

**A STUDY ON THE PERFORMANCE OF
HANDLOOM ENTERPRISES IN ZUANGTUI
CLUSTER OF
AIZAWL, MIZORAM**

**(A dissertation submitted in partial fulfillment of the
requirements for the degree of Master of Philosophy)**

P.C.REMLALHRUAI

MZU Regn. No.: 1906734

M.Phil Regn. No.:MZU/M.Phil./621 of 29.05.2020



**THE DEPARTMENT OF ECONOMICS
SCHOOL OF ECONOMICS, MANAGEMENT
& INFORMATION SCIENCE**

MARCH 2021

**A STUDY ON THE PERFORMANCE OF
HANDLOOM ENTERPRISES IN ZUANGTUI
CLUSTER OF
AIZAWL, MIZORAM**

BY

P.C.REMLALHRUAI

Department of Economics

Prof. Lalhriatpuii

Supervisor

Submitted

**In partial fulfillment of the requirement of the Degree
of Master of Philosophy in Economics of Mizoram
University, Aizawl**

I

**MIZORAM UNIVERSITY
DEPARTMENT OF ECONOMICS**

Prof. Lalhriatpuii

09436152046

MZU, Tanhril-796009

0389-2330709

CERTIFICATE

This is to certify that the dissertation entitled “**A Study on the Performance of Handloom Enterprises in Zuangtui Cluster of Aizawl, Mizoram**” by Smt. P.C. Remlalhruaii has been written under my guidance. This dissertation is the result of her investigation into the subject and was never submitted to any other University for any research degree.

(PROF.LALHRIATPUII)

II

DECLARATION

MIZORAM UNIVERISTY

2021

I, P.C. Reamlalhruaii, hereby declare that the subject matter of this dissertation is the record of work done by me, that the contents of this dissertation did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the dissertation has not been submitted by me for any research degree in any other University/ Institute.

This is being submitted to the Mizoram University for the degree of Master of Philosophy in Economics.

(P.C.REMLALHRUAI)

(PROF.LALHRIATPUI)

Head & Supervisor

III

ACKNOWLEDGEMENT

It is by His grace that I am where I am. Let praise be to the Almighty for His unending blessings.

I am truly grateful to my supervisor, Prof. Lalhriatpuii for her thorough guidance, her swift and valuable feedbacks. I also extend my sincere gratitude to Dr. James LT Thanga and Dr. K. Angela Lalhmingangi for their wise suggestions and to all the staffs of the Department of Economics for their welcomed help.

This work would have been in vain without the active cooperation of all the respondents of the study area. I thank them wholeheartedly for talking with me hours on end on multiple occasions, for imparting valuable information and for instilling in me interest on the topic of handloom.

I am in debt to my immediate and extended family for providing for me all throughout and giving me the opportunity to complete my work.

Thank you Fabian Lalthathanga for all the little, yet precious details.

(P.C.REMLALHRUAI)

IV

CONTENTS

| | |
|--------------------------------|---------------|
| Certificate | I |
| Declaration | II |
| Acknowledgement | III |
| Contents | IV |
| List of Tables | V |
| List of Graphs | VII |
| List of Abbreviations | VIII |
| | |
| CHAPTER I: INTRODUCTION | 1 - 18 |
| | |
| 1.2: HANDLOOM IN MIZORAM | 8 - 10 |
| | |
| 1.3: CONCEPTS AND DEFINITIONS | 11- 12 |
| | |
| 1.4: SIGNIFICANCE OF THE STUDY | 12 - 13 |
| | |
| 1.5: STATEMENT OF THE PROBLEM | 13 - 14 |
| | |
| 1.6: SCOPE OF THE STUDY | 14 |
| | |
| 1.7: OBJECTIVES | 15 |
| | |
| 1.8: HYPOTHESES | 15 |

| | |
|--|----------------|
| 1.9: STUDY AREA | 16 - 17 |
| 1.10: METHODOLOGY | 18 |
| CHAPTER II: REVIEW OF LITERATURE | 19 - 27 |
| 2.1: INTRODUCTION | 19 |
| 2.2: HANDLOOM | 19 - 20 |
| 2.4: CHALLENGES TO HANDLOOM WEAVERS | 20 - 23 |
| 2.5: GENDER: WOMEN AND HANDLOOM | 23 - 25 |
| 2.6: OVERVIEW OF HANDLOOM IN MIZORAM | 25 - 27 |
| CHAPTER III: AN OVERVIEW OF HANDLOOM IN INDIA | 28 - 37 |
| 3.1: INTRODUCTION | 28 - 29 |
| 3.2: WEAVER HOUSEHOLDS | 29 - 32 |
| 3.3: ALLIED WORKERS | 32 - 33 |
| 3.4: NON-HOUSEHOLD UNITS | 33 - 34 |
| 3.5: LOOMS | 35 |
| 3.6: PRODUCTION | 36 - 37 |
| 3.7: YARN | 37 |
| 3.8: SALES | 37 |

| | |
|--|------------------|
| CHAPTER IV: PERFORMANCE ANALYSIS | 38 - 98 |
| 4.1: INTRODUCTION | 38 |
| 4.2: PROFILE AND SOCIO ECONOMIC CONDITION OF ENTREPRENEURS | 39 - 51 |
| 4.3: ORGANISATIONAL PROFILE OF THE HANDLOOM ENTERPRISES | 51 - 64 |
| 4.4: CAPITAL ASSET AND INVENTORY | 64 - 71 |
| 4.5: ACCESS TO CREDIT | 71 - 77 |
| 4.6: ECONOMICS OF PRODUCTION AND WORKING CAPITAL | 77 - 87 |
| 4.7: OTHER FINDINGS | 88 - 91 |
| 4.8: CORRELATION ANALYSIS AND HYPOTHESES TESTING | 91 - 98 |
| CHAPTER V: MAIN FINDINGS AND SUGGESTIONS AND CONCLUSION | 99 - 114 |
| APPENDIX | 115 - 117 |
| BIBLIOGRAPHY | 118 - 126 |
| BRIEF BIO-DATA OF THE CANDIDATE | 127 |
| PARTICULARS OF THE CANDIDATE | 128 |

LIST OF TABLES

| No. | Name of Tables | Page |
|------------|--|-------------|
| 4.1: | Sex of the Respondents | 39 |
| 4.2: | Age of the Respondents | 40 |
| 4.3: | Education Qualification of the Respondents | 41 |
| 4.4: | Possession of the Respondents | 42 |
| 4.5: | Family Size of the Respondents | 43 |
| 4.6: | Number of Dependent Family Member of the Respondents | 44 |
| 4.7: | Family Status of the Respondents | 45 |
| 4.8: | Type of Dwellings | 46 |
| 4.9: | Type of Residence of the Respondents | 46 |
| 4.10: | Possession of Health Insurance | 47 |
| 4.11: | Weaving Status of the Respondents | 47 |
| 4.12: | Status of Health Problem Faced by the Respondents | 48 |

| | |
|--|----|
| 4.13: Health Problems Faced by the Respondents | 48 |
| 4.14: Handloom as a Source of Livelihood | 50 |
| 4.15: Average Monthly Income of the Respondents | 50 |
| 4.16: Year of Establishment of the Respondents' Enterprise | 52 |
| 4.17: Number of Workers Employed by the Respondents | 53 |
| 4.18: Enrolment in Handloom Society | 54 |
| 4.19: Enrolment in Self Help Group | 54 |
| 4.20: Decision Maker of the Handloom Enterprise | 55 |
| 4.21: Mode of Sale of the Handloom Enterprise | 56 |
| 4.22: Sale outside Mizoram | 56 |
| 4.23: Online Sales | 57 |
| 4.24: Ownership of a display shop | 58 |
| 4.25: Mode of Advertisement of the Enterprise | 58 |
| 4.26: Status of Undertaking Research and Development | 59 |
| 4.27: Employment of Designer for the Enterprise | 60 |
| 4.28: Participation of the Respondents in Handloom Expo | 61 |
| 4.29: Attendance in Skill Training Programmes | 62 |

| | |
|--|----|
| 4.30: Reception of Handloom Award | 63 |
| 4.31: Status of Awareness of Handloom Schemes of the Government | 63 |
| 4.32: Ownership of Workshed | 64 |
| 4.33: Type of Loom Used by the Respondents | 65 |
| 4.34: Quantity of Looms Owned by the Respondent | 66 |
| 4.35: Ownership of Means of Transport | 67 |
| 4.36: Source of Yarn for the Respondents | 67 |
| 4.37: Start-up Capital of the Respondents | 68 |
| 4.38: Status of Providing Ancillary Repair Services | 69 |
| 4.39: Type of Products of the Respondents | 70 |
| 4.40: Status of Borrowing Loan | 71 |
| 4.41: Principal of Loan Borrowed by the Respondents | 72 |
| 4.42: Status of Problem Faced when Borrowing Loan | 73 |
| 4.43: Borrowing Money from Money Lender, Family or Friends | 74 |
| 4.44: Reception of Financial Assistance from the Government | 74 |
| 4.45: Type of Financial Assistance from the Government | 75 |
| 4.46: Channel of Reception of Financial Assistance from the Government | 75 |

| | |
|--|----|
| 4.47: Reception of Financial Assistance from Other Sources | 76 |
| 4.48: Status of Facing Financial Problem by the Respondents | 76 |
| 4.49: Cost of Looms of the Respondents | 77 |
| 4.50: Cost of Renting Workshed and Display Shops | 79 |
| 4.51: Quantity of Output Produced Per Week Per Loom | 80 |
| 4.52: Quantity of Yarn Used for Each Product | 81 |
| 4.53: Employment of Family Member | 84 |
| 4.54: Selling Price of Each Product | 85 |
| 4.55: Availability of Various Amenities | 86 |
| 4.56: Satisfaction in Handloom | 88 |
| 4.57: Status of Marketing Problems Faced by the Respondents | 88 |
| 4.58: Marketing Problems Faced by the Respondents | 89 |
| 4.59: Status of Other Problems Faced by the Respondents | 90 |
| 4.60: Other Problems Faced by the Respondents | 90 |
| 4.61: Correlation Between No. of Workers and Average Monthly Income | 95 |
| 4.62: Correlation Between No. of Looms and Average Monthly Income | 97 |
| 4.63: Chi-Square Tests of Association Between Gender and Average Monthly Income | 98 |

VI

LIST OF GRAPHS

| No. | Name of Graphs | Page |
|------------|--------------------------------|-------------|
| 4.1: | Sex of the respondent | 39 |
| 4.2: | Age of the Respondents | 40 |
| 4.3: | Education Qualification | 41 |
| 4.4: | Family Size | 43 |
| 4.5: | No. of Dependent Family Member | 44 |
| 4.6: | Family Status | 45 |
| 4.7: | Health Problems | 49 |
| 4.8: | Average Monthly Income | 50 |
| 4.9: | Year of Establishment | 52 |
| 4.10: | No. of Workers | 53 |
| 4.11: | Decision Maker | 55 |
| 4.12: | Participation in Handloom Expo | 61 |

| | |
|--|----|
| 4.13: Quantity of Looms Owned | 66 |
| 4.14: Source of Yarn | 68 |
| 4.15: Type of Products | 70 |
| 4.16: Principal of Loan | 72 |
| 4.17: Cost of Looms | 78 |
| 4.18: Cost of Renting Workshed and Display Shops | 79 |
| 4.19: Quantity Produced | 80 |
| 4.20: Amenities Provided | 87 |
| 4.21: Mean Distribution of No. of Workers | 92 |
| 4.22: Mean Distribution of Average Monthly Income | 93 |
| 4.23: Scattergram of No. of Workers and Average Monthly Income | 94 |
| 4.24: Mean Distribution of No. of Looms | 96 |
| 4.25: Scattergram of No. of Looms and Average Monthly Income | 96 |

VII

LIST OF ABBREVIATIONS

Abbreviations

| | |
|--------|---|
| AAY | Antyodaya Anna Yojana |
| APL | Above Poverty Line |
| BPL | Below Poverty Line |
| GI Tag | Geographical Indication Tag |
| HSLC | High School Leaving Certificate |
| HSSLC | Higher Secondary School Leaving Certificate |
| IDBI | Industrial Development Bank of India |
| IGNOU | Indira Gandhi National Open University |
| IHB | India Handloom Brand |
| MACHO | Mizoram Apex Handloom & Handicraft Cooperative Society Limited |
| MGBBY | Mahatma Gandhi Bunkar Bhima Yojana |

| | |
|--------|--|
| MIP | Mizoram Intodelhna Project |
| NCAER | National Council for Applied Economic Research |
| NEHU | North Eastern Hill University |
| NGO | Non Governmental Organisation |
| NIOS | National Institute of Open Schooling |
| NLUP | New Land Use Policy |
| OBC's | Other Backward Casts |
| PMEG | Prime Minister Employment Guarantee Programme |
| PMJJBY | Pradhan Mantri Jeevan Jyoti Bhima Yojana |
| PMSBY | Pradhan Mantri Suraksha Jyoti Bhima Yojana |
| R&D | Research and Development |
| RCC | Re-enforced Cement Concrete |
| RSBY | Rashtriya Swasthya Bhima Yojana |
| SC | Scheduled Caste |
| SHG | Self Help Group |
| SPSS | Statistical Package for the Social Sciences |
| ST | Scheduled Tribe |

| | |
|-------|--|
| UK | United Kingdom |
| USA | United States of America |
| ZIDCO | Zoram Industrial Development Corporation |

CHAPTER I

INTRODUCTION

1.1: INTRODUCTION

Handloom occupies an important place in the lives of people through the ages. Handloom as defined by the Merriam-Webster dictionary is “any weaving device operated wholly or partially by hand or foot power”. The Reservation of Articles for Production Act, 1985 defines handloom as “any loom other than power loom”. Handloom has always occupied an important position both in the economy of the country and in the hearts of the people. Handloom has endured through the Indus Valley Civilisation, British India and till today, accumulating wealth of innovations that enabled India to become the most richly cultured country (Vanlalruata, 2016). The lives of many tribes and castes are closely intertwined with handloom since time inception. Handloom constructs the social and cultural identity, rituals and habitats and plays a vital role in marriage institution of the North Eastern states (Devi, 2013). Artistic works of handloom is at the very core of India’s cultural heritage. Handloom is a timeless cultural heritage of India that bridges its diverse social groups through creativity, traditional knowledge and precision (Hmangaihzuali, 2013). It has been heralded as an artistic profession that commands a certain degree of awe and respect through the ages and hopes are still intact for the continuity of its grand status. The widespread of handloom throughout India establishes the dexterity and artistic skills of weavers that is symbolic of Indian culture (Lalmalsawmi, 2019). What had provided protection and comfort from the physical elements in ancient times still provided people with employment

opportunities in the modern world. Thus, the immeasurable values of handloom in the lives of people and in the economy as a whole is worth an extensive analysis.

Towards the end of the seventeenth century, 83% of the East India Company's export was said to be accounted for by clothing textile. However, the advent of Industrial Revolution and several turbulent policies under the British Raj led to the dwindling of India's handloom sector. Indian leaders of the time were aware of the need to revive handloom in order to revive the nation itself. Thus, the Mahatma proposed Charkha (spinning wheel) to be placed at the centre of the Indian flag, followed by various policies and promotions for Swadeshi goods. Despite such adversities, handloom has stood the test of time and has kept this great craft alive (NCAER, 2020).

The vital role of handloom in India is cemented by its responsibility to preserve the country's heritage and culture (Raju and Rao, 2014). India being the second most populous country has an advantage in providing adequate workforce for the labour intensive handloom industry. Through its long tradition of excellent craftsmanship, handloom provides a refreshing taste of manual skill and diversity amongst increasing globalisation and mechanisation (Devi, 2013). The diversity of Indian culture is reflected in its varied handloom products such as Chanderi muslin, Banarasi brocades, Rajasthani tie dye products, Punjabi phulkari, hymroos of Hyderabad, patola sarees from Patna, deccai and jamdani from Bengal, ikats from Andhra

Pradesh, mekhla sador of Assam, jainsem of Meghalaya, kho of Sikkim, phanek of Manipur, puan of Mizoram and numerous others of the like. In spite of all these wonderful diversities, few of these traditional handloom attire are still alien to the many and faces ignorant bigotry once in a blue moon. Handloom products have unique soul that is imbibed by the sincere touch of the weavers. The astounding intricacy and artistry of handloom products is beyond the capacity of any modern machinery (NCAER, 2020).

Today, handloom is the second largest provider of employment, providing employment to 31.45 lakh households through weaving and allied activities (NCAER, 2020). In addition, handloom also provides numerous employments to farmers and traders who are involved in the production of raw materials and marketing of finished products respectively. The colossal importance of handloom in India is significant from it being the largest cottage industry, its employment potential and agrarian linkages (Khatoon, 2016). Among the 31.45 lakh handloom households, 71.6% are female and 88.7% reside in rural areas. These figures clearly depict the valuable employment that helps to uplift status of women and the employment that helps to generate complementary income besides farming. In addition, among these weaver households, 34.6% belong to Other Backward Caste, 19.9% are from Scheduled Tribe and 14.1% belong to Scheduled Castes. It is clear that handloom provides a much needed impetus to bring equity among various social groups by increasing their income earning capacity.

Despite its colossal importance, the handloom sector is not devoid of flaws and weaknesses. The Report of the Steering Committee on Handlooms and Handicrafts constituted for the Twelfth Five Year Plan, 2011 (Govt. of India, 2011) observed perennial problems such as weak infrastructure and market, shortage in supply and poor sales practice (Hmangaihzuali, 2016). Handloom also faces threat from power loom and cheap imports. Due to these problems, policy formulation regarding handloom gets utterly tough. One side of policy making regards handloom as an unviable industry that drains precious resources while the other regards it as a pristine sector that must be protected and revived at all cost. Regardless of differences in views, handloom requires certain programmes and schemes in order to uplift the multitude of people employed under the sector. As such, the Government of India has rolled several programmes and schemes as follows:

1) National Handloom Development Programme:

This programme was implemented in order to assist independent weavers, weavers under self-help group and other NGO. It includes comprehensive packages that address finance, marketing, product design technology and skill up-gradation such as-

i) Block Level Cluster. As per the recommendation of the State Government, weavers of identified block level cluster are offered financial assistance of up to Rs.2 Crore for the construction of common facilities, work shed, skill and technology up-gradation, etc. In addition, financial

assistance up to Rs. 50 lakh for the setting up of dye house at the district level is made available.

ii) Concessional Credit. Mundra Scheme was launched in September, 2015 to provide concessional loans at 6% interest rate and margin money up to Rs.10000 per weaver for a period of three years. An online Handloom Weaver Mundra portal was also set up to facilitate direct benefit transfer.

iii) Marketing Incentives. Marketing incentives were provided to handloom organisations, corporations, co-operative society and other agents for creating marketing platform for handloom products. Agents in need of marketing assistance and whose annual turnover is below Rs.30 lakh may benefit from this programme. As part of the marketing incentive, India Handloom Brand (IHB) was launched and aims to increase the market value and sales of the best quality and authentic Indian handloom products by giving them a brand identity. Another form of marketing incentive is the Handloom Mark that acts as an indication of authenticity which proves the product being hand-woven.

2) Yarn Supply Scheme:

Implemented under National Handloom Development Corporation, this Scheme reimburses freight on yarn supply and subsidises 2% of depot charges to depot operating warehouses. In addition, a 10% subsidy on hank yarn, cotton, domestic silk and woolen yarn is also given at limited quantity.

3) **Welfare Measures:**

i) Mahatma Gandhi Bunkar Bhima Yojana (MGBBY) was introduced as an insurance scheme covering accidental death, natural death, partial disability and complete disability. MGBBY can be availed by existing weavers of the age group 51-59 years. Under this scheme, scholarship of Rs.300 per quarter per child studying IX to XII standard can be availed by children of the weaver covered by MGBBY for a period of four years or till the child completes XII standard, whichever is earlier.

ii) Pradhan Mantri Jeevan Jyoti Bhima Yojana (PMJJBY) and Pradhan Mantri Suraksha Bhima Yojana (PMSBY) are available for handloom weavers of the age group 15-50 years from 1st June, 2017 onwards. The benefits that can be claimed under these schemes are similar to those of MGBBY, although much larger in amount. All these schemes – MGBBY, PMJJBY, and PMSBY require a premium of only Rs.80 borne by the weaver while benefit up to Rs.4,00,000 can be claimed.

iii) Health Insurance Scheme (HIS) is implemented in Tamil Nadu, while in other states it was merged with RSBY in 2016-17.

4) **Education Facilities:**

In order to provide education that could act as leverage in handloom, the Ministry of Textiles and National Institute of Open Schooling (NIOS) and Indira Gandhi National Open University (IGNOU) signed a Memorandum of Understanding. This enabled NIOS and IGNOU to provide

distant education where children and female of SC, ST and BPL weaver household could enroll for education at a 75% subsidised fee.

5) Bunker Mitra Helpline:

This toll free helpline was introduced on 2017 as a single point of contact in order to address the enquiries of handloom weavers. This line is open from 10:00 a.m. to 6:00 p.m. for seven days a week and is accessible in Hindi, English, Assamese, Telegu, Kannada, Bengali and Tamil.

6) Handloom Awards:

In order to incentivise weavers and to reward them for their immense contribution and excellence in handloom, the following awards are handed out to deserving weavers – National Merit Certificate, National Award, Sant Kabir Award and Kamala Devi Chattapadhyay Award that is exclusively reserved for women.

7) Geographical Indication:

Under Geographical Index Tag (GI Tag) legal protection is given to goods, including handloom products that pertain to certain geographical location as per the Geographical Indications of Goods (Registration and Protection) Act 1999. On August, 2019, *Puanchei*, *Tawlhloh puan*, *Ngotekherh*, *Hmaram* and *Pawndum* of Mizoram were awarded the GI tag.

These programs and schemes have helped many deserving weavers in their endeavor to better their status through handloom. In spite of the many problems faced by handloom, its openness to innovation and

designs, low capital investment and capability of producing small batches has kept the art alive (Hmangaihzuali, 2016). Perhaps, both the inherent nature of handloom and the programs implemented by the Government have kept this art alive.

1.2: HANDLOOM IN MIZORAM

1.2.1: Scenario:

Handloom has always occupied a prestigious place in Mizo culture. During a short period of regression the Mizo ancestors would wear vines sewn together as garments. This garment called “siapsuap” was uncomfortable, let alone offered minimal protection from the harsh physical elements. With handloom being feasible again once the geographical conditions were viable, women could weave garments of everyday wear, including heavy blankets called “pawnpui”. Handloom became women’s task as men were busy with agricultural works, hunting and protecting the village. Handloom was a way to showcase one’s talent and ingenuity through sophisticated designs and motifs of the garment called “puan”. Girls would learn the art from a young age, anxious to master it in order to weave garments for her post nuptial wear.

“Puan” means cloth in general and denotes the traditional costume of Mizo men and women in particular (Fanai, 2009). Handloom is immensely important since *puan* itself is regarded as a treasured artefact.

Some of the celebrated *puan* are “Puanchei” which is the most glorified of them all, worn in weddings and festivals, “Ngotekherh” which is a beautiful black and white striped *puan* worn during festivals such as *Chapchar Kut*, *Mim Kut* and *Pawl Kut*, “Pawndum” which is an attire for the traditional dance *khual lam* and “Tawlhloh Puan” worn by honoured warriors as a beacon of bravery. *Pawndum*, also known as *Zawlpuan* must be taken along with by every woman when getting married as she must use it to cover her husband’s remains upon his death.

Mizoram, by virtue of its location, is not endowed with the resources and potential for industrial advancement. Because of this, agriculture and handloom continues to be one of the key employment providers in the state. Handloom was traditionally a domestic work for women, but now it has evolved into a valuable commercial activity that provides employment to 27402 households (NCAER, 2020). Handloom products has now broken the traditional confinement of *puan* and has branched out to various apparels such as vests, waistcoats, shawls, handbags, sling bags, pillow covers, footwear, wall hangings and others of the sort. However, the major product continues to be *puan* that is modernised with trending designs, colour combinations and motifs. The pride of Mizo *puan* stands tall as women prefers them above anything else as their formal wear for church and other social gatherings.

1.2.2: Handloom Enterprises:

An enterprise, as defined by the Oxford Dictionary of Economics, is a business venture that is private or public in nature. Handloom enterprises are surveyed under ‘Non-Household Handloom Units’ by the Handloom Census who defines the same as ‘all establishments that undertakes handloom work for commercial purposes’. As such, these entrepreneurs who undertake handloom activities for commercial purposes by employing workers or by self-employment will be the unit of study.

At present, under weaving and allied activities, handloom employs 5634 men, 22083 women and 3 transgender in Mizoram (NCAER, 2020). As per the Fourth All India Handloom Census, Mizoram has 55 non-household handloom units in 2019 –2020. These handloom enterprises have 456 pit looms, 468 frame looms, 56 loin looms and 34 other type of looms distributed amongst them. Dhoti/Sarong/Lungi/Angavastram is the most commonly produced item, produced by 51 enterprises, followed by Dress material/Suiting/Shirting/Long cloth, produced by 9 enterprises and Shawls/Mekhla chadder/Loi/Stole/Scarf/Muffler which is produced by 4 non-household handloom units. Most of the handloom units (52 units) had sales in the local market while 17, 16, 6 and 1 unit had sales in other market, organized fairs/exhibitions, export and e-commerce respectively

1.3: CONCEPTS AND DEFINITIONS

Various terms are used in this study as per their following definitions:

Handloom: Handloom as defined by the Merriam-Webster dictionary is ‘any weaving device operated wholly or partially by hand or foot power’. The Reservation of Articles for Production Act, 1985 defines handloom as ‘any loom other than power loom’.

Enterprise: An enterprise, as defined by the Oxford Dictionary of Economics, is ‘a business venture that is private or public in nature’. The Handloom Census defines handloom enterprise as ‘all establishments that undertakes handloom work for commercial purposes’.

Weaver: The Oxford Dictionary Thesaurus and Wordpower Guide define a weaver as ‘a person who weaves fabric’.

Loom: The Cambridge Dictionary defines loom as ‘a piece of equipment for weaving (=making thread into cloth)’.

Puan: Puan is ‘cloth in general and denotes the traditional costume of Mizo men and women in particular’ Fanai, T. Lalrindiki (2009). Puan would generally mean any piece of cloth, but the specific definition used for the study is the garment worn by Mizo men and women. Although puan is worn in different styles by men and women throughout Mizo history, in modern day puan is worn almost exclusively by women and occasionally by men

when showcasing the Mizo traditional attire. The modern day puan is a rectangular piece of cloth, generally measuring 42 X 63 inches but may vary slightly to accommodate different sizes. It is worn as a lower garment by wrapping the puan onto one's waist by overlapping both ends and secured by tucking in the open end.

1.4: SIGNIFICANCE OF THE STUDY

Handloom sector occupies an indispensable position in the Indian economy. It provides employment to 31.45 lakh households, making it the second largest employment provider in India. The importance of handloom sector in rural development and women empowerment is cemented by the fact that 88.7% of the workers reside in rural areas and out of which 71.6% are female.

Recognising its importance, the Union Government has undertaken various steps and measures to develop the handloom sector. Initiatives such as National Handloom Development Programme, Yarn Supply Schemes, Mahatma Gandhi Bunkar Bhima Yojana, Pradhan Mantri Jeevan Jyoti Bhima Yojana, Pradhan Mantri Suraksha Bhima Yojana (PMSBY), etc. have been adopted.

The Government of Mizoram also launched various schemes and initiative to increase the vigour of handloom sector with regards to providing employment and income generation. In addition to its action on handloom

cluster development of Thenzawl and Zuangtui clusters, the government has undertaken handloom as a development trade under the New Land Use Policy (NLUP) and Mizoram Intodelhna Project (MIP).

In keeping with the indispensable importance of handloom regarding employment and income generation, the government has undertaken various measures to improve its potential. Conversely, this very stress given by the government on developing handloom sector indicates its immense importance. The sector that may as well be the driver of Mizoram's economic development is worth an extensive study and thus, the proposed study will give us a better understanding of the contribution of handloom in the economy.

1.5: STATEMENT OF THE PROBLEM

Handloom has been a source of living for many households in Zuangtui. However, this area has been neglected under the purview of research studies for a long time as it is cast under the shadow of Thenzawl handloom cluster of Mizoram. Additionally, there exist little to no research studies on handloom enterprises and its entrepreneurs of Zuangtui handloom cluster. Therefore, an extensive study is much needed in order to assess the performance of handloom enterprise in Zuangtui cluster. The performance of handloom enterprise regarding their output, productivity and income generated is worthy of further study due to the fact that any industry

or enterprise that is clustered together must have a significant capacity of providing livelihood to that many people.

Upon embarking on handloom sector as a source of livelihood, it will be interesting to study the socio economic conditions of the entrepreneurs of each handloom enterprise. Any form of disparity in living conditions, educational shortfalls or status of access to healthcare and sanitation would be an interesting subject of study.

Therefore, an extensive study is required in order to fill the knowledge gap that is present in the study of handloom in Zuangtui cluster. The proposed study will also help in addressing the problem of an absent compounding scenario pertaining to the performance of handloom in Mizoram.

1.6: SCOPE OF THE STUDY

The study encompasses the scope of registered handloom enterprises, with regards to their organizational setting, production and marketing strategies and their employment generation capacities. In addition, the socio-economic profile of the entrepreneurs is also within the scope of the study.

1.7: OBJECTIVES

- 1) To analyse the profile of the entrepreneurs and their socio-economic conditions.
- 2) To examine the organizational profile of the handloom enterprises in Zuangtui cluster.
- 3) To study the status of capital asset and inventory of the handloom enterprises in the study area.
- 4) To study the access to credit and financial assistance by the handloom enterprises.
- 5) To study the economics of production and marketing of handloom enterprises.

1.8: HYPOTHESES

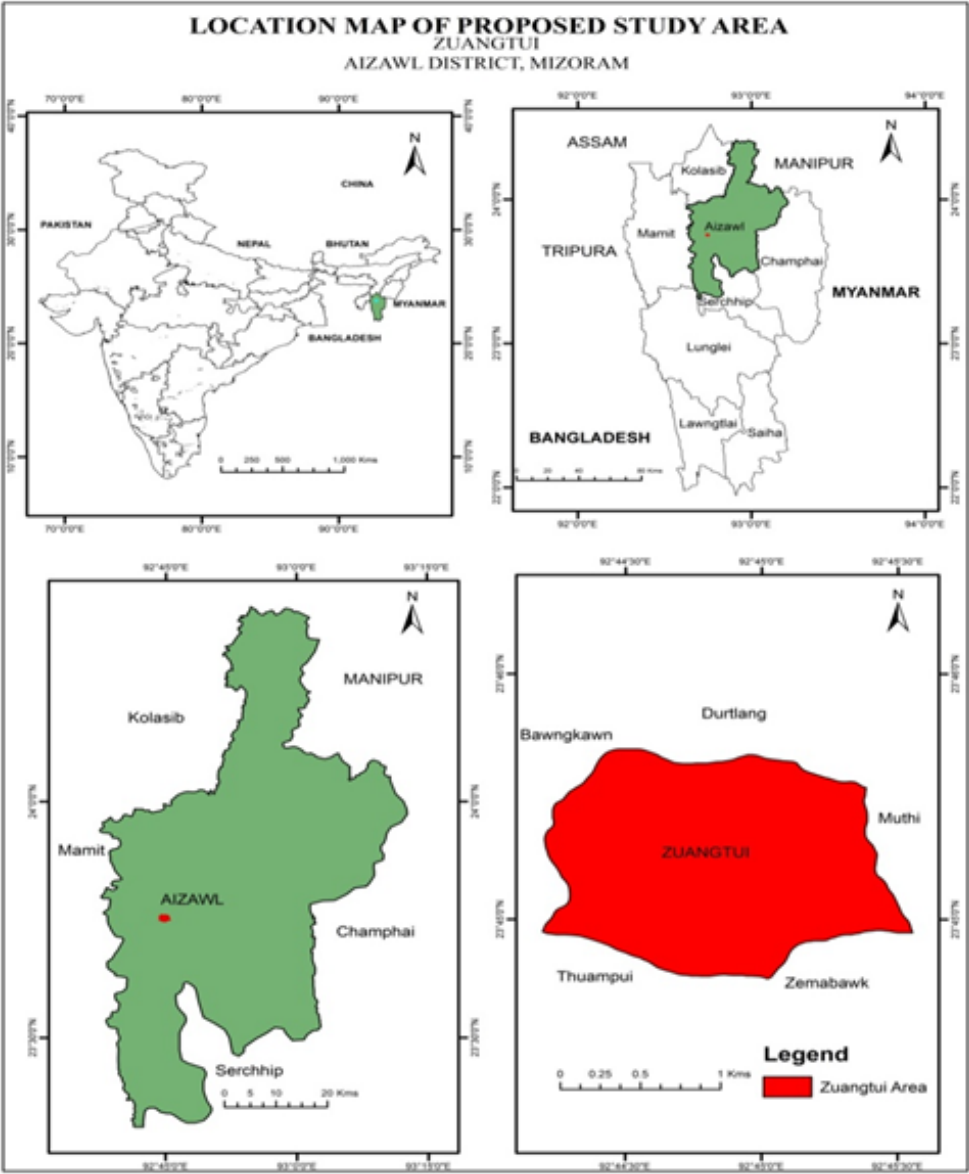
- 1) There is a significant correlation between number of workers employed and average monthly income of the entrepreneurs.
- 2) There exist a correlation between number of looms and average monthly income of the entrepreneurs.
- 3) There is an independence of gender and average monthly income of the entrepreneurs.

1.9: STUDY AREA

The study analyses the performance of handloom enterprises in Zuangtui cluster, Aizawl, Mizoram.

The study area is located in the district of Aizawl, Mizoram. The locality of Zuangtui covers a total area of 2.87sq. km., and houses approximately 1000 households having a population of 2500 voters. It borders locality of Durtlang in the north, Zemabawk and Thuampui in the south, Muthi in the east and Bawngkawn in the east.

Fig.1 : Location map of the study area: Zuangtui, Aizawl, Mizoram.



Prepared by: Fabian Lalthangana, Research Scholar, Department of Geography, NEHU (2020)

1.10: METHODOLOGY

The study analyses the performance of handloom enterprises in Zuangtui cluster, Aizawl, Mizoram. The study utilises both primary and secondary data.

Primary data is collected through structured questionnaire and interview method. The sample unit is selected using simple random sampling method from the list of the registered enterprise maintained by the Zuangtui Handloom Association. After a visit of the study area, a sample size of 30 units was selected. Secondary data is extracted from official reports, books, published and unpublished sources, journals, magazines, websites and other e-resources.

To examine the patterns and trends of the data obtained from primary and secondary sources, statistic tools such as Averages, Mean, Percentages, etc. is adopted. Diagrammatic representation is also made as and when appropriate. To test the hypothesis, Karl Pearson Correlation Coefficient and Chi Square test is used.

CHAPTER II
REVIEW OF LITERATURE

2.1: INTRODUCTION

In order to shed some light on the status and condition of handloom industry and its workers, a literature review is done on various academic papers, dissertations, official government reports and others of the like. This literature review helps to provide background knowledge on handloom in India and bridges the study with the same.

2.2: HANDLOOM

Handloom is India's cultural heritage that shows cultural diversity through creativity and traditional precision (Hmangaihzuali, 2013). The versatile nature of handloom with its unparalleled flexibility permits experimentation and encourage innovation. A skilful blend of myth, faith, symbols and imagery gives the hand-woven fabrics their appealing dynamism (Mitra, et al., 2009). The ancient handloom sector is the largest cottage industry and its colossal importance is reflected in its vast employment and agrarian linkages (Khatoon, 2016).

To support and revive the handloom sector, the formation of a weaver cooperative has been seen as the best strategy. However, the success of these cooperatives depended heavily on political influences and management within (Niranjana, 2004). Handloom cooperatives in Angara, Andhra Pradesh were able to create a niche for themselves in the market by adopting a market driven production. This was done by employing designers

who translate fast moving designs demanded by the market. The innovative move boosted sales which led to timely payments of wages to weavers, creating a self perpetuating series of factors which works in their favour (Dharmaraju, 2006). Cooperatives in Andhra Pradesh were found to have a big impact on the performance of master weavers, middle men and independent weavers. Well performing cooperatives works towards the interest of the weavers and handloom sector while bad performing ones strengthen the interest of master weavers (Mahendra Dev, et al., 2008). Within the handloom sector, cooperative form of organisation is found to be best suited due to the convenience of procuring raw materials and disposing finished goods through the cooperative channel. This also enables weavers within the cooperative to earn higher income in relation to independent weavers and weavers working under master weavers (Kasisomayajula, 2012). Majority of the Manipur women handloom entrepreneurs under cooperatives contributed to over 70% of their family income and were depended upon by their family as their sole breadwinner. However, a stark contrast was true for the independent women weavers (Phurailatpam, 2011).

2.4: CHALLENGES TO HANDLOOM WEAVERS

Through the first to third Handloom Census, many positive indicators show a declining trend that may indicate weaver's migration to

other profession, low productivity and income generation and poor infrastructure of the handloom sector (Amaravathi and Raj, 2019). Power looms had a negative impact on the overall profitability of handloom cooperatives in Andhra Pradesh. However, it was seen that these negative impacts can be offset by producing branded high or medium value products that are distinct and unique from power loom products (Mahendra Dev, et al., 2008). Handloom cooperatives were adversely affected by power looms, leading to an increase in cost of production and a successive decline in overall profitability. Higher wages offered by power looms diverted younger generation of weavers employed under handloom enterprises from the sector (Dev, et al., 2008). Competition from power looms and low earnings forced the weavers to either constantly innovate and improve or be forced out of the occupation line (Bhattacharya and Sen, 2018). For the case of Chirala handloom weavers when the demand for Real Madras Handkerchiefs dwindled, their ability to shift their production to jacquard sarees, polycot and sico as per the market demand proved to be their major strength (Niranjana, 2004). Weavers do not prefer this line of profession for their children and the amount of participation among youth has also dropped significantly. Weaving appeared to be a distress line of work among the backward classes (Raju and Rao, 2014). Within the handloom sector, three classes of workers, i.e., reelers, weavers and owner entrepreneurs were studied. Factors such as education, annual income and access to technology encouraged reelers to switch to being weavers and on the other hand; increase in annual income, education, work experience and access to modern

technology influences weavers to climb up to the owner entrepreneur status (Bortamuly, et al., 2012). Weavers of West Bengal were mostly forced into weaving due to lack of employment opportunity in other lines of work. They were also burdened with various problems such as poor health, high cost of production, low quality raw materials and shortage of yarn supply (Das, 2018). Lack of adequate and well trained workers posed hurdles for the utilisation of advanced technological improvements by the handloom enterprises in Kerala (Varghese and Salim, 2015). Within the handloom industry of Alipurdwar, West Bengal, inadequate marketing facility, lack of organisational strength and difficulty in transport of finished goods were among the many problems faced (Kundu, 2014). The handloom industry is met with problems such as obsolete technology, unorganised production system, weak market link, low productivity, redundant designs and lack of research and development (Sudalaimuthu and Devi, 2006). Handloom weavers of Jaipur also faced problems such as low volume of sales at exhibitions and showrooms, lack of promotional activities and low budget among many others (Goswami & Jain, 2014). The handloom industry of Cuttack, Odisha, was divided into various weaving sub-casts. The problems faced by them started out with the labour intensive nature of handloom which drives up the cost of production. This led to their diversification into lower valued handloom products which, unfortunately, were driven out of competition by power looms. Ultimately, the subsidies intended by the government as a development measure ended up being the reason of their competitive weakness upon its withdrawal (Patra & Dey, 2015). The

Geographical Indication tag that is awarded to certain products in order to tag them for their geographical and cultural origin could serve well for handloom products. However, traders and master weavers were disproportionately the main beneficiaries of the GI tag (Vinayan, 2011). However, in spite of being plagued with shortage of yarn, dyes, credit and market support, the crippling handloom sector is given new strength through “Make in India” programme that hopes to launch India’s culture to worldwide fame (Khatoon, 2016).

Growth of handloom cluster enables employed weavers to transition to owner entrepreneurs who would undertake the overall responsibility of the enterprise from employing weavers, procuring raw materials and selling finished products to the market or Mahajans (moneylenders) (Mitra, et al., 2009). Upon analysing the various handloom products of Cuttack, Odisha, it was found that the difference in their individual profitability was very much significant. This opened opportunities for the entrepreneurs to analyse the market and profitability potential of each handloom product and invest in the most profitable ones, thereby improving their economic conditions (Patra & Dey, 2015).

2.5: GENDER: WOMEN AND HANDLOOM

In spite of its numerous shortfalls, handloom continues to provide employment to many in India (Hmangaihzuai, 2013). Among the adult

handloom workers, majority, i.e., 77.9% are female. This dominance is unique to the North Eastern States at 99% female workforce, while male dominate the workforce in other states (NCAER, 2020). Traditionally, handloom is women's trade and plays an integral part in marriage institution where girls with proficient weaving skills are preferred (Gailangam, 1997; Devi, 2013). Handloom gave women economic independence, although the domestic nature of their work has rendered them less productive in relation to weavers of other states (Devi, 2013). However, through handloom, women entrepreneurs have contributed significantly to local economic development, gender equality and socio-economic upliftment of women (Hazarika and Goswami, 2018). Women handloom entrepreneurship tend to have a positive impact on their decision making authority within the household and freedom of movement outside the house while at the same time reducing male preference and domestic violence against them. However, the lack of ability to exercise power over family income and asset is still evident (Hazarika and Goswami, 2016). Generally, in developing countries, women participate more actively in micro-entrepreneurship in the informal sector than men. However, their micro-entrepreneurial participation in the handloom sector is lower than males (Goswami, et. al., 2017). Women entrepreneurs of Manipur faced problems of access to credit due to unavailability of collateral property and lack of time for their handloom work. Majority of the entrepreneurs were the household's sole bread-winner and earns less than Rs.5000 a month (Debbarma & Geetha, 2017). Women micro-entrepreneurs of Assam were more risk averse than their male

counterparts and hence, their growth is limited by lack of resources and low valued products. Education has an impact on reducing the risk averse nature and improving productivity and income of the entrepreneurs (Goswami, et. al., 2017).

Among the weavers of Telengana, a significant positive relationship between their socioeconomic condition with age, educational qualification and working hours was found although the same is found null for gender, marital status, work experience and body mass index (Lakshmi, et. al., 2019). Upon studying the factors influencing wage structure of handloom weavers of Assam, it was found that for contractual weavers, age, sex, experience and education had no influence on their wage while productivity had significant impact on the same. Similarly, for monthly weavers, sex and productivity had a significant impact on the wage structure where the impact of sex is considered having its origin from the difference in productivity (Bortamuly & Goswami, 2012). Gender wage gap also exist in the handloom sector where productive characteristics such as credit access, handloom training, adopting modern technology and maintaining bookkeeping adds to the wage generating capacity of both gender, but favours males better (Hazarika, 2017).

2.6: OVERVIEW OF HANDLOOM IN MIZORAM

Handloom and the art of cultivating and processing cotton have been known to the Mizos since time immemorial, however, the first clear

account of their handloom works dates back to around 1450 – 1400 when they settled in Thantlang and Run river (Boichhingpuii, 2016 & Lalarzoa, 2014). In the olden days, Mizo men and women could not share equal status since the division of labour has clearly demarcated this line (Lalrinmawii Rokhum, 2014). It was the sole duty of women to painstakingly undertake all the intricate and time consuming process from preparing the cotton plant to weaving the fabric into clothes (Boichhingpuii, 2016). In Mizoram, weaving is a local art that runs in the blood of weavers. Weaving runs in the family and grew out of necessity, but gradually expands in designs and motifs (Bajwa & Hmunsiamthangi, 2017).

Although agriculture is the main occupation, households took to handloom in order to beat the decreasing returns to land. This provides handloom households with better employment opportunities and improved livelihood. In spite of immense efforts to sustain the increasing returns, numerous problems hinder the development of the handloom sector (Vanlalruata, 2016). Among handloom entrepreneurs of Thenzawl, low profit margin was the main problem faced where they earned a profit margin of about 25% while that of the trader's is 22%. However, these profit margin are quite high as compared to other clusters in India (one of the highest being 14% in Burdwan, West Bengal) (Ramswamy, 2013). Handloom entrepreneurs also faced problems pertaining to limited supply of yarn and fixing employee turnover due to loom owners betting up wages (Pachau, et al., 2018). In Zuangtui cluster, majority of the weavers were women and

faced no problem in both finance and marketing. However, problems regarding supply of yarn and lack of skills resonate well with the inadequate Government assistance (Renthlei, 2019).

CHAPTER III

AN OVERVIEW OF HANDLOOM INDUSTRY IN INDIA

3.1: INTRODUCTION

Under the sponsorship of the Development Commissioner (Handloom), Ministry of Textiles, Government of India, the National Council of Applied Economic Research gave a report on the “Third National Census of Handloom Weavers and Issue of Photo Identity Cards to Weavers and Allied Workers”. According to this Third Handloom Census 2009 - 2010, handloom provides employment to nearly 27.83 lakh households who are engaged in weaving and allied activities. Out of these handloom households, 87% live in rural areas and the rest 13% reside in urban areas. About 10% of the handloom households belong to the Scheduled Castes, 22% belong to the Scheduled Tribes, 41% are from Other Backward Castes (OBCs) and 27% households belong to other casts. A total of 69% of the handloom households undertake commercial production where nearly 53% undertake sole commercial production and nearly 16% undertake a mix of domestic and commercial production. There were 38.46 lakh adult handloom workers where 77% are female and 23% are male. A comparison with the Second Handloom Census showed that the number of handloom weavers declined from 33.26 lakh to 29.09 lakh on the one hand, and on the other, the proportion of full-time weavers increased from 44.3% to 63.5% and the proportion of households who reported more than 60% of their income from handloom sources increased from 31% to 35%. A few anomalies of the North East Handloom sector form the rest of the states are that: they have a predominantly female (99%) adult work force in comparison to the rest of

the country that registered male work force of about 44%, 96% of all handloom workers in the North Eastern States work under an independent production system while 76% of all handloom workers in other states are contract workers, handloom workers of North Eastern States attain higher education than the rest of the country where 60% of the workers attain little or no schooling and lastly, frame looms (78%) and loin looms (21%) are mainly used in the North-East while pit looms (74%) dominate all other states (NCAER, 2010).

According to the latest All India Fourth Handloom Census 2019 - 2020, 31.45 lakh households are engaged in the handloom sector. Out of these households, 25.45 lakh comprises of weaver households, 8.48 lakh handloom allied workers and 5457 non-households units who undertake commercial handloom production and employs over 2.65 lakh workers.

3.2: WEAVER HOUSEHOLDS

The weaver households were those where any member of the household operates a handloom in the last one year. The Fourth Handloom Census, 2019 – 2020 saw a significant increase in the number of weaver household from 22.68 lakh to 25.45 lakh households. The NCAER attributed this increase in the weaver household to the success of various Government incentives and their comprehensive research design. In the weaver household category, only three States accounted for 16.4 lakh or 61.35% of all the weaver households of the country. These States are Assam with 10.9 lakh

households accounting for 40.77%, West Bengal with 3.4 lakh households accounting for 12.71% and Manipur with 2.1 lakh household accounting for 7.85% of all the weaver households in India. The 25,45,312 weaver household had 26,73,891 individual weavers residing within the household which amounts to 1.05 weavers per household, i.e. 1.10 in the urban areas and 1.04 in the rural areas. Among the weaver households, 88.7% are located in rural areas while 11.3% reside in urban areas. The gender distribution in the urban areas is quite level with 50.4% female and 49.6% male weaver household, but in the rural areas this distribution is rather loop sided with 74.5% female and 25.5% male weaver household. Nearly one in every four weavers has not received any formal education and another 14% of the weavers have not completed primary school level of education. Among the male weaver household, 60.2% have education below the primary level while the rest 39.8% have middle school to higher secondary school or a higher level of education. On the other hand, among the female weaver household, 51.8% have education below the primary level and the rest 48.2% have middle school to higher secondary school or a higher level of education. This figure shows that the women weaver households have attained a slightly higher level of education. With regards to the dwellings of the weaver household, 61% reside in Kuccha houses, 20% reside in Semi Pucca houses while the rest 18% reside in Pucca houses. Majority, i.e. 66.3% of the weaver households earn less than Rs.5,000 per month. However, this percentage is significantly lower than the figures of the Third All India Handloom Census, 2009-2010 where a shocking 99% of all weaver

households earned less than Rs.5,000 per month. Among the group of weaver household who earns greater than Rs. 5,000 monthly, 36.1% were from the rural areas while 25.1% reside in urban areas. There are 3 States where 60% or more of the weaver households have earned in excess of Rs.5000 per month. These are Goa (95.5%), Uttarakhand (69.8%), and Maharashtra (60.3%). Only 7.4% of the weaver household earns greater than Rs. 10,000 and above per month. Banking penetration is quite low among the weaver household, standing only at 23.3% of the enumerated weavers. Among the weaver households with banking penetration, the figure is higher for urban weavers with 41.8% penetration than those living in rural areas with only 20.8% penetration. In addition, the banking penetration is higher among male weavers with 37.8% than female weavers with only 17.6% banking penetration. With regards to the indebtedness of the weavers, only 3.4% were in debt. Among those weavers who were in debt, 40% had borrowed loans for handloom purposes while a large 59% were in debt due to loans for other reasons. A bright side to this indebtedness may be that, the majority 75.8% had availed their loans from formal sources. The handloom weavers were poorly insured of both their health and their lives where only 3.8% of rural weavers and 7% of urban weavers, amounting to a total 3.8% of the weavers which subscribe to a health or life insurance scheme. A large 85.8% of the female weavers were independent weavers while among the male weavers, this category of weaver amounts to only 59.5%. Female weavers who were under master weavers were only 9.5% while male weavers under a master weaver amounts to 27.5%. With regards to

affiliation with associations, 25.9% of the weavers were members of Co-operative societies, SHG's or Producer Companies. In order to assess the awareness of various handloom schemes that benefit the handloom weavers, a list of 13 schemes was made on which their awareness was tested. It was seen that the weavers' awareness on these schemes do not surpass 34% in all the list of schemes. Awareness was highest for Housing Schemes at 33.1% and lowest for Weavers' Health Insurance Scheme only at 3%. Among all the weavers enumerated for the Handloom Census 2019 - 2020, only 56.7% were issued Adhaar Cards. However, since issuance of Adhaar Cards started late in Assam and Meghalaya, the figure for weavers with Adhaar Card stands at 96.7% if the state of Assam and Meghalaya is excluded from the data.

3.3: ALLIED WORKERS

The allied worker households were those who did not operate or own a loom in the last one year but engages in pre-loom or post-loom activities. The pre-loom activities considered were winding, warping, tying and dyeing, sizing, dyeing, loom setting and manual card punching while only calendaring has been considered as a post-loom activity. Allied workers reside in both weaver households as well as in allied worker household. The difference of allied household from weaver household is that it is one which does not have weavers or looms. The Fourth All India Handloom Census enumerated 8,48,621 allied workers out of which 6,37,870 workers are working in 5,99,527 allied households and 2,10,751 workers are working in

weaver households. Among the allied workers, 82.2% reside in rural areas and 17.8% reside in urban areas. A large 74.5% allied workers are female and the rest 25.5% are male. The male allied workers who have attended lower than Primary level of education makes up 54.2% while female allied workers of the same category makes up 63.1% of the allied workers. On the other hand, 45.8% of the male allied workers have attended middle school to graduate level of education while this figure stands at 36.9% for female allied workers. Among the allied workers who reside in rural area, 60.8% were independent workers and 31.2% were under master weavers. On the other hand, among allied workers who reside in urban area, 38.2% were independent workers and 50.6% were under master weavers. This figure showed that the allied workers of rural areas were more self-reliant than their urban counterparts.

3.4: NON-HOUSEHOLD UNITS

The non household units are those units including all establishments owned by institutions or private owners-societies such as a master weaver, cooperative societies and handloom development corporation that undertakes handloom work for commercial purposes. The enumeration of non-household units had been attempted in the Third Handloom Census but was in vain. So, the first ever enumeration of the non-household handloom units is made in the Fourth All India Handloom Census, 2019 – 2020. The types of entities identified for enumeration are master weavers, co-operative societies, units run by Government/corporations, producer groups, private

companies and others. The census covers 5457 non-household handloom units in total and employs 1,95,111 handloom workers across India with an average worker per unit of 36. Co-operative societies were the most numerous forms of non-household units, making up a large 70% of the units, followed by other types of units, making up 14% of the non-household units. The State of Meghalaya has not reported any non-household unit while the states of Assam, Tamil Nadu and Nagaland accounts for 31.3%, 14.7% and 11.7% of the reported non-households units respectively. Among the non-household handloom units, 65.9% are based in rural areas while only 34.1% are located in urban areas. These non-households units across the country owns 1,22,302 looms in total. These looms are not owned completely by the proprietors, but the premise of the non-households units may be used to house looms owned by the weavers. This case is more commonly seen in cooperative society form of units. Out of the total looms owned by the non-households units, 60.1% of the units reported idle looms. The most common reasons for keeping looms idle is mainly due to lack of market demand (50%), non-availability of weavers (27%) and lack of capital funds (23%). However, this set of reasons is distributed quite unevenly among the rural and urban units. The lack of market demand makes up for 53% in the rural areas while this reason accounts for only 28% in the urban areas. It can be seen that access to the market is quite unbalanced with the rural units having poorly connected markets. The absence of weavers pose a problem to only 25% of the units in the rural areas while a larger 41% of the urban units face this problem.

3.5: LOOMS

In India, different types of looms are traditionally in practice and they can be identified from the nature of cloth produced or their places of origin. Some of the most common looms are loin loom, pit loom, frame loom, Manipuri loom, Rajasthani loom, Kashmiri loom and various others. A unique feature of the North Eastern States of India is that pit loom also known as back-strap loom, although being one of the oldest weaving device, is the most common amongst them. These looms have the advantage of being light and portable, being affordable and having the capacity to weave a variety of textures and designs. The Fourth All-India Handloom Census reported 28.2 lakh handlooms, out of which 25.2 lakh were in rural areas and 2.9 lakh were in urban areas. Handlooms are mostly located or owned by the weaver households (95.6%), clearly signifying that weaving on handlooms is primarily a household based activity. In the rural areas, pit loom is most common, making up 41.7% of the looms while 31.8% are frame looms, 15.3% are loin looms and the rest 11.2% are of all other types taken together. In urban areas, pit looms are even more common making up 53.1% of the looms while 30.2% are frame looms. Loin looms are not as popular in urban areas making up less than 6% of the looms. Other type of looms make up only 0.32% of the total looms in urban India. Idle looms is reported by 17.6% of weaver household and 5.3% of master weavers.

3.6: PRODUCTION

The most commonly produced type of handloom products by the household units are Shawls, Mekhla Chadder, Loi, stole, scarf and muffler, produced by 26.7% of the household units. Among the units producing these types of products, the state of Assam alone contributes 77.4% of the total production. The second most commonly produced item is Saree, produced by 22.9% of the household units with West Bengal and Tamil Nadu contributing 35.3% and 15.6% respectively of all the Saree production by the household handloom units. The third most common product is Angavastram, dhoti, sarong and lungi, produced by 19.5% of the household units. The four North Eastern States of Assam (42.6%), Manipur(19.1%), Tripura(11.1%) and Arunachal Pradesh(5.7%) contributes to a large 78.5% of all Angavastram, dhoti, sarong and lungi production. Durries, rugs and mats are produced by 3.5% of the handloom household with Uttar Pradesh and Assam contributing to 46.8% and 12.7% of the total production. Bedsheet, furnishings and blankets is produced by 3.4% of the household units with Assam and Tamil Nadu producing 26.8% and 20.1% of the total output. Dress material (Salwar, kameez, etc.), suiting, shirting and long cloth is produced by 3.2% of the household units and although close to 54% of the production continues to come from the North Eastern States of Assam (23.6%), Manipur (17.3%) and Tripura (13.2%), the production of these items is more widely spread than most other major fabrics. Other types of fabric including surgical bandage is produced by 4.3% of the handloom

household units with Assam and West Bengal accounting for 27.5% and 19.3% of the production.

3.7: YARN

The Fourth All India Handloom Census showed that a large 67.2% of the weavers in India used cotton yarn for their handloom production and within the natural fibre category 10% of the weavers used silk yarn, 7.9% used wool and 0.5% used jute. Among the synthetic fibres, 2.6% used polyester blends, 2.5% used zari threads, 2.1% used acrylic wool and 0.5% used viscose blends. The remaining 5% of the weavers in India used other types of yarn. A large majority of the weavers sourced their yarns from the open market (76.6% for hank yarn and 49.7% for dyed yarn), followed by master weavers (8.4% hank yarn and 35.3% dyed yarn).

3.8: SALES

Among all the enumerated weaver and allied workers, 64.1% sell their produce in the local market and 17.6% sell their products to master weavers to whom they are affiliated and from whom they source orders and raw materials. About 8.8% of the handloom products are sold through cooperative societies. However, organised fairs, e-commerce platforms or exports are yet to be benefitted from by the weavers and the allied workers.

CHAPTER IV

PERFORMANCE ANALYSIS

4.1: INTRODUCTION

This chapter contains detailed analysis of survey data collected through an interview schedule. The researcher conducted open ended and close ended interview schedule which eliminates much inaccuracies that could arise due to various misunderstanding of questions by the respondents. The data collected is clubbed together under various sections in order to answer appropriate research objectives. The first section analyses the profile and socio economic conditions of the entrepreneurs on the basis of various parameters. The second section analyses the overall organisational profile of the handloom enterprises within the study area. The third section talks of the enterprise's capital assets and inventories while the forth section is of their access to capital. The fifth section answers questions pertaining to the economics of production and marketing of the enterprise. The sixth section answers miscellaneous questions such as satisfaction in handloom as a source of livelihood and problems faced by the entrepreneurs. The final section concludes the performance analysis by drawing correlation between various parameters.

4.2: PROFILE AND SOCIO ECONOMIC CONDITION OF ENTREPRENEURS

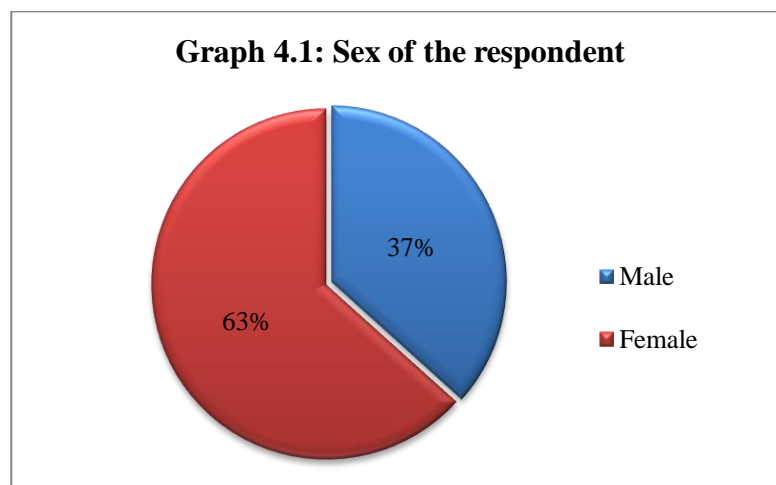
The profile and socio economic condition of the entrepreneurs is an important tool that enables the researcher to draw various inferences regarding the nature of handloom industry within the study area and its impact on the economic lives of the respondents.

4.2.1: Sex of the Respondents

Table: 4.1: Sex of the Respondents

| Variable | Male | Female | Total |
|------------|--------|--------|-------|
| Frequency | 11 | 19 | 30 |
| Percentage | 36.66% | 63.66% | 100% |

Source: *Field Survey 2020*



The field survey data shows that out of all the respondents, 11 were male while 19 were female. The figure of women respondents amounts to 63.33%, which is significantly higher than their men counterparts, i.e. 36.66%. However, this difference in gender participation is quite mild as compared to weavers of other areas in India. According to the Fourth

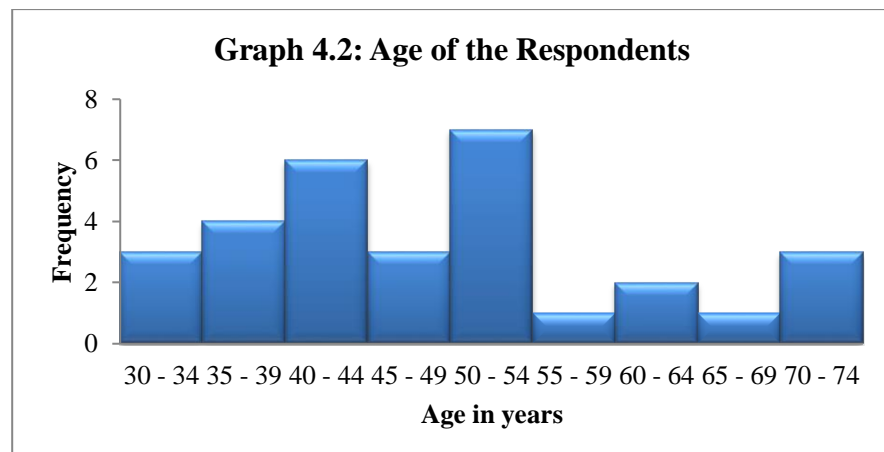
Handloom Survey, the weaver participation of males in Mizoram is 12.34% while that of females is 87.65%. Similarly, according to a field study by Lalmalsawmi Renthlei in Zuangtui, the weaver participation of males is 30% while that of females is 70%. Therefore, within the same study area, i.e. Zuangtui handloom cluster, there is a significant difference in the proportion of gender participation between weavers and handloom entrepreneurs. This may be due to the inherent nature of weaving being considered a woman's task that drives up women participation in weaving. On the other hand, entrepreneurship is a capacity endowed irrespective of gender. This may be one of the reasons that drive up men's participation in handloom entrepreneurship as compared to their participation in weaving.

4.2.2: Age of the Respondents

Table 4.2: Age of the Respondents

| | | | | | |
|-----------|---------|---------|---------|---------|---------|
| Age | 30 - 34 | 35 - 39 | 40 - 44 | 45 - 49 | 50 - 54 |
| Frequency | 3 | 4 | 6 | 3 | 7 |
| Age | 55 - 59 | 60 - 64 | 65 - 69 | 70 - 74 | |
| Frequency | 1 | 2 | 1 | 3 | |

Source: *Field Survey 2020*



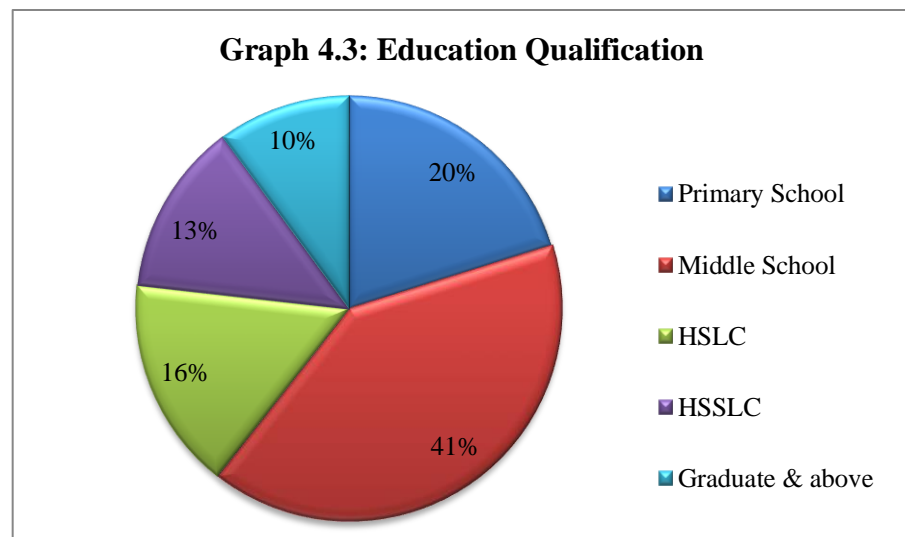
Among the respondents surveyed for the study majority, i.e., 7 of them belonged to the age group 50-54 years, followed by the age group 40 - 44 years in which 6 respondents belong. There were 3 entrepreneurs between the age group 30 - 34 years who were second generation handloom entrepreneurs. At the same time, there were 6 respondents over the age of 60 years. This data showed the valuable work participation of senior citizens who would otherwise be retirees had they been employed in the public sector.

4.2.3: Education Qualification of the Respondents

Table 4.3: Education Qualification of the Respondents

| Variable | Primary School | Middle School | HSLC | HSSLC | Graduate & above |
|------------|----------------|---------------|------|-------|------------------|
| Frequency | 6 | 12 | 5 | 4 | 3 |
| Percentage | 20% | 40% | 16% | 13% | 10% |

Source: *Field Survey 2020*



The given table 4.3 shows that out of all the respondents majority of them, i.e. 40% attended school up to Middle School and those who attended up to Primary school were next, making up 20%. The cumulative percentage of these two classes makes up a hefty 60% of the respondents. Respondents who secured the HSLC and HSSLC were 16% and 13% of the respondents respectively. Only a small portion, i.e. 10% of the respondents were graduates & above. This set of data goes to show that the handloom sector provides decent employment to people who attended minimal education. As the respondents put it, handloom provides employment opportunities for the less educated, the elderly and especially busy women with kids and household to tend to.

4.2.4: Possession of Various Identification Cards:

The respondents were asked of their possession of various identification cards such as Voter ID, Adhaar Card and family Ration Card. Without these unique identification cards, it is near impossible for a citizen of India to do business in the formal sector. Their responses are tabulated in table 4.4 as under:

Table 4.4: Possession of the Respondents

| Variable | Voter ID | Adhaar Card | Ration Card |
|------------|----------|-------------|-------------|
| Frequency | 30 | 29 | 30 |
| Percentage | 100% | 96.66% | 100% |

Source: *Field Survey 2020*

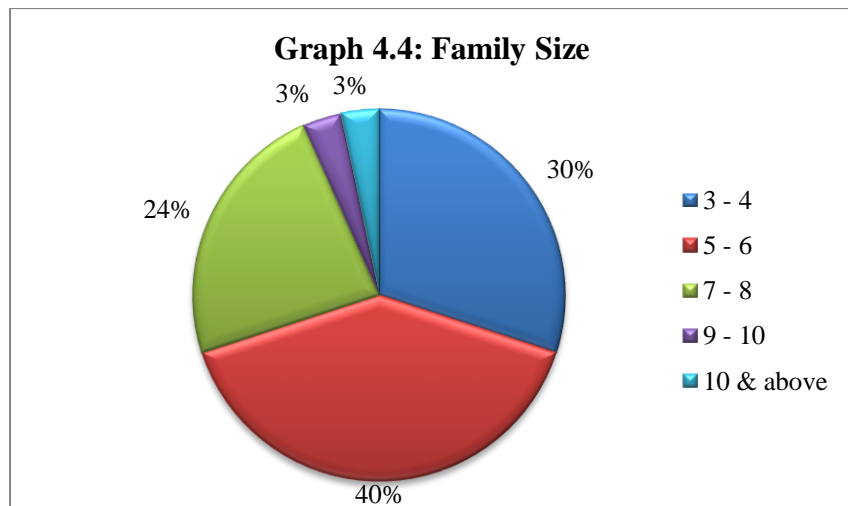
The field survey data showed that a complete cent percent of the respondents have both Voter ID and Ration Card. With regards to Adhaar Card, only 1 respondent out of 30 was without it, which equates to 96.66% of the respondents with possession of Adhaar Card. This set of data shows that the handloom entrepreneurs of Zuangtui cluster are fairly aware of the importance of various modes of identity verification. Possession of these identification cards enables the respondents to perform their duty as a citizen of India and avail various benefits made available to them.

4.2.5: Family Size of the Respondents

Table 4.5: Family Size of the Respondents

| Family Size | 3 - 4 | 5 - 6 | 7 -8 | 9 -10 | 10 & above |
|-------------|-------|-------|--------|-------|------------|
| Frequency | 9 | 12 | 7 | 1 | 1 |
| Percentage | 30% | 40% | 23.33% | 3.33% | 3.33% |

Source: *Field Survey 2020*



As can be seen from table 4.5, a majority of the respondents, i.e. 40% of them had a family size of 5-6 members. Respondents with 3-4 family members were next to majority, making up 30% of the sample family. The cumulative frequency of respondents with family size 3-4 and 5-6 classes is 70%. Respondents with family size 7-8 were 24% of the sample family, while those with family size of 9-10 and 10 and above makes up only 6.66% of the sample family.

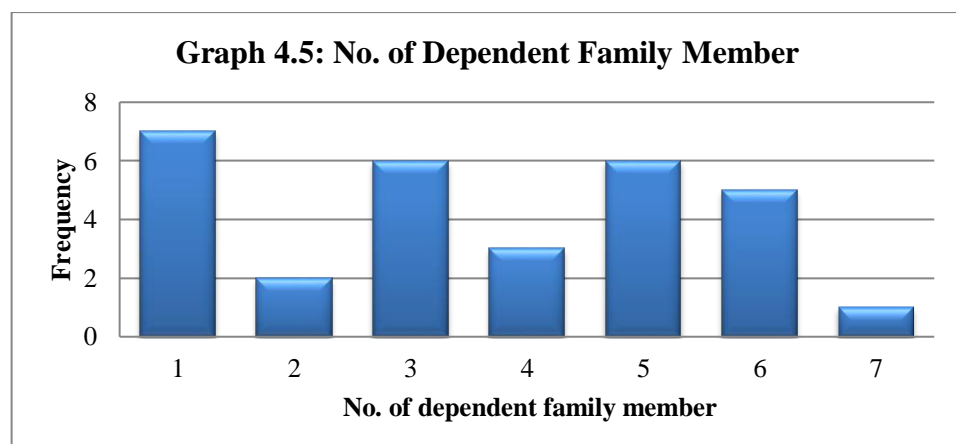
4.2.6: Number of Dependent Family Member of the Respondents

Dependent family members are those members of the family who do not have any form of income and thus depend on other family member for economic sustenance. The respondents were asked how many dependent family members they had and their responses were tabulated in table 4.6 as under:

Table 4.6: Number of Dependent Family Member of the Respondents

| Number | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|------------|--------|-------|-----|-----|-----|--------|-------|
| Frequency | 7 | 2 | 6 | 3 | 6 | 5 | 1 |
| Percentage | 23.33% | 6.66% | 20% | 10% | 20% | 16.66% | 3.33% |

Source: *Field Survey 2020*



The data from field survey showed that the majority of the respondents, i.e. 23.33% do not have any dependent family member. Respondents with 2 and 4 dependent family members respectively make up the next biggest proportion, making up 20% of the total respondents each. Respondents with 5, 3, 1 and 6 followed the frequency order, making up 16.66%, 10%, 6.66% and 3.33% of the respondents respectively.

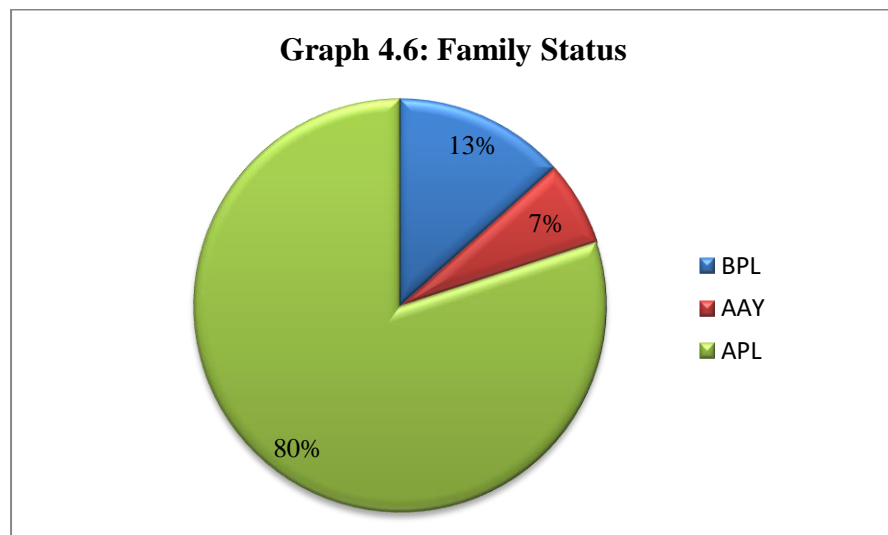
4.2.7: Family Status

The family status of the respondents was surveyed based on the different types of cards they hold for Public Distribution System and this family status is not a measure of poverty.

Table 4.7: Family Status of the Respondents

| Family status | BPL | AAY | APL |
|---------------|--------|-------|-----|
| Frequency | 4 | 2 | 24 |
| Percentage | 13.33% | 6.66% | 80% |

Source: *Field Survey 2020*



This set of data is based on the type of Ration Cards issued to each family for availing food grains and other necessities through Public Distribution System of the government. It can be seen from the above field survey data that a large majority, i.e. 80% of the respondents belongs to the Above Poverty Line class of family while only a few 13.33% and 6.66% belong respectively to the Below Poverty Line and Antyodaya Anna Yojana class of family. It can be inferred from this set of data that most handloom enterprise households of the study area live comfortably above the line of destitution.

4.2.8: Type of Dwellings and Other Possessions

The respondents were surveyed on the ownership of their place of dwelling and their responses are as table 4.8:

Table 4.8: Type of Dwellings

| House | Owned | Rented |
|------------|-------|--------|
| Frequency | 21 | 9 |
| Percentage | 70% | 30% |

Source: *Field Survey, 2020*

The field survey data showed that a large 70% of the respondents reside in houses owned by them while the rest 30% reside in rented houses.

Table 4.9: Type of Residence of the Respondents

| Owned | Assam type | RCC |
|------------|------------|--------|
| Frequency | 11 | 10 |
| Percentage | 52.38% | 47.61% |

Source: *Field Survey, 2020*

Among the respondents who owned houses themselves, 52.83% had Assam Type houses while the remaining 47.61% owned Reinforced Cement Concrete houses.

Table 4.10: Possession of Health Insurance

| Health insurance | Yes | No |
|------------------|-----|-----|
| Frequency | 24 | 6 |
| Percentage | 80% | 20% |

Source: *Field Survey, 2020*

Among the respondents of this research, 24 of them were insured under various health insurance schemes. This group of respondents makes up 80% of the sample and most of them were insured under the Zoram Health Care Scheme. The remaining 20% of the population were without health insurance at the time of survey, which many informed that this was due to their failure of renewing their health care schemes which they plan to do at a later date.

4.2.9: Weaving Status of the Respondents

The respondent entrepreneurs were asked whether they themselves undertake weaving or not. The following data elicit their responses:

Table 4.11: Weaving Status of the Respondents

| Waving | Yes | No |
|------------|-----|-----|
| Frequency | 15 | 15 |
| Percentage | 50% | 50% |

Source: *Field Survey, 2020*

The above table 4.11 shows that the respondents who undertake weaving and those who do not were exactly equivalent, i.e. each making up 50% of the respondents. The reason for this is that almost all the male entrepreneurs do not undertake weaving but concentrate on management of the enterprise and a few female entrepreneurs were either lacking in health or numerous in age to weave. To those entrepreneurs who did undertake weaving, a question was asked whether or not they face health problem due to weaving. The following set of data shows their responses:

Table 4.12: Status of Health Problem Faced by the Respondents

| Health problem | Yes | No |
|----------------|--------|--------|
| Frequency | 10 | 5 |
| Percentage | 66.66% | 33.33% |

Source: *Field Survey, 2020*

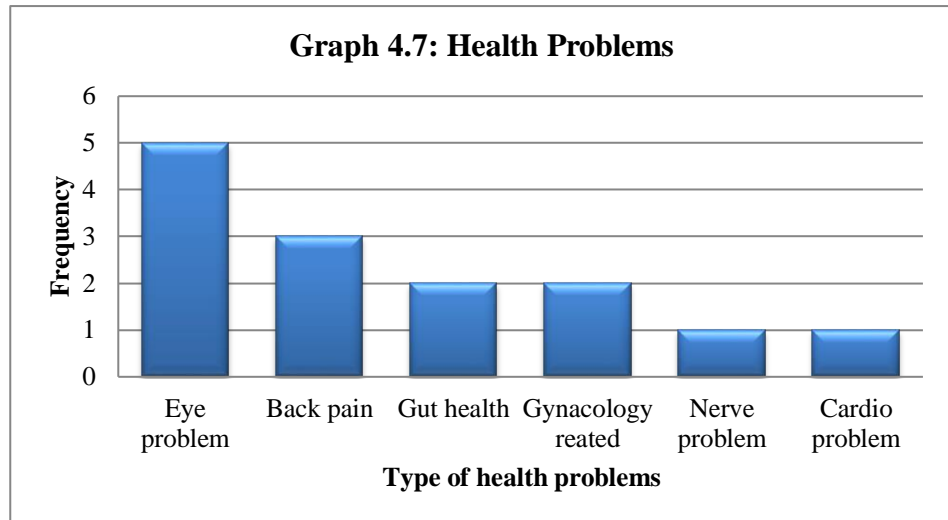
Of the entrepreneurs who undertake weaving, a majority, i.e. 66.66% faced health problems due to weaving while the remaining 33.33% faced no issue as such. Among the various health problems, the ones pertaining to the eye was most common, cited by 5 entrepreneurs followed by back pain that is cited by 3 entrepreneurs. 2 entrepreneurs each cited gynaecology related and nerve problem respectively. The complete data on health problems mentioned by the entrepreneurs is shown below.

Table 4.13: Health Problems Faced by the Respondents

| Type of problem | Eye problem | Back Problem | Gut Health |
|-----------------|-------------|--------------|------------|
| Frequency | 5 | 3 | 2 |

| Type of problem | Gynaecology Related | Nerve problem | Cardio problem |
|-----------------|---------------------|---------------|----------------|
| Frequency | 2 | 1 | 1 |

Source: *Field Survey, 2020*



Some entrepreneurs faced numerous health problem in a variety of combination of the above mentioned health problems. Among the respondents, there were a couple who completely gave up weaving due to back pain and poor eyesight caused by weaving.

4.2.10: Handloom as a Source of Livelihood

An enquiry was made whether or not handloom is the main source of livelihood of the respondents. It was observed that a large majority, i.e. 70% of the respondents had handloom as their main source of livelihood while the rest 30% had other sources, namely government employment and business, as their main source of livelihood.

Table 4.14: Handloom as a Source of Livelihood

| Handloom | Yes | No |
|------------|-----|-----|
| Frequency | 21 | 9 |
| Percentage | 70% | 30% |

Source: *Field Survey, 2020*

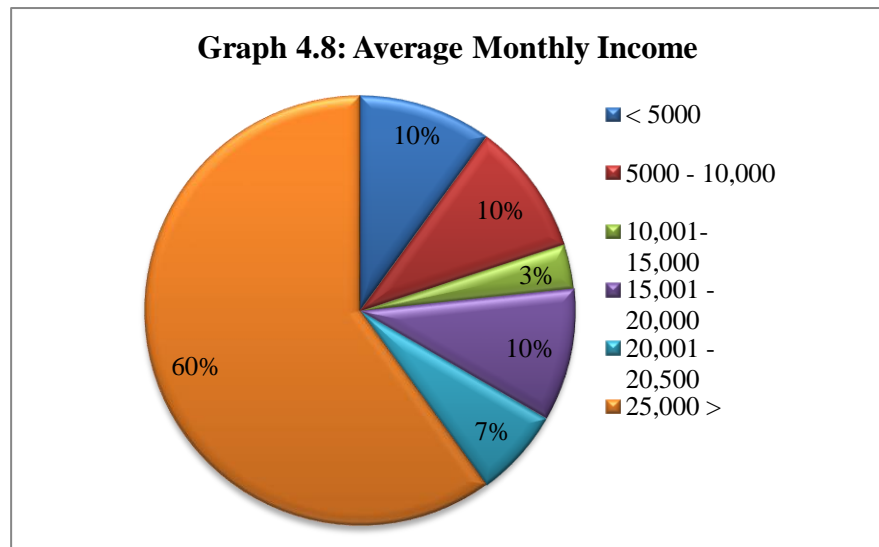
The respondents were asked a follow up question of how much their average monthly income from handloom alone is. The following data elicit their responses:

Table 4.15: Average Monthly Income of the Respondents

| Variable | < 5000 | 5000 - 10,000 | 10,001- 15,000 |
|------------|--------|---------------|----------------|
| Frequency | 3 | 3 | 1 |
| Percentage | 10% | 10.00% | 3.33% |

| Variable | 15,001 - 20,000 | 20,001 - 20,500 | 25,000 > |
|------------|-----------------|-----------------|----------|
| Frequency | 3 | 2 | 18 |
| Percentage | 10.00% | 6.66% | 60.00% |

Source: *Field Survey, 2020*



The above table 4.15 shows that the lowest income group of entrepreneurs who earns less than Rs.5000 per month makes up 10% of the respondents. Respondents who earn Rs.5000 - 10,000 and Rs.10,001-

15,000 makes up 10% and 3.33% while those who earn Rs.15,001 - 20,000 and Rs.20,001 - 20,500 makes up 10% and 6.66% of the sample respondents. The highest income group of entrepreneurs who earn more than Rs.25,000 monthly makes up a majority, i.e. 60% of the respondents. This is a stark contrast to the income of weavers of Zuangtui cluster (Renthlei, 2019) where the highest income group who earn above Rs. 25,000 monthly makes up only 12.5% of the respondents. In this study, among the respondent entrepreneurs within the highest income group, there were 9 entrepreneurs who earn between Rs.80,000 - Rs.1,00,000 per month, making up 30% of the respondents. Therefore, a disparity in the income of handloom entrepreneurs of Zuangtui cluster is quite evident.

4.3: ORGANISATIONAL PROFILE OF THE HANDLOOM ENTERPRISES

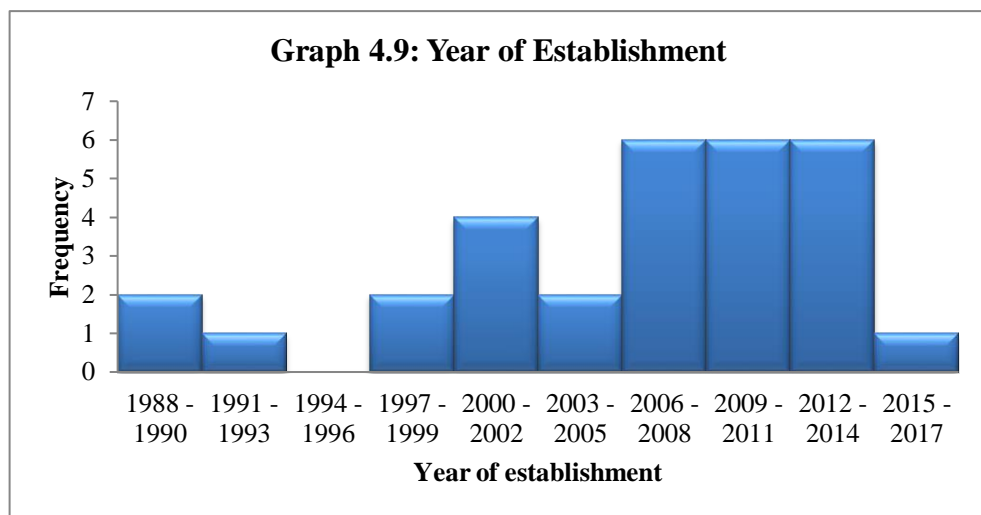
The organisational profile of the handloom enterprises of Zuangtui cluster is studied by analysing various appropriate parameters. The collected data on organisational profile aims to shed some light on the nature and performance of the handloom enterprises.

4.3.1: Year of Establishment and Mode of Ownership

Table 4.16: Year of Establishment of the Respondents' Enterprise

| | | | | | |
|-----------|----------------|----------------|----------------|----------------|----------------|
| Year | 1988 - 1990 | 1991 - 1993 | 1994 - 1996 | 1997 - 1999 | 2000 - 2002 |
| Frequency | 2 | 1 | 0 | 2 | 4 |
| Year | 2003 - 2005 | 2006 - 2008 | 2009 - 2011 | 2012 - 2014 | 2015 - 2017 |
| Frequency | 2 | 6 | 6 | 6 | 1 |

Source: *Field Survey, 2020*



The above survey data showed that the 2 longest running enterprise owned by the respondents were established in the year 1988-1990 while the newest enterprise was established recently in 2015-2016. 1, 0, 2, 4 and 2 enterprises were set up in the years 1991-1993, 1994-1996, 1997-1999, 2000-2002 and 2003-2005 respectively. A boom in the establishment of handloom enterprise was seen during the years 2006-2008, 2009-2011 and 2012-2014 where 6 enterprises were set up each year. It is thus evident that 63.33% of the surveyed enterprises were set up only after 2006.

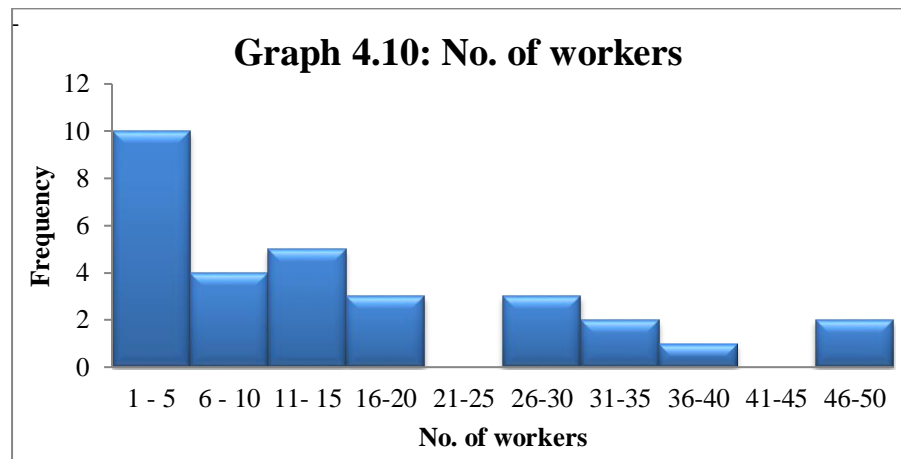
The mode of ownership of all the enterprises surveyed was a sole proprietorship. Although these enterprises are established as sole proprietorship, most family members help out in the management of the enterprise from weaving to marketing.

4.3.2: Number of Workers Employed

Table 4.17: Number of Workers Employed by the Respondents

| | | | | | |
|-----------|---------|---------|---------|---------|---------|
| Workers | 1 - 5 | 6 - 10 | 11 - 15 | 16 - 20 | 21 - 25 |
| Frequency | 10 | 4 | 5 | 3 | 0 |
| Workers | 26 - 30 | 31 - 35 | 36 - 40 | 41 - 45 | 46 - 50 |
| Frequency | 3 | 2 | 1 | 0 | 2 |

Source: *Field Survey, 2020*



It is evident from the above set of data that handloom enterprises that employ 1-5 workers is most numerous, i.e. 10 enterprises, making up 33.33% of the respondents. There were 4, 5, 3, 0, 3, 2, 1, 0 entrepreneurs who employ 6-10, 11-15, 16-20, 21-25, 26-30, 31-35, 36-40 and 41-45 workers respectively. At the extreme end, there were 2 enterprises which employed 46-50 workers.

4.3.3: Enrolment in Various Bodies

The respondents were asked of their enrolment in any form of handloom society and their responses are tabulated as under:

Table 4.18: Enrolment in Handloom Society

| Enrolment | Yes | No |
|------------|--------|--------|
| Frequency | 23 | 7 |
| Percentage | 76.66% | 23.33% |

Source: *Field Survey, 2020*

It was observed that a large majority of the respondents, i.e. 76.66% were enrolled in a handloom society while the remaining 23.33% had no enrolment in any form of handloom society or association.

As an addition, the respondents were asked of their enrolment in any form of Self Help Group (SHG) and their responses are as followed:

Table 4.19: Enrolment in Self Help Group

| Enrolment | Yes | No |
|------------|-------|--------|
| Frequency | 2 | 28 |
| Percentage | 6.66% | 93.33% |

Source: *Field Survey, 2020*

Table 4.19 made clear that almost all, i.e. precisely 93.33% of the respondents had no enrolment in any form of SHG. Of the little 6.66% of the respondents enrolled in SHG's, all were groups that were completely unrelated to causes of handloom activities.

4.3.4: Decision Maker of the Handloom Enterprise

Making decisions on 'what to produce' and 'how much to produce' is an important economic choice faced by all producers. The

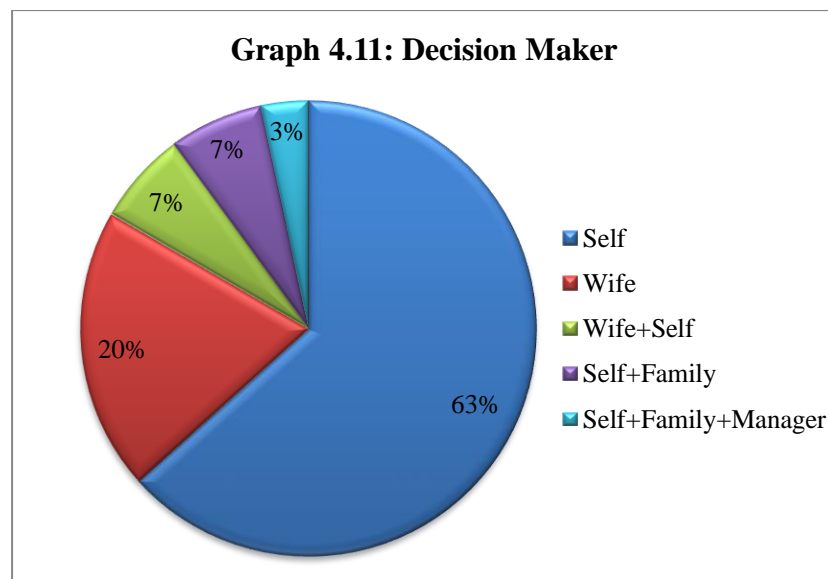
respondents were asked of who takes decisions on what type of product and how much of it is to be produced. The following table shows their responses:

Table 4.20: Decision Maker of the Handloom Enterprise

| | | | |
|----------------|--------|------|-------------|
| Decision maker | Self | Wife | Wife + Self |
| Frequency | 19 | 6 | 2 |
| Percentage | 63.33% | 20% | 6.66% |

| | | | |
|----------------|---------------|-------------------------|--|
| Decision maker | Self + Family | Self + Family + Manager | |
| Frequency | 2 | 1 | |
| Percentage | 6.66% | 3.33% | |

Source: *Field Survey, 2020*



It was found that out of all the respondent entrepreneurs, 63.33% take decisions themselves with regards to ‘what to produce’ and ‘how much to produce’. A large portion, i.e. 20% of the entrepreneurs entrusted the task of taking such said decisions on their wives. It was elicited from the male respondents that this was mainly because their female partners better knew the market demands and the type of products and designs that are trending

with consumers. Entrepreneurs who take collective decisions with their wives and those who did so with other family member make up 6.66% of the respondents respectively. Lastly, entrepreneurs who take decision with their wives and the manager of their enterprise make up 3.33% of the respondents.

4.3.5: Sales of the Handloom Enterprise

A survey was made on the various modes of sales of the handloom enterprises within the study area. The following data sums up the responses of all the respondents:

Table 4.21: Mode of Sale of the Handloom Enterprise

| Mode of sale | Wholesale | Retail | Both |
|--------------|-----------|--------|------|
| Frequency | 18 | 0 | 12 |
| Percentage | 60% | 0% | 40% |

Source: *Field Survey, 2020*

From the field survey data, it was found that 60% of the respondents carried out their sales through wholesale to commissioners while 40% of them did so through both wholesale and retail sales to final customers. It is evident from the data given above that there were no entrepreneurs who sell their products solely on a retail basis.

A follow up question was asked whether the entrepreneurs had any sales outside Mizoram. The following table shows their responses:

Table 4.22: Sale outside Mizoram

| Variable | Yes | No |
|------------|-----|-----|
| Frequency | 12 | 18 |
| Percentage | 40% | 60% |

Source: *Field Survey, 2020*

It was elicited from the respondents that 60% of them only had sales within Mizoram while a good 40% of them had additional sales without. The most recurring destination of sales outside Mizoram are Manipur, Tripura, Nagaland, Meghalaya, Assam, Delhi, and an impressive list of international destination such as Myanmar, Australia, the UK and the USA.

A supplementary question of whether or not the entrepreneurs had any online sales was asked. The responses of the respondents are as follows:

Table 4.23: Online Sales

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 5 | 25 |
| Percentage | 16.66% | 83.33% |

Source: *Field Survey, 2020*

The above field survey data made clear that only 16.66% of the entrepreneurs had sales online while the remaining 83.33% had none as such. The scanty group of entrepreneurs who sold their products online did so through social media platforms, such as Facebook, Instagram and mainly WhatsApp.

4.3.6: Ownership of Display Shops and Mode of Advertisement

All the respondent entrepreneurs had a workshed either in their own premise, in a rented space or in a plot of industrial estate issued by the government. However, a display shop in which one could display and sell their products to final customers is completely different to a workshed.

Therefore, the respondents were asked of their ownership of a display shop of any kind. The following data set elicit their response:

Table 4.24: Ownership of a display shop

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 4 | 26 |
| Percentage | 13.33% | 86.66% |

Source: *Field Survey, 2020*

The above data of responses by the respondents shows that a large majority, i.e. 86.66% of the respondents did not own any type of display shop while the rest 13.33% owns one as such. This is because of the reason that most entrepreneurs sell their products in wholesale to commissioners who own a display shop and therefore circumvent the need for one. Entrepreneurs who also sell their products in retail, but do not own a display shop, do the same either from their workshop or their houses.

With regards to advertisement of their enterprises, the entrepreneurs were asked of their various modes of advertisement. The following table shows their responses:

Table 4.25: Mode of Advertisement of the Enterprise

| Mode | Television Set | Display shop | Print media | Social media |
|------------|----------------|--------------|-------------|--------------|
| Frequency | 0 | 4 | 1 | 1 |
| Percentage | 0% | 14.33% | 3.33% | 3.33% |

Source: *Field Survey, 2020*

The above table of data shows that advertisement of their enterprise is sparse amongst the entrepreneurs. Those respondents who own a display shop have it as a mode of advertisement, making up 14.33% of the

respondents. There was only 1 respondent each who uses print media and social media as a mode of advertisement while those who uses television set for advertisement is absent. This scanty number of entrepreneurs who uses any mode of advertisement is because of their mode of sale which is mostly wholesale to commissioners. This renders advertisement on print and electronic media or others of the sort that targets final consumers quite redundant.

4.3.7: Research and Development

Handloom, having shared numerous aspects of the fashion industry, requires a sharp taste in trends and contemporary look books. The entrepreneurs were asked whether or not they undertake any kind of research and development (R&D) for the betterment of their handloom enterprise. The following table sums up their response:

Table4.26: Status of Undertaking Research and Development

| Variable | Yes | No |
|------------|-----|-----|
| Frequency | 9 | 21 |
| Percentage | 30% | 70% |

Source: *Field Survey, 2020*

It was found that a majority of the respondents, i.e. 70% had not undertaken any form of research and development for their handloom enterprise. However, the remaining 30% of the entrepreneurs took the time and resources to undertake research and development for the advancement of their enterprise. These entrepreneurs did research as best as they could in order to come up with new designs and motifs for their pun. They would

look up other designs on the internet and draw inspiration from various handloom and handicrafts of different tribes across the world.

The respondents were asked a supplementary question of whether or not they employ a designer for their products. The following data elicit their response:

Table 4.27: Employment of Designer for the Enterprise

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 4 | 26 |
| Percentage | 13.33% | 86.66% |

Source: *Field Survey, 2020*

The above field survey data makes evident that only a small portion, i.e. 13.33% of the respondents employ a designer while the rest 86.66% did not. As the respondents explain, it is more economical for them to emulate trending designs that are readily available in the market than spending time and resources to employ a designer, whose designs are not guaranteed to breakthrough in the market. As such, samples of customer's favourite puaan with the desired motif and designs will be provided to them by their commissioners and then weaved by them without the need for employing separate designers.

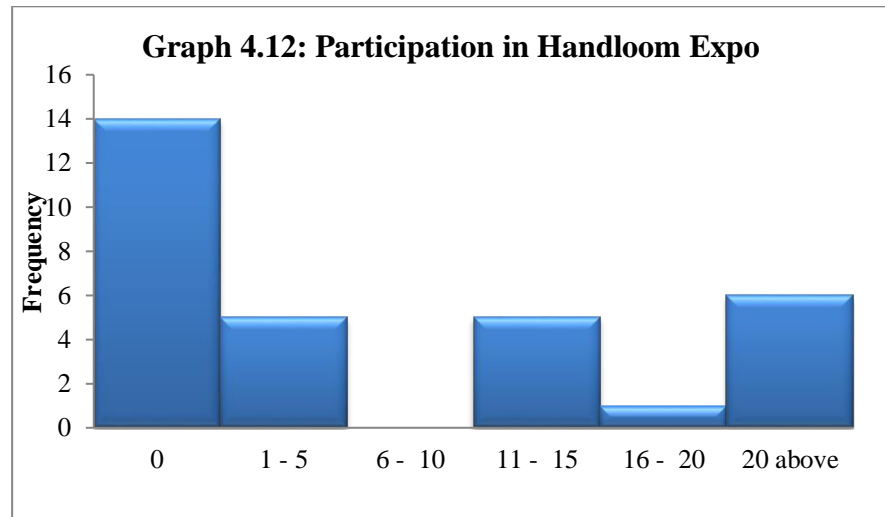
4.3.8: Participation in Handloom Expo and Skill Training

The respondents were asked of the frequency of their participation in any kind of handloom exhibition or expo. The following table shows their responses:

Table 4.28: Participation of the Respondents in Handloom Expo

| Variable | 0 | 1 -5 | 6 -10 | 11 -15 | 16 -20 | 20 above |
|------------|--------|--------|-------|--------|--------|----------|
| Frequency | 14 | 5 | 0 | 5 | 1 | 6 |
| Percentage | 46.66% | 16.66% | 0 | 16.66% | 3.33% | 20% |

Source: *Field Survey, 2020*



It is evident from the above field survey data that a large portion, i.e. 46.66% of the respondent had never participated in any form of handloom expo or others of the sort. Entrepreneurs who have participated in a handloom expo 1-5 times, 6-10 times, 11-15 times and 16-20 times make up 16.66%, 0%, 16.66% and 3.33% of the respondents respectively. The group of entrepreneurs who have attended more than 20 handloom expo make up 20% of the respondents. Some entrepreneurs insist that they had no time and zeal to participate in handloom exhibitions while others found great reward in the rebate they received from their sales in said exhibitions.

An additional question pertaining to the frequency of the entrepreneurs' attendance in skill training programmes was asked. The entrepreneurs' responses are as follows:

Table 4.29: Attendance in Skill Training Programmes

| Variable | 0 | 1 | 2 | 3 | 4 | 5 |
|------------|--------|-----|-------|-----|-------|-------|
| Frequency | 16 | 6 | 2 | 3 | 1 | 2 |
| Percentage | 53.33% | 20% | 6.66% | 10% | 3.33% | 6.66% |

Source: *Field Survey, 2020*

It was observed that about half, i.e. 53.33% of the respondents have not attended any sort of skill training. However, 20%, 6.66%, 10%, 3.33% and 6.66% of the respondents have attended skill trainings 1, 2, 3, 4 and 5 times respectively. All of these entrepreneurs attended skill training on handloom and its related activities. There were none who had attended a training on entrepreneurship and business management.

4.3.9: Reception of Handloom Award and Awareness of Handloom Schemes

In order to incentivise weavers and to reward them for their immense contribution and excellence in handloom, the following awards are handed out to deserving weavers – National Merit Certificate, National Award, Sant Kabir Award and Kamala Devi Chattapadhyay Award that is exclusively reserved for women. In addition to these national awards, there are various awards given out on various levels. The respondents were asked of whether or not they have received any type of handloom award. Their responses are listed in the table given as follows:

Table 4.30: Reception of Handloom Award

| Variable | Yes | No |
|------------|-------|--------|
| Frequency | 2 | 28 |
| Percentage | 6.66% | 93.33% |

Source: *Field Survey, 2020*

From the above set of data, we can see that almost all, i.e. 93.33% of the respondents have not received any type of award for their work or excellence in handloom related activities. Only a couple, i.e. 6.66% of the respondents had received a handloom award, both of which are best exhibitor award in a national level handloom exhibition.

An additional question was asked whether or not the respondents know of any handloom scheme implemented by the government. The following table is their responses:

Table 4.31: Status of Awareness of Handloom Schemes of the Government

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 7 | 23 |
| Percentage | 23.33% | 76.66% |

Source: *Field Survey, 2020*

It was found that only a few entrepreneurs, i.e. 23.33% knew of any kind of handloom related schemes implemented by the government. The rest of the respondent, i.e. 76.66% were unaware of any kind of handloom related schemes implemented by the government. It was elicited from the respondents that many prefer to channel their resources in actual handloom work than doing business with the government and expecting assistance from the government. It was their experience that dealing with the

government is time consuming, wasteful of resources and futile in most cases.

4.4: CAPITAL ASSET AND INVENTORY

The status of capital asset and inventories of the handloom enterprise was studied by posing various questions that would help enlighten their status. The following variables highlight the status of capital asset and inventories:

4.4.1: Workshed

A workshed refers to the place in which the looms are housed and where the weavers get to work. Some of the entrepreneurs were given a plot of land by the government within the industrial estate in Zuangtui. Here, they built their workshed and pays an annual rent to the government, although this rent is quite minimal. The other entrepreneurs who could not get a plot within the industrial estate either built workshed in their own premise or rent places for the same. The entrepreneurs were asked whether or not their workshed was owned by themselves or rented from a landlord. The following table shows their response:

Table 4.32: Ownership of Workshed

| Workshed | Owned | Rented |
|------------|--------|--------|
| Frequency | 26 | 4 |
| Percentage | 86.66% | 13.33% |

Source: *Field Survey, 2020*

It was found that a large majority, i.e. 86.66% of the entrepreneurs were owners of their workshed. These entrepreneurs were mainly those who had a plot of industrial estate issued under their name. The rest of the entrepreneurs, i.e. 13.33% had to rent places elsewhere under a landlord in order to have a place of work.

4.4.2: Loom Type and Quantity

There are different types of fly shuttle looms used in Mizoram. The most common ones are Indian loom and semi automatic Zo loom. The semi automatic Zo loom is a modification of Burma loom that are widely used in Myanmar. The respondents were asked of what type of loom they use. The following were their responses:

Table 4.33: Type of Loom Used by the Respondents

| Loom type | Zo loom | Indian loom |
|------------|---------|-------------|
| Frequency | 30 | 0 |
| Percentage | 100% | 0% |

Source: *Field Survey, 2020*

It is certainly noteworthy that all the respondents uses semi automatic Zo loom. The wide prevalence of Zo loom seem to come about in 1985 when the Zoram Industrial Development Corporation (ZIDCO), a private company jointly owned by the Government of Mizoram and the Industrial Development Bank of India (IDBI) gave refinance loans on the Semi Automatic Zo Loom. This Zo Loom was much more efficient in production and could churn out three times the amount of output in relative to the Indian fly shuttle looms (Dr. Zohmangiha, MACHO Chairman, 2020).

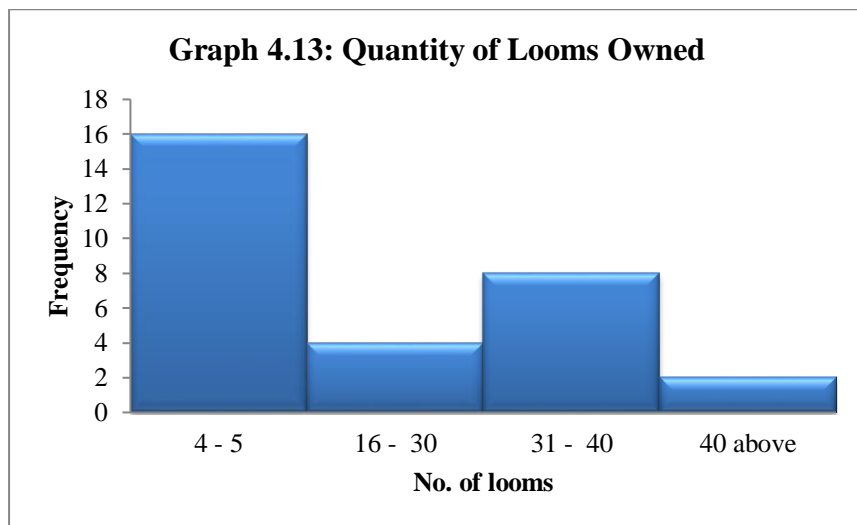
Thus, the economic efficiency of Zo loom and the availability of skilled mostly-Burmese workers who could operate the loom led to its popularity among the respondents.

The respondents were also asked a supplementary question of the quantity of looms they owned. The following table records their responses:

Table 4.34: Quantity of Looms Owned by the Respondent

| Variable | 1 - 15 | 16 - 30 | 31 - 40 | 40 above |
|------------|--------|---------|---------|----------|
| Frequency | 16 | 4 | 8 | 2 |
| Percentage | 53.33% | 13.33% | 26.66% | 6.66% |

Source: *Field Survey, 2020*



It can be seen from the above field survey data that about half, i.e. 53.33% of the respondents had 1-15 looms, a few 13.33% of them had 16-30 looms, a sizeable 26.66% of the respondents had 31-40 looms and only a couple 6.66% of the respondents had more than 40 looms.

4.4.3: Ownership of Means of Transport

A means of transportation such as two wheeler or four wheeler vehicle of any kind may serve as a valuable mode for shipping of finished products to the market and procuring raw materials from their sources. The respondents were asked of their possession of any mode of transport and their responses are tabulated as under:

Table 4.35: Ownership of Means of Transport

| Variable | 1 - 15 | 16 - 30 | 31 - 40 | 40 above |
|------------|--------|---------|---------|----------|
| Frequency | 16 | 4 | 8 | 2 |
| Percentage | 53.33% | 13.33% | 26.66% | 6.66% |

Source: *Field Survey, 2020*

It was found from the field survey that a large portion, i.e. 76.66% of the respondents had at least one means of transport, which is either a two wheeler vehicle or a four wheeler or both. The remaining of the respondents, i.e. 23.33% had no means of transport and thus rely on public mode of transportation or walking on foot as a means of transport.

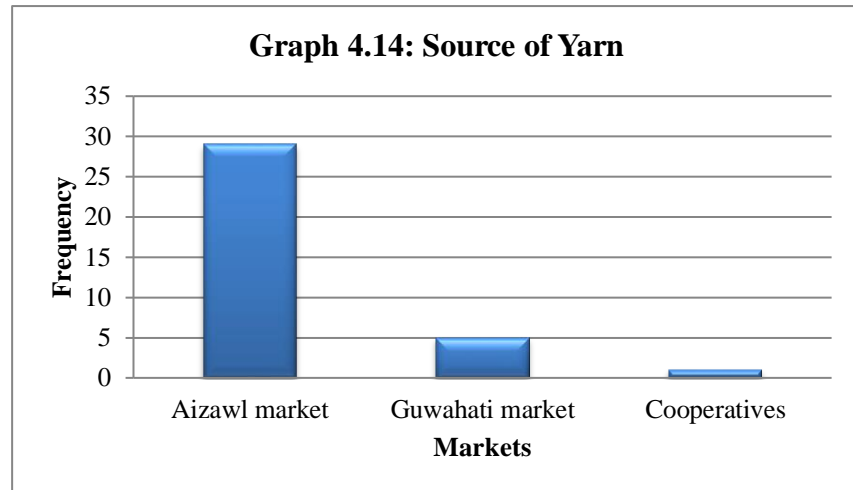
4.4.4: Source of Yarn

The place where the respondents bought their yarns was asked and the following answers were elicited from the respondent:

Table 4.36: Source of Yarn for the Respondents

| Variable | Aizawl market | Guwahati market | Cooperatives |
|-----------|---------------|-----------------|--------------|
| Frequency | 29 | 5 | 1 |

Source: *Field Survey, 2020*



It is evident from the field survey data that out of all the respondents, 29 of them procure their yarns from Aizawl market, 5 of them from Guwahati market and there was only 1 respondent who procure his yarns from a cooperative market. As can be seen, few entrepreneurs had not just a single market as a source for procuring their yarns and did business in the Aizawl market and Guwahati market or the Aizawl market and Cooperative market.

4.4.5: Start-up Capital

A start-up capital is essentially the money invested to start a new business. The entrepreneurs were asked whether the start-up capital for their enterprise was raised by them or loaned from a bank. The following are their responses:

Table 4.37: Start-up Capital of the Respondents

| Start-up capital | Raised by self | Loaned |
|------------------|----------------|--------|
| Frequency | 24 | 6 |
| Percentage | 80% | 20% |

Source: *Field Survey, 2020*

The above data showed that a large majority, i.e. 80% of the respondents raised the start-up capital for their enterprise by themselves. The rest, i.e. 20% of the entrepreneurs borrowed their start-up capital from the banks as loans.

4.4.6: Ancillary Repair Services

Capital asset such as looms, warps and drums requires maintenance and repair every once in a while. As such, the respondents were asked if they provide any ancillary repair services to various capital assets of the handloom enterprises. The following table reflects their responses:

Table 4.38: Status of Providing Ancillary Repair Services

| Variable | Yes | No |
|------------|-----|-----|
| Frequency | 6 | 24 |
| Percentage | 20% | 80% |

Source: *Field Survey, 2020*

It can be seen from the above field survey data that while a large 80% of the respondents lack any ancillary repair services, a handful 20% of them could provide such service. There were a few talented entrepreneurs who could and who did built their own looms using parts imported from Myanmar. Such entrepreneurs were aptly skilled to provide repairing services to their fellow entrepreneurs.

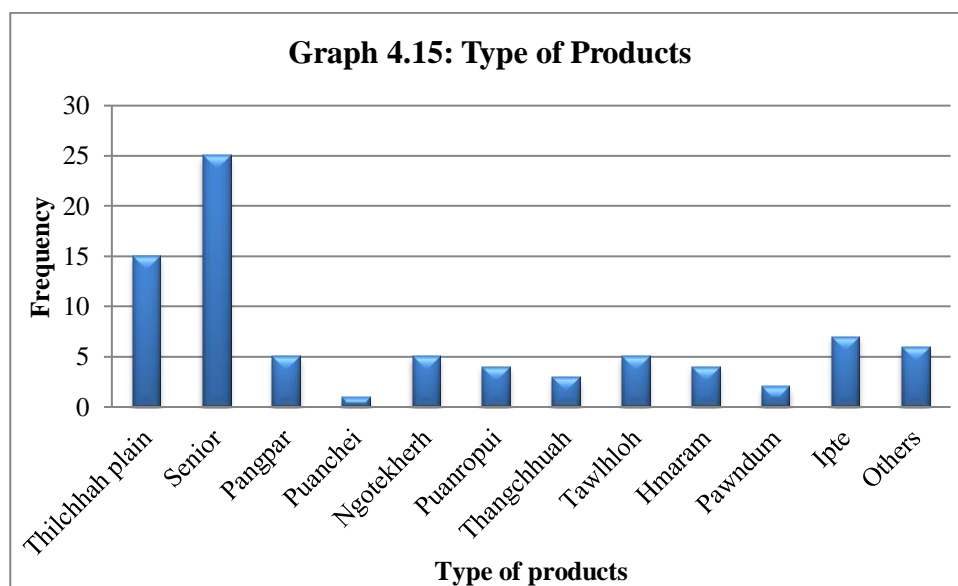
4.4.7: Type of Products

An enquiry was made into the type of products produced by the handloom entrepreneurs of Zuangtui cluster. The data thus obtained are tabulated as under:

Table 4.39: Type of Products of the Respondents

| | | | | |
|--------------|-----------------|-----------|-------------|----------|
| Product type | Thilchhah plain | Senior | Pangpar | Puanchei |
| Frequency | 15 | 25 | 5 | 1 |
| Product type | Ngotekherh | Puanropui | Thangchhuah | Tawlhloh |
| Frequency | 5 | 4 | 3 | 5 |
| Product type | Hmaram | Pawndum | Ipte | Others |
| Frequency | 4 | 2 | 7 | 6 |

Source: *Field Survey, 2020*



It was elicited from the respondents that Senior puan was their most produced item, weaved by 25 entrepreneurs. The next item which is most commonly produced was Thilchhah plain, which is weaved by 15 entrepreneurs. This was followed by Pangpar puan, Ngotekherh and Tawlhloh puan which is weaved by 5 entrepreneurs each. Puanropui and

Hmaram were weaved by 4 entrepreneurs each while Thangchhuah, Pawndum and Puanchei were produced by 3, 2 and 1 entrepreneurs respectively. 7 entrepreneurs produced Ipte (a bag) of different kind such as Khiangkawi ipte, Iptechei and a Mizo puan-patterned sling bag which is quite popular with the consumers. Other items such as Shawl, Kawrchei(a blouse paired with Puanchei) and Naupuakpuan (a cloth used as a baby carrier) were produced by 2 entrepreneurs each. One very interesting finding was that there was 1 entrepreneur who produces only Naga garments and ships their entire products outside Mizoram.

4.5: ACCESS TO CREDIT

The credit history of the entrepreneurs with regard to loans and sum of money borrowed from banks and other sources were analysed.

4.5.1: Loan from Banks

The entrepreneurs were asked whether or not they have borrowed loans from bank exclusively meant for handloom purposes. The following table records their responses:

Table 4.40: Status of Borrowing Loan

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 16 | 14 |
| Percentage | 56.66% | 46.66% |

Source: *Field Survey, 2020*

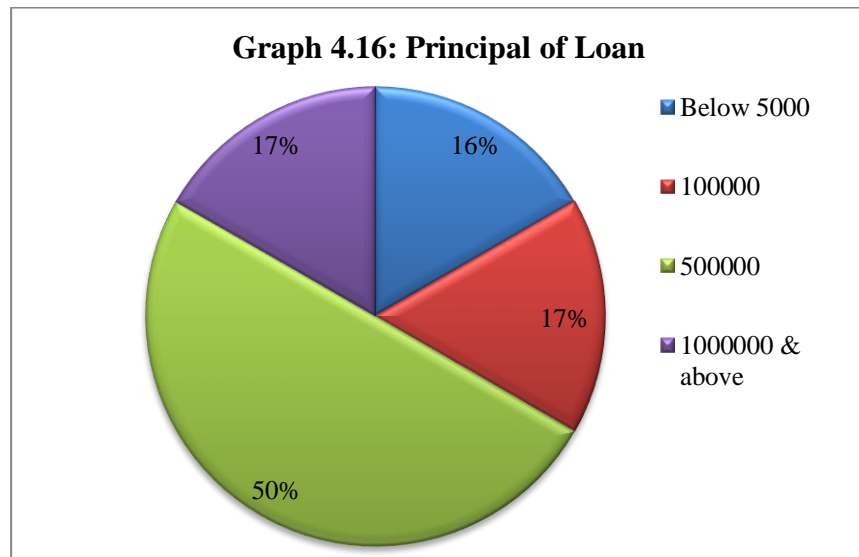
It can be seen from the above table that more than half the number of entrepreneurs, i.e. 56.66% have borrowed loans from bank for handloom purposes while the rest 46.66% have not.

Amongst those entrepreneurs who have borrowed loans from banks, an enquiry was made into the principal amount of loan borrowed. The following table shows their responses:

Status 4.41: Principal of Loan Borrowed by the Respondents

| Amount | Below 50,000 | 1,00,000 | 5,00,000 | 10,00,000 & above |
|------------|--------------|----------|----------|-------------------|
| Frequency | 3 | 3 | 9 | 3 |
| Percentage | 18.75% | 18.75% | 56.25% | 18.75% |

Source: *Field Survey, 2020*



The above field survey data shows that a majority, i.e. 56.25% of the entrepreneurs who had availed loans from banks borrowed a principal of 5,00,000 rupees. These entrepreneurs were mainly beneficiaries of the Prime Minister Employment Generation Programme (PMEG) which is an initiative of the Ministry of Micro, Small and Medium Enterprises. There were few

entrepreneurs, i.e. 18.75% who availed micro finances of principal below 50,000 rupees. Entrepreneurs who availed loan of principal amount 1,00,000 rupees and 10,00,000 rupees make up 18.75% of those respondents who had availed loans respectively.

Among the same entrepreneurs who had availed loans for handloom purposes, a question was posed whether or not they face any problems while applying for these loans. Their responses are tabulated as under:

Table 4.42: Status of Problem Faced when Borrowing Loan

| Problem | Yes | No |
|------------|-----|-----|
| Frequency | 3 | 13 |
| Percentage | 10% | 90% |

Source: *Field Survey, 2020*

It was elicited from the respondents who had availed loans from banks that while most, i.e. 90% did not face any problem, few, i.e. 10% of them faced one problem or the other. Responses such as difficulty in dealing with bankers and lack of information regarding loan details were cited. A respondent faced problem as critical as the need to bribe a banker in order to avail loan.

4.5.2: Loan from Money Lender, Family or Friends

The respondents were asked whether or not they have borrowed loan from a money lender, a family member or a friend exclusively for commercial purposes. Their responses are as follows:

Table 4.43: Borrowing Money from Money Lender, Family or Friends

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 7 | 23 |
| Percentage | 23.33% | 76.66% |

Source: *Field Survey, 2020*

It can be seen from the above table that out of all the respondents, a large majority, i.e. 76.66% had not availed loan from the aforementioned sources while the remaining 23.33% have. The sources from which they have borrowed loans are mainly family and friends.

Out of all the entrepreneurs who have availed loan for handloom purposes from a bank, family, friend or money lender, there were none who could not repay their loan, the principal amount and interest within the stipulated time.

4.5.3: Financial Assistance from the Government

An enquiry was made whether or not the respondents have received any form of financial assistance from the government. The following table records their responses:

Table 4.44: Reception of Financial Assistance from the Government

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 16 | 14 |
| Percentage | 53.33% | 46.66% |

Source: *Field Survey, 2020*

As can be seen from the above field survey data, it is comforting to know that more than half of the entrepreneurs, i.e. 53.33% had received at least one form of financial assistance from the government. On the other

hand, the remaining, i.e. 46.66% of the entrepreneurs had not had any form of financial assistance from the government.

Amongst those entrepreneurs who had received a financial assistance from the government, a question of what type of assistance it was and whether or not it was through a handloom society was asked. The following table reflects their responses:

Table 4.45: Type of Financial Assistance from the Government

| Type | Rebate | DCT |
|------------|--------|--------|
| Frequency | 6 | 10 |
| Percentage | 37.50% | 62.50% |

Source: *Field Survey, 2020*

It was found that out of the entrepreneurs who had received government financial assistance, 62.50% received it as a direct cash transfer while 37.50% received as a rebate on the sales of their product in various handloom expo.

Table 4.46: Channel of Reception of Financial Assistance from the Government

| Channel | Society | Self |
|------------|---------|--------|
| Frequency | 6 | 10 |
| Percentage | 37.50% | 62.50% |

Source: *Field Survey, 2020*

With regards to the channel of reception of these financial assistances, 37.50% received theirs through a handloom society while the rest 62.50% received their government financial assistance through their self channel.

4.5.4: Financial Assistance from Other Sources

The respondent entrepreneurs were asked whether or not they have received any financial assistance from sources other than the government. Their responses are tabulated as under:

Table 4.47: Reception of Financial Assistance from Other Sources

| Variable | Yes | No |
|------------|-------|--------|
| Frequency | 1 | 29 |
| Percentage | 3.33% | 96.66% |

Source: *Field Survey, 2020*

It can be seen from the above field survey data that while almost all the respondents, i.e. 96.66% had not receive any form of extra governmental financial assistance, there was one entrepreneur, i.e. 3.33% who had received the same.

4.5.5: Financial Problem

The respondents were asked whether or not they have faced any sort of financial problem in the course of running their handloom enterprise. The following table elicits their responses:

Table 4.48: Status of Facing Financial Problem by the Respondents

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 26 | 4 |
| Percentage | 86.66% | 13.33% |

Source: *Field Survey, 2020*

It is distressing to see that a large portion of the entrepreneurs, i.e. 86.66% faced financial problem in due course of running their handloom

enterprise. On the other hand, 13.33% of the entrepreneurs did not face any financial problem that is worthwhile mentioning. The kind of financial problem faced by the entrepreneurs were mostly when the commissioners could not pay up for their products or when they could not sell their products in the market during the lean monsoon seasons. Due to these constraints, the entrepreneurs would face shortage of funds to buy yarns and other raw materials. However, a wonderful agreement would be made amongst the entrepreneurs and yarn merchants where the entrepreneurs would buy their yarns on credit without any collateral and then repay for the same on the availability of funds without any interest.

4.6: ECONOMICS OF PRODUCTION AND WORKING CAPITAL

The various economic variables associated with the production of handloom enterprises of Zuangtui cluster are analysed under this section.

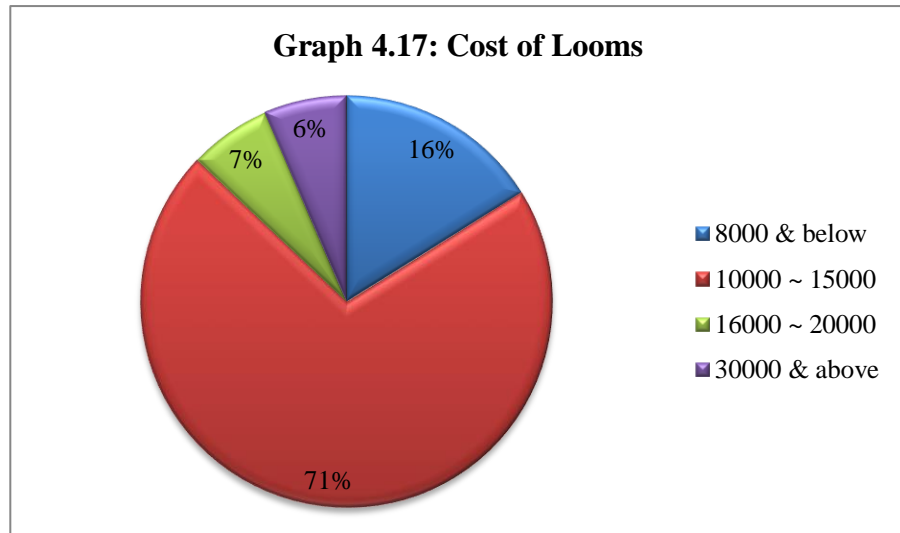
4.6.1: Cost of Loom

An enquiry was made into the cost of each loom owned by the entrepreneurs. The following responses were elicited from the respondents:

Table 4.49: Cost of Looms of the Respondents

| Cost (per loom) | 8000 & below | 10000 - 15000 | 16000 - 20000 | 30000 & above |
|-----------------|--------------|---------------|---------------|---------------|
| Frequency | 5 | 22 | 2 | 2 |
| Percentage | 16.66% | 73.33% | 6.66% | 6.66% |

Source: *Field Survey, 2020*



It can be seen from the field survey data that a large majority, i.e. 73.33% of the entrepreneurs bought their looms for Rs. 10,000 to 15,000. This price range seems to be the current market price of these looms. There were 16.66% of the entrepreneurs who had their looms for less than Rs. 8,000. This group of entrepreneurs was mainly those who bought their looms many years back when loom prices were not as inflated or those who built their own looms using parts imported from Myanmar. At the extreme end, there were few entrepreneurs each, i.e. 6.66% who bought their looms for Rs.16,000-20,000 and more than Rs. 30,000. This is because these entrepreneurs bought metal framed looms which are more durable and are therefore higher priced.

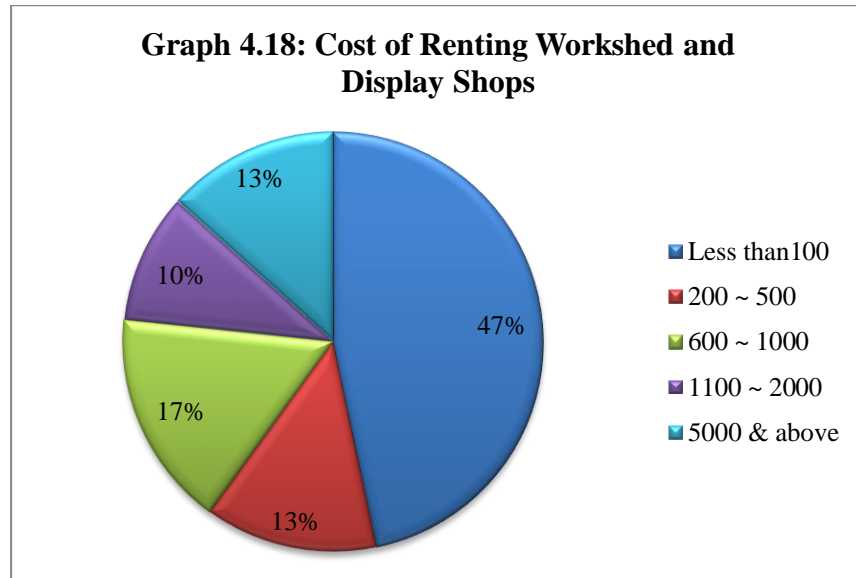
4.6.2: Cost of Renting Workshed and Display Shops

The cost of renting workshed and display shops (if any) by the entrepreneurs were tallied and tabulated as follows:

Table 4.50: Cost of Renting Workshed and Display Shops

| Cost | Less than100 | 200 - 500 | 600 - 1000 | 1100 - 2000 | 5000 & above |
|------------|--------------|-----------|------------|-------------|--------------|
| Frequency | 14 | 4 | 5 | 3 | 4 |
| Percentage | 46.66% | 13.33% | 16.66% | 10% | 13.33% |

Source: *Field Survey, 2020*



It can be seen from the above field survey data that almost half, i.e. 46.66% of the respondents spent only less than a Rs.100 per month for renting workshed and display shops (if they had any). This rate is astonishingly low but was reasoned by the respondents that taxes paid out to the government for their plot of land at the industrial estate was quite minimal and almost nonexistent. Respondents who spent Rs.200 to 500 on rent per month makes up 13.33% while those who pay Rs.600 to 1,000 per month makes up 16.66% of the respondents. On the higher end of the rent scale, respondents who pay Rs.1,100 to 2,000 makes up 10% while those who pay more than Rs.5,000 makes up 13.33% of the respondents. These groups of respondents were mostly those who did not have an industrial plot

issued to them and those who had to pay rent for display shops elsewhere in the city.

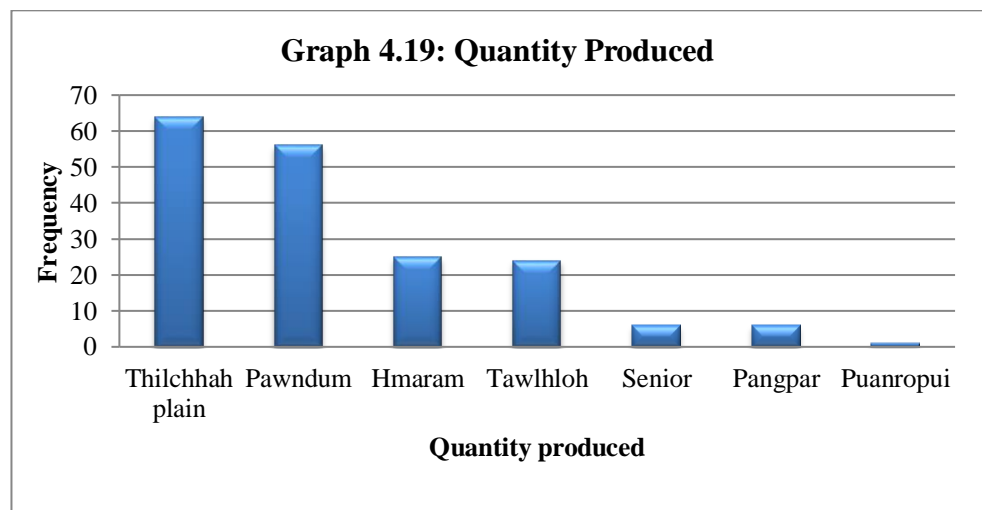
4.6.3: Quantity Produced

An enquiry was made into the quantity of output produced per week per loom for each type of product. The following table records the responses of the entrepreneurs:

Table 4.51: Quantity of Output Produced Per week Per Loom

| | | | | | |
|----------|-----------------|------------|----------|----------|-----------|
| Type | Thilchhah plain | Senior | Pangpar | Puanchei | Puanropui |
| Quantity | 64 | 6 | 6 | 60 lines | 1 |
| Type | Thangchhuah | Ngotekherh | Tawlhloh | Pawndum | Hmaram |
| Quantity | 40 metres | 25 lines | 24 | 56 | 25 |

Source: *Field Survey, 2020*



It was elicited from the entrepreneurs that the quantity of output produced of each type of product varies with each loom. This is because each loom being hand operated by a weaver varies in the quantity of its output depending on the capacity of the weaver who operates on it.

Therefore, the data enlisted in the table above is an average of the quantity of each type of product produced by a weaver per week that is elicited from the respondents. It can be seen from the above table that in a week on an average, each loom operated by a weaver produces 64 Thilchhah puan plain, 6 Senior puan and Pangpar puan respectively, 25 Hmaram, 24 Tawhlhloh puan, 56 Pawndum and a Puanropui. Similarly, each of the aforementioned factors of production produces 60 lines of Puanchei, 25 lines of Ngotekherh and 40 meters of Thangchhuah puan per week on an average. These three type of products are not produced as the typical puan, but as lines and meters because they are used as intermediate materials for making different type of handloom by-products such as bags, vests, various apparels, pillow cases and various others of the sort.

4.6.4: Quantity of Yarn Used for Each Product

The quantity of yarn used for each product could not be uniform across different weavers due to difference in designs and quantity of puan weaved out of each drum. The following table shows the quantity of yarn used on an average per puan by each enterprise:

Table 4.52: Quantity of Yarn Used for Each Product

| Type | Thilchhah plain | Senior | Ngotekherh | Tawlhloh | Hmaram | Puanropui |
|-------------|-----------------|--------|------------|----------|--------|-----------|
| Amount (Kg) | 0.42 | 0.31 | 0.42 | 0.21 | 0.25 | 0.18 |

Source: *Field Survey, 2020*

It can be seen from the above table that on an average, the amount of yarn used for Thilchhah puan plain, Senior and Pangpar puan,

Ngotekherh, Tawlhloh puan, Hmaram and Puanropui were 0.42, 0.31, 0.42, 0.21, 0.25 and 0.18 kilograms respectively. Senior and Pangpar puan requires different amount of yarn depending on the intricacy of their designs and requires more time to complete than puan plain. Thilchhah plain does not require as much time and intense labour as Senior and Pangpar puan, but their selling price is much lower.

4.6.5: Cost of Yarn

The cost of yarn was different to each entrepreneur depending on the place and time of their purchase. Yarns were either purchased in kilograms or in bags which had 3 kilograms of yarn in it. The cost of yarn to each entrepreneur was Rs.445 per kilogram on an average.

4.6.6: Cost of Winding Yarn to Bobbin

The hank yarns had to be wound on spools called bobbins, which are then placed into a bobbin frame. This task of winding the yarn onto the bobbins was outsourced by the entrepreneurs to experts who did the task using specialised machines. The cost of winding hank yarn onto the bobbins is Rs. 110 per bag on an average. However, there was one entrepreneur amongst the respondents who did this task himself.

4.6.7: Cost of Unwinding Yarn from Bobbin to Warping Drum

Once the bobbins were placed into the bobbin frame, the yarns had to be transferred to the warping drum. This set of task was also mostly

outsourced by the entrepreneurs to experts at a rate of Rs.448 on an average per warping drum. However, there were 6 entrepreneurs who did this task themselves.

4.6.8: Cost of Threading the Heddle

Each strand of yarn that is wounded on the warping beam had to be threaded through the multitude of heddles by hand. This task was mostly outsourced to experts at Rs.388 on an average per warping beam. However, 16 entrepreneurs had their weaver borne the cost of this task. These weavers in turn either did the said task by themselves or pay experts to do so out of their pocket.

4.6.9: Cost of Transportation

Transportation cost involved in moving the finished products to the market and sourcing raw material from the market had to be borne by the entrepreneurs. It was elicited from the entrepreneurs that 76.66% of them had a vehicle which could facilitate as a mode of transportation. The remaining 23.33% of the respondents state that they utilise public transport such as buses and taxis or even walking on foot as their means of transport. The average cost of transport on taxi and bus from Zuangtui cluster to Aizawl market is Rs.80 per trip. The respondents state that they would move out their products weekly or whenever an appropriate quantity of product is stocked up.

4.6.10: Salary Paid to Weavers

The weavers employed under each entrepreneur were paid according to the work they completed. Each weaver differs in the amount of work they were able to complete within a week. Since the weavers were paid salary for a week's work, their income also differs considerably. Some entrepreneurs split the revenue from each product produced by the weavers and share them equally between themselves. Other entrepreneurs fixed a wage rate for each unit of output of different type of products. Taking into account all the mean wages paid out by each entrepreneur, the average weekly salary of weavers of Zuangtui cluster was Rs.3626.

4.6.11: Employment of Family Member

The entrepreneurs were asked whether or not they employ a family member in their enterprise without pay. This employment is strictly confined to weaving activities only and does not cover management and other services. The following table records their responses:

Table 4.53: Employment of Family Member

| Variable | Yes | No |
|------------|-----|-----|
| Frequency | 9 | 21 |
| Percentage | 30% | 70% |

Source: *Field Survey, 2020*

It is observed from the above field survey data that only 30% of the respondents employ a family member without pay while the rest 70% did not. Amongst the 9 entrepreneurs who employed a family member, 4 of

them were self employed in weaving activities while 5 of them employed an extra family member beside themselves.

4.6.12: Selling Price of Each Product

The price at which the entrepreneurs sold their products to their market was enquired. Since each entrepreneur sold their products at a different price point, the follow table shows the average selling price of each entrepreneur:

Table 4.54: Selling Price of Each Product

| | | | | |
|---------|-----------------|-----------|----------|-------------|
| Product | Thilchhah plain | Senior | Tawhlloh | Hmaram |
| Price | 298 | 1111 | 400 | 425 |
| Product | Ngotekherh | Puanropui | Puanchei | Thangchhuah |
| Price | 475 | 2500 | 150/line | 175/line |

Source: *Field Survey, 2020*

It was calculated from the responses given by each entrepreneur that the selling price of Thilchhah puan plain, Senior puan, Tawhlloh puan, Hmaram, Ngotekherh and Puanropui were Rs. 298, Rs. 1111, Rs. 400, Rs. 425, Rs. 474 and Rs. 2500 respectively. Puanchei and Thangchhuah puan were sold by the line at Rs. 150 and Rs. 175 per line respectively.

4.6.13: Employment Condition

With regards to the employment condition of the weavers, the entrepreneurs were asked how much the labour hour per day was. It was elicited from the respondents that they were unaware of how long their employees worked in a day. This was because the weavers lived in the

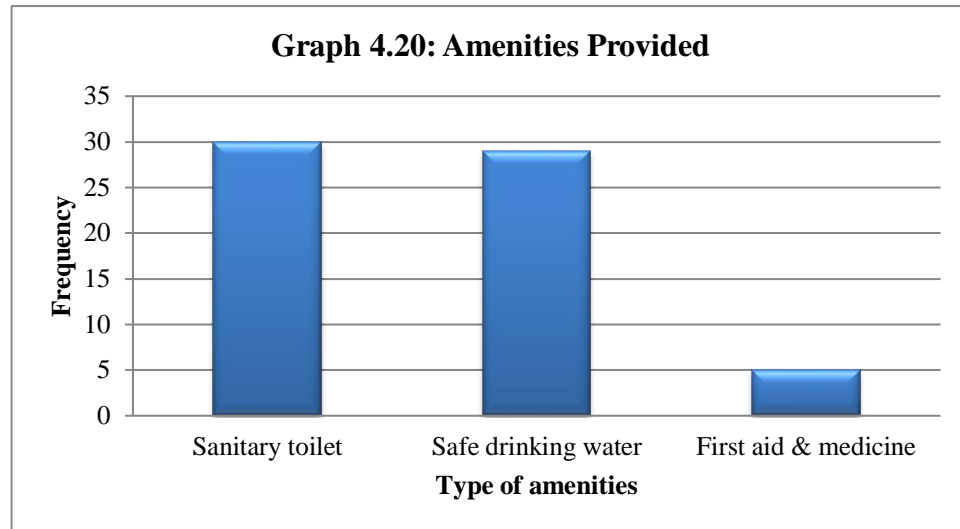
workshed rent free, but these workshed were situated in places far off from the entrepreneurs’ residence. The work sheds were situated within Zuangtui handloom cluster but many entrepreneurs reside in other parts of Aizawl city, well outside the cluster. Therefore, they could not monitor their employees working hours and have no knowledge on it. However, it was mentioned that the weavers usually work well over 10 hours a day on the loom. It was reasoned by the entrepreneurs that since the weavers lived in the work shed itself, it was only natural for them to work during the usual working hours and their supposedly leisure time at early mornings and evenings.

The entrepreneurs were asked a supplementary question of whether or not they provide their workers with amenities such as sanitary toilet, safe drinking water and first aid and medicine. The following table records their responses:

Table 4.55: Availability of Various Amenities

| Amenities | Sanitary toilet | Safe drinking water | First aid & medicine |
|------------|-----------------|---------------------|----------------------|
| Frequency | 30 | 29 | 5 |
| Percentage | 100% | 96.66% | 16.66% |

Source: *Field Survey, 2020*



It is evident from the above field survey data that while all the entrepreneurs provided sanitary toilet to their workers, 96.66% of them provide safe drinking water to their workers. It was stated by the 3.33% of entrepreneur who did not provide safe drinking water that they and their workers drank out of a nearby spring water. Only a small portion, i.e. 16.66% of the respondents provides first aid and medicine to their workers. It was reasoned by the entrepreneurs that since their employees lived separately in the work shed as a family, they entrusted the minor responsibilities of first aid and general medicines onto them. However, in major health cases that require a visit to the doctor and others of the sort, they would help out their workers in hospital visits.

4.7: OTHER FINDINGS

4.7.1: Satisfaction in Handloom

The entrepreneurs were asked whether or not they find handloom as a satisfactory job to feed a family. The following table shows their response:

Table 4.56: Satisfaction in Handloom

| Satisfaction | Yes | No |
|--------------|--------|-------|
| Frequency | 29 | 1 |
| Percentage | 96.66% | 3.33% |

Source: Field Survey, 2020

As can be seen from the above table, almost all the entrepreneurs, i.e. 96.66% interviewed for the survey found handloom as a satisfactory line of work to decently feed a family. However, these entrepreneurs added conditions to their responses. Some of them were that handloom would satisfy as a decent job to feed a family only if one is honest, hard working, dedicated and if family members support each other through thick and thin. There was only 3.33% of the entrepreneur who did not consider handloom as a satisfactory profession to feed a family.

4.7.2: Marketing Problems

A question was posed to the entrepreneurs whether or not they have faced any sort of marketing problem of their handloom enterprise. Their responses are tabulated as under:

Table 4.57: Status of Marketing Problems Faced by the Respondents

| Variable | Yes | No |
|------------|--------|--------|
| Frequency | 19 | 11 |
| Percentage | 63.33% | 36.66% |

Source: *Field Survey, 2020*

The above set of data shows that a large portion, i.e. 63.33% of the respondents faced certain marketing problems while the rest 36.66% did not face any problem worth mentioning.

Table 4.58: Marketing Problems Faced by the Respondents

| Marketing Problems | Frequency |
|--|-----------|
| Difficulty in sale of products in monsoon season | 10 |
| Difficulty in sale of products to retailers | 6 |
| Inability of commissioners to pay debt | 2 |
| Price competition | 2 |
| Design competition | 1 |
| Fluctuation in prices | 1 |
| Problem in supply chain | 1 |
| Difficulty in sale of old stocks | 1 |

Source: *Field Survey, 2020*

The most frequently mentioned marketing problem was one mentioned by 10 entrepreneurs, where the entrepreneurs faced difficulty in selling their products during the monsoon season. This was mainly because of decline in demand and unforeseen contingencies regarding shipping routes. The second most frequent problem cited by 6 entrepreneurs is the difficulty in selling their products to the retailers or commissioners. 2 entrepreneurs had problems with the inability of commissioners to pay up their debts and problems in price competition respectively. 1 entrepreneur

each faced problems with design competition, fluctuation in prices, problem in supply chain and difficulty in selling old stocks.

4.7.3: Other Problems

The respondents were asked whether they faced any other problem regarding their handloom enterprise. The following table sums up their responses:

Table 4.59: Status of Other Problems Faced by the Respondents

| Variable | Yes | No |
|------------|-----|-----|
| Frequency | 24 | 6 |
| Percentage | 80% | 20% |

Source: *Field Survey, 2020*

It is evident from the field survey data that a large majority, i.e. 80% of the respondents faced one problem or the other with regards to their handloom enterprise while the rest 20% did not. When asked to mention the kind of problems they faced, the respondents mentioned problems that are recorded in the following table:

Table 4.60: Other Problems Faced by the Respondents

| Problems regarding handloom | Frequency |
|---|-----------|
| Shortage of honest and skilled workers | 16 |
| Shortage of yarn | 7 |
| Lack of control or standardization of price | 2 |
| Difficulty in management of workers | 1 |
| Inability to get weaver ID | 1 |
| Inability to get a plot in industrial estate | 1 |
| Difficulty in selling defective products that arises due to learning curve if workers | 1 |

Source: *Field Survey, 2020*

It can be seen from the table above that the most frequently cited problem was shortage of honest and skilled workers, which is cited by 16 entrepreneurs. The respondents elaborated that workers had the tendency of leaving their enterprise after they had been trained by them. Other workers were either lacking in skill to weave the type of demanded products or would weave poorly, rendering their market price awfully low. 7 entrepreneurs cited problem due to shortage of yarn. This was mainly shortage of particular yarn colours demanded by the entrepreneurs. 2 entrepreneurs cited problem due to lack of control or standardisation of prices where competitor entrepreneurs would bet the market prices of products low and the wages of workers high.

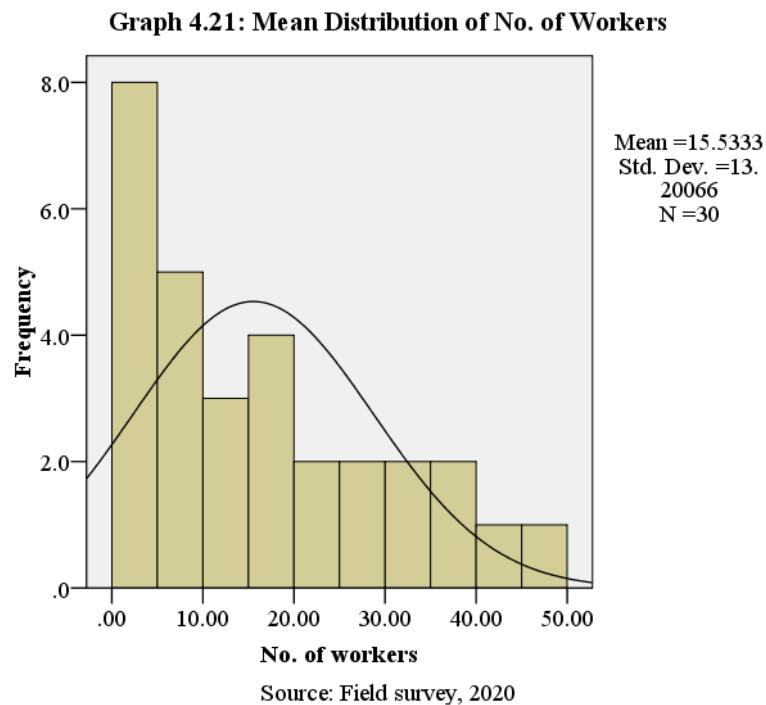
4.8: CORRELATION ANALYSIS AND HYPOTHESIS TESTING

Correlation analysis on various parameters was run using Statistical Package for the Social Sciences (SPSS) software. The correlation analysis is made in order to establish any form of association between two variables and to determine the strength of association between them. A parametric test, Karl Pearson's Coefficient of Correlation was done in order to determine the association between number of workers and average monthly income and also between number of looms and average monthly income of the entrepreneurs. A non parametric test, Chi Square test was done in order to

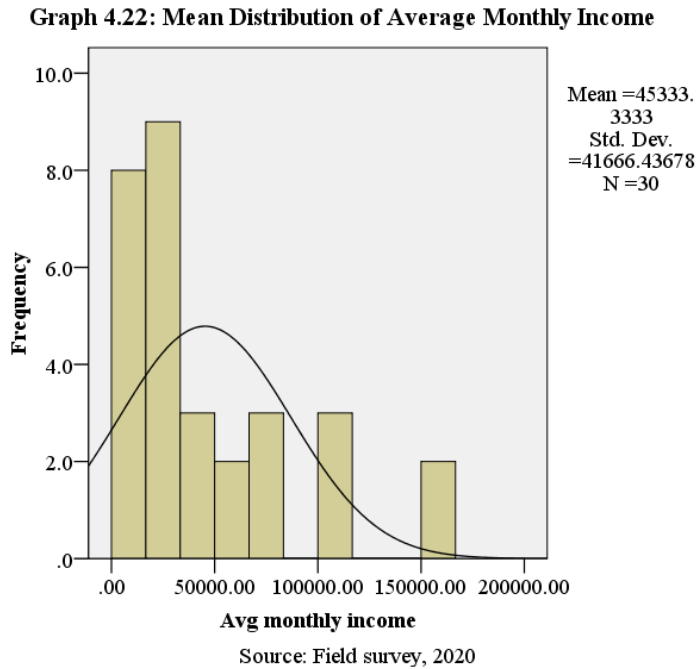
determine the independence of attributes such as gender and average monthly income of the entrepreneurs.

4.8.1: Correlation Between Number of Workers and Average Monthly Income

In order to analyse a set of parameter for Karl Pearson's Coefficient of Correlation, it must be established that the parameters have normal distribution and a linear relationship. In order to establish the normal distribution of number of workers and average monthly income, a histogram of both the parameters were made.



The above histogram of number of workers employed by the entrepreneurs showed a normal bell shaped curve, establishing its normal distribution.



The above histogram of average monthly income of entrepreneurs shows a negatively skewed distribution curve. However, as per the Central Limit Theorem, we can conclude that as the number of sample size increases above 30, the distribution of average monthly income approaches a normal distribution.

In order to establish the linear relationship between number of workers and average monthly income, a scatter diagram was synthesized as under:

Graph 4.23: Scattergram of No. of Workers and Average Monthly Income

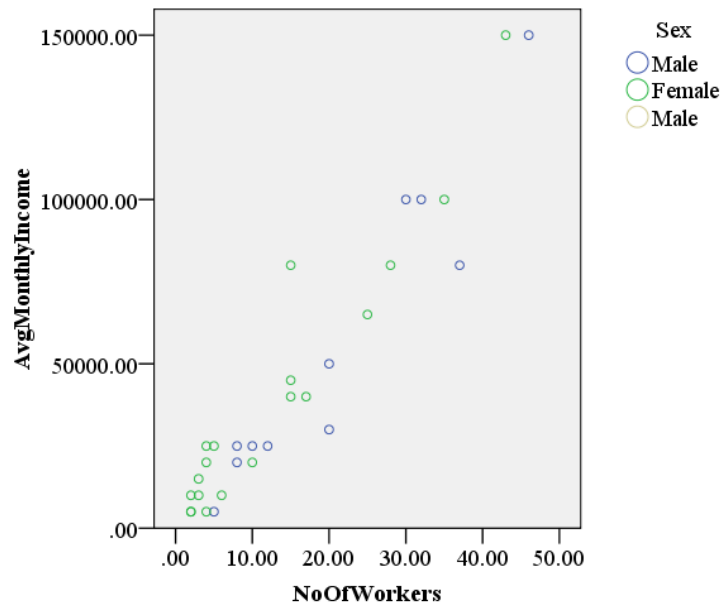


Table 4.61: Correlation Between No. of Workers and Average Monthly Income

| | | No of workers | Avg. monthly income |
|---------------------|---------------------|---------------|---------------------|
| No. of workers | Pearson Correlation | 1 | .949** |
| | Sig. (2-tailed) | | .000 |
| | N | 30 | 30 |
| Avg. monthly income | Pearson Correlation | .949** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 30 | 30 |

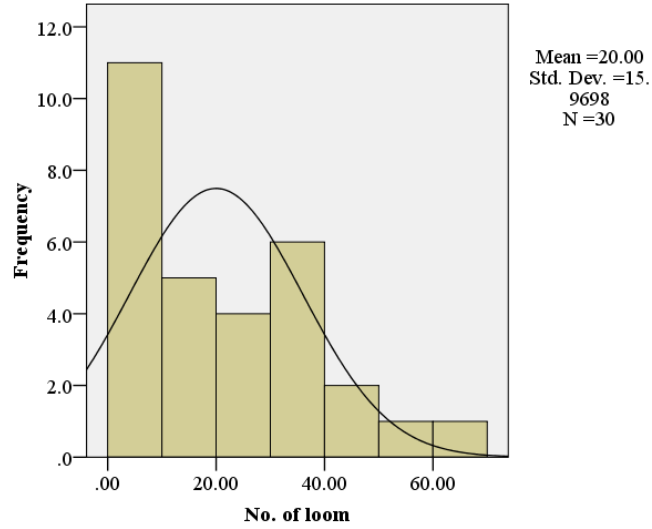
** . Correlation is significant at the 0.01 level (2-tailed).

It can be seen from the above table that the Karl Pearson's Correlation Coefficient of number of workers and average monthly income of the entrepreneurs is 0.949, which is significant at 0.01 level. This means that these two variables have a very strong positive correlation and we can say this with 99% level of confidence.

4.8.2: Correlation Between Number of Looms and Average Monthly Income

In order to analyse the correlation between number of looms and average monthly income, it must first be established that these two parameters are normally distributed and have linear relationship. The normal distribution of average monthly income of entrepreneurs has been established previously. The normal distribution of number of looms may be established using a histogram as under:

Graph 4.24: Mean Distribution of No. of Looms

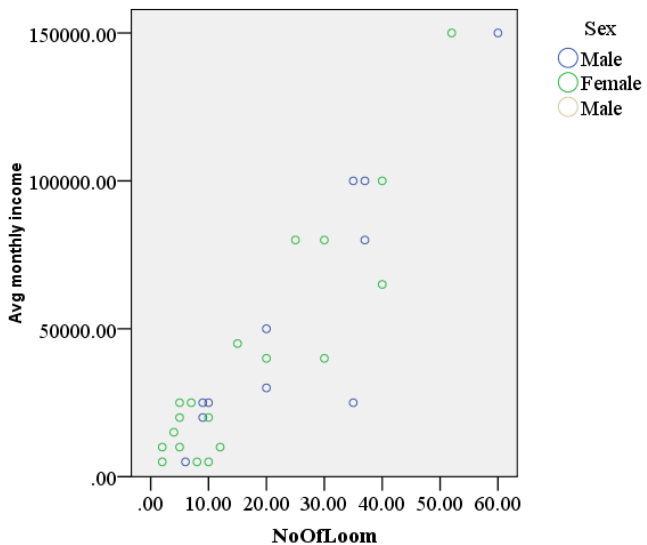


Source: Field survey, 2020

The slight negatively skewed number of loom distribution can be assumed to be normally distributed under the Central Limit Theorem.

The linear relationship of number of looms and average monthly income can be shown using a scatter plot as follows:

Graph 4.25: Scattergram of No. of Looms and Average Monthly Income



Source: Field survey, 2020

The above scatter diagram of average monthly income plotted against the number of looms showed a positive linear relationship.

With the normal distribution and linear relationship of number of looms and average monthly income of entrepreneurs, a Karl Pearson's Correlation Coefficient was run using SPSS software. The following table showed the results obtained:

Table 4.62: Correlation Between No. of Looms and Average Monthly Income

| | | Avg. monthly income | No. of looms |
|---------------------|---------------------|---------------------|--------------|
| Avg. monthly income | Pearson Correlation | 1 | .909** |
| | Sig. (2-tailed) | | .000 |
| | N | 30 | 30 |
| No. of looms | Pearson Correlation | .909** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 30 | 30 |

** . Correlation is significant at the 0.01 level (2-tailed).

It is evident from the above table that the Karl Pearson's Correlation Coefficient for number of looms and average monthly income is 0.909 which is significant at 0.01 level. This means that the two parameters have a very strong positive correlation which can be said with 99% level of confidence.

4.8.3: Independence of Gender and Average Monthly Income

In order to find out the existence of association or correlation between gender and average monthly income, a non parametric test Chi Square test was run in SPSS software. A null hypothesis of independence of

gender and average monthly income was made. The following table is an extraction of the result obtained from the Chi Square test:

Table 4.63: Chi-Square Tests of Association Between Gender and Average Monthly Income

| | Value | df | Asymp. Sig. (2-sided) |
|--------------------|---------------------|----|--------------------------|
| Pearson Chi-Square | 10.837 ^a | 12 | .543 |
| Likelihood Ratio | 13.971 | 12 | .303 |
| N of Valid Cases | 30 | | |

a. 26 cells (100.0%) have expected count less than 5. The minimum expected count is .37.

It can be seen that the observed Pearson Chi Square value is 10.837 at 12 degrees of freedom. We cannot reject the null hypothesis at 0.05 level of significance since the observed asymptotic significance value is 0.543. Thus, there is no sufficient data or evidence to establish that there is an association of the attributes of gender and average monthly income.

CHAPTER V

MAIN FINDINGS, SUGGESTIONS AND

CONCLUSION

MAIN FINDINGS

On Profile and Socio Economic Condition of the Entrepreneurs

(Objective 1):

- Out of all the respondents, 11 were male while 19 were female. The figure of women respondents amounts to 63.33%, which is significantly higher than their men counterparts, i.e. 36.66%.
- Among the respondents surveyed for the study majority, i.e., 7 of them belonged to the age group 50-54 years, followed by the age group 40 - 44 years in which 6 respondents belong. There were 3 entrepreneurs between the age group 30 - 34 years who were second generation handloom entrepreneurs. At the same time, there were 6 respondents over the age of 60 years.
- Majority of the respondents, i.e. 40% attended school up to Middle School while those who attended up to Primary school were next, making up 20%. Respondents who secured the HSLC and HSSLC were 16% and 13% of the respondents respectively. Only a small portion, i.e. 10% of the respondents were graduates & above.
- A complete cent percent of the respondents have both Voter ID and Ration Card. With regards to Adhaar Card, only 1 respondent out of 30 was without it, which equates to 96.66% of the respondents with possession of Adhaar Card.
- A majority of the respondents, i.e. 40% of them had a family size of 5-6 members. Respondents with 3-4 family members were next to majority,

making up 30% of the sample family. Respondents with family size 7-8 were 24% of the sample family, while those with family size of 9-10 and 10 and above makes up only 6.66% of the sample family.

- A majority of the respondents, i.e. 23.33% do not have any dependent family member. Respondents with 2 and 4 dependent family members respectively make up the next biggest proportion, making up 20% of the total respondents each. Respondents with 5, 3, 1 and 6 followed the frequency order, making up 16.66%, 10%, 6.66% and 3.33% of the respondents respectively.
- A large number, i.e. 80% of the respondents belong to the Above Poverty Line class of family while only a few 13.33% and 6.66% belong respectively to the Below Poverty Line and Antyodaya Anna Yojana class of family.
- 70% of the respondents reside in houses owned by them while the rest 30% reside in rented houses.
- Among the respondents who owned houses themselves, 52.83% had Assam Type houses while the remaining 47.61% owned Reinforced Cement Concrete houses.
- 80% of the respondents were with a health insurance scheme while the rest 20% of the population were without.
- Respondents who undertake weaving and those who do not were exactly equivalent, i.e. each making up 50% of the respondents.

- Of the entrepreneurs who undertake weaving, 66.66% faced health problems due to weaving, while the remaining 33.33% faced no issue as such. Among the various health problems the ones pertaining to the eye was most common, cited by 5 entrepreneurs followed by back pain that is cited by 3 entrepreneurs. 2 entrepreneurs each cited gynaecology related and nerve problem respectively.
- 70% of the respondents had handloom as their main source of livelihood while the rest 30% had other sources, namely government employment and business, as their main source of livelihood.
- The lowest income group of entrepreneurs who earn less than Rs.5000 per month makes up 10% of the respondents. Respondents who earn Rs.5000 - 10,000 and Rs.10,001- 15,000 makes up 10% and 3.33% respectively, while those who earn Rs.15,001 - 20,000 and Rs.20,001 - 25,000 makes up 10% and 6.66% of the sample respondents respectively. The highest income group of entrepreneurs who earn more than Rs.25,000 monthly makes up a majority, i.e. 60% of the respondents.

On Organisational Profile of the Enterprise (Objective 2):

- The 2 longest running enterprise owned by the respondents were established in the year 1988-1990 while the newest enterprise was established recently in 2015-2016. 1, 0, 2, 4 and 2 enterprises were set up in the years 1991-1993, 1994-1996, 1997-1999, 2000-2002 and 2003-2005 respectively. A boom in the establishment of handloom enterprise

was seen during the years 2006-2008, 2009-2011 and 2012-2014 where 6 enterprises were set up each year.

- The mode of ownership of all the enterprises surveyed was a sole proprietorship.
- Enterprises that employ 1-5 workers is most numerous, i.e. 10 enterprises, making up 33.33% of the respondents. There were 4, 5, 3, 0, 3, 2, 1, 0 entrepreneurs who employ 6-10, 11-15, 16-20, 21-25, 26-30, 31-35, 36-40 and 41-45 workers respectively. At the extreme end, there were 2 enterprises which employed 46-50 workers.
- 76.66% of the respondents were enrolled in a handloom society while the remaining 23.33% had no enrolment in any form of handloom society or association.
- 93.33% of the respondents had no enrolment in any form of SHG. Of the little 6.66% of the respondents enrolled in SHG's, all were groups that were completely unrelated to causes of handloom activities.
- Among the respondents, 63.33% take decisions by themselves with regards to 'what to produce' and 'how much to produce'. 20% of the entrepreneurs entrusted the task of taking such said decisions on their wives. Entrepreneurs who take collective decisions with their wives and those who did so with other family member make up 6.66% of the respondents respectively and those who take decision with their wives and the manager of their enterprise make up 3.33% of the respondents.

- 60% of the respondents carried out their sales through wholesale to commissioners, while 40% of them did so through both wholesale and retail sales to final customers.
- 60% of the respondents only had sales within Mizoram while a good 40% of them had additional sales outside Mizoram.
- 16.66% of the entrepreneurs had sales online while the remaining 83.33% had none.
- Among the respondents, 86.66% did not own any type of display shop while the rest 13.33% owns one as such.
- Respondents who own a display shop have it as a mode of advertisement, making up 14.33% of the respondents. There was only 1 respondent each who uses print media and social media as a mode of advertisement while those who uses television set for advertisement is absent.
- 70% of the respondents had not undertaken any form of research and development for their handloom enterprise. However, the remaining 30% of the entrepreneurs took the time and resources to undertake research and development for the advancement of their enterprise.
- Among the respondents, 13.33% employs a designer while the rest 86.66% did not.
- 46.66% of the respondent had never participated in any form of handloom expo or others of the sort. Entrepreneurs who have participated in a handloom expo 1-5 times, 6-10 times, 11-15 times and 16-20 times make up 16.66%, 0%, 16.66% and 3.33% of the respondents respectively. The

groups of entrepreneurs who have attended more than 20 handloom expo make up 20% of the respondents.

- It was observed that about half, i.e. 53.33% of the respondents have not attended any sort of skill training. However, 20%, 6.66%, 10%, 3.33% and 6.66% of the respondents have attended skill trainings 1, 2, 3, 4 and 5 times respectively.
- 93.33% of the respondents have not received any type of award for their work or excellence in handloom related activities. Only a couple, i.e. 6.66% of the respondents have received a handloom award, both of which are best exhibitor award in a national level handloom exhibition.
- Only a few entrepreneurs, i.e. 23.33% knew of any kind of handloom related schemes implemented by the government. The rest of the respondent, i.e. 76.66% were unaware of any kind of handloom related schemes implemented by the government.

On Capital Asset and Inventory (Objective 3):

- 86.66% of the entrepreneurs were owners of their workshed while rest 13.33% had to rent places elsewhere under a landlord in order to have a place of work.
- All the respondents uses semi automatic Zo loom.
- About half, i.e. 53.33% of the respondents had 1-15 looms, a few 13.33% of them had 16-30 looms, a sizeable 26.66% of the respondents had 31-40 looms and only a couple 6.66% of the respondents had more than 40 looms.

- 76.66% of the respondents had at least one means of transport, which is either a two wheeler vehicle or a four wheeler or both. The remaining of the respondents, i.e. 23.33% had no means of transport and thus rely on public mode of transportation or walking on foot as a means of transport.
- Out of all the respondents, 29 of them procure their yarns from Aizawl market, 5 of them from Guwahati market and there was only 1 respondent who procure his yarns from a cooperative market.
- 80% of the respondents raised the start-up capital for their enterprise by themselves while the rest, i.e. 20% of the entrepreneurs borrowed their start-up capital from the banks as loans.
- A large 80% of the respondents lack any ancillary repair services and only a handful 20% of them could provide such service.
- Senior puan was the most produced item, weaved by 25 entrepreneurs. The next item which is most commonly produced was Thilchhah plain, which is weaved by 15 entrepreneurs. This was followed by Pangpar puan, Ngotekherh and Tawlhloh puan which is weaved by 5 entrepreneurs each. Puanropui and Hmaram were weaved by 4 entrepreneurs each while Thangchhuah, Pawndum and Puanchei were produced by 3, 2 and 1 entrepreneurs respectively. 7 entrepreneurs produced Ipte and other items such as Shawl, Kawrchei and Naupuakpuan were produced by 2 entrepreneurs each. There was 1 entrepreneur who produces only Naga garments and ships their entire products outside Mizoram.

On Access to Credit and Financial Assistance (Objective 4):

- 56.66% of the respondents have borrowed loans from bank for handloom purposes while the rest 46.66% have not.
- A majority, i.e. 56.25% of the entrepreneurs who had availed loans from banks borrowed a principal of 5,00,000 rupees. There were few entrepreneurs, i.e. 18.75% who availed micro finances of principal below 50,000 rupees. Entrepreneurs who availed loan of principal amount 1,00,000 rupees and 10,00,000 rupees make up 18.75% of those respondents who had availed loans respectively.
- From the respondents who had availed loans from banks that while most, i.e. 90% did not face any problem, few, i.e. 10% of them faced one problem or the other.
- Out of all the respondents, a large majority, i.e. 76.66% had not availed loan from the money lender, family or friends while the remaining 23.33% have.
- More than half of the entrepreneurs, i.e. 53.33% had received at least one form of financial assistance from the government. On the other hand, the remaining, i.e. 46.66% of the entrepreneurs had not had any form of financial assistance from the government.
- Out of the entrepreneurs who had received government financial assistance, 62.50% received it as direct cash transfer while 37.50% received as a rebate on the sales of their product in various handloom expo.

- With regards to the channel of reception of these financial assistances, 37.50% received theirs through a handloom society, while the rest 62.50% received their government financial assistance through their self channel.
- While almost all the respondents, i.e. 96.66% had not received any form of extra governmental financial assistance, there was one entrepreneur, i.e. 3.33% who had received the same.
- 86.66% of the respondents faced financial problem in due course of running their handloom enterprise. On the other hand, 13.33% of the entrepreneurs did not face any financial problem that is worthwhile mentioning.

On Economics of Production and Working Capital (Objective 5):

- 73.33% of the entrepreneurs bought their looms for Rs. 10,000 to 15,000. There were 16.66% of the entrepreneurs who had their looms for less than Rs. 8,000. There were few entrepreneurs each, i.e. 6.66% who bought their looms for Rs.16,000-20,000 and more than Rs. 30,000.
- Almost half, i.e. 46.66% of the respondents spent only less than Rs.100 per month for renting workshed and display shops (if they had any). Respondents who spent Rs.200 to 500 on rent per month makes up 13.33% while those who pay Rs.600 to 1,000 per month makes up 16.66% of the respondents. On the higher end of the rent scale, respondents who pay Rs.1,100 to 2,000 makes up 10% while those who pay more than Rs.5,000 makes up 13.33% of the respondents.

- On an average, each loom operated by a weaver produces 64 Thilchhah puan plain, 6 Senior puan and Pangpar puan respectively, 25 Hmaram, 24 Tawhlhloh puan, 56 Pawndum and a Puanropui. Similarly, each of the aforementioned factors of production produces 60 lines of Puanchei, 25 lines of Ngotekherh and 40 meters of Thangchhuah puan per week on an average.
- On an average, the amount of yarn used for Thilchhah puan plain, Senior and Pangpar puan, Ngotekherh, Tawhlhloh puan, Hmaram and Puanropui were 0.42, 0.31, 0.42, 0.21, 0.25 and 0.18 kilograms respectively.
- The cost of yarn to each entrepreneur was Rs.445 per kilogram on an average.
- The cost of winding hank yarn onto the bobbins is Rs.110 per bag on an average. However, there was one entrepreneur amongst the respondents who did this task himself.
- The cost of unwinding yarn from bobbin to warping drum is Rs. 448 on an average per warping drum. However, there were 6 entrepreneurs who did this task themselves.
- The cost of threading the heddle is Rs.388 on an average per warping beam. However, 16 entrepreneurs had their weaver borne the cost of this task.
- The average cost of transport on taxi and bus from Zuangtui cluster to Aizawl market is Rs.80 per trip.

- Taking into account all the mean wages paid out by each entrepreneur, the average weekly salary of weavers of Zuangtui cluster was Rs.3626.
- Only 30% of the respondents employ a family member without pay while the rest 70% did not. Amongst the 9 entrepreneurs who employed a family member, 4 of them were self employed in weaving activities while 5 of them employed an extra family member beside themselves.
- It was calculated from the responses given by each entrepreneur that the selling price of Thilchah puan plain, Senior puan, Tawlhloh puan, Hmaram, Ngotekherh and Puanropui were Rs. 298, Rs. 1111, Rs. 400, Rs. 425, Rs. 474 and Rs. 2500 respectively. Puanchei and Thangchhuah puan were sold by the line at Rs. 150 and Rs. 175 per line respectively.
- It was elicited from the respondents that the weavers usually work well over 10 hours a day on the loom.
- While all the entrepreneurs provided sanitary toilet to their workers, 96.66% of them provide safe drinking water to their workers. Only a small portion, i.e. 16.66% of the respondents provides first aid and medicine to their workers.

On Miscellaneous Questions:

- Almost all the entrepreneurs, i.e. 96.66% interviewed for the survey found handloom as a satisfactory line of work to decently feed a family.
- A large portion, i.e. 63.33% of the respondents faced certain marketing problems while the rest 36.66% did not face any problem worth mentioning.

- 80% of the respondents faced one problem or the other with regards to their handloom enterprise while the rest 20% did not.

On Correlation Analysis and Hypothesis Testing:

- As can be seen from the Karl Pearson's Correlation Coefficient of number of workers and average monthly income of the entrepreneurs, these two variables have a very strong positive correlation and we can say this with 99% level of confidence.
- From the Karl Pearson's Correlation Coefficient of number of looms and average monthly income of the entrepreneurs, it was observed that the two parameters have a very strong positive correlation which can be said with 99% level of confidence.
- As can be seen from the Pearson Chi Square test, there is no sufficient data or evidence to establish that there is an association of the attributes of gender and average monthly income.

EMPIRICAL BASED SUGGESTIONS

- It was observed that while 46.66% of the respondent entrepreneurs have attended skill training on handloom and its related activities, none of them had attended skill training on entrepreneurship and business management. Thus, the handloom entrepreneurs of Zuangtui cluster could benefit much from a sincere training on entrepreneurship and business management in order to grow their handloom enterprises further.

- Among the entrepreneurs who undertake weaving activities, 66.66% faced health problems; but still 20% of the respondents do not subscribe to any health insurance scheme. Therefore, the handloom entrepreneurs of Zuangtui cluster must be advised and incentivised to subscribe to the various health insurance schemes provided by the government and other bodies.
- It was observed that 13.33% of the respondents could not get a plot of the Zuangtui Industrial Estate issued to them by the government. Because of this, cost of renting (or taxes on) workshop varies from Rs.100 per month for those who were issued an industrial plot to Rs.5000 per month for those who were denied an industrial plot. Thus, it is imperative for the government to ensure that the plots of Zuangtui Industrial Estate be distributed fairly to deserving handloom entrepreneurs, to whom the estate is intended for.
- Since a large 60% of the respondents only had sales within Mizoram, market must be expanded for the handloom entrepreneurs at the national and international level.
- In this internet age where e-commerce is booming, only 16.66% of the respondents had online sales. Therefore, the handloom entrepreneurs must be equipped with appropriate platform and skills to take their business online to reap the benefits of e-commerce market.
- In spite of the fierce competition within the handloom market, a hefty 70% of the respondents have not undertaken any form of research and

development activities for their enterprise. Handloom entrepreneurs of Zuangtui cluster must be enlightened on the economic benefits of R&D and be given appropriate guidance and help to undertake such.

- A large 76.66% of the respondents were unaware of any kind of handloom related schemes implemented by the government. Therefore, the government must improve its information publicity such that the lesser informed weavers and entrepreneurs may be enlightened on the handloom schemes implemented for them.

GENERAL SUGGESTIONS

- Prices of yarns is ever increasing while the prices of handloom products is either stagnant or increase in less than proportionate to the increase in yarn prices. So, the handloom entrepreneurs could greatly benefit from a subsidy in the prices of yarn.
- The handloom entrepreneurs faced various problems with differences in wages of labours, prices of yarn and handloom products. Some entrepreneurs would buy off skilled workers of other enterprise or entrepreneurs of other clusters would bet prices down due to differences on factors of production. Thus, some form of standardisation of wages and prices, either by the government or handloom societies is required in order to level the playing fields of various handloom entrepreneurs.

- There are months of the year (viz. monsoons) during which sales of handloom products plummet. In the unique case of 2020 pandemic, almost all the handloom entrepreneurs had to close down or severely downsize due to a near absent demand. In such cases, the entrepreneurs require some sort of minimum support price for their handloom products from the government in order for them to stay in business.
- The yarn used for almost all the handloom products is acrylic yarn. Since acrylic yarn is not appealing to touch and poorly breathable, it renders the market for said handloom products unfit for regions with warmer climate. Therefore, in order to target such markets, natural yarns such as cotton and silk can serve as a great alternative to acrylic yarns.
- A majority of the handloom products of Zuangtui cluster is *puan* of different designs. However, the usage of *puan* is limited to Mizo and a few other tribes of North East India and some South East Asian countries. Also, the design and structures of such *puan* worn by said ethnicities other than Mizo is very different from the handloom products of Zuangtui cluster and does not cater to them. Therefore, in order to broaden the handloom market to the national and international level, the types of products produced must be adapted to suit the destined markets.
- In order to increase value, give uniqueness and identity to designs and motifs, each entrepreneur could put a label or designer tag on their handloom products.

- To broaden the market for handloom products, use of handloom fabrics for school uniforms, curtains, bed sheets, etc. can act as a boost.

CONCLUSION

The study has helped shed some light on the performance of Zuangtui handloom enterprises. It reveals both the valuable economic contributions of the handloom industry and the shortcomings of the enterprises. Since the scope of the study pertains to the handloom enterprises and its entrepreneurs, secondary data and research works on the subject is quite insufficient. The All India Handloom Census focuses mainly on handloom workers while non-household handloom enterprises are given secondary importance. Also, research works within the handloom sector of Mizoram is mostly done with handloom workers as the unit of study while research on the handloom enterprises and its entrepreneurs is quite scanty. Thus, the study is faced with challenges and limitations due to insufficient research works in the field and thus prompts for further research studies on handloom enterprises and entrepreneurs of Mizoram.

APPENDIX

QUESTIONNAIRE

1) PROFILE AND SOCIOECONOMIC CONDITION OF ENTREPRENEURS

| | | | | | | | |
|---|---------------------------------|--------------------------------|---------------------------------|--|--|--|--|
| Name: | Address: | | | | | | |
| Age: | Phone no: | | | | | | |
| Sex: Male <input type="checkbox"/> Female <input type="checkbox"/> | Family size: | | | | | | |
| Possession of: Voter ID <input type="checkbox"/> Adhaar Card <input type="checkbox"/> Ration Card <input type="checkbox"/> | | | | | | | |
| Education qualification: Primary school <input type="checkbox"/> Middle school <input type="checkbox"/> HSLC <input type="checkbox"/> HSSLC <input type="checkbox"/> Graduate and above <input type="checkbox"/> | | | | | | | |
| Age when started weaving: | | | | | | | |
| Possession of: Mobile phone <input type="checkbox"/> Television set <input type="checkbox"/> Refrigerator <input type="checkbox"/> Washing Machine <input type="checkbox"/> Computer/Laptop <input type="checkbox"/> Two wheeler <input type="checkbox"/> Four Wheeler <input type="checkbox"/> | | | | | | | |
| House: | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Owned <input type="checkbox"/></td> <td style="width: 50%;">Rented <input type="checkbox"/></td> </tr> <tr> <td>Pucca <input type="checkbox"/> Semi Pucca <input type="checkbox"/></td> <td></td> </tr> <tr> <td>Assam Type <input type="checkbox"/> RCC <input type="checkbox"/></td> <td></td> </tr> </table> | | Owned <input type="checkbox"/> | Rented <input type="checkbox"/> | Pucca <input type="checkbox"/> Semi Pucca <input type="checkbox"/> | | Assam Type <input type="checkbox"/> RCC <input type="checkbox"/> | |
| Owned <input type="checkbox"/> | Rented <input type="checkbox"/> | | | | | | |
| Pucca <input type="checkbox"/> Semi Pucca <input type="checkbox"/> | | | | | | | |
| Assam Type <input type="checkbox"/> RCC <input type="checkbox"/> | | | | | | | |
| Family status: BPL <input type="checkbox"/> AAY <input type="checkbox"/> APL <input type="checkbox"/> | | | | | | | |
| Are you insured under any form of health insurance scheme?: | | | | | | | |
| Do you have any health problems due to weaving? If yes, please specify. | | | | | | | |
| Is handloom the main occupation of your household? If no, what are your other sources of occupation? | | | | | | | |
| How many dependent family members do you have?: | | | | | | | |
| Estimated monthly income from handloom: Below 5000 <input type="checkbox"/> 5000 ~10000 <input type="checkbox"/> 10001~15000 <input type="checkbox"/> 15001~20000 <input type="checkbox"/> 20001~25000 <input type="checkbox"/> Above 25000 <input type="checkbox"/> | | | | | | | |

2) ORGANISATIONAL PROFILE

| | |
|---|-------------------|
| Year of establishment: | No. of employees: |
| Mode of ownership: Sole proprietorship <input type="checkbox"/> Partnership <input type="checkbox"/> Joint Family <input type="checkbox"/> | |
| Are you a registered member of any form of handloom organisation or association? | |
| Are you a registered member of any form of Self Help Group? | |
| Mode of sale: Wholesale <input type="checkbox"/> Retail <input type="checkbox"/> | |

| | |
|---|---|
| Do you have a display shop? Yes <input type="checkbox"/> No <input type="checkbox"/> | Do you have sales online? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Do you have sales outside Mizoram? Yes <input type="checkbox"/> No <input type="checkbox"/> | Do you employ a designer? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Do you undertake research and development in order to improve your design or sales: Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| Mode of advertisement: Display shops <input type="checkbox"/> TV <input type="checkbox"/> Print media <input type="checkbox"/> Social Media <input type="checkbox"/> | |
| How many times have you participate in handloom expo? | |
| How many times have you attended a skill training programme? | |
| Who is the decision maker regarding the type and quantity of product? | |
| Have you receive any form of award due to excellence in handloom? Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| Are you aware of any government schemes implemented for the handloom industry? If yes, please specify. | |

3) CAPITAL ASSET AND INVENTORY

| | |
|---|--|
| Workshed: Owned <input type="checkbox"/> Rented <input type="checkbox"/> | Possession of: Workshed <input type="checkbox"/> Display <input type="checkbox"/> Shops <input type="checkbox"/> |
| Loom: Type | Quantity |
| Do you own any vehicle of transport/shipping for your goods? | |
| Products: | |
| Puan: Puanchei <input type="checkbox"/> Ngotekherh <input type="checkbox"/> Puanropui <input type="checkbox"/> Senior <input type="checkbox"/> | Others: |
| Product quantity in the year 2018=2019 | |
| Puan: Puanchei <input type="checkbox"/> Ngotekherh <input type="checkbox"/> Puanropui <input type="checkbox"/> Senior <input type="checkbox"/> | Others: |
| Source of raw material? | |
| Source of start up capital: Self <input type="checkbox"/> Borrowed/Loaned <input type="checkbox"/> | |
| Do you have access to repair/support/ ancillary services related to your work? | |

4) ACCESS TO CREDIT

| | |
|---|--|
| Possession of bank account? Yes <input type="checkbox"/> No <input type="checkbox"/> | Possession of weaver ID? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Access to loan from bank or other financial institution | |
| Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Frequency: | |
| Type: | |
| Amount: | |
| EMI: | |

| | |
|--|--|
| Duration: Collateral used: | |
| Access to loan from money lender, family or friends: Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| Access to financial assistance from the government Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| Type: Amount: Is it through a handloom organisation channel or personal assistance: | |
| Any other form of financial assistance? Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| Have you faced any sort of financial problem in the past? Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| Have you faced any sort of problem when attempting to borrow loan from commercial banks? Yes <input type="checkbox"/> No <input type="checkbox"/> | |

5) ECONOMICS OF PRODUCTION AND WORKING CONDITIONS

| | |
|--|---|
| Cost of renting workshed/display shop: | Cost of loom: |
| Time taken to produce Puanchei Ngotekherh Puanropui Senior | Amount of yarn used to produce Puanchei Ngotekherh Puanropui Senior |
| Cost of yarn: | Cost of warp beam: |
| Cost of shipping/transportation: | Salary paid out to employees: |
| Do you employ a family member as an unpaid worker? Yes <input type="checkbox"/> How many: _____ No <input type="checkbox"/> | |
| How many hours do your employees work in a day? | |
| Market prices of: Puanchei Ngotekherh Puanropui Senior | Do you provide the following amenities to your employees Safe drinking water <input type="checkbox"/> Clean toilet <input type="checkbox"/> Medicine and first aid <input type="checkbox"/> |

6) OTHER QUESTIONS

| |
|--|
| Do you face any form of marketing problem? If yes, please specify? |
| Do you think handloom is a satisfactory job to feed a family? |
| Have you face any problem regarding your handloom enterprise. If yes, please specify. |
| What suggestions would you like to give in order to improve the handloom industry in Mizoram? |

BIBLIOGRAPHY

Bibliography

Abdul, Noorbasha (1996), “Handlooms in Distress”, *Economic and Political Weekly*, Vol. 31, No. 23, pp. 1384-1386

Amaravathi, Gunti & Raj, K. Bhavana (2019), “Indian Handloom Sector – A Glimpse”, *International Journal of Innovative Technology and Exploring Engineering*. Vol. 8, No. 654, pp. 645-654

Annual Report 2017 – 18. New Delhi: Government of India, Ministry of Textile

Bajwa, Ramanjit Kaur & Hmunsiamthangi (2017), “Woven Assemblages - The Cultural Identity of Mizos”, *Imperial Journal of Interdisciplinary Research*, Vol. 3, No. 1, pp. 1309-1317

Bhattacharya, Rajesh & Sen, Samishtha (2018), “Pride and Prejudice: The Condition of Handloom Weavers in West Bengal”, *State of Working India 2018*, Background Paper – 16

Boichhingpuii (2016), “*Mizo La Deh Leh Ze Thlan*”, C. Hmingthanzaua

Bortamuly, Alin Borah & Goswami, Kishor (2012), “Factors Influencing Wage Structure of Handloom Workers in Assam”, *Journal of Rural Development*, Vol. 31, No. 2, pp. 139 - 150

Bortamuly, Alin Borah; Goswami, Kishor & Hazarika, Bhabesh (2012), “Determinants of Occupational Choice of Workers in the Handloom Industry in Assam”, *International Journal of Social Economics*, Vol. 40, No. 12, pp. 1041-1057

B. Hmangaihzuali, Jenny (2014), “Marketing Practices of Handloom Enterprise in Thenzawl Cluster, Mizoram” (Master of Philosophy Dissertation), Mizoram University, Aizawl. Retrieved and access on 22/01/2020 from:
<https://mzuir.inflibnet.ac.in:8080/jspui/handle/123456789/628>.

Dharmaraju, P (2006), “Marketing in Handloom Cooperatives”, *Economic and Political Weekly*, Vol. 41, No. 31, pp. 3385-3387

Das, Satyajit (2018), “Present Scenario and Some Problems of Handloom Industry A Study with Handloom Weavers’ In Tufanganj Block–I of Cooch Behar District West Bengal”, *IMPACT: International Journal of Research in Humanities, Arts and Literature*, Vol. 6, No. 9, pp. 153-170

Debbarma, Ani & Geetha, V. Jaisee (2017), “Problems of Women Handloom Entrepreneurs in West Tripura District, Tripura”, *International Journal of Law, Humanities & Social Science*, Vol.1, No.6, pp. 68-80

Dev, S. Mahendra; Galab S.; Reddy, P. Prudhvikar & Vinayan, Soumya (2008), “Economics of Handloom Weaving: A Field Study in Andhra Pradesh”, *Economic and Political Weekly*, Vol. 43, No. 21, pp. 43-51

Devi, Ch.Victoria (2013), “Handlooms for Livelihood in North-Eastern Region: Problems and Prospects”, *Journal of Rural Development*, Vol. 32, No. 4, pp. 427-438

Examining Employment Figures in the Handloom Sector (2006), All India Artisans and Craftworks Welfare Association, New Delhi

Fanai, T. Lalrindiki (2009), “Narrative of Mizo Puan and Mizo Indigenous Patterns”, *Indian Folklife*, Sl. No. 34, pp. 15 – 16

Goswami, Rachana & Jain, Ruby (2014), “Strategy for Sustainable Development of Handloom Industry”, *Global Journal of Finance and Management*, Vol. 6, No. 2, pp. 93-98

Goswami, Kishor; Hazarika, Bhabesh & Handique, Kalpana (2017), “Determinants of Financial Risk Attitude among the Handloom Micro-Entrepreneurs in North Eastern India”, *Asia Pacific Management Review*, Vol. 30, pp. 1-8

Hazarika, Bhabesh (2017), “Decomposition of Gender Income Gap in Rural Informal Micro-Enterprises: An Unconditional Quantile Approach in the Handloom Industry”, *National Institute of Public Finance and Policy Working Paper Series*, No. 216, 28-Dec-2017

Hazarika, Bhabesh & Goswami, Kishor (2016), “Do Home-based Micro-Entrepreneurial Earnings Empower Rural Women? Evidence From the Handloom Sector in Assam”, *Asian Journal of Women’s Studies*, Vol. 22, No. 3, pp. 289–317

Hazarika, Bhabesh & Goswami, Kishor (2018), “Micro-Entrepreneurship Development in the Handloom Industry: An Empirical Analysis among the Tribal Women in Assam”, *International Journal for Rural Management*, Vol. 14, No. 1, pp. 22-38

Indian Handloom Industry – Position Paper (2019), Thought Arbitrage Research Institute, New Delhi

Islam, Md. Khairul; Hossain, Md. Elias & Ghosh, Bikash Chandra (2013), “Cost-Benefit Analysis of Handloom Weaving Industry in Kumarkhali Upazila Of Kushtia District, Bangladesh”, *Development Compilation*, Vol. 9, No. 1, pp. 63-72

Kasisomayajula, Srinivasa Rao (2012), “Socio-economic Analysis of Handloom Industry in Andhra Pradesh a Study on Selected Districts”, *Journal of Exclusive Management Science*, Vol. 1, No. 8, pp. 1-15

Khatoon, Sabiha (2016), “Make in India: A Platform to Indian Handloom Market”, *IOSR Journal of Business and Management*, Vol. 18, No. 9, Ver. II, pp. 36-40

Kundu, Mintu (2014), "Cotton Handloom Industry Problems and Prospects of Development (A Case Study of Alipurduar Block – II)", *Paripex - Indian Journal of Research*, Vol. 3, No. 1, pp. 83-85

Lakshmi, V. Vijaya; Deepika, J & Deve, M. Gayathri, "Assessment of Socio-Economic Status of Pochampally Ikat Handloom Weavers", *International Journal of Current Microbiology and Applied Sciences*, Vol. 8, No. 10, pp. 573-579

Lalrinmawii Rokhum, Nancy (2014), "Social Stratification of the Mizos". In Malsawmdangliana & Rohmingmawii, *Mizo Narratives: Accounts from Mizoram* (pp. 27 - 45). Guwahati, Assam: Scientific Book Centre

Lalzarzoa (2014), Migration of Mizo Tribes: A Brief Overview. In Malsawmdangliana & Rohmingmawii, *Mizo Narratives: Accounts from Mizoram* (pp. 17 -26). Guwahati, Assam: Scientific Book Centre

Liton, Muhammad Rabiul Islam; Islam, Tahmidul & Saha, Subrata (2016), "Present Scenario and Future Challenges in Handloom Industry in Bangladesh". *Social Sciences*, Vol. 5, No. 5, pp. 70-76

Mahendra Dev, S; Galab, S; Prudhvikar, Reddy and Vinayan, Soumya (2008), "Economics of Handloom Weaving: A Field Study in Andhra Pradesh", *Economic and Political Weekly*, Vol. 43, No. 21, pp. 43-51

Mamidipudi, Annapurna & Gajjala, Radhika (2008), “Juxtaposing Handloom Weaving and Modernity: Building Theory through Praxis”, *Development in Practice*, Vol. 18, No. 4, pp. 235 – 244

Mamidipudi, Annapurna; B, Syamasundari & Bijker, Wiebe, “Mobilising Discourses: Handloom as Sustainable Socio-Technology”, *Economic and Political Weekly*, Vol. 47, No. 25, pp. 41-51

Mitra, Ashish; Choudhuri, Prabir Kumar & Mukherjee, Arup (2009), “A Diagnostic Report on Cluster Development Programme of Shantipur Handloom Cluster, Nadia, West Bengal”, *Indian Journal of Traditional Knowledge*, Vol. 8 , No. 4 , pp. 502 – 509

Modak, Savita (2006), “Weaving Customers' Dreams”, *Economic and Political Weekly*, Vol. 41, No. 31, pp. 3367-3368

NCAER (2020): Fourth All India Handloom Census, 2019-20. New Delhi: Government of India, Ministry of Textiles

NCAER (2010): Third All India Handloom Census, 2009-10. New Delhi: Government of India, Ministry of Textiles

Niranjana, Seemanthini (2004), “Thinking with Handlooms: Perspectives from Andhra Pradesh”, *Economic and Political Weekly*, Vol. 39, No. 6, pp. 553-563

Pachua, Lisa Lalmalsawmi; Mathura, Ritu & Kapoor, Kiran (2018), “Weaving in Thenzawl: A Case Study”, *Internal Journal of Applied Home Science*, Vol. 5, No. 4, pp. 916-921

Patil, Usha N. (2012), “Role of Handloom Industry in India”, *International Indexed & Referred Research Journal*, Vol. 4, No. 39, pp. 1-2

Patra, Samira & Dey, Sanjeeb Kumar (2015), “Profitability Analysis Of Handloom Weavers: A Case Study Of Cuttack District of Odisha”, *Abhinav National Monthly Refereed Journal of Research in Commerce & Management*, Vol. 4, No. 8, pp. 11-19

Peters, Rajiv H & Bajpai, Shobhit (2017), “The Role and Working of Handloom Sector in Chhattisgarh”, *International Research Journal of Engineering and Technology*, Vol. 04, No. 02, pp. 492 - 498

Phurailatpam, Ashalata (2011), “The Role of Handloom Women Entrepreneurship in Socio-Economic Development of Manipur” (Doctor of Philosophy Thesis), Sardar Patel University, Gujarat. Retrieved from: <https://pdfs.semanticscholar.org> Accessed on: 19/03/2020

Premsundar, B. & Kannan, J. (2013), “Women in Handloom Industry: Problems and Prospects”, *EPRA International Journal of economic and Business Review*, Vol. 1, No. 1, pp. 32 – 38

Raju, G. (2014), “Empowerment of Women Weavers through Handloom Industry – Pros and Cons”, *International Journal of Business and Administrative Research Review*, Vol. 2, No. 7, pp. 93 – 103

Ramswamy, Rama (2013), “Marketing Problems of Micro-Artisan Enterprises in Thenzawl Handloom Cluster, Mizoram”, *Voice of Research*, Vol. 2, No. 2, pp. 41-45

Renthlei, Lalmalsawmi (2019), “Socio-Economic Conditions of Handloom Weavers: A Case Study of Weavers in Zuangtui Clusters, Aizawl, Mizoram”, *Shenhri Journal of Multidisciplinary Studies*, Vol. 4, No. 1, pp. 54-62

Roy, Tirthankar (2002), “Acceptance of Innovations in Early Twentieth-Century Indian Weaving”, *The Economic History Review*, Vol. 55, No. 3, pp. 507- 532

Srinivasulu, K. (1994), “Handloom Weavers' Struggle for Survival” *Economic and Political Weekly*, Vol. 29, No. 36, pp. 2331-2333

Statistical Handbook of Assam, 2019. Guwahati: Government of Assam, Directorate of Economics and Statistics.

Sudalaimuthu, S. and Devi, S. (2006), “Handloom Industry in India”, Retrieved from www.fibre2fashion.com Accessed on: 27/04/2020

Vanlalruata (2017), “Livelihood Conditions of Handloom workers in Thenzawl cluster, Mizoram” (Master of Philosophy Dissertation), Mizoram University, Aizawl. Retrieved and accessed on 22/01/2020 from <https://mzuir.inflibnet.ac.in:8080/jspui/handle/123456789/745>.

Varghese, Anu & Salim, M.H. (2015), “Handloom Industry in Kerala: A Study of the Problems and Challenges”, *International Journal of Management and Social Science Research Review*, Vol.1, No.14, pp. 347

Vinayan, Soumya (2011), “Intellectual Property Rights and the Handloom Sector: Challenges in Implementation of Geographical Indications Act, *Journal of Intellectual Property Rights*, Vol. 17, pp. 55 – 63

Web References

<https://www.aiacaonline.org> (Accessed on 21/01/2020)

<https://www.census2011.co.in/census/state/mizoram> (Accessed on 21/01/2020)

<https://www.ibef.org>(Accessed on 21/01/2020)

<https://www.mzuir.inflibnet.ac.in> (Accessed on 21/01/2020)

BRIEF BIO - DATA OF THE CANDIDATE

Name: P.C. Remlalhruaii

Gender: Female

Father's name: P.C. Hmangaihzuala

Mother's name: Lalramsiami

Address: College Veng, Aizawl, Mizoram-796005

Degree: Master of Philosophy (M. Phil)

Department: Economics

Title of the Dissertation: A Study on the Performance of Handloom Enterprises in Zuangtui Cluster of Aizawl, Mizoram.

Fellowship Availed During M. Phil: MZU Non-NET Fellowship

Year of Completion of Coursework: 2019 (SGPA-8)

M. Phil Registration No.& Date: MZU/M.Phil./621 of 29.05.2020

Participation : Presented a paper on "Analysis of Socio Economic Conditions of Handloom Entrepreneurs of Zuangtui Cluster of Aizawl, Mizoram" in a National Seminar of "Social Changes and Development in India: Issues and Dynamics" organised by Research, Innovation and Extension Cell, IQAC, Govt. Aizawl College held on 11th& 12th February, 2021.

PARTICULARS OF THE CANDIDATE

NAME OF CANDIDATE: P.C.REMLALHRUAI
DEGREE : MASTER OF PHILOSOPHY
DEPARTMENT : ECONOMICS
TITLE OF DISSERTATION: A STUDY ON THE PERFORMANCE OF
HANDLOOM ENTERPRISES IN
ZUANGTUI HANDLOOM CLUSTER OF
AIZAWL, MIZORAM
DATE OF ADMISSION : 27th August, 2019
COMMENCEMENT OF SECOND SEM/DISSERTATION: 1st Jan.2020

APPROVAL OF RESEARCH PROPOSAL

1. DRC : 13th April 2020
2. BOS : 30th April 2020
3. SCHOOL BOARD : 29th May, 2020
MZU REGISTRATION NO : 1906734
M.PHIL REGISTRATION NO & DATE: MZU/M.Phil./621 of
29.05.2020
DATE OF SUBMISSION : 22nd March 2021
EXTENSION (IF ANY) : Extended Vide No. AC: 39: 4 (4) of
the 39th Academic Council Meeting
held on the 20.11.2020.

**Head
Department of Economics**

ABSTRACT

A STUDY ON THE PERFORMANCE OF HANDLOOM ENTERPRISES IN ZUANGTUI CLUSTER OF AIZAWL, MIZORAM

**(A dissertation submitted in partial fulfillment of the
requirements for the degree of Master of Philosophy)**

P.C.REMLALHRUAI

MZU Regn. No.: 1906734

M.Phil Regn. No.:MZU/M.Phil./621 of 29.05.2020



**THE DEPARTMENT OF ECONOMICS
SCHOOL OF ECONOMICS, MANAGEMENT
& INFORMATION SCIENCE**

MARCH 2021

1.1: INTRODUCTION

Handloom occupies an important place in the lives of people through the ages. Handloom as defined by the Merriam-Webster dictionary is “any weaving device operated wholly or partially by hand or foot power”. The Reservation of Articles for Production Act, 1985 defines handloom as “any loom other than power loom”. Handloom has always occupied an important position both in the economy of the country and in the hearts of the people. Handloom has endured through the Indus Valley Civilisation, British India and till today, accumulating wealth of innovations that enabled India to become the most richly cultured country (Vanlalruata, 2016). The lives of many tribes and casts are closely intertwined with handloom since time inception. Handloom constructs the social and cultural identity, rituals and habitats and plays a vital role in marriage institution of the North Eastern states (Devi, 2013). Artistic works of handloom is at the very core of India’s cultural heritage. Handloom is a timeless cultural heritage of India that bridges its diverse social groups through creativity, traditional knowledge and precision (Hmangaihzuali, 2013). It has been heralded as an artistic profession that commands a certain degree of awe and respect through the ages and hopes are still intact for the continuity of its grand status. The widespread of handloom throughout India establishes the dexterity and artistic skills of weavers that is symbolic of Indian culture (Lalmalsawmi, 2019). What had provided protection and comfort from the physical elements in ancient times still provided people with employment opportunities in the modern world. Thus, the immeasurable values of handloom in the lives of people and in the economy as a whole is worth an extensive analysis.

Towards the end of the seventeenth century, 83% of the East India Company's export was said to be accounted for by clothing textile. However, the advent of Industrial Revolution and several turbulent policies under the British Raj led to the dwindling of India's handloom sector. Indian leaders of the time were aware of the need to revive handloom in order to revive the nation itself. Thus, the Mahatma proposed Charkha (spinning wheel) to be placed at the centre of the Indian flag, followed by various policies and promotions for Swadeshi goods. Despite such adversities, handloom has stood the test of time and has kept this great craft alive (NCAER,2020).

The vital role of handloom in India is cemented by its responsibility to preserve the country's heritage and culture (Raju and Rao, 2014). India being the second most populous country has an advantage in providing adequate workforce for the labour intensive handloom industry. Through its long tradition of excellent craftsmanship, handloom provides a refreshing taste of manual skill and diversity amongst increasing globalisation and mechanization (Devi, 2013). The diversity of Indian culture is reflected in its varied handloom products such as Chanderi muslin, Banaras brocodes, Rajasthani tie dye products, Punjabi phulkari, hymroos of Hyderabad, patola sarees from Patna, deccai and jamdani from Bengal, ikats from Andhra Pradesh, mekhla sador of Assam, jainsem of Meghalaya, kho of Sikkim, phanek of Manipur, puan of Mizoram and numerous others of the like. In spite of all these wonderful diversities, few of these traditional handloom attire are still alien to the many and faces ignorant bigotry once in a blue moon. Handloom products have unique soul that is imbibed by the sincere touch of the weavers. The astounding intricacy and artistry of handloom products is beyond the capacity of any modern machinery (NCAER, 2020).

Today, handloom is the second largest provider of employment, providing employment to 31.45 lakh households through weaving and allied activities (NCAER, 2020). In addition, handloom also provides numerous employments to farmers and traders who are involved in the production of raw materials and marketing of finished products respectively. The colossal importance of handloom in India is significant from it being the largest cottage industry, its employment potential and agrarian linkages (Khatoon, 2016). Among the 31.45 lakh handloom households, 71.6% are female and 88.7% reside in rural areas. These figures clearly depict the valuable employment that helps to uplift status of women and the employment that helps to generate complementary income besides farming. In addition, among these weaver households, 34.6% belong to Other Backward Caste, 19.9% are from Scheduled Tribe and 14.1% belong to Scheduled Castes. It is clear that handloom provides a much needed impetus to bring equity among various social groups by increasing their income earning capacity.

Despite its colossal importance, the handloom sector is not devoid of flaws and weaknesses. The Report of the Steering Committee on Handlooms and Handicrafts constituted for the Twelfth Five Year Plan, 2011 (Govt. of India, 2011) observed perennial problems such as weak infrastructure and market, shortage in supply and poor sales practice (Hmangaihzuali, 2016). Handloom also faces threat from power loom and cheap imports. Due to these problems, policy formulation regarding handloom gets utterly tough. One side of policy making regards handloom as an unviable industry that drains precious resources while the other regards it as a pristine sector that must be protected and revived at all cost. Regardless of differences in views, handloom requires certain programmes and schemes in order to uplift the multitude of people employed under the sector.

These programmes and schemes have helped many deserving weavers in their endeavour to better their status through handloom. In spite of the many problems faced by handloom, its openness to innovation and designs, low capital investment and capability of producing small batches has kept the art alive (Hmangaihzuali, 2016). Perhaps, both the inherent nature of handloom and the programmes implemented by the Government have kept this art alive.

1.2: LITERATURE REVIEW

Handloom is India's cultural heritage that shows cultural diversity through creativity and traditional precision (Hmangaihzuali, 2013). The ancient handloom sector is the largest cottage industry and its colossal importance is reflected in its vast employment and agrarian linkages. In spite of being plagued with shortage of yarn, dyes, credit and market support, the crippling handloom sector is given new strength through "Make in India" programme that hopes to launch India's culture to worldwide fame (Khatoun, 2016). However, through the first to third Handloom Census, many positive indicators show a declining trend that may indicate weaver's migration to other profession, low productivity and income generation and poor infrastructure of the handloom sector (Amaravathi and Raj, 2019).

Handloom cooperatives were adversely affected by power looms, leading to an increase in cost of production and a successive decline in overall profitability. Higher wages offered by power looms diverted younger generation of weavers employed under handloom enterprises from the sector (Dev, et al., 2008). Weavers do not prefer this line of profession for their children and the

amount of participation among youth has also dropped significantly. Weaving appeared to be a distress line of work among the backward classes (Raju and Rao, 2014). Competition from power looms and low earnings forced the weavers to either constantly innovate and improve or be forced out of the occupation line (Bhattacharya and Sen, 2018). Lack of adequate and well trained workers posed hurdles for the utilisation of advanced technological improvements by the handloom enterprises in Kerala (Varghese and Salim, 2015). Women entrepreneurs of Manipur faced problems of access to credit due to unavailability of collateral property and lack of time for their handloom work. Majority of the entrepreneurs were the household's sole bread-winner and earns less than Rs.5000 a month (Debbarma & Geetha, 2017). Women micro-entrepreneurs of Assam were more risk averse than their male counterparts and hence, their growth is limited by lack of resources and low valued products. Education has an impact on reducing the risk averse nature and improving productivity and income of the entrepreneurs (Goswami, et. al., 2017).

In spite of its numerous shortfalls, handloom continues to provide employment to many in India (Hmangaihzuali, 2013). Among the adult handloom workers, majority, i.e., 77.9% are female. This dominance is unique to the North Eastern States at 99% female workforce, while male dominate the workforce in other states (NCAER, 2020). Traditionally, handloom is women's trade and plays an integral part in marriage institution where girls with proficient weaving skills are preferred (Gailangam, 1997; Devi, 2013). Handloom gave women economic independence, although the domestic nature of their work has rendered them less productive in relation to weavers of other states (Devi, 2013). However, through handloom, women entrepreneurs have contributed significantly to local economic

development, gender equality and socio-economic upliftment of women (Hazarika and Goswami, 2018).

In Mizoram, although agriculture is the main occupation, households took to handloom in order to beat the decreasing returns to land. This provides handloom households with better employment opportunities and improved livelihood. In spite of immense efforts to sustain the increasing returns, numerous problems hinder the development of the handloom sector (Vanlalruata, 2016). Among handloom entrepreneurs of Thenzawl, low profit margin was the main problem faced where they earned a profit margin of about 25% while that of the trader's is 22%. However, these profit margin are quite high as compared to other clusters in India (one of the highest being 14% in Burdwan, West Bengal) (Ramswamy, 2013). Handloom entrepreneurs also faced problems pertaining to limited supply of yarn and fixing employee turnover due to loom owners betting up wages (Pachau, et al., 2018). In Zuangtui cluster, majority of the weavers were women and faced no problem in both finance and marketing. However, problems regarding supply of yarn and lack of skills resonate well with the inadequate Government assistance (Renthlei, 2019).

1.3: HANDLOOM IN MIZORAM

1.3.1: Scenario

Handloom has always occupied a prestigious place in Mizo culture. During a short period of regression the Mizo ancestors would wear vines sewn together as garments. This garment called "siapsuap" was uncomfortable, let alone offered minimal protection from the harsh physical elements. With

handloom being feasible again once the geographical conditions were viable, women could weave garments of everyday wear, including heavy blankets called “pawnpui”. Handloom became women’s task as men were busy with agricultural works, hunting and protecting the village. Handloom was a way to showcase one’s talent and ingenuity through sophisticated designs and motifs of the garment called “puan”. Girls would learn the art from a young age, anxious to master it in order to weave garments for her post nuptial wear.

“Puan” means cloth in general and denotes the traditional costume of Mizo men and women in particular (Fanai, 2009). Handloom is immensely important since *puan* itself is regarded as a treasured artefact. Some of the celebrated *puan* are “Puanchei” which is the most glorified of them all, worn in weddings and festivals, “Ngotekherh” which is a beautiful black and white striped *puan* worn during festivals such as *Chapchar Kut*, *Mim Kut* and *Pawl Kut*, “Pawndum” which is an attire for the traditional dance *khual lam* and “Tawlhloh Puan” worn by honoured warriors as a beacon of bravery. *Pawndum*, also known as *Zawlpuan* must be taken along with by every woman when getting married as she must use it to cover her husband’s remains upon his death.

Mizoram, by virtue of its location, is not endowed with the resources and potential for industrial advancement. Because of this, agriculture and handloom continues to be one of the key employment providers in the state. Handloom was traditionally a domestic work for women, but now it has evolved into a valuable commercial activity that provides employment to 27402 households (NCAER, 2020). Handloom products has now broken the traditional confinement of *puan* and has branched out to various apparels such as vests, waistcoats, shawls, handbags, sling bags, pillow covers, footwear, wall hangings and others of the

sort. However, the major product continues to be *puan* that is modernised with trending designs, colour combinations and motifs. The pride of Mizo *puan* stands tall as women prefer them above anything else as their formal wear for church and other social gatherings.

1.3.2: Handloom Enterprises

An enterprise, as defined by the Oxford Dictionary of Economics, is a business venture that is private or public in nature. Handloom enterprises are surveyed under ‘Non-Household Handloom Units’ by the Handloom Census who defines the same as ‘all establishments that undertakes handloom work for commercial purposes’. As such, these entrepreneurs who undertake handloom activities for commercial purposes by employing workers or by self-employment will be the unit of study.

At present, under weaving and allied activities, handloom employs 5634 men, 22083 women and 3 transgender in Mizoram (NCAER, 2020). These figures depict, in general, the valuable employment potential of handloom and in particular, the employment opportunity generated for women. Out of these employees, 60.72% reside in pucca houses and 83.58% reside in houses that they owned. These statistics regarding dwelling units conveys the comfortable living that handloom has helped provide in Mizoram.

1.4: CONCEPTS AND DEFINITIONS

Various terms are used in this study as per their following definitions:

Handloom: Handloom as defined by the Merriam-Webster dictionary is ‘any weaving device operated wholly or partially by hand or foot power’. The

Reservation of Articles for Production Act, 1985 defines handloom as ‘any loom other than power loom’.

Enterprise: An enterprise, as defined by the Oxford Dictionary of Economics, is ‘a business venture that is private or public in nature’. The Handloom Census defines handloom enterprise as ‘all establishments that undertakes handloom work for commercial purposes’.

Weaver: The Oxford Dictionary Thesaurus and Wordpower Guide define a weaver as ‘a person who weaves fabric’.

Loom: The Cambridge Dictionary defines loom as ‘a piece of equipment for weaving (=making thread into cloth)’.

Puan: Puan is ‘cloth in general and denotes the traditional costume of Mizo men and women in particular’ Fanai, T. Lalrindiki (2009). Puan would generally mean any piece of cloth, but the specific definition used for the study is the garment worn by Mizo men and women.

1.5: SIGNIFICANCE OF THE STUDY

Handloom sector occupies an indispensable position in the Indian economy. It provides employment to 31.45 lakh households, making it the second largest employment provider in India. The importance of handloom sector in rural development and women empowerment is cemented by the fact that 88.7% of the workers reside in rural areas and out of which 71.6% are female.

Recognising its importance, the Union Government has undertaken various steps and measures to develop the handloom sector. Initiatives such as National Handloom Development Programme, Yarn Supply Schemes, Mahatma Gandhi Bunkar Bhima Yojana, Pradhan Mantri Jeevan Jyoti Bhima Yojana, Pradhan Mantri Suraksha Bhima Yojana (PMSBY), etc. have been adopted.

The Government of Mizoram also launched various schemes and initiative to increase the vigour of handloom sector with regards to providing employment and income generation. In addition to its action on handloom cluster development of Thenzawl and Zuangtui clusters, the government has undertaken handloom as a development trade under the New Land Use Policy (NLUP) and Mizoram Intodelhna Project (MIP).

In keeping with the indispensable importance of handloom regarding employment and income generation, the government has undertaken various measures to improve its potential. Conversely, this very stress given by the government on developing handloom sector indicates its immense importance. The sector that may as well be the driver of Mizoram's economic development is worth an extensive study and thus, the proposed study will give us a better understanding of the contribution of handloom in the economy.

1.6: STATEMENT OF THE PROBLEM

Handloom has been a source of living for many households in Zuangtui. However, this area has been neglected under the purview of research studies for a long time as it is caste under the shadow of Thenzawl handloom cluster of Mizoram. An extensive study is much needed in order to assess the performance

of handloom enterprise in Zuangtui cluster. The performance of handloom enterprise regarding their output, productivity and income generated is worthy of further study due to the fact that any industry or enterprise that is clustered together must have a significant capacity of providing livelihood to that many people.

Upon embarking on handloom sector as a source of livelihood, it will be interesting to study the socio economic conditions of the handloom workers of each enterprise. Any form of disparity in living conditions, educational shortfalls or status of access to healthcare and sanitation would be an interesting subject of study.

Therefore, an extensive study is required in order to fill the knowledge gap that is present in the study of handloom in Zuangtui cluster. The proposed study will also help in addressing the problem of an absent compounding scenario pertaining to the performance of handloom in Mizoram.

1.7: SCOPE OF THE STUDY

The study encompasses the scope of registered handloom enterprises, with regards to their organizational setting, production and marketing strategies and their employment generation capacities. In addition, the socio-economic profile of the entrepreneurs is also within the scope of the study.

1.8: OBJECTIVES

1. To examine the organisational profile of handloom enterprises in Zuangtui cluster.
2. To study the status of capital asset and inventory of the handloom enterprises in the study area.
3. To study the access to credit and financial assistance by the handloom enterprises.
4. To analyse the profile of entrepreneurs and their socio-economic conditions.
5. To study the economics of production and marketing of handloom enterprises.

1.9: HYPOTHESES

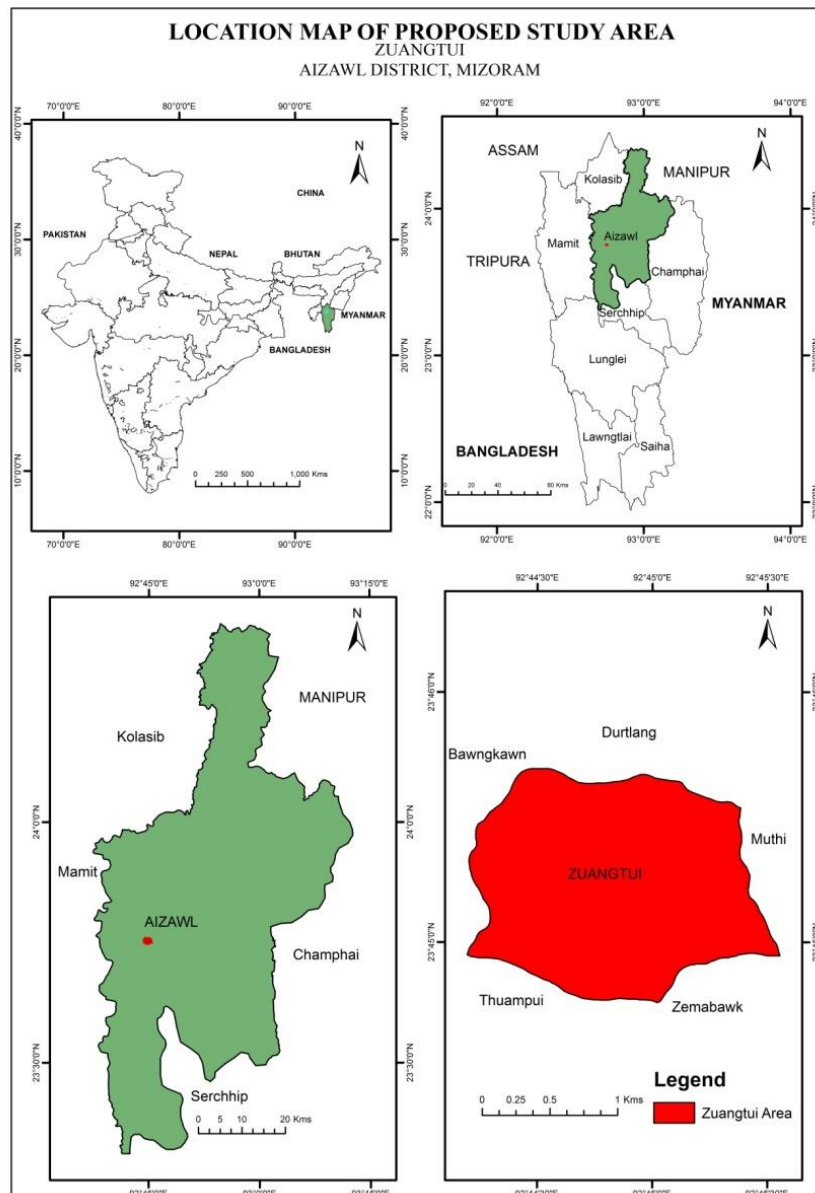
1. There is a significant correlation between number of workers employed and average monthly income of the entrepreneurs.
2. There exist a correlation between number of looms and average monthly income of the entrepreneurs.
3. There is an independence of gender and average monthly income of the entrepreneurs.

1.10: STUDY AREA

The study analyses the performance of handloom enterprises in Zuangtui cluster, Aizawl, Mizoram.

The study area is located in the district of Aizawl, Mizoram. The locality of Zuangtui covers a total area of 2.87 sq.km., with approximately 1000 households having a population of 2500 voters. It borders locality of Durtlang in the north, Zemabawk and Thuampui in the south, Muthi in the east and Bawngkawn in the east.

Fig.1 : Location map of the proposed study area: Zuangtui, Aizawl, Mizoram.



Prepared by: Fabian Lalthanga, Research Scholar, Department of Geography, NEHU (2020)

1.11: METHODOLOGY

The study analyses the performance of handloom enterprises in Zuangtui cluster, Aizawl, Mizoram. The study utilises both primary and secondary data.

Primary data is collected through structured questionnaire and interview method. The sample unit is selected using simple random sampling method from the list of the registered enterprise maintained by the Zuangtui Handloom Association. After a visit of the study area, a sample size of 30 units was selected. Secondary data is extracted from official reports, books, published and unpublished sources, journals, magazines, websites and other e-resources.

To examine the patterns and trends of the data obtained from primary and secondary sources, statistic tools such as Averages, Mean, Percentages, etc. is adopted. Diagrammatic representation is also made as and when appropriate. To test the hypothesis, Karl Pearson Correlation Coefficient and Chi Square test is used.

1.12: CHAPTER PLAN

Chapter 1: Introduction

Chapter 2: Review of Literature

Chapter 3: An Overview of Handloom Industries in India.

Chapter 4: Handloom Enterprise in Zuangtui Cluster, Aizawl: Performance Analysis

Chapter 5: Main Findings, Suggestions and Conclusions

Bibliography

1.13: MAIN FINDINGS, SUGGESTIONS AND CONCLUSION

On Profile and Socio Economic Condition of the Entrepreneurs (Objective 1)

- Out of all the respondents, 11 were male while 19 were female. The figure of women respondents amounts to 63.33%, which is significantly higher than their men counterparts, i.e. 36.66%.
- Among the respondents surveyed for the study majority, i.e., 7 of them belonged to the age group 50-54 years, followed by the age group 40 - 44 years in which 6 respondents belong. There were 3 entrepreneurs between the age group 30 - 34 years who were second generation handloom entrepreneurs. At the same time, there were 6 respondents over the age of 60 years.
- Majority of the respondents, i.e. 40% attended school up to Middle School while those who attended up to Primary school were next, making up 20%. Respondents who secured the HSLC and HSSLC were 16% and 13% of the respondents respectively. Only a small portion, i.e. 10% of the respondents were graduates & above.
- A complete cent percent of the respondents have both Voter ID and Ration Card. With regards to Adhaar Card, only 1 respondent out of 30 was without it, which equates to 96.66% of the respondents with possession of Adhaar Card.
- A majority of the respondents, i.e. 40% of them had a family size of 5-6 members. Respondents with 3-4 family members were next to majority, making up 30% of the sample family. Respondents with family size 7-8 were 24% of the sample family, while those with family size of 9-10 and 10 and above makes up only 6.66% of the sample family.
- A majority of the respondents, i.e. 23.33% do not have any dependent family member. Respondents with 2 and 4 dependent family members respectively make

up the next biggest proportion, making up 20% of the total respondents each. Respondents with 5, 3, 1 and 6 followed the frequency order, making up 16.66%, 10%, 6.66% and 3.33% of the respondents respectively.

- A large number, i.e. 80% of the respondents belong to the Above Poverty Line class of family while only a few 13.33% and 6.66% belong respectively to the Below Poverty Line and Antyodaya Anna Yojana class of family.
- 70% of the respondents reside in houses owned by them while the rest 30% reside in rented houses.
- Among the respondents who owned houses themselves, 52.83% had Assam Type houses while the remaining 47.61% owned Reinforced Cement Concrete houses.
- 80% of the respondents were with a health insurance scheme while the rest 20% of the population were without.
- Respondents who undertake weaving and those who do not were exactly equivalent, i.e. each making up 50% of the respondents.
- Of the entrepreneurs who undertake weaving, 66.66% faced health problems due to weaving while the remaining 33.33% faced no issue as such. Among the various health problems, the ones pertaining to the eye was most common, cited by 5 entrepreneurs followed by back pain that is cited by 3 entrepreneurs. 2 entrepreneurs each cited gynaecology related and nerve problem respectively.
- 70% of the respondents had handloom as their main source of livelihood while the rest 30% had other sources, namely government employment and business, as their main source of livelihood.
- The lowest income group of entrepreneurs who earn less than Rs.5000 per month makes up 10% of the respondents. Respondents who earn Rs.5000 - 10,000 and Rs.10,001- 15,000 makes up 10% and 3.33% respectively while those who earn

Rs.15,001 - 20,000 and Rs.20,001 - 25,000 makes up 10% and 6.66% of the sample respondents respectively. The highest income group of entrepreneurs who earn more than Rs.25,000 monthly makes up a majority, i.e. 60% of the respondents.

On Organisational Profile of the Enterprise (Objective 2):

- The 2 longest running enterprise owned by the respondents were established in the year 1988-1990 while the newest enterprise was established recently in 2015-2016. 1, 0, 2, 4 and 2 enterprises were set up in the years 1991-1993, 1994-1996, 1997-1999, 2000-2002 and 2003-2005 respectively. A boom in the establishment of handloom enterprise was seen during the years 2006-2008, 2009-2011 and 2012-2014 where 6 enterprises were set up each year.
- The mode of ownership of all the enterprises surveyed was a sole proprietorship.
- Enterprises that employ 1-5 workers is most numerous, i.e. 10 enterprises, making up 33.33% of the respondents. There were 4, 5, 3, 0, 3, 2, 1, 0 entrepreneurs who employ 6-10, 11-15, 16-20, 21-25, 26-30, 31-35, 36-40 and 41-45 workers respectively. At the extreme end, there were 2 enterprises which employed 46-50 workers.
- 76.66% of the respondents were enrolled in a handloom society while the remaining 23.33% had no enrolment in any form of handloom society or association.
- 93.33% of the respondents had no enrolment in any form of SHG. Of the little 6.66% of the respondents enrolled in SHG's, all were groups that were completely unrelated to causes of handloom activities.

- Among the respondents, 63.33% take decisions by themselves with regards to 'what to produce' and 'how much to produce'. 20% of the entrepreneurs entrusted the task of taking such said decisions on their wives. Entrepreneurs who take collective decisions with their wives and those who did so with other family member make up 6.66% of the respondents respectively and those who take decision with their wives and the manager of their enterprise make up 3.33% of the respondents.
- 60% of the respondents carried out their sales through wholesale to commissioners while 40% of them did so through both wholesale and retail sales to final customers.
- 60% of the respondents only had sales within Mizoram while a good 40% of them had additional sales outside Mizoram.
- 16.66% of the entrepreneurs had sales online while the remaining 83.33% had none.
- Among the respondents, 86.66% did not own any type of display shop while the rest 13.33% owns one as such.
- Respondents who own a display shop have it as a mode of advertisement, making up 14.33% of the respondents. There was only 1 respondent each who uses print media and social media as a mode of advertisement while those who uses television set for advertisement is absent.
- 70% of the respondents had not undertaken any form of research and development for their handloom enterprise. However, the remaining 30% of the entrepreneurs took the time and resources to undertake research and development for the advancement of their enterprise.

- Among the respondents, 13.33% employs a designer while the rest 86.66% did not.
- 46.66% of the respondent had never participated in any form of handloom expo or others of the sort. Entrepreneurs who have participated in a handloom expo 1-5 times, 6-10 times, 11-15 times and 16-20 times make up 16.66%, 0%, 16.66% and 3.33% of the respondents respectively. The groups of entrepreneurs who have attended more than 20 handloom expo make up 20% of the respondents.
- It was observed that about half, i.e. 53.33% of the respondents have not attended any sort of skill training. However, 20%, 6.66%, 10%, 3.33% and 6.66% of the respondents have attended skill trainings 1, 2, 3, 4 and 5 times respectively.
- 93.33% of the respondents have not received any type of award for their work or excellence in handloom related activities. Only a couple, i.e. 6.66% of the respondents have received a handloom award, both of which are best exhibitor award in a national level handloom exhibition.
- Only a few entrepreneurs, i.e. 23.33% knew of any kind of handloom related schemes implemented by the government. The rest of the respondent, i.e. 76.66% were unaware of any kind of handloom related schemes implemented by the government.

On Capital Asset and Inventory (Objective 3):

- 86.66% of the entrepreneurs were owners of their workshed while rest 13.33% had to rent places elsewhere under a landlord in order to have a place of work.
- All the respondents uses semi automatic Zo loom.

- About half, i.e. 53.33% of the respondents had 1-15 looms, a few 13.33% of them had 16-30 looms, a sizeable 26.66% of the respondents had 31-40 looms and only a couple 6.66% of the respondents had more than 40 looms.
- 76.66% of the respondents had at least one means of transport, which is either a two wheeler vehicle or a four wheeler or both. The remaining of the respondents, i.e. 23.33% had no means of transport and thus rely on public mode of transportation or walking on foot as a means of transport.
- Out of all the respondents, 29 of them procure their yarns from Aizawl market, 5 of them from Guwahati market and there was only 1 respondent who procure his yarns from a cooperative market.
- 80% of the respondents raised the start-up capital for their enterprise by themselves while the rest, i.e. 20% of the entrepreneurs borrowed their start-up capital from the banks as loans.
- A large 80% of the respondents lack any ancillary repair services and only a handful 20% of them could provide such service.
- Senior puan was the most produced item, weaved by 25 entrepreneurs. The next item which is most commonly produced was Thilchhah plain, which is weaved by 15 entrepreneurs. This was followed by Pangpar puan, Ngotekherh and Tawlhloh puan which is weaved by 5 entrepreneurs each. Puanropui and Hmaram were weaved by 4 entrepreneurs each while Thangchhuah, Pawndum and Puanchei were produced by 3, 2 and 1 entrepreneurs respectively. 7 entrepreneurs produced Ipte and other items such as Shawl, Kawrchei and Naupuakpuan were produced by 2 entrepreneurs each. There was 1 entrepreneur who produces only Naga garments and ships their entire products outside Mizoram.

On Access to Credit and Financial Assistance (Objective 4):

- 56.66% of the respondents have borrowed loans from bank for handloom purposes while the rest 46.66% have not.
- A majority, i.e. 56.25% of the entrepreneurs who had availed loans from banks borrowed a principal of 5,00,000 rupees. There were few entrepreneurs, i.e. 18.75% who availed micro finances of principal below 50,000 rupees. Entrepreneurs who availed loan of principal amount 1,00,000 rupees and 10,00,000 rupees make up 18.75% of those respondents who had availed loans respectively.
- From the respondents who had availed loans from banks that while most, i.e. 90% did not face any problem, few, i.e. 10% of them faced one problem or the other.
- Out of all the respondents, a large majority, i.e. 76.66% had not availed loan from the money lender, family or friends while the remaining 23.33% have.
- More than half of the entrepreneurs, i.e. 53.33% had received at least one form of financial assistance from the government. On the other hand, the remaining, i.e. 46.66% of the entrepreneurs had not had any form of financial assistance from the government.
- Out of the entrepreneurs who had received government financial assistance, 62.50% received it as direct cash transfer while 37.50% received as a rebate on the sales of their product in various handloom expo.
- With regards to the channel of reception of these financial assistances, 37.50% received theirs through a handloom society while the rest 62.50% received their government financial assistance through their self channel.

- While almost all the respondents, i.e. 96.66% had not received any form of extra governmental financial assistance, there was one entrepreneur, i.e. 3.33% who had received the same.
- 86.66% of the respondents faced financial problem in due course of running their handloom enterprise. On the other hand, 13.33% of the entrepreneurs did not face any financial problem that is worthwhile mentioning.

On Economics of Production and Working Capital (Objective 5):

- 73.33% of the entrepreneurs bought their looms for Rs. 10,000 to 15,000. There were 16.66% of the entrepreneurs who had their looms for less than Rs. 8,000. There were few entrepreneurs each, i.e. 6.66% who bought their looms for Rs.16,000-20,000 and more than Rs. 30,000.
- Almost half, i.e. 46.66% of the respondents spent only less than Rs.100 per month for renting workshed and display shops (if they had any). Respondents who spent Rs.200 to 500 on rent per month makes up 13.33% while those who pay Rs.600 to 1,000 per month makes up 16.66% of the respondents. On the higher end of the rent scale, respondents who pay Rs.1,100 to 2,000 makes up 10% while those who pay more than Rs.5,000 makes up 13.33% of the respondents.
- On an average, each loom operated by a weaver produces 64 Thilchhah puan plain, 6 Senior puan and Pangpar puan respectively, 25 Hmaram, 24 Tawhlhloh puan, 56 Pawndum and a Puanropui. Similarly, each of the aforementioned factors of production produces 60 lines of Puanchei, 25 lines of Ngotekherh and 40 meters of Thangchhuah puan per week on an average.

- On an average, the amount of yarn used for Thilchhah puan plain, Senior and Pangpar puan, Ngotekherh, Tawlhloh puan, Hmaram and Puanropui were 0.42, 0.31, 0.42, 0.21, 0.25 and 0.18 kilograms respectively.
- The cost of yarn to each entrepreneur was Rs.445 per kilogram on an average.
- The cost of winding hank yarn onto the bobbins is Rs.110 per bag on an average. However, there was one entrepreneur amongst the respondents who did this task himself.
- The cost of unwinding yarn from bobbin to warping drum is Rs.448 on an average per warping drum. However, there were 6 entrepreneurs who did this task themselves.
- The cost of threading the heddle is Rs.388 on an average per warping beam. However, 16 entrepreneurs had their weaver borne the cost of this task.
- The average cost of transport on taxi and bus from Zuangtui cluster to Aizawl market is Rs.80 per trip.
- Taking into account all the mean wages paid out by each entrepreneur, the average weekly salary of weavers of Zuangtui cluster was Rs.3626.
- Only 30% of the respondents employ a family member without pay while the rest 70% did not. Amongst the 9 entrepreneurs who employed a family member, 4 of them were self employed in weaving activities while 5 of them employed an extra family member beside themselves.
- It was calculated from the responses given by each entrepreneur that the selling price of Thilchahpuan plain, Senior puan, Tawlhlohpuan, Hmaram, Ngotekherh and Puanropui were Rs. 298, Rs. 1111, Rs. 400, Rs. 425, Rs. 474 and Rs. 2500 respectively. Puanchei and Thangchhuah puan were sold by the line at Rs. 150 and Rs. 175 per line respectively.

- It was elicited from the respondents that the weavers usually work well over 10 hours a day on the loom.
- While all the entrepreneurs provided sanitary toilet to their workers, 96.66% of them provide safe drinking water to their workers. Only a small portion, i.e. 16.66% of the respondents provides first aid and medicine to their workers.

On Miscellaneous Questions:

- Almost all the entrepreneurs, i.e. 96.66% interviewed for the survey found handloom as a satisfactory line of work to decently feed a family.
- A large portion, i.e. 63.33% of the respondents faced certain marketing problems while the rest 36.66% did not face any problem worth mentioning.
- 80% of the respondents faced one problem or the other with regards to their handloom enterprise while the rest 20% did not.

On Correlation Analysis and Hypothesis Testing:

- As can be seen from the Karl Pearson's Correlation Coefficient of number of workers and average monthly income of the entrepreneurs, these two variables have a very strong positive correlation and we can say this with 99% level of confidence.
- From the Karl Pearson's Correlation Coefficient of number of looms and average monthly income of the entrepreneurs, it was observed that the two parameters have a very strong positive correlation which can be said with 99% level of confidence.
- As can be seen from the Pearson Chi Square test, there is no sufficient data or evidence to establish that there is an association of the attributes of gender and average monthly income.

EMPIRICAL BASED SUGGESTIONS

- It was observed that while 46.66% of the respondent entrepreneurs have attended skill training on handloom and its related activities, none of them had attended skill training on entrepreneurship and business management. Thus, the handloom entrepreneurs of Zuangtui cluster could benefit much from a sincere training on entrepreneurship and business management in order to grow their handloom enterprises further.
- Among the entrepreneurs who undertake weaving activities, 66.66% faced health problems; but still 20% of the respondents do not subscribe to any health insurance scheme. Therefore, the handloom entrepreneurs of Zuangtui cluster must be advised and incentivised to subscribe to the various health insurance schemes provided by the government and other bodies.
- It was observed that 13.33% of the respondents could not get a plot of the Zuangtui Industrial Estate issued to them by the government. Because of this, cost of renting (or taxes on) workshed varies from Rs.100 per month for those who were issued an industrial plot to Rs.5000 per month for those who were denied an industrial plot. Thus, it is imperative for the government to ensure that the plots of Zuangtui Industrial Estate be distributed fairly to deserving handloom entrepreneurs, to whom the estate is intended for.
- Since a large 60% of the respondents only had sales within Mizoram, market must be expanded for the handloom entrepreneurs at the national and international level.
- In this internet age where e-commerce is booming, only 16.66% of the respondents had online sales. Therefore, the handloom entrepreneurs must be

equipped with appropriate platform and skills to take their business online to reap the benefits of e-commerce market.

- In spite of the fierce competition within the handloom market, a hefty 70% of the respondents have not undertaken any form of research and development activities for their enterprise. Handloom entrepreneurs of Zuangtui cluster must be enlightened on the economic benefits of R&D and be given appropriate guidance and help to undertake such.
- A large 76.66% of the respondents were unaware of any kind of handloom related schemes implemented by the government. Therefore, the government must improve its information publicity such that the lesser informed weavers and entrepreneurs may be enlightened on the handloom schemes implemented for them.

GENERAL SUGGESTIONS

- Prices of yarns is ever increasing while the prices of handloom products is either stagnant or increase in less than proportionate to the increase in yarn prices. So, the handloom entrepreneurs could greatly benefit from a subsidy in the prices of yarn.
- The handloom entrepreneurs faced various problems with differences in wages of labours, prices of yarn and handloom products. Some entrepreneurs would buy off skilled workers of other enterprise or entrepreneurs of other clusters would bet prices down due to differences on factors of production. Thus, some form of standardisation of wages and prices, either by the government or handloom

societies is required in order to level the playing fields of various handloom entrepreneurs.

- There are months of the year (viz. monsoons) during which sales of handloom products plummet. In the unique case of 2020 pandemic, almost all the handloom entrepreneurs had to close down or severely downsize due to a near absent demand. In such cases, the entrepreneurs require some sort of minimum support price for their handloom products from the government in order for them to stay in business.
- The yarn used for almost all the handloom products is acrylic yarn. Since acrylic yarn is not appealing to touch and poorly breathable, it renders the market for said handloom products unfit for regions with warmer climate. Therefore, in order to target such markets, natural yarns such as cotton and silk can serve as a great alternative to acrylic yarns.
- A majority of the handloom products of Zuangtui cluster is *puan* of different designs. However, the usage of *puan* is limited to Mizo and a few other tribes of North East India and some South East Asian countries. Also, the design and structures of such *puan* worn by said ethnicities other than Mizo is very different from the handloom products of Zuangtui cluster and does not cater to them. Therefore, in order to broaden the handloom market to the national and international level, the types of products produced must be adapted to suit the destined markets.
- In order to increase value, give uniqueness and identity to designs and motifs, each entrepreneur could put a label or designer tag on their handloom products.
- To broaden the market for handloom products, use of handloom fabrics for school uniforms, curtains, bed sheets, etc. can act as a boost.

CONCLUSION

The study has helped shed some light on the performance of Zuangtui handloom enterprises. It reveals both the valuable economic contributions of the handloom industry and the shortcomings of the enterprises. Since the scope of the study pertains to the handloom enterprises and its entrepreneurs, secondary data and research works on the subject is quite insufficient. The All India Handloom Census focuses mainly on handloom workers while non-household handloom enterprises are given secondary importance. Also, research works within the handloom sector of Mizoram is mostly done with handloom workers as the unit of study while research on the handloom enterprises and its entrepreneurs is quite scanty. Thus, the study is faced with challenges and limitations due to insufficient research works in the field and thus prompts for further research studies on handloom enterprises and entrepreneurs of Mizoram.

REFERENCES

Amaravathi, Gunti & Raj, K. Bhavana (2019), “Indian Handloom Sector – A Glimpse”, *International Journal of Innovative Technology and Exploring Engineering*. Vol. 8, No. 654, pp. 645-654

Annual Report 2017 – 18. New Delhi: Government of India, Ministry of Textile

Bhattacharya, Rajesh & Sen, Samishtha (2018), “Pride and Prejudice: The Condition of Handloom Weavers in West Bengal”, *State of Working India 2018*, Background Paper – 16

B. Hmangaihzuali, Jenny (2014), “Marketing Practices of Handloom Enterprise in Thenzawl Cluster, Mizoram” (Master of Philosophy dissertation), Mizoram University, Aizawl. Retrieved and accessed on: 22/01/2020

from: <https://mzuir.inflibnet.ac.in:8080/jspui/handle/123456789/628>

Debbarma, Ani & Geetha, V. Jaisee (2017), “Problems of Women Handloom Entrepreneurs in West Tripura District, Tripura”, *International Journal of Law, Humanities & Social Science*, Vol.1, No.6, pp. 68-80

Dev, S. Mahendra; Galab S.; Reddy, P. Prudhvikar & Vinayan, Soumya (2008), “Economics of Handloom Weaving: A Field Study in Andhra Pradesh”, *Economic and Political Weekly*, Vol. 43, No. 21, pp. 43-51

Devi, Ch. Victoria (2013), “Handlooms for Livelihood in North-Eastern Region: Problems and Prospects”, *Journal of Rural Development*, Vol. 32, No. 4, pp. 427-438

Examining Employment Figures in the Handloom Sector (2006), All India Artisans and Craftworks Welfare Association, New Delhi

Fanai, T. Lalrindiki (2009), “Narrative of Mizo Puan and Mizo Indigenous Patterns”, *Indian Folklife*, Sl. No. 34, pp. 15 – 16

Goswami, Kishor; Hazarika, Babesh & Handique, Kalpana (2017), “Determinants of Financial Risk Attitude Among the Handloom Micro-Entrepreneurs in North Eastern India”, *Asia Pacific Management Review*, Vol. 30, pp. 1-8

Hazarika, Babesh & Goswami, Kishor (2018), “Micro-Entrepreneurship Development in the Handloom Industry: An Empirical Analysis Among the Tribal Women in Assam”, *International Journal for Rural Management*, Vol. 14, No. 1, pp. 22-38

Indian Handloom Industry – Position Paper (2019), Thought Arbitrage Research Institute, New Delhi

Khatoon, Sabiha (2016), “Make in India: A Platform to Indian Handloom Market”, *IOSR Journal of Business and Management*, Vol. 18, No. 9, Ver. II, pp. 36-40

Liton, Muhammad Rabiul Islam; Islam, Tahmidul & Saha, Subrata (2016), “Present Scenario and Future Challenges in Handloom Industry in Bangladesh”. *Social Sciences*, Vol. 5, No. 5, pp. 70-76

NCAER (2020): Fourth All India Handloom Census, 2019-20. New Delhi: Government of India, Ministry of Textiles

Pachua, Lisa Lalmalsawmi; Mathura, Ritu & Kapoor, Kiran (2018), “Weaving in Thenzawl: A Case Study”, *Internal Journal of Applied Home Science*, Vol. 5, No. 4, pp. 916-921

Patil, Usha N. (2012), “Role of Handloom Industry in India”, *International Indexed & Referred Research Journal*, Vol. 4, No. 39, pp. 1-2

Prem Sundar, B. & Kannan, J. (2013), "Women in Handloom Industry: Problems and Prospects", *EPRA International Journal of economic and Business Review*, Vol. 1, No. 1, pp. 32 – 38

Raju, G. (2014), "Empowerment of Women Weavers Through Handloom Industry – Pros and Cons", *International Journal of Business and Administrative Research review*, Vol. 2, No. 7, pp. 93 – 103

Ramswamy, Rama (2013), "Marketing Problems of Micro-Artisan Enterprises in Thenzawl Handloom Cluster, Mizoram", *Voice of Research*, Vol. 2, No. 2, pp. 41-45

Renthlei, Lalmalsawmi (2019), "Socio-Economic Conditions of Handloom Weavers: A Case Study of Weavers in Zuangtui Clusters, Aizawl, Mizoram", *Shenhri Journal of Multidisciplinary Studies*, Vol. 4, No. 1, pp. 54-62

Vanlalruata (2017), "Livelihood Conditions of Handloom workers in Thenzawl cluster, Mizoram" (Master of philosophy dissertation), Mizoram University, Aizawl. Retrieved and accessed on 22/01/2020 from:

<https://mzuir.inflibnet.ac.in:8080/jspui/handle/123456789/745>

Varghese, Anu & Salim, M.H. (2015), "Handloom Industry in Kerala: A Study of the problems and Challenges", *International Journal of Management and Social Science Research Review*, Vol.1, No.14, pp. 347

Web References

<https://www.aiacaonline.org> (Accessed on 21/01/2020)

<https://www.census2011.co.in/census/state/mizoram> (Accessed on 21/01/2020)

<https://www.ibef.org> (Accessed on 21/01/2020)

<https://www.mzuir.inflibnet.ac.in> (Accessed on 21/01/2020)