

SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY MASTER OF BUSINESS ADMINISTRATION

SUSTAINABILITY IN TRADITIONAL COIR PROCESSING IN SRI LANKA

This dissertation is submitted as a partial fulfilment of the requirements of the degree of Master of Business Administration.

B.L.T.D BALASOORIYA

MB20851040

November 2021

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to the Associate Dean of the Faculty of Business and my supervisor Prof. Nagalingam Nagendrakumar for his encouragement, insight, sharing knowledge and his vast experience in the research field which helped me to complete this thesis successfully. I consider it as a great privilege to work under his supervision. I would also like to extend my sincere gratitude to Prof. Ruwan Jayathilaka, Head of Department of Information Management and MBA Coordinator, for the guidance provided to me in preparing the thesis and helping in successful completion of the same. Also, I would like to extend my thanks to Ms. Sonali Rajasekara for the continuous support and for guiding me with relevant knowledge throughout the study. I would also like to express special gratitude to my beloved father Mr. Premarathne and mother Mrs. Susilawathie for their guidance, support and blessings. My sincere gratitude also extends to my brother Wishwa Balasooriya who has shared his knowledge and insight in completing my thesis successfully. Finally, I express my gratitude to the Sri Lankan Institute of Information Technology for offering the opportunity and motivating directly or indirectly to complete my MBA.

ABSTRACT

Sri Lanka is one of the world's leading exporters of high-quality bristle fiber. The Drum Paired method is the most common traditional method for extracting bristle fiber in Sri Lanka. This strategy was utilized to bring in more foreign currency to the country, as well as increase profits for coir manufacturers in order to keep the fiber sector afloat in Sri Lanka. However, a new technology known as 'D1' is rapidly replacing the traditional method and this method is incapable of producing high-quality bristle fiber as an output. Hence, this study aims to find the causative factors for why entrepreneurs move to 'D1' method. Interviews were done with manufacturers in this field that had been in business for a long time and had experience with both coir extracting technologies to find moderate characteristics that were not identified by earlier researchers: resource needs, labour, maintenance, market, and safety. Thematic analysis was used to examine transcripts of the interviews, and four distinct themes emerged: government, productivity, business development, and business continuity. A structured questionnaire was issued to 150 coir manufacturers in Sri Lanka, with 9 factors considered, and binary logistic regression was used to determine which factors have an impact on moving to a new coir processing method. According to the results generated resource needs, labour, maintenance, market, business development, and business continuity have a significant impact on moving to new method. These findings will be valuable to both coir manufacturers and relevant authorities in determining a solution to this problem and motivating manufacturers to return to the traditional approach in order to increase profits and foreign revenue for the country.

Keywords: Drum Paired Method, D1 Method, Coir Processing, Binary Logistic Regression

TABLE OF CONTENT

DECLARATION OF THE CANDIDATE	. ii
SUPERVISOR'S CERTIFICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	. v
TABLE OF CONTENT	vi
LIST OF TABLES	ix
LIST OF FIGURES	. x
LIST OF ABBREVIATIONS	хi
CHAPTER 01 INTRODUCTION	. 1
1.1 Background of the study	. 1
1.1.1 Traditional Drum Paired method	. 2
1.1.2 D1 method (new method)	. 3
1.2 Problem statement	. 3
1.2.1 Research questions	. 4
1.2.2 Research objectives	. 4
1.3 Scope of the study	. 5
1.4 Contribution of the study	. 5
1.5 Layout of the paper	. 5
1.6 Summary	. 6
CHAPTER 02 LITRETURE REVIEW	. 7
2.1 Introduction	. 7
2.2 Coir manufacturing industry	. 7

2.3 Problems in coir manufacturing industry	8
2.4 Summary	11
CHAPTER 03 RESEARCH METHODOLOGY	12
3.1 Introduction	12
3.1.1 Research approach	12
3.1.2 Research strategy	12
3.2 Conceptual framework	13
3.3 Hypothesis	14
3.4 Sampling	16
3.5 Operationalization	16
3.6 Data collection method	18
3.7 Data analysis techniques	18
3.7.1 Qualitative data analysis techniques	18
3.7.2 Quantitative data analysis techniques	19
3.8 Summary	20
CHAPTER 04 QUALITATIVE STUDY	21
4.1 Introduction	21
4.2 Conduct of qualitative study	21
4.2.1 Government	23
4.2.2 Productivity	23
4.2.3 Business development	24
4.2.4 Business continuity	25
4.3 Emergent model	26
4.4 Summary	26
CHAPTER 05 DATA ANALYSIS AND FINDINGS	27

5.1 Introduction	27
5.2 Descriptive statistics	27
5.3 Likelihood to move to D1 method	28
5.4 Reliability testing	29
5.5 Hypothesis testing	30
5.5 Summary	32
CHAPTER 06 DISCUSSION OF FINDINGS	33
6.1 Introduction	33
6.2 Discussion	33
6.3 Summary	36
CHAPTER 07 CONCLUTION AND RECOMENDATIONS	37
7.1 Introduction	37
7.2 Conclusion	37
7.3 Recommendation	39
7.4 Limitations	39
REFERENCES	41
APPENDIX	44
APPENDIX 01: QUESTIONNAIRE ENGLISH	44
APPENDIX 02: QUESTIONNAIRE SINHALA	47
APPENDIX 03: STATA COMMANDS AND OUTPUT RESULTS	53
APPENDIX 04: INTERVIEW TRANSCRIBES	55
APPENDIX 05: DETAIL SHEET OF LITRETURE REVIEW	61

LIST OF TABLES

Table 1: Fibre Products Export Performance 2018-2020.	2
Table 2: Millers view on three different coir extracting technologies	10
Table 3: Operationalization	16
Table 4: Variable definitions	19
Table 5: Codes which developed using transcribed data.	21
Table 6: Themes and codes	22
Table 7: Defined themes and codes	25
Table 8: Demographic variables	27
Table 9: Likelihood to move to D1 method	28
Table 10: Cronbach's Alpha testing	29
Table 11: Internal consistency	29
Table 12: Classification table	30
Table 13: Binary logistic regression results	31
Table 14: Hypothesis testing summary	31

LIST OF FIGURES

Figure 1: Drum Paired Machine	3
Figure 2: D1 Machine	3
Figure 3: Research framework for moving to new coir processing method	13
Figure 4: Emergent model	26

LIST OF ABBREVIATIONS

CCB - Coconut Cultivation Board.

CDA - Coconut Development Authority.

CRI - Coconut Research Institute.

EDB - Export Development Board.

MT - Metric Ton

Mn - Million

SPSS - Statistical Package for the Social Sciences

SLIIT - Sri Lanka Institute of Information Technology

MBA - Master of Business Administration

NWP - North Western Province