SOCIAL CAPITAL AND RESILIENCE OF POOR HOUSEHOLDS DURING COVID-19 LOCKDOWN IN AIZAWL CITY

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Certificate

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Declaration

I, V. Lalramchuani, 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 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.

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CONTENTS

CHAPTER			Page No.
	Certificate		i
	Declaration		ii
	Acknowledgement		iii
	Contents		iv
	List of Tables		vi
	List of Figures		viii
	Abbreviations		x
I	Introduction		
	1.1.	Social Capital, Networks and Support	1
	1.2.	Poverty, Pandemic and COVID 19	3
	1.3.	Vulnerability and Resilience	5
	1.4.	Role of Social Workers during Pandemics	6
	1.5.	Overview of Literature	7
	1.6.	Statement of the Problem	10
	1.7.	Chapter Scheme	11
II	Review of Literature		
	2.1.	Studies on Poverty	13
	2.2.	Studies on Social Capital	17
	2.3.	Studies on Social Networks	20
	2.4.	Studies on Social Capital, Resilience and Vulnerability	24
	2.5.	Studies on Pandemic and COVID-19	30
	2.6.	Studies on COVID-19 in India	33
	2.7.	Studies on Pandemic and Social Capital	35
	2.8.	Studies on Pandemic, Epidemic and Social Work	38
III	Methodology		
	3.1.	The Setting: Profile of the Study Area	41
	3.2.	Research Design	64

IV Social Networks, Social Support and Resilience of Poor Households

4.1.	**Social Structural Bases of Poor Households**	**68**
4.2.	**Lockdown, Livelihood Challenges and Coping of Poor Households**	**76**
4.3.	**Social Networks, Social Support and Social Capital**	**79**
4.4.	**Resilience and Adaptation of Poor Households During COVID-19 Lockdown**	**91**
4.5.	**Correlates of Household Resilience and Adaptation**	**98**

V Community and Household Response to Lockdown

5.1.	**Perception of the Lockdown by the Poor Households**	**103**
5.2.	**Perception of the Lockdown by the Community Leaders**	**108**
5.3.	**Lived Experience of Poor during Lockdown: Some Case Studies**	**112**

VI Conclusion

6.1.	**Major Findings**	**117**
6.2.	**Conclusion**	**125**
6.3.	**Suggestions**	**127**

Appendices

Bibliography	**xi**
Interview Schedule	**xxii**
Particulars	**xxvii**
Bio data	**xxviii**

LIST OF TABLES

Table		Page No.
4.1	Demographic Profile of the Respondents	69
4.2	Family Profile of the Respondents	72
4.3	Social Characteristics of the Respondents	73
4.4	Economic Characteristics of the Respondents	75
4.5	Civic and Political Affiliation of Family Members of the Respondents	76
4.6	Livelihood Challenges Experienced During COVID-19 Lockdown	77
4.7	Coping Strategies Adopted by Respondent Households	78
4.8	Demographic Composition of Social Networks during COVID-19 Lockdown	80
4.9	Social Composition of Social Networks during COVID-19 Lockdown	82
4.10	Socio Economic and Political Composition of Networks	83
4.11	Relationship with and Social Support from Networks	85
4.12	Diversity in the Social Network Composition	86
4.13	Homophily in the Social Network Composition	87
4.14	Social Network Measures of Social Capital	88
4.15	Household Experience during COVID-19 Lockdown	93
4.16	Level of Household Resilience during COVID-19 Lockdown	94
4.17	Household Experience during COVID-19 Lockdown	96
4.18	Level of Household Adaptation after COVID-19 Lockdown	97
4.19	Human Capital, Household Resilience and Adaptation	98
4.20	Natural Capital, Household Resilience and	99

	Adaptation	
4.21	Heterogeneity, Household Resilience and Adaptation	100
4.22	Homophily, Household Resilience and Adaptation	100
4.23	Relationship, Social Support, Household Resilience and Adaptation: Pearson's r	101
4.24	Social Capital, Household Resilience and Adaptation: Pearson's r	102
5.1	Resource Mobilization of Local Level Task Force	109
5.2	Process and Functions of the Local Level Task Force	110
5.3	Community Leaders' Perception of the Lockdown	112

LIST OF FIGURES

Figure		Page No.
3.1	Map of Mizoram	42
3.2	Map of Aizawl Municipal Area	43
3.3	Social Map of Zuangtui	45
3.4	Timeline of Zuangtui	46
3.5	Services and Opportunities Map of Zuangtui	47
3.6	Social Map of Zemabawk	48
3.7	Timeline of Zemabawk	49
3.8	Services and Opportunities Map of Zemabawk	50
3.9	Social Map of Bethlehem Vengthlang	51
3.10	Timeline of Bethlehem Vengthlang	52
3.11	Services and Opportunities Map of Bethlehem Vengthlang	53
3.12	Social Map of Sakawrtuichhun	54
3.13	Timeline of Sakawrtuichhun	55
3.14	Services and Opportunities Map of Sakawrtuichhun	56
3.15	Social Map of Maubawk	57
3.16	Timeline of Maubawk	58
3.17	Services and Opportunities Map of Maubawk	59
3.18	Social Map of Hlimen	61
3.19	Timeline of Hlimen	62
3.20	Services and Opportunities Map of Hlimen	63
4.1	Personal Network of Typical Households at Average Degree	89
4.2	Personal Network of Typical Households at Average level of Density	89
4.3	Personal Network of Typical Households at Average Effective Size	90
4.4	Personal Network of Households at Average Level of Constraint	91
5.1	Impact Diagram of Zuangtui	106
5.2	Impact Diagram of Zemabawk	106

5.3	Impact Diagram of Bethlehen Vengthlang	106
5.4	Impact Diagram of Sakawrtuichhun	106
5.5	Impact Diagram of Maubawk	106
5.6	Impact Diagram of Hlimen	106
5.7	Summary of Impact Diagrams	107

ABBREVIATIONS

AAY: Antyodaya Anna Yojana

AMC: Aizawl Municipal Corporation

BPL: Below Poverty Line

CEST: Central European Summer Time

COVID: Corona Virus Disease

CRPF: Central Reserve Police Force

FGD: Focus Group Discussion

GDP: Gross Domestic Product

GOI: Government of India

HIV: Human Immunodeficiency Virus

IKK: Isua Krista Kohhran

IQV: Index of Qualitative Variation

LLTF: Local Level Task Force

MLA: Member of Legislative Assembly

NGO: Non-Governmental Organization

NFSA: National Food Security Act

NULM: National Urban Livelihood Mission

PHE: Public Health Engineering

PHH: Priority Household

PRA: Participatory rural Appraisal

PWD: Public Works Department

SOP: Standard Operating Procedures

SPSS: Statistical Package for the Social Sciences

TPDS: Targeted Public Distribution System

UPC: United Pentecostal Church

UPC NEI: United Pentecostal Church, North East India

WHO: World Health Organization

YMA: Young Mizo Association

ZOHANCO: Zoram Handloom and Handicraft Corporation Limited

CHAPTER I

INTRODUCTION

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INTRODUCTION

The present study aims to find out the bearing of social capital embedded in the social networks of poor households on their resilience in Aizawl city during COVID- 19 lockdown.

1.1. Social Capital, Networks and Support

Social capital has become a fast core concept in social sciences (Burt, 1998). The concept of 'social capital' has been regarded as a solution for various social problems including poverty, economic problems and challenges brought about by disasters or pandemics. According to Portes (2009), "Pierre Bourdieu, who defined social capital as 'an aggregation of actual or potential resources connected with the existence of a durable network of more or less institutionalised mutual acquaintance or recognition in the nineteen eighties', was the first to produce the contemporary analysis." and Putnam in 1993 conceptualized 'social capital' using components viz. 'social values', 'moral obligations', 'norms' and 'social networks'. Coleman defined 'social capital' by its function. "Social capital is a collection of different entities with similar characteristics consisting of some aspect of social structures, and they all assist certain actions of actors inside the structure, whether individuals or corporations. 'Social capital' comes about through changes in the relations among persons that facilitate actions. The function identified by the concept of 'social capital' is the value of these aspects of social structure to actors as resources that they can use to achieve their interests" (Coleman, 1988). Social capital is embedded in the structure of relationships between and among actors and depends on the social structure and social integration.

Social capital is a collective asset that consists of social relationships, shared norms, and trust that facilitates development, cooperation and collective action which can be broadly categorized into 'bonding capital' which includes relations with families, friends who share a common identity; 'bridging capital' which includes the relations beyond the common identity such as distant friends and colleagues and 'linking capital' which includes relations with individuals and groups in institutionalized networks. As a multidimensional concept, social capital exists in the form of social networks, trust and

norms (R. Burt, 2000). ‘Trust can be defined as one's belief in other people and institutions’ (Putnam, 1995), ‘norms are frequently referred to the different forms of social support’ (Ferlander, 2007) and ‘social networks are the social ties formed in social groups which benefit an individual’ (Coleman,1990). As a multi-level concept, social capital exists in a network approach at the individual level and social cohesion or a communitarian approach (Ferlander, 2007). However, rather than trust, social capital should be characterised by its source, which are social ties (Woolcock, 1998).

Social networks are defined as “a web of relationships and links which surrounds and connects people with one another and with organizations”. It is used for communication, interaction, sharing and exchange, and to exert power as well as influence others. The concept of social network was first employed by J. A Barnes in his study of a Norwegian island. Barnes, 1954 defines a network as “Each person is, as it were, in touch with a number of people, some of whom are directly in touch with each other and some of whom are not… It is convenient to talk of a social field of this kind as a network. The image I find and have is of a set of points, some of which are joined by lines. The points of the image are people, or sometimes groups, and the lines indicate which people interact with each other. We can, of course, think of the whole of social life generating a network of this kind.” Social networks can be of two types as ‘formal networks’, which are ties with voluntary organizations and associations, and ‘informal networks’ which are ties with family, friends, neighbours etc. connected to the individual at a personal level (Ferlander, 2007). Social networks have various functions which are social influence, social control, social undermining, social comparison, companionship, and social support.

“Social support is defined as information leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligations” (Cobb, 1976). It relates to the function and quality of social relationships, such as the perceived availability of assistance or actual support. It is linked to altruism, a sense of obligation, and the idea of reciprocity and happens as a result of an interactive process (Schwarzer et al., 2003). House (1987) defines social support as “the functional content of relationships and categorized into four broad types of supportive behaviours or acts such as instrumental support which entails the providing of tangible aid and services that

directly assist a person in need; emotional support which entails the provision of care, love, trust and empathy. Lastly, informative support entails providing guidance, suggestions, and knowledge that a person may use to solve difficulties, and appraisal support entails providing information that is valuable for self-evaluation."

Social capital provides the benefit of perceiving social systems as effective resources in reducing vulnerability and focusing more on the strengths during community emergencies (Dynes, 2006) and also helps in the mobilization of resources through social networks at the community level (Wu, 2021).

1.2. Poverty, Pandemic and COVID 19

Poverty has been one of India's most serious challenges to social policy and social work. It is a multifaceted issue, whether rural or urban. Men, women and children experience poverty and it affects their overall wellbeing. It has two dimensions- material deprivation which is deprivation in consumption items including food, clothing, durables, shelter, health, education and connectivity; non-material deprivation which is related to phenomena as discrimination based on gender, race or caste. In India, poverty is usually calculated in terms of per capita consumption per day or month. According to Rangarajan methodology (2014), an individual or family whose per capita consumption expenditure is less than Rs 972 per month (i.e., Rs. 32 per day) in rural areas and Rs 1407 per month (i.e., Rs. 47 per day) is considered to be living below the poverty line in urban areas. In India, 21.9% of the total population lives under the poverty line (GOI, 2018). According to the Census of India, the urban population is 377 million (31.6 per cent of the total population) of which 13.7 per cent of the urban population lives under the poverty line (GOI, 2018). "Rapid urbanization has been the reason and cause of urban poverty which is defined by residential vulnerability, social vulnerability, and occupational vulnerability" (GOI, 2013). Other causes of poverty include warfare, agricultural cycles, corruption, social inequality, illiteracy, natural hazards and widespread diseases (Philip, 2004).

Pandemics are epidemics which are diseases that occur more frequently than expected. It affects at least a few countries on multiple continents. Pandemics are risks notable for combining a low probability of occurrence with a high, potentially

catastrophic, global impact. The 1918 pandemic, the most severe of the four flu pandemics in the last 100 years, killed 50 million to 100 million people in a world population of fewer than 2 billion people. In the past, pandemics such as plague, cholera smallpox, influenza, Severe Acute Respiratory Syndrome (SARS), Swine Flu (H1N1), the Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS), Middle East Respiratory Syndrome (MERS), Avian Influenza (H5N1), Ebola, dengue, and chikungunya have proven to be disasters affecting people both at the individual and community levels. These pandemics have health effects, economic impacts such as direct and indirect costs, social impacts such as strictly limited travel, the closing of educational institutions and markets and global security impacts (Qiu et al., 2017). "Disasters are unexpected public health crises that exceed the coping capacity of the affected community" (Goyet et al., 2006), thus, pandemics are disasters (Jonas, 2014). The people who suffered most during these disasters are the poor (Anderson, 2001), increasing their vulnerability, through loss of employment, less income, rise in prices of food items etc.

COVID-19 (coronavirus disease) pandemic crisis is a systemic human development crisis (Kovacevic & Jahic, 2020) and not just a health emergency. It affected the economic and social dimensions of development across the globe. The first case of COVID-19 was confirmed on 12th December 2019 in Wuhan, China, and was declared a pandemic on 11th March 2020 by WHO with 22,992,517 cases including 249,992 deaths in India (Reported by WHO at 3:06 pm CEST, 11th May 2021). Responses have been made towards this pandemic at the global, regional, and national levels. In India, COVID-19 had an impact on both individuals and households. The National Disaster Management Act (2005) was enacted by the Government of India which declares the COVID-19 outbreak as a national disaster and establishes policies, plans, and regulations for managing, maintaining, and controlling the outbreak of the disease and ensures a disaster response such as lockdown measures, social distancing measures and containment plans (Acharya & Porwal, 2020). Even though a lockdown is required to stop the transmission, it is having and will continue to have a greater impact on all aspects of humankind due to the country's weak socioeconomic structures (Ganguly et al., 2020). It had affected economic activity and overall wellbeing through its impact on labour income, non-labour

income, consumption, and service disruptions (World Bank, 2020). The sudden enforcement of the lockdown has brought about a decrease in the country's economy, the labour market has been affected, migrant workers were forced to move back to their homes with an uncertain future, the education system is on halt, disruptions in the medical facilities due to COVID-19 (Ghosh et al., 2020; Sengupta & Jha, 2020). The pandemic and its consequences have increased the vulnerability of the poor.

1.3. Vulnerability and Resilience

"Vulnerability is defined as the risk of a household to fall into poverty at least once in the next few years. Household vulnerability is a measure of the probability where households have greater or lesser degrees of vulnerability" (Pritchett et al., 2000). The vulnerability context of the poor to poverty can be considered by analysing the extent to which the poor are exposed to particular trends, shocks or seasonality and the sensitivity of their livelihood to these trends, shocks or seasonality (DIFD, 2011). Mizoram with its total population of 1,097,206 has 52.11 per cent living in urban areas (Census, 2011). According to the BPL Baseline Survey conducted by the Directorate of Economics and Statistics, Aizawl in 2016, 19.63 per cent of the total households in Mizoram lived under Below Poverty Line. Aizawl, the capital, consisting of 78.53 per cent of the total urban population has a total of 12668 BPL households. Urban poor in Mizoram are characterized by inadequate income, unequal distribution of income, inadequate skills and expertise, inadequate shelter and food, low education and inability to access better education, lack of assets and the inability to treat illnesses, use of alcohol and drugs, inflation and rising prices (Malsawmdawngliani, 2007; Sailo, 2014). Therefore, the urban poor in Mizoram are vulnerable due to these factors. The COVID-19 pandemic affects the economic sector and the overall wellbeing of the community which increases the vulnerability of the poor. The measures taken for COVID-19 containment shows negative impacts on the livelihood of the informal sector and food security and thus, is a site for economic vulnerability (Kesar et al., 2021). The impacts can be managed through prevention strategies, mitigation strategies and coping strategies. The actors in this management can be individuals, communities and governments which will help in the reduction of risks and decrease vulnerability and become resilient.

"Resilience is the ability of a system to withstand disturbance and reorganise despite experiencing change and maintaining essentially the same function, structure, identity, and feedback" (Walker et al., 2004). 'It determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist' (Holling, 1973). Therefore, in the context of poverty, resilience is a function of the ability to manage shocks and that individuals and households have access to assets and services for risk management which ensure that they do not become impoverished. During a flu pandemic, bioterrorism or any natural disaster, the best monitoring, equipment, communication systems, antiviral supplies, and emergency services will be ineffective unless equal attention is paid to the issues posed by human behaviour in these situations. The adaptive systems should be considered at the local level as all human resilience arises from the interactions of individuals and small groups of people with one another (Masten & Obradovic, 2008). Therefore, adaptability influences resilience (Walker et al., 2004). Social capital embedded within communities helps in the adaptation which results in building resilience (Adger, 2007; Aldrich & Meyer, 2014; Murphy, 2007).

1.4. Role of Social Workers during Pandemics

As the COVID-19 pandemic is causing tremendous health emergencies, the response to lower the transmission is necessary. Countries worldwide have been implementing lockdown and physical distancing measures. The responses to combat COVID-19 had a tremendous impact on the vulnerable sections of the society and those in need of social assistance. The role of social work is vital during pandemics. Social workers provide essential goods and services through mobilizing resources, linking markets for agriculture workers, providing social assistance, ensuring the understanding of families and situations affected by COVID-19, improving the communication channel with the vulnerable sections etc. (Redondo-Sama et al., 2020; Tung, 2021). This emphasizes the importance of social work during pandemics. However, the role of social workers during pandemics is still minimal. Associated public health issues, public outreach, and community-based responses to those in need of support are all areas where social workers can and should play a much larger role than it currently does (Cox & Pawar, 2013).

1.5. Overview of Literature

Social capital had been defined at the individual level by Burt (2000) and at the community level by Coleman (1988). Network closure and structural holes as social capital can be seen in the works of Burt (2001), Coleman (1988), and Granovetter(1973). The literature on the benefits of social capital can be seen in Sandefur & Laumann (2009), definitions, types, and properties such as its capability for economic development (see Bhandari & Yasunobu, 2009). Social capital as a poverty reduction strategy is focused on by Sundram et al. (2011). Morris (1998) studies the variables of social capital and provides evidence for the relationship between social capital and poverty reduction. Allahdadi (2011) also assesses social capital in poverty reduction. Mpanje et al. (2018) conducted a case study in Kenya on social capital and found out that nongovernmental institutions and well-wishers are sources of financial support and food for households without livelihoods.

As poverty is a major global social problem and its eradication has been the goal of social and economic policy as well as social work intervention for many years, there is copious literature on various aspects of it (see for instance Asian Development Bank, 2011; GOI, 2014; Mehta & Shah, 2012; Wratten, 1995). The dimensions of poverty and the vulnerabilities of the poor are focused in many studies (see Alok, 2020; Amis, 1994; Chanchal, 2014; Loughhead & Mittal, 2000; Mehta & Shah, 2012). Policy measures addressing the challenges of urban poor have been the main concern of various reports and articles (see Chanchal, 2014; Nandi & Gamkhar, 2013; NITI Aayog, 2016). But these policies are usually rural-centric and only a handful of the urban population benefited from them. This shows that the causes of poverty had to be tackled at the micro, meso and macro levels. Philip (2004) observed in his paper that vulnerability and poverty are interlinked and are the causes of each other.

In the Mizoram context, studies on poverty in the urban communities are few (Sailo, 2014; Malsawmdawngliani, 2007; Tuanmuansanga, 2016). These studies bring about the problems of urban poverty in Aizawl. The reach of Government policies toward poverty reduction is seen in (Sailo, 2014; Chanchal, 2014) and projected the need for a programme that will benefit the whole urban poor population. Sailo (2014) in her study presented an urban vulnerability context in which geographical location of localities,

landslides, the high price of basic commodities and house rent, nepotism and corruption of government officials as well as community leaders contributes to the vulnerability of the poor in Mizoram context.

Even though the COVID-19 crisis is a contemporary issue, there are several articles, studies, and literature related to it (see Arockiasamy, 2020; CFS HLPE, 2020; Ganguly et al., 2020). These defined the vulnerable groups and how the lockdown had worsened their disadvantage. There is also literature on the resilience of the poor during natural hazards (Hallegatte et al., 2016). The impact of COVID-19 on food security is focused on various articles (see CFS HLPE, 2020; Sekhar, 2020; Unhale et al., 2020). These highlighted the direct and indirect impact on food demand, supply, and access. The impact of natural disasters on poor people are seen in Anderson (2001), Diwakar (2020), Hallegatte et al.(2016). Pandemics and their impacts on health, economy, society and security are seen in Jonas (2014), Kelman (2020) and Qiu et al. (2017). Community network as a strategy for reducing the impact of natural disasters has been focused on by Anderson (2001). Holzmann & Jorgensen (2001) proposed a new conceptual framework of social risks management in which the main actors in the management are individuals, households, communities, NGOs, governments and financial institutions.

There is literature on resilience (Berkes, 2007; Southwick et al., 2014; Windle, 2011) and on the concept of resilience (Holling, 1973; Walker et al., 2004). Some studies linked resilience and concepts of poverty escapes (Canvin et al., 2009; Thiede, 2016; USAID, 2016). These studies showed evidence of the need to understand the resilience of the poor in meeting the short-term needs and prevention for future shocks and stresses. and poverty.

There are many kinds of literature on the social network, its concepts and its types (for instance see Afridi, 2011; Catherine & Israel, 2002; Rosas, 2001) and on social support and its attributes, forms and its connection to social networks (see Burt, 2001; de Souza Briggs, 1998; Granovetter, 1973; Langford et al., 1997; Song et al., 2011). Many studies focus on how social network structures function as sources of social support (see Cantor, 1979; Espinoza, 1999; Rashid, 2000). These studies are in cases of stressful events such as problems of health, ageing, natural disasters and poverty etc. There are studies of social support as a coping strategy for the poor (see Afridi, 2011; Klärner &

Knabe, 2019; Lowe, 2012; Rashid, 2000; Schweizer et al., 1998). There are papers that present data and theories on the distribution of social support and support resources across social structures (see House, 1987; Turner & Marino, 1994). The studies of social networks as coping strategies of poverty are less compared to studies of social networks as psychological coping strategies. These studies have found out that the social networks of urban poor have both strong bonds and weak bonds. Strong bonds include families, kins and immediate circle of friends whereas weak bonds comprise distant contacts. The studies revealed that most of the poor rely on strong ties such as kins and friends for instrumental support and emotional support while weak ties provide informational support which helps them find employment opportunities and thus helped in leveraging from poverty. These studies also showed that urban poor have small social networks due to them being migrants and their geographical location. Thus, social support received by the poor through their networks had helped in getting by poverty and for some getting on over poverty.

Social network analysis has been used for understanding individuals and family functioning as well as for understanding livelihood systems (see Clifton & Webster, 2017; Gillieatt et al., 2015; Misra et al., 2014; Pfouts & Safier, 1981). Social network analysis is useful in studying the exchange of resources or support in both tangible and intangible forms (see Haythornthwaite, 1996). Name generator methods are used to find out the sources of social support (see Reingold, 1999; Schweizer et al., 1998). There is also a study on the role of social support networks of Gorkha settlements in Aizawl (see Rai, 2013) and a study on the use of egocentric network analysis on social capital (Rai, 2019).

The above overview of literature points out a few research gaps. Firstly, as the COVID-19 lockdown is a contemporary issue, studies relating to COVID-19, vulnerability, and resilience of the poor households are rare in India and are non-existent in the context of Mizoram. Secondly, studies on the social networks or social capital of urban poor are a few. Thirdly, the use of egocentric network analysis to measure social capital is also rare in the national, regional and local contexts. The present study is an attempt to address these research gaps in the context of Aizawl, the capital city of Mizoram.

1.6. Statement of the Problem

Urban poverty in India is characterized by unsanitary, overcrowded housing and low living conditions, heavy dependence on labour markets, decrease in urban wage rates due to a high number of urban male migrants, high dependence on the public sector for goods and services; violence which is a result of youth underemployment, alcoholism and drug abuse, experienced at both the community and household level which is contributed by rapid and unplanned urbanization. All these characteristics increase the vulnerability of the urban poor to disasters and disease epidemics; also, it is an additional vulnerability for specific groups such as the elderly, disabled, children and women.

Aizawl, the capital of Mizoram, consisting of more than half of the total population of the state have shown decadal population growth in the last Census 2011. Urbanization has led to many households migrating from rural areas to urban areas for employment opportunities, educational purposes, medical facilities and a better standard of living. This has led to an increase in problems of poverty, lack of job opportunities, inadequate income, lack of access to better education etc.

On account of the outbreak of COVID-19, there has been a lockdown in the country as well as in Mizoram as a precautionary measure to slow down the growth curve of COVID-19 cases. The lockdown to restrict the physical distance to avoid contact was enacted by the Government of Mizoram enforced from 22nd March 2020 with two extensions. During this lockdown, the livelihood of the urban poor has been affected to a certain extent. As many poor households solely depend on daily wage-earning and petty trades for their livelihood, the lockdown does not allow many breadwinners to earn due to movement restrictions and physical distancing norms. This leads to employment loss and inadequate income. Movement restrictions further cause less food supply in the local markets and high prices of food items. Despite the efforts of the State Government in providing food grains through the Public Distribution System (PDS), there are still difficulties in physical availability and economic access to food, which raises food security risks. The pandemic had directly impacted food security directly on its supply and demand and indirectly been decreasing the purchasing power. The COVID-19 lockdown is likely to increase the risk and vulnerability of the poor sections of the society by employment loss and decrease in income.

The vulnerability context of the poor such as trends like political trends, economic trends; seasonality like production cycles, prices of products; and shocks like diseases, disasters, pandemics, deaths etc. affected the livelihood of the poor. Therefore, it is important to identify capitals to decrease the vulnerability of the poor and increase their resilience, improve their food security as well as their livelihoods.

The present study tries to understand the role of the social capital of the poor households in Aizawl city in enabling the resilience of the poor households during the COVID-19 lockdown. Using Egocentric Network Analysis, the study attempts to find out the composition of social networks of the poor and the social capital embedded in its structure. The study will also examine the availability of social support of the poor households in Aizawl through their social networks and their overcoming of vulnerabilities during COVID-19 lockdown.

The outcomes of the present study will be useful for social work practitioners and policymakers towards urban community development and in increasing preparedness during pandemics. The findings of the present study will be useful for determining the effectiveness of the implemented policies and the Government and non-Government institutions during a pandemic crisis and towards the eradication of poverty. It will also help design intervention strategies focusing on the poor and very poor households and in creating better policies that reach the whole population.

1.7. Chapter Scheme

The study has been organised into the following six chapters.

Chapter I: Introduction

It includes the introduction of the concepts of the study, the overview of the literature, and the statement of the problem.

Chapter II: Review of Literature

It includes the review of the literature of the present study and is divided into eight sections. The substantial, theoretical and methodological gaps in the literature have also been highlighted.

Chapter III: Methodology

It includes a brief description of the study area and methodology of the present study. It is structured broadly into five sections viz. of the setting and profile of the study areas, the research problems in terms of objectives and hypotheses as to the research design, sampling, tools of data collection, data processing and data analysis and the definition of concepts and the ethical consideration.

Chapter IV: Social Capital, Social Support and Resilience of Poor Households

It comprises an analysis of the data of the present study, which was collected through field surveys in six Aizawl localities. It is divided into five sections.

Chapter V: Community and Household Response to Lockdown

It comprises the qualitative data analysis of the present study. The chapter is divided into three sections.

Chapter VI: Conclusion

It comprises the conclusion of the present study, which is divided into three sections. The major findings are presented in the first section, the conclusion is presented in the second section, and the suggestions are presented in the third section.

CHAPTER II

REVIEW OF LITERATURE

CHAPTER II
REVIEW OF LITERATURE

A literature review aids in the identification of theoretical, substantive, analytical, and conceptual challenges, which are to be addressed in the context of the present research. This chapter is presented in eight major sections. The first section is devoted to reviewing the literature on poverty. In the second section, the literature on social capital has been reviewed. The third section presents a review of studies on social networks while in the fourth section the studies on social capital, resilience and vulnerability have been reviewed. The fifth section presents literature on pandemics and COVID-19 while the sixth section is devoted to COVID-19 in India. The seventh section presents literature on pandemics and social capital and the last section, literature on pandemics, epidemics and social work has been reviewed.

2.1. Studies on Poverty

Wratten (1995) conceptualizes urban poverty in both North and South America and explores it in three broad ways. First, it examines how poverty is defined and examined in 'conventional economic definition' saying 'it is a lack of income or consumption defined in relative or absolute terms' using quantitative approach using 'poverty line' as a 'scale of measurement', 'affected number' to measure the extent of poverty and also measures the 'depth of poverty. It suggested macro-level interventions such as the creation of jobs, safety nets etc. for the reduction of poverty. Secondly, the 'participatory social development definition' saying it is multi-faceted and its definition varies between individuals'. It uses qualitative analysis like 'bottom-up' participatory approaches and suggested micro-level interventions to strengthen individuals like 'community-level interventions in strengthening health, education, credit for small enterprises, capacity building in decision making, political participation, legal literacy, decentralization of decision-making to local levels etc.'. Thirdly, 'integrated development approach' which says 'the causes of poverty are interlinked with the environment, housing, income generation, education etc. and must be tackled in a coordinated way. It uses both qualitative and quantitative assessments and suggests a holistic, integrated approach to urban development and poverty alleviation to 'redistribute resources to

provide for basic needs of the poor, coordinating interventions in primary health care, water and sanitation, pollution control, housing, income generation, education, crime control, domestic violence, leisure facilities and acknowledge linkages between national economic and social policies and poverty in urban and rural areas.

Amis (1994) summarized the major findings of The National Institute of Urban Affairs to provide literature on poverty in urban India and concluded that both women and children are among the most vulnerable groups. There is strong evidence that one's status in the labour market influences one's level of poverty in any measure. The composition of the labour market, in particular the level of labour market segmentation and the prevalence of casual labour, determines this. Poverty in Indian cities is inextricably connected to the loss of a wage earner which is the single most significant occurrence that increases a household's vulnerability. There are also important physical environmental issues that cause poverty that is unrelated to neither income nor employment. It suggested that poverty alleviation initiatives must begin with the major causes of poverty such as access to the labour market, which directly linked education and health, but also a regulated control to this access, and support for women. Women should be able to increase their productivity and provide a safety net in times of extreme economic hardship, such as the loss of a breadwinner within the family. Nonetheless, the significance of physical environmental upgrades, which can be accomplished by improved service provision, should be acknowledged.

Pawar and McClinton (1999) in their study discusses the findings of a project entitled, ‘Feasibility of Poverty Alleviation in Rural Australia’ in two districts of North East Victoria. The project uses purposive sampling, and employs surveys, case studies and focus group discussions for the collection of data. The data is analysed using content analysis involving the identification of themes. According to those who live in poverty, “Poverty is viewed as a product of systemic and personal failures. It has an impact on a person's personality, hope, confidence, beliefs, attitudes, and self-esteem, as well as their reliance on services”. Individuals and families' social and economic participation in community life is also hindered. There is a need for an increased understanding of current services of poverty alleviation programs as well as improvements to their effectiveness. Poverty can be alleviated by making institutional, local, and personal improvements. At

the micro-level, the need for ‘domestic skills training’ like budgeting, education, improvement in small business opportunities etc. are highlighted. The need for external help from the government is also mentioned.

Collins et al. (2010) reviews the literature on ‘the impact of trauma in the context of urban poverty on the family system’ and concludes that families living in urban poverty face several traumas. They are less likely to have access to the services and resources which would reduce their trauma. But they use essential support from families and communities to recover from post-traumatic stress. Their relationships with parents, siblings, extended families, neighbours and faith-based groups are the safety nets and provide stability in the function of the family to recover and grow.

Kundu (2000) studies and looks at rural and urban poverty rates, analyses interstate patterns, and describes them in terms of socio-economic factors. It illustrates that rural poverty decreases with economic growth, whereas urban poverty does not. The shortage of water, sanitation, and electricity, which are not directly included in the official description of poverty, has been investigated at the state level as well as through different size classes of urban settlements. Small and medium towns are said to have a poor and fragile economic foundation. As a result, most of them are unable to raise funds to provide public services to all segments of the population. As a result, these towns, especially those in less developed states, should be a top priority for government policy and suggest that anti-poverty programs should prioritize the provision of basic necessities.

Mukherjee and Chatterjee (2014) uses parameterized Lorenz curve methods to estimate the incidence of poverty and inequality in urban India over the last three decades. In recent years, rapid urbanization in developing countries has been followed by a rise in the incidence of urban poverty. The analysis then uses panel regression to look at how different socioeconomic factors influence the incidence of urban poverty in urban West Bengal, a state in eastern India. The analysis is focused on data from different rounds of the National Sample Survey Organization's unit-level consumption expenditure data (NSSO). According to the results, the incidence of urban poverty in Indian states was very high in earlier periods compared to later periods. In West Bengal, lower urban poverty is related to a faster rate of urbanisation, smaller household sizes, lower urban

inequality, higher per capita industrial income, and higher per-capita public spending on health and education.

Since more than half of the urban population lives in unplanned settlements, the quality of life in developed countries is substandard, if not inhumane. Delhi, India's capital is a prime example, with more than half of the country's population living there. As the country embarks on a more rapid growth path, the rate of urbanization is expected to accelerate. Currently, 300 million Indians live in towns and cities that are underserved by services, have insufficient housing, and are facing traffic congestion. This trend of growth in urban towns and cities is resulting in the creation of new slums or rising pressure on existing slums. When a group of new migrants finds refuge in an old slum or builds new slums, there are several coercive experiences at play. Both of these are inevitable urban threats that workers face while seeking shelter in new towns and cities (GOI, 2007).

Sridhar (2015) in his article investigates whether urban poverty is more difficult to overcome than rural poverty. The philosophical claims and current research on the intensity of urban versus rural poverty, urban and rural disparities, and whether urban poverty lines should be higher than rural poverty lines are discussed. According to a study of current studies, the urban share of the poor is increasing, and the ratio of urban poverty to overall poverty incidence has increased as a result of urbanization. Urban inequality worsened in many countries, including India, from the early 1990s to the late 2000s.

Tuan Mansanga (2016) conducted a study on “Housing problems of urban poor in Aizawl city, Mizoram” and used both primary and secondary data. The study employs stratified random sampling and selected seven localities with Aizawl. From the seven localities, 15 households were selected from the BPL list and the total sample is 105. The study observed that thirty-three per cent of the BPL Households is headed by females. Daily wage labour and petty business are the main sources of income for the poor households in Aizawl. Seventy per cent of the BPL households live on rent, where more than half of households have difficulty paying rent which is the result of less income. Poverty and unemployment are the reason behind the problems of housing and basic amenities.

2.2. Studies on Social Capital

According to Burt (2005) “the advantage created by a person’s location in a structure of relationships is known as social capital” and explained that people do better due to their connections with other people and concludes that structural holes have the social capital advantage. The informal organizations consist of dense groups or clusters which have an occasional relation when someone in the group has relations to another person in another group, thus, the network spans to multiple groups resulting in an advantage inflow of information of knowledge and opportunities. Thus, the brokerage is the advantage of social capital in recognizing resources.

Bhandari and Yasunobu (2009) reviewed that earlier economic models focused on factors of production, ignoring social-cultural dimensions. This has resulted in distorted development and the inability to explain the results of economic development. This, however, led to a development approach focusing on social cultures, cultural norms and values to understand sustainable economic development. Thus, social capital, a multi-dimensional concept, a collective asset of networks, trust, relations, shared norms and institutions resulting in cooperation and collective action which have mutual benefits have become an important determinant towards economic development.

Coleman (1988) introduced and illustrated the concept of social capital, defining it by its function. It is a collection of entities that have two characteristics. They are made up of some part of social structure and promote certain actions inside it. Information channel is an important form of social capital; thus, it is a potential source for information that is present in social relations. The social relations maintained for other purposes could be used to retrieve information, for further action.

Granovetter (1973) conducted a labour market study in Boston on individuals who found new jobs through contacts and used the information channel as a measure for the strength of the tie. Almost half of the total respondents have an information channel between themselves and the employer of the new job, 12.5% have two channels and 3.1% have more than two channels. The findings suggested that the egocentric network consists of ego, his contacts and their contacts. Thus, weak ties are an important source of opportunities.

Mpanje et al. (2018) conducted a conceptual analysis to establish the constitution, the relevance and measurement of social capital in vulnerable urban settings and proposed social capital as "The structures and relationships that determine the quality and quantity of social interactions in vulnerable urban settings, enhancing the capacity of individual, community and society to collaborate to achieve individual and collective aims before, during and after a humanitarian crisis." The analysis identifies social capital in three forms such as bonding capital at the micro level which has three attributes namely the quantity of relationships-structure and nature, the quality of relationships-norms of trust and reciprocity and the degree of social influence; bridging capital at the meso level which refers to the quality and quantity of connections at the meso level and linking capital at the macro level which is the quality and structure of linkages and institutions. As a requirement of the concept analysis approach, a case study was conducted in the informal urban settlements of Nairobi, Kenya. The case study uses household baseline survey and egocentric analysis for analysing the bonding capital, community profile, socio-metric network analysis and qualitative studies for analysing the bridging capital and survey responses as well as qualitative studies were used for analysing the linking capital. Credit purchasing (36.4%) and borrowing from friends and relatives (28.8%) were the top two coping strategies indicating that the slum dwellers in Nairobi depend on people they know for help and support. The study also indicates that some of the studied population participated in political parties, associations etc. but the participants' proportion cannot be clearly understood. The study further revealed that there is an existence and linkage of both national and international organizations and further concluded that more exploration in this area is needed.

People and households obtain supporting services primarily through community relations with friends and relatives. The data from the study in East York explored six alternative theories for why different types of connections provide different kinds of support services which are tie power, interaction, community processes, kinship, network members' characteristics, and similarities and differences in such characteristics between network members in East York. The majority of relationships provide specialized assistance. The types of assistance offered are more closely related to relationship characteristics than to network participant characteristics. Emotional support, small

services, and friendship are all supported by ‘strong ties’. Adult children and their parents exchange financial and emotional assistance, as well as large and small services. Services are supported by physically accessible links. Women provide emotional support. Around half of all supportive relationships are made up of friends, neighbours, and siblings. The network ensemble provides dependable and adaptable support (Wellman and Wortley, 1990).

Woolwock (2001) examines the dimensions of social development on both the demand and supply side of the economy and thus, concludes that it is held together by social development. The paper highlighted the findings of certain urban studies on OECD countries and it is evident that support of social capital comes from both household and community level and concluded that “getting the social relations right” is an important means for development as well as an end to development. For communities, management of risks and shocks during economic decline, natural disasters as well as micro problems such as the death of family members, domestic violence is more advantageous in achieving sustainable development than changes in the structural features.

Mogues (2006) conducted 416 rural household surveys in Ethiopia to study livelihood asset dynamics, shocks and social capital. The sample area faced a series of environmental shocks such as droughts during the study timeframe. The study used stratified sampling conducted in seven rounds over a period of three years, thus, examining the role of social capital, the findings of the study highlighted both social relationships and “bridging social capital” have positive effects on the growth and recovery of household endowments and has an indirect outcome on mitigating the effect of income shocks on livestock capital.

Carter and Maluccio (2003) attempted to explore how households cope with economic shocks and how “social capital” tends to facilitate their capacity to cope with economic shocks. Using a panel survey of South African households, two rounds of surveys were undertaken in 1993 and 1998 in KwaZulu Natal Province in South Africa. The first set of surveys consists of 1354 African and Indian households, out of which 84% were reinterviewed in the second set. The second survey follows the first survey question design similar to a ‘World Bank Living Standards Measurement Survey’ that includes measures of demographic structure, income and expenditure, and anthropometric

measures for children aged six and under. Questions on economic shocks experienced by the households were also added. During the given period or time frame of five years, economic events or shocks which topped the findings are death, injury, illness, loss of a job and loss of property by the household due to fire.

Moser (1998) identifies the assets of the poor rather than what they don't have and contributes to the vulnerability/asset's literature by using the "asset vulnerability framework" for categorizing the assets of the urban poor which includes tangible assets such as human capital and labour and housing and intangible assets such as relations within households and social capital. The results of the community panel study conducted in Zambia, Ecuador, the Philippines and Hungary in 1992 were also highlighted. Households that provide children's education rather than sending them out to work were poorer in terms of income but this is an approach to reduce vulnerability in the long run by merging human capital as an asset and large "stocks" of social capital may be ineffective when they lack friends, house or education. When people have more assets to their command, they have a greater capacity to buffer against shocks.

2.3. Studies on Social Networks

Rai (2013) attempted to determine the effect of social support networks on the wellbeing of the Gorkhali households in Mizoram. The study is conducted at the community level in which two localities within Aizawl, the district capital of the state, are selected viz. Tanhril, representing a low level of development locality whereas Thuampui, representing a high level of development locality. The study follows a descriptive design and a cross-sectional nature. The tools for data collection adopted are Participatory Rural Appraisal, a structured household interview schedule that includes name generators to assess the social support of the community. For data analysis and processing, SPSS, UCINET (Borgatti et. al., 2002) for social networks, and E-NET (Borgatti, 2006) for Personal Network is employed. Within the sample of one hundred and thirty-four households, the male population is higher as compared to the female population which is similar to the Census of India and four fifth of the total households are male-headed families. The study employs Social Network Analysis to understand the structure and dynamics of the relationships that bind community members, demonstrating that the Gorkhali community at a high level of development is more connected than the

Gorkhali community at a low level of development. Accordingly, the social support network follows the same pattern. The study also revealed that the source of social support, which is the kinship network, is embedded in the caste network. Further, communities in the high level of development have greater extend to social capital, with structural holes greater as compared to that of the low level of development, indicating a positive effect on both the subjective and objective wellbeing.

An attempt was made by Reingold (1999) to investigate the link between social networking and job-seeking opportunities by secondary analysis of cross-sectional data collected by the National Opinion Research Centre in Chicago in 1986. Stratified random sampling collected 2490 interviews from 18 to 47 years of parents living in poverty. The data is used as it represents urban poor households competing in the labour market, the samples consist of different racial ethnicity and the data collected consists of 'egocentric network' data including information on 'friends', 'daily social support' and 'crisis support'. The study has found out that the pattern of those who found jobs using word of mouth does not differ from those who found jobs using other methods but the ethnic differences differ the rate of job finding through word of mouth, i.e., the Mexicans and the Puerto Rican, which may be due to low education attainment and that they rely more on personal contacts for job seeking. In addition, the study also found out that individuals on welfare can find more jobs. This may be due to their connection with the welfare offices. The overall findings of the study propose that social networks account for the employment problems that the poor residents of Chicago faced.

An evaluation is made on the study in East York in 1977-78. The study, conducted through interviews, consists of 29 samples from the 845 randomly selected samples. The unit of the study is the respondent's relationship and the network members. Out of the 18 types of support analysed in the study, five types of support or dimensions are taken as dependent variables for the evaluation: emotional aid, financial aid, small services, large services and companionship. Six rationales are evaluated using the qualitative and quantitative data of the study. The findings under the first rationale 'strength' of ties showed that strong ties provide broader support, more emotional aid, small services and companionship; 52 per cent of strong ties provide two dimensions while only 25 per cent of weak ties provide two dimensions of support. Under the 'contact' rationale, the

findings suggest that small services as well as large, are promoted by frequent contact and physical access. The third rationale, ‘group interaction’ highlights that formal groups are more focused on the organizational aspects and does not extend community nor domestic support whereas support groups exchange mutual support of domestic concerns. Under ‘kinship’, the parent-child relationship is the most supportive, providing emotional and financial aid, small and large services, siblings providing small services while extended kins are just members in the network. Companions, consisting of 52 per cent of friends and neighbours who are friendly to the respondents, provide mostly companionship. Under the rationale ‘personal characteristics’, gender becomes a notable factor which shows that women, out of which 86 per cent are mothers followed by sisters consisting of 77 per cent, provide more emotional aid than men. Under the last rationale, ‘similarities and dissimilarities, the study shows that 65 per cent of similar employment provide small services and 19 per cent of companionship, while 56 per cent small services and 12 per cent companionship by different employment while gender roles define the types of services provided to the respondents. Thus, the study concludes that networks provide emotional aid and belongingness, small services to help cope with difficult situations, and ‘safety nets’ to help manage crises and decrease the effects of certain difficult situations (Wellman and Wortley, 1990).

Miller and Buys (2008) conducted a study in Australia to understand the extent to which social capital and engagement in group activities predict happiness, health, and life satisfaction. A seventy-four per cent response rate (n = 249) was obtained in a random door-to-door survey of inhabitants in a Gold Coast neighbourhood. In ordinal regression research, two dimensions of social capital, the value of existence and emotions of confidence and safety, were found to predict happiness, life satisfaction, and health. In terms of group activities, not participating in social activities predicted both sadness and decreased life satisfaction. Only two of the seven elements, life satisfaction and health, were found to predict happiness, indicating that how social capital is defined and assessed matters. The main implication is that introducing in place policies, programs, and urban developments that encourage feelings of confidence and protection will help people live longer, healthier lives.

Klärner and Knabe (2019) examined the spatial dimensions of poverty and social networks as a source of coping strategies for the rural poor. The data were collected using an exploratory; a mixed-methods study conducted in both the rural and urban areas of north-eastern Germany. They examined how poor people's social networks are shaped by their spatial contexts. The quantitative analyses showed that the sizes of rural networks are smaller than urban networks and have more family members and fewer supportive relationships. The analysis of qualitative interviews with rural poor people generated a typology of coping strategies and demonstrates that social networks are important resources for coping with poverty in rural areas, but the structural changes such as migration of younger educated individuals, population ageing and shrinking have resulted in the weakening of their support capacities.

Child (2016) analyses the importance of social capital through social networks on health among the disadvantaged communities in South Carolina. The author looked at the relationship between socioeconomic status, social capital, social network characteristics and chronic disease outcomes in low-income, historically disadvantaged communities and suggested that low socioeconomic status may be associated with less access to social network capital as well as social network characteristics. The socioeconomic status may moderate the relationships between social capital, social networks, and chronic disease. Furthermore, mixed relationships were found between social capital, social networks, and chronic disease, implying that not all social capital is associated with health improvements.

Hlebec and Kogovšek (2013) deal with meta-analysis the PAPI questionnaire filled by students of the University of Ljubljana through interviews to evaluate the 'survey measurement of ego-centred social support networks' and compare and contrast the three ways for measuring social networks: 'the name generator method', 'the role generator method', and the 'event-related method'. The effect of various measurement instrument characteristics on the variability of network indices is evaluated by analysing the method and the type of calculation on social support network composition, the constraint of the network size and the event support and concludes that the network composition is significantly affected by the network generator method. The estimation of network composition is also significantly affected by constraints in the network size and

estimation of network composition does not have much effect on the received or perceived social support.

2.4. Studies on Social Capital, Resilience and Vulnerability

'Vulnerability, resilience, and adaptation are three interconnected concepts in global change science, social-ecological risk, and disaster risk domains.' Lei et al.(2014) provided an overview of the origins and variations of V, Re, and A by taking into account various academic backgrounds and tentatively categorizing past diverse understandings on them into three methods of vulnerability preference, resilience preference, and overlapped relationships base on empirical study and ''hit-damage-recovery-learning cycle'' insight and found out that measures to reduce vulnerability, build resilience, and improve adaptability can all contribute to disaster risk reduction and concludes that the adaptation strategies adopted should not only reduce vulnerability but also foster resilience and adaptive capabilities for future risks.

An attempt was made to study the mechanism of "social capital" in facilitating resilience on HIV positive patients who were on antiretroviral therapy (ART) in resource-poor Uganda and other sub- Saharan African countries. For this purpose, 50 including both male and female adult HIV patients were selected for samples. It is a qualitative study employing an ethnographic approach aiming to find out the description of events, actions, processes to describe how the samples mobilize their resources. Semi-structured and narrative interview schedule, case study and participant observation were employed for data collection whereas NVivo.10 was used for data analysis, conducted using inductive and deductive thematic analysis. Employing resilience as a framework on strength perspectives, the coded data is divided into two categories such as risk factors and overcoming risk factors. The risk factors include poverty, fear of stigma, ill health, lack of information and no supply of medicines from the treatment centres. The overcoming risk factors include access to medicines, access to HIV medicine without visiting the treatment centres, access to proper diet even though they are poverty-stricken. These overcoming factors were borne by personal resources as well as with help from others in their social network. Their bonding networks include family members, both nuclear and extended, friends, other HIV patients, religious affiliates and neighbours. Their bridging networks included workmates, transporters and landlords while their

linking network included health workers and religious leaders. These social networks played an important role in facilitating access to scarce resources, facilitating access for transportation to treatment centres, facilitating access to food, thus, increasing food security as it is an important part of the treatment process. The social networks also encourage the HIV patients to continue the treatment and provided instrumental support when the patients were in fear of social stigma. Thus, social networks provided resilience to poor HIV patients on ART. These findings were similar to the reports given by Ware et al., on their study on three African countries (Nanfuka et al., 2018).

A case study is conducted on how faith-based organizations played a role in re-establishing a community hit by a disaster when government interventions were inadequate. The study area is New Orleans hit by Hurricane Katrina in 2005, flooding around 80% of the whole area, Mary Queen of Vietnam (MQVN) is selected for the case study. The study observed the presence and how the 'bonding social capital', 'bridging social capital' and 'linking social capital' of MQVN contributes to the redevelopment of the community. After the disaster struck the area, many people had to evacuate their homes and move to safer places. During this time, MQVN conducted mass gatherings which contributed to re-establishing 'bonding social capital' at the local level facilitating emotional support, provide shelter to people using the 'neighbourhood zone administrative structure', facilitating instrumental support, which further developed a network for organizing the society, rebuilding the community and for the exchange of information. This helped the community in rebuilding their homes, access to health care and access to food and security. Apart from rebuilding the 'bonding social capital', MQVN also utilizes its 'bridging social capital' to re-establish certain basic services. In addition, MQVN also provided networks to improve the economic conditions of the people. It facilitates a 'bottom-up' approach towards community redevelopment. The study concluded that faith-based organizations not only provided emotional support to communities during disasters, but the 'social capital' of the organizations also contributes to community resilience (Rivera & Nickels, 2014).

Cassidy and Barnes (2012) conducted a study to examine the link between resilience and household connectivity in rural Botswana. The rural poor communities are exposed to shocks of climate change. The study uses three indices of household resilience

namely livelihood diversity, wealth index and resilience index based on combining human, physical, financial, natural and social capital. The study area is Habu, where livelihoods are based on natural resources and access to wildlife community-based projects are absent. The study employed Focus Group Discussions and quantitative surveys for data collection. The focus group discussion with 75 participants highlighted ill health, livestock illness, damage of crops and death as shocks and based on these shocks, the changes in networks of information, food, labour and money were examined. The quantitative survey of 145 households is structured along with financial capital, physical capital, natural capital, human capital and social capital. The findings of the survey agree that social capital interacts with other forms of capital. Connectivity is represented by two social network metrics namely degree centrality and betweenness. For social network analysis, UCINET software is used (Borgatti et al. 2002). The households in Habu were asked to tell the other three households with whom they exchange information, food, labour or money during shocks. The findings highlighted the labour network is the densest network, followed by the food network, money network and information networks. The analysis showed that families with members playing important roles in the community have high network centrality as well as resilience but leadership does not contribute to information exchange. The labour network is the most active with more actors in the network. The findings also highlighted that male-headed households were wealthier as compared to female-headed households. The degree of centrality and the overall average of the four networks correlate to the different measures of resilience and the overall betweenness is associated slightly higher with the resilience index and wealth index than the overall degree centrality. The findings of the study show that large social network households are likely to have greater forms of social capital and therefore are more resilient.

Aldrich and Meyer's (2014) article considers literature and evidence of social capital and networks, the types and applications in surviving and recovering a disaster. The findings of the article consider social capital is central to community resilience and highlights that a high level of bonding social capital results in a higher level of trust and shared norms, which further reflected higher satisfaction in rebuilding the community despite differences in economic characteristics and culture within the disaster-affected

community. Bridging social capital is also found to be effective in increasing resilience, working complementarity with bonding social capital. Bonding social capital provides immediate help during disasters whereas bridging social capital tends to seek resources from other organizations, other communities and in rebuilding the infrastructure within the community, as well as job opportunities after the disaster. The article concludes by drawing attention to social capital which is an underutilized resource for community resilience and suggests that programs building social capital within a community should be enhanced to build resilience for future crises.

Ungar (2011) reviews how social capital and physical capital provided resilience to communities, focusing on youth and families, during and after natural and manmade disasters. A group of people or a community's resilience is the potential ability to recover from change, adapt and grow which is provided by the social capital, physical infrastructure and interrelations embedded in the culture. Disastrous events harm a community in fulfilling its functions, but there is a possibility of recovery, sustainability and growth but depends on the community's resources and strengths such as 'informal social support' and 'formal social service systems'. Thus, 'resilience is the capacity of individuals to access the resources needed for sustaining well-being and the capacity of communities and governments to provide what the community needs in meaningful ways.' For a community's resilience, both the physical capital and social capital need to go hand in hand. A well-prepared community in terms of health care, education and family attachment will have better coping strategies. Concerning social capital, values, social support and instrumental support such as food distribution, public safety etc. all contribute to social capital. Thus, access to both the physical capital and social capital after considering the ethnic, racial and socioeconomic context of the community will promote community resilience after a disaster.

Ninno et al. (2003) examine the household coping strategies on the impact of floods during Bangladesh floods in 1998. The sample consists of 750 households that were affected by the flood in 1998. The study took place in three rounds and focused on the impacts of floods on household assets, food consumption and outcomes in nutrition. The flood had resulted in the loss of crops and other assets which further affected income and market prices. There was crop loss of 24 per cent of the total expected value, 55 per

cent of the total households lost their assets whereas income for the sample households increased over the period. But, regression analysis by del Ninno and Roy (2001) showed that there is a 5 per cent decrease in the levels of income to the severely affected households as compared to the less affected households. The flood also causes an increase in food prices and a decrease in the total household expenditure. The household coping mechanisms include borrowing, reducing expenditure and selling assets. Out of the three, borrowing is the major coping mechanism, allowing them to buy food items at the beginning but due to the rise in food prices, the purchasing power of the households' declines. The sources of borrowing were neighbours and friends, not from banks and NGOs. But this coping mechanism had resulted in huge debt to the households.

Misra et al. (2014) conducted an exploratory study to indicate the role of social networks in disaster management. The study area is at the settlement area of Dakshin Shivganj village in Patharpratima Block, West Bengal with thirty-three households after considering the damages caused by cyclone Aila in 2009. The study adopted the Social Network Analysis (SNA) approach (Wasserman & Faust, 1994) in which the disaster event was conceptually divided into four phases namely 'extreme event' (Phase-1), 'immediate community response' (Phase-2), 'relief' (Phase-3) and 'rehabilitation' (Phase-4), and Pre and Post-disaster phases for before-after comparison of the community's social network. The data was collected through focus group discussions and found out that the measures of the density of the networks showed an increase from the pre-disaster phase to Phase 1 and decreases gradually to Phase 4. It also showed that the structural holes in the earlier phases tend to develop fewer structural holes. Many of the emergency ties formed during the four stages of disaster may have continued to remain in the community and become part of the community's own social support network. The study also discovered a significant relationship between centrality scores and resilience, possibly due to the probability-based fact that a higher degree may result in short-term support from fellow villagers. But due to the decrease in density of the network, it concludes that density may not reflect a community's resilience.

Vasavada (2013) conducted an exploratory study to comprehend the structure of disaster management networks from the standpoint of network governance and to investigate the key factors that influence the effectiveness of the network governance

form in Gujarat which had suffered several natural disasters. The data on social network communication ties were collected using structured interviews from five individuals and analysed using UCINET software. The data on the effectiveness of network management was collected using semi-structured interviews among the non-probability samples consisting of thirty-four individuals. The analysis implies networked governance consisting of government institutions, international funding agencies, individuals from various institutions and non-profit organizations and the factors that affect the effectiveness includes trust, number of network participants, network goal consensus and the need for network competencies. The study concludes that there is interdependency between the government and funding agencies and this interdependency lies on the leadership of the disaster management agency of the state.

Dietz et al. (2012) in their article presents examples of state and local collaborations towards their response to bioterrorism and preparedness in the United States from the experiences collected by the assessments of NACCHO between March 2002 and January 2003. The data for assessment was conducted through telephone interviews and e-mail. The Local Public Health Agency (LPHA) is taken as local level agencies and the examination of 500 LPHAs had reflected successful collaboration such as communication and provided local input during planning, involving health officers from the local, adopting both regional and system-wide approaches and setting up of protocols.

Murphy (2007) in his study distinguished municipal government obligations and community-level initiatives as two types of emergency management at the local level. It contends that these are interconnected but distinct parts of emergency management. He employed two case studies to show the concepts proposed namely the 2000 Walkerton water-borne disaster and the 2003 electricity blackout in eastern Canada and the United States and concluded that in both the proactive and reactive phases of disaster management, communities, whether or not related to specific locations, are suggested as important but frequently disregarded resources. The social capital resources, which are networks of strong and weak links, might help a community become more resilient to risks and hazards are particularly important within communities.

Social capital is often thought to have a favourable impact on disaster resilience. However, in calamities, social cohesion which is primarily the bonding of social capital can have detrimental implications. Social capital, as general welfare, can be used to combat a variety of catastrophe recovery needs. Following Hurricane Katrina, communities with higher voter turnout before the catastrophe were more likely to successfully refuse the establishment of temporary trailer homes in their area. Following the 2004 Indian Ocean tsunami, the caste councils known as “uur panchayat” in Tamil Nadu scrutinised the assistance distribution procedure and excluded Dalits, Muslims, and widows because they were seen as outside the community. During and after disasters, decision-makers must be aware of the possible "dark side" of strong in-group cohesion (Aldrich & Meyer, 2014).

Mohaimin et al. (2017) conducted a mail survey to study household recovery in four small towns in southern Indiana that were hit by deadly tornadoes in March 2012. The study focused on how households in these communities are recovering from the harm they've suffered, as well as the impact of social capital, personal networks, and emergency responder aid on the entire recovery process and used an ordered pro bit modelling framework to test the combined and relative effects of the physical infrastructure damage on houses, vehicles, etc., the recovery assistance from emergency responders (FEMA) as well as friends and neighbours, the personal network characteristics such as network size, density, proximity, and length of the relationship and the social capital such as civic engagement, contact, etc. The findings demonstrate that while homes with more damage recovered more slowly, those with recovery help from neighbours, stronger personal networks, and higher levels of social capital recovered faster. Emergency management and disaster response workers will be able to use the information collected from this study to develop focused methods for facilitating post-disaster recovery and community resilience.

2.5. Studies on Pandemics and COVID-19

World Bank (2020) explores the impact of COVID 19 on the economy and society among various income groups. The shock of COVID 19 on the economic activity on the wellbeing of the individual and household is summarized as both a direct and indirect impact. The labour income is directly affected by the loss of earnings due to the

contraction of the disease and indirectly affected income by disruptions of demand and supply of labour in the market. It also has a direct impact on consumption through the increase in the price of commodities as well as disruptions to services such as suspension of schools for children, decrease in health care facilities for non- COVID patients and transportation facilities.

Many significant pandemics have occurred throughout human history, and pandemic-related crises have had an unfavourable impact on global health, economies, and even national security. The consequences of a pandemic are severe. Millions of people have been infected by pandemics, leading to widespread serious illness and hundreds of deaths. It is a major threat not only to the global population but also to its economy. The economic loss has the potential to cause economic instability through direct costs, burdens, and indirect costs. The social effects of pandemics were severe, with travel restrictions, schools shutting down, markets shutting down, and sporting events being cancelled. All of these things are likely to happen if a pandemic with high morbidity and mortality emerges. Pandemics pose a threat to global security in terms of lives and economic stability (Qiu et al., 2017).

Arndt et al. (2020) examine a case in South Africa on the implications of COVID-19 Lockdown policies focusing on income distribution and social protection in the preservation of food security. Due to the absence of vaccinations and medical intervention to prevent the spread of the novel Coronavirus, physical distancing and lockdown are employed by the Government of South Africa which leads to the inability of people to go out for work and other special circumstances, which reduces income as well as their spending abilities. The lockdown also closes non-essential industries, which further affects the entire economy indirectly. The indirect effects of the direct impacts of lockdown policies are entered in input/output tables, expanding it to a Social Accounting Matrix (SAM) showing the flow of income from production to value addition, to income distribution and then to demand. Both the direct and indirect impact reduces the GDP by 34 per cent. A major finding of the study is that the negative impact on income due to lockdown increases for low educated households, wage income earnings fall by 30 per cent. They are already vulnerable, thus, threatening their food security. But due to the transfer payments of the total income of low-income households in South Africa, their

incomes are somewhat protected. Based on the results, the study concludes that low-level education households that depend largely on wage labour for livelihood will experience income shock, leading to food insecurity assuming that there are not many impacts on food production, change in food prices and no change in food distribution channels.

Owusu and Frimpong-manso (2020) conducted a study on "The impact of COVID-19 on children from poor families in Ghana and the role of welfare institution" based on secondary data from journals, articles, textbooks and the internet to give an opinion on the problems that children in Ghana might face as they are the vulnerable groups exposed to the global pandemic. COVID-19 had forced many families to live on the savings from the pre-COVID period as it had reduced income and further reduced consumption. Apart from decreased income, schools had been closed to follow social distancing measures. This has a huge impact on not only children's education but widens inequality for children from poor families. Online learning through digital technologies due to the closing of schools has added to the economic burden of parents as data connection, phones, tablets and other such electronic devices are limited to those who can afford them. Also, the children in Ghana cannot access the free meals provided by the Government in schools, missing out on their means of survival. It is also pointed out that the increase in the number of school dropouts, child labour, child abuse, streets etc. after the Ebola 2014 outbreak. The study further proposes a better social protection program with enough resources and funds to protect the children of poor households affected by COVID-19 socially and economically.

Ekoh et al. (2020) studied the impact of COVID-19 in Nigeria. It is a qualitative study with older people. The sample size is 11 and the qualitative data was collected using in-depth interviews and thematic data analysis and coding is done using NVivo12. The study is conducted in rural Nigeria where there is no movement restriction and no language barrier. Simple random sampling is employed to select four villages out of the total twelve villages in Awgu. Availability sampling is used to select the respondents which comprise seven females and four males. The age of the respondents is between 60 to 80 years, 8 out of the 11 respondents live alone. As many of the respondents depend on their family for financial and material support, in comparing the during and before coronavirus situation, their economic welfare and support received decreased due to the

coronavirus. Not only the economic welfare, the social contract between the respondents and their children reduced due to social distancing norms. The decreased economic support from their families is due to the loss of income activities of their families. The respondents had also received tangible aids from the government such as food items, however, it exhausted over a short period. The intangible support of the respondents had also reduced due to the movement restrictions due to COVID-19, which left families unable to move around. Even after movement restrictions are lifted, their families do not make contact as old age are more vulnerable to the virus. Three out of the total respondents mentioned that the reduced tangible support is due to the restrictions of social contact. Thus, COVID-19 had not only created health challenges for the older people but also economic challenges indirectly.

2.6. Studies on COVID-19 in India

Acharya and Porwal (2020) use the freely available data to study the vulnerability index for identifying vulnerable regions in India based on infrastructural characteristics and population in India. The study created a composite index of vulnerability at the state and district levels based on 15 indicators from the socioeconomic, demographic, housing and hygiene, epidemiological, and health system domains and computed domain-specific and overall vulnerability using a percentile ranking method and displayed the findings spatially with the number of positive COVID-19 cases in districts. The study found out that in every region of the country excluding the northeast regions, the number of districts in nine large states of Bihar, Uttar Pradesh, Madhya Pradesh, Maharashtra, Telangana, Jharkhand, West Bengal, Odisha, and Gujarat was determined to have high overall vulnerability. According to the majority of the five domains, these states were similarly highly vulnerable. The study was not to estimate infection risk for a district or a state, however, a correlation between vulnerability and the present COVID-19 case concentration at the state level was observed.

Siddiqui et al. (2020) look into the impact of COVID-19 on the Indian health system, as well as the potential health system, social, political, and economic consequences. The research was conducted in chronological order, with data collected between the 30th of January and the 12th of June of 2020. The findings highlighted that initial containment measures, such as point-of-entry screenings and testing protocols,

appeared to be inadequate. However, testing capacity was gradually increased following the start of a nationwide lockdown. The country also faces the risk of an economic downturn, with a loss of approximately four per cent of its Gross Domestic Product due to containment measures and a decrease in goods import and export. The low public health expenditure which combines with the lack of infrastructure and low fiscal response implies an increase in the number of challenges towards COVID-19 response and management. As a result, integrating an emergency preparedness and response plan into India's health system is critical.

Sengupta and Jha (2020) in their article examines the experiences of 'locked down' migrant workers during the COVID-19 pandemic. The migrant workers were not allowed to work due to measures of the Government which led to the loss of employment, decreased income, decrease in food intake etc. while some migrants were forced to return to their hometowns. The article also examines the nature and scope of existing social policy, which is designed to protect this vulnerable group and decrease dislocation, discrimination, and destitution. The post lockdown tragedy of poor migrants is mass unemployment and insecure and unprotected work. The article concludes by suggesting that workplaces must provide better protection and decent work standards for informal workers after COVID 19, based on the existing policy framework. The government must also recognize that rural employment, which continues to support millions of people's subsistence, is in jeopardy. Rural social protection schemes, such as MGNREGA public works, should be expanded to urban areas, and other welfare measures, such as maternal and child protection and PDS, should be portable.

Meher et al. (2020) investigate the impact of COVID-19 and lockdown on the livelihood of street vendors in the Indian state of Maharashtra. Twenty street vendors who sell perishable goods for a living were interviewed over the phone from the 16th of May to the 1st of June 2020. The data were analysed using thematic analysis after the interviews were transcribed and found out that the lockdown had a multifaceted impact on street vendors. Many street vendors were forced to change their profession to selling fruits and vegetables within a specific time frame, which had consequences. Some respondents have shared their experiences with government assistance in the form of free rations. In addition to financial losses, street vendors were subjected to stress as a result of

restrictions imposed by local authorities. Respondents also expressed their desire to receive direct financial assistance as well as protective equipment to allow them to perform their jobs safely. The study concludes that the street vendors are one of the most affected groups, their overall welfare rests in the responsibility of the Government.

2.7. Studies on Pandemic and Social Capital

Afridi et al. (2021) conducted a study using data from two round surveys. The first round of surveys took place in May 2019 with around 1,600 women and their spouses living in metropolitan Delhi households while the second round was a follow-up phone survey performed in April and May 2020, right around the peak of the COVID-19 health crisis. Both rounds collected self-reported employment data, but only the post-pandemic round collected mental health data. Due to the lack of personal phones among the majority of the women respondents, the husband was the primary respondent in the phone survey for all questions, but the wives were also asked about their mental health separately. This affords a unique perspective into the gendered experience by providing matched husband-wife data for mental health outcomes. All respondents were asked to name two friends or close relatives whom they could contact in the event of a hypothetical scenario, such as needing to rush to the hospital or doctor during the first round. This data was utilised to create the social network measure that was used in the analysis. The findings highlighted the impact of COVID-19 on livelihoods such that employment among men declined post-pandemic whereas women do not experience any significant change in employment. Overall, the survey indicates very high levels of mental stress as a result of the pandemic, which is primarily driven by financial and health concerns. Despite experiencing fewer job losses, women experience more mental stress than males and this could be the increased societal constraints placed on women at home during a crisis when their spouses are also at home. The social network findings also showed that men who have a large social network measured by the total number of friends have less mental stress than those who do not. Women, on the other hand, exhibit the opposite pattern where those with greater social networks experience more mental stress than those without. This effect is due to the home-based character of wives' social networks, as well as the lack of support from such friends owing to social separation during the lockdown.

Pitas and Ehmer (2020) recommend that individuals, communities, and government institutions work to strengthen and expand social networks based on evidence from previous crises of tsunami-affected communities in India and the H1N1 pandemic crises. During a crisis, social capital provides several benefits, and communities with high social capital respond more effectively than those with low social capital. It is believed that believe that in many American communities, the response to and recovery from the COVID-19 pandemic may be hampered by deficiencies or disruptions in social capital caused by physical separation and concludes that failure to expand social capital will have repercussions in terms of human morbidity and mortality, as well as exacerbate the current disaster.

Dafuleya (2020) in his article "Social and Emergency Assistance Ex-Ante and During COVID-19 in the SADC Region" states that "The majority of mutual assistance practices continue to exist, providing essential but limited social assistance to the poor and vulnerable who are not reached by formal mechanisms. It was discovered that mutual assistance is most common among relatives who live next door to each other in Zambia where food is the most common form of mutual assistance which varies from handing out small items such as salt and sugar to sharing a harvest with the needy. Destitute households are placed with relatively better-off families and share meals until they can operate independently. Mutual assistance is believed to be extremely limited due to three factors. First, assistance is usually given between members of the same community who are in the same state of poverty and vulnerability. Devereux discovered this to be the case in Malawi two decades ago (1999). There was recently discovered evidence of the same in Zimbabwe. As a result, exchanging money or food does not lift households out of poverty. Second, when a systemic shock, such as COVID-19, occurs, mutual assistance becomes elusive. Third, there is evidence of community-based programmes failing due to modernization and commercialization. It was also demonstrated on how this was the case in Malawi a decade ago, causing citizens to become increasingly reliant on social assistance provided by NGOs" and concludes that existing social assistance in more than half of SADC member states is precarious and insufficient to protect livelihoods from the hunger threats posed by COVID-19 containment measures. Instead, emergency assistance

financed through donations targeting the whole population is very much needed in the current case scenario of COVID-19.

During the early stages of the Covid-19 pandemic, Bai et al. (2020) provided some of the first large-scale data that disparities in civic norms and social networks across counties in the United States lead to considerably divergent social distancing behaviour. GPS location data at a daily frequency is used to measure the social distance and found out that whereas areas with high civic standards have higher levels of social distancing than that with low civic norms, areas with high-density social networks have lower levels of social distancing than areas with low-density social networks. The findings showed that civic norms encourage socially cooperative behaviours and promote selflessness and individual sacrifice for the greater good (Coleman 1988), resulting in increased social distancing behaviour during the Covid-19 pandemic. Individuals in high-density social networks, on the other hand, are required to sustain ongoing social connections and perform regular duties, making social distancing more difficult.

Wu (2021) conducted an online survey from April 22 to April 28, 2020, in Wuhan, China after the reopening of the city which was funded by the Canadian Institute of Health Research (CIHR) to understand about Chinese people's reactions to the outbreak, their social interactions with family, friends, and neighbours, and their values and behaviours throughout the crisis. The study uses a multidimensional and multilevel approach of social capital to look at how different forms at different levels can alter COVID-19 response in different ways and found out that social network and political trust, in particular, are crucial in restricting the COVID-19 virus's spread. Also, the findings of social networks operating primarily at the macro level suggest that social networks can assist communities in better mobilising resources in times of crises at the contextual level. However, some evidence suggests that social action and political participation may increase the risk of COVID-19 at the country level.

Epidemic-specific social capital is a new type of social capital that emerges during epidemic crises like the COVID-19 pandemic. Because of the pandemic's physical isolation, this epidemic-specific social capital emerges to aid people in their fight against the viral spread. The first internal construct of the concept refers to the strengthening of personal circles to which an individual is connected, and these are the motivators,

encouragement, influence, and support that motivate an individual to play an active role in well-regulated indoor and outdoor physical activities during the pandemic, thereby maintaining one's overall health status. During the pandemic, the second internal construct of the concept refers to maintaining an individual's connections to distant alters, most presumably via online communication, and the prompt, diversified, and non-redundant information they obtain from these links will lead them to have a rational and more briefed response to COVID-19, which will lead to an ability to participate in both indoor and outdoor activities. Finally, epidemic-specific social capital contributes significantly to people's physical activity and health during the pandemic (Bian, 2020).

2.8. Studies on Pandemics, Epidemics and Social Work

The HIV/AIDS epidemic has reached epidemic proportions, necessitating a concerted and coordinated effort from all disciplines, including social work. However, where there is the greatest need, the presence of social workers is usually minimal. This situation emphasises the importance of the profession stimulating and supporting the development of social work in the most affected countries at the appropriate levels and with adequate personnel numbers. While focusing on HIV/AIDS, this is just one of many epidemics causing havoc on the lives of many people. Malaria, tuberculosis in different forms, river blindness, and other diseases have proven difficult to tackle and have had disastrous consequences. While the significance of a medical response to these diseases is obvious, associated public health issues, public outreach, and community-based responses to those in need of support are all areas where social work can and should play a much larger role than it currently does. In many countries, this would entail including public health content in social work curricula (Cox & Pawar, 2013).

Dynes (2006) describes where social work theory can be helpful. First, emergence has been interpreted, mostly implicitly, as the creation of new social capital in this context. To examine the outcome, it would be useful to examine the literature on emergence, which is scattered throughout the disaster literature. Second, because external aid disrupts existing obligations, distorts informational potential, and imposes new authority patterns, the social capital theory may be useful in analysing the problems of external aid in disasters. Third, social capital theory is useful because it connects micro- and macro-analysis. The majority of psychological studies of disaster victims have

centred on psychodynamic causation using borrowed concepts like Post-Traumatic Stress Syndrome. These types of theoretical approaches have largely failed. Because social capital theory connects the consequences of individual actions to social resources, it has the potential to explain individual "trauma" and disaster resilience.

During the COVID-19 crisis, social workers were faced with one of the most difficult tasks: meeting urgent social needs in an uncertain environment. This study looks at how social workers responded to vulnerable groups in the first 15 days of the pandemic in Barcelona, one of the most COVID-19-affected cities in the world. This qualitative study's sample includes 23 semi-structured interviews with social workers from various fields of intervention, ranging from general approaches (primary care) to specific approaches (special care) (health, ageing, homeless, and justice). The data was analysed using a communicative methodology, which included transformative and exclusionary dimensions, with analytical categories focusing on the impact of the COVID-19 pandemic on social service users, social worker organisational responses, and the impact of interventions to meet attendees' urgent social needs. The interventions were accompanied by an improvement in communication channels with vulnerable groups, ensuring that the situation of families and individuals was understood and that the most urgent social needs were met. The study demonstrates the critical role of social workers in a variety of social attention tools, as well as their contribution to the long-term sustainability of social services (Redondo-Sama et al., 2020).

Tung (2021) in his study “Social work responses for vulnerable people during the COVID-19 pandemic: the role of socio-political organisations” employed literature review, descriptive statistical analysis, graphing technique and thematic analysis to understand the modelling of social work responses of the socio-political organisation system for vulnerable people in the COVID-19 pandemic in Vietnam. The study highlighted that Vietnam has a high figure of vulnerable people that require immediate social assistance to survive pandemics like COVID-19 and the socio-political organisation system formed at the local level has been proved to play a critical and effective role in guaranteeing the social welfare of vulnerable people which mobilises community resources for national charity funding to combat the COVID-19 pandemic. These programmes are also aimed at Vietnamese people living in other countries and

conclude the supportive measures have been successful in a variety of ways and the effectiveness of numerous organisational activities has contributed to ensuring that vulnerable people in the community are not overlooked.

The above review of the literature points out a few research gaps. Firstly, as the COVID-19 lockdown is a contemporary issue, studies relating to the impact of COVID-19 lockdown, vulnerability, and resilience of the poor households are rare in India and are non-existent in the context of Mizoram. Secondly, studies on the social networks and social capital of urban poor are rare in the national, regional and local contexts. Thirdly, the use of egocentric network analysis to measure social capital is also rare in the context of the country. Fourthly, studies of pandemics and epidemics from the points of view of social work are also rare. The present study attempts to address these research gaps in the context of Aizawl, the capital city of Mizoram.

An attempt has been made in this chapter to give a review of the literature relevant to the present study. The substantial gaps in the literature have also been identified, both theoretically and methodologically. The methodological aspects, as well as the setting of the present study, are described in the next chapter.

CHAPTER III

METHODOLOGY

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METHODOLOGY

The study area and methodology are presented in this chapter. This chapter is structured broadly into five sections. The first section consists of the setting and profile of the study areas. The research problems in terms of objectives and hypotheses as to the research design, sampling, tools of data collection, data processing, and data analysis of the present study are discussed in the second section. The third section consists of the definition of concepts and the fourth section is the ethical consideration.

3.1. The Setting: Profile of the Study Area

The present study is conducted in six localities of Aizawl city, the capital of Mizoram. The profile of the studied areas are presented in four sub-sections according to the zones viz., Aizawl East, Aizawl West, Aizawl North and Aizawl South.

3.1.1. Mizoram

Located in the north-eastern corner of the country, Mizoram is one of the twenty eight states of India. It is one of the Seven Sister States of North Eastern India, bordering the states of Tripura, Assam, and Manipur, as well as the neighbouring countries of Bangladesh and Burma. The Mizo people share many other tribes in north eastern India as their ancestors. It was inhabited by Tibeto-Burman tribal groups and migrations led to settlements in the hills between 1750 and 1850. During this time, hereditary chieftainship ruled over the tribal groups. Later during the British era, Mizoram became a part of British India's territory in 1891, though village administration was left to local chieftains. Under the Reorganisation Act of 1971, the district was carved out of Assam and elevated to the status of a Union Territory on January 21, 1972, and Mizoram became India's 23rd full-fledged state in 1987.

According to the 2011 Census, Mizoram has a total population of 1,097,206, with 555,339 males and 541,867 females. The decadal population growth of Mizoram is 23.48 per cent in 2011 and the total population of Mizoram constituted 0.9 per cent of the total population of India. Mizoram covers a total area of 21,081 sq. km. and the density is 52 per sq. km. The literacy rate of the State is 91.33 per cent where the male literacy rate is 93.35 per cent and the female literacy rate is 89.27 per cent. The urban population of

Mizoram totals 571,771 which is 52.11 per cent of the total population. Christianity is a majority religion in the State with 87.16 per cent of the total population following Christianity. There are eight districts in Mizoram and Aizawl city is the capital of Mizoram.

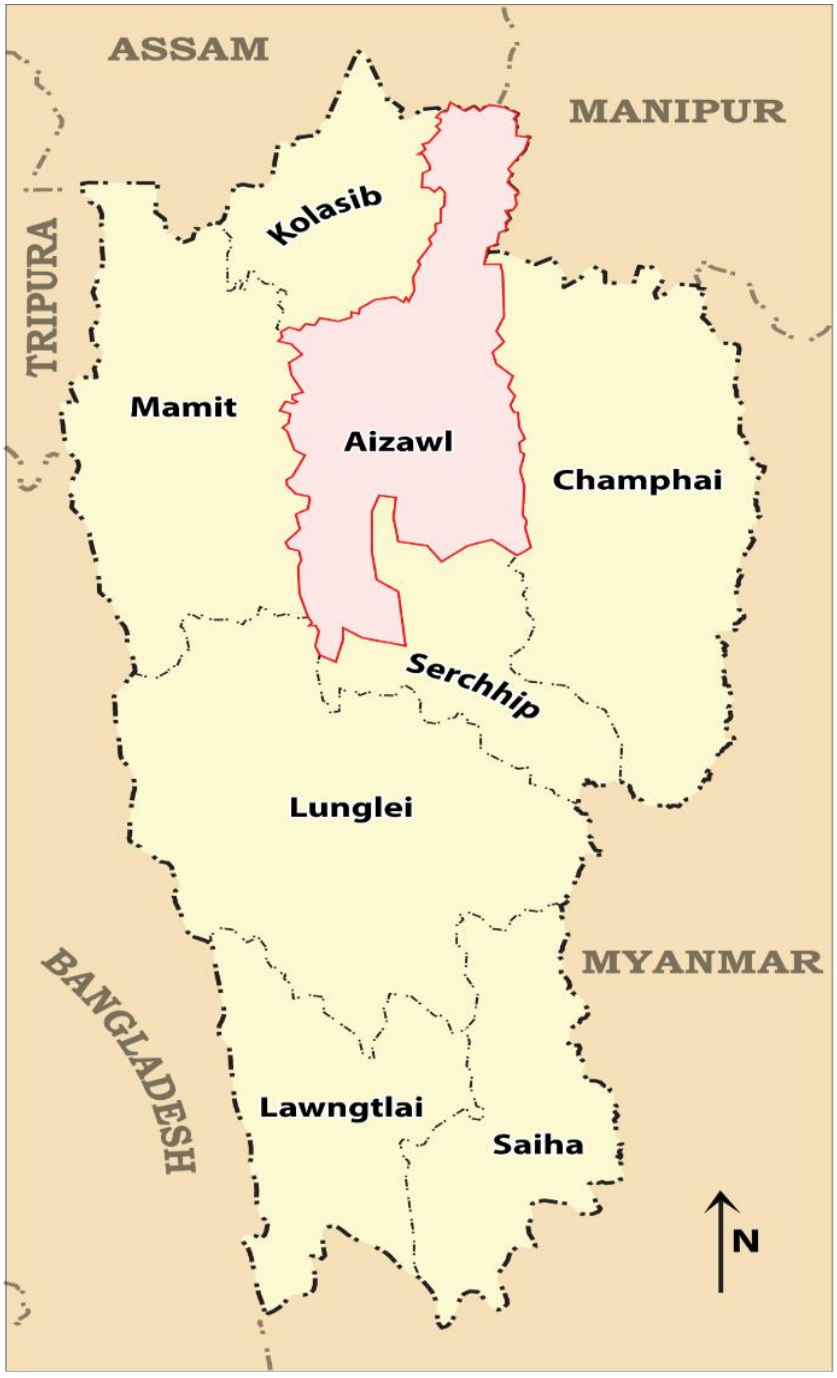


Figure 3.1 Map of Mizoram

3.1.2. Aizawl City

Aizawl, located in the northern part of the state, Mizoram is located in the north of the 'Tropic of Cancer'. It is located on a ridge that rises to a height of 1132 metres (3715 feet) above sea level, with the Tlawng and Tuirial river basins to the west and east, respectively. Due to its elevation and geographic location, Aizawl has a moderate, subtropical climate. According to the Census of India's provisional reports 2011, the population of Aizawl is 293,416 people, with 144,913 men and 148,503 women. The overall literacy rate is 98.36 per cent, with male and female literacy rates of 99.30 and 98.31 per cent, respectively. It serves as the administrative centre, including all of the important government offices, as well as the state assembly and civil secretariat.

Figure 3.2 Map of Aizawl Municipal Area

The present research is conducted in six localities of Aizawl viz., Zuangtui, Zemabawk, Bethlehem Vengthlang, Sakawrtuichhun, Maubawk and Hlimen. Zuangtui is located in the Northern part of Aizawl city, while Zemabawk and Bethlehem Vengthlang in the East, Sakawrtuichhun and Maubawk in the West and Hlimen in the South. In the six communities, a Participatory Rural Appraisal approach was employed to develop a better understanding of the community by conducting PRA exercises viz., Social Map, Timeline, and Services and Opportunities Map. Members of the communities are the participants in the PRA exercises and thorough descriptions of the six study areas are presented below.

3.1.3. Study Area

The present study was conducted in six localities representing the six zones in the Aizawl Municipal Area. The profiles of the localities studied are briefly described as under.

3.1.3.1. Aizawl North: Zuangtui

Zuangtui is located in the Northern part of Aizawl and comes within Ward I of Aizawl Municipal Area. It is located in 23°45'11"N and 92°44'43"E. The total population is 3912 with 1991 males and 1921 females (Census 2011). The total number of households is 899 where 50 households are under AAY and 385 are under the PHH category. It is surrounded by four localities viz. Bawngkawn, Thuampui, Durtlang and Muanna Veng.

There are important government institutions within the locality such as 132 KV Grid Power Substation and Control room which supplies around two-third of the total electricity consumed by the State, Power and Electricity Department Inspectorate, ZOHANCO, office of Zoram Energy Development Agency, National Institute of Electronics and Information Technology, Aizawl and Public Work Department Quality Control and Store Division. Apart from these governmental institutions, there are several industries within the locality. This may be due to the natural landscape of the locality which provides an ideal construction site for industries. The industries located in the Zuangtui are Bezalel Industries, Brook Mineral Water Industry, H.P Flour Mills, Zote Bakery, FK Tui Um Industry, F. Hrangvela Industry, Sunrise Flour Mills, Swan Industry

and Oxygen industry. There are seven churches within the locality, three Presbyterian Churches, two Salvation Army Churches, one Seventh Day Adventist Church and one Lairam Isua Krista Baptist Kohhran (LIKBK) Church. The community has established educational institutions where there is one government primary school, middle school and high school each. An English medium school is also established within the community. There are three Anganwadi Centres in the locality and an Urban Primary Health Centre is also present which has been utilised by the community people for health care services. Damna In, a de-addiction centre is also established within the community. Zuangtui community is blessed with a perfect landscape which is transformed into playgrounds and Prayer Mountain. It also has a graveyard within the boundaries of the locality. There is also a community graveyard located within the locality area and the social map in Figure 3.3 also shows the settlement pattern of the community people. The people are densely populated in the core areas of the locality and are scattered in the peripheral areas.

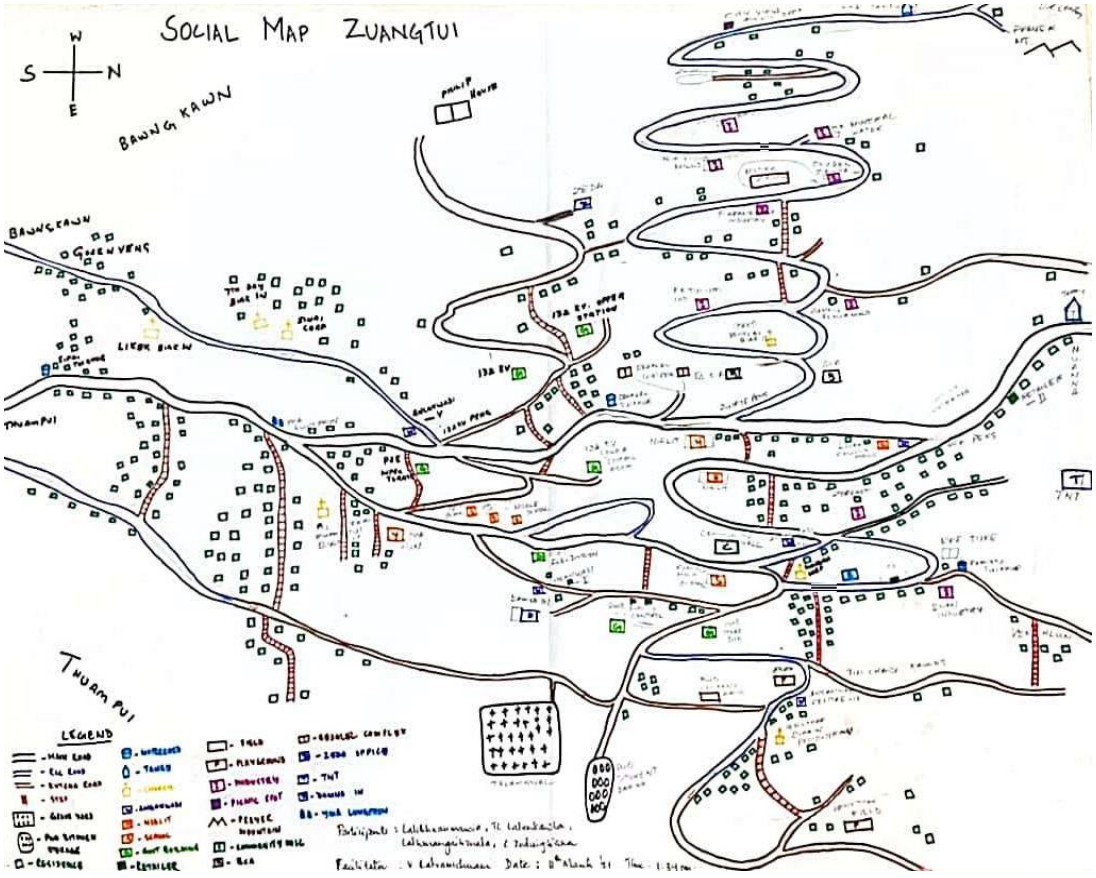
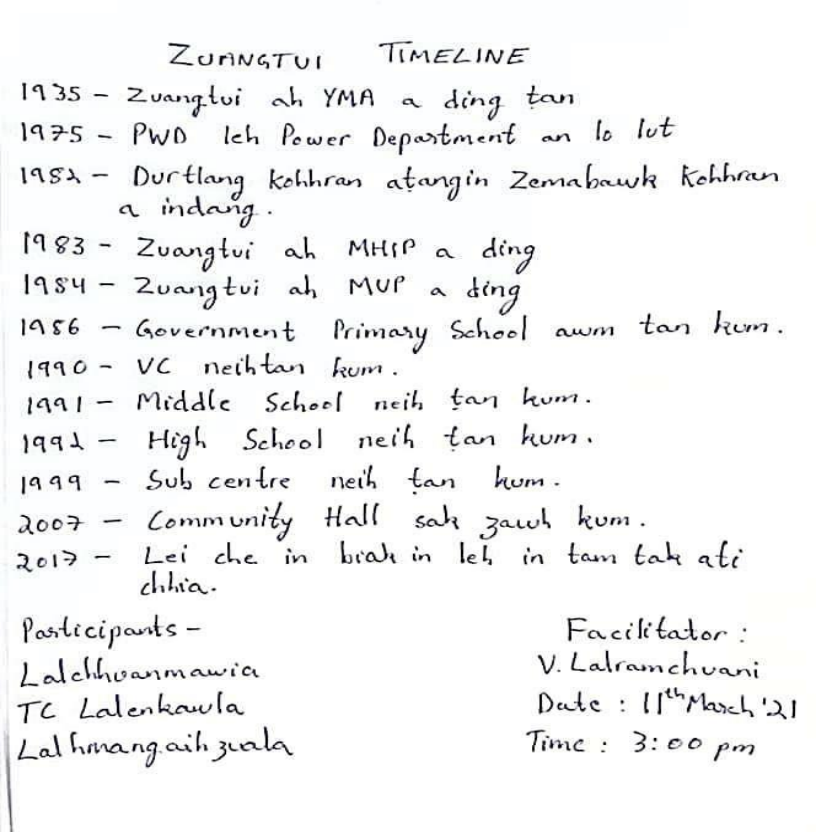


Figure 3.3 Social Map of Zuangtui

History of Zuangtui

The history of Zuangtui community has been old as it can be seen from Fig. 3.4 Young Mizo Association (YMA) was established way back in 1935 and had celebrated its Diamond Jubilee in 1995. As a hub of power stations in Mizoram, the Power Department was established within the community premises in the year 1975. In the same year, the Public Works Department was also established. Zuangtui Presbyterian Church was formed separately from Durtlang Presbyterian Church in 1982. The next year marks the establishment of Mizo Hmeichhe Insuihkhawm Pawl (MHIP) followed by Mizoram Upa Pawl (MUP) in 1984. In 1986, the educational institution, Govt. Primary School has started. A separate Village Council as Zuangtui Village Council was formed in 1990. In 1991, Govt. Middle School was started and in 1992, Govt. High School was also established. The Zuangtui community started having their own sub center in 1999. The construction of the community hall was completed in 2007 after many years. In 2017, a natural disaster occurred in which many houses and a Church were destroyed.


ZUANGTUI TIMELINE

1935 – Zuangtui ah YMA a ding tan

1975 – PWD leh Power Department an lo lut

1982 – Durtlang kohhran atangin Zemabawk kohhran a indang.

1983 – Zuangtui ah MHIP a ding

1984 – Zuangtui ah MUP a ding

1986 – Government Primary School awm tan kum.

1990 – VC neihtan kum.

1991 – Middle School neih tan kum.

1992 – High School neih tan kum.

1999 – Sub centre neih tan kum.

2007 – Community Hall sak zawh kum.

2017 – Lei che in biak in leh in tam tak ati chhia.

Participants –
Lalchhoanmawia
TC Lalenkawla
Lalhmangaihzuala

Facilitator :
V. Lalramchuani
Date : 11th March '21
Time : 3:00 pm

Figure 3.4 Timeline of Zuangtui

Services and Opportunities

The services and opportunities map of Zuangtui are shown in Fig. 3.5. From the services and opportunities Map, we can see the services available within the community are schools and sub-centres. Elementary education is available to the community people within their locality premises. For higher studies, the nearest educational institution is J. Thankima College at Bawngkawn which is around 3 km away. Minute health care services are also available at the sub-centre in the locality. But for more health care services, the community people often approach Greenwood Hospital, 2 km away, at Bawngkawn as Civil Hospital, Aizawl is a bit far from Zuangtui. State Cancer Hospital, Zemabawk is also nearby, but it is hardly utilised by the people. The services of the post office and the police are also accessed through Bawngkawn Post Office and Bawngkawn Police Station respectively. Banking services are also not available in the locality and people often go to either Thuampui or Bawngkawn for these services. The nearest market is located in Thuampui which is 1 km away from Zuangtui.

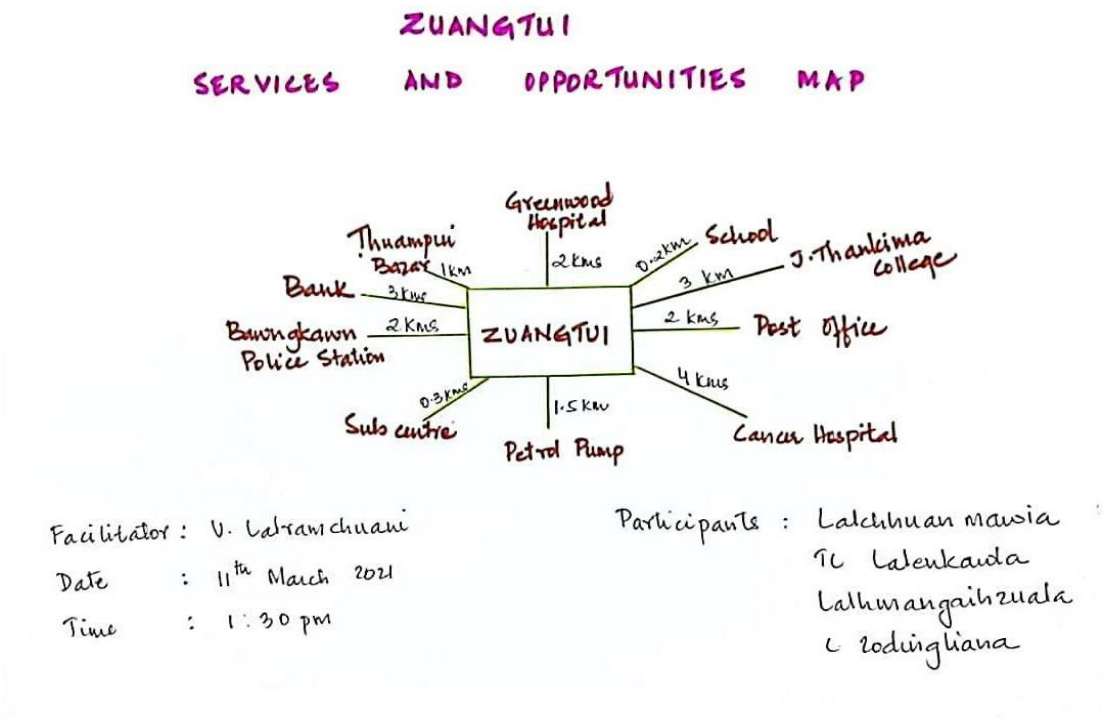


Figure 3.5 Services and Opportunities Map of Zuangtui

3.1.3.2. Aizawl East: Zemabawk

Zemabawk is located in Ward VII of the Aizawl Municipal Area, in the eastern part of the city of Aizawl. It is located in 23°44'12"N and 92°45'13"E. The total population of Zemabawk is 9983 where 5193 are males and the female population consists of 4790 according to Census 2011 (GOI, 2011). There are 2565 households within the locality and 63 are AAY households while 1093 are Priority Households. Zemabawk shares its boundary with Zemabawk North which was formed as a separate locality from Zemabawk for better administration.

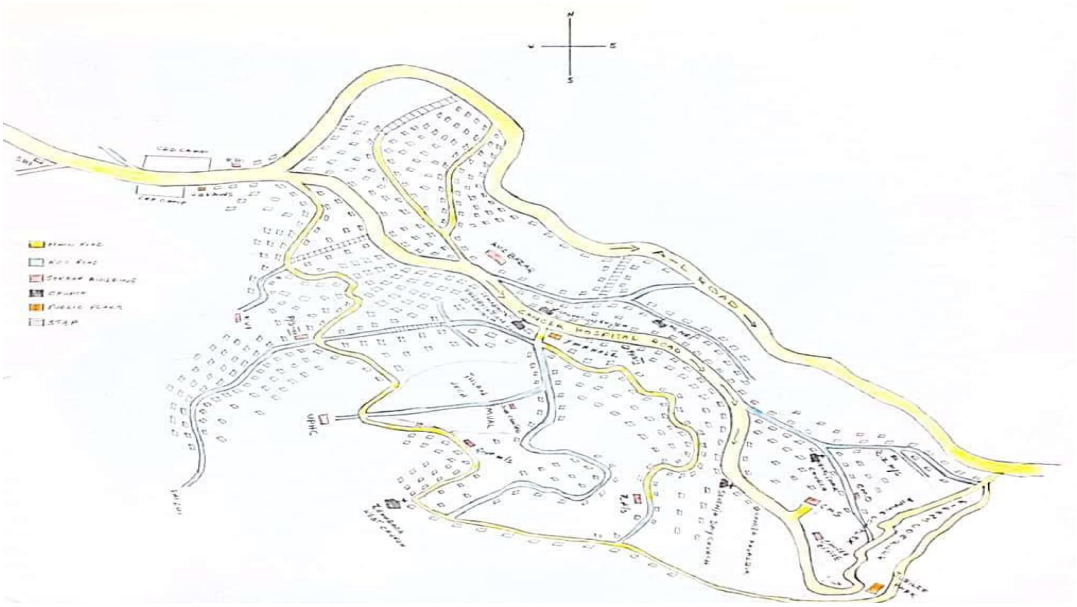


Figure 3.6 Social Map of Zemabawk

Zemabawk is a densely populated locality where there are six churches; three Presbyterian Churches and one church each of Salvation Army, UPC North East India (NEI) and Seventh Day Adventist. There are five educational institutions from Primary school, Middle School up to High School. The CRPF camp is also situated within the locality premises. Zemabawk has been famous for the State Cancer Hospital in the locality. Furthermore, a veterinary hospital, JB Paws is also available. The graveyard covers a large area in the locality and near the graveyard, there is a sub-centre and Urban Primary Health Centre. There is also a community hall known as YMA Hall which is utilised by the community people in numerous ways. Banking facilities are also available

within the locality and there is a huge market building called “AMC Bazar” which has a regular stock of food items available for sale to the community people. The social map in Fig. 3.6 showed that the pattern of distribution of settlement of the community is almost equally scattered within the locality area.

History of Zemabawk

From the Timeline shown in Fig. 3.7, we can see that the history of Zemabawk was dated back to the 1800s. Zemabawk as a locality was established in 1890 and the first Presbyterian Church started its function as a separate church in 1909. The Young Mizo Association (YMA) was established in 1949. In 1952, the Salvation Army church was established in the community. Likewise, in 1964, the Seventh Day Adventist Church was also established. Zemabawk High School was started in 1968 and the next year, the second primary school within the community was also established. In 1985, Zemabawk UPC NEI was also established. CZ Middle School was established in 1993 and 2000, the Higher Secondary School was added to the High School. In 2000, a revival occurred in the Presbyterian Church community.

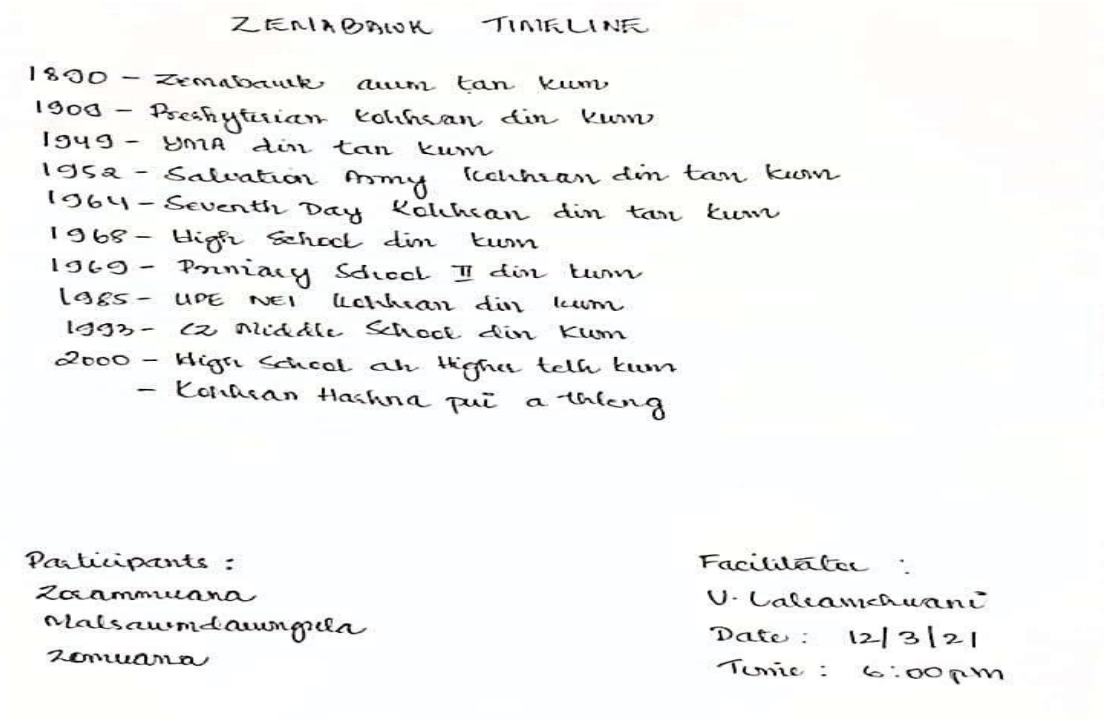


Figure 3.7 Timeline of Zemabawk

Services and Opportunities

As we can see from the services and opportunities map of Zemabawk in Fig. 3.8, there are some services available within the locality. Educational institutions are present within the locality and can be easily accessed by the community. For higher education, the nearest college is Pachhunga University College at College Veng which is about 4 km from Zemabawk. J. Thankima College, Bawngkawn is also about 5 km from the locality. For health care services, sub-centres and Urban Primary Health Centre are available. But for severe cases, Greenwood Hospital at Bawngkawn is usually utilised by the Zemabawk community. The nearest accessible petrol pump is about 2 km away. Banking services are available in the locality while the nearest police station is at Bawngkawn.

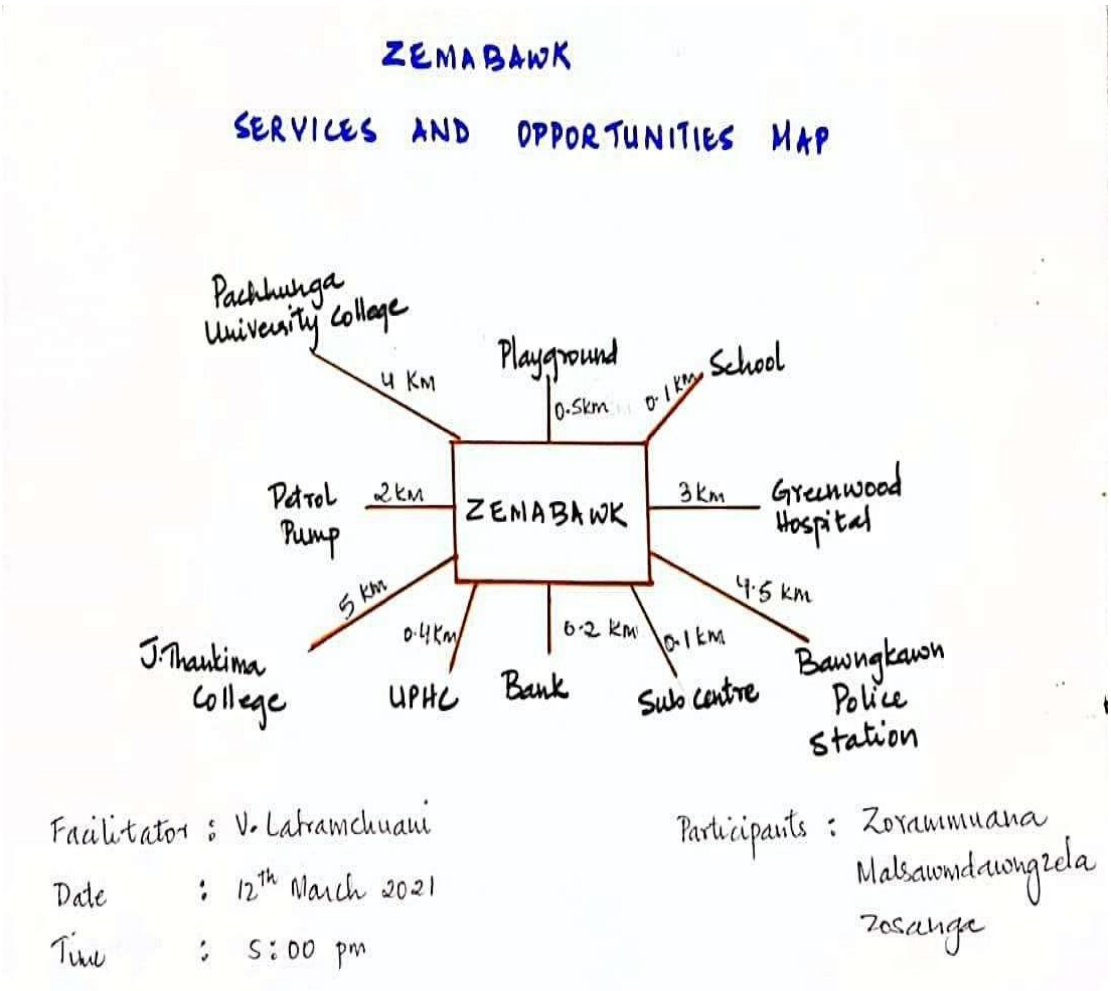


Figure 3.8 Services and Opportunities Map of Zemabawk

3.1.3.3. Aizawl East: Bethlehem Vengthlang

Located towards the East of Aizawl, Bethlehem Vengthlang comes within Ward XVI of Aizawl Municipal Area. It is located in 23°43'43"N and 92°43'38"E and has a total population of 7467 people in the community (Census 2011) with 3648 males and 3819 females. The total number of households is 1853 where 49 households are under AAY and 846 are under the PHH category.

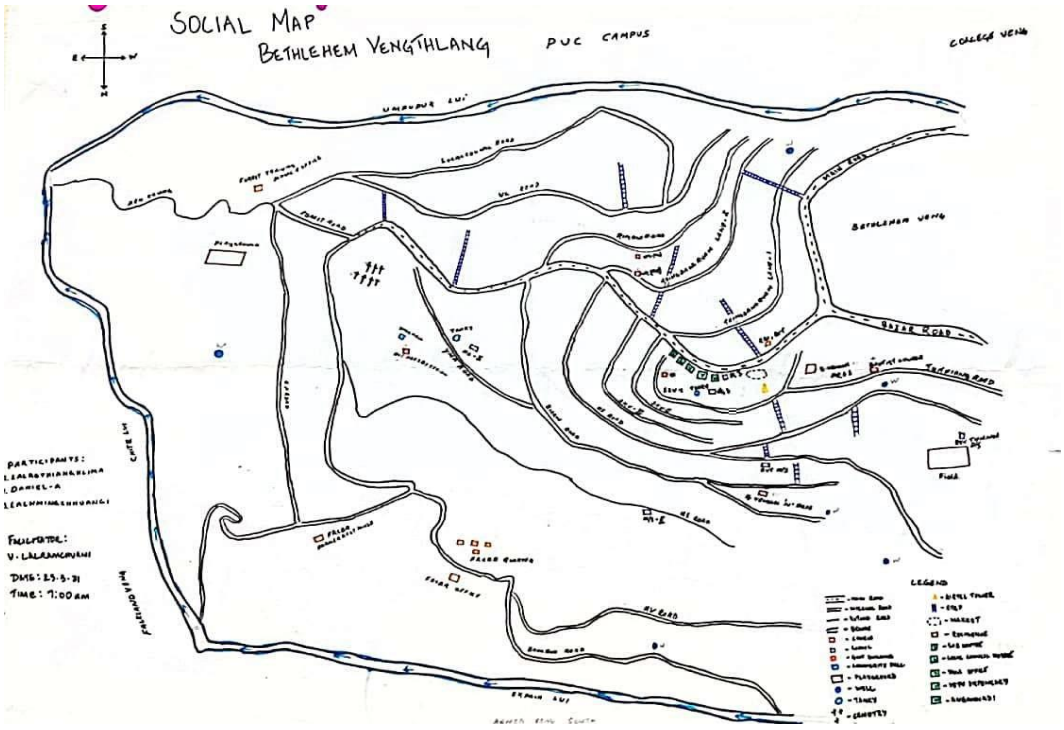


Figure 3.9 Social Map of Bethlehem Vengthlang

The locality has a brook which acts as a natural boundary with College Veng, Falkland Veng and Armed Veng South. Bethlehem Vengthlang also shares its boundaries with Bethlehem Veng (see Fig. 3.9). The community has a total of seven churches, where three are Presbyterian Churches, one Salvation Army Church, Baptist Church, UPC North East India and UPC Mizoram Churches each. There are five schools in the community, two government primary schools, two government middle schools and one Rev. Thianga primary school. There are also Anganwadi centres in the community. The community has a playground that is utilised by the youths in the community to practice football which enabled them to become champions in various tournaments within Aizawl city. There is a community hall, YMA Office, Local Council house which is utilized by the community

people, Police Beat Post, Sub Centre, and VETY Dispensary, whose services have benefited the people within the community. The FRCBR Office, quarters and farmer rest houses are located within the community area. The community also has a market of their own. There are two graveyards within the community.

History of Bethlehem Vengthlang

The timeline of Bethlehem Vengthlang in Fig. 3.10 shows that Bethlehem Vengthlang was a part of Bethlehem Veng and they formed a separate community along with a separate Village Council in the year 1991. In the same manner, the Mizoram Upa Pawl (MUP), Mizoram Hmeichhe Insuihkhawm Pawl (MHIP) and the Young Mizo Association (YMA) were all established within the community in 1991. The Government Primary School I was established in 1962, Government Primary School II in 1972, Government Middle School I in 1972 and Government High School in 1980, all before the community was separated from Bethlehem Veng. In 1992, Rev. Thianga Primary School was established and in 1994, Bethlehem Vengthlang Presbyterian Church was formed. The Government Middle School II was established in the years 1995 and 2004, the Government established Forest Research Centre for Bamboo and Rattan (FRCBR) within the locality. The Police Beat Post was opened in 2019.

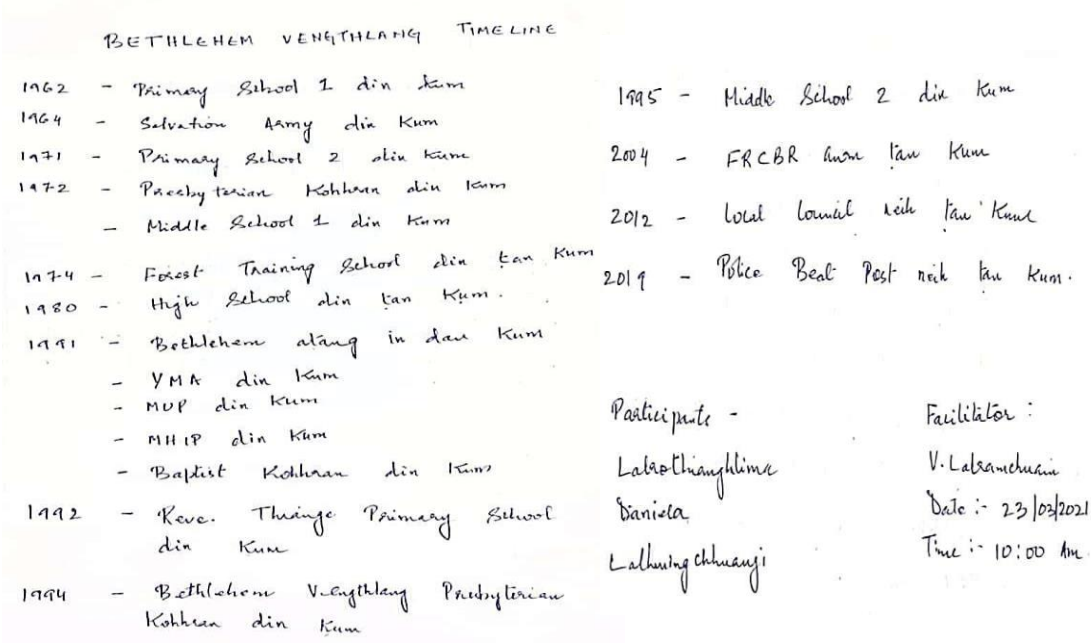


Figure 3.10 Timeline of Bethlehem Vengthlang

Services and Opportunities

The services and opportunities map in Fig. 3.11 showed that school, playground/field, bank, market, ATM facilities are all located within the locality and it is easy for the community to access them. All the schools from Anganwadi to High School in the locality are within 0.3 km which are easily accessible. For higher secondary schooling, Govt. Central Higher Secondary School is 0.5 km far from the locality and Pachhunga University College is about 0.5 km away from the neighbouring locality, College Veng which had many students from the community enrolled. Even though the sub-centre is present within the locality, the community people often go to Civil Hospital, Aizawl for health care which is around 2 km from the locality. For postal services, Aizawl Head Post Office in Treasury Square, Aizawl which is about 1 km from the locality is often used. The nearest petrol pump is the Mizofed Petrol Pump in Treasury Square.

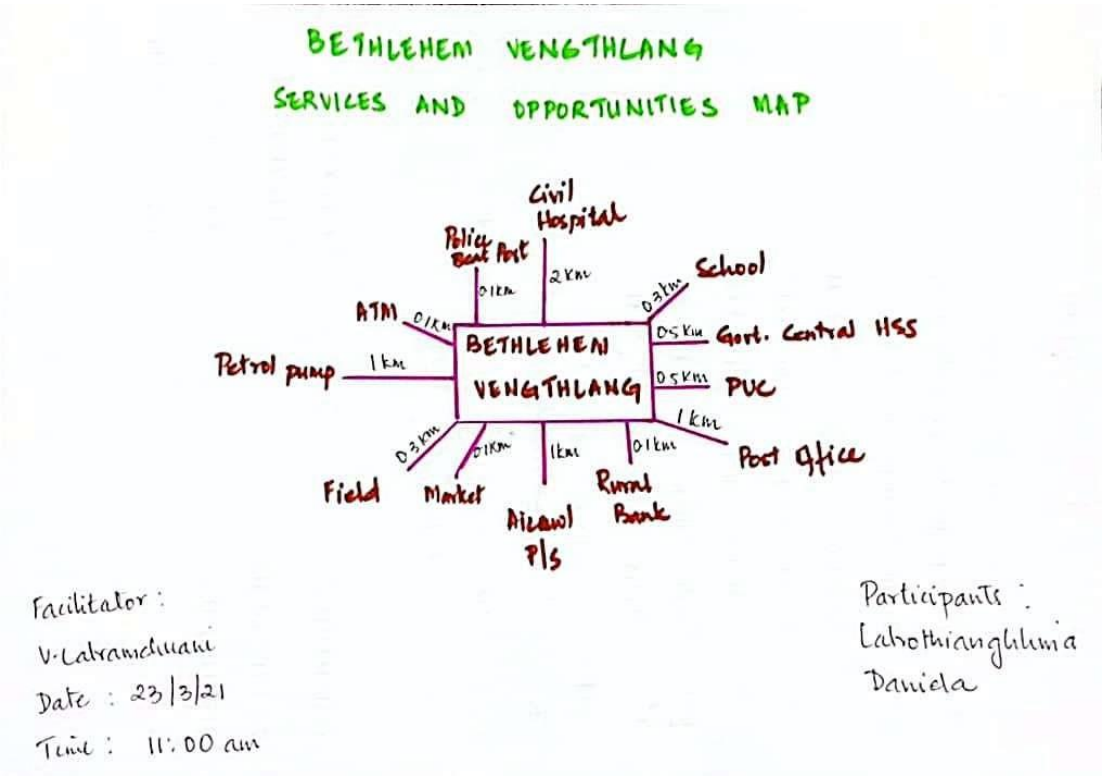


Figure 3.11 Services and Opportunities Map of Bethlehem Vengthlang

3.1.3.4. Aizawl West: Sakawrtuichhun

Sakawrtuichhun is located in the Western part of Aizawl and comes within Ward XI of the Aizawl Municipal Area. It is located in 23°45'30"N and 92°40'39"E. The total population is 1425 with 755 males and 670 females (Census 2011). The total number of households is 368 where 24 households are under AAY and 130 are under the PHH category. Sakawrtuichhun area covers a large area till Sairang and Sihhmui. The Social Map in Fig. 3.12 shows the settlement area of the community people. There is a Presbyterian Church within the locality which serves as a centre point in the locality. The Police Training Centre of Mizoram is also located within the locality area. There are two Anganwadi Centres within the locality along with four educational institutions from Primary school to High School. The locality also has a sub-centre for health care and there is a community hall and indoor stadium.

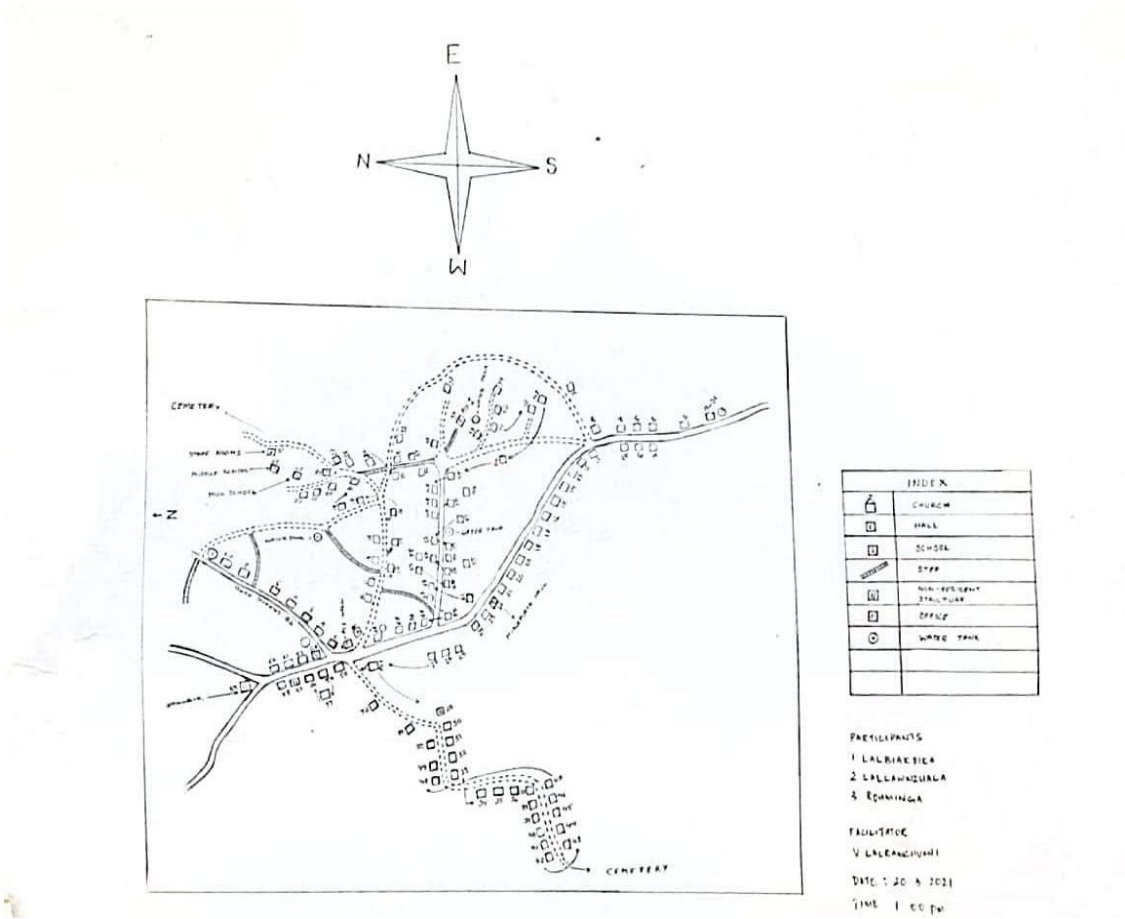


Figure 3.12 Social Map of Sakawrtuichhun

History of Sakawrtuichhun

According to the records in the Synod Office, Aizawl, a Preaching Station of Presbyterian Church, was formed in 1905 in Sakawrtuichhun. Sakawrtuichhun was gifted to Saikunga by his father Nikhama, who was the Chieftain of Luangmual in 1923. This was believed to mark the permanent settlement of people in the locality to date. In 1945, the first educational institution, Govt. Primary School I was established. The Sakawrtuichhun Branch YMA was established in 1946. The land area for the Police Training Centre was given to the Government by the locality and in 1972, the Police Training Centre was started to be occupied. The construction work for the Indoor Stadium and playground was started in 1973 and 1980 respectively. In 1980, Ramrikawn Link Road construction also started. The Govt. Middle school was started in 1982. In 1986, the health sub-centre was established and the following year, the first Anganwadi centre was established. The work of digging up underground water was started by PHED in 1991. In 1993, Govt. High School was established and the same year marks the entrance of landline phones within the locality. In 1994, Govt. Primary school II was established and in 2007, Anganwadi Centre II was started. In 2011, the Village Council was transformed into a Local Council. In 2012, Aizawl city Bus started servicing to and from the locality and in 2020, the Local Task Force of Sakawrtuichhun was formed due to the pandemic.

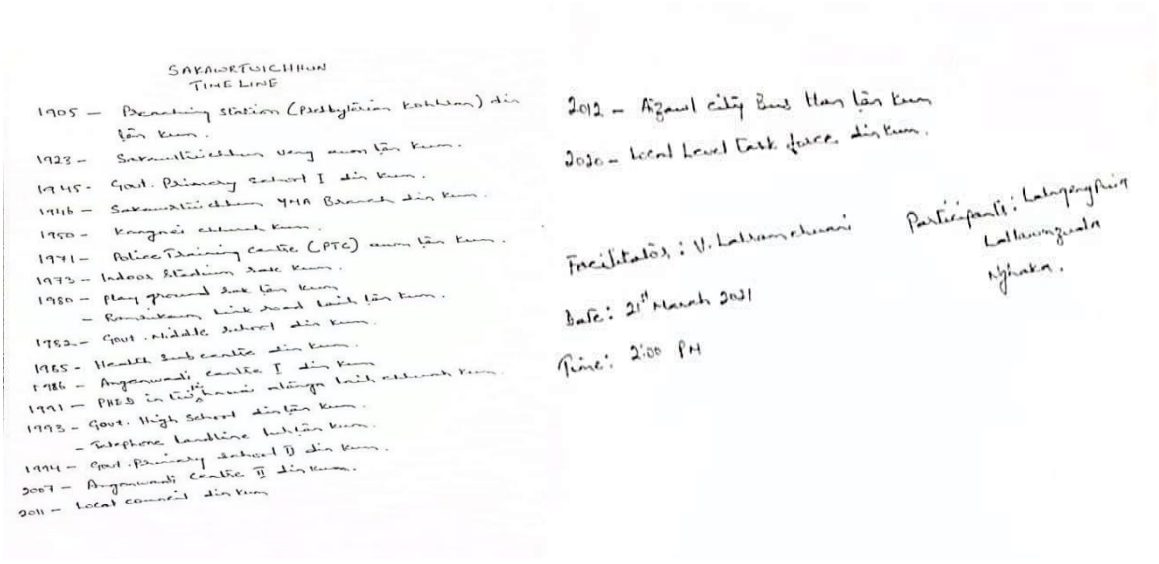


Figure 3.13 Timeline of Sakawrtuichhun

Services and Opportunities

The services and opportunities map in Fig. 3.14 showed that educational facilities from primary to high school are easily accessible within the locality area. The nearest Higher Secondary School is St. James School in Chawlhmun which is 4 km far from Sakawrtuichhun. For higher studies, Aizawl West College is the nearest which is 7 km away. Mizoram University is also 5 km away from the locality. The churches are also not far to reach by the community people. For banking services, the nearest is in Ramrikawn which is 2.6 km away and the nearest police station is in Zonuam. For postal services, the Vaivakawn Post office is the nearest even though health centres are available in the locality, people often utilised the services of Seventh Day Hospital near Vaivakawn. Central Jail is located 2.5 km from the locality and the stone quarries are 2 km away from the centres of the locality.

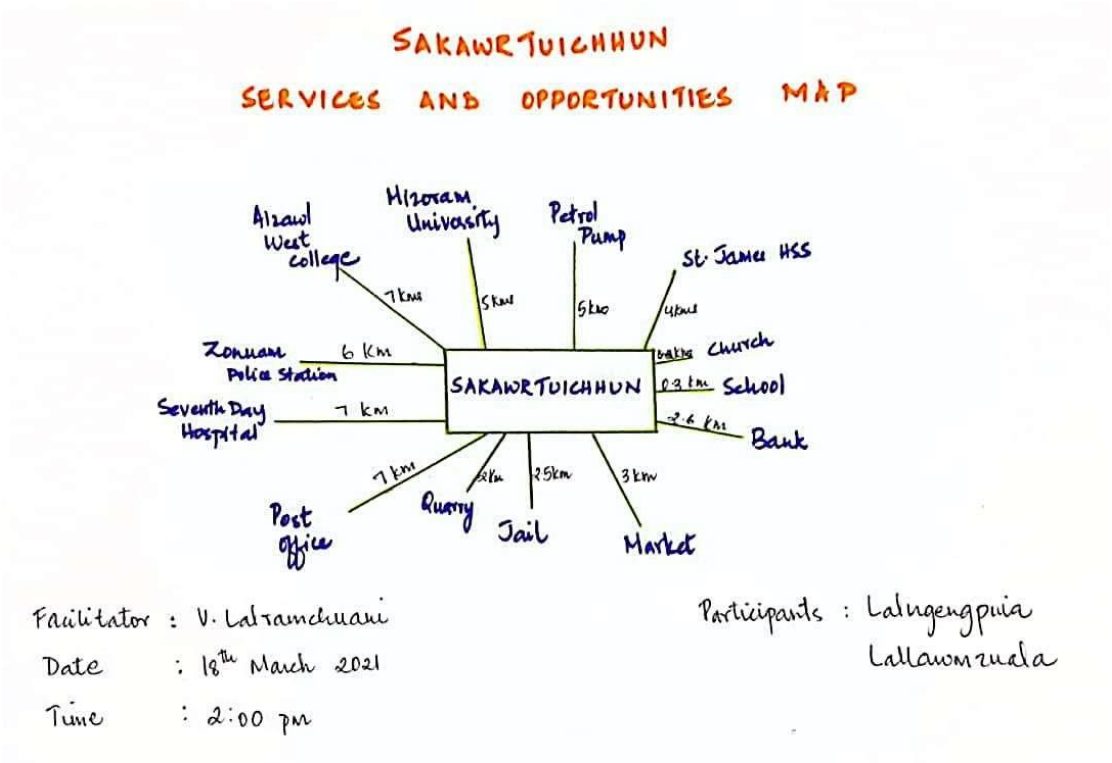


Figure 3.14 Services and Opportunities Map of Sakawrtuichhun

3.1.3.5. Aizawl West: Maubawk

Situated in the Western part of Aizawl, Maubawk is located in 23°43'18"N and 92°41'52"E. According to the Census 2011, 4120 people are residing in the locality with 1980 male and 2140 female. The total number of households in the locality is 870 (Source- Community Leaders) while 514 households are enrolled under NFSA. There are 39 AAY households and 439 households under PHH. Maubawk shares its boundary with Bungkawn, Bungkawn Vengthar and Lawipu.

The social map of Maubawk (Fig. 3.15) shows that there are nine churches; three Presbyterian Churches, one each of UPC NEI, Baptist Church, Salvation Army, Roman Catholic, IKK and Kohhran Thianghlim within the locality and there is also a mandir. There are five Anganwadi centres and six educational institutions viz. two primary schools, two middle schools, one high school and one English medium school in the locality. The map also shows one watershed, the Local Council house which is utilised by the community leaders for meetings, a furniture workshop, UPC Pastor Quarters and PHE office. A private hospital, Blessing Nursing Home is also shown on the map.

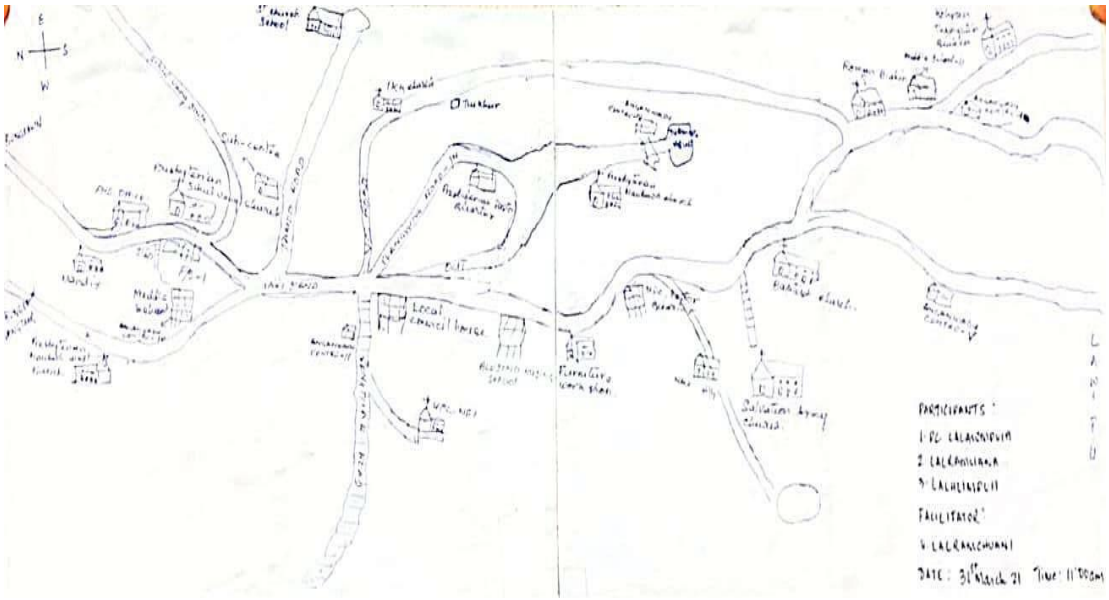


Figure 3.15 Social Map of Maubawk

History of Maubawk

The history of Maubawk can be traced back to 1890 which is believed to be the year people start settling as a community in the locality. In 1911, Presbyterian Church was established. In 1947, the first Village Council was formed and in 1954, Govt. Primary School I was established following the works of the Village Council. After more than twenty years in 1978, Govt. Middle School I was also established. The Govt. High School was established in 1990 and in 2000, Govt. Middle School II was established. The health sub-centre was established in 2004. In 2010, the community faced a man-made disaster where houses were burned for the first time. In 2019, the YMA Property House construction was finished. In 2021, a second manmade disaster was experienced by the community in which many houses were burned down affecting around 20 households.

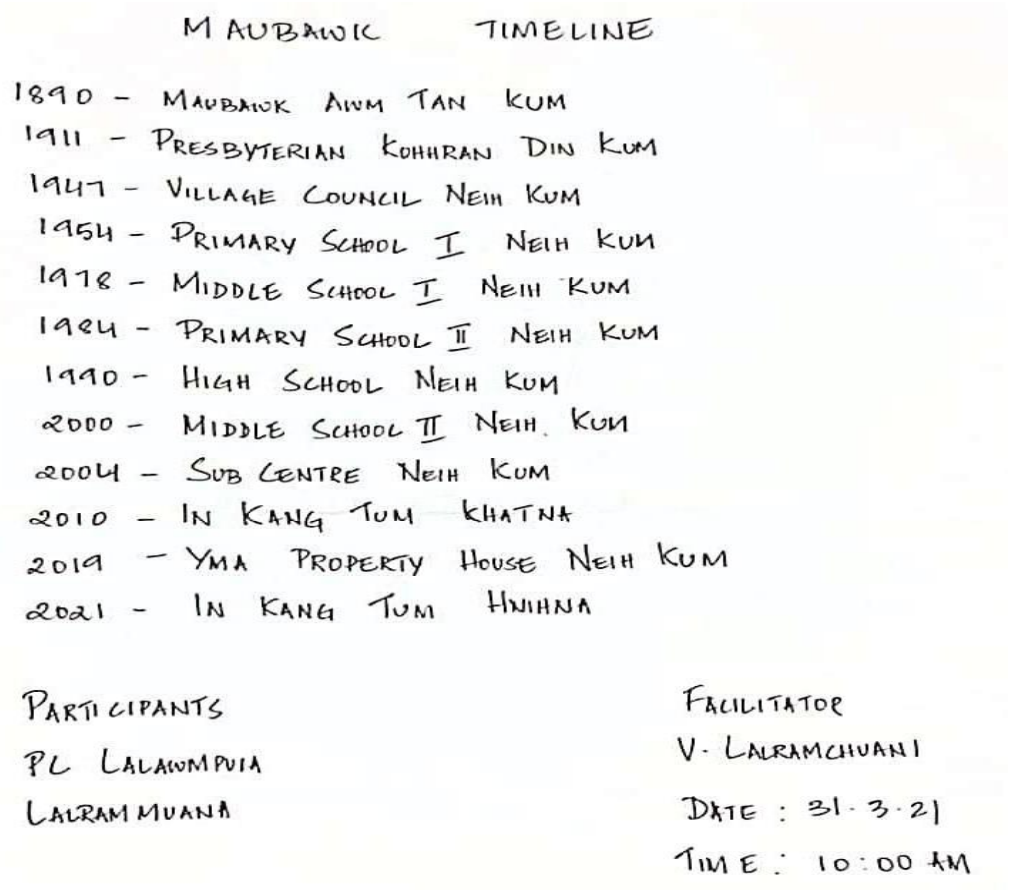


Figure 3.16 Timeline of Maubawk

Services and Opportunities

The services and opportunities map of Maubawk in Fig. 3.17 showed that all the educational institutions in the locality can be easily reached from Maubawk Kawn. For higher studies, the nearest college is Aizawl College in Mission Veng and it is about 1.2 km away. Banking facilities and ATM facilities are also available within the locality. The nearest petrol pump is at Ngaizel which is around 3 km and the nearest Police Station is in Kulikawn which is about 2 km away from the locality. Maubawk has its market in the locality. Also, a private hospital is established within the locality area and the community people accessed the services of Lawipu PHC for health care services.

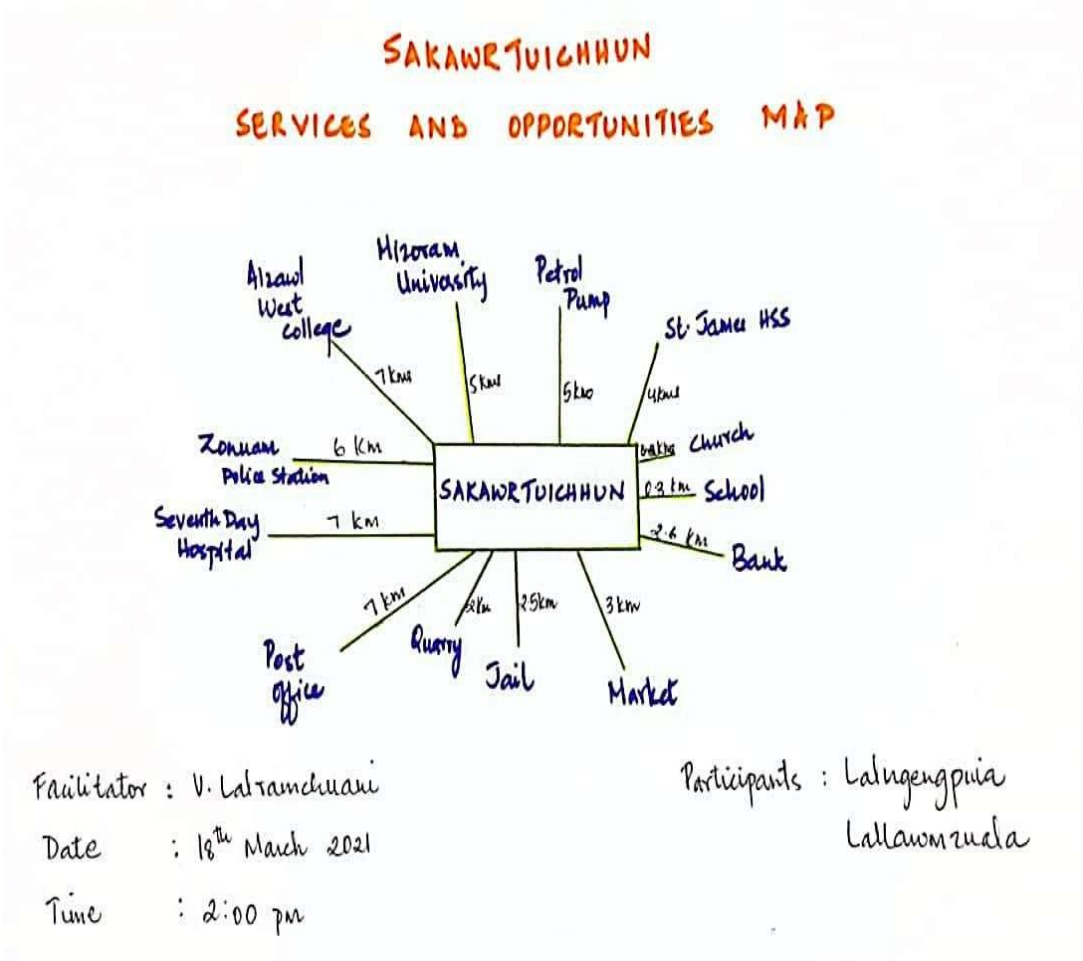
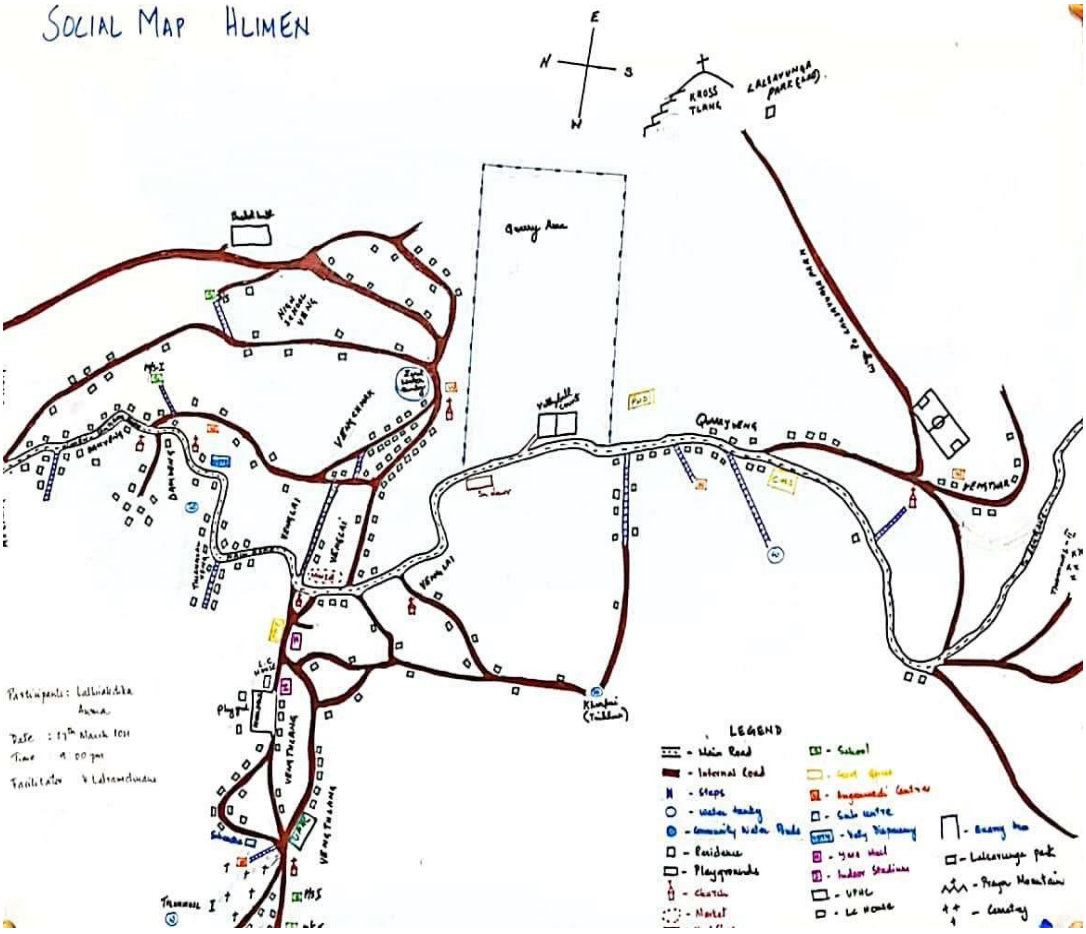


Figure 3.17 Services and Opportunities of Maubawk

3.1.3.6. Aizawl South: Hlimen

Hlimen is in the Southern part of Aizawl city. It is located in 23°41'02"N and 92°42'57"E. The Census 2011 records 2733 as the total population with 1404 males and 1329 females in the community. The number of households in the locality is 729 where 26 households are AAY and 289 and under PHH. Hlimen is within Ward XIX of the Aizawl Municipal Area. Hlimen shares its boundary with Melthum.

The social map in Fig. 3.18 shows that there is a huge quarry area in Hlimen. This has been the source of employment opportunity not only for the people in the community but also for people in the neighbouring communities. There are many stone crushers installed in the quarry area. For better administration, Hlimen locality is subdivided into smaller areas viz. Dam Veng, High School Veng, Thlanmual Veng, Vengchhak, Venglai, Vengthlang, Quarry Veng and Vengthlang. These sub-divided Vengs in the community have separate YMA Branches for better community cooperation and management. There are a total of seven churches of different denominations within the locality. The locality has two markets separately for vegetables and meat, in which the main market day is Saturday. The community also has a YMA Hall, Indoor stadium, a basketball court, a volleyball court and two playgrounds. There are five Anganwadi Centres within the locality and four educational institutions viz. Primary School, Middle School and a High School. There is also an English medium school established in the locality. Urban Primary Health Centre and a sub-centre are available within the locality for health care services and a Very dispensary is established in the community. There are three government offices within the locality viz. PWD Site Office, PHE Site Office and Central Workshop. Hlimen also has one zonal tank constructed within the locality area and four watersheds that are utilised by the community to date. The famous Lalsavunga Park is also located within the locality which attracts many tourists and locals to spend their leisure time. Hlimen community is also blessed with a beautiful landscape which enabled them to transform it into a prayer mountain, utilised by many church fellowships for church programs. The houses in Hlimen are constructed in such a way that the people can make small gardens in their household area which enables them to grow their vegetables and help them become self-sustained.


SOCIAL MAP HLIMEN
E
N
S
W
CROSS
LALSAVUNGA PARK (LAD)
Quarry Area
Khuangchera Mara
Quarry veng
Vengthar
Vengsai
Vengthlang
Khuangchera
Khuangchera Mara
Khuangchera Veng
Vengsai
Vengthlang
Vengthlang
Khuangchera

1971, the High School was reopened. Likewise, the Hlimen MUP Unit was reformed in 1976. In 1975, Hlimen Mizo Hmeichhe Insuihkhawm Pawl (MHIP) was formed. In 1986, huge destruction at the Hlimen Quarry occurred in which some lives were lost. The same year marks the establishment of a Central Workshop by the Government in the locality. In 1989, Govt. Primary School II was established, after three years, in 1991, Govt. Middle School was also established. In 1992, the second destruction of the Hlimen Quarry occurred in which more lives were lost compared to the previous one. In the year 2000, an English medium school known as Presbyterian English School was established and in 2004, the Urban Health Centre was established in the community. The first election for the Local Council was held in 2012 and in the same year, the PHE Site Office was established. In 2014, Lalsavunga Park and the Very Dispensary were opened.

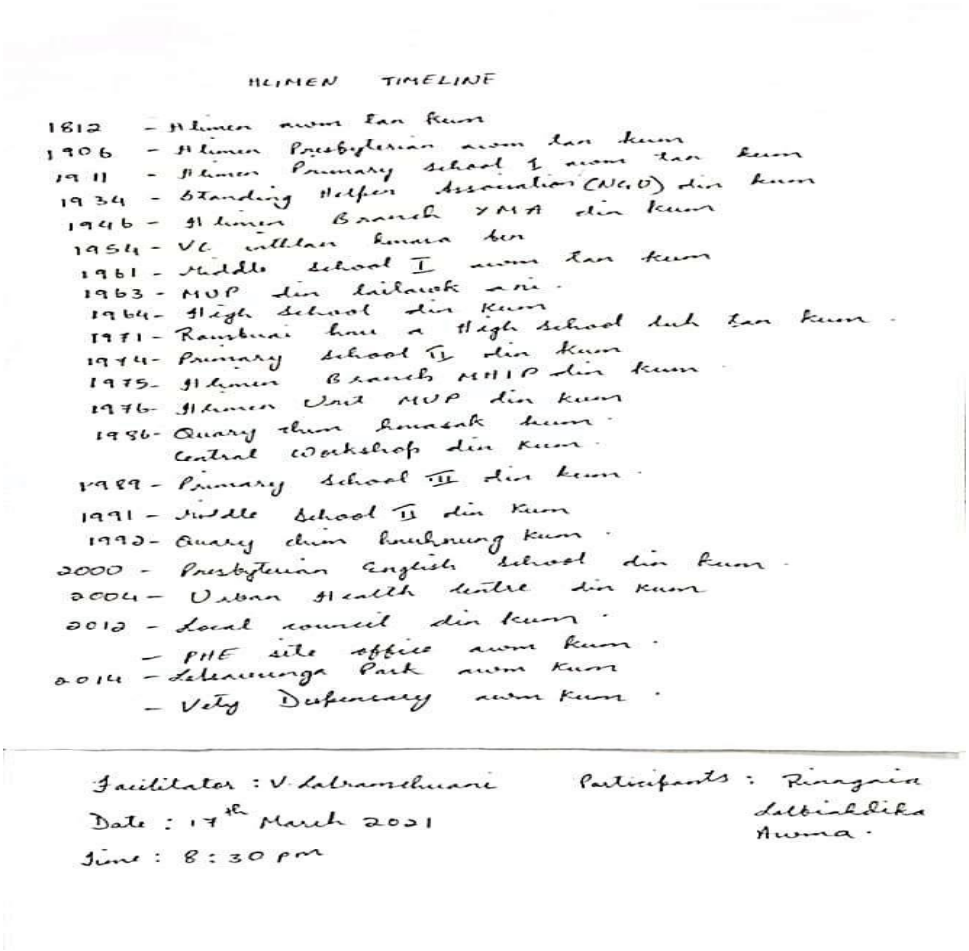


Figure 3.19 Timeline of Hlimen

Services and Opportunities

Figure 3.20 shows the services and opportunities available to the Hlimen community. The educational institutions from Primary School to High School are easily accessible within the locality. The nearest higher secondary school is St. Paul's Higher Secondary School which is located in Tlangnuam and is about 2 km far from Hlimen. The nearest college is Aizawl College in Sikulpuikawn and is about 4 km from the locality. The recreational space, Lalsavunga Park and the quarry, the source of livelihood for many households within the community is within 1 km from the centre of the locality. The playground is about 2 km far from the centre and post office services are available within the locality through a sub-post office established in the locality. The nearest police station and banking facilities are available at Kulikawn which is 2.5 km from Hlimen. Even though primary health care facilities are available within the locality, for health care service, the community people often access the services of Alpha Hospital at Kulikawn.

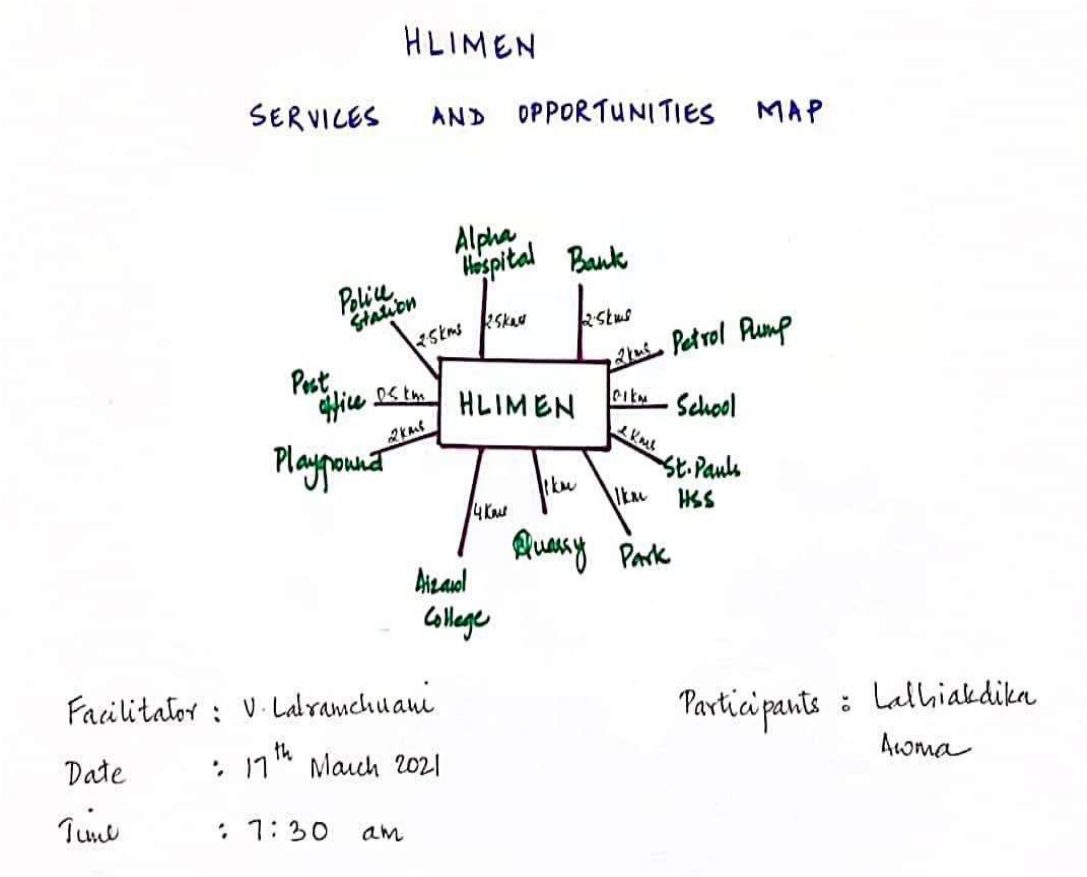


Figure 3.20 Services and Opportunities Map of Hlimen

3.2. Research Design

The previous section presented a detailed description of the study area of the present study. This section presents the research objectives, hypotheses and the research design of the present study which is further presented into sub-sections viz. sampling, tools of data collection, processing and analysis and the important concepts used in the present study are defined and ethical considerations are also presented in this chapter.

3.2.1. Objectives

The following are the objectives of the present study:

1. To probe into the challenges faced by poor households during COVID-19 Lockdown and the coping strategies used by them.
2. To understand the role of State, Civil Society and Church organisation during the COVID-19 lockdown in Aizawl city.
3. To assess the social capital and social support embedded in the composition and structure of social networks of poor households in Aizawl.
4. To assess the resilience of the poor households during the COVID-19 lockdown.
5. To examine the relationship between social capital, social support and household resilience of poor households during the COVID-19 lockdown.

3.2.2. Hypotheses

The following hypotheses are formulated in order to provide focus to the present study:

1. Social capital assessed in terms of the density of social networks of the poor households is related to the resilience during the COVID-19 lockdown.
2. Social capital assessed in terms of the structural hole measures is related to the resilience of the poor households during the COVID-19 lockdown.
3. Availability of social support from social networks of poor households is directly related to their resilience during the COVID-19 lockdown.

The first hypothesis draws its inspiration from the writings of Coleman (1988) while the second hypothesis is drawn from the works of R. S. Burt (2000). The third hypothesis is intuitively drawn.

3.2.3. Design

The present study is explanatory in design and cross-sectional in nature and is based on the primary data collected through sequential, quantitative, qualitative and participatory methods. The primary data is collected through field surveys using pretested structured household interview schedules from the six localities within Aizawl Municipal Area. The study also employs Participatory Rural Appraisal (PRA) and case study methods to supplement the quantitative data. However, the study is predominantly quantitative in its methodological orientation.

3.2.3.1 Sampling

The unit of the study was a household and the respondent includes any adult member of the households selected. The population of the study includes all the poor households residing in Aizawl city during the COVID-19 Lockdown.

A multi-stage sampling procedure was employed for the selection of cities, localities and households. The first stage is the selection of the city. Aizawl, the capital of Mizoram is purposely chosen for the present study. The second stage is the selection of the localities within Aizawl city. Six localities within Aizawl city are selected to represent the four zones in the city East (2), West (2), North (1) and South (1) of Aizawl city purposively. As the eastern and western zones have larger populations, two localities were chosen from them. The third stage is the selection of households. Disproportionate stratified random sampling was employed for the selection of households from the list collected from the retailers in each locality with an acknowledgement from the community leaders. From these lists, the poor and very poor households were randomly selected using a systematic sampling procedure. The poor and very poor households were disproportionately distributed in the sample for their proportionate distribution between these two categories results inadequate subsample size for comparison. In the selected households, an adult member was interviewed. The sample size thus obtained was 120.

3.2.3.2 Tools of Data Collection, Processing and Analysis

The quantitative data for the present study was collected through field surveys with a pretested structured household interview schedule. The structured household interview schedule was designed using KoboToolbox while KoBoCollect (Harvard Humanitarian Initiative, n.d) was used to collect the data with the help of an android device. For collecting Ego-centric Network information of the respondents, name generators and interpreters (see Perry, Pescosolido & Borgatti 2018; Campbell & Lee 1991) is included in the schedule. The data were collected during the months of February and March 2021 and the reference period was the first lockdown during the period between March and August 2020.

Focus Group Discussions with stakeholders such as community leaders were used to collect qualitative data to support the quantitative data. Participatory exercises such as Social Mapping, Services and Opportunities Mapping and Impact Diagram are facilitated for a better understanding of the vulnerability context of the urban poor during COVID-19 lockdown.

For data processing and analysis of quantitative data, Microsoft Excel and SPSS (Statistical Package for Social Sciences) were used. For qualitative data analysis, thematic analysis was used and for egocentric network analysis, E Net software was used (Halgin and Borgatti, 2012). The results of analysis of personal network data from E-Net software (Borgatti, 2006) such as heterogeneity, homophily and the structural hole were further analysed using SPSS. Simple averages, cross-tabulation, percentages, independent 't' test, Pearson's chi-square test and Karl Pearson's Product Moment correlation were used for analyses of the quantitative data.

3.2.3.3. Definitions of Concepts

The definitions of important concepts used in the present study are as under:

Social network: It refers to the relationships and connections of individuals and households with each other and with organisations as well as associations. It includes both formal and informal networks.

Social capital: It refers to the resources of an individual or community which is brought about by their social relationships, connections and networks.

Social support: It refers to the different types of support such as instrumental support-tangible support in cash or kind, emotional support, and informational support, received by an individual or household through their social networks.

Resilience of poor: It refers to the ability of households and communities to cope with external shocks or stresses brought about by the COVID-19 pandemic which reduces their vulnerability and maintains a certain level of wellbeing. It focuses on the availability of social support.

Poor: It includes households in the selected localities identified as Priority Households (PHH) of the Targeted Public Distribution System (TPDS) obtained from the Local Council.

Very poor: It includes households in the selected localities identified and covered under Antyodaya Anna Yojana (AAY) of the Targeted Public Distribution System (TPDS) obtained from the Local Council.

Lockdown: It is a situation that is taken as a precautionary measure to establish physical distance. The lockdown in the study is the first lockdown enacted by the Government of Mizoram from 22nd March 2020, a period of twenty-one days was with two additional extensions of the lockdown period. The second lockdown was for forty days which has been extended to the third lockdown of eighty days.

3.2.3.4. Ethical Considerations

1. Formal permission was obtained from the Local Council of the selected localities (Veng) to research in their locality.
2. Informed consent was obtained from the households to participate in the study and be included in the field survey.
3. Confidentiality is maintained in the qualitative part of the study.
4. Physical distancing is maintained during the collection of primary data.

The settings and the methodological aspects of the present study are described in this chapter. In view of these, the next section discusses the results of the analysis of the collected data.

CHAPTER IV

SOCIAL NETWORKS, SOCIAL SUPPORT AND RESILIENCE OF POOR HOUSEHOLDS

CHAPTER IV

SOCIAL NETWORKS, SOCIAL SUPPORT AND RESILIENCE OF POOR HOUSEHOLDS

The previous chapter describes the profile and settings of the study areas as well as the methodology of the study. This chapter attempts to present the analysis of data collected through field surveys in the six localities within Aizawl City. This chapter has been divided into five sections. It consists of the social structural bases of poor households; lockdown, livelihood challenges and coping of the poor households; social network, social support and social capital; resilience and adaptation of poor households during the lockdown and correlates of household resilience and adaptation during the lockdown.

4.1. Social Structural Bases of Poor Households

The social structural bases of the poor households in Aizawl city are further divided into five sub-sections viz. the demographic profile of the respondents, the family profile of the respondents, the social characteristics of the respondents, the economic characteristics of the respondents and the civic and political affiliation of the family members of the respondents.

4.1.1. Demographic Profile of the Respondents

Gender, age group, marital status, and educational status form the demographic profile of the respondents in the present study (see Table 4.1). The total number of households in the sample is one hundred and twenty where Very Poor households (Antodaya Anna Yojana) and Poor Households (Priority Households) are sixty each in number.

Out of the total respondents, a little more than a fifth (21.7%) of the respondents are male respondents whereas more than three fourth of the respondents are female (78.3%). In comparison between the two household categories, female respondents are comparatively higher in number among both the very poor and poor household respondents. Among the very poor households, one fourth (25%) of respondents are male and three fourth (75%) respondents are female whereas among the poor households, less

than a fourth (18.3%) are male respondents and more than three fourth (81.7%) are female respondents.

Table 4.1 Demographic Profile of the Respondents

Sl. No.	Characteristic	Socio-Economic Category		Total N = 120
		Very Poor (AAY) n = 60	Poor (PHH) n = 60	
I	**Gender**			
	Female	45 (75.0)	49 (81.7)	94 (78.3)
	Male	15 (25.0)	11 (18.3)	26 (21.7)
II	**Age Group**			
	Young (<35)	17 (28.3)	16 (26.7)	33 (27.5)
	Middle (36 -59)	18 (30.0)	22 (36.7)	40 (33.3)
	Old (60+)	25 (41.7)	22 (36.7)	47 (39.2)
	Mean Years of Age	51.50 ± 20.170	50.90 ±18.277	51.20 ± 19.168
III	**Marital Status**			
	Married	26 (43.3)	21 (35.0)	47 (39.2)
	Unmarried	27 (45.0)	35 (58.3)	62 (51.7)
	Widowed	7 (11.7)	4 (6.7)	11 (9.2)
IV	**Education Status**			
	Illiterate	2 (3.3)	3 (5.0)	5 (4.2)
	Primary (1- 4)	18 (30.0)	17 (28.3)	35 (29.2)
	Middle (5 -7)	12 (20.0)	12 (20.0)	24 (20.0)
	High School (8 - 10)	21 (35.0)	20 (33.3)	41 (34.2)
	Higher Secondary School (11 -12)	5 (8.3)	6 (10.0)	11 (9.2)
	Graduation and above	2 (3.3)	2 (3.3)	4 (3.3)
	Mean Years of Education	6.60 ± 3.660	6.53 ± 3.762	6.57 ± 3.696

Source: Computed Mean ± SD Figures in parentheses are percentages

The age group of the respondents are classified into three groups, young age group (less than 35), middle age group (between 36-59) and old age (60 and above). The study had found out that among the total respondents, a little more than a third (39.2%) are from the old age group which is the highest, followed by a third (33.3%) of the respondents in the middle age group and less than a third (27.5%) are from young age group. In

comparison between the two household categories, the very poor and poor households, age group is more or less similar. The study revealed that among the very poor households, the majority of the respondents i.e., more than a third (41.7%) are old age, followed by middle age (30%) and young age (28.3%). The middle age and old age respondents from the poor households are equal (36.7%) and young age respondents are 26.7 per cent. The respondents' average age is 51.20 years, with a standard deviation of 91 to the highest age and 19.168 to the lowest age.

The marital status of the respondents is grouped into Married, Unmarried and Widowed. A little more than half (51.7%) of the total respondents are unmarried while less than half (39.2%) are married and 9.2 per cent of the total respondents are widowed. There is a little difference in the marital status between the two socio economic categories. Among the very poor respondents, 45 per cent are unmarried, which is followed by the married (43.3%) and the widowed (11.7%) whereas more than half (58.3%) of the poor respondents are unmarried, followed by 35 per cent of married respondents and 6.7 per cent are widowed.

Illiterate, Primary (1-4), Middle (5-7), High School (8-10), Higher Secondary School (11-12), and Graduation and above are the educational levels of the respondents in the present study. Taken as a whole, a third (34.2%) of the total respondents have completed their High School, while less than a third (29.2%) had completed Primary School, a fifth (20%) of the total respondents had completed Middle School followed by 9.2 per cent of the total respondents completing Higher Secondary School, 4.2 per cent of the total respondents did not receive formal education and 3.3 per cent are graduates and above. A similar pattern was observed by Sailo (2014). Both the household groups respondents have more or less similar educational statuses. A little more than a third (35%) of the very poor household respondents finished their High School education while among the poor household respondents, a third (33.3%) of them finished the same. Thirty per cent of the respondents from very poor finished Primary education, followed by Middle education (20%), Higher Secondary education (8.3%) while Graduates and Illiterates are equal (3.3%). Among the poor household respondents, less than a third (28.3%) completed Primary education which is followed by Middle education (20%), Higher secondary education (10%), Illiterate (5%) and Graduates (3.3%). The mean years

of education among the very poor respondents is 6.60 and the standard deviation is 3.660 while the mean years of education among the poor respondents is 6.35 and the standard deviation is 3.762. The total mean years of education is 6.57 and the standard of deviation is 3.696 to Graduation.

4.1.2. Family Profile of the Respondents

Family is the basic and primary social unit in all human societies and performs multifaceted functions. Family acts as an institution to meet biological, social, cultural and economic needs. Family shapes the identities and cultures of individuals and it resolves or decreases the extent of certain social problems within the society. The profile of the family of the present study is discussed in this section. It comprises based on the type of family, the size of the family, and the gender of the household's head (see Table 4.2).

Joint family and nuclear family are two different types of families in the present study. A joint family consists of more than one generation connection within the family members while the nuclear family consists of a one generation connection within the family members. One third (31.7%) of the total households are joint families and two third (68.3%) are nuclear families. In both the household categories, nuclear families are found to be more. Among the very poor households, three fourths (78.3%) are nuclear while 21.7 per cent are joint families. More than half (58.3%) of the poor households are nuclear families and a little more than a third (41.7%) are joint families. The greater number of nuclear families among the poor household may be because smaller families are easier to sustain with insufficient income.

The size of the family (binned) in the present study is categorised into Small (Less than 3), Medium (4) and Large (More than 5). Out of the total respondents, the majority, which is almost half (45.8%), are small families, followed by large families (29.2%) and medium size families (25%). The study revealed that among the very poor, respondents belonging to small families are the highest (48.3%) followed by large families (28.3%) and medium size families (23.3%) whereas among the poor, 43.3 per cent of the respondents are small size families followed by large families (30%) and medium size families (26.7%). There are minute differences in the size of the family between the two

household categories. As a total, the mean size of the family is 3.8 with a standard deviation of 2 as its lower limit and 9 as the upper limit.

A little more than half (50.8%) of the total households are male-headed families while 49.2 per cent are female-headed families. More male-headed families were also observed in the urban studies in Mizoram of Sailo (2014) and Malsawmdawngliani (2007). Among the very poor households, the male-headed and female-headed families are similar whereas, among the poor households, 51.7 per cent and male-headed and 48.3 per cent are female-headed families. Regarding the gender of the head of the household, there is not much difference between the two socio economic categories.

Table 4.2 Family Profile of the Respondents

Sl. No.	Characteristic	Socio Economic Category		Total N = 120
		Very Poor (AAY) n = 60	Poor (PHH) n = 60	
I	**Type of Family**			
	Joint	13 (21.7)	25 (41.7)	38 (31.7)
	Nuclear	47 (78.3)	35 (58.3)	82 (68.3)
II	**Size of Family (Binned)**			
	Small (<= 3.00)	29 (48.3)	26 (43.3)	55 (45.8)
	Medium (4.00 - 4.00)	14 (23.3)	16 (26.7)	30 (25.0)
	Large (5.00+)	17 (28.3)	18 (30.0)	35 (29.2)
	Mean Size of Family	3.7 ± 1.9	4.0 ± 2.2	3.8 ± 2.0
III	**Gender of Head of Household**			
	Male	30 (50.0)	31 (51.7)	61 (50.8)
	Female	30 (50.0)	29 (48.3)	59 (49.2)

Source: Computed Mean ± SD Figures in parentheses are per centages

4.1.3. Social Characteristics of the Respondents

The social characteristics of the respondents have been divided into Sub-tribe, Clan and Denomination (see Table 4.3).

The majority of the respondents (70%) are Lusei, followed by Lai (13%), Hmar (8%) and other subtribes such as Paihte, Mara and Nepali were also a part of the sample.

It can be seen from Table 4.3 that in both socio-economic categories, Lusei is the dominant sub-tribe (similar to Sailo, 2014) followed by Lai and Hmar.

In terms of clan, the study showed that the majority, i.e., eighty-six per cent of the total households are common clans while fourteen per cent are ruling clan. In terms of clan, there is not much difference between the two categories. Among the very poor households, eighty-five per cent are the common clan and fifteen per cent are the ruling clan and among the poor households, eighty-seven per cent are the common clan while thirteen per cent are the ruling clan.

Table 4.3 Social Characteristics of the Respondents

Sl. No.	Characteristic	Socio Economic Category				Total N = 120	
		Very Poor (AAY) n = 60		Poor (PHH) n = 60			
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
I	**Sub tribe**						
	Lusei	42	70	42	70	84	70
	Lai	9	15	6	10	15	13
	Hmar	5	8	5	8	10	8
	Paihte	2	3	4	7	6	5
	Others	2	3	2	3	4	3
	Mara	0	0	1	2	1	1
II	**Type of Clan**						
	Common	51	85	52	87	103	86
	Ruling	9	15	8	13	17	14
III	**Denomination**						
	Presbyterian	41	68	34	57	75	63
	UPC NEI	3	5	9	15	12	10
	Baptist Church	3	5	5	8	8	7
	UPC Mizoram	4	7	1	2	5	4
	Seventh Day Adventist	1	2	1	2	2	2
	Roman Catholic	0	0	1	2	1	1
	Others	8	13	9	15	17	14

Source: Computed

The next social characteristic is denomination which is divided into Presbyterian, Baptist Church, Roman Catholic, Seventh Day Adventist, UPC North East India (NEI), UPC Mizoram and Others. The study showed that more than half (63%) belong to Presbyterian Church, ten per cent belong to UPC NEI Church, followed by Baptist Church, UPC Mizoram, Seventh Day Adventist, Roman Catholic and Others including Salvation Army, IKK, Kohhran Thianghlim etc. In both the very poor and poor categories, Presbyterians are a majority, followed by UPC Mizoram among the very poor and UPC NEI among the poor households.

4.1.4. Economic Characteristics of the Respondents

The economic characteristics are presented in terms of Dependency, Level of Living of the Household, Ownership of House and Type of House (see Table 4.4).

Among the total respondents, the earner rate is slightly higher (53.3%) than the dependency rate (46.7%). A higher earner rate has been observed by Sailo (2014) while it is the opposite to the findings of Malsawmdawngliani (2007) in urban poverty studies. The very poor households have a higher earner rate (55%) while that of the poor households is (51.7%). Likewise, the dependency rate of the very poor household is slightly lower (45.0%) than that of the poor household (48.3%).

The perceived level of living of households in the five-point scale is rated as Very Rich, Rich, Middle, Poor and Very Poor. The study revealed that more than half (59.2%) of the total respondents perceive their level of living as poor followed by a middle level of living (25.8%) and very poor level (15%). Among the very poor households, nearly two third (63.3%) perceive their level of living as poor, a little more than a sixth (20%) as very poor and a sixth (16.7%) as middle level. Among the poor households, a little more than half (55%) perceive their level of living as poor, one third (35%) as middle and ten per cent as perceived their level of living as very poor.

The ownership of the house is presented as Owned, Quarters and Rented. A little more than half (54.2%) of the respondents live in their own homes while less than half (42.5%) live in rented homes and 3.3 per cent live in quarters. There is a small difference between the very poor and poor households. Among the very poor respondents, more than half (58.3%) live in their own homes while less than half (38.3%) live in rented homes. Among the poor respondents, half (50%) live in their own homes and a little less than half (46.7%) live in rented homes. The number of respondents living in quarters is equal in both categories.

The type of house is presented as Assam type, Concrete and Semi Concrete. More than three fourth (75.8%) of the total respondents live in Assam type houses followed by those who reside in semi concrete houses (10.8%) and concrete houses (9.2%). Among the very poor households, 76.7 per cent live in Assam type houses, 15 per cent in concrete

houses and 8.3 per cent in semi concrete houses while 75 per cent of the poor households live in Assam type houses, followed by semi concrete (13.3%) and concrete houses (3.3%).

Table 4.4 Economic Characteristics of the Respondents

Sl. No	Characteristic	Socio Economic Category		Total N = 120
		Very Poor (AAY) n = 60	Poor (PHH) n = 60	
I	**Earner**			
	Earner	33 (55.0)	31 (51.7)	63 (53.3)
	Dependent	27 (45.0)	29 (48.3)	56 (46.7)
II	**Level of Living of Household**			
	Middle	10 (16.7)	21 (35.0)	31 (25.8)
	Poor	38 (63.3)	33 (55.0)	71 (59.2)
	Very Poor	12 (20.0)	6 (10.0)	18 (15.0)
III	**Ownership of House**			
	Owned	35 (58.3)	30 (50.0)	65 (54.2)
	Quarters	2 (3.3)	2 (3.3)	4 (3.3)
	Rented	23 (38.3)	28 (46.7)	51 (42.5)
IV	**Type of House**			
	Assam type	46 (76.7)	50 (75.0)	95 (75.8)
	Concrete	9 (15.0)	2 (3.3)	11 (9.2)
	Semi concrete	5 (8.3)	8 (13.3)	13 (10.8)

Source: Computed Figures in parentheses are percentages

4.1.5. Civic and Political Affiliation of Family Members of the Respondents

The civic and political affiliation of the family members is presented in Table 4.5. The study revealed that out of the total respondents, less than half of the total respondents have leadership positions in the community. The leadership positions are subdivided into a church leader, a leader in community-based organizations, and politically affiliated individuals. Among the very poor category, only one third of the family members have leadership positions in the community in which the major leadership position is a church

leader (32%) followed by politically affiliated individuals (3%) and a leader in CBO (2%). In the poor category, similar to the very poor, the major leadership position is a church leader (40%), followed by a leader in CBO (10%) and politically affiliated individual (3%). The difference in the pattern showed that the poor are more associated with the CBOs in the community as compared to the very poor.

Table 4.5 Civic and Political Affiliation of Family Members of the Respondents

Sl. No	Leadership Position	Socio Economic Category				Total N = 120	
		Very Poor (AAY) n = 60		Poor (PHH) n = 60			
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1	Politically Affiliated	2	3	2	3	4	3
2	Leader in CBO	1	2	6	10	7	6
3	Church Leader	19	32	24	40	43	36

Source: Computed

4.2. Lockdown, Livelihood Challenges and Coping of Poor Households

The Government of Mizoram implemented the lockdown from 22nd March 2020, limiting close contact, which has had an impact on the lives of the urban poor in Aizawl. This section aims to present the data gathered through a field survey and is presented in two sub sections viz. the livelihood challenges during COVID-19 lockdown and the coping strategies adopted.

4.2.1. Livelihood Challenges during COVID-19 Lockdown

The livelihood challenges experienced by the poor households during COVID-19 lockdown in Aizawl city is presented in Table 4.6. Almost half (48.4%) mentioned no income as their livelihood challenge and ten per cent mentioned that their income had reduced while 41.7 per cent did not experience challenges in their livelihood during the lockdown. In comparison between the two socio-economic categories, there are minute differences in the challenges faced. Among the very poor, half (55.0%) of the respondents experience no income, 8.3 per cent experienced less income while 36.7 per cent do not mention livelihood challenges. Among the poor, almost half (46.7%) did not experience livelihood challenges during the lockdown while 41.7 per cent experienced no income

and 11.7 per cent had their income reduced. The pattern difference showed that the poor households have a more stable livelihood which was not affected by the lockdown as compared to the very poor households whose main source of livelihood is daily wage labour and petty business.

Table 4.6 Livelihood Challenges Experienced During COVID-19 Lockdown

Sl. No.	Livelihood Challenges	Socio Economic Category		Total N = 120
		Very Poor (AAY) n = 60	Poor (PHH) n = 60	
1	Less income	5 (8.3)	7 (11.7)	12 (10.0)
2	Nil	22 (36.7)	28 (46.7)	50 (41.7)
3	No Income	33 (55.0)	25 (41.7)	58 (48.4)

Source: Computed

4.2.2. Coping Strategies Adopted by Respondent Households

The coping strategies adopted by the respondent households during the lockdown are presented in Table 4.7. Among the total households, more than half (66%) employ thrift as a strategy to coping with the challenges of lockdown. A little more than half (51%) of the total respondents received material support from others during the lockdown. Forty-six per cent of the total households have made use of their savings to cope with the adverse effects brought about by the novel coronavirus and thirty-three per cent received instrumental support from others. A sixth (17%) of the total households borrowed from others and less than a sixth (13%) of the total households in the sample rely on prayers during the lockdown. Eight per cent of the total household diversified their livelihood to cope with the effects of the lockdown due to the pandemic.

The study revealed that among the very poor households, material support (65%) is the most common coping strategy followed by thrift (62%). Instrumental support (26%) has also been utilized by the very poor for coping while twenty-one per cent used their savings during the lockdown. Twenty-two per cent borrowed from others during the lockdown. The numbers of households who diversified their livelihood and used prayer are equal (4%). This showed that support from families, friends and other people in the

social network had helped the very poor households to cope with the adverse effects of the lockdown.

Table 4.7 Coping Strategies Adopted by Respondent Households

Sl. No.	Coping Strategy	Socio Economic Category				Total N = 120		t
		Very Poor (AAY) n = 60		Poor (PHH) n = 60				
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	
1	Thrift	37	62	42	70	79	66	.96
2	Material Support	39	65	22	37	61	51	3.21**
3	Savings	21	35	34	57	55	46	2.42*
4	Instrumental Support	26	43	13	22	39	33	2.58*
5	Borrowing	13	22	7	12	20	17	1.47
6	Prayer	4	7	11	18	15	13	1.95*
7	Livelihood Diversification	4	7	5	8	9	8	.34

Source: Computed * P < 0.05 ** P < 0.01

Among the poor households, more than half (70%) employed thrift as a coping strategy, which is the highest among the coping strategies followed by savings (57%), material support (37%) and instrumental support (22%). Only twelve per cent used borrowing as a coping strategy and eighteen per cent used prayer while eight per cent were able to find another source of livelihood during the lockdown. This showed that the poor household category is coping utilizing thrift and savings without much support from other people in their social network.

There are differences in the coping strategies adopted by the respondent households. The variations of the t-test between the two socio-economic categories in material support (3.21) are significant at a 1 per cent level in which the per cent of material support among the very poor (65%) is higher than the poor (61%). Savings (2.42), instrumental support (2.58) and prayer (1.95) are significant at a 5 per cent level. The percentage of the coping strategy viz. savings (57%) and prayer (18%) of the poor households are higher as compared to the very poor while instrumental support (43%) of the very poor is higher than the poor. The higher number of material support and instrumental support among the very poor may be contributed by a greater number of loss in the economic activities of the very poor household due to unstable livelihood sources.

More saving among the poor households may be due to more stable livelihood as compared to the very poor households.

4.3. Social Networks, Social Support and Social Capital

In this section, the findings on the analysis of social capital assessed in terms of social network are presented. The personal network of the households is analysed for the conceptualization of social capital. The data on social networks is collected to assess social capital using Personal Network Analysis through an interview schedule that includes name generators and name interpreters (see Perry, Pescosolido & Borgatti 2018; Campbell & Lee 1991). The composition of the ego-centric social support network and its structure were analysed by E-Net software (Borgatti, 2006). The analysis of the statistical summary of the personal network from E-Net is done using SPSS.

The findings of Personal Network Analysis are subdivided into six parts. The first part includes the demographic composition of social networks of the poor in Aizawl city during COVID 19 lockdown. The second part is the socio economic and political composition of the social network. The third part consists of patterns of relationship and social support and the fourth part consists of heterogeneity in the composition of the social networks of the poor. The fifth part consists of homophily in the composition of social networks of the poor and the last is the network measures of social capital.

4.3.1. Demographic Composition of Social Networks

The demographic composition of social networks of the poor in Aizawl city during COVID 19 lockdown is discussed in terms of gender, age and education. The demographic composition of the respondents' alters are given in Table 4.8. Alters are the individuals mentioned by the actors (respondents) in their social network. Gender composition of the social network is an interesting determining factor in the quality of social support (House, 1987). The majority of the alters in the respondents' social network are female, with male alters being present. This finding of more females in the gender composition of social support networks is similar to the study of Rai (2019). Regarding gender, in both the socio-economic category, it follows a similar pattern in which female alters are more compared to male alters. However, the percentage of female alters differs

in the two categories. The percentage of female alters among the poor category is much higher as compared to the very poor category. Likewise, the percentage of male alters is higher among the very poor as compared to the poor.

Table 4.8 Demographic Composition of Social Networks during COVID-19 Lockdown

Sl. No	Characteristic	Socio Economic Category				Total N = 120	
		Very Poor (AAY) n = 60		Poor (PHH) n = 60			
		Mean	SD	Mean	SD	Mean	SD
I	**Gender**						
	Female	58	33	72	33	65	34
	Male	42	33	28	33	35	34
II	**Age (Years)**						
	Minimum	36	9	34	9	35	9
	Maximum	62	13	63	12	62	12
	Average	48	9	48	9	48	9
III	**Education (Years)**						
	Minimum	6	2	6	2	6	2
	Maximum	10	2	10	2	10	2
	Average	8	1	8	2	8	2

Source: Computed

At the individual level, the mean age and standard deviation are computed, and the age of the alters is quantified in terms of minimum, maximum, and average. As a whole, the age of the social network ranges from 35 years to 62 years with an average of 48 years. Comparing both the categories, there are some differences between the two. The minimum age of the alters is slightly higher in the very poor category, higher than the overall mean age, which is 36 years. In the poor category, the minimum age of the alters is 34 years. The maximum age of the alters is also slightly higher among the poor, 63 years while the maximum age of alters of the very poor is 62 years.

The education characteristic of the alters is measured in terms of years of education in the present study. The mean years of education of the alter measured in terms of minimum, maximum and average are between 6 to 10. The years of education are similar between the two socio-economic categories and the average mean years of education is worked out to 8. There are no significant differences in the education characteristic of both the socio-economic categories.

4.3.2. Socio Economic and Political Composition of Social Networks

The alters' social composition is presented in terms of sub tribe and denomination (see Table 4.9), while the economic and political compositions are discussed in terms of socio-economic categories and civic and political affiliations, respectively (see Table 4.10).

The first characteristic of the social composition of the social networks discussed is sub tribe (see Table 9). Lusei is the largest sub tribe among the alters followed by Hmar, Lai, Mara, Paihte and Others which include Nepalis. The percentage of the sub tribes viz. Lusei, Lai, Paihte and Others, of the alters observed in both the socio-economic category, are more or less similar while Hmar alters are higher among the very poor and Mara alters are present only among the poor households alters.

The second characteristic observed in the social composition of the social networks is denomination (see Table 4.9). Denomination is an important factor in determining social support. Six denominations along with small denominations put under others are observed in the data. Presbyterian, UPC North East India (NEI), Baptist Church, UPC Mizoram, Roman Catholic and Seventh Day Adventist are the major denominations observed. The majority of the alters in the social networks belong to Presbyterian Church followed by UPC NEI, Baptist Church and UPC Mizoram. Only some of the alters are Roman Catholics and Seventh Day Adventists. Twelve per cent of the alters belong to others, which includes Salvation Army, Kohhran Thianghlim, Isua Krista Kohhran etc.

Different percentages of denominations of the alters are observed between the social network of the very poor and poor households. Presbyterian alters are the majority in the social networks of both the very poor (77%) and poor (61%) and UPC North East India (NEI) is the second major denomination among the alters. The third major denomination observed among the alters of the very poor is Baptist Church and UPC Mizoram. They are equal in percentage while Baptist Church is the third major denomination among the alters of the poor followed by UPC Mizoram. Roman Catholics are found only in the social networks of the poor and the percentages of Seventh Day Adventists are equal in both categories.

Table 4.9 Social Composition of Social Networks during COVID-19 Lockdown

Sl. No.	Characteristic	Socio Economic Category				Total N = 120	
		Very Poor (AAY) n = 60		Poor (PHH) n = 60			
		Mean	SD	Mean	SD	Mean	SD
I	**Sub tribe**						
	Lusei	91	19	92	15	91	17
	Hmar	5	12	2	7	3	10
	Lai	1	7	2	7	2	7
	Mara	0	0	1	6	0	5
	Others	2	7	2	8	2	7
	Paihte	1	3	1	6	1	5
II	**Denomination**						
	Presbyterian	77	24	61	31	69	29
	UPC NEI	5	13	10	24	8	19
	Baptist Church	4	11	8	21	6	17
	UPC Mizoram	4	13	4	13	4	13
	Roman Catholic	0	0	2	9	1	6
	Seventh Day Adventist	1	3	1	4	1	4
	Others	10	19	14	22	12	21

Source: Computed

The economic and political composition of the social networks during COVID-19 lockdown is presented in Table 4.10. The socio-economic category is based on the categories for the Public Distribution System (PDS) governed by the provisions of the National Food Security Act, 2013. The subdivisions of the socio-economic category are non-poor which are under the Non-NFSA, Poor which are under the Priority Households (PHH) and Very Poor which are under the Antodaya Anna Yojana (AAY).

A majority, more than half, of the alters in the social networks during COVID-19 lockdown in Aizawl city belong to poor households followed by the non-poor and then the very poor. There is a difference in the economic composition of the social networks between the very poor and poor households.

Among the social networks of the very poor, non-poor households consist of a little more than half of the social networks constituting the majority, followed by the poor. More non-poor alters are also observed by Rai in 2019 in her study on social capital in Aizawl. Only three per cent of the social networks of the very poor households are from

their own socio economic category. This showed that the non-poor are sources of social support for the very poor households during the COVID-19 lockdown.

Table 4.10 Socio Economic Civic and Political Composition of Social Networks

Sl. No.	Characteristic	Socio Economic Category				Total N = 120	
		Very Poor (AAY) n = 60		Poor (PHH) n = 60			
		Mean	SD	Mean	SD	Mean	SD
I	**Socio Economic Category**						
	Non-Poor (Non- NFSA)	51	30	39	30	45	30
	Poor (PHH)	47	30	58	29	52	30
	Very Poor (AAY)	3	7	3	8	3	7
II	**Civic and Political Affiliation**						
	Government Servant	17	20	13	19	15	19
	Member of Local Level Task Force (LLTF)	8	13	4	9	6	12
	Church Leader	8	13	4	9	6	11
	Belong to a Political Party	4	8	2	10	3	9
	CBO Leader	4	9	1	6	3	8

Source: Computed

The poor category consists of more than half of the social networks of poor households. This showed that there is more interaction and support within their household category. A similar pattern was observed by Devereux (1999) in his study of Malawi. The poor category is followed by the non-poor category and then by the very poor.

The civic and political affiliation of the alters in the social networks are subdivided into individual affiliation with the Government, Local Task Force, Church, Political Party and Community Based Organizations. Among the alters, affiliation with the government i.e., the Government servant is the highest (15%), followed by a few Local Level Task Force and Church affiliations (6%) and fewer political party and CBO affiliations (3%). The percentage of the civic and political affiliation of the social networks of both the socio-economic categories followed a similar pattern in which government servant is the highest followed by members of LLTF, church leader, belonging to a political party and a CBO leader. This finding of the present study showed that the poor households in Aizawl city have less community participation within their own communities.

4.3.3. Patterns of Relationship and Social Support

The relationship patterns of the respondents (ego) with their alters are described as three types; friend, kin and know each other (see Table 4.11). Among the three types of relationships, friends constituted the highest relationship pattern among the alters followed by kin and know each other.

The findings of the present study highlighted that the social networks of the two socio economic categories are majorly friend-based. Kinship is the second major relationship pattern and there are no significant differences found. The third major relationship pattern is known to each other and the difference between the two socio-economic categories is found to be significant (2.13) at a 5 per cent level. The 'know to each other' relationship pattern between the very poor respondents is much higher (21%) as compared to that of the poor (11%). This showed that the very poor household had benefited from the weak ties in their social networks during the lockdown.

The functional content of the social network is known as social support (House, 1987). The type of social support received by the respondents through their alters is assessed into four types viz. material support (provision of tangible aid), instrumental support (provision of intangible aid), emotional support and informational support. Instrumental support ranks the first among the four types of social support followed by material support, emotional support and informational support in both the socio-economic categories. The difference in the material support (2.07) and emotional support (1.97) between the very poor and poor is significant at a 5 per cent level. The percentage of material support of the very poor (58%) is higher than that of the poor (45%) which may be because the very poor during lockdown are more vulnerable than the poor. The emotional support of the poor (28%) is higher than that of the very poor (17%). This may be because of more female alters among the poor than the very poor (see Table 4.8) as women have greater involvement in the emotions of those who are around them (Kessler & McLeod, 1984).

The respondents' social support from their alters is calculated in terms of minimum, maximum, and average. The number of social support ranges from 2.2 (maximum) to 0.8 (minimum) and the overall average of social support is 1.5. There are

no significant differences between the very poor households and poor households in the maximum and a minimum number of social supports.

Table 4.11 Relationship Pattern and Social Support from Networks

Sl. No.	Aspect of Support	Socio Economic Category				Total N = 120		t
		Very Poor (AAY) n = 60		Poor (PHH) n = 60				
		Mean	SD	Mean	SD	Mean	SD	
I	**Relationship pattern**							
	Friend	49	32	48	34	49	33	*1.87*
	Kin	30	30	41	34	36	32	*0.10*
	Know Each Other	21	29	11	24	16	27	*2.13**
II	**Type of Social Support**							
	Instrumental Support	66	31	72	30	69	31	*1.08*
	Material Support	58	36	45	33	52	35	*2.07**
	Emotional Support	17	24	28	37	22	31	*1.94**
	Information Support	3	9	4	14	4	12	*0.48*
III	**Number of Social Supports**							
	Minimum	0.8	0.6	0.8	0.8	0.8	0.7	*0.64*
	Maximum	2.2	0.6	2.2	0.7	2.2	0.6	*0.28*
	Average	1.4	0.5	1.5	0.6	1.5	0.6	*0.52*

Source: Computed * P < 0.05 ** P < 0.01

4.3.4. Heterogeneity in the Composition of Social Networks of Poor

Heterogeneity is the diversity in the social networks. The demographic, social and economic composition of the social networks has been analysed to operationalize social capital in terms of heterogeneity of the social network of the respondents. Het (Herfindahl, Hirschman, Blau heterogeneity measure) and IQV (Index of Qualitative Variation) are used to measure the heterogeneity of categorical variables such as gender, denomination, sub tribe, and socioeconomic category, while continuous variables such as age and education are measured in Standard Deviation (SD) to operationalize social capital. The Het and IQV scales are between 0 and 1. When the value is closer to zero, the social network is more homogeneous and when the value is closer to one, the social network is heterogeneous. The heterogeneity of the alters in the social network of the respondents is assessed in terms of gender, age, education, denomination, sub tribe and socio-economic category (see Table 4.12).

Table 4.12 Diversity in the Social Network Composition

Sl. No.	Characteristic	Socio Economic Category				Total N = 120		t
		Very Poor (AAY) n = 60		Poor (PHH) n = 60				
		Mean	SD	Mean	SD	Mean	SD	
I	**Gender**							
	Het	.27	.20	.19	.20	.23	.20	2.2*
	IQV	.54	.40	.39	.41	.46	.41	2.2*
II	**Age**							
	SD	9.17	3.87	10.39	3.92	9.78	3.93	-1.7
III	**Education**							
	SD	1.66	.74	1.65	.77	1.65	.76	0.0
IV	**Denomination**							
	Het	.25	.22	.33	.21	.29	.22	-1.8
	IQV	.47	.39	.58	.35	.53	.37	
V	**Sub tribe**							
	Het	.11	.18	.11	.19	.11	.19	0.0
	IQV	.20	.32	.20	.34	.20	.33	0.0
VI	**Socioeconomic**							
	Het	.35	.20	.33	.19	.34	.19	0.5
	IQV	.65	.35	.64	.36	.64	.35	0.2

Source: Computed * P < 0.05 ** P < 0.01

The heterogeneity measures of the variables gender, denomination and sub tribe of the social networks of the poor in Aizawl city during COVID-19 lockdown are all closer to 0. Therefore, they are all homogeneous whereas the socio-economic category shows heterogeneity in both the very poor (0.65) and poor (0.64).

Gender is found to have a significant variation (2.2) between the two socio-economic categories. It can be observed that gender heterogeneity is higher among the alters of the very poor respondents as compared to the alters of the poor respondents. The poor household respondents have more female alters (see Table 4.8). Therefore, it is more homogenous. There are no other significant variations observed among the heterogeneity measures of the social network composition of the respondents.

4.3.5. Homophily in Composition of Social Networks

Homophily is the principle that similar people have greater contact than dissimilar people (Miller et al., 2001). The people with whom they share similar characteristics are most likely to interact. It is the similarity between the respondents (ego) and the alters. To operationalize social capital in terms of homophily, the gender, age, education,

denomination and sub tribe of the alters in the social networks are analysed by three measures viz., same proportion, E-I Index and Average Euclidean Distance (see Table 4.13). For categorical variables such as gender, denomination and sub tribe, the Same Proportion and E-I index is computed where E-I index ranges from -1 (homophily) to +1 (heterophily) and the same proportion ranges from 0 per cent (heterophily) to 100 per cent (homophily). For continuous variables such as age and education, Average Euclidean Distance is computed. These measures were computed using E-Net software and the summary of these computed measures were analysed using SPSS.

Table 4.13 Homophily in the Social Network Composition

Sl. No	Characteristic	Socio Economic Category				Total N = 120		t
		Very Poor (AAY) n = 60		Poor (PHH) n = 60				
		Mean	SD	Mean	SD	Mean	SD	
I	**Gender**							
	Same proportion	67	30	80	24	73	28	2.74**
	E-I	-0.3	1	-1	0	0	1	2.78**
II	**Age**							
	Average Euclidean Distance	375	377	306	249	340	320	1.20
III	**Education**							
	Average Euclidean Distance	24	27	13	13	19	22	2.91**
IV	**Denomination**							
	Same proportion	71	32	64	30	67	31	1.22
	E-I	0	1	0	1	0	1	1.20
V	**Sub tribe**							
	Same proportion	68	42	70	41	69	41	0.29
	E-I	-0.4	0.8	-0.4	0.8	-0.4	0.8	0.27

Source: Computed * P < 0.05 ** P < 0.01

The alters of the social network of the poor in Aizawl city during COVID-19 lockdown are homophilous in terms of gender and subtribe. The study showed that in terms of gender, the poor are more homophilous (-1) than the very poor (-0.3) and seventy-three percent of the respondents' alters in the social network are of the same gender. The subtribe of the alters of both the two socio economic categories shows homophily at a score of -0.4. Sixty-eight per cent of the alters of very poor social networks are of the same subtribe as the respondents, while seventy per cent of the alters of the poor households belong to the same subtribe as the respondents. The E-I score of denomination revealed that the social network is neither homophilous nor heterophilous where sixty- seven per cent of the total alters share the same denomination with that of

the respondents. While gender and subtribe show homophily, the age and education of the alters show heterogeneity.

The variation in the homophily of the gender and education characteristics between the two socio economic household categories is found to be significant at a 1 per cent level. In terms of gender, the poor categories are more homophilous. Likewise, in terms of education, the poor are more homophilous as compared to the very poor households.

4.3.6. Social Network Measures of Social Capital

The social network measures of social capital are analysed by four measures viz., degree (network size), density, effective size and constraint. The first two measures, size and density, are the standard ego measures (Borgatti et al., 1998) and the other two, effective size and constraint, are structural hole measures (Burt, 1998) at individual levels (see Table 4.14).

Table 4.14 Social Network Measures of Social Capital

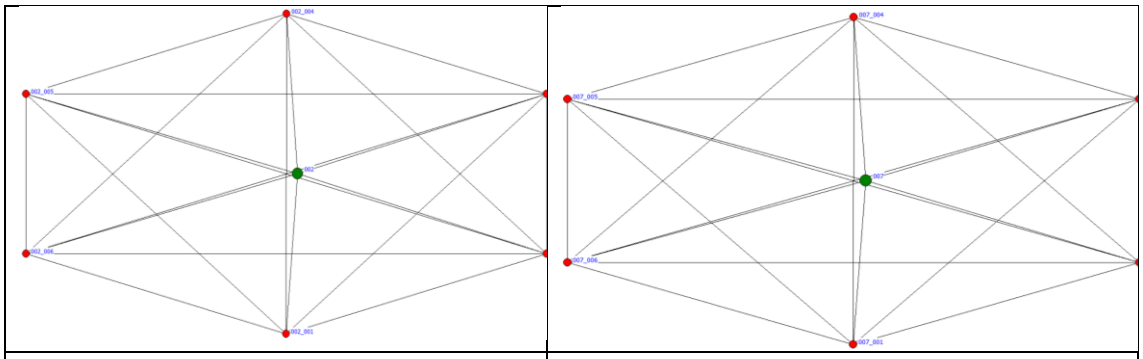
Sl. No.	Measures	Socio Economic Category				Total N = 120		t
		Very Poor (AAY) n = 60		Poor (PHH) n = 60				
		Mean	SD	Mean	SD	Mean	SD	
1	Degree (Network Size)	6.3	1.4	5.9	1.2	6.1	1.3	1.48
2	Density	0.6	0.3	0.7	0.4	0.7	0.3	1.11
3	Effective Size	2.9	1.1	3.0	1.3	3.0	1.2	0.29
4	Constraint	0.5	0.1	0.5	0.1	0.5	0.1	0.13

Source: Computed * P < 0.05 ** P < 0.01

The first measure is the degree which is the number of alters to which ego has a direct link, weighted by 'the strength of the tie'. It is expected to have a positive relationship with social capital which indicates that the more relationships, the more likely it is that one relationship has the resource needed (Borgatti et al., 1998). The mean degree of the social network of the very poor households is 6.3 while that of the poor households is 5.9. Therefore, the network size of the very poor is slightly larger than the poor. The personal networks of the typical households with these network sizes have been depicted in Figure 4.1. The total mean of the network size of the social networks of the poor in Aizawl city during lockdown is 6.1. The calculated t statistic shows (1.48) that there is no significant difference between the degrees of the social network between the poor and

very poor socio economic categories. The personal network figures depicted also show that they were not much different.

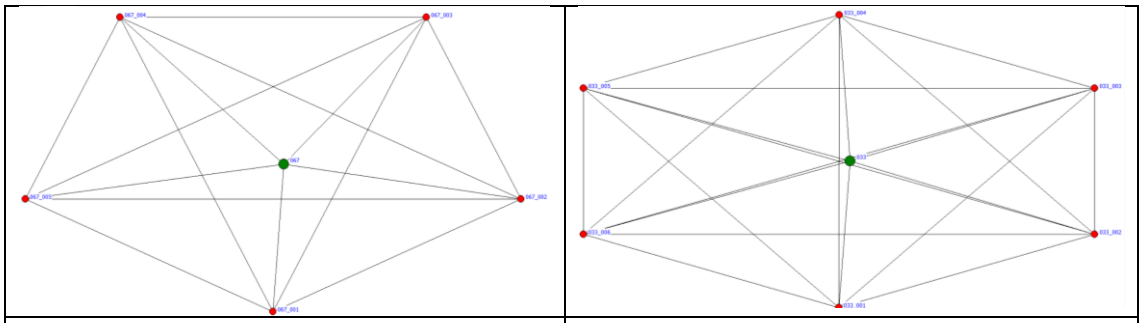
Figure 4.1 Personal Network of Typical Households at Average Degree



A Very Poor Household: Degree = 6	A Poor Household: Degree = 6

The second measure is the density of the social network. It is the proportion of the connected pairs of alters. It is considered to have a negative relationship with social capital which means that if all the alters are connected, the alters are redundant (Borgatti et al., 1998). The overall mean density of the social network is 0.7 which is similar to the mean density of the social network of the poor households. The mean density of the social networks of the very poor is 0.6. Similar to the degree measure, there is no significant difference in the calculated t statistic. The personal networks of the typical households with this density have been depicted in Figure 4.2. The personal network figures depicted show that there is a slight difference in the average level of density.

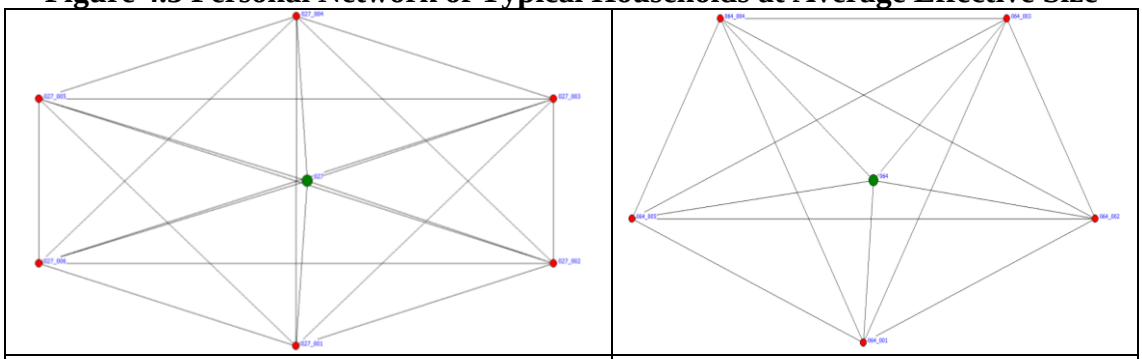
Figure 4.2 Personal Network of Typical Households at Average level of Density



A Very Poor Household: Density = 0.6	A Poor Household: Density = 0.7

The third measure is effective size. It is one of the two structural hole measures proposed by Burt in 1992. It is the number of alters to which ego is directly related, weighted by the 'strength of the tie', minus a 'redundancy' factor. It has a positive relationship with social capital. The actor has greater potential information and control benefits with ties from more different regions of the network (Borgatti et al., 1998). The mean effective size of the social network of the very poor households is 2.9 while it is 3.0 for the poor households. There is no significant variation in the effective size between the two household categories. The personal networks of the typical households with effective size of 2.9 of very poor households and 3.0 of poor households have been depicted in Figure 4.3. The personal network figures depicted show that there is a slight difference in the average level of effective size.

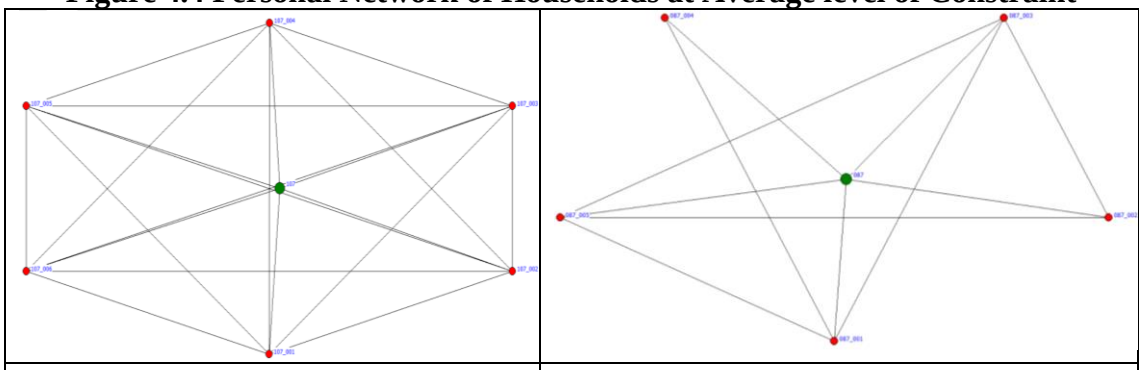
Figure 4.3 Personal Network of Typical Households at Average Effective Size



A Very Poor Household: Effective Size = 2.9 | A Poor Household: Effective Size = 3.0

The last social network measure is constraints. It is also one of the two structural hole measures proposed by Burt in 1992. It is the extent to which all of the ego's relational investments, either directly or indirectly, are focused on a single alter. It is negatively related to social capital which means that there are fewer opportunities for action when the actor is more constrained (Borgatti et al., 1998). The mean constraint measure of the social network of both the poor and very poor households is equal (0.5) and their calculated t value is not significant. The personal networks of the typical households with this density have been depicted in Figure 4.4. The personal network figures depicted show that there is a slight difference in the average level of constraint.

Figure 4.4 Personal Network of Households at Average level of Constraint



A Very Poor Household: Constraint = 0.5	A Poor Household: Constraint = 0.5

4.4. Resilience and Adaptation of Poor Households during COVID-19 Lockdown

On account of the onset of the COVID-19 pandemic all across the globe, restrictions were imposed by the Government of Mizoram to prevent and lower the curve of the COVID-19 infections. This had a multi-dimensional effect on the people especially the vulnerable sections of the society. Even though the lockdown has a positive effect on the prevention of COVID-19, it has a negative effect especially on the livelihoods of the poor. The present study aims to analyse the relationships between vulnerability, resilience and adaptation from social capital perspective assessed in terms of social network.

The vulnerability of the poor households during lockdown has been presented in the previous chapter. 'Vulnerability is the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard' (UNISDR, 2009) while resilience is defined as "the amount of disturbance that can be sustained by a system before a change in system control or structure occurs. It could be measured by the magnitude of disturbance the system can tolerate and persist' (Holling, 1973). Adaptation is connected with resilience. It is the ability to respond to external changes and allow development with the changed situation. Adaptation brings about resilience. The UNISDR (2009) defines adaptation as 'The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities'.

In this section, the household resilience and household adaptation of the respondents are presented. The study employs sixteen indicators based on different

dimensions to understand the household's resilience and adaptation of the poor by analysing the experience of the household during the lockdown and after the lockdown. Man days of employment, household income, the quantity of food available to family members and family expenditure are indicators within the economic dimension, ability to provide health care to family members, mental health and physical health of family members, alcohol consumption, use of drugs, paan and tobacco are indicators under health dimension, children's education, relations within the family, mobility to different places, religious activity at home and participation in church activities are indicators within social dimensions. The analysis of the indicators leads to the assessment of the household resilience and adaptation.

The level of household resilience and adaptation are also presented in this section and the inter socio-economic category variation is analysed using Spearman Correlation, t-test and Chi-square test.

4.4.1. Household Experience during COVID-19 Lockdown

Table 4.15 shows the experience of the respondents during the lockdown. Out of the total sixteen indicators, fourteen indicators had declined due to the lockdown in Aizawl city in both the socio- economic category. Only four of the indicators viz., relations within the family, use of tobacco and paan and religious activity had increased. As the majority of the indicators declined, it showed that the lockdown had increased the vulnerability of the poor household in Aizawl city.

The most affected are the indicators of economic dimension which are mobility to different places followed by man-days of employment and household income. When the respondents were restricted from moving to other localities as well as within their own, this had affected their livelihood and decreased employment opportunities. Surprisingly, the quantity of food available to the family members had not been adversely affected. This is because of the timely availability of food grains provided by the Government through PDS, social support received by the poor households from their social networks including the LLTF, NGOs and individuals. There is also a minute decrease in the use of drugs and alcohol as a result of movement restriction. Children's education had decreased as schools were closed to avoid close contact. During the focus

group discussion and interview, it is mentioned that children are believed to be the most affected by the lockdown. The lockdown has also improved the relations of the family of the respondents and has also provided quality time to have family time and family prayers.

Table 4.15 Household experience during COVID-19 Lockdown

Sl. No	Indicator	Socio Economic Category				Total N = 120	
		Very Poor (AAY) n = 60		Poor (PHH) n = 60			
		Mean	SD	Mean	SD	Mean	SD
1	Man days of Employment	-.83	.38	-.78	.42	-.81	.40
2	Household Income	-.75	.57	-.65	.61	-.70	.59
3	Quantity of Food availability to Family Members	-.22	.67	-.25	.57	-.23	.62
4	Provide Health Care to Family	-.13	.34	-.18	.39	-.16	.37
5	Children's Education	-.25	.44	-.38	.49	-.32	.47
6	Mental Health of Family Members	-.37	.61	-.45	.50	-.41	.56
7	Physical Health of Family Members	-.12	.32	-.07	.31	-.09	.32
8	Relations within Family	.48	.54	.35	.71	.42	.63
9	Mobility to Different Places	-.90	.44	-.92	.38	-.91	.41
10	Alcohol Consumption	-.10	.40	-.25	.44	-.18	.42
11	Use of Drugs	-.03	.26	-.08	.28	-.06	.27
12	Use of Tobacco	.00	.49	.07	.58	.03	.53
13	Use of Paan	.00	.41	.07	.58	.03	.50
14	Participation in Church Activities	-.95	.22	-.98	.13	-.97	.18
15	Religious Activity at Home	.58	.50	.57	.50	.58	.50
16	Family Expenditure	-.85	.48	-.55	.79	-.70	.67
	Household Resilience	-.28	.14	-.28	.17	-.28	.15

Source: Computed

In comparison between the two household categories, very poor and poor, the very poor households' man-days of employment, household income and family expenditure are more affected. The reason behind this is that the very poor households mainly depend on daily wage labour for their livelihood. The physical health of family members of the very poor is also more affected as compared to the poor. Children's education is more affected among the poor as compared to the very poor. This may be due to larger family size within the poor household category. Accordingly, the use of tobacco and paan had also increased more among the poor household category. This can be because the poor households have more to spend on non-basic amenities as compared to the very poor households.

The overall household resilience of both the very poor and poor households is -.28 which shows that the challenges brought about by the lockdown had contributed to the decline in economic, health and social dimensions of the poor households in Aizawl city. Thus, the lockdown has increased the vulnerability of the poor.

4.4.2. Level of Resilience of the Poor and Very Poor Households

The resilience level is classified into four levels using the visual binning method (Mean ± SD) using SPSS (see Table 4.16). The four levels are very low (<= -.43), low (-.42 to -.28), moderate (-.27 to -.13) and high (-.12+). The differences in the resilience level of the two household categories can also be seen in Table 4.16.

Table 4.16 Level of Household Resilience during COVID-19 Lockdown

Sl. No	Resilience Level	Socio Economic Category		Total
		Very Poor (AAY)	Poor (PHH)	
1	Very Low (<= -.43)	13 (21.7)	12 (20.0)	25 (20.8)
2	Low (-.42 -.28)	18 (30.0)	16 (26.7)	34 (28.3)
3	Moderate (-.27 - .13)	17 (28.3)	20 (33.3)	37 (30.8)
4	High (-.12+)	12 (20.0)	12 (20.0)	24 (20.0)
5	Total	60 (100.0)	60 (100.0)	120 (100.0)
	Mean Household Resilience	-.28±.14	-.28±.17	-.28±.15
	Spearman Correlation	.034		
	t'	.150		
	Pearson Chi-Square	.401		

Source: Computed * P < 0.05 ** P < 0.01

The overall resilience level of the households is more on the low and moderate level. Moderate level of resilience is the highest followed by low, very low then high. The very poor households' resilience is more at the low level, followed by moderate level, very low level and then high level. The poor household's resilience highest level is moderate level, then low. There is an equal number of respondents in the very low and high levels. The differences in the patterns of resilience levels between the two categories may be due to the patterns of livelihood and household incomes and savings. However, the mean household resilience is the same in the two categories. The patterns of resilience levels do not show any significant differences between the socio-economic category and

the resilience level. Since the resilience level of the poor households in Aizawl city is more on the lower side, the poor households are vulnerable during the COVID-19 lockdown in Aizawl city.

4.4.3. Household Experience after COVID-19 Lockdown

The household experience after COVID-19 lockdown is shown in Table 4.17. Among the overall indicators, only two indicators, children's education and religious activity at home showed a decrease. This showed that the households were coping and started to regain the new normal.

Regarding the economic dimensions, the very poor households show a more increase in employment, income and expenditure as compared to the poor households. This is due to the relaxation of restrictions and the Unlock which enabled the movement to different places, creating job opportunities for the very poor households as most of them are daily wage labourers. Once they have employment opportunities, income increases and thus they have more to spend. But the quantity of food available is more for the poor households. As mentioned during the interview, this is because there is no change in the quantity of food consumed by the very poor respondents as their food consumption is more on the lesser side before, during and even after lockdown.

In the health dimension indicators, the poor households can provide more health care to family members and their physical health has also increased than the very poor households. Regarding the mental health of family members, the very poor have better mental health. This is because unlock brings more employment opportunities, their vulnerabilities have decreased and they do not have to worry much about livelihood as it starts to become more stable. Alcohol consumption has also increased among the poor respondents than that of the very poor respondents while the use of paan and tobacco is vice versa. The increase in the use of drugs is similar for both the household categories.

The indicators of the social dimension show that the very poor households have difficulty regarding children's education. This is due to the introduction of online classes in schools, and parents are unable to provide their children with smartphones for them to attend classes, and they have no idea how to proceed with the online classes as mentioned

in the FGD. The decline in children's education is similar to the assessment made by Ganguly et al. (2020). There is not much difference between the socio-economic categories in the other indicators of the social dimension.

The overall household adaptation results in .27 for the very poor households and .26 for the poor households. In comparison with household resilience, there is an increase in the indicators after the lockdown. This showed that the poor households were able to cope with the changes brought about by the lockdown.

Table 4.17 Household Adaptation after COVID Lockdown

Sl. No	Indicator	Socio Economic Category				Total	
		Very Poor (AAY)		Poor (PHH)			
		Mean	SD	Mean	SD	Mean	SD
1	Man days of Employment	.77	.50	.73	.48	.75	.49
2	Household Income	.65	.61	.63	.58	.64	.59
3	Quantity of Food available to Family Members	.05	.47	.22	.45	.13	.47
4	Ability to provide Healthcare to Family Members	.07	.25	.12	.32	.09	.29
5	Children's Education	-.03	.18	.00	.26	-.02	.22
6	Mental Health of Family Members	.17	.46	.12	.49	.14	.47
7	Physical Health of Family Members	.00	.18	.05	.29	.03	.24
8	Relations within Family	.02	.29	.02	.29	.02	.29
9	Mobility to Different Places	.97	.18	.98	.13	.98	.16
10	Alcohol Consumption	.08	.28	.17	.42	.13	.36
11	Use of Drugs	.02	.13	.02	.22	.02	.18
12	Use of Tobacco	.10	.35	-.03	.37	.03	.37
13	Use of Paan	.03	.26	-.03	.37	.00	.32
14	Participation in Church Activities	.53	.57	.53	.57	.53	.56
15	Religious Activity at Home	-.02	.29	-.02	.34	-.02	.32
16	Family Expenditure	.87	.43	.67	.71	.77	.59
	Household Adaptation	.27	.11	.26	.14	.26	.12

Source: Computed

4.4.4. Level of Adaptation of the Poor and Very Poor Households

The adaptation level is classified into four levels using the visual binning method (Mean ± SD) using SPSS (see Table 4.18). Very low (=.14), low (.15 -.26), moderate (.27 -.39), and high (.40+) are the four levels of adaptation. Table 4.18 shows the variations in adaption levels of the two household categories.

The overall adaptation level of the households after lockdown is at the low and moderate levels similar to the levels of resilience. Both the households, very poor and poor, follow a similar pattern in adaptation level. Low-level adaptation is the highest level, the moderate level is the second highest followed by very low and high levels. Among the very poor households, almost half of the respondents are at a low level of adaptation, a little more than one-third at the moderate level, less than one-sixth at the very low level and one-twelfth at the high level of adaptation. A little more than one-third of the total poor respondents are at the low level of adaptation, while thirty five per cent are at the moderate level. One-sixth of the poor respondents have a very low adaptation level while one-twelfth manage to have a high level of adaptation. There is no significant relationship at a five per cent level.

Even though social capital is accessed through their social networks, the adaptation of the poor households in Aizawl city cannot be translated to a high level of adaptation and is more on the lower side. The poor households were able to cope with the adverse effects of the COVID-19 lockdown in Aizawl city due to the availability of social capital as discussed in the previous sections (see Section 4.2 and 4.3).

Table 4.18 Level of Household Adaptation after COVID-19 Lockdown

Sl. No	Adaptation Level	Socio Economic Category		Total
		Very Poor (AAY)	Poor (PHH)	
1	Very Low (<= .14)	7 (11.7)	11 (18.3)	18 (15.0)
2	Low (.15 - .26)	26 (43.3)	23 (38.3)	49 (40.8)
3	Moderate (.27 - .39)	22 (36.7)	21 (35.0)	43 (35.8)
4	High (.40+)	5 (8.3)	5 (8.3)	10 (8.3)
5	Total	60 (100.0)	60 (100.0)	120 (100.0)
	Mean Household Adaptation	.27 ± .11	.26 ± .14	.26 ± .12
	Spearman Correlation	-.046		
	t	.276		
	Pearson Chi-Square	1.096		

Source: Computed * P < 0.05 ** P < 0.01 Mean ± SD

4.5. Correlates of Household Resilience and Adaptation

Correlation analysis has been performed to understand the household resilience and adaptation of the poor during the lockdown. This section is further divided into six subsections. The first subsection is the correlates of human capital and household resilience and adaptation, the second subsection is natural capital and household resilience and adaptation, the third subsection is heterogeneity and household resilience and adaptation, the fourth subsection is homophily and household resilience and adaptation and the fifth section are relationship pattern, social support and household resilience and adaptation. The last subsection is the correlates of social capital and household resilience and adaptation.

4.5.1. Human Capital, Household Resilience and Adaptation

Correlation analysis has been done to understand the relationship between the human capital measures such as gender, age, education, sub tribe, denomination and socio-economic category and the household resilience and adaptation (see Table 4.19).

Table 4.19 Human Capital, Household Resilience and Adaptation: Pearson's r

Sl. No	Measure	Household Resilience	Household Adaptation
1	Gender: Het	-.055	-.003
2	Gender: IQV	-.055	-.003
3	Age: SD	.061	-.140
4	Education: SD	.017	-.039
5	Subtribe: Het	-.016	-.023
6	Subtribe: IQV	-.010	-.047
7	Denomination: Het	-.010	-.072
8	Denomination: IQV	-.067	-.061
9	Socioeconomic: Het	-.052	.002
10	Socioeconomic: IQV	-.073	-.010

Source: Computed * P < 0.05 ** P < 0.01

The analysis shows that household resilience and adaptation have no significant correlation with the human capital measures. The human capital measure, gender, is negatively related to both household resilience and adaptation. Age and education are positively related to household resilience while the same are negatively related to household adaptation. Denominations of the respondents have negative relationships with

both resilience and adaptation. The Het value of the socio-economic category and household resilience are negatively related while it has a positive relationship with the household adaptation. The IQV value of the socio-economic category has a negative relationship with both household resilience and adaptation.

4.5.2. Natural Capital, Household Resilience and Adaptation

Correlation analysis has been done to understand the relationship between the natural capital assets such as natural assets and physical assets and household resilience and adaptation (see Table 4.20).

Table 4.20 Natural Capital, Household Resilience and Adaptation: Pearson's r

Sl. No	Asset	Household Resilience	Household Adaptation
1	Natural Asset	.139	-.011
2	Physical Asset	.054	-.043

Source: Computed * P < 0.05 ** P < 0.01

The natural asset and physical assets of the respondent households have no significant relation with household resilience and adaptation. However, the natural assets and physical assets of the households are positively related to resilience and negatively related to adaptation.

4.5.3. Heterogeneity, Household Resilience and Adaptation

The heterogeneity measures viz, gender, age, education, sub tribe, denomination and socio-economic category are correlated with the resilience and adaptation of the households (see Table 4.21). The analysis shows that household resilience and adaptation have no significant relationship with the heterogeneity measures. The heterogeneity measure, gender, is negatively related to both household resilience and adaptation. Age and education are positively related to household resilience while the same are negatively related to household adaptation. Denominations of the respondents have a negative relationship with both resilience and adaptation. The Het value of the socio-economic category and household resilience are negatively related while it has a positive relationship with the household adaptation. The IQV value of the socio-economic category has a negative relationship with both household resilience and adaptation.

Table 4.21 Heterogeneity, Household Resilience and Adaptation: Pearson's r

Sl. No.	Measure	Household Resilience	Household Adaptation
1	Gender: Het	-.055	-.003
2	Gender: IQV	-.055	-.003
3	Age: SD	.061	-.140
4	Education: SD	.017	-.039
5	Subtribe: Het	-.016	-.023
6	Subtribe: IQV	-.010	-.047
7	Denomination: Het	-.010	-.072
8	Denomination: IQV	-.067	-.061
9	Socioeconomic: Het	-.052	.002
10	Socioeconomic: IQV	-.073	-.010

Source: Computed * P < 0.05 ** P < 0.01

4.5.4. Homophily and Household Resilience and Adaptation of Poor

A correlational analysis is done on the homophily characteristics of social network measures and the resilience and adaptation of sample households. The analysis has found out that there is no significant relationship between the two (see Table 4.22).

Table 4.22 Homophily, Household Resilience and Adaptation: Pearson's r

Sl. No.	Measure	Household Resilience	Household Adaptation
1	Gender: Same proportion	-.048	.147
2	Gender: E-I	.050	-.147
3	Age: Average Eucdist	-.001	-.037
4	Education: Average Eucdist	.129	-.171
5	Subtribe: Same proportion	.059	-.022
6	Subtribe: E-I	-.059	.021
7	Denomination: Same proportion	.166	-.031
8	Denomination: E-I	-.169	.031

Source: Computed * P < 0.05 ** P < 0.01

The same proportion measure of gender is negatively related to the household resilience and positively related with the adaptation and vice versa with that of E-I measure of gender. Age of the alters is negatively related to both household resilience and adaptation while the education of the alters and household resilience is related positively

and with the household adaptation, the relationship is negative. The same proportion measure of sub-tribes and denomination of the alters of the respondents are positively related with resilience and negative with adaptation while the E-I measures of the same are negatively related to resilience and positive relation with adaptation.

4.5.5. Relationship, Social Support, Household Resilience and Adaptation

Pearson's correlation coefficient is used to study the connection between the respondents' relationship patterns with the alter and social support received from the alters with the household resilience and adaptation (see Table 4.23).

Among the relationship pattern with the alters, the relationship pattern-friend and household adaptation found to be significant. Among the social support measures, there is no significant relationship with household resilience nor adaptation. The correlation of social support measures viz. relationship, number and type; and household resilience are not significant even at 5 per cent level.

Table 4.23 Relationship, Social Support and Resilience and Adaptation:Pearson's r

Sl. No.	Measure	Household Resilience	Household Adaptation
1	Relationship pattern: Know Each Other	.137	.026
2	Relationship pattern: Friend	-.009	-.195*
3	Relationship pattern: Kin	-.126	.132
4	Number of Social Support: Average	.027	-.003
5	Number of Social Support: Maximum	-.026	.019
6	Number of Social Support: Min	.031	.051
7	Emotional Support	-.080	.006
8	Information Support	-.113	-.101
9	Instrumental Support	.026	.088
10	Material Support	.126	-.058

Source: Computed * P < 0.05 ** P < 0.01

4.5.6. Social Capital and Household Resilience and Adaptation

Pearson's correlation coefficient is used to test the statistical relationship of social capital measures and household resilience and adaptation (see Table 4.24).

The analysis of social capital and household resilience showed that the degree, density and effective size of social capital are positively correlated while the constraint is

negatively correlated. The social capital and household adaptation analysis reveal that the degree and effective size shows a negative correlation and density and constraint show a positive correlation. There is no significant relationship between social capital and household resilience and adaptation.

Table 4.24 Social Capital and Household Resilience and Adaptation: Pearson's r

Sl. No.	Measure	Household Resilience	Household Adaptation
1	Degree	.072	-.125
2	Density	.073	.064
3	Effective Size	.045	-.101
4	Constraint	-.027	.061

Source: Computed * P < 0.05 ** P < 0.01

The present chapter presents the analysis of the data collected in the six localities within Aizawl city. The next chapter presents the community and household response to the lockdown from lived experiences of the community people in Aizawl city.

CHAPTER V

COMMUNITY AND HOUSEHOLD RESPONSE TO LOCKDOWN

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COMMUNITY AND HOUSEHOLD RESPONSE TO LOCKDOWN

This chapter presents the qualitative data analysis of the present study. In this chapter, the lived experiences are divided into three sections. The first section consists of the impact diagrams of poor households, the second section consists of the focus group discussions facilitated among the Local Level Task Force members in the six communities and the third section consists of the case studies conducted among the poor households on their experiences during COVID-19 lockdown in Aizawl city.

5.1. Perception of the Lockdown by the Poor Households

Impact diagram is one of the methods under the relational methods of Participatory Rural Appraisal (PRA). It is an approach used to analyse, share and improve local people's knowledge of life and the situation, and to plan, prioritize, act, monitor and assess. It is a flow diagram that identifies and represents the impact of an activity, intervention or event. The changes and the perception of the people are captured in the diagram and it is a powerful assessment tool. It helps in identifying positive and negative impacts, whether it is intended or unintended and helps in understanding the interconnections between these effects.

To understand the perceptions of the poor households on the impacts of the lockdown, the present study facilitated the PRA exercise using Impact Diagrams in the six communities. The six Impact Diagrams are summarized in Figure 5.7. The main events which cause the impacts shown in the table are COVID-19 and the lockdown implemented by the Government due to the novel Coronavirus. The impact of the lockdown has been summarized into two broad groups i.e., positive impacts and negative impacts. Both the impacts are classified into high impact (4-5), medium impact (3) and low impact (1-2).

5.1.1. Negative Impacts of the Lockdown

Among the negative impacts, the high impacts mentioned are decreased income and a decline in children’s education. The decrease in income is mainly due to the movement restrictions imposed by the Government. Most of the poor and very poor

households are daily wage earners. When movement restriction is imposed, they lose their employment opportunities. The lockdown also had an indirect impact on the agriculture and livestock of the poor households as food crops are destroyed without caretakers and dying of livestock due to the non-availability of markets.

The decline in children's education is due to the closing of schools to avoid social gatherings and opting for online classes. Many private schools undertake online classes while Government schools, where most of the children from poor households attend, were not able to undertake online classes. The poor households whose children have online classes were not able to provide facilities to their children such as android devices and fast internet connections. Also, the parents were not able to follow their classes due to them being low educated, language barrier and having less amount of time as they have to earn their livelihood. The decrease in income has also borne the problem of not being able to pay the school fees. The lockdown had also led to laziness in children which further increased the number of school dropouts.

Another high negative impact is the decrease in food items which leads to an increase in food prices. The decrease in food items is due to panic buyers and the SOP followed. The panic buyers are mostly the non-poor who collected food items, decreasing the number of food items in the local shops and limiting the food supply for poor households. The SOP followed had also limited the supply of food items both vegetables and daily needs as mobility was restricted.

Medium negative impacts are stress and laziness. Stress is mainly due to the decrease in income and decline in children's education. The poor households had to use their small savings and find a way to earn a living during the pandemic to provide food for their family. Laziness as a negative impact mentioned by the poor households is mainly due to the closing of churches which used to be a normal routine and the closing of schools that results in laziness among the children.

The low negative impact is a decrease in health and decreases employment due to the movement of inter-state migrants. Health decreases due to the unavailability of timely tests schedules and the movement restrictions which restricted the elderly who have

hypertension and diabetes to go for walks. All these negative impacts have increased the vulnerability of the poor during the lockdown.

5.1.2. Positive Impacts of the Lockdown

While the negative impacts of the lockdown are highly evident, there are a few positive impacts of the lockdown. The summary of the impact diagrams showed that the formation of LLTF in all the localities has high positive impacts. The LLTF in each locality has played an important role in both fighting the pandemic and in the provision of social support to the most vulnerable households in their respective localities. Social support provision is both in the form of cash and kind depending on their localities. This had reduced the vulnerability of the poor during the lockdown.

Medium positive impact includes increased income due to livelihood diversification and the LTTF Guidelines which is the SOP and a decrease in the use of substances such as drugs and alcohol. As the livelihood of the poor are disrupted due to the movement restrictions, the poor household diversified their livelihood, taking new steps to earn a living and this had helped them in increasing their income even after the lockdown. The decrease in the use of substances is also due to the movement restrictions which decreases the supply of such substances. This had enabled the substance abusers to abstain and created more family time in their families. There are also increased food grains availability through the PDS. This showed that the Government has played a role in reducing food insecurity during the pandemic.

Low positive impact includes increased employment opportunities due to the movement of inter-state migrants, more family time and support from individuals. The movement of inter-state migrants has opened up employment opportunities in both the skilled and the unskilled labour market. The requirement for labour has increased as the non-Mizo workers have migrated back to their hometowns due to the pandemic. More family time has led to more family prayers which some households were not able to practice before lockdown. Also, some households are supported by individuals which helped them reduce their vulnerability during the lockdown.

The impact diagrams have shown the perception of the poor households on the lockdown and the scenario of Aizawl City during the lockdown. The negative impacts are more as compared to the positive impacts.

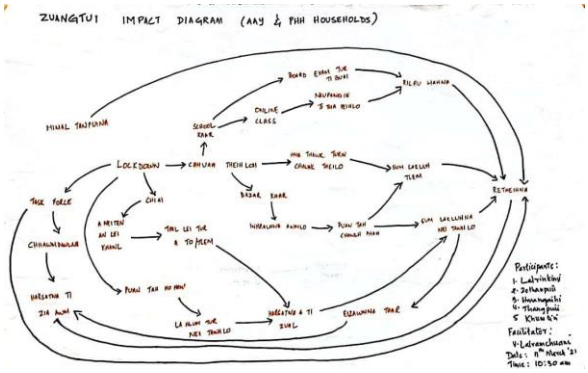

Figure 5.1 Impact Diagram of Zuangtui

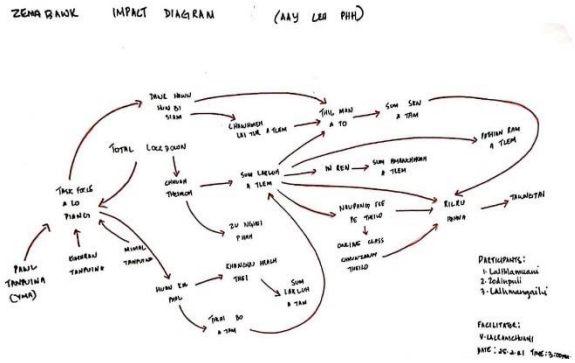

Figure 5.2 Impact Diagram of Zemabawk

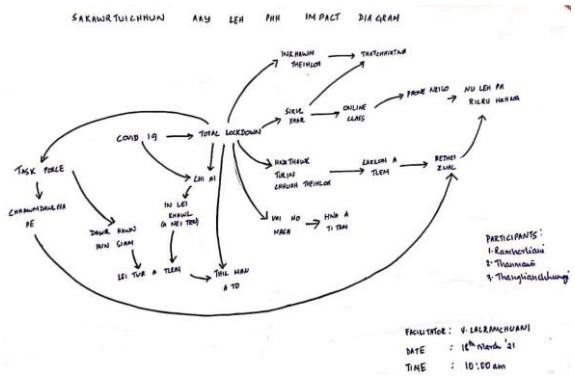

Figure 5.3 Impact Diagram of Bethlehem Vengthlang

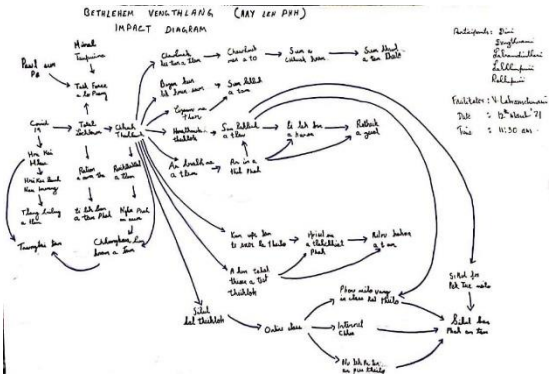

Figure 5.4 Impact Diagram of Sakawrtuichhun

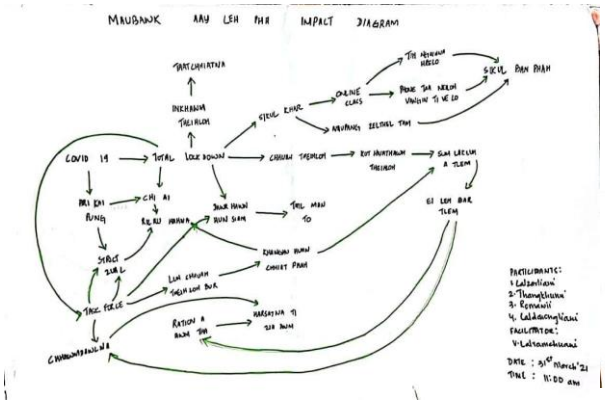

Figure 5.5 Impact Diagram of Maubawk

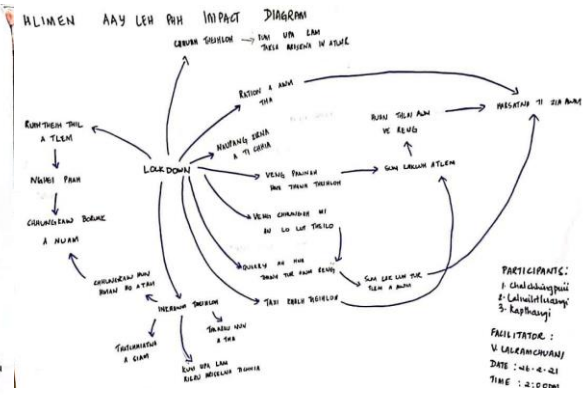

Figure 5.6 Impact Diagram of Hlimen

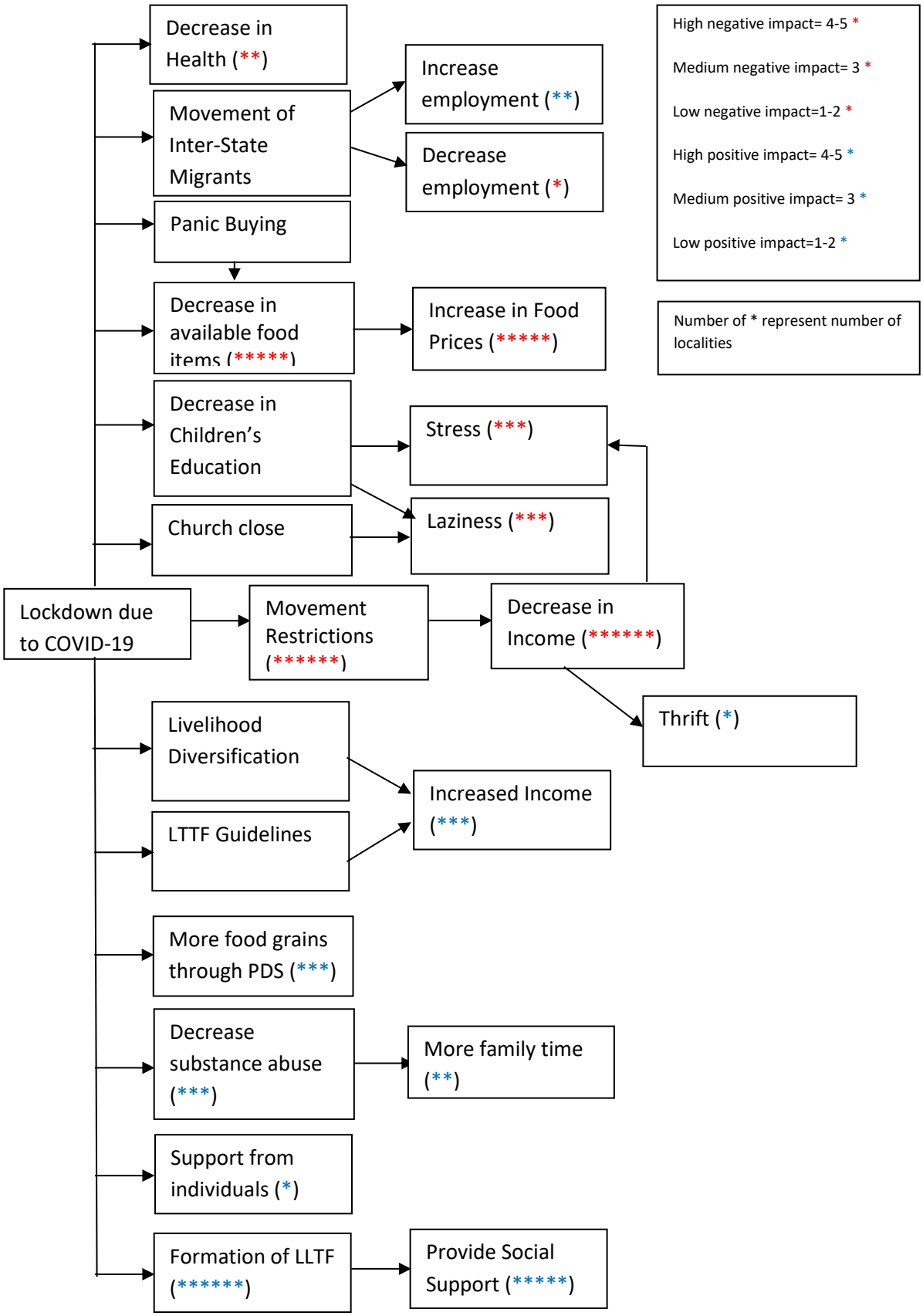

Figure 5.7 Summary of Impact Diagrams

5.2. Perception of the Lockdown by the Community Leaders

To understand the perception of the community leaders on the lockdown, Focus Group Discussions were facilitated among Local Level Task Force members of the six communities. The discussions focused on the Covid-19 lockdown which started on 22nd March 2020 and the impacts of the lockdown. It highlighted the support given to Very Poor and Poor Households within their community, their arrangements in preventing the spread of Covid-19 their views on various challenges faced as well as suggestions.

There are various themes that emerged from the FGD which are as follows:

5.2.1. The Local Level Task Force

The Local Level Task Force is formed in each locality according to the Standard Operating Procedures for Village/Local Level Task Force implemented by the Government of Mizoram.

5.2.1.1. Composition of the Local Level Task Force

The composition and structure of the LLTF in the six localities are all well based on the SOP guidelines given by the Government. There are some minute differences in the composition as these guidelines were modified according to the socio demographic characteristics of the community people respectively. The total number of LLTF members also differs according to the population of the community.

5.2.1.2. Resource Mobilization of Local Level Task Force

The resource mobilisation of the LLTF in Aizawl city during COVID-19 lockdown is presented in Table 5.1. The donations to the LLTF in cash in each locality were more or less similar which were made by Churches, NGOs, State Government, and individuals including the MLA and AMC Councillors. Some localities received kind donations in the form of vegetables. All these donations had enabled the functioning of the LLTF to serve their purpose to work for the containment of the COVID-19 virus and providing social support to the community.

Table 5.1: Resource Mobilisation of Local Level Task Force

Resource Mobilisation		Community					
		1	2	3	4	5	6
Cash Donations	YMA	✓	✓	✓	✓	✓	✓
	MHIP	✓	✓	✓	✓	✓	✓
	Churches	✓	✓	✓	✓	✓	✓
	Government	✓	✓	✓	✓	✓	✓
	Individuals	✓	✓	✓	✓	✓	✓
Kind Donations				1. Maite community 2.Thingdawl community		1. Chhunthang community 2. Sihphir community 3. Maubuang community	

Source: FGD

5.2.1.3. Process and Functioning of the Local Level task Force

The process and function of the Local Level Task Force are presented in Table 5.2. The task and duties fulfilled by the LLTF are also more or less similar. It can be classified into major task (5-6), medium task (3-4) and minor task (1-2).

Contact tracing, management of quarantine centres, arrangement of sample collection for the COVID-19 positive contacts, scheduling of opening of shops, both petty shops and vegetable vendors, implementation of the Government rules and provision of social support in kind were the major tasks performed by the LLTF in the study areas during the lockdown. Apart from these major tasks, the other duties or tasks performed by the LLTF can be grouped under minor tasks. The LLTF also collects food items for the community which also includes basic necessities for redistribution and also provides social support in the form of cash. Handling the inter-state migrants, taking care of Community Quarantine Centres, and upholding the rules and regulations were also fulfilled by the LLTF. Community 6 LLTF was able to establish their own COVID Care Centres, which is the first CCC established by a community in the city. All the participants of the FGD except Community 6 LLTF do not mention any challenges faced by them. The challenge mentioned by the Community 6 LLTF was that some of the members of the committee were infected by COVID-19 which had created a problem in the function of the LLTF.

Table 5.2 Process and function of the Local Level Task Force

Process	Community						Total
	1	2	3	4	5	6	
Collection of food items	1	0	1	0	0	0	2
Contact tracing	1	1	1	1	1	1	6
Creation of CCC	0	0	0	0	0	1	1
Management of CCC	0	0	0	0	0	1	1
Management of Quarantine Centres	1	1	1	1	1	1	6
Arrangement of sample collection	1	1	1	1	1	1	6
Scheduling of opening shops	1	1	1	1	1	1	6
Implement Govt. rules	1	1	1	1	1	1	6
Control food prices	1	0	0	0	0	0	1
Home delivery services	0	0	1	0	0	0	1
Assisting Govt. officials	0	0	0	0	1	0	1
Provision of Social Support in Cash	0	1	0	0	1	0	2
Provision of Social Support in Kind	1	1	1	1	1	1	6

Source: FGD

5.2.2. Leaders' perception of COVID-19 and its impacts in the community

The findings of the FGD on the community leaders' perception of the lockdown are summarised in Table 5.3. The perceived impacts of the lockdown on the community by the leaders is grouped into high impact (5-6), medium impact (3-4) and low impact (1-2).

The high impact on the community during the lockdown is on education. Children are believed to be the most affected by the lockdown. Online education is still difficult to follow by most households. This has further affected the children in not being able to understand lessons and they become lazy. However, for some community leaders, online classes have made their lives easier and saved their time.

The medium impact includes impact on wage labourers, decreased tithe, a decline in substance abuse, fear of infection, increased food availability, and health improvement. The community leaders believed that the livelihoods of the poor are not very much affected by observing their spending capacity. However, the workers within the settlement area are affected by the lockdown norms. The lockdown had also decreased the supply of drugs and alcohol in the community which leads to the decline in substance abuse.

Regarding the psychosocial aspects of the community, the community was quite peaceful but that depends on the positive cases and infection rate of the coronavirus,

however, some communities panic due to fear of getting the infection. But there are also a few who hesitate to wear masks and disobey the rules for the prevention of the virus as mentioned by the leaders of Community 5. With regards to community health, the community leaders believed that health has improved due to the continuous use of face masks and the popularization of steam. Cleanliness in the community areas has also improved.

Another medium impact is the increased food availability to the community. It was mentioned that food security has increased for some households as support was given to them and the LLTFs mentioned that there will be no person who is not able to have two square meals a day due to the provisions of social support in their respective locality.

The low impacts perceived by the community leaders include the psychosocial aspects of the community which was the fear of food insecurity, impacts on the livelihood of farmers, increased family time, and decline in health. The community leaders believed that there was fear of food insecurity among the community people due to the panic buyers who were mostly the non-poor sections in the community. With regards to livelihood, the leaders perceived that the farmers were not much affected by the lockdown as the agricultural workers were allowed to work in their fields as the demand for food supply was high in each of the communities.

With lockdown measures that keep everyone at home, there was also an increase in family time. However, these measures keeping everyone at home affected the health especially the elder sections. They cannot go for exercises, negatively affecting the health of diabetes and hypertension patients nor go to Church which was their source of emotional support.

Suggestions were also made by the members of LLTF for disaster mitigation like sensitization on the importance of savings and self-reliance. Community 5 LLTF had suggested making contributions for the "Relief Fund" which would enable the community to self-sustain when natural or manmade disasters happen in the community. If the contributions are not used, then, it could be used as a saving, which could be used anytime in need.

Table 5.3 Community Leaders' Perception of the Impact of Lockdown

Dimension	Impact	Community						Total
		1	2	3	4	5	6	
Psychosocial	Fear of Infection	0	0	1	1	0	1	3
	Fear of Food Insecurity	0	0	1	0	0	1	2
Livelihood	Farmers	0	0	0	1	1	0	2
	Wage Laborers	0	1	1	1	1	1	4
Food availability	Increased	1	1	1	0	0	0	3
Health	Improved	1	1	0	0	1	1	4
	Decline	0	0	1	0	0	0	1
Education	Decline	1	1	1	1	1	1	6
Substance abuse	Decline	1	0	1	1	0	1	4
Church	Tithe Decreased	1	0	1	1	0	1	4
Family	Family Time Increased	0	0	1	0	0	1	2

Source: FGD

The above summary of the Impact Diagrams and FGD showed the scenario of the lockdown in Aizawl City. It can be seen that there is not much difference in the perceptions of the lockdown between the poor and the leaders. However, the perceptions of the community leaders on the livelihood of the poor are far away from the lived experiences of the poor during the lockdown. The social support provided by the LLTF had helped the destitute in the community to cope with the adverse effects of the lockdown.

5.3. Lived Experiences of Poor during Lockdown: Some Case studies

A total of five case studies were conducted among the poor households to understand the challenges faced by the poor during the lockdown and the coping strategies employed by them to overcome the adverse effects of the lockdown.

5.3.1. Case I: A Lady with Differently Abled Siblings

Mrs. Thari aged 65 years old lady comes from a below poverty line (BPL) household and currently resides in Zemabawk. She is illiterate and she said that attending school at a younger age was difficult due to poverty. She is a widowed mother and has one child and after the death of her husband, she lives with her two siblings and her one child. They moved to Mizoram in the year 2000 from Falam (one of the districts in Myanmar) with the main aim of hoping and seeking better livelihood opportunities and

living conditions. Two of her siblings are living with a disability while one sibling cannot move around without the help of a caretaker and the other younger sibling used to sell vegetables within the community despite her disability, their income cannot suffice or is not able to cover the financial needs of the family. Unfortunately, the only son, the breadwinner (he is a carpenter) in the family is living with his wife and is not able to support his mother regularly. She said that having a meal twice a day is very difficult as they are only surviving with support from others. When people stop giving, they will be starving. The disability of the two siblings has made it difficult to generate more income and moreover, she is at an old age and no one is willing to employ her. Pre- and post-COVID-19 do not make any difference in the socio-economic condition of the family as they are struggling even before the COVID-19 pandemic. Nevertheless, their only means of getting two meals a day is the social support received in both cash and kind from neighbours and other people who identify them through weak ties.

5.3.2. Case II: A Childless Widow who is Very Poor

Mrs. Zingi, 91 years of age, has been residing in Zuangtui for the past ten years. Her husband passed away six years ago, they do not have children, so she has been living alone since then. She does not have any means to earn a livelihood due to old age. She rented her home free of cost and has been identified by the community leaders and put her on the AAY beneficiary list which helped her to earn her livelihood. The food grains received through the Public Distribution System are much more than what she consumed, so she can sell the extra food grains, which is her only source for earning money. She had a small home garden from which she could get enough vegetables for herself, but not throughout the year. She received continuous social support from her neighbours, especially in kind. Her next-door neighbour has always been a continuous supporter and helped her in carrying the food grains every time there was a ration. The lockdown does not have much effect on her income as she is not able to go out for work even before the lockdown. During COVID-19 Lockdown, she received social support from the Local Level Task Force and many individuals and said that she had more during the lockdown. Some of the social support she received in kind are from unknown individuals, which she explained as “God has given her numerous blessings.”

5.3.3. Case III: A Frail Elderly Lady

Mrs. Khuali, 81 years old, is originally from Rallen Village. She has nine siblings and did not receive formal education as she has to take care of her parents. She did not know how to read nor write. Due to the merging of villages in the 1960s, she and her family moved to Darlung village. She is a single mother with a son and due to his illness; they went to Aizawl in 1991 to get better medical treatment for her son. They started residing in Hlimen where they joined their distant family for some months and later decided to settle permanently. They rented a house at Rupees One fifty per month at that time. Vegetable selling and working at the quarry was their main source of income. Her son got married but later he passed away due to his illness. Since then, Mrs. Khuali has been living alone as her daughter-in-law and grandson decided to move out. While working at the quarry, she met with an accident and has hip dislocation. Due to the accident and old age, she is not able to earn as much as before. Back in the day, there was a storm in which Mrs. Khuali's house was completely flooded. Her current house owner saw her condition and supported her by letting her rent their house free of cost. Till today, she resides in their house. She started working at the quarry again with the help of other quarry workers but she mentioned that it was extremely hard for her to earn even a hundred rupee. When the consequences of her hip dislocation arise due to lifting weights, she would stay at home idle. At this time, she realized that she wanted to read the Bible badly. So, she prayed to God and asked His blessings, God gifted her the ability to read. She has been receiving social support from Churches, NGOs and individuals in both cash and kind. She saves the cash she received and uses it to treat her illnesses. Her house owners supported her in every way, in refilling her LPG, in buying ration from the retailer, giving her television so that she does not feel bored etc. She also mentioned that she visited her grandson and daughter in law, they were willing to help her but their other family members did not even want to talk to her. So, she did not receive support from her family members. During the lockdown, Mrs Khuali was bedridden due to her pelvic dislocation again. She mentioned that she did not eat nor drink for days as her house owner was out of town and no one visited her. She prayed and asked for help. After a week, her house owners returned and they provided assistance to her. Later on, she

received social support in cash and kind from the YMA, Church and individuals within and outside the community. This helped her to survive.

5.3.4. Case IV: A Lonely Man who is Very Poor

A seventy-five-year-old male, Mr Ngura originally from Kepran Village was a farmer back then. He is the fifth child among seven siblings. He moved to Zuangtui in 1990 in hope of a better economic opportunity. He was married with two children but unfortunately, he was divorced which led him to live alone. His wife and daughters reside in another locality within Aizawl city. His main livelihood is reeling threads for weaving at the loom. He can reel around twenty reels which makes him earn hundred rupees a day. Due to his economic condition, his house owners rented him his home free of cost and did not make him pay other bills too. During the lockdown, he was not able to earn his living. This is because most of the weavers had gone back to their hometown and there was no demand for cotton reels. He used to sit idle at home. During this time, he did not receive support from the LLTF, Church nor NGOs but he was supported by his neighbours and his daughters provided him with his needs. He also gets food grains through the PDS and he mentioned that as he is under the AAY beneficiary list, he received much more than what he consumes. The PDS and support from his daughters and neighbours have helped him cope with the livelihood challenges he faced due to the lockdown.

5.3.5. Case V: A Self-reliant Elderly Lady

Mrs. Khumi is eighty-one years old lady. She received formal education up to “B Pawl" only. As she mentioned, her family wanted her to continue her studies but she made her own choice as all her friends were engaged in picking firewoods from the forest supporting their families and she wanted to do the same. She has been residing in Zemabawk since the ninety sixties due to the village grouping. She was married with one son but her husband happened to elope with another lady so she became a single mother. She earned her living by commissioning bamboo. She used to go to Tuirial to get bamboo in bundles and sell it in their locality. She was able to get a profit of rupees thirty per bundle but her daily income varies. Her son, along with his family resides in the same locality but she tried and worked hard so that her son would not need to support her. She

sometimes went to Tuirial and got the bamboos in credit which she paid in installment after she sold it. During the lockdown, earning a livelihood was very hard. She was not able to go to get bamboos and even if she does, there were no customers as going out and working was not allowed due to social distancing measures. This has made life hard for her as she has to pay her bills. One time, as she had used up all her savings but needed to earn, she borrowed a sum of money from her neighbour to use as a capital to start her small business in bamboo again. Her house owner has also understood her difficulties and gave her a discount on her house rent. She then received social support from neighbours and other individuals within and outside the community. She saved up the cash she received and used it to pay her rent. Her next-door neighbour had also paid water bills for her to date. The amount of social support received from others had enabled her to cope with hard times especially during the lockdown.

The above cases revealed the challenges of the poor in Aizawl before and during the lockdown. The challenges which they faced pre-COVID-19 are mainly due to unstable livelihood sources, ill health and living alone. The COVID-19 lockdown had increased their vulnerabilities and were not able to continue their small businesses to earn their livelihood. But, as a whole, they are supported by the Local Level Task Force in their localities, Churches, NGOs and individuals which helped them cope through the lockdown period.

The present chapter presents the community and household response to lockdown and lived experiences of the poor during the lockdown. The major findings, conclusion, and suggestions of the present study are presented in the next chapter.

CHAPTER VI

CONCLUSION

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CONCLUSION

The role of social capital of poor households in Aizawl city during the COVID-19 lockdown is examined in the present study. It tries to assess the relationship between social capital in terms of social network measures and the availability of social support with resilience and adaptation. The study also explores the challenges faced by the poor households and the role of the State, Civil Society and Church during the COVID-19 Lockdown. The present study also assesses the social support embedded in the composition and structure of social networks. The study is conducted using both quantitative and qualitative methods in six localities with Aizawl Municipal Area viz. Zuangtui, Zemabawk, Bethlehem Vengthlang, Sakawrtuichhun, Maubawk, and Hlimen to meet the objectives and hypotheses of the present study.

This chapter consists of three sections. The major findings of the present study are presented in the first section, the conclusion is presented in the second section, and the suggestions are presented in the third section.

6.1. Major Findings

The findings of the present study are summarized in this section. The findings are presented into six sub-sections in which the first sub-section consists of the social structural bases of the poor in Aizawl, the second sub-section presents the challenges faced by the poor households during COVID-19 lockdown and the third subsection discusses the role of State, Civil Society, and Church during the lockdown. In the fourth sub-section, the social capital and social support embedded in the composition and structure of social networks of poor households in Aizawl are discussed. The resilience of the poor households during the COVID-19 lockdown is summarized in the fifth sub-section and the sixth sub-section presents the relationship between social capital, social support, and household resilience of poor households during the COVID-19 lockdown.

6.1.1. Social Structural Bases of the Poor in Aizawl

In terms of demographic profile, family profile, social characteristics, economic characteristics, and civic and political affiliations, the social structural bases of the poor in Aizawl have been discussed.

Gender, age group, marital and educational status have been studied to understand the demographic structural bases of the poor have been studied in terms of. In the present study, there are more female respondents among both poor and very poor respondents where most of the respondents belong to middle and old age groups. More than half of the respondents are unmarried and among the respondents, those who finished their high school constitute a majority followed by primary and middle.

The type of family, family size, and gender of the household's head in the present study describe the family profile. The poor households in Aizawl are mostly nuclear families and small in size i.e., less than three members in the family. As a patriarchal society, there are more male-headed families as compared to female-headed families.

The social structural bases are analysed in terms of sub tribe, type of clan and denomination. The poor households in Aizawl are mostly Lusei followed by Lai, Hmar and other subtribes such as Paihte, Mara and Nepali where more than half are from the common clan. The Presbyterian church is the major denomination. Other denominations of UPC NEI Church, Baptist Church Church, UPC Mizoram, Seventh Day Adventist, Roman Catholic, Salvation Army, IKK, Kohhran Thianghlim etc. are also present.

In the present study, the economic bases include dependency rate, perceived levels of living, ownership and type of house. Among the poor household, the earner rate is higher than the dependency rate and more than half of the poor perceive their level of living as poor followed by a middle level of living and very poor level of living. More than half of the poor in Aizawl live in their own homes and most of the houses are Assam type houses. House ownership by the poor households in Aizawl can be a result of the support received through Government schemes and the collaboration between the Local Council and YMA in their respective localities. There are only a small number of individuals who have leadership positions among the sample households.

6.1.2. Challenges Faced by the Poor Households during COVID-19 Lockdown

The challenges faced by the poor households during COVID-19 Lockdown are based on the effect of the Lockdown from 22nd March 2020 with two additional extensions of the lockdown period. The first lockdown is a period of twenty-one days, followed by the second lockdown of forty days and is extended to the third lockdown of eighty days. The poor households in Aizawl City mainly depend on daily labour, self-employment and private employment as their primary occupation (Sailo, 2014; Tuan Mansanga, 2016). Due to movement restriction and social distancing norms of the lockdown, the informal sector and the livelihood of the poor have been affected. The lockdown had resulted in increased movement restrictions which decreased the number of man-days of employment and further decreased the income of the poor. Findings from the FGD highlighted those daily wage labourers whose workplace is within the settlement area are more affected than farmers who work in the outskirts of the city. Interstate migration at the onset of the pandemic also contributes to decreased income among poor households. In addition to the decreased income, the poor experience a decrease in food items available and a rise in food prices which are caused by the panic buyers who are from the non-poor category and movement restrictions.

Apart from the livelihood challenges, the poor households faced challenges regarding children's education. The challenges on education are due to the economic bases of the poor households, the economic impacts of the lockdown and the encouragement of online classes without proper planning and inadequate digital skills. The poor households without proper income during the lockdown have difficulty in payment of fees for their children's education and online classes undertaken by the educational institutions are a burden for the poor families. While some families were unable to provide facilities for joining the online classes, some were unable to cope with the online classes due to their busy schedule to earn their livelihood in every possible way and the language barrier also creates a problem as the medium of education is mostly in English. Both physical and mental health were also disturbed due to the lockdown.

Social capital embedded in the social network of the poor had helped them to cope with the challenges during the lockdown. The poor household had employed thrift,

material support from friends and families, savings, instrumental support from friends and families, borrowing from friends and families, livelihood diversification and prayer as coping strategies for the challenges faced during the lockdown.

6.1.3. Role of State, Civil Society and Church during COVID-19 Lockdown

The role of the State and Civil Society organisations such as YMA, MHIP and MUP and the Church during the lockdown has been assessed in terms of the social support provided to the poor. The State comprises the State Government and Local Council. The findings from the perceptions of the lockdown provided that the State Government had helped reduce the stress of the poor households during the lockdown by providing food grains- rice frequently, pulses were also provided through PDS and free of cost for the AAY households which increases food security. Thus, helped in reducing the vulnerability of the poor and also provided material support in the form of cash to the LLTFs within Aizawl. The State Government through the Mizoram State Disaster Management Authority had issued Standard Operating Procedures which provided guidelines for restrictions towards the fight against COVID-19 and the formation of Local Level Task Force (LLTF) in each locality.

The Local Council is an important component of the LLTF. The State Government has constituted the LLTF with the Local Council Chairman as the Chairman of the LLTF. The formation of the LLTF is the key factor that contributes to the prevention and containment of COVID-19 outbreak in the communities and also helped in decreasing the vulnerabilities of the poor during the lockdown.

The role of Civil Societies such as YMA, MHIP and MUP during the lockdown is summarized in the present study by the social support provided through the LLTFs. Apart from their functions in the LLTF, these non-governmental organizations in their respective locality contributed donations to the LLTF and functions together as a group following the SOP implemented by the State. The LLTFs have played a leading role in each of their localities as Front-Line Workers.

The Church is also a composition of the LLTF. The SOP had included a representative of Churches in the LLTF. Apart from the social support and duties fulfilled

by the LLTF, the Church had been playing an important role by providing social support in cash and kind to the vulnerable households within their respective locality without any barrier in denominations. The Church is the backbone for the community in the prevention of the COVID-19 outbreak. They authorized the use of the Church Halls for Community Quarantine Centres and provided support in the form of cash to the LLTF as well as to the destitute within their community.

The role played by the LLTF toward the prevention of COVID-19 can be summarised as follows:

1. 'Contact tracing' of the COVID-19 positive patients for containing the virus.
2. Arrangement of sample collection and management of Community Quarantine Centres.
3. Amend the Government SOP according to the community requirement.
4. Maintain the rules and regulations of COVID-19 prevention.
5. Track down the destitute and provide material support in cash and kind.

Apart from the collective efforts through the LLTF, the civil societies providing social support to the destitute in their respective locality separately had enabled the poor to cope with the challenges they faced during the lockdown.

6.1.4. Social Capital and Social Support

The present study analyses social capital in the form of social networks. The social network data composition is collected using name generators and name interpreters embedded in the interview schedule. The composition and measures of the ego-centric social network are analysed with E-Net and SPSS.

To understand the social structural bases of the social network of the poor in Aizawl city during the COVID-19 lockdown, the gender composition of the social network, the age and years of education of the alters, the sub tribe and denomination as well as the socio-economic category (SEC) of the alters were analysed. There are more female alters than male alters in the social networks of the poor where there are more female alters among the poor SEC than the very poor SEC. The alters' age ranges from

thirty-five years to sixty-two years and the education level of the alters in the social network ranges from six to ten years of education. Lusei is the largest sub-tribe mong the alters, followed by Hmar, Lai, Mara, Paihte and Nepalis. In terms of denomination, the majority of the alters belong to Presbyterian Church. There are also alters who belong to UPC NEI, Baptist Church and UPC Mizoram, Roman Catholics, Seventh Day Adventists, Salvation Army, Kohhran Thianghlim, Isua Krista Kohhran etc. Majority of alters in the social network of the poor household in Aizawl during COVID-19 lockdown belong to the poor SEC followed by the non-poor SEC. However, the non-poor are the main sources of social support for the very poor households whereas the majority of the alters in the social network of poor households are from the poor SEC. This means that social support is provided by the same level of people among the poor household category. Among the alters, affiliation with the government i.e., government servant is the highest and there are also a few Local Task Force and Church affiliations. There are fewer political parties and CBO affiliations.

The pattern of relationship in social networks of the poor in the present study is majorly friend based followed by kinship and there are no significant differences found between the very poor and poor households. The third major relationship pattern is ‘known each other ' and the difference between the two socio-economic categories in this relationship pattern is found to be significant, where it is much higher among the very poor households. This may be because the very poor households are more vulnerable during the lockdown and receive more social support from individuals outside their strong ties. The presence of more friend based relationships in the social network of the poor during the lockdown may be due to the lockdown restrictions which unable movement across localities and households mainly depending on local ties at the point of time.

The relationship between the ego and the alters have resulted in the provisions of social support during the lockdown where instrumental support has been the highest support provided to the poor followed by material support, emotional support and informational support. The difference in the material support and emotional support between the very poor and poor is significant in which the percentage of material support of the very poor is higher than that of the poor. This may be attributed to the greater

number of decreased income households among the very poor which resulted in the need for more material support. The overall average number of social supports is 1.5. There are no significant differences in the number of social supports.

Social capital operationalized in terms of heterogeneity showed that the alters in the social network show similarity in terms of gender, denomination and subtribe whereas the socio-economic categories of the alters are different. There is significant variation between the two socio-economic categories in terms of gender. Also, social capital operationalized in terms of homophily showed the respondents (ego) and the alters are similar in terms of gender and subtribe while age and education of the alters shows heterogeneity with the ego. The variation in the homophily of the gender and education characteristics between the two socio-economic household categories is found to be significant.

The analysis of the social network measures of social capital in terms of Standard Ego measure (Borgatti, 2006) and Structural Hole measure (1992) showed that the mean degree or network size of the social network is 6.1 and the density of the network is 0.7 which is high. The effective size is 3.0 and the constraint is 0.3. There are some differences in the social network measure between the two socio economic categories where the mean degree of the very poor households is greater than that of the poor households which shows that the relationship among the very poor is likely to have the needed resources as compared to that of the poor while the mean density of the social networks of the very poor is slightly lower to the poor. Also, the mean effective size of the social network of the very poor households is lower than that of the poor households and the constraint measure of the social network of both the poor and very poor households is equal. There are no significant variations in these measures. These findings showed that social capital embedded in the social networks of the poor households in Aizawl city during the lockdown is high.

6.1.5. Resilience of the Poor Households during the COVID-19 Lockdown

The present study analyses the relationships between vulnerability, resilience and adaptation from social capital perspective assessed in terms of social network using sixteen indicators based on economic, health and social dimensions based on the experiences during and after the lockdown.

During the lockdown, the economic dimensions viz., the man-days of employment, household income, the quantity of food available to family members and family expenditure have all declined. Among the health dimensions, ability to provide health care to family members, mental health and physical health of family members, alcohol consumption, use of drugs has declined whereas the use of paan and tobacco has increased. Children's education, mobility to different places and participation in church activities has also declined while relations within the family, religious activity at home have increased. The vulnerability of the poor households had increased during COVID-19 lockdown.

After the lockdown, the experiences of the poor households in Aizawl city showed that only children's education and religious activity at home had decreased after the lockdown. The decline in children's education during and after the lockdown is mainly due to the inability to provide facilities for online classes at home which is an impact of poverty and the inability of the parents to help their children in their studies. This increase in indicators showed that the poor households were able to cope with the challenges posed by the lockdown with social capital.

The overall resilience and adaptation level of the households is more on the low and moderate level. This is due to the fact that the lockdown had affected the poor households in all dimensions of economy, health and society and the availability of the high social capital cannot be translated to high levels of resilience and adaptation. The level of resilience is slightly higher among the poor households as compared to the very poor. This may be due to the livelihood patterns of the poor which enable them to have more savings which they employed as a second major coping strategy for the challenges during the lockdown. This finding highlights the importance of savings for households.

6.1.6. Social capital, Social Support and Resilience of Poor Households

In the present study, for the analysis of social capital, the composition and the structural measures of the social network is used. Homogeneity and heterogeneity are measures of composition while degree (network size), density, effective size and constraint are structural measures of the social network.

The first hypothesis of the study reads that social capital assessed in terms of density of social networks of the poor households is related to the resilience during the COVID-19 lockdown. The computed P-value of density and resilience is not significant even at a 5 per cent level; hence, the hypothesis is rejected.

The second hypothesis of the present study reads that social capital assessed in terms of structural hole measures is related to the resilience of the poor households during the COVID-19 lockdown. The computed P-value of structural hole measures i.e., effective size and constraint; and resilience are not significant even at a 5 per cent level; hence, the hypothesis is rejected.

The third hypothesis of the present study reads that availability of social support from social networks of poor households is directly related to their resilience during the COVID-19 lockdown Since the correlation of social support measures viz. relationship pattern, the number of social support and type of social support; and household resilience are not significant even at 5 per cent level, the hypothesis is rejected.

6.2. Conclusion

The COVID-19 pandemic has a deep impact on individuals, families, communities, countries and the world. At the micro level, it negatively impacted the livelihood, education and health of individuals and households due to the lockdown measures which resulted in a loss of employment, reduction in household income, decrease in the accessibility of healthcare facilities, increased use of *paan* and tobacco and decline in children's education. While we largely focused on the negative impacts, there are also a few positive impacts at the micro level. The lockdown has created more family time, abstained few substance abusers and provided an ideal situation for family prayers which some families found it difficult to do before the lockdown. This improves

the bond within the families and is a good impact as families are the basic institutions of a society. For some families, the lockdown had provided a chance for a new livelihood which increased their income and continued even after the unlock and there are provisions of social support from individuals to the families in need which had contributed to the resilience of the poor during the lockdown. The importance of savings for ensuring household resilience was also clearly highlighted from the experiences due to the pandemic.

At the mezzo level, the major negative impacts include decreased food supply in the community due to movement restrictions, decreased social interactions due to the closing of religious and educational institutions for physical distancing measures. The decreased income at the micro level also impacted the tithe of the Church at the mezzo level. The major positive impact at the mezzo level is the formation of the LLTF. The decentralization plan of the State Government to fight the coronavirus leading to the formation of the Local Level Task Force in each locality is one of the remarkable efforts taken up. This well-thought plan of the Government in the formation of the LTTF, a committee which includes all the representatives of the community, is a champion in the prevention and containment of the outbreak of the novel coronavirus in Aizawl and contributes to reducing the vulnerability of the poor during the lockdown as they trace and provide support in cash and kind to the destitute. Also, the Church and NGOs as independent groups had come up to curb the impact of the pandemic in the community by provisions of material social support in terms of cash and kind. These efforts taken up at the mezzo level had contributed to the resilience of the poor during the lockdown and declined the growth curve of the COVID-19 infections.

At the macro level, the economy is adversely affected. The expenditure on COVID-19 tests, hospital bills for COVID-19 patients, expenditures on the transportation of COVID-19 positive patients and COVID Care Centres etc are all borne by the government. Apart from these efforts taken up by the government, more frequent rations through PDS were provided to the citizens. It is not only frequent but also free for the AAY households and also includes other pulses apart from rice. This has reduced food

insecurity, a contributing factor to the resilience of the poor thus, reducing their vulnerability.

Social capital is present among the poor households in Aizawl city in the form of social networks which provide social support where ‘bridging capital’ is more as compared to ‘bonding capital' during the lockdown. The lockdown due to the pandemic may reflect an increase in social capital among the community people in Aizawl city after the pandemic, however, the availability of household social capital assessed in terms of egocentric social networks is high, but it is not enough and does not contribute to high levels of resilience and adaptation of the poor households during the lockdown. The present study concludes that the poor households in Aizawl city have the ability to cope with the effects and challenges of the lockdown though most of them were vulnerable. Though social capital embedded in social networks was high, it could not be translated to a high level of resilience because the lockdown implemented to control the outburst of the pandemic has affected the livelihood, living conditions, food security, education and health of the poor households.

6.3. Suggestions

The present study suggested the following in light of the findings:

1. To generate awareness on the importance of savings for enhancing economic development and to reduce their vulnerabilities in times of crises among the poor. Lack of financial capital can further lead to more vulnerability. The importance of savings can be promoted at home by parents, at schools by teachers, through more popularization of Self-Help Groups, awareness and sensitization programmes and advertisements.

2. To promote more economic opportunities and facilitate empowerment among the poor using a bottom-up approach through capacity building and skills training by NGOs and government agencies. This will enable the poor to be more resilient in times of crisis and will enable them to find and adjust to new livelihoods.

3. To promote organic kitchen gardening within household premises which will promote the sustainable agricultural practice, healthier food, reduce food insecurity due to market shocks and price rise caused by pandemics and other disasters. This can be done through general awareness in social media, inclusion in the curriculum of school education, provision of subsidised seeds by NGOs or government agencies.

4. To sensitize the importance of social capital as it is an underutilised community asset which can be useful in poverty reduction, disaster response and also in disaster preparedness by encouraging social participation of the poor in various organizations and associations to build and maintain social ties which will enhance their social capital and will contribute to the mobilisation of resources whenever a disaster or crisis happens. This can be practised by the community leaders and ensure the inclusion of every section of the society.

5. To promote the use of digital platforms by learning from the current pandemic situation and prepare for future similar crises to build and maintain social capital which can be destroyed due to the physical distancing measures employed to contain the spread of the virus.

6. In-depth studies on the effects of COVID-19 and social capital during pre and post COVID-19 scenarios towards both household resilience and community resilience.

APPENDICES

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SOCIAL CAPITAL AND RESILIENCE OF POOR HOUSEHOLDS DURING COVID-19 LOCKDOWN IN AIZAWL CITY

Household Interview Schedule

(For Research Purpose only)

By V. Lalramchuani

I. Identification Information

House Number:

Locality:

Location (GPS):

Date and Time of Interview:

II. Personal Profile of the respondents

Name of the respondent:

Religion

- Christian
- Hindu
- Muslim
- Others

Denomination

- Baptist
- Presbyterian
- Roman Catholic
- Seventh Day Adventist
- UPC NEI
- UPC Mizoram
- Others

Type of Family

- Joint
- Nuclear

Sub Tribe

- Hmar
- Lai
- Lusei
- Mara
- Paihte
- Others

Clan

- Common
- Ruling

Socio economic category

- Poor (PHH)
- Very Poor (AAY)

Ownership of house

- Free
- Owned
- Rented

- Quarters

Type of house
- Concrete (Pucca)
- Semi concrete (Semi pucca)
- Assam type (Kutcha)

Is there any family member affiliated with political party?
- No
- Yes

Is there any family member as a leader in any community organization?
- No
- Yes

Is there any family member with the following status in church?
- Elder
- Group/ Fellowship leader
- Sunday School Teacher
- None
- Others

Please rate the level of living of your household
- Affluent
- Rich
- Middle
- Poor
- Very poor

III. Demographic Composition of the household

Next, I am going to ask you questions about you and the member of your household. The first should be the head of the household

Name:

Relationship to the Head of the household:
- Head
- Wife/Husband
- Son/Daughter
- Parent
- Grandparent
- Children
- Son/Daughter in law
- Other relatives

Gender:

Age:

Marital status:

Years of education:

Earner or dependent
- Yes Earner
- No Dependent

Respondent
- Yes
- No

IV. Livelihood sources and assets

I am going to ask you a few questions on your livelihood.

Sources of livelihood:

Assets owned:

- Land
- House
- Television
- Smart phones
- Washing machine
- Sewing machine
- LPG connection
- Water connection
- Two-wheeler
- Four-wheeler
- Pig
- Poultry

Skills/Expertise possessed by the members of the household:

V. Challenges and Strategies during COVID-19 Lockdown

I am going to ask you about the livelihood challenges faced by your household during COVID-19 Lockdown.

Please tell me one by one:

What are the strategies used by you to manage the livelihood problem during COVID-19 Lockdown?

- Borrowing
- Material support from family, friends and neighbor
- Instrumental support from family, friends and neighbor
- Thrift
- Savings
- Livelihood diversification
- Others

VI. Social Network: Name Generator

Please tell the names of the persons to whom you have talk to for at least ten minutes in the last two weeks. Please tell them one by one.

Name01:

Name02:

Name03:

Name04:

VII. Social Network: Name Interpreter

Please tell me the details of the persons in your network.

Age of (Name01) (Name02) (Name03) (Name04)

Gender of (Name01) (Name02) (Name03) (Name04)

- Male
- Female

Education status of (Name01) (Name02) (Name03) (Name04)

Subtribe of (Name01) (Name02) (Name03) (Name04)

- Hmar
- Lai
- Lusei

- Mara
- Paihte
- Others

Denomination of (Name01) (Name02) (Name03) (Name04)

- Baptist
- Presbyterian
- Roman Catholic
- Seventh Day Adventist
- UPC NEI
- UPC Mizoram
- Others

Socio economic category of (Name01) (Name02) (Name03) (Name04)

- Non-Poor (Non NFSA)
- Poor (PHH)
- Very Poor (AAY)

Does (Name01) (Name02) (Name03) (Name04) belong to a political party?

- Yes
- No

Does (Name01) (Name02) (Name03) (Name04) belong to Local Level Task Force?

- Yes
- No

Is (Name01) (Name02) (Name03) (Name04) CBO leader?

- Yes
- No

Is (Name01) (Name02) (Name03) (Name04) a church leader?

- Yes
- No

Is (Name01) (Name02) (Name03) (Name04) government official?

- Yes
- No

VIII. Social Network: Actor-Alter relationship

Now I am going to ask you about your relationship with the persons in your network.

How is (Name01) (Name02) (Name03) (Name04) related to you?

- Friend
- Kin
- Know each other

IX. Social Network: Alter-Alter relationship

How are (Name01 and Name02) (Name01 and Name03) … related?

- Friendship
- Kinship
- Know each other
- Not know each other

X. Social Support

What kind of support do you receive from (Name01) (Name02) (Name03) (Name04)?

- Material support
- Instrumental support
- Informational support
- Emotional support
- No support

XI. Livelihood Resilience and Vulnerability

Now I am going to ask you the experience of your family during COVID-19 Lockdown?

Can you please rate how the following indicators have been affected during Lockdown?

Indicators	Increased	No Change	Decreased
Man days of employment			
Household Income			
Family Expenditure			
Mobility to different places			
Quantity of food available to family members			
Ability to provide health care to family members			
Children's education			
Physical heath of family members			
Mental health of family members			
Alcohol consumption			
Use of drugs			
Use of tobacco			
Use of paan			
Participation in church activities			
Religious activity at home			

Can you please rate how the following indicators have been affected after Lockdown?

Indicators	Increased	No Change	Decreased
Man days of employment			
Household Income			
Family Expenditure			
Mobility to different places			
Quantity of food available to family members			
Ability to provide health care to family members			
Children's education			
Physical heath of family members			
Mental health of family members			
Alcohol consumption			
Use of drugs			
Use of tobacco			
Use of paan			
Participation in church activities			
Religious activity at home			

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Approval of research proposal

1.	BOS	: 5th June 2020
2.	School Board	: 12th June 2020
3.	Academic Council	: 23rd June 2020
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SOCIAL CAPITAL AND RESILIENCE OF POOR HOUSEHOLDS DURING COVID-19 LOCKDOWN IN AIZAWL CITY

An abstract of the dissertation submitted in partial fulfilment of the requirements for the degree of Master of Philosophy in Social Work

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INTRODUCTION

The present study aims to find out the bearing of social capital embedded in the social networks of poor households on their resilience in Aizawl city during COVID- 19 lockdown.

Social Capital, Networks and Support

Social capital has become a fast core concept in social sciences (Burt, 1998). The concept of 'social capital' has been regarded as a solution for various social problems including poverty, economic problems and challenges brought about by disasters or pandemics. According to Portes (2009), "Pierre Bourdieu, who defined social capital as 'an aggregation of actual or potential resources connected with the existence of a durable network of more or less institutionalised mutual acquaintance or recognition in the nineteen eighties', was the first to produce the contemporary analysis." and Putnam in 1993 conceptualized 'social capital' using components viz. 'social values', 'moral obligations', 'norms' and 'social networks'. Coleman defined 'social capital' by its function. "Social capital is a collection of different entities with similar characteristics consisting of some aspect of social structures, and they all assist certain actions of actors inside the structure, whether individuals or corporations. 'Social capital' comes about through changes in the relations among persons that facilitate actions. The function identified by the concept of 'social capital' is the value of these aspects of social structure to actors as resources that they can use to achieve their interests" (Coleman, 1988). Social capital is embedded in the structure of relationships between and among actors and depends on the social structure and social integration.

Social capital is a collective asset that consists of social relationships, shared norms, and trust that facilitates development, cooperation and collective action which can be broadly categorized into 'bonding capital' which includes relations with families, friends who share a common identity; 'bridging capital' which includes the relations beyond the common identity such as distant friends and colleagues and 'linking capital' which includes relations with individuals and groups in institutionalized networks. As a multidimensional concept, social capital exists in the

form of social networks, trust and norms (R. Burt, 2000). ‘Trust can be defined as one's belief in other people and institutions’ (Putnam, 1995), ‘norms are frequently referred to the different forms of social support’ (Ferlander, 2007) and ‘social networks are the social ties formed in social groups which benefit an individual’ (Coleman,1990). As a multi-level concept, social capital exists in a network approach at the individual level and social cohesion or a communitarian approach (Ferlander, 2007). However, rather than trust, social capital should be characterised by its source, which are social ties (Woolcock, 1998).

Social networks are defined as “a web of relationships and links which surrounds and connects people with one another and with organizations”. It is used for communication, interaction, sharing and exchange, and to exert power as well as influence others. The concept of social network was first employed by J. A Barnes in his study of a Norwegian island. Barnes, 1954 defines a network as “Each person is, as it were, in touch with a number of people, some of whom are directly in touch with each other and some of whom are not… It is convenient to talk of a social field of this kind as a network. The image I find and have is of a set of points, some of which are joined by lines. The points of the image are people, or sometimes groups, and the lines indicate which people interact with each other. We can, of course, think of the whole of social life generating a network of this kind.” Social networks can be of two types as ‘formal networks’, which are ties with voluntary organizations and associations, and ‘informal networks’ which are ties with family, friends, neighbours etc. connected to the individual at a personal level (Ferlander, 2007). Social networks have various functions which are social influence, social control, social undermining, social comparison, companionship, and social support.

“Social support is defined as information leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligations” (Cobb, 1976). It relates to the function and quality of social relationships, such as the perceived availability of assistance or actual support. It is linked to altruism, a sense of obligation, and the idea of reciprocity and happens as a result of an interactive process (Schwarzer et al., 2003). House (1987) defines social support as “the functional content of relationships and categorized into four broad types of supportive behaviours or acts

such as instrumental support which entails the providing of tangible aid and services that directly assist a person in need; emotional support which entails the provision of care, love, trust and empathy. Lastly, informative support entails providing guidance, suggestions, and knowledge that a person may use to solve difficulties, and appraisal support entails providing information that is valuable for self-evaluation."

Social capital provides the benefit of perceiving social systems as effective resources in reducing vulnerability and focusing more on the strengths during community emergencies (Dynes, 2006) and also helps in the mobilization of resources through social networks at the community level (Wu, 2021).

Poverty, Pandemic and COVID 19

Poverty has been one of India's most serious challenges to social policy and social work. It is a multifaceted issue, whether rural or urban. Men, women and children experience poverty and it affects their overall wellbeing. It has two dimensions- material deprivation which is deprivation in consumption items including food, clothing, durables, shelter, health, education and connectivity; non-material deprivation which is related to phenomena as discrimination based on gender, race or caste. In India, poverty is usually calculated in terms of per capita consumption per day or month. According to Rangarajan methodology (2014), an individual or family whose per capita consumption expenditure is less than Rs 972 per month (i.e., Rs. 32 per day) in rural areas and Rs 1407 per month (i.e., Rs. 47 per day) is considered to be living below the poverty line in urban areas. In India, 21.9% of the total population lives under the poverty line (GOI, 2018). According to the Census of India, the urban population is 377 million (31.6 per cent of the total population) of which 13.7 per cent of the urban population lives under the poverty line (GOI, 2018). Rapid urbanization has been the reason and cause of urban poverty which is defined by residential vulnerability- access to land and shelter, basic services, etc., social vulnerability- deprivations related to factors such as gender, age, participation in governance structures, etc. and occupational vulnerability- livelihoods dependence on the informal sector for employment and earnings, lack of job security, poor working conditions, etc. (GOI, 2013). Other causes of poverty include warfare, agricultural cycles, corruption, social inequality, illiteracy, natural hazards and widespread diseases (Philip, 2004).

Pandemics are epidemics which are diseases that occur more frequently than expected. It affects at least a few countries on multiple continents. Pandemics are risks notable for combining a low probability of occurrence with a high, potentially catastrophic, global impact. The 1918 pandemic, the most severe of the four flu pandemics in the last 100 years, killed 50 million to 100 million people in a world population of fewer than 2 billion people. In the past, pandemics such as plague, cholera smallpox, influenza, Severe Acute Respiratory Syndrome (SARS), Swine Flu (H1N1), the Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS), Middle East Respiratory Syndrome (MERS), Avian Influenza (H5N1), Ebola, dengue, and chikungunya have proven to be disasters affecting people both at the individual and community levels. These pandemics have health effects, economic impacts such as direct and indirect costs, social impacts such as strictly limited travel, the closing of educational institutions and markets and global security impacts (Qiu et al., 2017). “Disasters are unexpected public health crises that exceed the coping capacity of the affected community” (Goyet et al., 2006), thus, pandemics are disasters (Jonas, 2014). The people who suffered most during these disasters are the poor (Anderson, 2001), increasing their vulnerability, through loss of employment, less income, rise in prices of food items etc.

COVID-19 (coronavirus disease) pandemic crisis is a systemic human development crisis (Kovacevic & Jahic, 2020) and not just a health emergency. It affected the economic and social dimensions of development across the globe. The first case of COVID-19 was confirmed on 12th December 2019 in Wuhan, China, and was declared a pandemic on 11th March 2020 by WHO with 22,992,517 cases including 249,992 deaths in India (Reported by WHO at 3:06 pm CEST, 11th May 2021). Responses have been made towards this pandemic at the global, regional, and national levels. In India, COVID-19 had an impact on both individuals and households. The National Disaster Management Act (2005) was enacted by the Government of India which declares the COVID-19 outbreak as a national disaster and establishes policies, plans, and regulations for managing, maintaining, and controlling the outbreak of the disease and ensures a disaster response such as lockdown measures, social distancing measures and containment plans (Acharya & Porwal, 2020). Even though a lockdown is

required to stop the transmission, it is having and will continue to have a greater impact on all aspects of humankind due to the country's weak socioeconomic structures (Ganguly et al., 2020). It had affected economic activity and overall wellbeing through its impact on labor income, non-labor income, consumption, and service disruptions (World Bank, 2020). The sudden enforcement of the lockdown has brought about a decrease in the country's economy, the labor market has been affected, migrant workers were forced to move back to their homes with an uncertain future, the education system is on halt, disruptions in the medical facilities due to COVID-19 (Ghosh et al., 2020; Sengupta & Jha, 2020). The pandemic and its consequences have increased the vulnerability of the poor.

Vulnerability and Resilience

"Vulnerability is defined as the risk of a household to fall into poverty at least once in the next few years. Household vulnerability is a measure of the probability where households have greater or lesser degrees of vulnerability" (Pritchett et al., 2000). The vulnerability context of the poor to poverty can be considered by analysing the extent to which the poor are exposed to particular trends, shocks or seasonality and the sensitivity of their livelihood to these trends, shocks or seasonality (DIFD, 2011). Mizoram with its total population of 1,097,206 has 52.11 per cent living in urban areas (Census, 2011). According to the BPL Baseline Survey conducted by the Directorate of Economics and Statistics, Aizawl in 2016, 19.63 per cent of the total households in Mizoram lived under Below Poverty Line. Aizawl, the capital, consisting of 78.53% of the total urban population has a total of 12668 BPL households. Urban poor in Mizoram are characterized by inadequate income, unequal distribution of income, inadequate skills and expertise, inadequate shelter and food, low education and inability to access better education, lack of assets and the inability to treat illnesses, use of alcohol and drugs and inflation and rising prices (Malsawmdawngliani, 2007; Sailo, 2014). Therefore, the urban poor in Mizoram are vulnerable due to these factors. The COVID-19 pandemic affects the economic sector and the overall wellbeing of the community which increases the vulnerability of the poor. The measures taken for COVID-19 containment shows negative impacts on the livelihood of the informal sector and food security and thus, is a site for economic vulnerability (Kesar et al., 2021). The impacts

can be managed through prevention strategies, mitigation strategies and coping strategies. The actors in this management can be individuals, communities and governments which will help in the reduction of risks and decrease vulnerability and become resilient.

"Resilience is the ability of a system to withstand disturbance and reorganise despite experiencing change and maintaining essentially the same function, structure, identity, and feedback" (Walker et al., 2004). 'It determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist' (Holling, 1973). Therefore, in the context of poverty, resilience is a function of the ability to manage shocks and that individuals and households have access to assets and services for risk management which ensure that they do not become impoverished. During a flu pandemic, bioterrorism or any natural disaster, the best monitoring, equipment, communication systems, antiviral supplies, and emergency services will be ineffective unless equal attention is paid to the issues posed by human behaviour in these situations. The adaptive systems should be considered at the local level as all human resilience arises from the interactions of individuals and small groups of people with one another (Masten & Obradovic, 2008). Therefore, adaptability influences resilience (Walker et al., 2004). Social capital embedded within communities helps in the adaptation which results in building resilience (Adger, 2007; Aldrich & Meyer, 2014; Murphy, 2007).

Role of Social Workers during Pandemics

As the COVID-19 pandemic is causing tremendous health emergencies, the response to lower the transmission is necessary. Countries worldwide have been implementing lockdown and physical distancing measures. The responses to combat COVID-19 had a tremendous impact on the vulnerable sections of the society and those in need of social assistance. The role of social work is vital during pandemics. Social workers provide essential goods and services through mobilizing resources, linking markets for agriculture workers, providing social assistance, ensuring the understanding of families and situations affected by COVID-19, improving the communication channel with the vulnerable sections etc. (Redondo-Sama et al., 2020; Tung, 2021). This emphasizes the importance of social work during pandemics. However, the role of

social workers during pandemics is still minimal. Associated public health issues, public outreach, and community-based responses to those in need of support are all areas where social workers can and should play a much larger role than it currently does (Cox & Pawar, 2013).

Overview of Literature

Social capital had been defined at the individual level by Burt (2000) and at the community level by Coleman (1988). Network closure and structural holes as social capital can be seen in the works of Burt (2001), Coleman (1988), and Granovetter(1973). The literature on the benefits of social capital can be seen in Sandefur & Laumann (2009), definitions, types, and properties such as its capability for economic development (see Bhandari & Yasunobu, 2009). Social capital as a poverty reduction strategy is focused on by Sundram et al. (2011). Morris (1998) studies the variables of social capital and provides evidence for the relationship between social capital and poverty reduction. Allahdadi (2011) also assesses social capital in poverty reduction. Mpanje et al. (2018) conducted a case study in Kenya on social capital and found out that nongovernmental institutions and well-wishers are sources of financial support and food for households without livelihoods.

As poverty is a major global social problem and its eradication has been the goal of social and economic policy as well as social work intervention for many years, there is copious literature on various aspects of it (see for instance Asian Development Bank, 2011; GOI, 2014; Mehta & Shah, 2012; Wratten, 1995). The dimensions of poverty and the vulnerabilities of the poor are focused in many studies (see Alok, 2020; Amis, 1994; Chanchal, 2014; Loughhead & Mittal, 2000; Mehta & Shah, 2012). Policy measures addressing the challenges of urban poor have been the main concern of various reports and articles (see Chanchal, 2014; Nandi & Gamkhar, 2013; NITI Aayog, 2016). But these policies are usually rural-centric and only a handful of the urban population benefited from them. This shows that the causes of poverty had to be tackled at the micro, meso and macro levels. Philip (2004) observed in his paper that vulnerability and poverty are interlinked and are the causes of each other.

In the Mizoram context, studies on poverty in the urban communities are few (Sailo, 2014; Malsawmdawngliani, 2007; Tuanmuansanga, 2016). These studies bring about the problems of urban poverty in Aizawl. The reach of Government policies toward poverty reduction is seen in (Sailo, 2014; Chanchal, 2014) and projected the need for a programme that will benefit the whole urban poor population. Sailo (2014) in her study presented an urban vulnerability context in which geographical location of localities, landslides, the high price of basic commodities and house rent, nepotism and corruption of government officials as well as community leaders contributes to the vulnerability of the poor in Mizoram context.

Even though the COVID-19 crisis is a contemporary issue, there are several articles, studies, and literature related to it (see Arockiasamy, 2020; CFS HLPE, 2020; Ganguly et al., 2020). These defined the vulnerable groups and how the lockdown had worsened their disadvantage. There is also literature on the resilience of the poor during natural hazards (Hallegatte et al., 2016). The impact of COVID-19 on food security is focused on various articles (see CFS HLPE, 2020; Sekhar, 2020; Unhale et al., 2020). These highlighted the direct and indirect impact on food demand, supply, and access. The impact of natural disasters on poor people are seen in Anderson (2001), Diwakar (2020), Hallegatte et al.(2016). Pandemics and their impacts on health, economy, society and security are seen in Jonas (2014), Kelman (2020) and Qiu et al. (2017). Community network as a strategy for reducing the impact of natural disasters has been focused on by Anderson (2001). Holzmann & Jorgensen (2001) proposed a new conceptual framework of social risks management in which the main actors in the management are individuals, households, communities, NGOs, governments and financial institutions.

There is literature on resilience (Berkes, 2007; Southwick et al., 2014; Windle, 2011) and on the concept of resilience (Holling, 1973; Walker et al., 2004). Some studies linked resilience and concepts of poverty escapes (Canvin et al., 2009; Thiede, 2016; USAID, 2016). These studies showed evidence of the need to understand the resilience of the poor in meeting the short-term needs and prevention for future shocks and stresses. and poverty.

There are many kinds of literature on the social network, its concepts and its types (for instance see Afridi, 2011; Catherine & Israel, 2002; Rosas, 2001) and on social support and its attributes, forms and its connection to social networks (see Burt, 2001; de Souza Briggs, 1998; Granovetter, 1973; Langford et al., 1997; Song et al., 2011). Many studies focus on how social network structures function as sources of social support (see Cantor, 1979; Espinoza, 1999; Rashid, 2000). These studies are in cases of stressful events such as problems of health, ageing, natural disasters and poverty etc. There are studies of social support as a coping strategy for the poor (see Afridi, 2011; Klärner & Knabe, 2019; Lowe, 2012; Rashid, 2000; Schweizer et al., 1998). There are papers that present data and theories on the distribution of social support and support resources across social structures (see House, 1987; Turner & Marino, 1994). The studies of social networks as coping strategies of poverty are less compared to studies of social networks as psychological coping strategies. These studies have found out that the social networks of urban poor have both strong bonds and weak bonds. Strong bonds include families, kins and immediate circle of friends whereas weak bonds comprise distant contacts. The studies revealed that most of the poor rely on strong ties such as kins and friends for instrumental support and emotional support while weak ties provide informational support which helps them find employment opportunities and thus helped in leveraging from poverty. These studies also showed that urban poor have small social networks due to them being migrants and their geographical location. Thus, social support received by the poor through their networks had helped in getting by poverty and for some getting on over poverty.

Social network analysis has been used for understanding individuals and family functioning as well as for understanding livelihood systems (see Clifton & Webster, 2017; Gillieatt et al., 2015; Misra et al., 2014; Pfouts & Safier, 1981). Social network analysis is useful in studying the exchange of resources or support in both tangible and intangible forms (see Haythornthwaite, 1996). Name generator methods are used to find out the sources of social support (see Reingold, 1999; Schweizer et al., 1998). There is also a study on the role of social support networks of Gorkha settlements in Aizawl (see Rai, 2013) and a study on the use of egocentric network analysis on social capital (Rai, 2019).

The above overview of literature points out a few research gaps. Firstly, as the COVID-19 lockdown is a contemporary issue, studies relating to COVID-19, vulnerability, and resilience of the poor households are rare in India and are non-existent in the context of Mizoram. Secondly, studies on the social networks or social capital of urban poor are a few. Thirdly, the use of egocentric network analysis to measure social capital is also rare in the national, regional and local contexts. The present study attempts to address these research gaps in the context of Aizawl, the capital city of Mizoram.

Statement of the Problem

Urban poverty in India is characterized by unsanitary, overcrowded housing and low living conditions, heavy dependence on labour markets, decrease in urban wage rates due to a high number of urban male migrants, high dependence on the public sector for goods and services; violence which is a result of youth underemployment, alcoholism and drug abuse, experienced at both the community and household level which is contributed by rapid and unplanned urbanization. All these characteristics increase the vulnerability of the urban poor to disasters and disease epidemics; also, it is an additional vulnerability for specific groups such as the elderly, disabled, children and women.

Aizawl, the capital of Mizoram, consisting of more than half of the total population of the state have shown decadal population growth in the last Census 2011. Urbanization has led to many households migrating from rural areas to urban areas for employment opportunities, educational purposes, medical facilities and a better standard of living. This has led to an increase in problems of poverty, lack of job opportunities, inadequate income, lack of access to better education etc.

On account of the outbreak of COVID-19, there has been a lockdown in the country as well as in Mizoram as a precautionary measure to slow down the growth curve of COVID-19 cases. The lockdown to restrict the social distance to avoid physical contact was enacted by the Government of Mizoram enforced from 22nd March 2020 with two extensions. During this lockdown, the livelihood of the urban poor has been affected to a certain extent. As many poor households solely depend on daily

wage-earning and petty trades for their livelihood, the lockdown does not allow many breadwinners to earn due to movement restrictions and physical distancing norms. This leads to employment loss and inadequate income. Movement restrictions further cause less food supply in the local markets and high prices of food items. Despite the efforts of the State Government in providing food grains through the Public Distribution System (PDS), there are still difficulties in physical availability and economic access to food, which raises food security risks. The pandemic had directly impacted food security directly on its supply and demand and indirectly been decreasing the purchasing power. The COVID-19 Lockdown is likely to increase the risk and vulnerability of the poor sections of the society by employment loss and decrease in income.

The vulnerability context of the poor such as trends like political trends, economic trends; seasonality like production cycles, prices of products; and shocks like diseases, disasters, pandemics, deaths etc. affected the livelihood of the poor. Therefore, it is important to identify capitals to decrease the vulnerability of the poor and increase their resilience, improve their food security as well as their livelihoods.

The present study tries to understand the role of the social capital of the poor households in Aizawl city in enabling the resilience of the poor households during the COVID-19 lockdown. Using Egocentric Network Analysis, the study attempts to find out the composition of social networks of the poor and the social capital embedded in its structure. The study will also examine the availability of social support of the poor households in Aizawl through their social networks and their overcoming of vulnerabilities during COVID-19 lockdown.

The outcomes of the present study will be useful for social work practitioners and policymakers towards urban community development and in increasing preparedness during pandemics. The findings of the present study will be useful for determining the effectiveness of the implemented policies and the Government and non-Government institutions during a pandemic crisis and towards the eradication of poverty. It will also help design intervention strategies focusing on the poor and very poor households and in creating better policies that reach the whole population.

Chapter Scheme

The study has been organised into the following six chapters.

Chapter I: Introduction

It includes the introduction of the concepts of the study, the overview of the literature, and the statement of the problem.

Chapter II: Review of Literature

It includes the review of the literature of the present study and is divided into eight sections. The substantial, theoretical and methodological gaps in the literature have also been highlighted.

Chapter III: Methodology

It includes a brief description of the study area and methodology of the present study. It is structured broadly into five sections viz. of the setting and profile of the study areas, the research problems in terms of objectives and hypotheses as to the research design, sampling, tools of data collection, data processing and data analysis and the definition of concepts and the ethical consideration.

Chapter IV: Social Capital, Social Support and Resilience of Poor Households

It comprises an analysis of the data of the present study, which was collected through field surveys in six Aizawl localities. It is divided into five sections.

Chapter V: Community and Household Response to Lockdown

It comprises the qualitative data analysis of the present study. The chapter is divided into three sections.

Chapter VI: Conclusion

It comprises the conclusion of the present study, which is divided into three sections. The major findings are presented in the first section, the conclusion is presented in the second section, and the suggestions are presented in the third section.

METHODOLOGY

The study area and methodology are presented in this chapter. This chapter is structured broadly into five sections. The first section consists of the setting and profile of the study areas. The research problems in terms of objectives and hypotheses as to the research design, sampling, tools of data collection, data processing, and data analysis of the present study are discussed in the second section. The third section consists of the definition of concepts and the fourth section is the ethical consideration.

The Setting: Profile of the Study Area

The present study is conducted in six localities of Aizawl city, the capital of Mizoram. The profile of the studied areas is presented in four sub-sections according to the zones viz., Aizawl East, Aizawl West, Aizawl North and Aizawl South.

Mizoram

Located in the north-eastern corner of the country, Mizoram is one of the 28 states of India. It is one of the Seven Sister States of North Eastern India, bordering the states of Tripura, Assam, and Manipur, as well as the neighbouring countries of Bangladesh and Burma. The Mizo people share many other tribes in north eastern India as their ancestors. It was inhabited by Tibeto-Burman tribal groups and migrations led to settlements in the hills between 1750 and 1850. During this time, hereditary chieftainship ruled over the tribal groups. Later during the British era, Mizoram became a part of British India's territory in 1891, though village administration was left to local chieftains. Under the Reorganisation Act of 1971, the district was carved out of Assam and elevated to the status of a Union Territory on January 21, 1972, and Mizoram became India's 23rd full-fledged state in 1987.

According to the 2011 Census, Mizoram has a total population of 1,097,206, with 555,339 males and 541,867 females. The decadal population growth of Mizoram is 23.48 per cent in 2011 and the total population of Mizoram constituted 0.9 per cent of the total population of India. Mizoram covers a total area of 21,081 sq. km. and the density is 52 per sq. km. The literacy rate of the State is 91.33 per cent where the male literacy rate is 93.35 per cent and the female literacy rate is 89.27 per cent. The urban population of Mizoram totals 571,771 which is 52.11 per cent of the total population.

Christianity is a majority religion in the State with 87.16 per cent of the total population following Christianity. There are eight districts in Mizoram and Aizawl city is the capital of Mizoram.

Aizawl City

Aizawl, located in the northern part of the state, Mizoram is located in the north of the 'Tropic of Cancer'. It is located on a ridge that rises to a height of 1132 metres (3715 feet) above sea level, with the Tlawng and Tuirial river basins to the west and east, respectively. Due to its elevation and geographic location, Aizawl has a moderate, subtropical climate. According to the Census of India's provisional reports 2011, the population of Aizawl is 293,416 people, with 144,913 men and 148,503 women. The overall literacy rate is 98.36 per cent, with male and female literacy rates of 99.30 and 98.31 per cent, respectively. It serves as the administrative centre, including all of the important government offices, as well as the state assembly and civil secretariat.

The present research is conducted in six localities of Aizawl viz., Zuangtui, Zemabawk, Bethlehem Vengthlang, Sakawrtuichhun, Maubawk and Hlimen. Zuangtui is located in the Northern part of Aizawl city, while Zemabawk and Bethlehem Vengthlang in the East, Sakawrtuichhun and Maubawk in the West and Hlimen in the South. In the six communities, a Participatory Rural Appraisal approach was employed to develop a better understanding of the community by conducting PRA exercises viz., Social Map, Timeline, and Services and Opportunities Map. Members of the communities are the participants in the PRA exercises and thorough descriptions of the six study areas are presented below.

Study Area

The present study was conducted in six localities representing the six zones in the Aizawl Municipal Area. The profiles of the localities studied are briefly described as under.

Aizawl North: Zuangtui

Zuangtui is located in the Northern part of Aizawl and comes within Ward I of Aizawl Municipal Area. It is located in 23°45'11"N and 92°44'43"E. The total population is 3912 with 1991 males and 1921 females (Census 2011). The total number

of households is 899 where 50 households are under AAY and 385 are under the PHH category. It is surrounded by four localities viz. Bawngkawn, Thuampui, Durtlang and Muanna Veng.

History of Zuangtui

The history of Zuangtui community has been old as Young Mizo Association (YMA) was established way back in 1935 and had celebrated its Diamond Jubilee in 1995. As a hub of power stations in Mizoram, the Power Department was established within the community premises in the year 1975. In the same year, the Public Works Department was also established. Zuangtui Presbyterian Church was formed separately from Durtlang Presbyterian Church in 1982. The next year marks the establishment of Mizo Hmeichhe Insuihkhawm Pawl (MHIP) followed by Mizoram Upa Pawl (MUP) in 1984. In 1986, the educational institution, Govt. Primary School has started. A separate Village Council as Zuangtui Village Council was formed in 1990. In 1991, Govt. Middle School was started and in 1992, Govt. High School was also established. The Zuangtui community started having their own sub center in 1999. The construction of the community hall was completed in 2007 after many years. In 2017, a natural disaster occurred in which many houses and a Church were destroyed.

Services and Opportunities

The services available within the community are schools and sub-centres. Elementary education is available to the community people within their locality premises. For higher studies, the nearest educational institution is J. Thankima College at Bawngkawn which is around 3 km away. Minute health care services are also available at the sub-centre in the locality. But for more health care services, the community people often approach Greenwood Hospital, 2 km away, at Bawngkawn as Civil Hospital, Aizawl is a bit far from Zuangtui. State Cancer Hospital, Zemabawk is also nearby, but it is hardly utilised by the people. The services of the post office and the police are also accessed through Bawngkawn Post Office and Bawngkawn Police Station respectively. Banking services are also not available in the locality and people often go to either Thuampui or Bawngkawn for these services. The nearest market is located in Thuampui which is 1 km away from Zuangtui.

Aizawl East: Zemabawk

Zemabawk is located in Ward VII of the Aizawl Municipal Area, in the eastern part of the city of Aizawl. It is located in 23°44'12"N and 92°45'13"E. The total population of Zemabawk is 9983 where 5193 are males and the female population consists of 4790 according to census 2011 (GOI, 2011). There are 2565 households within the locality and 63 are AAY households while 1093 are Priority Households. Zemabawk shares its boundary with Zemabawk North which was formed as a separate locality from Zemabawk for better administration.

History of Zemabawk

The history of Zemabawk was dated back to the 1800s. Zemabawk as a locality was established in 1890 and the first Presbyterian Church started its function as a separate church in 1909. The Young Mizo Association (YMA) was established in 1949. In 1952, the Salvation Army church was established in the community. Likewise, in 1964, the Seventh-day Adventist Church was also established. Zemabawk High School was started in 1968 and the next year, the second primary school within the community was also established. In 1985, Zemabawk UPC NEI was also established. CZ Middle School was established in 1993 and 2000, the Higher Secondary School was added to the High School. In 2000, a revival occurred in the Presbyterian Church community.

Services and Opportunities

There are some services available within the locality. Educational institutions are present within the locality and can be easily accessed by the community. For higher education, the nearest college is Pachhunga University College at College Veng which is about 4 km from Zemabawk. J. Thankima College, Bawngkawn is also about 5 km from the locality. For health care services, sub-centres and Urban Primary Health Centre are available. But for severe cases, Greenwood Hospital at Bawngkawn is usually utilised by the Zemabawk community. The nearest accessible petrol pump is about 2 km away. Banking services are available in the locality while the nearest police station is at Bawngkawn.

Aizawl East: Bethlehem Vengthlang

Located towards the East of Aizawl, Bethlehem Vengthlang comes within Ward XVI of Aizawl Municipal Area. It is located in 23°43'43"N and 92°43'38"E and has a total population of 7467 people in the community (Census 2011) with 3648 males and 3819 females. The total number of households is 1853 where 49 households are under AAY and 846 are under the PHH category. The locality has a brook which acts as a natural boundary with College Veng, Falkland Veng and Armed Veng South. Bethlehem Vengthlang also shares its boundaries with Bethlehem Veng.

History of Bethlehem Vengthlang

Bethlehem Vengthlang was a part of Bethlehem Veng and they formed a separate community along with a separate Village Council in the year 1991. In the same manner, the Mizoram Upa Pawl (MUP), Mizoram Hmeichhe Insuihkhawm Pawl (MHIP) and the Young Mizo Association (YMA) were all established within the community in 1991. The Government Primary School I was established in 1962, Government Primary School II in 1972, Government Middle School I in 1972 and Government High School in 1980, all before the community was separated from Bethlehem Veng. In 1992, Rev. Thianga Primary School was established and in 1994, Bethlehem Vengthlang Presbyterian Church was formed. The Government Middle School II was established in the years 1995 and 2004, the Government established Forest Research Centre for Bamboo and Rattan (FRCBR) within the locality. The Police Beat Post was opened in 2019.

Services and Opportunities

School, playground/field, bank, market, ATM facilities are all located within the locality and it is easy for the community to access them. All the schools from Anganwadi to High School in the locality are within 0.3 km which are easily accessible. For higher secondary schooling, Govt. Central Higher Secondary School is 0.5 km far from the locality and Pachhunga University College is about 0.5 km away from the neighbouring locality, College Veng which had many students from the community enrolled. Even though the sub-centre is present within the locality, the community people often go to Civil Hospital, Aizawl for health care which is around 2 km from the

locality. For postal services, Aizawl Head Post Office in Treasury Square, Aizawl which is about 1 km from the locality is often used. The nearest petrol pump is the Mizofed Petrol Pump in Treasury Square.

Aizawl West: Sakawrtuichhun

Sakawrtuichhun is located in the Western part of Aizawl and comes within Ward XI of the Aizawl Municipal Area. It is located in 23°45'30"N and 92°40'39"E. The total population is 1425 with 755 males and 670 females (Census 2011). The total number of households is 368 where 24 households are under AAY and 130 are under the PHH category. Sakawrtuichhun area covers a large area till Sairang and Sihhmui.

History of Sakawrtuichhun

According to the records in the Synod Office, Aizawl, a Preaching Station of Presbyterian Church, was formed in 1905 in Sakawrtuichhun. Sakawrtuichhun was gifted to Saikunga by his father Nikhama, who was the Chieftain of Luangmual in 1923. This was believed to mark the permanent settlement of people in the locality to date. In 1945, the first educational institution, Govt. Primary School I was established. The Sakawrtuichhun Branch YMA was established in 1946. The land area for the Police Training Centre was given to the Government by the locality and in 1972, the Police Training Centre was started to be occupied. The construction work for the Indoor Stadium and playground was started in 1973 and 1980 respectively. In 1980, Ramrikawn Link Road construction also started. The Govt. Middle school was started in 1982. In 1986, the health sub-centre was established and the following year, the first Anganwadi centre was established. The work of digging up underground water was started by PHED in 1991. In 1993, Govt. High School was established and the same year marks the entrance of landline phones within the locality. In 1994, Govt. Primary school II was established and in 2007, Anganwadi Centre II was started. In 2011, the Village Council was transformed into a Local Council. In 2012, Aizawl city Bus started servicing to and from the locality and in 2020, the Local Task Force of Sakawrtuichhun was formed due to the pandemic.

Services and Opportunities

Educational facilities from primary to high school are easily accessible within the locality area. The nearest Higher Secondary School is St. James School in Chawlhmun which is 4 km far from Sakawrtuichhun. For higher studies, Aizawl West College is the nearest which is 7 km away. Mizoram University is also 5 km away from the locality. The churches are also not far to reach by the community people. For banking services, the nearest is in Ramrikawn which is 2.6 km away and the nearest police station is in Zonuam. For postal services, the Vaivakawn Post office is the nearest even though health centres are available in the locality, people often utilised the services of Seventh Day Hospital near Vaivakawn. Central Jail is located 2.5 km from the locality and the stone quarries are 2 km away from the centres of the locality.

Aizawl West: Maubawk

Situated in the Western part of Aizawl, Maubawk is located in 23°43'18"N and 92°41'52"E. According to the Census 2011, 4120 people are residing in the locality with 1980 male and 2140 female. The total number of households in the locality is 870 while 514 households are enrolled under NFSA. There are 39 AAY households and 439 households under PHH. Maubawk shares its boundary with Bungkawn, Bungkawn Vengthar and Lawipu.

History of Maubawk

The history of Maubawk can be traced back to 1890 which is believed to be the year people start settling as a community in the locality. In 1911, Presbyterian Church was established. In 1947, the first Village Council was formed and in 1954, Govt. Primary School I was established following the works of the Village Council. After more than twenty years in 1978, Govt. Middle School I was also established. The Govt. High School was established in 1990 and in 2000, Govt. Middle School II was established. The health sub-centre was established in 2004. In 2010, the community faced a man-made disaster where houses were burned for the first time. In 2019, the YMA Property House construction was finished. In 2021, a second manmade disaster was experienced by the community in which many houses were burned down affecting around 20 households.

Services and Opportunities

The educational institutions in the locality can be easily reached from Maubawk Kawn. For higher studies, the nearest college is Aizawl College in Mission Veng and it is about 1.2 km away. Banking facilities and ATM facilities are also available within the locality. The nearest petrol pump is at Ngaizel which is around 3 km and the nearest Police Station is in Kulikawn which is about 2 km away from the locality. Maubawk has its market in the locality. Also, a private hospital is established within the locality area and the community people accessed the services of Lawipu PHC for health care services.

Aizawl South: Hlimen

Hlimen is in the Southern part of Aizawl city. It is located in 23°41'02"N and 92°42'57"E. The Census 2011 records 2733 as the total population with 1404 males and 1329 females in the community. The number of households in the locality is 729 where 26 households are AAY and 289 and under PHH. Hlimen is within Ward XIX of the Aizawl Municipal Area. Hlimen shares its boundary with Melthum.

History of Hlimen

The settlement of the Hlimen community started in 1812 with the chieftainship of Lalsavunga Sailo. After Lalsavunga Sailo, Kapdaia started his reign over the community. During Kapdaia's rule over the community, the Presbyterian Church was established in 1906. In 1911, Govt. Primary School I was established. Buala Ralte was the successor of Kapdaia in 1918. On 2nd December 1934, the first non-governmental organization known as the Standing Helper Association was established in Hlimen. The Young Mizo Association (YMA) was established in Hlimen in 1946. The first election for Village Council was held in 1954 and in 1961, Govt. Middle School I was established. In 1963, Mizoram Upa Pawl (MUP) was formed followed by the establishment of Govt. High School in 1964. The High School was not able to be continued due to insurgency and in 1971, the High School was reopened. Likewise, the Hlimen MUP Unit was reformed in 1976. In 1975, Hlimen Mizo Hmeichhe Insuihkhawm Pawl (MHIP) was formed. In 1986, huge destruction at the Hlimen Quarry occurred in which some lives were lost. The same year marks the establishment

of a Central Workshop by the Government in the locality. In 1989, Govt. Primary School II was established, after three years, in 1991, Govt. Middle School was also established. In 1992, the second destruction of the Hlimen Quarry occurred in which more lives were lost compared to the previous one. In the year 2000, an English medium school known as Presbyterian English School was established and in 2004, the Urban Health Centre was established in the community. The first election for the Local Council was held in 2012 and in the same year, the PHE Site Office was established. In 2014, Lalsavunga Park and the Very Dispensary were opened.

Services and Opportunities

The infrastructure of the community includes the educational institutions from Primary School to High School and are easily accessible within the locality. The nearest higher secondary school is St. Paul's Higher Secondary School which is located in Tlangnuam and is about 2 km far from Hlimen. The nearest college is Aizawl College in Sikulpuikawn and is about 4 km from the locality. The recreational space, Lalsavunga Park and the quarry, the source of livelihood for many households within the community is within 1 km from the centre of the locality. The playground is about 2 km far from the centre and post office services are available within the locality through a sub-post office established in the locality. The nearest police station and banking facilities are available at Kulikawn which is 2.5 km from Hlimen. Even though primary health care facilities are available within the locality, for health care service, the community people often access the services of Alpha Hospital at Kulikawn.

Research Design

The previous section presented a detailed description of the study area of the present study. This section presents the research objectives, hypotheses and the research design of the present study which is further presented into sub-sections viz. sampling, tools of data collection, processing and analysis and the important concepts used in the present study are defined and ethical considerations are also presented in this chapter.

Objectives

The following are the objectives of the present study:

1. To probe into the challenges faced by poor households during COVID-19 Lockdown and the coping strategies used by them.
2. To understand the role of State, Civil Society and Church organisation during the COVID-19 lockdown in Aizawl city.
3. To assess the social capital and social support embedded in the composition and structure of social networks of poor households in Aizawl.
4. To assess the resilience of the poor households during the COVID-19 lockdown.
5. To examine the relationship between social capital, social support and household resilience of poor households during the COVID-19 lockdown.

Hypotheses

The following hypotheses are formulated in order to provide focus to the present study:

1. Social capital assessed in terms of the density of social networks of the poor households is related to the resilience during the COVID-19 lockdown.
2. Social capital assessed in terms of the structural hole measures is related to the resilience of the poor households during the COVID-19 lockdown.
3. Availability of social support from social networks of poor households is directly related to their resilience during the COVID-19 lockdown.

The first hypothesis draws its inspiration from the writings of Coleman (1988) while the second hypothesis is drawn from the works of R. S. Burt (2000). The third hypothesis is intuitively drawn.

Design

The present study is explanatory in design and cross-sectional in nature and is based on the primary data collected through sequential, quantitative, qualitative and participatory methods. The primary data is collected through field surveys using pretested structured household interview schedules from the six localities within Aizawl

Municipal Area. The study also employs Participatory Rural Appraisal (PRA) and case study methods to supplement the quantitative data. However, the study is predominantly quantitative in its methodological orientation.

Sampling

The unit of the study was a household and the respondent includes any adult member of the households selected. The population of the study includes all the poor households residing in Aizawl city during the COVID-19 lockdown.

A multi-stage sampling procedure was employed for the selection of cities, localities and households. The first stage is the selection of the city. Aizawl, the capital of Mizoram is purposely chosen for the present study. The second stage is the selection of the localities within Aizawl city. Six localities within Aizawl city are selected to represent the four zones in the city East (2), West (2), North (1) and South (1) of Aizawl city purposively. As the eastern and western zones have larger populations two localities were chosen from them. The third stage is the selection of households. Disproportionate stratified random sampling was employed for the selection of households from the list collected from the retailers in each locality with an acknowledgement from the community leaders. From these lists, the poor and very poor households were randomly selected using a systematic sampling procedure. The poor and very poor households were disproportionately distributed in the sample for their proportionate distribution between these two categories results inadequate subsample size for comparison. In the selected households, an adult member was interviewed. The sample size thus obtained was 120.

Tools of Data Collection, Processing and Analysis

The quantitative data for the present study was collected through field surveys with a pretested structured household interview schedule. The structured household interview schedule was designed using KoboToolbox while KoBoCollect (Harvard Humanitarian Initiative, n.d) was used to collect the data with the help of an android device. For collecting Ego-centric Network information of the respondents, name generators and interpreters (see Perry, Pescosolido & Borgatti 2018; Campbell & Lee 1991) is included in the schedule. The data were collected during the months of

February and March 2021 and the reference period was the first lockdown during the period between March and August 2020.

Focus Group Discussions with stakeholders such as community leaders were used to collect qualitative data to support the quantitative data. Participatory exercises such as Social Mapping, Services and Opportunities Mapping and Impact Diagram are facilitated for a better understanding of the vulnerability context of the urban poor during COVID-19 lockdown.

For data processing and analysis of quantitative data, Microsoft Excel and SPSS (Statistical Package for Social Sciences) were used. For qualitative data analysis, thematic analysis is used and for egocentric network analysis, E Net software was used (Halgin and Borgatti, 2012). The results of analysis of personal network data from E-Net software (Borgatti, 2006) such as heterogeneity, homophily and the structural hole were further analysed using SPSS. Simple averages, cross-tabulation, percentages, independent 't' test, Pearson's chi-square test and Karl Pearson's Product Moment correlation were used for analyses of the quantitative data.

Definitions of Concepts

The definitions of important concepts used in the present study are as under:

Social network: It refers to the relationships and connections of individuals and households with each other and with organisations as well as associations. It includes both formal and informal networks.

Social capital: It refers to the resources of an individual or community which is brought about by their social relationships, connections and networks.

Social support: It refers to the different types of support such as instrumental support-tangible support in cash or kind, emotional support, and informational support, received by an individual or household through their social networks.

Resilience of poor: It refers to the ability of households and communities to cope with external shocks or stresses brought about by the COVID-19 pandemic which reduces their vulnerability and maintains a certain level of wellbeing. It focuses on the availability of social support.

Poor: It includes households in the selected localities identified as Priority Households (PHH) of the Targeted Public Distribution System (TPDS) obtained from the Local Council.

Very poor: It includes households in the selected localities identified and covered under Antyodaya Anna Yojana (AAY) of the Targeted Public Distribution System (TPDS) obtained from the Local Council.

Lockdown: It is a situation that is taken as a precautionary measure to establish physical distance. The lockdown in the study is the lockdown enacted by the Government of Mizoram from 22nd March 2020, a period of twenty-one days was with two additional extensions of the lockdown period. The second lockdown was for forty days which has been extended to the third lockdown of eighty days.

Ethical Considerations

1. Formal permission was obtained from the Local Council of the selected localities (Veng) to research in their locality.
2. Informed consent was obtained from the households to participate in the study and be included in the field survey.
3. Confidentiality is maintained in the qualitative part of the study.
4. Physical distancing is maintained during the collection of primary data.

The settings and the methodological aspects of the present study are described in this chapter. In view of these, the next section discusses the results of the analysis of the collected data.

CONCLUSION

The present study examines the role of social capital of poor households in Aizawl city during the COVID-19 lockdown. It tries to assess the relationship between social capital in terms of social network measures and the availability of social support with resilience and adaptation. The study also explores the challenges faced by the poor households and the role of the State, Civil Society and Church during the COVID-19 lockdown. The present study also assesses the social support embedded in the composition and structure of social networks. The study is conducted using both quantitative and qualitative methods in six localities with Aizawl Municipal Area viz. Zuangtui, Zemabawk, Bethlehem Vengthlang, Sakawrtuichhun, Maubawk, and Hlimen to meet the objectives and hypotheses of the present study.

This chapter consists of three sections. The major findings of the present study are presented in the first section, the conclusion is presented in the second section, and the suggestions are presented in the third section.

Major Findings

The findings of the present study are summarized in this section. The findings are presented into six sub-sections in which the first sub-section consists of the social structural bases of the poor in Aizawl, the second sub-section presents the challenges faced by the poor households during COVID-19 lockdown and the third subsection discusses the role of State, Civil Society, and Church during the lockdown. In the fourth sub-section, the social capital and social support embedded in the composition and structure of social networks of poor households in Aizawl are discussed. The resilience of the poor households during the COVID-19 lockdown is summarized in the fifth sub-section and the sixth sub-section presents the relationship between social capital, social support, and household resilience of poor households during the COVID-19 lockdown.

Social Structural Bases of the Poor in Aizawl

The social structural bases of the poor in Aizawl have been discussed in terms of demographic profile, family profile, social characteristics, economic characteristics and civic and political affiliations.

Gender, age group, marital and educational status have been studied to understand the demographic structural bases of the poor have been studied in terms of. In the present study, there are more female respondents among both poor and very poor respondents where most of the respondents belong to middle and old age groups. More than half of the respondents are unmarried and among the respondents, those who finished their high school constitute a majority followed by primary and middle.

The family profile consists of the type of family, size of family and the gender of the head of the household. The poor households in Aizawl are mostly nuclear families and small in size i.e., less than three members in the family. As a patriarchal society, there are more male-headed families as compared to female-headed families.

The social structural bases are analysed in terms of sub tribe, type of clan and denomination. The poor households in Aizawl are mostly Lusei followed by Lai, Hmar and other subtribes such as Paihte, Mara and Nepali where more than half are from the common clan. The Presbyterian church is the major denomination. Other denominations of UPC NEI Church, Baptist Church Church, UPC Mizoram, Seventh Day Adventist, Roman Catholic, Salvation Army, IKK, Kohhran Thianghlim etc. are also present.

In the present study, the economic bases include dependency rate, perceived levels of living, ownership and type of house. Among the poor household, the earner rate is higher than the dependency rate and more than half of the poor perceive their level of living as poor followed by a middle level of living and very poor level of living. More than half of the poor in Aizawl live in their own homes and most of the houses are Assam type houses. House ownership by the poor households in Aizawl can be a result of the support received through Government schemes and the collaboration between the Local Council and YMA in their respective localities. There are only a small number of individuals who have leadership positions among the sample households.

Challenges Faced by the Poor Households during COVID-19 Lockdown

The challenges faced by the poor households during COVID-19 Lockdown are based on the effect of the Lockdown from 22nd March 2020 with two additional extensions of the lockdown period. The first lockdown is a period of twenty-one days,

followed by the second lockdown of forty days and is extended to the third lockdown of eighty days. The poor households in Aizawl City mainly depend on daily labour, self-employment and private employment as their primary occupation (Sailo, 2014; Tuan Mansanga, 2016). Due to movement restriction and social distancing norms of the lockdown, the informal sector and the livelihood of the poor have been affected. The lockdown had resulted in increased movement restrictions which decreased the number of man-days of employment and further decreased the income of the poor. Findings from the FGD highlighted those daily wage labourers whose workplace is within the settlement area are more affected than farmers who work in the outskirts of the city. Interstate migration at the onset of the pandemic also contributes to decreased income among poor households. In addition to the decreased income, the poor experience a decrease in food items available and a rise in food prices which are caused by the panic buyers who are from the non-poor category and movement restrictions.

Apart from the livelihood challenges, the poor households faced challenges regarding children's education. The challenges on education are due to the economic bases of the poor households, the economic impacts of the lockdown and the encouragement of online classes without proper planning and inadequate digital skills. The poor households without proper income during the lockdown have difficulty in payment of fees for their children's education and online classes undertaken by the educational institutions are a burden for the poor families. While some families were unable to provide facilities for joining the online classes, some were unable to cope with the online classes due to their busy schedule to earn their livelihood in every possible way and the language barrier also creates a problem as the medium of education is mostly in English. Both physical and mental health were also disturbed due to the lockdown.

Social capital embedded in the social network of the poor had helped them to cope with the challenges during the lockdown. The poor household had employed thrift, material support from friends and families, savings, instrumental support from friends and families, borrowing from friends and families, livelihood diversification and prayer as coping strategies for the challenges faced during the lockdown.

Role of State, Civil Society and Church during COVID-19 Lockdown

The role of the State and Civil Society organisations such as YMA, MHIP and MUP and the Church during the lockdown has been assessed in terms of the social support provided to the poor. The State comprises the State Government and Local Council. The findings from the perceptions of the lockdown provided that the State Government had helped reduce the stress of the poor households during the lockdown by providing food grains- rice frequently, pulses were also provided through PDS and free of cost for the AAY households which increases food security. Thus, helped in reducing the vulnerability of the poor and also provided material support in the form of cash to the LLTFs within Aizawl. The State Government through the Mizoram State Disaster Management Authority had issued Standard Operating Procedures which provided guidelines for restrictions towards the fight against COVID-19 and the formation of Local Level Task Force (LLTF) in each locality.

The Local Council is an important component of the LLTF. The State Government has constituted the LLTF with the Local Council Chairman as the Chairman of the LLTF. The formation of the LLTF is the key factor that contributes to the prevention and containment of COVID-19 outbreak in the communities and also helped in decreasing the vulnerabilities of the poor during the lockdown.

The role of Civil Societies such as YMA, MHIP and MUP during the lockdown is summarized in the present study by the social support provided through the LLTFs. Apart from their functions in the LLTF, these non-governmental organizations in their respective locality contributed donations to the LLTF and functions together as a group following the SOP implemented by the State. The LLTFs have played a leading role in each of their localities as Front-Line Workers.

The Church is also a composition of the LLTF. The SOP had included a representative of Churches in the LLTF. Apart from the social support and duties fulfilled by the LLTF, the Church had been playing an important role by providing social support in cash and kind to the vulnerable households within their respective locality without any barrier in denominations. The Church is the backbone for the community in the prevention of the COVID-19 outbreak. They authorized the use of the

Church Halls for Community Quarantine Centres and provided support in the form of cash to the LLTF as well as to the destitute within their community.

The role played by the LLTF toward the prevention of COVID-19 can be summarised as follows:

1. 'Contact tracing' of the COVID-19 positive patients for containing the virus.
2. Arrangement of sample collection and management of Community Quarantine Centres.
3. Amend the Government SOP according to the community requirement.
4. Maintain the rules and regulations of COVID-19 prevention.
5. Track down the destitute and provide material support in cash and kind.

Apart from the collective efforts through the LLTF, the civil societies providing social support to the destitute in their respective locality separately had enabled the poor to cope with the challenges they faced during the lockdown.

Social Capital and Social Support

The present study analyses social capital in the form of social networks. The social network data composition is collected using name generators and name interpreters embedded in the interview schedule. The composition and measures of the ego-centric social network are analysed with E-Net and SPSS.

To understand the social structural bases of the social network of the poor in Aizawl city during the COVID-19 Lockdown, the gender composition of the social network, the age and years of education of the alters, the sub tribe and denomination as well as the socio-economic category (SEC) of the alters were analysed. There are more female alters than male alters in the social networks of the poor where there are more female alters among the poor SEC than the very poor SEC. The alters' age ranges from thirty-five years to sixty-two years and the education level of the alters in the social network ranges from six to ten years of education. Lusei is the largest sub-tribe mong the alters, followed by Hmar, Lai, Mara, Paihte and Nepalis. In terms of denomination, the majority of the alters belong to Presbyterian Church. There are also alters who

belong to UPC NEI, Baptist Church and UPC Mizoram, Roman Catholics, Seventh Day Adventists, Salvation Army, Kohhran Thianghlim, Isua Krista Kohhran etc. Majority of alters in the social network of the poor household in Aizawl during COVID-19 lockdown belong to the poor SEC followed by the non-poor SEC. However, the non-poor are the main sources of social support for the very poor households whereas the majority of the alters in the social network of poor households are from the poor SEC. This means that social support is provided by the same level of people among the poor household category. Among the alters, affiliation with the government i.e., government servant is the highest and there are also a few Local Task Force and Church affiliations. There are fewer political parties and CBO affiliations.

The pattern of relationship in social networks of the poor in the present study is majorly friend based followed by kinship and there are no significant differences found between the very poor and poor households. The third major relationship pattern is ‘known each other ' and the difference between the two socio-economic categories in this relationship pattern is found to be significant, where it is much higher among the very poor households. This may be because the very poor households are more vulnerable during the lockdown and receive more social support from individuals outside their strong ties. The presence of more friend-based relationships in the social network of the poor during the lockdown may be due to the lockdown restrictions which unable movement across localities and households mainly depending on local ties at the point of time.

The relationship between the ego and the alters have resulted in the provisions of social support during the lockdown where instrumental support has been the highest support provided to the poor followed by material support, emotional support and informational support. The difference in the material support and emotional support between the very poor and poor is significant in which the percentage of material support of the very poor is higher than that of the poor. This may be attributed to the greater number of decreased income households among the very poor which resulted in the need for more material support. The overall average number of social supports is 1.5. There are no significant differences in the number of social supports.

Social capital operationalized in terms of heterogeneity showed that the alters in the social network show similarity in terms of gender, denomination and subtribe whereas the socio-economic categories of the alters are different. There is significant variation between the two socio-economic categories in terms of gender. Also, social capital operationalized in terms of homophily showed the respondents (ego) and the alters are similar in terms of gender and subtribe while age and education of the alters shows heterogeneity with the ego. The variation in the homophily of the gender and education characteristics between the two socio-economic household categories is found to be significant.

The analysis of the social network measures of social capital in terms of Standard Ego measure (Borgatti, 2006) and Structural Hole measure (1992) showed that the mean degree or network size of the social network is 6.1 and the density of the network is 0.7 which is high. The effective size is 3.0 and the constraint is 0.3. There are some differences in the social network measure between the two socio economic categories where the mean degree of the very poor households is greater than that of the poor households which shows that the relationship among the very poor is likely to have the needed resources as compared to that of the poor while the mean density of the social networks of the very poor is slightly lower to the poor. Also, the mean effective size of the social network of the very poor households is lower than that of the poor households and the constraint measure of the social network of both the poor and very poor households is equal. There are no significant variations in these measures. These findings showed that social capital embedded in the social networks of the poor households in Aizawl city during the lockdown is high.

Resilience of the Poor Households during the COVID-19 Lockdown

The present study analyses the relationships between vulnerability, resilience and adaptation from social capital perspective assessed in terms of social network using sixteen indicators based on economic, health and social dimensions based on the experiences during and after the lockdown.

During the lockdown, the economic dimensions viz., the man-days of employment, household income, the quantity of food available to family members and

family expenditure have all declined. Among the health dimensions, ability to provide health care to family members, mental health and physical health of family members, alcohol consumption, use of drugs has declined whereas the use of paan and tobacco has increased. Children's education, mobility to different places and participation in church activities has also declined while relations within the family, religious activity at home have increased. The vulnerability of the poor households had increased during COVID-19 Lockdown.

After the lockdown, the experiences of the poor households in Aizawl City showed that only children's education and religious activity at home had decreased after the lockdown. The decline in children's education during and after the lockdown is mainly due to the inability to provide facilities for online classes at home which is an impact of poverty and the inability of the parents to help their children in their studies. This increase in indicators showed that the poor households were able to cope with the challenges posed by the lockdown with social capital.

The overall resilience and adaptation level of the households is more on the low and moderate level. This is due to the fact that the lockdown had affected the poor households in all dimensions of economy, health and society and the availability of the high social capital cannot be translated to high levels of resilience and adaptation. The level of resilience is slightly higher among the poor households as compared to the very poor. This may be due to the livelihood patterns of the poor which enable them to have more savings which they employed as a second major coping strategy for the challenges during the lockdown. This finding highlights the importance of savings for households.

Social capital, Social Support and Resilience of Poor Households

In the present study, for the analysis of social capital, the composition and the structural measures of the social network is used. Homogeneity and heterogeneity are measures of composition while degree (network size), density, effective size and constraint are structural measures of the social network.

The first hypothesis of the study reads that social capital assessed in terms of density of social networks of the poor households is related to the resilience during the

COVID-19 lockdown. The computed P-value of density and resilience is not significant even at a 5 per cent level; hence, the hypothesis is rejected.

The second hypothesis of the present study reads that social capital assessed in terms of structural hole measures is related to the resilience of the poor households during the COVID-19 lockdown. The computed P-value of structural hole measures i.e., effective size and constraint; and resilience are not significant even at a 5 per cent level; hence, the hypothesis is rejected.

The third hypothesis of the present study reads that availability of social support from social networks of poor households is directly related to their resilience during the COVID-19 lockdown Since the correlation of social support measures viz. relationship pattern, the number of social support and type of social support; and household resilience are not significant even at 5 per cent level, the hypothesis is rejected.

Conclusion

The COVID-19 pandemic has a deep impact on individuals, families, communities, countries and the world. At the micro level, it negatively impacted the livelihood, education and health of individuals and households due to the lockdown measures which resulted in a loss of employment, reduction in household income, decrease in the accessibility of healthcare facilities, increased use of *paan* and tobacco and decline in children's education. While we largely focused on the negative impacts, there are also a few positive impacts at the micro level. The lockdown has created more family time, abstained few substance abusers and provided an ideal situation for family prayers which some families found it difficult to do before the lockdown. This improves the bond within the families and is a good impact as families are the basic institutions of a society. For some families, the lockdown had provided a chance for a new livelihood which increased their income and continued even after the unlock and there are provisions of social support from individuals to the families in need which had contributed to the resilience of the poor during the lockdown. The importance of savings for ensuring household resilience was also clearly highlighted from the experiences due to the pandemic.

At the mezzo level, the major negative impacts include decreased food supply in the community due to movement restrictions, decreased social interactions due to the closing of religious and educational institutions for physical distancing measures. The decreased income at the micro level also impacted the tithe of the Church at the mezzo level. The major positive impact at the mezzo level is the formation of the LLTF. The decentralization plan of the State Government to fight the coronavirus leading to the formation of the Local Level Task Force in each locality is one of the remarkable efforts taken up. This well-thought plan of the Government in the formation of the LTTF, a committee which includes all the representatives of the community, is a champion in the prevention and containment of the outbreak of the novel coronavirus in Aizawl and contributes to reducing the vulnerability of the poor during the lockdown as they trace and provide support in cash and kind to the destitute. Also, the Church and NGOs as independent groups had come up to curb the impact of the pandemic in the community by provisions of material social support in terms of cash and kind. These efforts taken up at the mezzo level had contributed to the resilience of the poor during the lockdown and declined the growth curve of the COVID-19 infections.

At the macro level, the economy is adversely affected. The expenditure on COVID-19 tests, hospital bills for COVID-19 patients, expenditures on the transportation of COVID-19 positive patients and COVID Care Centres etc are all borne by the government. Apart from these efforts taken up by the government, more frequent rations through PDS were provided to the citizens. It is not only frequent but also free for the AAY households and also includes other pulses apart from rice. This has reduced food insecurity, a contributing factor to the resilience of the poor thus, reducing their vulnerability.

Social capital is present among the poor households in Aizawl city in the form of social networks which provide social support where ‘bridging capital’ is more as compared to ‘bonding capital' during the lockdown. The lockdown due to the pandemic may reflect an increase in social capital among the community people in Aizawl after the pandemic, however, the availability of household social capital assessed in terms of egocentric social networks is high, but it is not enough and does not contribute to high

levels of resilience and adaptation of the poor households during the lockdown. The present study concludes that the poor households in Aizawl city have the ability to cope with the effects and challenges of the lockdown though most of them were vulnerable. Though social capital embedded in social networks was high, it could not be translated to a high level of resilience because the lockdown implemented to control the outburst of the pandemic has affected the livelihood, living conditions, food security, education and health of the poor households.

Suggestions

The present study suggested the following in light of the findings:

1. To generate awareness on the importance of savings for enhancing economic development and to reduce their vulnerabilities in times of crises among the poor. Lack of financial capital can further lead to more vulnerability. The importance of savings can be promoted at home by parents, at schools by teachers, through more popularization of Self-Help Groups, awareness and sensitization programmes and advertisements.

2. To promote more economic opportunities and facilitate empowerment among the poor using a bottom-up approach through capacity building and skills training by NGOs and government agencies. This will enable the poor to be more resilient in times of crisis and will enable them to find and adjust to new livelihoods.

3. To promote organic kitchen gardening within household premises which will promote the sustainable agricultural practice, healthier food, reduce food insecurity due to market shocks and price rise caused by pandemics and other disasters. This can be done through general awareness in social media, inclusion in the curriculum of school education, provision of subsidised seeds by NGOs or government agencies.

4. To sensitize the importance of social capital as it is an underutilised community asset which can be useful in poverty reduction, disaster response and also in

disaster preparedness by encouraging social participation of the poor in various organizations and associations to build and maintain social ties which will enhance their social capital and will contribute to the mobilisation of resources whenever a disaster or crisis happens. This can be practised by the community leaders and ensure the inclusion of every section of the society.

5. To promote the use of digital platforms by learning from the current pandemic situation and prepare for future similar crises to build and maintain social capital which can be destroyed due to the physical distancing measures employed to contain the spread of the virus.

6. In-depth studies on the effects of COVID-19 and social capital during pre and post COVID-19 scenarios towards both household resilience and community resilience.

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