figure 2.1: Evolution of Brazilian livestock (1989-1998)	18
Figure 2.2: Brazilian cattle inventories (%) per state (year 1998)	21
Table 2.1: Brazilian cattle inventories per state	21
Table 2.2: Brazilian beef production per state	22
Table 2.3: Brazilian cattle slaughters per state	22
Table 3.1: Factors affecting the rate of adoption of technologies in agriculture in less developed countries	33
Figure 4.1: Map of Rio Grande do Sul with location of farms	47
Table 5.1: Summary of farmer’s personal data	55
Table 5.2: Summary of Farm data	56
Table 5.3: Summary of Livestock data	57
Table 5.4: Farmers’ perceptions of Artificial Insemination through constructs classification	63
Table 5.5: Farmers’ perceptions of utilisation of Salt/Urea through constructs classification	64
Table 5.6: Farmers’ perceptions of utilisation of Fertilisers and Soil Correction through constructs classification	65
Table 5.7: Farmers’ perceptions of Parasites and Disease Control through constructs classification	66
Table 5.8: Farmers’ perceptions of Soil Testing through constructs classification	67
Table 5.9: Farmers’ use of technologies, goals and objectives and interest in other technologies	69