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Investigating *Monga*: Seasonal Food insecurity and Adaptation Strategies in the Northern Region of Bangladesh

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Abstract

Food insecurity and poverty are interlinked and the main reason for migration in poor households from the northern part of Bangladesh. Individuals from poor households migrate in the hope of improving self-well-being and for their families.

Monga- seasonal food insecurity is a multi-dimensional issue in the northern region of Bangladesh. The purpose of this study is to understand the adaptation strategies by the northern region people of Bangladesh against *Monga*-seasonal food insecurity. A qualitative approach has been used in this study and to assess the functionality of strategies for adaptation by the char dwellers in Rangpur against *Monga*-seasonal food insecurity has followed Talcott Parsons and his so-called AGIL system.

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1. Introduction

Food security exists when all people, always, have physical, social and economic access to enough, safe and nutritious food which meets their dietary needs and food preferences for active and healthy life (Ahamad, Khondker, Ahmed, & Tanin, 2013). When any of the four pillars of food security availability, access, sufficiency and nutrition are absent, then food security is violated. Seasonal food insecurity (*Monga*) is a multidimensional socioeconomic issue in Bangladesh. It is more escalated in the northern region of Bangladesh than in the other regions, due to unemployment, low income, and extreme poverty, making households vulnerable to food insecurity (Zug, 2006, Islam and Hossain, 2014). The scenario is worsened when climatic, and natural disasters occur affecting dimensions of food security, the availability, access, and utilization to food alleges (Hossain *et al.*, 2005; and World Food Summit, 1996).

According to research evidence, extreme climate change globally aggravates climate events like floods, heavy rainfall, drought, cyclone storm surges, destroying the billions worth of property, disrupting livelihood of hundred millions of people especially agriculture, and is associated with food security (Afifi, Liwenga, & Kwezi, 2014; Deb *et al.*, 2010). Bangladesh is ranked high on the list of the most vulnerable countries.

The most common water-related natural hazard is flash floods due to Bangladesh's low level above the sea, causing extensive damage to crops, damaging homes, roads and other infrastructure. The most flash flood-prone areas are northeastern and southeastern regions (Anik & Khan, 2012) where flash floods severely impact on livelihood activities of the poor rural people destroying crops, reducing soil fertility through increased salinity, and destroying property and lives of coastal people.

Migration is common in Bangladesh and associated with economic development states, Etzold *et al.* (2014) who alleges that, migration is a multidimensional concept caused by existing livelihood and labour migration system, climate change, social inequality, food security as well as structural economic difference (Etzold, Ahmed, Hassan, & Neelormi, 2014; Rademacher-Schulz, Schraven, & Mahama, 2014; Warner & Afifi, 2014).

Migration as a key adaptation strategy used by individuals and households in response to socioeconomic, cultural and environmental change to reduce vulnerability, and recover from, disruptive shocks (Afifi *et al.*, 2014; Afifi *et al.*, 2016; Bryan, Chowdhury, & Mobarak, 2014; Tacoli, 2009; Warner & Afifi, 2014). Another means of adaptation used is microfinance/microcredit. According to Ahmed, *et al.* (2001) microfinance extends credit to poor people especially for income-generating purposes, lessening seasonal variability, diversifying income-earning resources, building assets, strengthening crisis coping mechanism hence allowing clients to achieve the quality of life (Ahmed *et al.*, 2001; Banerjee & Jackson, 2017). Microfinance proponents believe that it has the capacity to transform the lives of poor people globally (Hammill, Matthew, & McCarter, 2008).

Most people in the northern region are landless, small-holders and poor. They are dependent on agricultural labour wages. This region is vulnerable to natural calamities due to its floodplain topography, tropical monsoon climatic characteristics and is regularly struck by natural disasters (floods, drought, degradation, riverbank erosion and cold waves) than other parts of the country (Islam & Hossain, 2014). This study will focus on seasonal food insecurity and investigate adaptation strategies of the North Bengal rural poor of Bangladesh. I hope this study will help to draw the attention of the Bangladesh government, national and international authorities, NGOs and local leaders to make appropriate policy to minimize the impacts of seasonal food insecurity.

1.1. Research Aim

The study aims to understand adaptation strategies against seasonal food insecurity of the landless poor living in the northern region of Bangladesh through the agent's life world stories. The objective in all its ambition is to evaluate the functionality of adaptation strategies and recommend further investigation of survival strategies.

Following questions are set as guidelines to fulfil this aim.

- What strategies do households use to adapt to seasonal food insecurity?

- How do the coping strategies function in minimizing food insecurity?
- How can the capacity to cope with food insecurity be improved among the landless poor of the Northern region of Bangladesh?

2. Study outline

The outline of the study is such laid out starting from introduction, research aim and study questions. Second is the conceptual framework, followed by the background in the third place. Thereafter follows the theoretical framework in number four. After theory follows the concepts used in the study in fifth. The methods are in the sixth place followed by interpretation and analysis, then the result, conclusion and finally further recommendation.

3. Functionalist and structural systems theories of action

According to Creswell (2014), theories are the lens that researchers use to study questions about a phenomenon. The theory is a researcher's reflection, which helps in analyzing individual actions and relationships in society (Inglis & Thorpe, 2013). This study will use functionalism, the structural system of action to analyze adaptation strategies used by Kolkonda villagers against "*Monga*"-seasonal food insecurity. After having studied a course on theories. I found functionalism interesting and chose it for analyzing the study. To understand why or what drives people to do what they do. Does the agent's action justify the end, solving the needs of being food secure in times of vulnerability?

Functionalism uses biological ideas of an organism and their development from simpler stages to more complex forms of a system. Functionalism was founded by Emil Durkheim and Spencer as structuralist theory, who considering the complexity of modern society, wanted to find its ability to exist (Inglis & Thorpe, 2013). Societies are deemed to have changed from

simpler relations where work was organized around kinship and family relations as for instance in European peasant households, which were both a working and a family unit, to differentiation in modern society, where structural differentiation is seen to apply around work in modernity that makes people leave home go to work to be paid wages (Inglis & Thorpe, 2013).

Talcott Parsons produced the unit act (system function) where action consists of a person with goals and choosing certain means within the material and cultural constraints to achieve them (Burt, 1982; Coleman, 1986; Inglis & Thorpe, 2013). Parsons structural-functionalism derives from Bates study of group interaction to solve tasks (adapt to the environment) based on the four principles of AGIL model (Adaptation, Goal Attainment, Integration, Latency). AGIL is used to analyze any system or subsystem of a system since all four components must function to guide action. Social structures of social functions carry out all four components. According to Mabogunje, (1970), a system with its environment constitutes the universe of a phenomenon which is of interest in each context. In understanding Kolkonda household's adaptation strategies against food insecurity '*monga*' the general social system will identify households behaviour, economic status and relationships to the subsystems.

The AGIL scheme is economic sociologists means to study the relationship between the economic subsystem and the other subsystems of the general social system, used in locating the economy within the extensive social system. AGIL outlines four major tasks that every system must be able to perform to secure its continuance (Heiskala, 2007). Adaptation to the environment produces resources for the system such as means of economic support; Goal attainment defines the tasks, policies, of the system concerning its environment, Integration of the system are norms, the accepted behaviour for a social group which prevents it from falling apart due to internal tensions and Latent, the values transmitted from one generation to another by socialization, institutions such as religion, family, and education, this provides motivational energy for the system to be used in situations of need.

Changes in the environment, or other factors, make redefinition of nature one or more of the other three subsystems and their mutual relations necessary (Heiskala, 2007; Tittenbrun, 2014). According to Coleman (1986), the social theory of action allows the connection of individuals' intentions to macro social consequences. Social theory creates the possibility of connecting the individual and society, the possibility of understanding how social systems might be shaped by human will (Sato, 2011). Burt (1982) alleges that an actor exists within a society where separate other actors within the system interdependently evaluate actions. Action is performed according to internal interests motivated by values and beliefs, through socialization, actors within a system use their resources to realize the interests (Burt, 1982).

4. Previous Research

This section presents different early research and presents concepts that will also be used to analyze this study.

4.1. Underinvestment in a profitable technology: The case of seasonal migration in Bangladesh

Needs for economic development has provided a major framework for explaining labour migration. Within this context, it is the wage differential between the receiving place and origin place that induce people to move to secure better lives. However, according to evidence, multiple factors such as to improve the economic position of households, a coping strategy for survival and livelihood strategy and better wages, underlie seasonal migration (Dang, Goldstein, & McNally, 1997; Deshingkar & Start, 2003; Rademacher-Schulz *et al.*, 2014).

Seasonal, temporary migration refers to people moving from rural to nearby cities or towns for a short duration of time in order to sustain their family in times of need (Shonchoy & Kurosaki, 2013; Shonchoy, 2011). According to

(Tacoli, 2009) extreme weather events often displace people for a while. They soon come back to reconstruct their livelihoods. The most vulnerable to natural disaster are the poor.

Migration is the process of moving from one place to the other for better opportunities or livelihood (Kainth, 2009). Seasonal migration serves to reduce vulnerability and increase livelihood security, alleges Rademacher-Schulz *et al.* (2014). Seasonal and circular labour is a short-term change of residency, repetitive or circular in nature as people continuously move in and out during vulnerability, only to come back when the hard times are over (Deshingkar & Start, 2003; Zelinsky, 1971). Migrating for employment labour is a component of livelihood strategies for poor households and is adjusted to agricultural circle (Deshingkar & Start, 2003) characteristic of the landless poor living in rural areas. Migration has since the 1970s been known to be motivated by involuntary factors such as extreme economic conditions and social hardship by the poor. Kainth (2009) argues that even though migration is usually deliberate, there are exceptional cases when migration is a response of human organisms, to economic, social, political and demographic forces in the environment. An important symptom to social change in society (Kainth, 2009) according to Haberfeld (1999) individuals from rural and less developed areas migrate not only to maximize income but also to minimize risks, of various market failures like natural catastrophes or drop in prices. They send household members to work away from home as migrant workers, to diversify their labour supply guarantee (Haberfeld, Menaria, Sahoo, & Vyas, 1999). Haberfeld argues that most seasonal migrants are the poor low class in the society and landless, as found in India in 1981. At the same time, overpopulation is usually a reason to migrate. Among other factors influencing people's decision to migrate seasonally is, inter-regional disparities in economic growth caused either by, industrial or agricultural (e.g. the Green Revolution) development. Their study found that migrant labourers helped to raise their household's standard of living.

4.2. Microfinance and the business of poverty reduction: Critical perspectives from rural Bangladesh

Poverty alleviation has for decades been on the top of the international development agenda. However, the tools for creating economic growth and releasing people from poverty have been hard to come by (Khavul, 2010). Research studies show that microfinance is a tool conceived by poverty alleviation practitioners as capable of alleviating poverty. Furthermore, it is being promoted to developing countries as, means of helping poor populations excluded from mainstream banking institutions. To access financial capital through cheap credit loans (Banerjee & Jackson, 2017; Bateman, 2012; Kent & Dacin, 2013; Khavul, 2010; Sinha).

According to Grameen Bank, the idea behind microfinance is for credit to be offered in a two-tiered approach—one by offering financial credit for the purchase of capital inputs to boost self-employment, secondly, by noncredit (enhancing social capital) offered as social development programs such as, vocational training, information on concerns of health, civil responsibilities and rights, and information sharing and monitoring among members. The noncredit services differentiate group lending programs from banks or, individual-lending institutions. Moreover, the noncredit maybe an important component of the success of microcredit programs argues, McKernan (2002). However, according to research by (Anderson *et al.*, 2002) the idea of social capital enhancement is, usually a secondary goal for microfinance offers. Arguing that, there can be more ways to offer these services other than through microfinance.

The goal of micro-finance on its conception was the dispersion of small collateral-free loans to jointly liable borrowers in groups. Group lending was originally promoted as a means of social solidarity and collateral to individuals to foster income generation and poverty reduction through enhancing self-employment (Banerjee & Jackson, 2017; Kent & Dacin, 2013; Sinha).

Microcredit is seen by many as lifting families out of poverty, especially when lent to women (Ahmed, Chowdhury, & Bhuiya, 2001; Morduch, 1999). Microfinance is mainly operated by money lenders and saving groups, in the belief of helping the poor by, insurance and other financial services to enable poor households, to engage in productive activities (Anderson, Locker, & Nugent, 2002; Chowdhury, Ghosh, & Wright, 2005; Hammill *et al.*, 2008; McKernan, 2002).

Proponents of microfinance are convinced of the possibility that Micro-Finance Institutions (MFI) can transform the lives of poor people. By halving global poverty in few years, generating income, increasing access to health and education, entrepreneurship and building social capital among the poor and vulnerable communities (Banerjee & Jackson, 2017; Hammill *et al.*, 2008; Kent & Dacin, 2013).

4.3. Food security and nutrition in Bangladesh: progress and Determinants

The origin of '*Monga*' is Mehenga a Bangla word which means expensive. According to (Ahamad *et al.*, 2013), *Monga* is used to refer to high food prices. Consequent poverty and hunger during the lean periods when there is, fluctuation of income and employment due to socioeconomic shocks. Bangladesh has since the end of the 1900s made improvements in its efforts to achieve national food security; however, individual food security has not been overcome. The problem of seasonal food insecurity (*Monga*) is not the availability of food, but lack of access to food (Ahamad *et al.*, 2013; Hossain, Naher, & Shahabuddin, 2005; Zug, 2006). According to Alam (2016), a report by USDA in 2010 indicated that 33 million people out of 156 million were registered in Bangladesh as food insecure, mainly due to the lack of affordability of adequate food for many poor households, and the number projected to rise to 37 million by 2020 (Alam, 2016).

The national-level food security refers to, a country's sufficiency of food-stock, to meet domestic demand until stocks can be replenished from harvests or imports. At the individual level, to be food secure means that, all members of the society have access to the food they need; food from own production, from the market and/or from the government's transfer, entitlements (Hossain *et al.*, 2005; Maxwell, 1996; Sen, 1981).

Food security dimensions have moved from the national to the household and individual level. An individual's behaviour in the face of uncertainty, irreversibility, and binding constraints on choice, whereby people sometimes choose to starve to save for the next meal (Barrett, 2005; Maxwell, 1996). Malnutrition is a result of hunger which is insufficient food intake. An Individuals' wellbeing is threatened because of insufficient intake of micro and macronutrient food. The nutrition component of food security relates to an individual's health status. To be healthy nutrient intake varies as per individual's age, work, and health. Consuming not enough nutrients is being food insecure.

Food insecurity among households is a consequence of multidimensional factors such as seasonal unemployment, damaged crop production, lack of alternative employment opportunities, etc. and inability to manage these risks (Ahamad *et al.*, 2013). At the same time, some people experience chronic food insecurity that is long term, some experience transitory food insecurity or short-term food insecurity, caused by shock to food production or economic system, due to the shortage of resources and income to adjust to shock (Gladwin, Thomson, Peterson, & Anderson, 2001).

In lean periods individual members of households' women, children, and elderly are more vulnerable to food insecurity due to shortage of daily intake. In Bangladesh people's diets are mostly imbalanced (Hossain *et al.*, 2005). Translation of consumed food to nutritional factors is aggravated by general health and sanitary environment, poverty, lack of education, and caring practices (Barrett, 2002; Hossain *et al.*, 2005).

4.4. Assessing the poverty and vulnerability impact of micro-credit in Bangladesh

Poverty has always been measured as absolute or relative. Absolute poverty is measured concerning the amount of money necessary to meet basic requirements, food, clothing, and shelter (Agola & Awange, 2014; Hulme, 2013). According to (Matin and Hulme 2003) a household's inability to meet these needs is attributed first as having an unstable income that is below the appropriate income, consumption or expenditure poverty line. Secondly, as a sudden shock that causes a household's income, consumption or expenditure to drop below the poverty line.

Monetary measurement does not consider the broader quality of life issues, or with the overall level of inequality in society, hence fails to recognize individuals social and cultural needs. Criticisms of this measurement led to the concept of relative poverty, defined about the economic status of other societal members in each society (Agola & Awange, 2014; Matin & Hulme, 2003).

Poverty is a multidimensional and a multifaceted deprivation. Poverty manifests itself in various forms such as powerlessness and exclusion from decision-making processes, low levels of education, high rates of mortality and poor health, and absence of wellbeing or capacities. Food insecure individuals are therefore poor people (Agola & Awange, 2014; Green, 2006). In his description of poor people, Zaman, (1999) states that, the rural poor continuously suffer from starvation and malnutrition. Are less educated, lack basic housing and clothing. The poor are rural landless farmers, small-scale marginal farmers, rural craftsman and fisherman. People with limited or barely any productive assets, are employed in the lower-wage category due to their lack of facility and are unable to maintain basic amenities due to limited purchasing power to buy food and other daily essentials.

Poverty can also be framed in narrow terms, based on income and the maintenance of physical efficiency (Hulme, 2013). In broader terms, poverty approach explores the multifaceted nature of poverty and the processes that create maintain or reduce poverty (Agola, 2014; Hulme,

2013). Hossain, (2005) states that 40% of the Bangladesh population lives below the food consumption-based poverty line, lacking sufficient resources to afford a diet of 2,122 kilocalories (kcal) per person per day, along with other necessities (Hossain *et al.* 2005). Poverty is still high in the rural areas of Bangladesh, (Hassan & Khan, 2007), the *monga* vulnerable areas in the northern districts can be said to experience both absolute and relative poverty. Ahamad (2013) alleges that subjection to frequent climate change leaves many in deprivation of required nutritional food needs, which leads to resultant poverty that affects both children and parents.

5. Methodology

This study is a qualitative approach out of the researcher's choice because qualitative methods allow for the understanding of meaning that participants ascribe to human or social problems (Creswell, 2014). After having studied the course on theory and methods the author considered structural functionalism a better tool for understanding the actions and justification of the subsystem (the landless char dwellers agents') within the system (Bangladesh) in adapting to *monga*. The study was carried out in Kolkonda union, in the Rangpur district of the northern region of Bangladesh, where the landless (char dwellers) rural poor peoples' livelihoods are affected during the lean period when agricultural activities reduce, affecting their food security seasonally. I chose to travel to Kolkonda and collect field data directly from individuals who live in food insecurity to do face to face interviews and observation to fulfill qualitative researchers' role of collecting data from real places/people living the phenomenon.

5.1. Background

From childhood, I could see some people come to our district from Rangpur to pull the Rickshaw seasonally. That time I heard people generally talking about these seasonal Rickshaw workers, that, they are so poor, therefore they come to our place to look for work. They do not have food to eat in their place, and so we must help them. I come from the northern region, but

even there, people still associate Rangpur with severe *Monga*. In Bangladesh, food insecurity is experienced everywhere, but worse in the northern region. Everyone from Bangladesh knows that Rangpur is a severe *Monga* prone district, Kolkonda union lies in Rangpur. Bangladeshi people know about the term *Monga*. Moreover, it is associated with Rangpur, but they do not know why it is only worse in Rangpur.

The author selected Kolkonda union because of familiarity, with the area and own interest. I come from the northern region of Bangladesh. I speak the language and share the culture of the respondents. Besides the author had worked in Kolkonda area in 2014 with an international NGO for six months, with the pumpkin consumption pattern at stakeholders' level. The NGOs idea was to cultivate something in the char land to help alleviate poverty in the Kolkonda region. The NGO selected a group of households, gave them seeds and education on how to grow pumpkins for a good yield. After a successful harvest, the households were followed to see how they use the pumpkin for food, and if it was able to alleviate poverty and hunger. My wonder is why such measures have not succeeded in lessening the food insecurity of Rangpur district. That is the driving force behind my thesis study. Hoping that the investigation can highlight the poor people's plight.

5.2. Procedure

To get knowledge and understanding food insecurity conditions of the northern region of Bangladesh, the author travelled to Kolkonda region, 250 km from the authors living village, and carried out a field study from 10th February 2018 to 20th February 2018. The author's period of the field study was limited due to the short time limit required for thesis writing and financial resource problem that shortened the fieldwork as opposed to the long-time field visit required of qualitative researchers (Creswell, 2014). Due to the short field duration this study did not meet the requirements of the long field stay that is recommended for qualitative methods therefore it can have biases due to the limited time. Because of the short time spent the study cannot be generalized, to other studies on the same but having longer study time. Besides I did not experience the *monga* season, I was in the

village during the season of plenty therefore the study lacks the experience of action during the *monga* season.

5.3. Study area

The study area is Gangachara Upazila of Rangpur district, which consists of 6 unions, namely Bala para, Mornia, Gajgnonta, Laxmitary, Kolkonda, and Alambiditar. The Upazila occupies an area of 209.61 km² with 37235 households. Out of these 6 unions, Kolkonda was selected purposively for conducting the study. The six unions have the same experience of *Monga*. South Kolkonda is selected for study because the author got help from an NGO that is working in the area who agreed to help in access participants. The NGO has days of meeting clients; it was easy to establish contacts through these rural families they helped fulfil the purposive selection of participants. Creswell (2014) states that, if sites and sample are selected purposively, then it will be easy in getting significant and meaningful narratives about a phenomenon because participants have proper experience of that phenomenon.

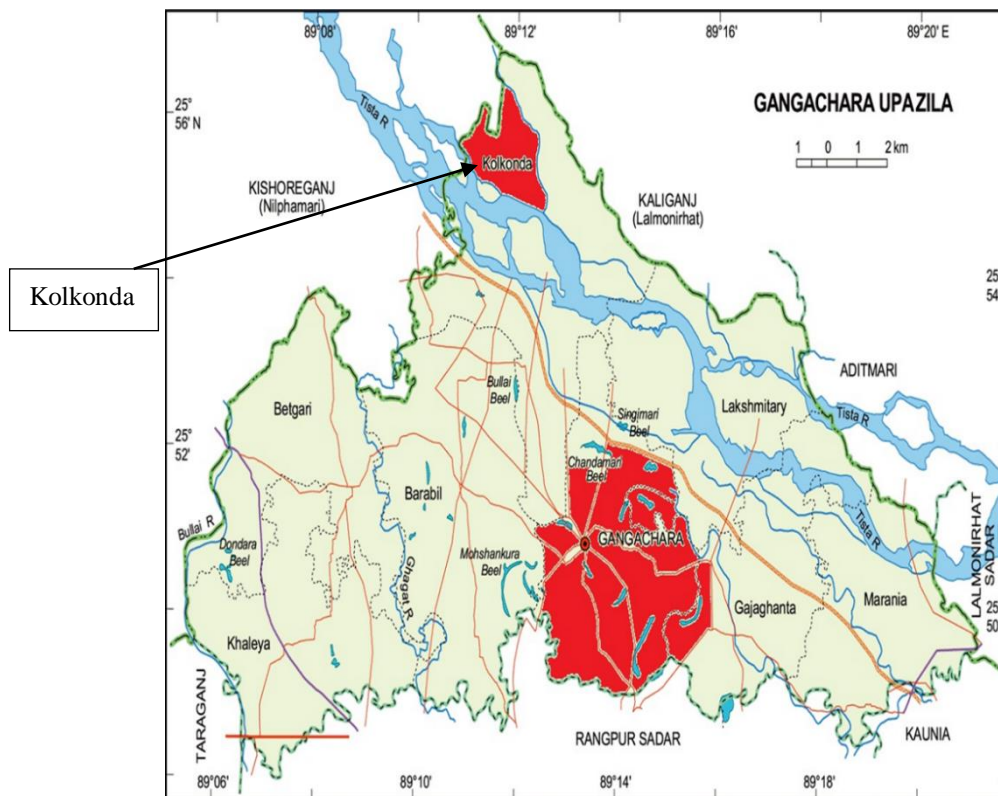


Figure 1. Map of Gangachara County showing Kolkonda union

5.4. Mode of procedure

5.4.1. Data collection

The author received the help of an NGO named Practical Action Bangladesh (PAB) in arranging Focus Group Discussion. They are working with pumpkin in Char land to improve the agro-economic condition of char peoples of Rangpur. Before data collection, the author met with the Agriculture Coordinator, Agriculture Officer and Field Assistants (FAs) of Practical Action Bangladesh. The author then requested them to provide necessary help and co-operation for information collection. Respective FAs of the study area helped to introduce a local leader with to the author, who is the key informant of this study. The author made all possible efforts to establish rapport with the respondents; I introduced myself and my purpose for meeting with them. Telling them that I come from not so far away district, we have *monga* too, but people do not move away. And since childhood, I have seen people from their area coming to look for work in our region during *monga*. Therefore, I was interested in hearing their life experiences of surviving *monga* through the years. The thesis study has provided me the opportunity to meet them. So, that they feel free to discuss the research questions deeply.

5.4.2. Sampling

The interviewees were 20 participants selected from different households. The individual interviews were coded as A and B. It comprised 6 participants of 4 males and 2 females. I had two focus group discussion coded C and D. Each composed of 6 males and 8 females. The participants were interviewed separately because of the respect of the culture and religion of Bangladesh. I carried out the interviews by the male participants, while my wife using the same questionnaire, guide assisted in interviewing the female participants.

The interviews were conducted using an open-ended, semi-structured questionnaire, which, according to Kvale & Brinkmann, (2009) gives a predetermined guide to the topic of discussion. Semi-structured questions

are flexible (Cohen & Crabtree, 2006; Kvale & Brinkmann, 2009). The flexibility helped the interviewer in the following interesting topics and answers given by the interviewees. Because of the flexibility of the semi-structured questions, the author did not follow the sequence of the guide. The questions were swiftly changed to let the narratives flow, following the interviewees lead and story. The flexibility of open-ended questions provided understanding and a new way of seeing the topic at hand.

The study could be done by other means of reading secondary material; however, I used the interviews because they are best used in situations when a researcher might not get another chance to interview participants as stated by Cohen and Crabtree, (2006). Besides, interviews are preceded by observation which is advantageous for the author. By observation, I was able to see and assess the participant's background and environment. My wife and I are from the northern part of Bangladesh; we have knowledge of what standards and living conditions present as low or worse even among the poor in the northern region. So, when making a face to face interviews, we captured the environment around the participants, which is useful during interpretation (Frankfort-Nachmias & Nachmias, 2007).

The individually interviewed were not participants in the focus group discussion; this was purposely done for the sake of capturing variation or saturation. When gathering fresh data, no longer gave new insights or revealed new properties, as stated by Creswell (2014).

The two focus group discussions which I gave code name C and D composed 6 males and 8 females, According to O Nyumba, Wilson, Derrick, & Mukherjee, (2018) focus group participants should share similar characteristics such as gender, age range, ethnic and social class background. For the generation of useful data which works better in homogenous groups. Focus groups are recommended when purposively sampling. I had also studied focus groups in a course at the college before field studies. I wanted to try and use a focus group too. I recruited the focus groups from the contacts that I accessed through the NGO. I told the participants that I needed to divide them and do the interviews according to groupings. To get more stories or variation, my wife also talked to the

female participants who helped by bringing some of the women friends or relatives to be part of the study.



Figure 2. Male Group discussion

According to Onwuegbuzie, Dickinson, Leech, & Zoran (2009) and O Nyumba, Wilson, Derrick, & Mukherjee (2018) the number of focus group participants should be large enough to yield a diversity of information between 6 to 12 participants. We kept the numbers low because large numbers are hard to control. Furthermore, I used focus group discussion because they are time and resource-saving (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009). Focus group was convenient for the author who had little resources as well as the short time to compile and complete the study for the master's exam study.

The interviews with female participants are not easy for a male interviewer in Bangladesh. The societal culture and religion do not allow, females to talk to male strangers without the permission, or the presence of their male partners. The male members are always out in the field working or looking for jobs. I had to take my wife along to the field as a field assistant to help interview the female participants. The assistant also used the same semi-structured open-ended interview guide that the author had formulated.

A digital audio rechargeable voice recorder recorded the interviews. The data was copied and saved on the computer and for later use by the author during analysis and interpretation as stated by Cohen and Crabtree (2006) that semi-structured interviews are used when a researcher will be sending several interviewees out into the field. The interviews were also recorded because of the difficulty of notetaking while conducting an interview, as well as to limit the detracting of rapport building by participants. Recording made me be at ease with the participants. I did not have to worry about writing down everything. It was captured in the audio, and this created time to keep the conversation flowing—the time which is essential for unstructured interviews.

Individual interviews took 50 minutes to one hour, and the focus groups took 2 hours so as not to wear out participants (O Nyumba *et al.*, 2018). The language of communication was Bangla since participants, assistant and the author share the same language. It is the mother tongue of the study area.

5.4.3. Validity and Reliability

Research methods use different measurements to test hypotheses (Creswell, 2014). Validity has always been essential for quantitative research to demonstrate causal relationships (Golafshani, 2003; Lakshmi & Mohideen, 2013). Validity justifies a study's reliability. In order to internally test validity, I used the theory concepts from early research, and the methods of investigation to analyze the field data. I used internal validity to check the extent to which the tools measured up to the results of the field study. Qualitative validity, according to Creswell (2014), means procedural checks, to verify the accuracy from the standpoint of the researcher. Internal validity is based on the tools of the research process (sampling, data collection technique and analysis).

The study can be generalized by external validity to other groups or populations of interest using the same measurements under the same conditions and in other places. Generalizability can be seen from the similarity with the literature on issues affecting similar cases such as poverty, migration, and theory (Creswell, 2014; Golafshani, 2003; Lakshmi

& Mohideen, 2013). Reliability is the degree to which methods are free from error and thus yield consistent results. Validity strategy used for this study is triangulation using different data sources for evidence to build themes for interpretation (Creswell, 2014).

5.4.4. Research Ethics

Ethical issues are present in all kinds of research for the reason of protecting research participants by doing good and keeping them from harm (Orb *et al.*, 2001). Qualitative researchers explore, examine and describe people in their natural setting and therefore attached to the investigation as qualitative researchers is power relations between researchers and participants, who must be protected (Creswell, 2014; Orb *et al.*, 2001). A researcher is bound by ethics to seek and obtain participant consent, promise and protect participant confidentiality, in data generation and analysis (Orb *et al.*, 2001; Shaw, 2003), and in reporting of outcomes to use participants view but not report subjective (Orb *et al.*, 2001; Van Maanen, 2011).

Since research ethics bound the author, we presented ourselves to participants. We explained that we were students and had come to request their participation in a study from their village, concerning food security problems and the adaption strategies they applied. We explained that this could help us in writing a student graduate paper, we promised them confidentiality, by saying any information given to us will only be used by us, for the student thesis paper, and no one will have access to it. Participants identity will not be revealed for the sake of protecting confidentiality, even though they might not mind their names being used. We promised that we would not use exact names but a pseudonym. Participants were informed of free consent, that anyone participating was free to withdraw at any point if they did not want to continue and free not to answer any question if they did not want to, or felt it was not appropriate.

5.4.5. Limitation

The researcher's period of the field study was limited due to the short time limit required for thesis writing. Moreover, due to the financial resource

problem, that shortened the fieldwork, which is a limitation for a qualitative researcher (Creswell, 2013). Another limitation is that the study time was not during *Monga* period, which limited observation of the household's agency during *Monga*. However, we relied on the individual household's recollections. *Monga* occurs in seven districts in Bangladesh, but the study was carried out in one little region and this makes it difficult to claim that this study is representative for *Monga* in all the seven regions. In Rangpur district, there is poverty and food insecurity from different angles, but the study limited itself to *Monga* prone households.

6. Data interpretation and discussion

This was a qualitative study, using primary data, collected through two focus group discussion interviews and individual interviews. The analysis procedure is organized by adopting data analysis procedure of reduction process to eliminate unnecessary features. Qualitative interview data are so rich, but not all can be used, rather is winnowed for themes (Creswell, 2013) the results are discussed and thematically presented.

6.1. Microfinance and Poverty

The nature of poor household's livelihood exposes families to shocks and seasonality's such as prices, employment opportunities and changes in demography, environment, economy, governance and technology (Shameem, Momtaz, & Rauscher, 2014).

Household poverty can be termed as a lack of or inadequate food or its cash equivalent. Aggravated by minimal or lack of other basic needs clothing, shelter, and other livelihoods. Food insecurity and subsequent vulnerability is a result of lack of availability, access, and utilization of food alleges as expressed by Fahim, a middle-aged man and father of five children. He referred to *monga* as poverty and difficulty in accessing even a day's meal Fahim said, "*this is seasonal poverty in those months we do not have anything to do, during Monga it is tough to get food even once a day*". He said that the aged people suffer more since they are unable to work and do

not get any help from other people because everybody is trying to provide for their children or themselves.

During the field work the author observed that there was food in the village. The men were present and busy working and enjoying time together gossiping. During '*monga*' season, there are no men in the village. There is no time to gossip; the men are busy looking for work in nearby cities.

The nature of poor household's food security is characterized by several risks, seasonal unemployment, damaged crop production, lack of alternative employment opportunities, etc., and an inability to manage these risks. A poor household's current food insecurity is indicative in terms of the household falling below food security or remain food insecure in the future (Ahamad *et al.*, 2013).

Another participant, a 47-year-old man Sabbir told us that poverty during *monga* is due to the unemployment as it is difficult to get work. Sabbir said that the char becomes filled with water during *monga*. By that time, the rice locally known as Aman has been transplanted in the upland. Reducing the need for labour as landowners wait for the harvest time of the Aman. The poor are not a homogeneous group, like small farmers or landless people, they have many different characteristics. Poverty presents here as multidimensional deprivation of income, capabilities, and entitlements.

During the *monga* season even getting credit is not easy said participants. Even the known money lenders do not want to give out loans to the poor who have no work. The interviews revealed that in the *monga* period, the poor are forced to take loans from other people. However, the lack of employment made it harder to access credit.

The poverty trap is not only the lack of credit but also life cycle and economic risks that threaten the very survival of the poor. Microfinance is alleged to be a risk transfer tool, effective for helping low-income households escape poverty traps (Ahmed *et al.*, 2001; Akotey & Adjasi, 2016; Hammill *et al.*, 2008; Khavul, 2010). If microfinance is a tool that can reduce poor people's vulnerabilities then, it is of considerable significance to link this tool to food insecurity adaptation for Kolkonda households' (Hammill *et al.*, 2008). However, the benefits of microfinance in fighting

poverty have shown doubt in the time of *monga*. Sabbir said that even the money lenders pointed to the lack of work as an excuse saying “*you do not have any work in the monga, and I do not know if you will get a job and how you will repay the debt*”.

Training and client education need to be combined with micro insurance to ensure income and consumption smoothing is done to promote financial stability and eliminate pawning or liquidation of poor people’s assets. Minhaj, the elderly participant in the focus group, recounted how he used to spend the borrowed money while working away from home in Cumilla town. Minhaj said that “*I used 500-600 taka as transport, for going to Cumilla to look for work. I saved 1000 for food and drink, gave 1000 to 2000 taka to my wife to run the family. This money I took from a rural debtor on a high interest rate*”. His goal for travelling to Cumilla for work was to fend for his family. The other goal was to repay the borrowed money. Otherwise, there would be an increase of 100 taka monthly fee for each 1000 taka. Minhaj had to cut down on some necessities to fulfil the goals he said.

Poverty-reduction programs require both a promotional component that increases the poor people’s incomes, productivity, or employment prospects and a protentional component that reduces the poor people’s vulnerability (Matin & Hulme, 2003). From the interviews, it came out that, in order to be useful in reducing poverty. Financial credit should be used for generating income activity that generates excess returns for loan repayments and increases consumption. However, when credit investment does not generate significant profit, it creates an asset which can reduce vulnerability but will not poverty. Repaying loan installments reduces consumption but gives no returns from investments. As noted in the response from Rafi who recalled the hard situation shaking his head and invoking God, he said that “*right now I am completely speechless; I cannot share the exact experience I underwent during monga. It is Allah and me who knows better*”. Referring to me he continued “*you cannot imagine it, because you have not experienced that kind of problem*”. No work means no money. No one agreed to give money, even as a debt. The suffering was too much to get enough to eat.

Eradication of multidimensional poverty calls for multi-sectoral and inter-organizational partnerships (Matin & Hulme, 2003) that help poor people not only meet minimum material needs, but also access health, and other services that constitute the poor people's deprivation, designed to include the poor people as much as possible for getting goods and services that are offered. If civilization invented poverty and if social status defines it, presumably the man in society, operating through the institutions he has created, or if necessary, through new institutions, can abolish poverty argues (Agola & Awange, 2014).

The poverty and food insecurity are escalated by poor living conditions of homelessness for Kolkonda residents. Mahira 50-year-old father of six who also takes care of his old parents told us that in the *monga* season floods occur. The situation is further deteriorated, by lack of a place to live. Due to floods, people, cattle, goose, poultry, must live together on a dam. People risk high chances of being infected by waterborne and other diseases. But here there is no treatment facility in case of disease breakout. The physical structure of the shelter centre is not very good. It is dangerous to take shelter there but, the options are out because of the many households that need shelter. There is a shelter centre and another one in a school, but they take less than the poor homeless people's requirement.

During interviews, I observed that they had crops in the fields. They said it was because there was char to cultivate. They had especially tobacco, zucchini, and lots of pumpkins, rice, and maize. The women were drying, tobacco for the market dealers that were expected to come and buy, they were making handicraft, as well as preparing storage for the pumpkin to be used in *monga*.



Figure 3. Char people bringing cultivated tobaccos from char land by boat



Figure 4. Char people drying their cultivated tobaccos

6.2. Migration

According to (Merton & Merton, 1968), functional analysis operates with the conception of the motivation of individuals, involved in a social system. Migration has always been perceived to pose a threat to social and economic stability. The policy has, therefore, tried to control migration rather than view it as an important livelihood option for the poor (De Haan, 1999;

Deshingkar & Start, 2003). Research always focuses on people's mobility as a result of crises, environmental, economic or demographic (Afifi *et al.*, 2016; De Haan, 1999; Etzold *et al.*, 2014) but causes for mobility are multidimensional as I found out.

The Kolkonda families undergo forced migrations, as a result of extreme economic, and often social hardships experienced by landless or land-poor, unskilled and illiterate poor labourers. Seasonal and circular migration of labour for employment has become a durable component of the livelihood strategy for many households (Deshingkar & Start, 2003). Migration is not just by the very poor; rather, it is an accumulative option strategy for all poor people during times of crisis for survival and coping (De Haan, 1999).

Kolkonda migrations are a people's motivation as an adaptation strategy used by individuals as a response to reduce the vulnerability of poverty, food insecurity and social marginalization (Deshingkar & Start, 2003; Rademacher-Schulz *et al.*, 2014; A. Shonchoy & Kurosaki, 2013). While discussing the theory of social action, another participant Shofiqul told me that he usually migrates before *monga* to get work earlier than others. He then comes back after 2 months at the end of the *monga*. His early migration has resulted in his family's ability to buy food regularly during *monga*. Shofiqul attributed his family's ability to access food as resultant of his earlier migration. He said, "*because I get work while there are still many opportunities open for the offer in the city. I send money constantly to my wife every week. The money is used to buy food for the family*". Because of this certainty, Shofiqul counts his family as food secure. Those who migrate each *monga* period can work hard and can save some money. With that savings, food security can be arranged at the time of *monga* as Amartya Sen had argued that, individuals starve either because of inability to command enough food or because of failure to use this ability to avoid starvation (Sen, 1981). The household's economic status is varied even though all are poor in the sense of poverty each family's action plan depends on the households' finances and capabilities other families cannot just leave early because Shofiqul did.

According to (Burt, 1982), people's actions are motivated by perception of increasing well-being. Motivation for migration in Kolkonda is to provide

food for their families. People or groups of people are expected to use their resources to realize their intentions. An actions' importance is evaluated in terms of the, however marginal, increase that it provides in relation to some criterion. These evaluations are made, and interests pursued in the context of social structure, generated by the division of labour. The male members of the families migrate to nearby cities or other districts while the women remain at home to take care of the children, the old and the sick thus labor is divided according to the social structure.

A woman participant named Munazza told us that she never goes to another city for work, but her husband does. Munazza told us that her husband Atif usually borrows money from the village landlord and goes to Dhaka the capital city because of the availability and high opportunity to get work. Munazza said that *“my husband usually goes to Dhaka on borrowed money to drive a rickshaw. The limit of the money to be borrowed is between 1000 to 2000 taka. The loan term is to be paid back every 15 days with interest”*.

Adjusting her sari as she shifted sitting position Munazza revealed that during that time she never stops worrying even after Atif has remitted the first amount of money. Because she must split the amount between the family's upkeep and repayment to the moneylender, while unsure of the arrival of the next remittance. Rickshaw is a common type of cheap transportation system used in Bangladesh a form of taxi pulled by cycling. Rickshaw is a source of livelihood to many low-income families in Bangladesh. The majority of rickshaw drivers are poor landless migrants from the countryside. The drivers themselves do not own the rickshaws. The cycle owners employ the drivers on casual daily basis. The drivers get paid at the end of the day according to the money made from the rickshaw. And there are many people waiting to drive.

Munazza told us that she worried because she had no idea when her husband would send the next amount of money. Otherwise, the loan would grow because of the high-interest rate. Pulling rickshaw is an unpredictable job. For the rickshaw to be counted as functional as employment one must have trustworthy networks. Sometimes the rickshaw owners can give the cycle to a new driver, and then the previous driver must find a new employer. Sometimes the rickshaws are confiscated by police because of risky driving.

Labour migration, between and within urban and rural areas, is a central element in the livelihoods of many households in developing countries, both the poor and medium able families (De Haan, 1999). Migration is a human investment and the migrants act individually in the rationality of economic self-interest, whereby, deprivations determine mobility in local areas, and prospects of job opportunity and better earning at the destination. As Shapan revealed to us that during *monga* he too leaves his hometown to overcome the hard times. Shapan, a 29 years old father of two, further listed his financial spending. He said he usually goes to Cumilla. Transportation costs him 500 to 600 taka, and he keeps 1000 taka for his upkeep. He elaborated further on the risks involved in the town. *He said, "we do not get work immediately, waiting takes 2 to 4 days. There is difficulty in finding a place to stay, food, and problems of where to sleep in the night. We start pulling rickshaw early in the morning until midnight. Pulling a rickshaw at night is a little dangerous because there are lots of chances of being robbed in the empty streets"*.

Migration and remittances from it are alleged to have both positive and negative effects on the welfare of rural households and communities. It can reduce or perpetuate a household's poverty depending on the type of household (Deshingkar & Start, 2003; Nguyen, Van den Berg, & Lensink, 2011). Munni, another respondent at the discussion group and a rickshaw driver commenting on the challenges, said that *"we have to stay in a certain place at the market. Those who need people to work, take us from that place. We work for them all day and earn 300 to 400 taka"*.

According to Nguyen, Van den Berg *et al.* (2011), remittances do not always guarantee an increase in income, or reduction of poverty and inequality in home areas. Remittances may be insufficient to compensate for them in grant's loss or could even lower the recipients earned income if measured in working hours. The Kolkonda poor move to find work to support their household's food needs back home.

Almost all participants were concerned about the challenges and risks involved in trying to maintain a livelihood during *monga*. Muntasir, another group participant contributing to the discussion, told us that it is never easy to get work or accommodation in the town where he migrates. He said

“where I migrate; I face many problems it is not easy to get work, no accommodation. Sometimes we stay in the school veranda, in the streets, or the open market stalls. On some occasions, we have lost our belongings due to lack of security. Despite all these troubles, we still migrate, because the only way to survive during monga period is to migrate”.

Migrants are alleged to be bonded labourers; powerless, poor and perpetually in debt according to (Deshingkar & Start, 2003) the authors emphasize the importance of understanding access to resources as well as the institutional and policy context within which migrants must function with discriminated, labour laws and labour market.

A woman participant Sabrina wife of one of the rickshaw drivers narrated her story on challenges to migrant rickshaw drivers of which her husband is one. She said that it usually takes two to three days to get a rickshaw because during that time many people go to Dhaka from different places to work. To get a rickshaw, sometimes the men must pay money in advance. This deal made her family suffer this time because of her husband's health. She said *“when my husband became ill, he could not pull the rickshaw for 3 or 4 days. When the rickshaw did not run for those days, the owner gave it to someone. My husband got trouble finding another rickshaw and money to send. That time we went through real difficulty in getting food”.*

Another male participant gave the same kind of statement. Munni who told us the biggest problem is to get the rickshaw in time. Many people migrate to towns to find work. For that reason, it takes at least one week to get a rickshaw. The people who can deposit more money can get the rickshaw earlier. The idea of the down payment is a challenge to many as well. As Munni expressed *“this is a big trouble for me because of lack of money”.*

Voluntary migration involves some costs and sacrifice. It is only for some poor. The poorest and most desperate (women with dependents, children, elderly, sick people) do not move because they cannot afford the risk. They starve in situ as narrated by Sumaiya in the women focus group. She said that *“I think, the children and the old people suffer most because; they normally depend on other family members. If the family cannot provide them food, then they will starve”.*

Sabrina, a mother of three, said that her family suffered a lot in that time because of the husband's sickness. Women, especially pregnant women and children, suffer most. If the man of the house does not have any income or does not have any access to cow, goat and land, which can be exchanged for money then, the families have to suffer during *monga* time; the older people too suffer during that time. "*Sometimes we starve,*" Sabrina said.

6.3. Food insecurity and Poverty

Food security and poverty are interlinked; the measures to reduce poverty always influence on food security (Oluoko, 2011). Poverty occurs when individuals or households experience some form of deprivation, such as the inability to meet minimum income requirements or basic needs (Hulme & Shepherd, 2003; Matin & Hulme, 2003). Poverty reduction task is, therefore, to ensure that, a household meets minimum material and physiological needs, which a poor household is considered unable to meet because of the low income as stated, by the middle-aged Purbita, who narrated that her household does not have food during *monga* time. She walks door to door, begging for food. If she fails to manage some food from the neighbours, then she goes to borrow something to eat from the stores. The shopkeeper does not lend more than twice unless the first debt is repaid. The alternative is to go to a money lender, who does not lend without proof of how one can repay? The moneylender instead asks if we can work for them in return for the lent amount. "*I agree to go to their home and work for them and get some broken rice that we cook and eat with my family members*".

Malnutrition and food insecurity remain widespread, as about a billion people suffer from malnutrition according to (Barrett, 2002). Because of the interlink between poverty and food insecurity, programs to reduce poverty in several countries are tailored according to household situations. Some households are given microcredit loans with hope to boost income returns. Households which have undergone sudden shocks are given grants such as food and cash however; these programs do not always yield to poverty reduction or minimizing food insecurity. Munira told us that the government

had started giving out rice at half price to tackle *Monga*. Families could get 30 kg of maximum rice. It was stopped for two years. *“we do not know what has stopped it, but we think there is something political about it,”* Munira said.

Food security is better viewed from both the national and individual level. According to (Hossain *et al.*, 2005) at the national level, it means the availability of sufficient food stocks from production or imports. While at individual level food security means that, all members of the society have access to the food they need, either from their own production, the market or from the government’s transfer mechanism.

Sen (1981) alleges that starvation is the characteristic of some people not having enough food to eat, but not the characteristic of there not being enough food to eat. Individuals and groups in a country can still go hungry because they lack the means to access the available food as told by Shoshi, another middle-aged woman mother of five. She alleged that the elderly, young children and pregnant women are the most vulnerable to hunger, *“the older people cannot work for money, sometimes it is even difficult for them to move from their own houses to beg for food at the neighbours’ homes. They depend completely on their children to feed them; otherwise, they starve”*.

Access to food is important however, as stated by Napoli *et al.*, (2011), access to food can only prevent hunger if it is accompanied by stability. Muntasir, a low spoken, skinny participant blamed the authorities for the poor people’s escalated hunger. He said that *“the relief food is officially sent to save us poor people, but it does not even reach us”*. It is the negligence of the governmental and non-governmental organizations that increase the suffering during *monga*. The cooperation work of the government and private sector does not often reach the right people.

In the focus group, Fayruz, a 67 years old man told us that, they usually received 5 to 7 kg of rice from the union council offices in the areas. This is government sponsored donation plan for the Vulnerable Group Development (VGD). Fayruz, explained further that, first an adult member in a household is given a token for collecting the portion of government donation from the council offices. He used that token to get rice from the

union council for his family. There was a mixed reaction. Munni, raising his voice said that, it is the poor road conditions which make it impossible for the villagers to run rickshaw locally; otherwise they can earn money to improve their food status without extra costs and migration. “Even help cannot reach us due to the bad road condition,” he said stroking his beard gently.

A study from Ghana found that seasonal migration compensates for the lack of employment during the dry season, reducing pressure on household food stocks, seasonal income variability and is used as a means for raising food security through remittances in cash or kind (Rademacher-Schulz *et al.*, 2014). Shameem, a 62-year-old man told us that officially they get some help but only for the older people, not for everyone. There was a project for alleviating hunger during the *monga*. A main part of it was selling rice in subsidy. The usual bags of 30 kg rice which sells at 300 taka, was sold at subsidized price of 10 taka per kg. No one could take more than 5kg. “*But there was a difference in the weight when we brought the rice home from the shop, the officials had corrupted the scales,*” Shameem said.

This program has however been off for two years, reasons unknown. “*It may be for political reasons, or the government could be sending that help, but it does not reach us at the field level,*” he said.

6.4. Functionalists systems

In structural-functional systems, a system consists of actions and actors in a constant relationship (structure) between subsystems and the larger whole (society), and how the larger whole, regulates the subsystems for functionality (Heiskala, 2007; Papero *et al.*, 2018; Sato, 2011)

The Kalkonda situation is the functionality of a subsystem in the system, the Bangladesh, the people, the government and even nongovernmental organizations. Because of the unfavorable weather condition and food insecurity which neither the government nor the NGO’s have managed to contain, the poor people have relied on local migrations, and loans to supplement for household’s food.

The 28 years old Sabrina said that, young people like her sometimes survive a few days without food. However, it was painful for the children, the

elderly and pregnant women. Children cry all day due to lack of food and empty stomachs. Dimensions of development are multidimensional argues (Alkire, 2002), quoting Amartya Sen's capability approach, for example, Alkire argues that development is not increased in GNP per capita, consumption, health, and education measures alone, but is also an expansion of people's capability. Capability is an individual or group's freedom to promote or achieve valuable functioning's, representing combinations of functioning.

Monga period comes with opportunities and creativity, as Fahad narrated to me. He made extra income by using a boat on the floods. He went to areas with grass, cut the grass, ferried it to the shore, divided it into small amounts and sold it in the market to those who needed grass for their animals. Fahad said that *"he made an income of about 200-300 taka"* daily from the grass sales. The people who have a boat can earn extra money by cutting grass, by fishing, or by boat ferry service. To be ferried across the river, the boat charges 30- 40 taka each. However, not all poor people have their own boats.

According to (Hutton & Haque, 2003), a socio-structural approach to natural hazards and disasters, are not merely extreme geophysical events harmful to human activity systems. However, complex mixes of geophysical processes, social, economic and political processes are an approach that considers human vulnerability as a complex product of the interface between natural and social affairs. Whereby physical hazards, social relations, and individual choice converge.

In support of what Munni had told us about poor communication, Fayruz added that the street condition is not so good. The broken roads are in bad shape for transportation. He said, *"that is why public or private help cannot reach our home. The helping hand ended where the good road ended."* The Social- structural approach looks at the various ways in which social systems operate making people vulnerable from resultant disasters since natural and human dimensions of disasters are inextricably bound on various ways (Hutton & Haque, 2003). Human actions, however, are rational alleges (Pinney, 1940). Individuals act to pursue ends possible

within conditions of the situations faced. And by means available to the actor. Means which are essentially best adapted to attain the end goal.

Fahad's idea as he told his story, the villagers, can turn the floods to something of benefit like fishing. If only they had good nets and boats. By fishing, the villagers can make a living by selling fish in the market and eating fish as food for sustainability. His request was to urge the government to come forward and help the villagers with means to get rid of the *monga*. Rangpur their town is not developed, they said. In Fahad's words *"there is no industry or factory in Rangpur town, we do not own any land, so we cannot cultivate, we have no land we live on the government's land, if we had our own land, we would be able to eliminate poverty by cultivating various types of crops"*. The women also had a vision of how the government or NGO's can help them make a change to the situation. Munnza said that *"I wish that the government would help us by buying cattle and sewing machines, and then I could have done work from my house and could earn some money which could be a means to minimize monga"*.

7. Results

The result indicates that the Rangpur region suffers transitory food insecurity, under which individuals and households undergo periods of starvation. The vulnerability of the landless poor households is linked to and deeply rooted in socio-economic inequities, which leave most of the poor household's dependent on wealthy, landed families for their subsistence. The study found that, even though some program aids were in existence, these programs failed to meet the poor households' food security needs. Program aid for poor people's protection and entitlement to food is insufficient and ineffective. Most poor people starve due to inability to access enough food. Their production is limited due to natural climatic conditions, lack of livelihood protection and lack of coverage within available program aids. The government-run program VGD supplied aid to the elderly, but this did not consider family members living with the aged. For those interviewed no children, the sick or expecting women were mentioned to have received the food aid. Besides, participants revealed that

this aid only reached areas where there was road communication but not the interior rural areas. The aid was, alleged to be minimal, and unreliable it came sometimes and absent during some lean periods, translating to lack of continuous access to food. The NGOs were alleged to be offering insufficient aid, with minimal recruitment and short duration of the operation.

Poor households also use migration and microcredit as an adaptation to seasonal food insecurity, but even these strategies are not fully supported by government, non-governmental organizations, or civil society. Most households adopt seasonal migration, but due to low education, the migrants end in low paying jobs. The migrants are further challenged at destination by insecurity, difficulty in accessing jobs, insecure job agreements, poor wages, lack of accommodation and meals for themselves, resulting to the vulnerability of well-being for both migrants and their families left behind as they risk starvation. Translating to running away from one poverty and into some other poverty.

Another adaptation strategy is the use of microfinance loans to offset the income deficit. The poor take quick loans from village money lenders who charge high rates on loan interests, with short notice of repayment. Loan conditionality and surety requirements by lending organizations are a disadvantage for the poor casual labourers. As revealed from the interview's microfinance has the risk of maintaining poverty cycles or increasing poor household vulnerability from exhaustive loan charges.

The poor landless households' take loans at higher interest to help finance their migration and food for the families risking their chances of falling deep into poverty upon default. Families do not have the opportunity to invest in other income-generating activities as assumed by microfinance loan proponents. Microfinance and microcredit offer further increase inequality, as services are offered to the better poor, who have surety and are valued as capable of repaying within the scheduled time. On the other hand, it can lead to the debt cycle or debt trap, when households keep borrowing from several lenders.

8. Conclusion

This was a qualitative study seeking to understand adaptation strategies adopted against seasonal food insecurity, by the landless poor, of a union in Rangpur district in the northern region of Bangladesh, to evaluate the functionality of the strategies and give a recommendation. Investigations were carried out using semi-structured open-ended individual interviews and two focus group discussions. Adaptation strategies adopted by poor landless households to manage food security are seasonal migration, microfinance credit while some receive food aid. From the results of collected data, these strategies lack functionality in managing poor household's food security. Even though there has been a reputable decrease in poverty level in Bangladesh, the decrease has not touched many of the different poor people. Households and families living in the flood-prone north, such as in Rangpur area still has the majority of chronic low-income families. The problems can be attributed to the geographic factors of inaccessibility by lack of infrastructure, lack of public institutions and limited government action. International NGOs have set up several activities in the northern regions of Bangladesh with some improvements, but in Rangpur, the landless have not benefited from being free of annual vulnerability to food insecurity.

9. Recommendation

The author recommends further research on the role of service providers' microfinance and program aid and their impact on poor people's livelihood. Further investigation is needed to explore the challenges and obstacles to program aid services.

Proponents are recommending microfinance as a tool for rural development with positive results of rising income generation for the poor, and this study found contradictions. In as much as microfinance can support households when in need of a capital boost, further investigation is required into how the services can increase or maintain poverty cycles among the different poor people.

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