FISH PRODUCTION AND ENTREPRENEURIAL BEHAVIOUR OF FISHERMEN IN HIKKADUWA DIVISIONAL SECRETARIAT AREAOF GALLE DISTRICT

LIBRARY
18 NOV 2023
EUSL, SRI LANKA

BY

D.L.J. EDIRISINGHE

FTC 19
Project Report
Library - EUSL

FACULTY OF TECHNOLOGY

EASTERN UNIVERSITY

SRI LANKA

DECEMBER 2021

cosmopolite ability of the fishermen positively correlates with their knowledge of expertise and leadership ability.

TABLE OF CONTENT

Page No

ABSTRACT ..... **i**

ACKNOWLEDGMENT ..... **iii**

TABLE OF CONTENT ..... **iv**

LIST OF TABLES ..... **viii**

LIST OF FIGURES ..... **ix**

ABBREVIATIONS ..... **x**

CHAPTER 01 INTRODUCTION **1**

1.1 Background 1

1.2 Importance of Entrepreneurship 4

1.3 Entrepreneurial behaviour 5

1.4 Need and importance of the study 6

1.5 Statement of problem 6

1.6 Objectives: 6

1.7 Scope of the study 7

1.8 Limitation of the study 7

CHAPTER 02 LITERATURE REVIEW **8**

2.1 Production of fisheries around the world 8

2.2 The fishing industry in Sri Lanka 8

2.2.1 Sri Lanka's fisheries 9

2.2.1.1 Production of marine fish 10

2.2.1.2 Production of inland and aquaculture fish 12

2.3 Seaweed Culture 14

2.4 Ornamental fish culture 14

2.5 The Marine Environment of Sri Lanka 15

2.5.1 Climate and fishing season 16

2.6 Geographical and climatic features of Galle District 18
2.7 Fishing methods 19
2.8 Aquaculture social entrepreneurship 21
2.8.1 Categories of entrepreneurs approaching agri-business incubator 21
2.9 Fish product with added value 22
2.10 Animal welfare and health 22
2.11 The fishing industry's contribution to GDP 23
2.12 Economic contribution in Fisheries 24
2.13 Pricing arrangements 25
2.14 Market structure 26
CHAPTER 03 RESEARCH METHODOLOGY 27
3.1 Study area 27
3.1.1 Galle district 27
3.1.2 Selection of DS division 28
3.1.3 Selection of villages 29
3.2 Population and Sample of the study 29
3.2.1 Population 29
3.2.2 Selection of sample 29
3.3 Selection of variable 30
3.4 Data collection 30
3.5 Data analysis 30
3.5.1 Methods used for measurement of the dependent variable 31
3.5.1.1 Decision-making ability 31
3.5.1.2 Knowledge of fishing enterprise 31
3.5.1.3 Risk-taking ability 32
3.5.1.4 Leadership ability 32
3.5.1.5 Cosmopoliteness 32

3.5.2 Methods used for measurement of independent variables 33
3.5.2.1 Personal and socio-economic characteristics 33
3.5.2.1.1 Age 33
3.5.2.1.2 Education 33
3.5.2.1.3 Main occupation 33
3.5.2.1.4 Subsidiary occupation 33
3.5.2.1.5 Size of the boat 34
3.5.2.1.6 Monthly total income 34
3.5.2.1.7 Social participation 34
3.5.2.1.8 Extension participation 35
CHAPTER 04 RESULTS AND DISCUSSION 36
4.1 Socio-economic characteristics of the fishermen 36
4.1.1 socio-economic characteristics 36
4.1.2 Age 37
4.1.3 Education level 37
4.1.4 Main occupation 38
4.1.5 Length of boat 38
4.1.6 Monthly income 39
4.1.7 Experience level 39
4.1.8 Family size 40
4.1.9 Fish production 40
4.1.10 Social participation 41
4.1.11 Extension participation 41
4.2 Entrepreneurial behaviour components of Respondents 41
4.2.1 Decision-making ability 41
4.2.2 Knowledge of fishing enterprise 42
4.2.3 Leadership ability 42

4.2.4 Cosmopoliteness 43

4.2.5 Risk taking ability 43

4.2.6 Entrepreneurial behavior of respondents 44

4.3 Relational analysis 44

4.3.1 Relationship between selected independent variables 44

4.3.2 Relationship between components of Entrepreneurial behaviour of the fishermen 45

CHAPTER 05 CONCLUSION 47

5.1 Conclusion 47

5.2 Implications and Recommendations 49

5.3 Suggestions for Future Research 50

REFERENCES 51

ANNEXURES 55

LIST OF TABLES

Table 1.1: Annual Fish Production by Marine & Coastal Sector (MT) -2013-2019 2

Table 1.2: Marine Sector Fish Catch by Fisheries Galle District (MT) -2013-2019 3

Table 2.1: Fish Production (MT) in Sri Lanka during 2018-2019 10

Table 2.2: Marine fish production by major commercial groups (MT) 11

Table 2.3: Fish production by fisheries districts in 2018 12

Table 2.4: Inland fish production by major species (MT) 13

Table 2.5: Common fishing gear used by Sri Lankan fishermen and their mode of operation 20

Table 2.6 : Fish Export with Total Exports in Sri Lanka 25

Table 3.1: Population of Galle District by religion group in 2012 27

Table 3.2: Fishing villages and number of the fishermen 29

Table 4.1: Socio-economic characteristics of respondents 36

Table 4.2: Age distribution of fishermen 37

Table 4.3: Education level of respondent fishermen 37

Table 4.4: Length of a boat (feet) of respondents 38

Table 4.5: Monthly income of the respondents 39

Table 4.6: Experience level of respondents 39

Table 4.7: Family size of respondents 40

Table 4.8: Fish production of respondents 40

Table 4.9: Social participation of fishermen 41

Table 4.10: Decision making ability of fishermen 41

Table 4.11: Knowledge of respondents 42

Table 4.12: Leadership ability of respondents 42

Table 4.13: Cosmopoliteness of respondents 43

Table 4.14: Risk taking ability of respondents 43

Table 4.15: Entrepreneurial behavior 44

Table 4.16: Correlation between independent variables 45

Table 4.17: Correlations between dependent variables different components of entrepreneurial behaviour 46

LIST OF FIGURES

Figure 1.1 : The maritime boundary of Sri Lanka 3

Figure 2.1: Fisher decision-making process for iconic community-based stilt fisheries in southern Sri Lanka 17

Figure 2.2: Map of climatic zones of Sri Lanka 18

Figure 4.1: Main occupation distribution 38

ABSTRACT

A study on fish production and entrepreneurial behaviour of fishermen in the Hikkaduwa Divisional Secretariat division of Galle district was carried out during May and December 2021. By following a random sampling procedure, 40 fishermen were selected, and a structured interview schedule was used to collect the information through personal interviews and phone calls. The data were analyzed by using the SPSS package. The frequencies, percentages and correlation coefficients were used to interpret the results.

The important findings of the study were: more than half (60%) of fishermen had medium level of entrepreneurial behaviour. The personal and socio-economic characteristics of fishermen revealed that all of the fishermen were male, more than half of fishermen (67.5%) belonged to the old age category, 47.5% of fishermen were educated up to primary education level, and more than half (62.5%) of the respondents were depended mainly on fishing activity. Half of the respondents (50%) had a boat size lesser than 24 feet in length. More than half (72.5%) of respondents obtained high income (more than 35,000 Rs) from fishing, 27.5% of fishermen obtained low income (below 20,000 Rs). More than half (70%) of the fishermen had medium family size (4 to 6 members), and the majority (45.0%) of fishermen had above 36 years experience in fishing activity. Further, a positive correlation was obtained between the variables; the age of the fishermen and experience in fishing, education level of the fishermen and monthly family income, and annual fish production and the annual cost of production. On the other hand, the family size of the fishermen and their monthly family income negatively correlate with their experience in fishing. Furthermore, the