

# **MONGA VULNERABILITY IN GREATER RANGPUR DISTRICT**

**AGRICULTURAL PERSPECTIVES IN TERMS OF ACCESS TO LAND AND  
LIVELIHOOD PATTERNS OF THE MONGA-AFFECTED POOR AND  
ULTRA-POOR PEOPLE**

**Report for the  
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**FOREWORD**

**Monga** is not a new phenomenon in Bangladesh. It has been in existence for many decades, since the days of the colonial period. The concept 'monga' is also sometimes synonymously used with 'aakal' or 'obove' in some areas, particularly in the south-east and south-western region of Bangladesh. But the term monga is commonly used only in the north-western region, specially in the greater Rangpur district. What is monga in greater Rangpur, 'aakal' or 'obove' meaning scarcity of food during the lean season of 'Ashwin-Kartick' tantamounts the same in other parts of the country.

But in the recent years, it has been able to draw the attention of the general people and make it a most publicly discussed and debatable political issue probably by the frequent media reports. Consequently, it has got its place in the national policy document 'Poverty Reduction Strategy Paper (PRSP)' duly incorporated by the policymakers. The basic framework of 'monga' phenomenon is seasonal food deprivation or food insecurity in the lean season of mid-September - mid-November (Ashwin – Kartick) when there is paucity of employment opportunities and income earning for the poor and ultra-poor agricultural labourers prior to the harvesting of amon paddy in the greater Rangpur region. Recognizing its gravity and scale of vulnerability, what is important to us is to know the dynamics of monga, where, when and how it takes place under what circumstances, and finally to find out the definite ways to eradicate it in a coordinated way.

Against this backdrop, the study was undertaken in five districts of greater Rangpur Region. I do believe the author has come out with a set of recommendations with due treatment to its findings and internalizing its insightful observations through an empirical field study spanning over a period of nearly one year despite many odds and limitations. Thus the findings of the report may be useful to the policymakers, planners, civil society, academics, researchers, NGOs management, development practitioners and donor agencies who could use them as a reference point while formulating policy options for eradication of monga.

We also acknowledge with thanks the financial support provided by the RDRS Bangladesh management for sponsoring this very important research study relevance to time and regional needs.

**Kazi Rafiqul Alam**  
President

## PREFACE

The term “**Monga**” is, nowadays, a widely used concept in Bangladesh. It is, in fact, a seasonal insecurity of food or in other words, it can be said as a seasonal deprivation of food due to lack of employment in farm sector and income earning opportunities in the **monga**-prone districts of greater Rangpur region. The inner thought, insights and explanation of **Monga** are embodied mainly in the agricultural arena where rural poor people cannot find any employment opportunities and income earning, whatsoever, between transplantation and harvesting of **Amon** paddy in the Bangla months of ‘**Ashwin and Kartick**’ (mid September-mid November). As a result, they used to face cash shortage to buy food items although these are abundantly available in the market. Here lies the difference between the concept of ‘**monga**’ and ‘famine’ when money is available but not food due to its scarcity. **Monga** is therefore obviously a seasonal problem of access to food but not an analogy to famine or near-famine situation. An attempt is thus made to address the issue with more details empirically.

In fine, we put on record the financial assistance, services and logistics (of both administrative and professional in nature) provided by the RDRS management and its research organ NBI. We, therefore, express our sincere thanks and gratitude to all of them collectively and individually. Heartfelt thanks are due to all those RDRS staff both at Head Office, specially Dr Syed Samsuzzaman, Director of NBI, Mr. Aslam Parvez and his team of RDRS Guest House and all field level project staff, district and upazila level officials of civil administration and Department of Agricultural Extension (DAE) for their unfailing support and cooperation to make this study a success.

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I am really indebted to the thousands of poor and ultra-poor respondents of the study area spreading over all five districts of Greater Rangpur Region. Special thanks are extended to Obaidul Haque, Project Manager and one of my ex-students Mosharraf Hossain of BDSC, a DFID-funded NGO, working in the remote Char areas of Nageshwari and Burungamari Upazilas of Kurigram district for their sincere cooperation. They also provided with all kinds of support for data collection in the Charlands., a difficult area to visit and conduct study. I also express my sincere thanks to all research assistants M/s Mujibur Rashid, Jugal Chandra Sarker, Md. Rabiul Islam and Aktarul Islam respectively for their sincere and hard working under difficult situation to compleite the field data collection in time.

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**Dr AKM Abdul Hannan Bhuiyan**  
Team Leader and Author  
DAM-RDRS Monga Research Project

## Abbreviations and Acronyms

DAM	:	Dhaka Ahsania Mission
RDRS	:	Rangpur Dinajpur Rural Services
DC	:	Deputy Commissioner
ADC	:	Additional Deputy Commissioner
ADM	:	Additional District Magistrate
UAO	:	Upazila Agricultural Officer
DDAE	:	Deputy Director of Agricultural Extension
DAE	::	Department of Agricultural Extension
BRRRI	:	Bangladesh Rice Research Institute
BARI	:	Bangladesh Agricultural Research Institute
BARC	:	Bangladesh Agricultural Research Council
PKSF		Palli Karma Sahayak Foundation
DLO	:	District Livestock Officer
DLS	:	Department of Livestock Services
DDF	:	Deputy Director of Fisheries
DOF	:	Department of Fisheries
RSM	:	Rangpur Sugar Mills Ltd
AAEO	:	Assistant Agricultural Extension Officer
RA	:	Research Assistant
RS	:	Research Supervisor
UNO	:	Upazila Nirbahi Officer
NDC	:	Nezarat to Deputy Commissioner
CSO	:	Chief Scientific Officer
PSO	:	Principal Scientific Officer
SO	:	Scientific Officer
DTO	:	District Training Officer
PPS	:	Plant Protection Specialist
CPS	:	Crop Production Specialist
PD/GM	:	Project Director/General Manager
HDS	:	Horticulture Development Specialist
PC	:	Project Coordinator

CPC	:	Chief Program Coordinator
MEO	:	Monitoring and Evaluation Officer
NBI	:	North Bengal Institute
ED		Executive Director
PM	:	Program Manager
BDSC	:	Bangladesh Development Service Centre
CLP	:	Chars Livelihoods Programs
ATO	:	Assistant Technical Officer
NGO	:	Non-government Organization
GO	:	Government Organization
VGD	:	Vulnerable Group Development
VGF	:	Vulnerable Group Feeding
TR	:	Test Relief
DFID	:	Department for International Development (UK)
Amon	:	Paddy grown in the monsoon season
Boro	:	Paddy grown in the dry season
BBS	:	Bangladesh Bureau of Statistics
Ashwin	:	Mid-September to Mid-October
Kartik	:	Mid October to Mid November
WFP	:	World Food Program of the United Nations
FAO	:	Food and Agriculture Organization of the United Nations
Chars	:	Unstable islands formed in the river basin from alluvial sediments
PRSP	:	Poverty Reduction Strategy Paper of the Govt. of Bangladesh (a development document)
MD	:	Managing Director
CDO	:	Cane Development Officer
DGM	:	Deputy General Manager
FFW		Food for Works
FFE		Food for Education
BSS		Bangladesh Sangbad Sangstha (National News Agency)
AAO	:	Assistant Administrative Officer
BARD	:	Bangladesh Academy for Rural Development.

## Executive Summary

- 1 The specific objectives of the study are to : (i) describe the socio-economic and demographic profile of the household-head-respondents, (ii) analyze the factors promoting the causes of monga, (iii) ascertain the status of landowning, access to land and livelihood patterns and share-cropping system, (iv) assess the vulnerability of monga due to climate change and environmental hazards; (v) determine the hindrances about the rural markets and marketing of their farm produce; (vi) identify the problems as perceived by the respondents as to what contributes to the incidence of monga; (vii) suggest policy guidelines for mitigation of monga, and finally (viii) explore the relationship between some selected characteristics (age, education, farm size, income, family size) and incidence of monga.
  
- 2 The principal method used in this study was field survey using semi-structured interview schedule. Other tools and techniques such as FGD, Case Studies, participants observation, informal discussion with opinion leaders and members of civil society, were also employed to supplement and cross-verify the information collected through face-to-face interview schedule. The study was conducted in five districts of greater Rangpur region spreading over 11 upazila, 29 unions and 81 villages. Total number of household heads covered by this survey were 1517 with 90% males and 10% females. Data collection took about seven (7) months starting from late August 2008 to early March 2009. In addition, feedbacks from 72 field level administrators, policymakers and implementers at district and upazila levels who were involved in the monga related programs and projects undertaken by GOs-NGOs were also obtained in order to get to know about their knowledge, feelings, attitudes and perceptions towards the incidence of monga and its extent of vulnerability inflicting upon the affected people. Data were analyzed and interpreted using both descriptive and inferential statistics like frequency count, mean, percentage, standard deviation, range, rank order and paired t-test and chi-square test to compare the means of two groups.

- 3 The mean age of the respondents was 42.01 ranging from 20-90 years. The average level of education is 1.26 years with more than 83% illiterate. The average family size is 3.09 which is less than the national average of 4.9. As regards the occupation, 55% of the respondents are day laborers, followed by 13% farming, 11% household help, 7% rickshaw/van pulling,, 2% fishing, 2% hawker/vendor, 1% rice mill worker/chattal, respectively. More than 85% are married, 2% unmerried, 9% widowed, 2% separated and 2% divorced. The annual income range varies from Tk. 100 to 11,03,010 with 1.32% having no income. Over 85% households had yearly income ranging from Tk. 2,000 – 50,000. With this meagre income how could they maintain their livelihood is a big question. It is evident that over 97% respondents had no organizational participation nor any other training programs.
- 4 The concept of munga is defined by different groups of respondents in different ways according to their perceptions. About 16% of them thought munga happens due to shortage of money which made them unable to buy food items, followed by 16% as poverty because of river erosion and floods, 15% as food shortage resulting in going hungry without meals, 13% due to crop loss or no harvest because of floods, river erosion and drought, while 10% termed it a seasonal distress condition with no agricultural work opportunities. By analysis of all such statements, **munga can be coined as a seasonal food insecurity or food deprivation in the lean season of 'Ashwin and Kartick' (mid Sept. to mid Nov.) preceding to the harvest of amon paddy when employment and income earning opportunities from agriculture sector are almost seized due to floods, river erosion, droughts and other natural calamities.** This definition is, of course, restricted to this study context only.

Peak period of munga varies from 'Ashwin to Kartick' (mid Sept – mid Nov.) prior to harvesting of amon paddy. This is also called 'big' munga in terms of its vulnerability and 'small' munga which takes place in the dry season of 'Chaitra-Baishakh' (March – April) before harvesting of boro paddy. Duration of munga varies from time to time, place to place and year to year depending on the nature and intensity of natural calamities like floods, droughts, river erosion, excessive rainfalls, etc. According to

majority of the respondents (over 80%) actual duration of munga (covering both big and small ones) ranges from 60-90 days based on the severity of natural disasters as indicated above.

- 5 Majority of the respondents (55%) opined that the degree of vulnerability of munga was 'moderate' meaning it is at tolerable level in 2007, while 41% termed it 'most vulnerable' i.e. above the tolerable level. It is surprising to note that no media reports published in any newspapers relating to happening of munga in greater Rangpur Region in 2008. This might perhaps be due to the army-controlled caretaker government running the state affairs after one/eleven. The media personnel may be subject to harassment by armed forces if they resort to any wrong or misleading report published in either print or electronic media. Thus no reporting about munga was conspicuous or in sight during the entire period of 2008 when army was in defacto control of state affairs. More than 57% respondents perceived that the severity of munga in 2008 was 'less' and 25% of them thought it was 'almost the same'.. This implies that the severity of munga is gradually in declining trend. External support programs, namely 100-days job creation, VGF, VGD, old-age pension,. TR, FFW, FFE, widow allowanc, etc undertaken by GOs-NGOs seem to be the contributing factors for such declining trend.

About 82% of the respondents taken from all districts perceived that it is 'increasing' as opposed to 15% considering it 'decreasing'. An unusual reply of 'increasing' the extent of munga does not seem to be factually correct as the research team observed its severity is gradually declining. This is an over statement which may be attributed to the fact that they may expect a big volume of relief materials, either cash or kind, which is attached to the over emphasizing the extent of munga by providing a rosy picture which is, in fact, an idea far from reality.

- 6 To a question, 'why munga occurs in greater Rangpur district only and not in other districts', a majority of those who responded (23%) opined that no work opportunity is there in the lean season of 'Ashwin-Kartick' prior to harvesting of amon paddy since the region is absolutely dependent on agriculture, followed by 21% as river erosion

and floods, another 12% as perennial floods making them cropless and poverty-prone, more than 12% as no industrial enterprises or mills/factories as an alternate source of income and still a small group viewed it as they are illiterate they are unemployed, idle and no scope for overseas employment. Some also expressed resentment against the local political leaders and well-off neighbors who do not support them in times of crisis nor do they take care of the poor community by extending their helping hands. No opportunities are available for skills development training making them eligible for gainful employment either at home or abroad. Two things now come to the fore : one is lack of work opportunity in agriculture sector, and the other one is illiteracy making them unemployed compounded with no industrial establishment. The affluent neighbors are also not supportive to them in times of needs and crisis thus terming them of lacking social responsibility towards their poor neighbors.

- 7 Majority of them consumed one or two meals a day-mostly in the morning and at night and skip of mid-day meal or lunch. In the morning, they usually eat over night water-soaked rice with arum leaves and stems or banana sheath as curry or any other cheap poor quality vegetables available free of cost at the roadside Khas lands. They used to cook at night only and share it with all members of the family and keep a portion of it (one-half) for the morning meal. They also used to take a variety of food combinations including 'chira-muri' with mollasses for consumption in the morning. Sometimes they go hungry without single meal a day, sometimes on alternate day,. Even they go without food for a week. Thus the monga is a bane for them that forces them to going without meal or one/two meals a day and somethimes one meal on alternate day.
- 8 Land is an important asset for crop production, food security, shelter and many other economic activities. It is also a guarantor of socio-economic developemnt and employment opportunities. So, access to land is a crucial issue for social status and economic power (Barkat et al, 2009). Nearly 40% of the respondents in the study area are either landless or absolutely landless having neither homestead nor any piece of cultivable land. Every one of two homesholds (51%) are either landless or functionally landless having land ranging from only one decimal to fifty decimal. If these two groups are combined together the absolute landless group constitutes more than 91%.

This implies that the land distribution in greater Rangpur is absolutely skewed with large concentration of land in the hands of a fortunate few.

- 9 There is a huge amount of agricultural Khas land available in the greater Rangpur region which comes to around 65,336 acres (26,452 ha) while non-agricultural khas land is about 25,293 acres (10240 ha). Thus the total amount of Khas land (agricultural + non-agricultural) stands at 90,629 acres (36,692 ha) in the greater Rangpur district. This is the percentage share of the total amount of agricultural khas land in Bangladesh (8,03,309 acre) while total amount of non-agricultural khas land is 16,86,354. So, the total amount of khas land available in Bangladesh is 24,89,663 acres or 10,07,961 ha (1.08 million ha) combining both agricultural and non-agricultural khas land (Barkat et al, 2009).

This indicates that a sizeable amount of khas land in greater Rangpur could be easily distributed to the landless farm workers as three-fourths or every three of four households wanted to arrange distribution of khas land who lost their farm lands to river erosion many times in their life times. This gives a two-fold benefits-they could bring those khas lands under cultivation producing enough food to feed their hungry mouths and on the same time it would go a long way to get rid of monga starvation and thus help build up food security at the household level.. But again it absolutely depends on the political commitment and sweet will of the government or political party in power.

- 10 Only 25% of the respondents were involved in 'Barga' cultivation or sharecropping. Among them, only 13% involved in 'Boro' season, 2% in amon season, 1% in 'rabi' season while 9% in all seasons since most of the households in the region are either landless or marginal farmers having a small piece of farm land ranging from 05 to 50 decimals. So they had to earn their livelihood either through labor selling or through 'barga' cultivation or crop sharing system. But land is available for share cropping mostly in Boro season only when the investment cost is high in purchasing the high cost production-inputs (seeds, fertilizers, pesticides, irrigation and management practices) and thus the cultivation cost in boro season becomes high compared to

amon season when investment is very little. This indicates that land owners prefer to lease out their lands on 'barga' system only in boro season which is not so profitable for the tenants. The tenants want barga land for both boro and amon seasons by which they could make a balance of the cost of inputs they spent on boro season. Thus the agriculture could be made more profitable for the tenants if the land is leased out by the landowners for at least two seasons. This is also supported by Hussain (2007).

11. Livelihood is managed through a number of ways and means right from labor selling, farming, fishing, rickshaw/van pulling, households help, begging etc. to collection of relief materials or alms/donations from others. But more than one-half (53%) of the respondents maintained their livelihood through selling labor, followed by farming (12%), household helps (11%), small business/ part-time job (8%), rickshaw/van pulling (7%), begging (3.5%), getting relief materials/alms/donations from others (3.5%), respectively. So labor selling is the primary source of livehood among the majority of the poor households.
12. Only 3% respondents participated in the training programs covering three areas of training such as poultry rearing, handicrafts making and micro credit only. This indicates that skills development training or vocational skills training is still a maiden area in the region which could be organized in a large scale so that people of this underdeveloped region could participate to improve their efficiency for self-development and also for wage earning both at home and abroad.
13. Nearly 3% households went on hungry without a single meal throughout the day, followed by 48% had only one meal a day, 46% two meals a day while 3% had three regular meals a day. This indicates that more than one-half of (51%) households had to go either without meal or one meal a day which leads them to an occassional starvation either everyday or alternate day.
14. The degree of monga vulnerability appears to be 'more' last year as perceived by 65% of the respondents compared to last five years, followed by 15% 'less' and 12%

remaining 'the same level as before'. This needs external supports from GOs, NGOs, donors, etc to cope with this vulnerable situation to mitigate the sufferings of the affected people or monga shock as a temporary succour.

- 15 More than 56% respondents adopted a coping strategy to face monga by taking loan from others at an exorbitant rate of interest or earning through diversified non-agricultural activities like small business, rickshaw/van pulling, vendor/hawker, household help. followed by 13% who went on hungry without food for days together, 12% by eating less or half-fed, sometimes begging (3%), selling valuable household goods (3%) and another (3%) by collecting relief materials, VGF, VGD, TR, old-age pension, 100-days job creation, etc. This indicates that they did not have any advance idea or preparedness to face monga situation, yet they survived it or coped with it by taking loan or half-fed or going hungry without food
- 16 When asked only 19% reported that they do this practice of advance labor selling, while 81% in the negative. Among those who responded, 6% revealed advance labor selling at cheap rate, followed by 4% as advance farm product selling at low price and almost a similar numbers reported deprivation of fair price of farm produce with deduction of unfair crop production share and nearly 6% reported exploitation through providing loan at high rate of interest. This process of exploitation could be checked by opening a special credit window in the Central Bank in the name and style of '**Distress Credit**' operation at softer terms for disbursement to the monga-affected poor people only. To a further query they informed about 20-40% money of the value of labor selling or product value they lost by selling advance labour or farm product. This is a big loss to them as they are poor and assetless.
- 17 The most frequently cited problems by the respondents during the time of monga are :  
a) food deficiency, so less eating or go hungry without meal like almost fasting, b) crop loss, no harvest due to floods and no work to earn money to buy food and medicines, c) survived on taking loan from others at high rate of interest, d) sitting idle at home or roadsides as no works available, e) no work, no income but food prices high in this distress situation f) Increase sickness and disease with no ability to

buy medicine or consult doctors, and g) migrate to other districts for earning livelihood which nobody likes.

A variety of solutions suggested by the respondents to the problems caused by monga.

The most frequently cited solutions to such problems summarized by rank order are : (a) creation of job opportunities round the year, (b) establish industries to create alternate sources of employment opportunities, (c) ensure economic activities through expansion of trade and commerce (d) organize job-oriented skills development training programs, (e) no work, no income because of floods, river erosion, natural calamities, etc. and as a result they had no option but to go hungry without food, (f) give us work opportunity for income earning but **not relief** which makes us dependent on others' charity, (g) distribute khas land to landless farm workers, and (h) 'we believe in God, whatever He does, is good for us'. This seems that some of them are fatalists.

- 18** Causes of monga as perceived by the respondents are summarized below by rank order :
- a) River erosion, floods, drought, excessive rainfall causing flash floods, hailstorms, severe cold, dense fog that made us landless, homeless, rootless, cropless, assetless and pauper.
  - b) No agricultural work, no business activities due to excessive rainfall, dense fogs, hailstorms, severe cold, etc.
  - c) Increase disease, fall sick and no income to buy medicine or consult doctors, cannot work because of abnormal climate like high temperature, excessive rainfall.
  - d) Natural disasters caused by climate change and environmental effects damage standing crops, grain formation hampers to paddy, difficult to livestock and poultry rearing, disruption in road communication networks due to floods, excessive rainfall.
  - e) No industrial establishment to get opportunity for alternative sources of income nor even SMEs to get wage based works
  - f) No scope of self-employment due to financial hardship and non-availability of credit.
  - g) No purchasing capacity to buy food and medicine

- h) Migration to other districts for earning income. This is an idea that nobody likes in the community.

The problems of monga thus highlighted by the households appear to be serious matters of concern and policy decisions. The problems of floods and flash floods coupled with river erosion not only made them homeless, assetless and cropless but also stopped their all economic activities apart from disruption of road communication networks, immense suffering of health-related issues causing them sick and idle, including livestock and poultry rearing, also. .

- 19** Majority of the households (82%) are landless and they do not produce surplus which needs marketing outlets.. Whatever small quantity they produce, they consume them at the family level. So marketing of agricultural produce does not seem to be an important issue for them.

The respondents, when asked, provided some suggestions which may be looked into at the policy level to ensure the fair price of farm products to the producers.. These are :

- a) fair price chart be hanged/ pasted in the prominent market places for public awareness,
- b) ensure govt fixed price while selling farm products,
- c) administrative steps be taken to ensure fair price through enactment of law,
- d) improve road networks to encourage more buyers from outside to the remote places,
- e) arrange direct purchase from the farmgate by govt. agencies, and
- f) do what govt thinks good for the welfare of the producers, respectively.

- 20** To a related query, every two out of five households (40%) reported that they have gone to other districts for income earning at their distress times. The districts they preferred to frequently visit are: Dhaka, Bogra, Narsingdhi, Brahmanbaria, Comilla, Feni, Chittagong, Sylhet. Further they informed that they usually spent 30-40 days per trip and earned Tk. 100-150 per day, while food and lodging were free of cost which provided by the employers.

- 21** Every two of three households (67%) thought that the ideal age for daughters' marriage is 16-18 years except a few who preferred to arrange early marriage at the age of 10-15 years, while 3% reported 22-25 years, By ignoring the official age of marriage at 18 years, a sizeable numbers of them (20%) still prefer early marriage at the age of 10-15

years. The varied reasons they cited for early marriage, among others, were : a) younger the age lesser the amount of dowry or sometimes no dowry (because of tenderage and good look), b) better to get them married off if good bridegrooms are available, c) once they become grown up better to dispose them of, d) being poor cannot provide food, cloth or education, why should they be kept at home, e) difficult to keep them under control at home as bad boys run after them, f) Nobody wants to look after all these hazards, so age does not matter, g) Sometimes they fall in love and choose their life partner at their sweet will which defames the family prestige and honour, and h) being orphans having no parents its better to get them married off.

To another question about amount of dowry and its mode of payment, 60% of them replied that they used to pay dowry ranging from Tk. 5000 to 25,000, followed by 12% from Tk. 25,000 to 50,000 while more than 3% from 50,000 to 100,000, respectively. Somebody who are rich have to pay dowry upto Tk. 300,000 depending on the quality, qualification and family status of the bridegrooms. **The thumb rule is that everybody has to pay dowry without which no marriage takes place.** Regarding mode of payment, it may be hard cash, ornaments, valuable household items like TV, wrist watch, wedding bands, furniture, bridal dress, radio, and also homesteads with dwelling houses, farm land, cattle/cows, etc. This practice of dowry is, of course, a social disease which should be urgently addressed by the GOs, NGOs, civil society, mass media, union parishads, teaching community in a coordinated way

**22** Smoking is a serious social menace and a cause of health hazards for all shades of people-men, women, young and children alike. It is so rampant in greater Rangpur region that nobody believes unless he has seen it. More than 54% of respondents reported that they used to smoke since childhood. Tobacco crop, the raw material for 'Bidi' and cigarettes manufacturing, is abundantly grown in the monga region. So huge tobacco-based industrial establishments are located every where and anywhere in the region. Thus, people connected with production, manufacturing, processing and marketing of tobacco products and by-products (gul, jarda, shada.) are very much addicted and habituated in smoking. The most frequently cited reasons of smoking are: :

- a) cannot give up now, become addicted to and bad habit developed since childhood,
- b) get relieved of tension of food insecurity and family problems for the time being,
- c) feel bad without smoking and cannot concentrate on works, and
- d) learnt bad habits from bad companionship, so cannot give up totally.

Thus the reasons cited above may be taken into consideration while preparing the anti-tobacco campaign by GOs, NGOs, POs, WHO, etc. who are connected with eradication of tobacco cultivation and promoters of anti-tobacco compaigns.

**23.** The average age of the district and upazila level administrators, policymakers and implementers of monga related programs is 43.82 years with a range from 26-63 years. Ninety two percent (92%) of them were males and 8% females, while 97% were married and the rest (3%) unmarried. The average family size was 3.85 with a range of 2-9 members per family which is quite below the national average of 4.9. The policymakers and administrators, as expected, had the highest educational attainment with 10% of them having Ph.D degrees, 60% Masters and 30% had 4-years Bachelors degree holders. Almost all of them had the opportunity to get advanced overseas trainings for several times to update their knowledge and professional efficiencies. Most of them were affiliated to different nation building organizations of both district and upazila levels. More than 57% respondents belonged to GOs, 31% NGOs, and the rest (12%) involved in the organizations of research, academics and media. They had an average service length of 5.38 years in the monga region in the present position varying from 2-38 years as total length of service in their service career. The monga mitigation programs they got involved were: 100-days job creation, VGF, VGD, TR, FFW, FFE, old-age pension, widow allowance, PKSf-funded PLDP II, DFID-funded CLP (asset transfer), promotion of BRRRI Dhan-33, etc. Nearly two of three respondents (64%) informed that the monga-affected people were really getting benefits from such programs in the form of cash flow, food aids, relief materials, micro credit, asset transfer (as grant money for purchase of cattle/boat/rickshaw/van, family allowances child nutrition, poultry rearing, etc).

The responses provided by them regarding the understanding of monga, its occurrence, vulnerability and duration were almost identical to household-head respondents. So these issues were not discussed here to avoid repetition of the same things over and over. However, the reasons 'why monga occurs in greater Rangpur District compared to other Districts' were presented below by rank order because of their importance :  
The specific reasons cited by them were :

- a) No other scope of alternative employment opportunities except agriculture, people are not hard working, low income area (less wage rate), so they are poor. b) Perennial floods, river erosion and droughts (as it is a riverine zone geographically), c) No industrial establishments for creation of job opportunities and alternative sources of income earning, d) Most people are poor and landless, low quality of sandy soils in the char lands where crops do not grow, e) Lack of technical skills and competencies due to lack of skills training support, F) Lack of education, poor literacy rate and thus lack of knowledge, g) Disaster-prone area with natural calamities like droughts, floods, river erosion and climate change vulnerability, h) Lack of social and political commitment, lack of political awareness, i) Ultrapoor poverty stricken people are basically lazy and idle, not self-motivated to go out ( for better income) to other districts (beyond the river Jamuna), j) monga is mostly media-created rather than actual situation since it is not so severe every year, k) Low wage rate (for agricultural laborers), Early marriage, dowry system, polygamy, so over population with high population growth rate, m) Monga exists in all districts but people here are less mobile compared to other districts, n) Rangpur region is a calamity-prone vulnerable area due to floods, river erosion, climate change, droughts, etc.

The other findings alongwith above were also supported by the findings of the FGD and case studies which were more or less identical except some minor issues. Detailed findings of FGD and case studies may be gleaned in the respective sections.

### **Implications**

Any planned change does not occur in isolation. So is the case of monga. It involves an interplay of so many diverse elements or dimensions like political, bureaucratic and social

groups. A clear understanding of these dimensions would be useful in analyzing the social and economic structure of the munga-affected poor and ultra-poor people who suffer the pinch most.

In order to mitigate munga in the greater Rangpur region, a number of factors are involved, directly and indirectly, in the process. To offset them, the three groups of individuals such as political, bureaucratic and social are to be interwovenly worked together to reach to a desired level of direction, else it may not be possible to effect a desired change.

Implications may be drawn in two ways. One is **theoretical** which concerns a number of issues for action and policy decisions and the other one is **practical** which concerns of issues that deserve immediate attention for implementation.

### **Theoretical Implications**

#### **Key Issues of Concern of Action and Policy Decision**

Some of the key issues of concern are discussed in this section for action and policy decisions. These are : organizational, investment, environmental, health and institutional.

#### **Organizational issues**

All programs-related activities and relief materials for distribution among the munga-affected people are carried out by different agencies without proper coordination among them. As a result, somebody get it while others may not. This levels a scope to talk out by the real benefactors. This is a general complaint by a few beneficiaries who are not getting the new job opportunities created by the CTG worth of 20,000.000 million taka project for 100 days works program. Similar programs like VGF, VGD, old-age pension, widow allowance, test relief, FFW, FFE and all such social safety net programs (SSNP) also come under this purview. In order to make them operationally sound and effective, concerted efforts are needed to integrate the three groups of people such as politicians, bureaucrat and social groups (civil society, NGOs, teaching community, etc.) in an effective way.

#### **Contribution of NGOs/RDRS**

Many NGOs, most prominent among them: RDRS, BRAC, ASA, Proshika, Grameen Bank, ASOD, ESDO, Jagaroni Chakra, Poppi, BDSC etc, have been working in the north-west

Region of Bangladesh for about 2-3 decades. They have, of course, made a modest achievement in minimizing the poverty level among the poor and ultra-poor people of the region, particularly in the greater Rangpur district. Among them, the contribution of RDRS is commendable. They are, in fact, pioneer in the socio-economic as well as infrastructure development of the Rangpur region. We are not aware of, nor do we have any statistics, about success and achievement of other NGOs. But records, reports and physical development of RDRS are available which indicate the laudable achievement of RDRS in their working areas in the sectors cited above.

The most notable parameter of RDRS efforts to reduce the vulnerability of the monga-affected people through agricultural diversification, particularly promotion and extension of advanced new rice technology like BRR1 Dhan-33 - an early maturing amon rice variety having only 110-115 days life cycle from seeding to harvesting. The most beauty and interesting feature of this variety is early harvesting time specially in the monga-month of Kartick (mid Oct. to mid Nov.) compared to other HYV amon rice varieties like BR-10, BR-11, Pajam etc. which are ready for harvest at least 40-50 days later. The RDRS through its different projects and programs made a vigorous effort to promote and expand this early maturing amon rice variety in collaboration with DAE and BRR1, the developer of this variety through genetic modification, in their working areas and motivate the farmers for adoption of this new technology and cultivation of this variety as a pilot project to generate employment opportunities for the farm laborers, in one hand, and build up food security for the farmers on the other with an ultimate goal to keep the food prices at an affordable level for mutual benefits of both producers and consumers. The average per hectare yield of this new variety ranges from 2.4 – 2.5 metric tonnes, as available information from DAE and BRR1 confirmed. For combating monga during its crisis period in the monga-prone districts and creating new job opportunities for the farm workers, DAE in collaboration with partner NGOs, specially RDRS, are contemplating to expand the cultivation area under this new variety to over 50,000 hectares of land in greater Rangpur region in the upcoming amon production season. By and large the single contribution of RDRS for promoting this new BRR1 Dhan – 33 variety to overcome the monga syndrme by creating agricultural job opportunities for the monga-hit farm laborers prior to harvesting of other amon rice

varieties is praise-worthy. Similar effort made by BIRRI also deserves appreciation for letting rays of hopes for their survival.. Against this backdrop the services rendered by RDRS in respect of promotion and transfer of this new rice technology to the monga-hit poor farmers to offset the monga syndrome is undoubtedly commendable.

### **Investment Issues**

It is conspicuous that the monga-affected region is a victim of public investment in terms of professional training programs, opportunities, communication network, industrial entrepreneurship, business climate, gas connectivity, adequate power generation, professional or para professional employment opportunities, etc. This is a micro level observation concerning volume of investment between the monga region and the central part of the country. Unless this regional disparity in terms of large investment is taken care of, mitigation of monga and suffering thereof appears to be a far cry. This is the opportune moment the government and the local political leadership could think of in terms of large investment in education, industries and power generation sectors back in mind the eradication of monga forever.

### **Environmental Issues**

Navigation through silted rivers like Teesta, Brahmaputra, Jamunashwari, Ghagot, Dud Kumar, Dharla, Korotoa, Bangali, Mohananda, etc. has been causing immense suffering to the people during the dry season while they used to cause an inhuman suffering at the time of rainy season. Global warming and climate change are also causal factors for river erosion, floods, excessive rainfall, droughts, hailstorms, high temperature, severe cold, dense fogs,. cyclones, water surges, earthquakes, river siltation and such other associated havocs. This necessitates a longterm comprehensive plan for mitigation with donor's supports for dredging of the mentioned rivers. It is heartening to note that the present government has already been talking about river training and dredging of big rivers with donors' supports. Now it is the turn of the regional political leadership to harvest the benefits since the ball is now rolling in their courts

### **Health Issues**

Rangpur region is traditionally a favourable area for growing of tobacco abundantly. Because of cheap and easy availability of raw materials, a large number of tobacco

industries are established. As a result, young children (even 6-8 years) of school-going age get full-time employment in making 'Bidi' at taka 5 per 1000 sticks. Their work place inside the factory is absolutely unhygienic for human habitation. Since the children from monga-affected areas have no other choice but to engage themselves knowing fully well that they are subject to victims of TB, cancer, hypertension, diabetes, pneumonia, conjivitis, breathing problems and many other associated diseases. Their parents also allow them to work in those industries as an alternative source of income earning to maintain their family.

Moreover, smoking is a common phenomenon there. Almost all of them, regardless of age –adults male and female, youth and children of 7-8 years alike are found smoking of tobacco and tobacco byproducts like 'gul' 'jarda' 'shada' (made of tobacco leaves) . Unless some immediate drastic steps are not taken to refrain them from smoking, it may create a health havoc over there and surely there would be a generation gap if the situation is not arrested urgently on top priority basis.

### **Institutional Issues**

Availability of credit is a great factor to get the affected people involved into the economic activities including self-employment. Since the target groups are mostly poor and landless, nobody comes forward to provide them money without collateral. Even NGOs, PRIME project of PKSF do not lift their fingers to extend credit to them as they do not have repaying capacity. In view of such distress condition to overcome, following mitigation measures are suggested:

- **Operation of Distress Credit Wing in Monga Region**

To open a new lending window in the Central Bank (Bangladesh Bank) in the name and style of '**Distress Credit Wing**' for disbursement of collateral free soft loan at low rate of interest to the munga-affected poor and ultra-poor people only of greater Rangpur Region. This would help them to be self-employed by starting a small business, bamboo-based handicrafts and basket making, rickshaw/van hiring, tailoring, weaving, carpentry, black smith, bullock cart, vending/hawking or such other demand-driven professions convenient to them. Actual mode of loan disbursement, lending guideline, rate of interest and duration of repayment, size of instalments, and such other minor details could be worked out later once the basic concept of idea is agreed upon.

- **Formation of Peer Group Empathetic Volunteers**

This is a new concept put forward considering the lack of social commitment already raised by the munga-hit people. Idea behind formation of this empathetic volunteers group is that the like-minded peer groups from the affluent families may come forward at times of crucial needs to help the marooned people like the tsunami and aila disasters through self-donation or donations received from other philanthropic people to save the affected people at the time of munga. This would serve as a forum to help the affected people in one hand, ensuring social responsibility towards the helpless community people on the other. As knowledge goes, there are many well-to-do /rich people in greater Rangpur region who could come forward to formation of such volunteers group for the sake of serving the distressed humanity. There are many such examples across the globe who worked like this at the time of natural disasters like earthquake, eruption of volcano, tsunami, aila, typhoons, cyclones, water surges, etc. in both developed and developing countries. This may serve as a forum as well as a pressure group to generate resources for giving a succour to the munga-affected poor people. This also requires an institutional shape through strong motivation and commitment.

### **Practical Implications**

Based on the findings of this study following practical implications may be drawn in respect of what can be done to address the key concerns of monga mitigation from the practical point of view:

- a. Seasonal unemployment during the post-flood lean period of 'Ashwin-Martick is a regular phenomenon. An initiative to address this unemployment issue is the popular demand of the monga-hit poor and ultra-poor people.
- b. Most of the monga-affected people are extremely poor and landless. Distribution of agricultural khas land to landless farm workers who lost their farm lands to river erosion appears to be a viable and pragmatic proposition.
- c. More investment in industry sector for creation of more employment opportunities as an alternative sources of income earning seems to be a time demanding approach for removal of regional disparity through allocation of more national resources.
- d. Establishment of SMEs, particularly potato-based (potato chips) and maize-based (coruflakes) industries as well as small scale mini sugar Mills and Jute Mills also appears to be a promising areas for consideration.
- e. Further promotion and development of Uttara EPZ through supply of gas and power seems to be more pragmatic approach for creation of more job opportunities.
- f. Some of the sick and labor-intensive RMG enterprises may be re-located or shifted to Uttara EPZ from Dhaka EPZ or other EPZ to improve efficiency and maximize profits by absorbing cheap and abundant labours available in the monga-hit area.
- g. There is an abundant scope for crop diversification through promotion of high value crops (HVCs) like vegetables, fruits, spices and aromatic rice varieties.

- h. Growing of some sand-friendly crops, namely groundnut, water melon, sweet ground, sweet potato and maize could be tried for maximizing production by making proper use of charlands and thus build up food security.
- i. Huge production of bamboos in monga region is really an asset, Bamboo-based handicrafts and basket making industries may be established with market linkage for smooth running of the enterprises.
- j. Small industries for processing of mango, sugarcane mollasses, ginger, turmeric and other exotic varieties of spices may be a new window for employment opportunities.
- k. Strategic plans such as short, medium & long term may be formulated to eradicate monga for good. This may be implemented through allocation of internal resources and also donors' supports in required cases.
- l. Comprehensive area development (CAD) program may be undertaken for overall development of the farm families in all areas of intervention like crops, livestock, fisheries, forests, health, education, nutrition, infrastructure development, etc. Experience of BARD in this regard may be utilized for successful operation of the project.
- m. Research and development (R&D) of early maturing hybrid among rice varieties (ie BRRI-Dhan 33, BINA-Dhan-7) to generate employment opportunities during the time of monga for unemployed rural poor and farm laborers tends to be another milestone to supplement and complement the trilogical approach to be institutionalized among the key stakeholders (political, bureaucratic and social systems) as proposed earlier in Fig 3.1.
- n. Special program for monga-hit region may be launched by organizing skills development training programs to produce technically skilled manpower who will be eligible for gainful employment both at home and abroad. Arrangement may also be made to provide interest free loan or at lower rate of interest to get them involved in agricultural production activities including crops, livestock, fisheries, forests, infrastructure development, in a bid to contain monga.

- o. Motivational programs for awareness building in bad effects of early marriage, dowry, anti-smoking campaign highlighting its harmful consequences may be organized.
- p. Investment in education sector also deserves to be initiated since there is no alternative to quality education for poverty alleviation visa-vis monga mitigation.
- q. A formidable size of unemployed youths and adults could be made productive through short, medium and long-term planned programs in human resource development by public-private-partnership (PPP) initiative, if need be, by getting the donor agencies involved in the process.
- r. Various kinds of researches like action or adaptive research, pilot or policy research may be continuously conducted to get feedback from the field to re-design the existing information generation policy for rapid socio-economic development of the monga-hit region. Area survey research for identification of actual monga-affected population and households may also be undertaken for initiating intervention.
- s. A more forceful need becomes surfaced to foster closer cooperation and coordination between and among the groups of major stakeholders like politicians, bureaucrats and social groups to expedite the process of monga mitigation. This trilogical approach may go a long way to eradicate the curse of monga for good.
- t. More dialogue between the project holders and beneficiaries appears to be helpful in the process of understanding each others' view point for meaningful social action and interaction and also exchanging ideas and experiences.
- u. Setting up of vocational/technical training institutes one each at every upazila for skilled manpower development to make the unemployed youths and adults eligible for gainful employment either at home or abroad deserve to be initiated on priority basis.
- v. Permanent solution to monga mitigation necessitates the commitment and integration of the politicians, bureancrats and social groups to work together for creation of necessary resources duly complemented with endeavors for generation of employment for the poor through industrial entrepreneurship development.

- w. Identification of actual monga-affected people or households as a special research project may be a viable proposition since it is a pre-requisite to proper planning for monga mitigation
- x. Formation of '**Monga Special Fund**' through Public-Private-Partnership (PPP) to permanently address the Monga for its eradication seems to be a notable initiation
- y. Development of short duration hybrid among rice varieties to generate early agricultural activities for landless farm workers along with diversification and promotion of High Value Crops (HVCs), particularly vegetables, fruits, spices, aromatic rice, etc. may be undertaken by the Ministry of Agriculture through its constituent components like BRRI-DAE-BINA, BARI.
- z. The last, but not the least is another proposition for placement and relocation of monga-affected poor and ultra-poor people to some tea gardens located in Panchagarh as seasonal but regular semi-permanent employment opportunities for a period of at least six (6) months beginning from June to November every year. The research team leader had a direct discussion with the top management of some tea planters operating in Panchagarh district. One such tea company offered him to provide job for at least 1000 workers in his own company for six months every year with free accommodation at a wage rate of Tk. 100 daily per worker. Some private small and big planters may also equally absorb at least another 10,000 to 15,000 workers if a concerted effort to negotiate with the tea planters is made from the interested parties or organizations at an institutional level. This employment venture deserves to be explored by the concerned authorities towards solving the monga problem to some extent in a limited scale as a temporary measure.

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## CHAPTER 1

### 1. Introduction

The economy of Bangladesh is largely dependent on agriculture sector. Nearly 21 per cent of the gross domestic product (GDP) and 23 per cent exports of the country come from agriculture. It provides employment for about 60 per cent of the total labour force and it seems to have managed to feed 150 million people of the country. Within agriculture sector, food crops production accounts for 75% of the value added. Among them, rice is the most dominant crop which occupies about 76% of the total cropped area, while other crops included are pulses (5%), wheat (4%), jute (4%), oilseeds (4%), and the remainders (7%) producing vegetables, fruits, sugarcane, cotton, tea and rubber. An estimated 9.30 million hectares (ha) are under crop cultivation with cropping intensity of exceeding 175%. Among them, about 2.9 million ha or 31% of the cultivated land is under irrigation coverage (BBS : Agriculture Census Report, 2009).

Access to land and livelihood is a crucial factor for survival of the rural poor. Besides, land is considered as a means of production. It is also a symbol of social status and economic power in the rural setting. Apart from it, land is a crucial asset for food production and a means for food, shelter and many other economic activities including guarantor of employment opportunities. Land ownership is thus an important contributor to food insecurity and restricted livelihood opportunities leading to an ultimate cause of poverty (Barkat et al. 2007).

Historically, Rangpur region was never a food-deficit area. Foodgrain production over there is always surplus. According to a recent estimate it shows that the average cropping intensity in greater Rangpur region is more than 217 per cent. It implies that it produces more than two crops a year in the cultivable land. But there are certain pockets which are food-deficit areas. These pockets are mostly located within the vulnerable grip of the mighty rivers like Padma, Jamuna, Teesta, Jamunashwari, Dud Kumar, Darla etc. As a result food production varies across the vulnerable regions depending on the climate conditions and natural disasters.

Agricultural statistics also shows that Rangpur region still remains a food surplus area despite production fall in the certain pockets due to floods, river erosion, drought, flash floods in the months of August-September alongwith other natural disasters that cause a total or significant

loss to the standing amon paddy. This statement of surplus production also corroborates the most recent production figures (Table 1.2) provided by the officials of Department of Agricultural Extension (DAE) stationed in different districts of the region.

## 2. Understanding Monga

The term 'Monga' is widely known in rural Bangladesh for decades long. It is more widespread in northwestern region, particularly in greater Rangpur district comprising of five new districts, namely Rangpur, Nilphamari, Lalmonirhat, Kurigram and Gaibandha. All these new districts are formerly subdivisions until 1984 when administrative reforms took place.

The concept of 'Monga' is, in fact, a state of seasonal deprivation of food due to lack of access to income and employment opportunities, specially for the rural poor and agricultural labours. This may also be evident from the analytical framework depicted in Fig. 2.1.

Monga is a kind of seasonal poverty taking place almost every year in a particular lean period of time in the northern districts under reference. It usually happens in the Bangla months of Ashwin-Kartick (mid September-to mid November) between transplantation and harvest of **Amon** paddy, a major food crop grown in the monsoon season in those districts.

### 2.1 Monga Defined

***As viewed by Zug (2006), Monga is a kind of seasonal food insecurity in ecologically vulnerable and economically weak parts of north-western Bangladesh, caused by an employment and income deficit before Amon rice is harvested. It mainly affects those rural poor, who have an undiversified income that is directly or indirectly based on agriculture.***

According to him this definition of monga is restricted to the lean season preceding the amon harvest in the Bangla months of Ashwin and Kartick (mid September to mid November) although there is a second lean season (Chaitra-Baishakh) before boro rice is harvested. Since this lean season is less severe, it is called as 'little monga'. The lean season reduces the poor people's access to income, which is a shock on their livelihoods.

The poor and the ultra-poor are mostly hard hit by the seasonal shock. Thus the lack of employment and income opportunities drastically reduces their food intake and nutritional requirements. Therefore, munga is not a problem of food availability but of lack of access to food due to no income earning by rural poor to buy food. This is unlike famine when there is a dearth of food although enough money is available. Here lies the difference between **munga** and **famine**. So this can be safely said that munga is not an analogue to famine and it seems probably not proper to say that munga is a near-famine like situation as pushed by the media reports. The term has also been politicised, and debate on the issue sometimes remains far from the real situation. The issue of munga has consequently been turned to be a national focus in the recent years. As a result, munga has been identified in the 'Poverty Reduction Strategy Paper' (PRSP) as a major component to fight against extreme poverty in munga prone areas of those districts.

## **2.2 Who are Affected by Munga ?**

A significant number of people or groups of people belonging to the vulnerable households are greatly suffered by munga whose primary source of income depends on agricultural operations and marginal farming. Limited or no access to employment and income earning is the main cause of munga. During the munga period non-farm activities like construction works, carpentry, rickshaw / van pulling, small business, bamboo-made handicrafts, etc. also become almost absent or severely limited as the cash flow is very low for the poor as well as big landowners whose consumption or purchasing capacity becomes minimized. This is the case for all those poor people whose income mostly depends on agricultural activities which are absent during the agricultural lean season in the months of 'Ashwin and Kartick'.

Another groups of vulnerable people consisting of individuals or families also maintain their livelihood on the generosity of others. Some families who have no male members, because of death, disability, illness, divorce , outmigration, etc., usually go for begging. During our informal discussion with local people held in the tea stall or market places it transpires that they face a big shock and seasonal fluctuation in their income since better-off people having resources and landed properties do not offer them any financial or material support mainly because of lean season. During the harvest time these well-off

people in the villages generally offer a lot of alms, specially in the form of paddy. They (poor people) store and sell them in the nearby market to get cash money for buying daily essentials.

This is obvious when affluent people run short of cash money, resources and other sources of income, they stop or limit/reduce their support for the others who are really needy.

### **2.3 Manifestation of Monga**

During the lean period of '**Ashwin-Kartick**' which turns to monga, people could hardly afford to take enough food. The situation thus forces them to take small amount of food with less quantity by reducing a fewer meals per day because of scarcity. Feedbacks from the monga-affected areas through personal interviews, formally or informally, reveal that many families used to consume one or two meal a day, and some ones are not even eating at all. It was found more precarious during the month of last Ramadhan when some people could hardly afford a single meal per day. One woman of nearly 80 years old at Hatibandha of Lalmanirhat district took the research team to her thatched hut built on other's land showed us what she cooked (a few pieces of arum leaves and banana stalk and some coarse rice in a small pot) for herself and her disabled old husband who is bed-ridden for years. The amount of food items she cooked is good for one person but she is supposed to share it with her husband. Her sons, and daughters were married off. They are now living separately at different places. They are unable to take care of their old parents since they are also food and income handicapped. When asked how could she live in such a starved situation, she lamented and told "Not the case of Ramadhan today, fasting is a regular phenomenon in our life, every day and every month of the year tantamounts to Ramadhan to us. You people decide how you could help us to live".

Monga is a cyclical shock for the affected people. It affects their health causing reduced physical strength and also exposed them to various diseases like diarrhoea, pneumonia, malaria, filaria, and many other water-borne diseases such as jaundice etc. These are some of the manifestations of poverty due to monga as they used to eat unhealthy,

unclean and unhygienic cheap foodstuff. They can hardly afford to consume good foods like fish, meat, eggs, milk, quality vegetables, etc. All these factors made them physically weak, malnourished, less productive and thus idle.

### 3. Current Status of Monga in Rangpur Region

Monga is a kind of seasonal poverty which occurs in a particular lean period of the year. It is not a new phenomenon in Bangladesh context rather it was widespread across the country even several decades ago, specially in the vulnerable pockets of the greater districts of Rangpur, Dinajpur, Bogra, Pabna, Rajshahi, Kushtia, Mymensingh, Comilla, Noakhali, etc. But some key factors of change, such as agricultural diversification, improved infrastructures, outmigration to middleeast and other countries become boon for the people of some districts compared to others to reshape their fates through economic transformation of better livelihood at individual, household and community levels (Rahman, 2007).

#### 3.1 Monga Situation

Poor and ultra-poor people specially agricultural labours of greater Rangpur region become jobless due to non-availability of agricultural activities from flowering stage to harvesting of amon paddy in the stipulated period of Ashwin and Kartick, locally known as “**Mora Kartick**”. According to Rahman (1995) ‘**mora**’ refers to hunger and deprivation. **Mora Kartick** is considered as a month for bane of the rural poor, particularly in the northern region. It is a season of half-fed, ill-fed, half-meals and debt bondage. This can also be synonymed with the terms “**obove**” or “**aakal**” in the south eastern region and other parts of the country.

But when the harvesting starts at mid-November or end of Kartick it is termed as ‘**Bhara Kartick**’, that is a season of ‘**Mora Kartick**’ to ‘**Bhara Kartick**’ meaning scarcity of food to abundance of food with the arrival (harvesting) of new amon paddy. During the period mentioned above or at the time of “**Mora Kartick**”, there is no work, no income and as a result they do not have any cash flow to buy food although plenty of food available in the

market as opposed to famine when there is money but no food available to buy. Consequently these vulnerable groups of people become victims of monga (Mazid, 2007).

### 3.2 How Many People are Affected by Monga ?

All five districts of greater Rangpur region, namely Rangpur, Nilphamari, Lalmonirhat, Kurigram and Gaibandha are more or less monga-prone areas measuring on the scale, vulnerability and severity of monga due to river erosion and floods. An estimate made by PKSF as quoted by Mazid (2007) indicates that 25 out of 35 upazilas of these five districts are severely affected by monga. Of them (25 upazila), more than 1.10 million (11.0 lacs) households spreading over 212 unions are reported to be poor. Among them, almost 50% or 5.5 lac households are perennially affected by monga every year. Again 50% of 5.5 lac households are ultrapoor, 25% moderately poor and the rest 25% are poor. The latest survey conducted by PKSF has estimated about 24,75,000 people considering a family size of 4.5 persons per household comprising of three clusters of people i.e. extremely poor, moderately poor and poor households of 5.5 lacs. This could be gleaned from the **Table 1.1**. This estimate is further illustrated as under :

- 25 affected upazila out of 35 in five districts.
- More than 11.0 lac (1.10 million) households spreading over 212 unions are mostly affected.
- Of these 5.5 lac households, 50% are extremely poor or ultrapoor, 25% moderately poor while the remainder 25% are poor.
- Estimated number of monga-affected people therefore stand at nearly 24.75,000 (2.475 million) taking 4.5 persons per household i.e. 5.5 million X 4.5 person per household.

Table 1.1 Monga affected Poor and Ultra-poor Households of Greater Rangpur Region

District	Upazila under each district	Total Households (HHs)	Monga-affected Households	% of Monga-affected Households
Rangpur	8	535.451	238.388	44.62
Nilphamari	6	304.882	142.218	46.65

Lalmonirhat	5	225.00	109.872	48.83
Kurigram	9	371.068	197.327	53.18
Gaibandha	7	337.718	207.674	61.49
Total	35	1,764.119	895,479	50.76

Source : PRIME Cell, PKSF Regional Office, RDRS-Rangpur (October 2008)

Another estimate made by BBS, also quoted by Mazid (2007), stipulated that there are about 596,645 monga-affected agricultural labour households out of 20,38,130 households covering 35 upazilas of five districts of greater Rangpur region totaling of 26.84,903 affected people @ 4.5 persons per household ( $596.645 \times 4.5 = 26,84,903$ ) while RDRS estimated extremely monga-affected households at 91,677 (considering <1600 kcl food intake). Here also statistics comes around 412,547 following the same rate of 4.5 family size per household.

### 3.3 State of Food Production, Requirements and Consequences

Greater Rangpur region is historically a food surplus area. Because of skewed distribution of land, proportionate share of resources is the limiting factor for uneven distribution of food production and food consumption. Impact of so-called 'green revolution' has made rich richer and poor poorer as the vulnerable farming community cannot afford to adopt the high cost seed-technology or in other words the seed-fertilizer-pesticide-mechanized cultivation and irrigation-based modern farm production technologies. This uneven distribution of landowning and food production also appears to be another cause of monga. One irony of fact is that there are quite a few resource-rich people in the region who could donate or lend money at lower rate of interest in the severe crisis period of monga to cope with their deficit lean season (Rahman, 2005). This implies that those so-called well-off people tend to have no social responsibility and moral fellow feelings towards their hardcore poor neighbours nor do they lift their fingers to help them (poor) out to tide over the monga crisis. The surplus food production analogy has been more illustrated by the food production and consumption statistics presented in Table I.2.

Table I.2 Food Production and Consumption Scenario of Rangpur Region (2007-2008)

Sl.No.	Name of District	Food Production (in metric ton)	Food Requirement(in metric ton)	Surplus/Deficits ((+) (-) (in metric ton)
1.	Rangpur	798,623	577,923	+ 220,700
2.	Nilphamari	616,177	278,506	+ 243,521
3.	Lalmonirhat	330,067	200,633	+ 129,404

4.	Kurigram	555,166	357,652	+ 197,514
5.	Gaibandha	618,153	461,871	+ 156,282
6.	All districts	2,918,186	1,876,585	+1,041,610

Source : Deputy Directors of Agriculture, DAE and personal Communication with the respective District Agriculture offices of DAE.

An analysis of the information provided in the above table about production, requirements and surplus of food grains clearly supports the theoretical assumption made in the beginning of this section. This seems that greater Rangpur district is always a food surplus area and never a deficit one. But because of socio-political situation makes it worst for the monga-affected hardcore people.

### 3.4 Crop Production Scenario and Scope of Diversification

The summary of food production, consumption and subsequent surpluses in the region is a clear indication of excess food grain production which includes cereal crops only (rice, wheat, maize). The most important and major crops grown in the region are : rice, wheat, potato, fruits, vegetables, oilseeds, pulses, spices, sugarcane, tobacco, jute, maize, groundnut etc. Among them, rice is the most dominant crop covering about 76% of total cultivable land.

Presently, the rice-based cropping system with an average cropping intensity of about 217% (Rangpur- 238%, Nilphamari-219%, Lalmonirhat-214%, Kurigram-221% and Gaibandha-193%) is predominant. The overall cropping intensity of Rangpur is topped in the list (238%) while it is on the bottomline in case of Gaibandha (193%). Much of the region command area is flood free and characterized by well-drained soils, except some pockets, with an adequate supply of ground water for irrigation. Thus the agro-climate of the region offers a great scope for diversification with high value crops (HVCs), specially fruits, vegetables, spices, aromatic rice, baby corn, and other important crops like groundnut, mugdal (pulses), sugarcane, sunflower, water melon, hybrid maize, potato, jute, etc. Inadequate public research and extension on crops other than rice, limited participation of NGOs and private sector in agricultural support services, farmer's lack of knowledge on selection of appropriate crops and varieties, inadequate availability and

timely supply of production inputs (seed, fertilizer, pesticide, irrigation), lack of quality planting materials of HVCs, poor transfer of production and post-production technologies,



dearth of information on market potentials and prices, and difficulties in access to institutional credit by small and marginal farmers are some of the major constraints hindering the growth of high value crops in the region for diversification of agricultural crops. All these propositions are designed to improve the farmers' level of income by assisting them to diversify to high value crops (HVCs). Thus the proposed thesis is aimed at increasing all kinds of farmers' incomes and reducing poverty level in the region. This proposal may help increase and create more job opportunities for the agricultural labours round the year and thus not only it minimizes the severity of monga but also eradicates it forever in the long run. It may also reinforce the existing on-going NCDP programs of crop diversification of HVCs now being implemented by DAE in association with partner NGOs in 16 Northwestern districts of Rajshahi division.

#### **4 Development Objective and Strategies**

##### **4.1 Development objective**

To identify the constraints and factors that promote the causes of monga so as to minimize the poverty level affected by monga in northern region. The ultimate goal is to improve the monga situation by increasing employment opportunities and alternative sources of income and provide greater access to adequate food and guidance for better livelihood through diversified and multi-dimensional programs.

##### **4.2 .Specific objectives of the study**

The overall objective of the study is to internalize the dynamics of **Monga** in all five northern districts (Rangpur, Nilphamari, Lalmonirhat, Kurigram and Gaibandha) of Bangladesh in order to develop a database through empirical evidence with a primary aim to formulate a policy strategy for **Monga** mitigation and thus reduce poverty level in the region.

However, the specific objectives of the study were to :

- Describe the socio-economic and demographic profile of the household head-respondents;
- Analyze the factors promoting the causes of **Monga** taking place in a particular lean season of the year;

- Assess the status of landowning and land use pattern, sharecropping system, access to cultivable land and livelihood pattern;
- Suggest policy guidelines for mitigation *monga* strategically (short term, midterm and long term strategies);
- Assess the vulnerability of *Monga* due to climate change and environmental hazards;
- Determine the hindrances, if any, about the rural markets and marketing of their farm products;
- Identify the striking problems as perceived by the respondents as to what attributes to the incidence of *monga*; and finally,
- Explore the relationship between some selected characteristics (education, farm size, age, income, family size ) and incidence of *monga*.

#### **4.3 Implementation Strategies**

Following strategies were carried out to achieve the study objectives :

- Review of related literature, project documents, official records, survey reports conducted by different agencies, library searching, internet browsing, study reports, research reports, use of journals and other sources of secondary data.
- Design and use of three sets of questionnaires and checklists for gathering data and information from all possible sources (one set for face-to-face interview of the selected vulnerable groups of household heads (poor and ultra-poor people) of *monga*-affected areas, one set for opinion survey of local level policymakers, administrators and implementors of various development programs undertaken by GOs, NGOs, donor agencies, and another set of checklist for conducting FGD/PRA, case studies, etc.
- Participants' observation, informal in-depth discussion with key opinion leaders. local govt. and NGOs officials and concerned stakeholders.
- Conduct specific case studies to focus and highlight the key concerns for policy options.

#### **4.4 Limitations and Problems Encountered**

This study was conducted in 11 upazilas out of 35 in greater Rangpur district taking at least 2-3 upazilas in each district. Therefore, the opinions received and findings generated from the respondents representing about one-third of the total upazilas cannot be generalized for the entire region. Time and resource constraints are the other limitations of the study.

One major setback encountered was the sudden heart ailment of Dr. Hannan, the team leader. Soon after completion of field work in the first week of March he felt severe heart pain which led him to go for angioplasty with stenting (ring setting) on 15 March '09. While he was in the process of recovery his wife (Professor Ferdouse Hannan of Dhaka University) has suddenly been hospitalized too on 30<sup>th</sup> March 2009 with Kidney problem (92% of her both Kidneys were non-functioning). With this new problem of her life and death question, Dr Hannan had no other alternative but to go to Bumrungrad International Hospital in Bangkok and subsequent follow-up treatment of his wife from April to August 2009 intermittently. The heavy load of pains, anxieties and stresses he was undergoing seriously hampers the report writing. Thus the undesirable, unforeseen and unpredictable circumstances were the only cause of delayed delivery of draft final report. The author is really regrettable for such unexpected situation and he is really sorry for the inconvenience thus caused to the client for no fault of him despite his sincere efforts and commitment.

The other problems encountered were the initial misconception of the field enumerators and their interactions with the respondents about the processes of monga and their consequences in the life and livelihood of the monga-affected poor and ultra-poor people of the region. This was however resolved quickly through feedback workshop and personal attention for their reorientation in the data collection process and procedure.

## CHAPTER II

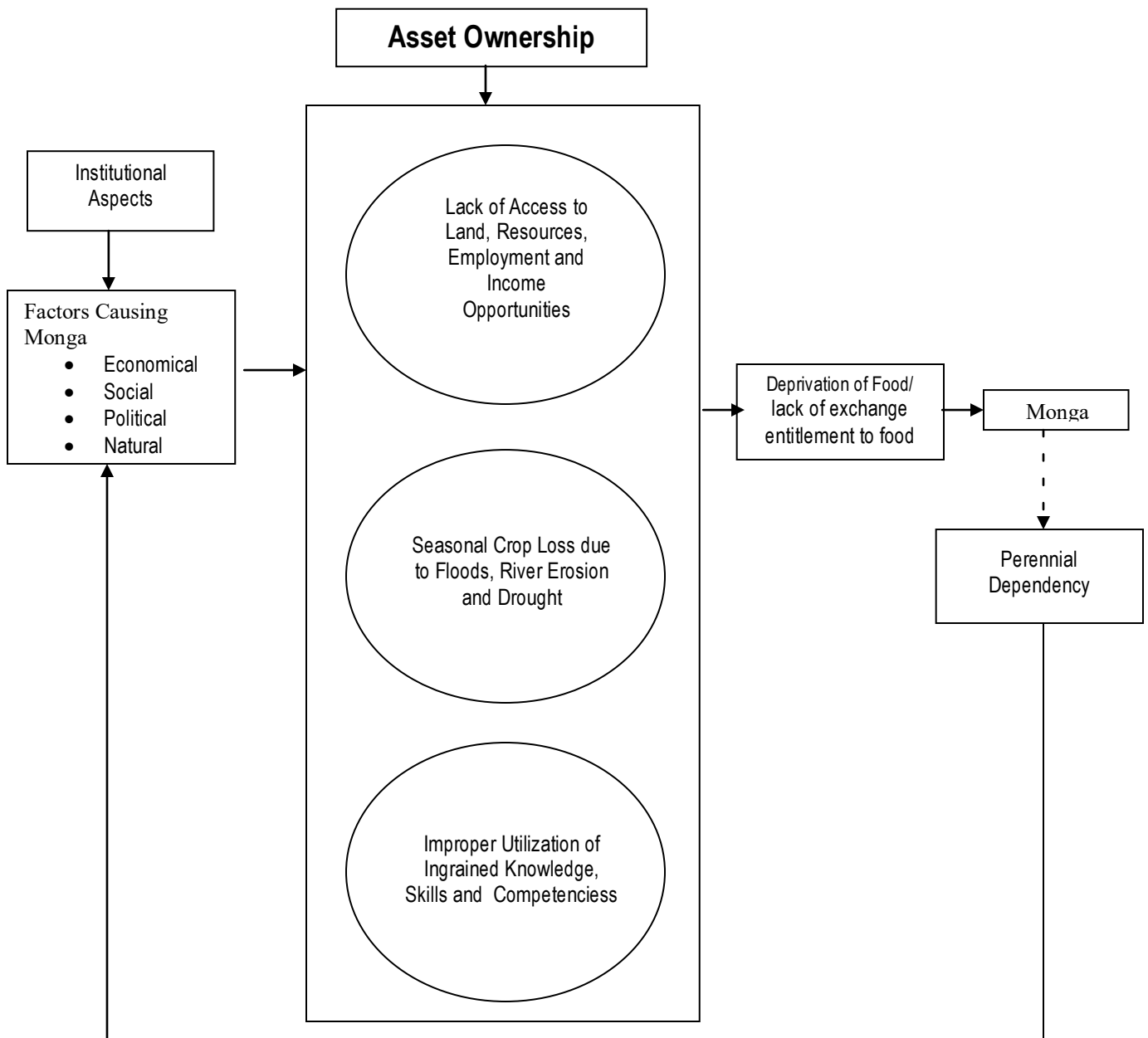
### 2.1 Analytical Framework for Incidence of Monga

Nothing happens in isolation or vacuum. So is the case of munga that occurs as an ultimate consequence of so many factors or actors. Thus the incidence of munga involves an interplay or interface of so many diverse elements, such as institutional aspects in the form or structure of economic, social, political and natural systems of a particular society or region. All these interacting forces have a direct relationship with asset ownership of the suffering people of the community wherein munga takes place. Thus the most important assets, among others, are land, labour, services and resources, employment and income opportunities, natural forces including climate change and environmental issues like floods, river erosion, excessive rainfall, flash floods, high temperature, droughts, cyclones, typhoons, water surges, earthquakes, severe cold, hailstorms and such other natural disasters that directly inflict upon the community in terms of crop loss, asset loss rendering the community assetless, homeless, rootless and ultimately forcing them to displace from one place to another. Thus the combined effects of all these factors cause deprivation of food or lack of exchange entitlement to food which consequently leads to what is called 'munga' – a seasonal insecurity of food in a lean season of a particular period of the year. These are some of the crucial issues or manifestations which may be termed as causal factors or inputs that are acting/ interacting in a given social system based on certain code of conduct and climate/environmental behaviors.

A clear understanding of the above mentioned causal factors or elements may be useful in analyzing the structure and function of a munga region and its consequential impacts on the suffering people. The same is true in analyzing the key issues that manifest as munga in the northern region of Rangpur district. All these phenomena that cause munga entail an in-depth analysis of the system including its available resources and other associated factors that restrain or promote the incidence of munga in a social setting where nothing happens in isolation. An attempt has been made to clearly illustrate it in a hypothetical diagram as shown in Fig. 2.1

The crucial issues of monga are the seasonal deprivation of food due to absence of agricultural activities for the farm labours and thus leaving no scope of income earning for them. Similarly, lack of access to resources and services as well as improper utilization of ingrained knowledge, skills and competencies are the other essential prerequisites that accelerate the process of monga. All these issues are presented in the analytical framework as a basis for clear understanding of the dynamics of monga. (Fig 2.1).

## Analytical Framework for Incidence of Monga



**Fig. 2.1** An Analytical Framework showing Relationships among the Variables Influencing the Occurrence of Monga and Perceived Operational Reality of Periodical Scarcity of Food among the Poor and Ultra-poor People of Greater Rangpur Region.

The ultimate consequence of incidence of Monga is lack of food and nutritional security. Understanding the dynamics of monga, a conceptual framework of food and nutrition security designed by Weingartner (2005) may be helpful if someone considers it as a guideline. According to him, Food and Nutrition Security is **achieved**, if adequate food (quantity, quality, safety, socio-cultural acceptability) is available and **accessible** for satisfactory utilization/consumption by all individuals at all times to live a healthy and happy life. So, the achievement of sufficient food and nutritional status depends on three factors. These are: **availability, accessibility and utilization of food. Availability** is the physical existence of food. In this framework, availability refers to the regional or national level and is a combination of food production, commercial food imports, food aid and domestic food stocks.

**Access** is ensured, when the households and its members have sufficient resources to obtain those foods. This can be done through subsistence production or by gaining enough income to purchase those from the market. **Utilization** refers to the quality of food consumed and how balanced it is concerning its nutrients. Utilization requires not only an adequate diet but also the ability of the human body to convert it into energy, which is either used to undertake daily activities or stored. A healthy physical environment including safe drinking water and an understanding of proper health care and food preparation is needed to ensure this ability. Each of these three factors may vary over time and space. This temporal dimension is included in the framework as **stability** (Fig. 2.2). A distinction can be made between **chronic food insecurity** – the inability to meet food needs on an ongoing basis and **temporary food insecurity** when the inability is restricted to a specific shock like natural disaster or civil conflict and **cyclical food insecurity**, if there is a regular pattern to food insecurity every year as quoted by Zug (2006).

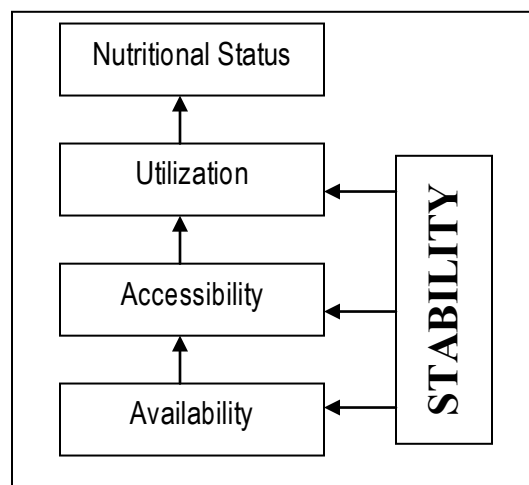


Fig : 2.2 Framework of Food and Nutrition Security (adopted from Weingartner, 2005).

Despite the severe life threatening situation of Monga, people have survived over time; though only barely; mainly by implementing and mixing different formal and informal coping or protection mechanisms.

Monga is a **cyclical food insecurity** which occurs during the lean season and it directly affects those who are involved in agricultural activities. The agriculture in the monga region is mainly based on paddy cultivation. The employment and income opportunities for agricultural day-laborers is therefore almost non-existence due to non-requirement of seasonal labors in amon crop cultivation practices. Between transplantation and harvest only insignificance labor is needed and as a result the income of day-laborers / agricultural laborers becomes reduced. Similarly the marginal farmers also face monga. Their financial assets is invested towards the harvest. They have to give successive inputs to their fields but they receive the return for their investment not until harvest of their farm produce. The financial resources of many marginal farmers are not enough to ensure the inputs for their crops and sufficient food for their families in the same time. Some groups or individuals are also indirectly affected by the agricultural lean season. This is the case for all those who including small traders and beggars depend on their income from agricultural works affected by the agricultural lean season like. Due to the weak purchasing power they have no access to the market, i.e. they can not buy enough food to fulfill their requirements. The access is sometimes further limited because prices for basic foods also increase very high during monga (Zug, 2006)

Affected people used to reduce the quantity of nutritional intake due to inadequate or no intake of expensive food rather they consume cheap and sometimes unhygienic products and collect wild growing plants. This can cause problems for the **utilization** of food. The physical health of the people during monga period becomes weakened through the preceding flood period when illnesses like diarrhoea, pneumonia are very common. Diarrhoea remains a problem during monga and worsens the situation because the limited amount of available food for the individual can not be absorbed adequately by the body.

Besides looking at monga as a seasonal phenomenon it has to be mentioned that most families suffer to a certain extent from chronic food insecurity throughout the year which has negative impact on their health. Thus it makes even worse for them to overcome the short but serious monga period.

The **availability** of food in understanding the framework is not a problem. A sufficient amount of food exists in Bangladesh and monga affected districts even produce surplus food grains. Bangladesh as a whole is not self sufficient in food production in some years. But government and private commercial imports as well as international food aids ensures the availability in times of national crisis (Kabir, 2005 and WFP, 2005).

Monga differs every year in its severity mainly because of food **accessibility** and **utilization** which vary in their stability. Agricultural production is underlying different natural risks like early floods, flash floods and heavy or late rains destroy standing crops and therefore also reduce employment opportunities. Furthermore, the price fluctuations during monga differ. Interventions of NGOs and the government program like VGF, VGD, TR Cash-for-Work (CFW) or Tk. 100 days job creation program also have influence on the **stability**. Social Safety net (SSN) Programs like Tk. 100 days work, VGF, VGD, TR, widow allowance, Oldage pension etc. bring income and enable the beneficiaries to have access to food on the markets. These short-term interventions and other activities to combat monga are praise worthy.

The framework, thus suggested by Weingartner (2005) appears to be quite logical and appropriate in the context of monga like situations in the northern region of Bangladesh. What is important is the coordinated efforts of the government and non-government agencies with the participation of civil society and non-exaggeration of media coverage will go a long way to combat monga in the short and long term vision as it is helpful in the long run monga mitigation.

## CHAPTER III

### 3.1 Political Economy of Monga : An Overview

Monga is not a new concept in Bangladesh context. It has got roots stemming in the British Period. The occurrence of famine in 1943 is a clear example of such phenomenon. It has only recently come to the focus by the media reports frequently. Monga has been prevailing in certain regions of Bangladesh for decades long, particularly in the greater districts of Rangpur, Dinajpur, Pabna, Rajshahi, Kushtia, Comilla, Noakhali, Mymensingh, Faridpur, Tangail, Bogra, Dhaka etc. Pushed by regular and frequent media reports about the food insecurity in the northern region, particularly in greater Rangpur, the monga situation has become one of the most publicly discussed and debated topics. As a result, policymakers and planners had to include it in the development policy document namely Poverty Reduction Strategy Paper (PRSP) as the national government agenda. Realizing its importance and gravity of the situation development partners of both home and abroad including NGOs have started implementing projects/ programs and collecting funds to mitigate monga (Khalily et al, 2008).

Agriculture is the mainstay of Bangladesh economy. The livelihood of majority of its people is dependent on agricultural production, especially of paddy cultivation. So, the income and consumption of the poor people varies seasonally with the seasonal nature of paddy production. As a result, the whole country faces seasonal variations in income, consumption, employment and poverty. This situation reaches such an extent that people go on without a meal even for a week. This severe situation is popularly termed as “Monga” – a cyclical phenomenon of poverty and hunger (CARE, 2005),

Traditionally, Rangpur is a food-surplus region with paddy-centered economy. Paddy is the most dominant but labour-intensive crop. As a result, agricultural labours become jobless during the lean period particularly in the Bangla months of Ashwin and Kartick (mid September to mid November) between the period of booting stage and harvesting of amon paddy, a major crop in the northern region.

The macro level comparison shows that the greater Rangpur is less developed than other regions of Bangladesh. Affected by big rivers, communication network, less or no industrialization, natural disasters like floods, droughts, river erosion, excessive rainfall, high temperature, severe cold, hailstorms, water surges, cyclones etc. contributes greatly to the process of under development. The relatively weak political leadership is perhaps another major factor for such under development apart from its isolation from the capital Dhaka and Port city Chittagong truncated by the mighty rivers like Jamuna, Padma, Dud Kumar, Brahmaputra, Teesta, Darla, Bangali, etc. All these factors have combinedly made the region economically and politically backward.

In a political system phenomenically based on patronage, it is important for the development of the region to be properly represented in the government to advocate for the region. Many people in greater Rangpur are still affiliated with the former autocrat President General Ershad and his party (JP) that has a stronghold in the region. In the election of 1991 and 1996 no other party could win a single constituency. Ershad alone happened to be got elected from five constituencies of his own district he comes from in both 1991 and 1996 national elections. Since 2001 their number has reduced and only 5 out of 22 seats were captured by BNP and Jamat-e-Islam combined are still very low (zug, 2006). But subsequently their (JP) popularity has been losing ground and they were to be happy with only 9 out of 22 seats in the last national election of 2009

It is always a customary to blame government for not taking sufficient steps to address munga. While the then govt. of Khaleda Zia was hosting the SAARC conference in November 2005 the then opposition leader Sheikh Hasina (now Prime Minister) bitterly criticized the govt. for not taking munga issue seriously. She added, "I also request the govt. headed by Prime Minister (Khaleda Zia) to visit immediately the munga-affected districts of the region". She attacked the govt in a populist manner concerning the expensive decoration of Dhaka City for the conference adding "Had the govt. allocated a portion of the money spent for such a gorgeous illumination, the acute poverty stricken people of the northern region would have get a meal". At that time of munga, Awami League



and other opposition political parties frequently carried out relief operations in the monga-affected region to discredit the poor performance of the government (Zug. 2006)

Likewise also the government issued press releases in the media to show that their people and programs were successfully tackling monga. The Bangladesh Sangbad Sangstha (BSS), the National News Agency of Bangladesh quoted official sources during monga in 2005 as saying that adequate steps taken by the government in the form of relief materials and adequate supply of food grains helped the people to overcome the monga in all the districts of greater Rangpur(BSS, 2005).

The Bangladeshi society is very much sensitized for famine and related issues. The last big famines of 1943 and 1974 are still well remembered. There is a widespread perception within the political elite of the country that the occurrence of a famine so soon after independence caused a massive crisis of legitimacy for the then government whose violent overthrow a year later was seen as an expression of this loss of legitimacy. The crisis of legitimacy due to failure to contain the famine appears to have become for subsequent governments a crucial political concern. The debate on monga is strongly related to this psychology of famine, because the political actors are usually made responsible for such a famine or to be accused that they are not prepared enough to prevent famine or starvation (Zug, 2006)..This castigates upon the legitimacy or failure of the ruling government or political party.

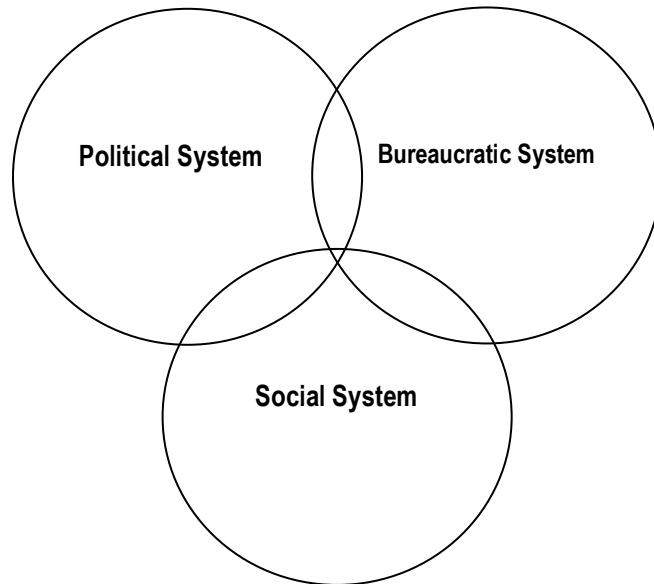
### **3.2 New Paradigm Proposed for Monga Eradication**

In the macro-level analysis of the entire gamut of monga syndrome, a new paradigm shift has been proposed for clear understanding and internalization of the process involving a trilogy of three major stakeholder's systems. These are political, bureaucratic and social systems in a given society or region. All these factors involved in the process are acting/interacting among the whole systems to operate for a meaningful solution of an intricate problem like monga. The inner message of this paradigm is to ensure participation of these three systems to work together interwovenly with an ultimate vision to carry forward the functioning of the system towards solving the monga problem for good.

Unless the three major stakeholders stipulated above in the proposed paradigm shift do not work or participate hands-in-hands in the process, the dynamics of munga may recur perennially and the victims of this munga syndrome may be fallen again to the poverty trap. This process of munga eradication involving the key social factors or actors has been illustrated in a diagram as shown in Fig 3.1

The political system takes the leadership role and provides overall policy guidelines, support and programs as well as policy directions to the bureaucratic system who, in turn, will implement the policy decisions or prescriptions given by the political system. In order to make the political decisions implemented properly and smoothly, the social system comprising members of civil society, NGOs, media and other pressure groups will help support them (both political and bureaucratic systems) for quick implementation of such policy decisions. Thus all these three systems are to work closely and sincerely with commitment for betterment of the munga-affected poor people to end their lifelong miseries and sufferings in a coordinated manners.

## New Paradigm Proposed for Munga Eradication



- Political System -** refers to the politicians who are on the top to provide policy directions, programs and policy prescriptions for implementation
- Bureaucratic System -** refers to bureaucrats at different tiers of administrative machinery who are to execute the policy directions given by the political elements.
- Social System -** includes members of civil society, media, NGOs, key community leaders, teaching community, religious leaders and other pressure groups of the society and eminent social forces.

If these three prominent groups of the munga region work hand-in-hand with utmost dedication, sincerity and earnest zeal, only then munga could be eradicated for good within a span of 5-10 years. This, of course, depends on political commitment of the party in power.

Fig 3.1 New Paradigm involving Three Major Stakeholders' Participation to work together interwovenly for munga eradication

## CHAPTER IV

### Methodology

This chapter deals with various methods and techniques adopted to collect relevant data and their process of analysis and interpretation.

#### 4. Approach and Methodology

##### 4.1 Methods and Techniques used

A wide variety of approaches, methods and tools were used to conduct the study. The principal method employed is the face-to-face personal interview with the selected household heads of vulnerable groups using a semi-structured interview schedule (Appendix -A) and checklists by the enumerators closely supervised by the research supervisors and core consultants including the team leader. Besides, eleven focus group discussions (FGDs), (Appendix– B), participants observation, case studies, in-depth informal discussion with the key stakeholders were also applied as other methods and techniques in order to cross-verify the information and data collected through the questionnaire survey. Another set of questionnaire for conducting opinion survey of the district and upazila levels field administrators, policymakers and implementors of different development programs relating to monga undertaken by GOs, NGOs and other agencies for monga mitigation was designed and used for the purpose (Appendix- C). Before and after launching the survey proper, a large number of stakeholders including Deputy Commissioners, ADC, ADM, UNO, Deputy Directors of Agriculture, NGO Executives and other key stakeholders were also consulted as to how do they feel about monga in their respective area of operation or work places. (Appendix-D).

##### 4.2 Locale of the study

The **Monga** research study was conducted in five northern districts, namely Rangpur, Nilphamari, Lalmonirhat, Kurigram and Gaibandha where **Monga**-affected people are mostly concentrated. The study sites at village level under 11 (eleven) concerned upazilas were selected keeping in mind the road-link and easy communication by road, rail and bus between the project sites and District/ Upazila headquarters as well as Dhaka for quick

and easy supervision of data collection process. Kurigram, also an extremely affected district, was initially dropped as suggested by the client

Table 4.1 Distribution of respondents by gender according to District, Upazila, Union and Village under study

District	Upazila	Union	Village	Household head-respondents		
				Male	Female	Total
Rangpur	Kaunia	3	8	347	48	395 (26.04)
	Gangachhara	3	10			
Lalmonirhat	Kaliganj	3	9	339	61	400 (26.37)
	Hatibandha	3	8			
	Aditmari	3	8			
Nilphamari	Jaldhaka	3	9	382	15	397 (26.17)
	Dimla	3	13			
Gaibandha	Shaghata	3	4	259	16	275 (18.13)
	Gobindiganj	3	9			
Kurigram	Nageshwari	2	2	43	7	50 (3.29)
	Burungamari	1	1			
<b>Total : 5</b>	<b>11</b>	<b>29</b>	<b>81</b>	<b>1370(90.31)</b>	<b>147(9.69)</b>	<b>1517(100)</b>

Figures within parentheses indicate percent

but subsequently included to get a comprehensive idea about the entire region though with a smaller/purposive sample size of 50 respondents. Thus the location of the research project covers all 5 (five) districts of Rangpur region comprising of 11 upazilas, 29 unions, 81 villages and 1517 households. Among the 1517 household head-respondents, 1370 (90.31%) are males and 147 (9.69%) are females spreading over 5 districts (Table 4.1). Data collection took about 07 (seven) months starting from late August 2008 to early March 2009.

#### 4.3 Unit of Analysis

The household heads (HHs) of the poor and ultra-poor *monga* affected people are the main focus or unit of analysis of this study. Both male - and female-headed households were chosen as respondents in this study, the ratio being 9:1 respectively.



#### 4.4 Sampling Design and Sample Size

Altogether five northern districts, namely Rangpur, Nilphamari, Lalmonirhat, Kurigram, and Gaibandha which are severely affected by the perennial phenomenon of *monga* were covered by this study. Multistage and stratified random sampling procedure were followed taking two to three upazilas, three unions from each upazila and three villages from each union, twenty households from each village were primarily selected for determining the composite and representative sample size from each district. Accordingly, a sample size of 1620 households @ 20 households from 81 villages were randomly selected spreading over all five districts except Kurigram wherefrom a small but purposive sample size of only 50 respondents were chosen deliberately considering the time and resource constraints. Thus the sample size of all districts stands at 1517 after editing, screening and discarding some respondents of questionable in nature. This may be further evident as follows:

- a) No of Districts : 5
- b) No of Upazilas : 11
- c) No of Unions : 29
- d) No of Villages : 81
- e) No. of Households : 1620 (20x81)
- f) No of respondents retained after discarding :  $1620-103 = 1517$
- g) Ratio of male-female respondents : 90:10 (1370+147) = **1517**

All the 1517 household heads were interviewed face-to-face using a semi-structured interview schedule by the field enumerators.

Apart from the above methods, 11 FGDs were conducted taking one each in every upazila in addition to 08 (eight) case studies covering at least one from two upazilas. Besides, key informants and participants observation, in-depth informal discussion with the local influential leaders, such as local govt. officials, school teachers, mosque Imams, college teachers, opinion leaders were also followed to supplement the information collected through other methods and instruments.











#### **4.5 Training of Data Collectors and Supervisors**

A two-day hands-on training program at RDRS HQ was organized to impart induction/ orientation training to the field enumerators and research supervisors on data collection procedure. The core consultants and experts including the team leader served as trainers. The major topics of the training included were : how to collect data, how to approach the respondents for providing information, how to note down and put those to data sheet or questionnaire, how to build up rapport and intimate personal relationship with the respondents, what ethics to be maintained/ followed at the time of interview, etc. by avoiding ambiguous questions having double meanings. All these issues were taken care of during the training sessions. After completion of training they were posted to the respective research sites as per schedule.

#### **4.6 Data Collection Procedure**

Relevant data were collected germane to the objectives of the study. Field enumerators used to visit every household heads upon receipt of the list of the most *monga* affected people provided by the RDRS, PKSf and local union parishads. They paid home visit to each and every household head with prior appointment. In case of non-availability or pre-occupation of the respondents, the enumerators arranged make-up visit at a convenient date and time of the respondents. They were advised not to ask any unethical, irrelevant and personal questions to the respondents which they complied to. They collected data and information using semi-structured interview schedule and other checklists earlier prepared and pre-tested by the research team in collaboration with RDRS/NBI professionals.

#### **4.7 Data Analysis and Report Writing**

Data thus collected were coded, screened, organized, edited, compiled, tabulated and analyzed using appropriate statistical measures of both descriptive and inferential statistics.

#### **4.8 Submission of Report**

Inception report, midterm/ progress reports and draft final report were submitted in time as per agreement. The final report finalized and submitted after receiving feedbacks from the

client as well as workshop participants. A day-long workshop at RDRS was also organized to share the initial findings of the study on 7<sup>th</sup> September 2009. The participants were mostly the in-house professionals of RDRS including field level project staff.

#### **4.9 Hypothesis**

Two null hypotheses were suggested to test the *Monga* vulnerability. These are :

- a. There is no relationship between education and annual income of the respondents and *Monga*. This is found to be significant at 0.01 level of degree of freedom meaning that higher the level of education and annual income lesser the monga vulnerability. So the null hypothesis was also rejected.
- b. There is no relationship between the landowning status and farm size of the respondents and *Monga*. So the null hypothesis rejected.

This is also found to be significant at 0.01 level meaning that higher the level of landowning status and farm size, lesser is the chance of affected by monga. So the null hypothesis was also rejected.

### **5. Project Implementation**

#### **5.1 Mobilization of Research Team**

Soon after signing of the contract made between RDRS and DAM, the core research team moved to RDRS for recruitment of field enumerators who were later redesignated as research assistants (RAs) considering their qualification and past experience. All of them have got their Masters degree in Economics and previous work experience in data collection in an RDRS Project. Four research assistants were selected through local advertisement and subsequent interview process in consultation with the counterpart organization i.e. RDRS. The management/ officials of RDRS/NBI were very helpful and cooperative in completing the recruitment process.

At least two upazilas from each district as location of study were chosen in consultation with RDRS taking into consideration the severity of monga situation in every upazila. Accordingly, three unions of each upazila, extremely affected by monga, were selected and likewise three villages from each union and 20 household heads (HHs) from each village were selected. So, four research assistants (RAs) for covering four districts were recruited and their tasks against each RA were also assigned. Then two-days induction

training was given to them explaining all aspects of data collection process and methodological techniques in detail. In the meantime information gathering instrument i.e. semi-structured interview schedule was designed, pre-tested (outside the selected villages) by the RAs under careful supervision of the core consultants and research supervisors (RSs) who were also trained up alongwith the RAs.

Initially, slow progress was noticed at the start because of lack of clear understanding of the RAs about the dynamics of munga situation. It was detected by the research supervisors and the core consultants. In the following week, a half-day feedback workshop was organized at the RDRS HQ where all team members were present to explain the situation and constraints faced by the RAs, RDRS/NBI professionals also took part in the workshop. Besides, regular monitoring and supervision were done by the core team members. At least 50 respondents from two upazilas i.e. Nageshwari and Burungamari/Kachacutta (a proposed upazila) were purposively selected through a local NGO, namely Bangladesh Development Service Centre (BDSC) covering the char areas of both upazilas. Data were collected through the trained staff of BDSC on contract basis alongwith the core research team.

## **5.2 Coordination Network and Rapport build up**

An unwritten coordination cell with NBI/RDRS management/ research staff at the top was formed for coordination of research activities between the field level RAs and RSs and NBI/RDRS and team leader of the research project at the DAM HQ. All field level problems were solved through this coordination process.

Similarly, functional rapport building was made with all tiers of professionals working at the district and upazila level nation building organizations, RDRS staff at the field level and regional and project offices, PKSF Prime Project staff at the field level. This served as a helpful forum for getting their professional, technical and administrative supports including logistics in the project commnd area. DAM is really thankful and grateful to NBI/RDRS management, professionals and project officials at the field level. In fact, they were acting as the local guardians and contact persons between HQ and project level in the field.

## **5.3 Administrative Supports from District and Upazila Level Organizations**

All kinds of administrative and technical supports were received without any exception from the DCs, ADMs, ADCs and UNOs as well as DDs and UAOs of district and upazila

level from both civil administration and technical professionals of DAE (Department of Agricultural Extension). Cordial thanks and warm appreciations are, therefore, extended to all of them for their nice cooperation and helpful support while working in the greater Rangpur region for conducting the study of monga mitigation.

## CHAPTER V

### RESULTS AND DISCUSSION

This chapter consists of four parts, such as description and analysis of

- A. Socio-economic characteristics of household head-respondents,
- B. Profile of administrations, policymakers and planners at the district and upazila levels and their feedbacks about monga,
- C. Findings and analysis of Focus group discussions (FGDs),
- D. Findings of case studies.

#### A. Socio-economic characteristics of the Household Head-Respondents

In this section, the socio-economic characteristics of the household head-respondents are discussed. The specific characteristics included for analysis are : age, education, family composition, primary occupation, marital status, annual income, livelihood patterns, organizational participation, understanding the concept of monga, time of incidence of monga, duration of monga, perceived vulnerability of monga, extent of severity of monga, occurrence of monga in Rangpur region only rather than other districts, consumption of food items/ number of meals taken daily during monga period, time of meals consumed, land ownership, etc. Analysis of all these parameters of the monga seems to be helpful in clearly understanding the dynamics of monga and its implications in the lives of the monga-affected people. All these characteristics are discussed and analyzed below in order of their preference and logical sequence.

#### 5.1 Age of the household head-respondents

Age is an important factor, particularly in the monga region since it determines the physical strength/ ability of an individual who can support his/her family with adequate amount of income earning. It is the common assumption that if the household head is an older person, obviously he/she has lesser earning or physical ability to get employed rather than when he/she was young. This implies that more the age of household heads, less active he/she is resulting in falling into difficult situation to keep the family nourished / fed adequately. This was also corroborated by Khalili et al (2008) in a similar study they

conducted in the greater Rangpur region. It is also their assumption that an older household head is more prone to monga shock than his counterpart of younger in age.

Data presented in Table 5.1 showed the distribution of respondents by age. It reveals that majority (57.68%) of the household heads are middle-aged within the age-bracket of 36-55 years old followed by one-third (33.62%) of them are young (<35 yrs.) and only 8.70% are old (above 55 years) with an average of 42.01 and SD 10.715 ranging from 20-90 years. The higher value of SD among them implies that there is a wide variation in the distribution of their ages. The data further showed that a relatively large number of middle-aged and younger respondents combinedly constitute more than 91 per cent (91.30%) of the household heads (HHs). Nearly nine per cent of them (8.70%) are over 55 years. Since the longevity in Bangladesh is increasing, the percentage of older people is also increasing. In monga region, this group will be more vulnerable because of their less ability to work and consequently they will face more seasonal deprivation of food during monga. Because of their old age and lack of income earning opportunities will eventually force them to be of more starvation. This was also supported by Khalily et al (2008) in a similar study conducted in the northern region of monga.

## **5.2 Level of Education of the HHs**

The data provided in the Table 5.2 showed that over one-half(53%) of the respondents had no educational background i.e. illiterate in all five districts of Rangpur Region. Another 30% can sign only followed by nearly nine percent (8.90%) with elementary level of education from grade 1-5. This combined group of respondents (with no education to primary level) constitutes about 92% and the remainder (8%) has education upto secondary level who could be termed as functionally literate. This implies that lack of educational attainment always pushes them to monga shock and they cannot get out of the poverty trap as they do not possess any employable or exchangeable skill to earn more income for supporting their families. The range of their educational attainment varies from 0-14 years only with an average of 1.26.



### **5.3 Level of Education of the Household Family Members**

Table 5.3 also shows the distribution of respondents by education of their family members where more than 63% are illiterate. This implies that they are unable to provide any education to their children also who cannot find any scope of upward social mobility in their life span. Consequently there will be no human resource development in the next generation that may limit the development of the region for lack of trained manpower. This warrants an immediate and sizeable investment in educational infrastructure development for opening more educational, facilities in the munga-prone region.

### **5.4 Family Size**

Data presented in the Table 5.4 revealed that the poor households of Kurigram seemed to have the larger family size (20.73%) of over 6-members, followed by the second largest family size (16.81%) in Gaibandha. The overall mean family size is, however, 3.09 with a range of 2-15 and a SD of 1.796. The average size of household (3.09) in munga region appears to be less than the national average of 4.9 and that of Rajshahi Division 4.6 and greater Rangpur region 4.48 (BBS : Statistical Pocket Book Bangladesh 2008 published in January 2009).

More than 41% of the respondents of greater Rangpur region have family size between 2 and 4, followed by 22.21% households with 4-6 members and 21.92 of less than 2-members. It seems that households with large family size are likely to be more affected by munga due to shortage of food. So, they will be more vulnerable and fall victim to occasional starvation. The high concentration of the family size in the group of 2-4 indicates that the family has less working members and they will earn less income and therefore more starvation. This finding is also supported by Khalily et al (2008) who conducted similar study in the greater Rangpur region.

## 5.5 Occupation

A wide range of occupation starting from day labour (54.68%), farming (12.61%), household help (10.53%), rickshaw/van puller (7.09%), begging (3.38%), small trade (2.67%), carpenter/blacksmith/weaving/tailoring (2.34%), fishing (1.69%), hawker/ vendor (1.30%), rice mill worker/Chattal (1.04%), respectively by rank order to other insignificant professions like service/part time job, village quack/faith healing, etc. as cited by the household head-respondents. Among them, nearly 55% were reported to be day labourer, followed by farming (12.61%), household help (10.53%), rickshaw/van puller (7.09%) and begging (3.38%), respectively. Thus five groups of occupations combinedly constitute more than 88% of total profession (Table 5.5).

Around 55% of entire group of respondents are day labourer and over 12% (12.61%) are involved in farming which jointly covered 67.29% or two-thirds of the respondents. This indicates that the land distribution in the region is so skewed that a great majority of the people are landless and therefore dependent on landowners' mercy for their livelihood as daily labour. Had there been no agricultural activities in a particular day or week, this vulnerable group of labours are to go hungry or without food as they do not have any other alternative source of income earning because of negligible or no industrial establishments of absorbing large number of labours in the region. This view was also echoed by the CARE (2005) and PKSf (2008) who conducted similar studies in the same district and found that the region is absolutely dependent on agriculture with negligible/ no industrial activities. In this situation, their main occupation is day labouring in farm and non-farm activities. The other occupations included are : 'farming/ cultivation' who had little amount of own land as self-employed farmers, 'non-agriculture' – self-employed entrepreneurs such as basket weavers made of bamboo, 'household help or service/ part-time job', for example, are those who work as servants or rice mill workers/ chattal, and 'beggars' who managed their livelihood from the generosity of neighbors/ others. The day labourers work for others' land either in agriculture or non-agriculture trades. Thus, being dependent on agriculture, the day labourers are the ones who are hard hit by the monsoon as pinpointed by the above studies.





In all districts combined, more than one-half (55%) of the respondents earn their livelihood by working as labourers (Table 5.5), PKSF study (2008) also reveals that over 65% of the households' principal occupation is labour selling. They are, therefore, the most worst affected labour group whose income becomes at stake when agricultural activities are affected by floods, river erosion or by other types of natural disasters as they have little or no savings or food stock. Very few household heads but very insignificant (0.91%) in the region get involved in service or part-time job. This means that they have at least guaranteed income earning either for the season or for the whole year. This group is less vulnerable than the other groups, particularly the day-labouring group. All households in the region are also perennially affected by monga as they are primarily dependent on agricultural activities which are mostly affected by floods, flash floods (due to excessive rainfalls), droughts, river erosion, etc. As a result most of them have had a fewer meals a day, some have one or two meals a day, while few of them hardly had any meal a day, sometimes no meal a week even.

#### **5.6 Marital Status**

Among the household heads, over 85% are married, only 1.58% unmarried, while 9.03% widow, 2.44% separated and a few (1.05%) are divorced (Table 5.6). Among all the districts, incidence of separation, divorce and widowhood is highest in Rangpur, followed by Lalmonirhat while a modest but insignificant group remains unmarried in Nilphamari. This may be due to poverty or other health reasons which keep them unmarried as they may be afraid to support a family if they are married off.

#### **5.7 Annual Income**

The annual income range varies from Tk. 100 to 1,103,010, while a few (1.32%) had no income at all. It is interesting to note that a significant number of households in Lalmonirhat had income range of Tk. 10,000 to more than 10,000,000 next to Nilphamari and Gaibandha (Table 5.7). This appears that a handful of well-off households might be the owners of cultivable lands, income from service or overseas remittance apart from business income. Data provided in the Table 5.7 showed that over 85% of the households had yearly income ranging from Tk. 2000-50,000. This indicates that they had a monthly income of roughly Tk. 167 to 4167 or a little over US\$ 2.60 per month. With this meagre amount, how could they maintain a decent livelihood? In this situation they have no other alternative but to go without food in the days of monga.

## **5.8 Organizational Participation**

A person may occupy varied positions in a community apart from the position he occupies as a member of the family or professional groups. He may also be a member of social or political organizations relevant to his livelihood or social status in the community he belongs to in order to enhance his personal or group's interest (Bhuiyan, 1987)..

When the respondents were asked to indicate whether they belonged to, or were affiliated with, any farmers' associations or social organizations, more than 97% replied in the negative while about 3% (2.97%) in the positive (Table 5.8). Those who were affirmative (only 45 out of 1517 households), 22 of them were the members of one religious-based organization, namely mosque / madrasah committee, followed by 12 in farmer's association and the remaining 11 were the members of school/college committee.

It seems that they do not have any social cohesiveness or group solidarity due to their backwardness in education, culture, social behaviors apart from chronic poverty and perennial monga-syndrome. This necessitates an urgent investigation to find out whether or not they could derive benefits from being organized into a social forum or institution through which changes in motivation, technical know-how, skills development through trainings, change in attitudes, group belongingness, and ideology could be effected. An effective organization is one that has a high and stable membership (Chua, 1986). The households in Lalmonirhat (25), Nilphamari (7), and Gaibandha (7) had more organizational affiliation than those of Rangpur (4) and Kurigram (2), respectively (Table 5.8). This was possible perhaps due to their higher level of education, income and comparatively higher land holdings as well as more access to resources and opportunities in the community (Rogers, 1969).

## **5.9 Understanding of Monga as perceived by the respondents**

As the people of greater Rangpur region are primarily dependent on agriculture and in monga period there is shortage of income earning and employment opportunities, especially in the months of Ashwin and Kartick (mid September- mid Nov.), and as such they face food insecurity and are unable to consume regular meals due to paucity of income and cash flow. Consequently they are forced to reduce consumption of daily food to cope with the situation which leads them to seasonal starvation, what is phenomenacally termed as 'monga' in the northern region (PKSF Report, 2008).

The data presented in Table 5.9 revealed a variety of concepts leveled by the household heads relating to understanding of monga as perceived by them. According to their perception, 16% of them consider monga is due to shortage of money which made them unable to buy food items, followed by another 15.72% who termed poverty, river erosion and floods are the main causal factors of monga, 14.99% as suffering from food shortage and ultimately to go hungry or without food at the time of monga, 12.63% term monga due to crop loss/no harvest due to perennial floods, river, erosion and drought, 10.33% consider it due to lack of agricultural work opportunities which leads them to sit idle without work and ultimately no income earning, and another 8.40% level it as distress condition due to no agricultural activities, respectively.

From an in-depth analysis of all these issues cited by the respondents (Table 5.9) it can be derived that monga is nothing but a seasonal food insecurity in the lean period of a given year particularly in the months of Ashwin and Kartick (mid September – mid Nov) preceding to the harvest of amon paddy when employment and income earning opportunities are seized due to floods, river erosion and other natural calamities. Similar definition and understanding the concept of monga is also described by Zug (2006) and PKSf (2008).

According to the views expressed by the household head – respondents, monga can also be described as the seasonal deprivation of food security with no scope of earning income and employment opportunities resulting in seizure of purchasing capacity of food items although abundantly available in the market. This implies that no work, no income and therefore no food and go hungry without adequate meals or half-fed, half-starved distress condition. All such previous studies and related available literature concerning monga as well as current opinions expressed by the monga-stricken vulnerable groups of people support the definition and understanding of monga as stipulated in the foregoing statements.





### **5.10 Time of happening Monga as perceived by the respondents**

To get to know the actual time of happening monga is an important factor to the policymakers and planners who could design appropriate programs and projects to address the monga issue well ahead of time. Keeping this in mind, the respondents were asked to tell us the real time of occurrence of monga. Nearly two-thirds (66.84%) of the respondents indicated that the incidence of monga commences in mid Bhadra (Sept.) and ends in mid Kartick (Oct.), while 10.95% consider the whole year or round the year as monga for them, some (9.95%) told 'Sraban – Bhadra' (Aug.- Sept.), still some (2.04%) viewed Ashwin – Kartick (mid- Sept to mid Nov.) and 'Chaitra – Baishakh' (Mar.- April). A few of them going a little further viewed it in two steps, one for 60-days in the month of Ashwin – Kartick (mid Sept. – Mid-Nov.) prior to harvesting of aman and another for about 40-days in the months of Chaitra – Baishakh (March-April) prior to harvesting of Boro paddy, totalling 100-days of monga period and still another group for 6-months, phase one is March - May and phase two in September to November (Table 5.10). By synthesis of all these statements it can be resolved that the peak period of monga varies from Ashwin to Kartick (mid-Sept. – mid- Nov.) which is also known as 'big monga' in terms of severity and 'small monga' which takes place usually in the months of 'Chaitra and Baishakh' (March-April). So it is quite logical to say that the actual monga period runs upto 90-100 days (Sept.- Nov. and March – April) depending on the vulnerability of Natural calamities.. This was also echoed by Zug (2006), PKSF (2008) and Ali (2008).

### **5.11 Duration of Monga as perceived by the respondents**

When the respondents were asked to indicate 'how long does monga persist in your locality', more than one-half (51%) of them replied it exists 90 days, followed by 13.7% for 120 days and 8.64% for 60 days, still others viewed it for 30-365 days (Table 5.11). According to them, duration of monga varies from time to time, place to place and year to year depending on the nature and intensity of the natural calamities like floods, droughts, excessive rainfalls, river erosion, flash floods, etc. From an analysis of all these statements it could be resolved that the actual duration of monga ranges from 60-90 days depending on the severity of natural disasters (Ali 2008, Zug 2006, POSE 2008)



### **5.12 Does Monga happen last year? If so what was its degree of vulnerability?**

Degree of vulnerability was categorized into three groups, such as 'most vulnerable', 'moderately vulnerable' and 'not so vulnerable'. Based on this scale of vulnerability, the respondents were asked as to what level of vulnerability they encountered during the immediate past years of this investigation. A majority of them (55%) reported that it was tolerable level or in other words it was 'moderately vulnerable', while 41% of them described it as 'most vulnerable' and still a small group (3.82%) termed it as 'not so vulnerable' (Table 5.12). This implies that during the monga period of 2007, the degree of vulnerability was 'moderate or at tolerable level' as perceived by majority of the respondents (55%) as opposed to 41% who considered it as above the tolerable level or at the 'most vulnerable' level. Apart from this contradiction by the sufferers themselves, media reports also sometimes contribute to exaggerate it far from reality.

One interesting thing to note that there was no media reports published in any newspapers relating to happening of monga in the greater Rangpur region in 2008. This might perhaps be due to the army controlled caretaker government running the state of affairs after one/eleven. The media personnel may face harassment by the combined armed forces including RAB and police if they resort to any wrong or misleading report published in either print or electronic media. So they were very careful about monga reporting in particular and thus no news item about monga was in sight during the entire period of 2008.

### **5.13 To what extent was Monga severe this year (2008) compared to previous years?**

Every year, especially during monga period, there are some conflicting and misleading media reports, sometimes politically motivated or group pressure from NGOs/vested interest group, which made government policymakers and planners as well as people in general alarmed and in some point of time confused. This made an uproar at the top level of the administration, civil society, NGOs, donor agencies, development partners and all other ranks and files.



Against this backdrop, the respondents were asked as to what extent they experienced severity of monga in the year under investigation compared to the previous years, 57.22% of them replied that monga was 'less severe', followed by 25% as 'almost same', and 17.47% perceived it as 'more severe' (Table 5.13). This implies that intensity and severity of monga is gradually declining. This might be attributed by different programs/projects, particularly 100-days job creation, apart from VGF, VGD, old-age pension, test relief, FFW, FFE, widow allowance, etc. undertaken by GOs and NGOs.

#### **5.14 Whether Incidence of monga is increasing/decreasing every year**

Regular occurrence of monga and to what extent it has been increasing or decreasing every year is an essential prerequisite for the national policymakers, NGOs, civil society, donor agencies, development partners for the purpose of designing appropriate programs and projects alongwith necessary allocation of resources to combat it. The extent of incidence of monga has been categorized as 'increasing', 'decreasing' and remaining the 'same as before' in order to get their feedbacks about its real situation as perceived by them.

To a related question regarding incidence of mongs, about 82% of the respondents taken from all districts reported it 'increasing' as opposed to 15% considering it 'decreasing', while 3% viewed it remaining 'the same as before' i.e. no change or increasing/decreasing (Table 5.14). An unusual answer of 'increasing' the extent of monga does not seem to be factually correct as the research team has witnessed its severity in declining condition. This over statement may be attributed to the fact that they may expect a big volume of relief materials or cash money if they provide a rosy picture of monga increasing which is far from reality.

#### **5.15 How often does monga occur in your locality?**

Data furnished in the Table 5.15 showed that majority of the respondents (38.43%) interviewed indicated occurrence of monga in almost every year, followed by 38% reported it happening every 5-7 years, 5% termed it every 2-3 years and 3% perceived it happening in every alternate year, while a big group 21% considered it happening every 10 years and above.



It is true that monga occurs in greater Rangpur region almost every year because of its topographical locations engulfed by the big rivers like Teesta, Brahmaputra, Jamuna, Dud Kumar, Padma, Jamunashwari, Darla, Ghagot, Bangali, and their tributaries as well as natural calamities, such as floods, river erosion, droughts, hailstorms, cyclones, excessive rainfall causing flash floods, severe cold, etc. Because of its typical geographical characteristics and natural disasters, greater Rangpur region is always frequented by monga almost every year, if not then every alternative year. So, monga is a bane for the unfortunate people of Rangpur region which they cannot escape from.

#### **5.16 Why does monga occur in Rangpur region only but not in other districts?**

Data presented in Table 5.16 showed a variety of responses indicating the reasons why monga happens in the greater Rangpur Region only compared to other neighboring districts. This is the most pertinent and crucial issue the respondents were asked to comply with, or respond to, what they perceived as the main factors of incidence of monga in greater Rangpur. A majority of them (22.43%) informed that no work opportunity is there in the lean season of Ashwin-Kartick prior to harvesting of amon paddy since the region is absolutely rice-based agriculture-dependent, followed by about 21% as river erosion and floods being a riverine zone, 12.31% as perennial floods zone causing crop loss and poverty-prone area, more than 12% as no industrial enterprises or mills and factories, 6% considered it as poor harvest or crop loss due to floods and river erosion, and another 6% viewed it having no scope of overseas employment due to poverty, illiteracy, unskilledness and financial crisis. Other groups, though small in size and percent, provided very interesting information such as they are illiterate so unemployed and jobless (4%), local leaders and well-off neighbors do not support them in times of crisis nor take care of the poor people (3%), mostly charlands due to floods and river erosion (5), traditionally poverty-stricken and food shortage area (4%) and no govt help/ support for skills development training nor send them abroad for gainful employment (3.30%), respectively (Table 5.16)





From an in-depth analysis of all these statements provided by the household heads two burning issues come to the fore: One is lack of work opportunity in the agriculture sector and thus no scope for income earning to buy food items apart from the Rangpur region being a perennially poverty-stricken riverine zone and food shortage area frequently visited by floods, river erosion, droughts and such other natural disasters, and secondly – illiteracy is very prominent in the region resulting in unemployment, jobless, compounded with no industrial establishments (large or small) enabling them to find out alternative sources of employment opportunities and income earning and above all no government help or support for skills development training programs in order to make them technically skilled for overseas employment. The most striking point is to be noted that the local leaders and well-off rich neighbors are not supportive nor take care of the poor people in times of their real needs and extreme crisis. This implies that the so-called affluent neighbors appear to be lack of social responsibility towards the community people or in other words they are self-centered.

#### **5.17 Consumption of food items during monga**

Respondents were asked to tell about their food intake pattern with frequency of meals taken and item of food intake at the time of monga. Data furnished in Table 5.17 revealed that most of the poor households (41.14) consumed over night water-soaked coarse rice with salt, onion and chili, followed by (27%) households who took rice with arum leaves, banana sheath and other poor quality vegetables collected free of cost from the roadside khas land/fallow land, canal banks, etc, while 15% consumed potato mesh or sweat potato with rice and 9.29% took broken coarse rice with leafy vegetables collected from roadside, khas land or fallow land and still a small group (4.15%) used to consume puffed rice, 'muri' with 'gur' (mollasses) apart from varieties of food combinations they consumed at different times of meals in the morning (breakfast).

Different types of foods they used to take at afternoon (lunch) and night (dinner) time were also presented in Table (5.17). All members of the households go out for work or begging at day time, so they cannot find time to cook at home during noon time or lunch. Sometimes they take small amount of food if provided or offered by others. But most of the times they go hungry or without meals at noon.



At night time or dinner they usually follow the same pattern of eating habits as that of morning except few exceptions if they could earn money either by himself or by other members of the family. In most cases, left over or uneatable portion of rice available free of cost at the nearby hotels/ restaurants are collected by them and taken together with poor quality curries available either at free of cost or at cheaper rate. A very few handful of affluent people could, however, afford to eat rice with fish, vegetables and sometimes chicken too. But none among the munga-affected poor people could afford to eat beef or mutton, not even at the time of Eid-ul-Azha since the rich people or other well-off people cannot afford to sacrifice animals during Qurbani (Muslim religious) festival. Consequently nobody gets any opportunity to have a taste of meat of the sacrificial animals. This implies that the well-off people also maintain austerity at the time of munga so that they do not have to face the occasional starvation of food at that particular time of the year.

#### **5.18 Number of meals taken by the respondents during munga**

The data presented in Table 5.18 showed a wide range of information relating to the number of meals taken by the households during the time of munga. More than one-third or in other words every one of three persons (35%) had the opportunity to have only one meal a day and nearly close to this figure another group of people (30%) survived on others' mercy or alms and take meal only if it is provided by the generous people. Besides, nearly 11% people depend on relief materials provided by GOs, NGOs and donor agencies, while another small but insignificant group (3.30%) did go on hungry without single meal a day. Two to three meals a day are also eaten by some people (6.73% and 10.68% respectively ) Some ones (2.17%) are also not sure whether they could eat at all or a single meal a day, apart from a few households (21%) used to eat one or two meals on every alternate day. This scenario thus entails a gloomy picture of the poor households who lead a very precarious life and livelihoods during the time of munga. This implies that munga is a bane to them which forces them to going without meal or one/two meals a day and sometimes one meal on alternate day.



### **5.19a & 19b Which time of the day respondents go without food and reasons thereof**

When respondents were asked to indicate which meal time (day or night) they used to go without food, three out of four households (75%) reported it at night time, while only 4% at day time and the remainders (19.25%) did not respond (Table 19a). This trend is more or less of uniform pattern in all districts except Kurigram.

Reasons cited by them for going to bed without food at night are that while sleeping at night they did not feel hungry so severely or it could be better sustained if an organic product, locally known as 'gul' (a kind of tobacco product/leaf mixed with a flavour colour) is put inside the mouth. This gul acts as a sedative or some sorts of addiction they resorted to. This is a local technique developed by them to survive without taking any foods at night.

Table 19b presents a variety of reasons cited by the households about why they go without foods during day time. Day, they consider, is the time for earning, so they used to cook at night with whatever they could earn at day time. They used to cook only one time at night and a portion of food stuffs they keep for eating in the following morning. When asked to tell about what they eat at night they felt a little embarrassed, it seemed, but told that they eat something of so poor quality which is not worth mentioning. They expressed a heap of sigh while narrating it.

### **5.20 Distribution of respondents according to land ownership**

Land is an important asset for crop production, food security, shelter and many other economic activities. It is a means of production. Land, in many respects, forms the basis of power structure. Landlessness is the main cause of poverty and shelterlessness. So, access to land is a crucial issue in respect of social status, economic power. Land is also a guarantor of socio-economic development and employment opportunities (Barkat et al, 2007).

As has already been discussed in the preceding section that the rural households of greater Rangpur are primarily dependent on agriculture, but majority of them are either landless or marginally landless owning less than twenty five decimals of land (PKSF, 2008). This indicates that most of the rural poor households in greater Rangpur hardly own any cultivable land. This implies that farm lands are mostly concentrated in the hands of a few with skewed distribution of this scarce resource.



Table 5.20 summarizes the land ownership pattern of the greater Rangpur Region. Data showed that nearly 40% of the respondents are either landless or absolute landless having neither homestead nor any piece of cultivable land. Over every one of two households (51%) is either marginally landless or functionally landless having farm land from only one digit to two digit i.e. one decimal to fifty decimal of land. Only six percent of households had hand from 51 to 100 decimals, while 2.50% of them had land ranging from 101 to 250 decimals. A negligible group (0.59%) had land from 250 to 500 decimals (Table 5.20). This implies that land distribution pattern in greater Rangpur is absolutely skewed with large concentration of land in the hands of a few fortunate people. This finding is also supported by the studies conducted by PKSf (2008), Zug (2006) and Ali (2008) in the greater Rangpur region.

#### **5.21 Cultivation of vegetables in the vacant spaces of the homestead and reasons thereof**

Table 5.21 presents the responses provided by the households in respect of cultivation of vegetables in the vacant spaces of their homesteads and the reasons cited by them as to why they are unable to cultivate in the spaces mentioned above.

Nearly two-thirds of the households (63%) reported that they do not have any vacant land in and around their homesteads, while 10% informed they live on others' lands and 9% had no money to invest for this purpose. Some also reported that the vegetables they grew are destroyed by poultry birds and goats, while 18% did not respond. This implies that because of their landlessness and living on others' lands as well as no cash money to invest, they are unable to cultivate vegetables in the homesteads under reference, Besides, if they could at all grow some, these are also subject to destroy by poultry birds or goats. These are some of the reasons cited by them for not growing vegetables in the homesteads.

#### **5.22 Reasons cited for cultivation of traditional crop varieties as perceived by the respondents**

Table 5.22 explained the reasons why the respondents preferred to cultivate traditional crop varieties over other high yielding varieties. According to their perception, the local varieties they are using in their small size of farm land more than 24% thought those are high yielders compared to others, while 9% reported they followed the neighbors' practices in selecting the





varieties and 3% perceived the local varieties could survive even with rising water during flooding. Nearly 64%, of course, did not respond. This implies that they are very much influenced by their neighbors who act or influence as a decision-maker. This is quite natural that they have more social interaction with the neighbors every now and then and whatever they do, they do it jointly in order to reduce the risk factors. Although a small group (3%) but they are highly calculative about the selection of varieties rather than higher yield. Local varieties have the genetic strength to survive with even the rising water while flooding compared to the HYVs which cannot thrive with the rising flood waters. It is a scientifically proven idea.

### **5.23 Reasons cited not cultivating HYVs as perceived by respondents**

Data provided in the Table 5.23 revealed that respondents put forward a number of reasons why they are least interested to use high yielding varieties (HYVs) for which required inputs such as seed, fertilizer, irrigation water are not available in time (2.3%), small farm size (2.04%), HYVs not so good than those of local varieties (2.57%), neighbors do not cultivate HYVs-so they do not (5.01%), use whatever varieties available in the local market (2.24%), while a small group (0.06%) had no cultivable land nor do they can manage 'barga' land (share cropping) for crop production, as they are poor none gives them 'barga' (sharing of farm produce based on certain terms and conditions between the landowners and the producers tenants locally called bargadar or adhia), respectively. But great majority of the households (85%) did not respond. This implies that because of landlessness, and not getting land on production sharing basis, high cost of inputs (seed, fertilizer, pesticides, irrigation water) and their non-availability at times of need, small landholding or farm size, the poor households are not interested to cultivate HYVs, rather they preferred use of local traditional varieties since they need low cost inputs or less amount of inputs.





## 5.24 Measures suggested by the respondents as to how to bring Khas/fallow land under cultivation

There are vast areas of charlands or Khas/fallow lands in the monga region. If those lands are distributed among the landless or could bring those lands under cultivation, more hungry mouths could be provided with foods apart from building food stock on one hand, and could ensure maximum use of available scarce land on the other.

The amount of Khas lands currently available in greater Rangpur Region could be gleaned from the following table (Table 5.24.1)

**Table 5.24.1 Distribution of Khas lands in Greater Rangpur Region**

District	Amount of Agril Khas land (acre)	% of Agril Khas land	Amount of non-agril Khas land (acre)	% non-agril Khas land	Amount of Khas land(Agril+non-agril)(acre)	% of khas land (agri+non-agri)
Rangpur	28436	3.54	285	0.02	28721	1.15
Nilphamari	18071	2.25	1437	0.09	19508	0.78
Lalmonirhat	8282	1.03	4077	0.24	12359	0.50
Kurigram	7475	0.93	322	0.02	7797	0.31
Gaibandha	3072	0.38	19172	1.14	22244	0.89
All Districts (Total)	65,336 (72.09%)	8.13	25,293 (27.91%)	1.51	90,629	3.63

Source : Barkat et al, 2009 : Political Economy of Khas Land in Bangladesh pp 34-36

Data presented in the Table 5.24 showed that 71% of the poor households in greater Rangpur Region wanted to arrange distribution of Khas lands to the landless agricultural labourers for building food security in the region and also to ensure maximum use of land, the scarce resource, followed by 11% of them demanded protection of their crops grown over there from the grip of floods and river erosion with adequate drainage facilities in order to ensure their crops from waterlogging (3%) while 6% respondents wanted arrangement of crop loan at softer terms or low rate of interest and more than 5% wanted arrangement of production inputs like seeds (HYVs), fertilizer, pesticides and irrigation water and make them

available in time. Another 4% of respondents wanted to have an opportunity to get 'barga' or sharecropping which is so far not allowed to them because of their poverty and landlessness.

This implies that if Khas/fallow lands are judiciously distributed to those landless farm workers who lost their lands to river erosion many times in their life times would be able to bring those lands under cultivation and produce enough food to feed their hungry mouths. The overall measures they suggested if implemented would go a long way to get rid of munga starvation and socioeconomic development of the region.

Table 5.24.1 showed that in all five districts of the region, the total amount of agricultural Khas land appears to be 65,336 acres (72.09%) or 26,452 ha while non-agricultural Khas land is about 25,293 acres (27.91%) or 10,240 ha. Thus the total amount of Khas land (agricultural and non-agricultural combined) stands at 90,629 acres or 36,692 ha in the greater Rangpur region. Of the five districts, Rangpur holds the largest share (3.54% of country total) followed by Nilphamari (2.25%), Lalmonirhat (1.03%), Kurigram (0.93%) and Gaibandha (0.38%) totaling 8.13% of the country-total, respectively (Table 5.24.1). This is the percentage share of the total amount of agricultural Khas land available in Bangladesh (8,03,309 acres or 32.26% of total), while total amount of non-agricultural khas land is 16,86,354 acres or 67.74% of total Khas land. However, the total amount of Khas land available in Bangladesh is 24,89,663 acres or 10,07,961 ha (1.08 million ha) combining both agricultural and non-agricultural Khas land (Barkat, et al 2009). This indicates that a sizeable amount of Khas land in greater Rangpur region could be easily distributed to the landless farm workers as a part of the land reform process if government desires so. But again it absolutely depends on the on-going political commitment of the present leadership or administrative machinery.

**Table 5.25a Do you cultivate 'Barga' land (Sharecropping)?**

Sharecropping or 'Barga' system (production sharing of farm produce based on unwritten terms and conditions) is a common practice in Bangladesh from the time immemorial. It is a kind of agreement between the landowners and the crop producers or tenants which is popularly known as 'Barga' system in almost all over Bangladesh. But the crop sharing system varies from place to place across the country. Different terms and conditions of crop production (1:1 or 1:3) sharing are on practice in different parts of the country depending on supply of production inputs like seed, fertilizer, irrigation, etc.

Table 25a presents data relating to the cultivation of crops based on 'Barga' or share cropping system. To a related question of how many of them were involved in 'Barga' cultivation, only 25% of the households replied in the affirmative while 75% of them in the negative. Among those who positively responded, only 9% of them were involved in barga cultivation round the year i.e. in all crop seasons, 13% in boro season, 2% in amon season and a small group (1.25%) in rabi season, respectively

Most of the households in the region are either landless or marginal farmers having a small piece of farm land ranging from 05 to 50 decimals. So they earn their livelihood either through selling labor to others' land or through cultivation of share cropping. Generally, the land is available for share cropping mostly for the 'Boro' season only. The data provided in the aforesaid table (Table 5.25a) also supports this hypothesis where majority of them (over 13%) got involved in the cultivation of share cropping during the Boro season compared to amon season (2% only). From the findings of FGD it also reveals that landowners prefer to lease out their lands during the Boro season only. During the amon season, they take back their lands and cultivate them on their own using family or hired labor. Boro cultivation is very expensive as it requires seed based technology such as HYV seeds, fertilizers, pesticides, irrigation, regular weeding and other intercultural practices that require intensive labor. Moreover, it is also hazardous, sometimes subject to hailstorms, droughts, cyclones, erratic power supply and high prices of production inputs. All sorts of hazards inflict upon the tenants or bargadars since land owners pay for irrigation cost only.



On the other hand, amon cultivation is relatively less expensive, rainfed with no irrigation and cost of inputs, and less hazardous as well. This implies that if the share-croppers are given land only for boro season, agriculture becomes less profitable for them (tenants), and sometimes it is not profitable at all. If the tenants are given lands for both the seasons, they could make a balance of the cost of inputs that they bear on Boro cultivation. Thus the agriculture could be made more profitable for the share-croppers if the land is leased out for all seasons. These findings were also corroborated by Hussain (2007) who conducted a similar study in Nageshwari Upazila of Kurigram district.

**Table 5.25b. Reasons cited for not getting land for share cropping as perceived by the respondents**

To a related question, when the respondents were asked to cite reasons why they are not getting land for share cropping, 24% reported that landowners being small holders used to cultivate by themselves, followed by 22% who were unable to manage land for share cropping as the landowners (also being poor) were not interested to lease out their lands for share cropping, particularly during the amon and rabi seasons while more than one-half (52%) did not respond. But a small group (about 3%) mostly from Rangpur informed that they do not get any support from landowners in case of natural disasters like floods, river erosion, droughts, pest attacks, etc. which eventually discouraged them to go for share cropping (Table 5.25b). This implies that the landowners seem to be more of exploitative in nature rather than supporting their tenants in times of natural calamities and do not like to share the loss of tenants while they are in distress conditions. Moreover, the landowners prefer to lease out their lands for share cropping during the boro season only when the production cost is very high.

**Table 5.26 How do you maintain your daily livelihood?**

Table 5.26 showed that more than one-half (53%) respondents maintained their daily livelihood through selling labor by working in others' land, followed by 12% by getting involved in farming, 11% by working as household helps or servants/maids in the urban areas, a little over 8% by doing small business/contractual/ part-time job, 7% by pulling rickshaw/van, while 3.49% by begging and equal numbers of households (3.49%) by collecting relief materials/alms or donations from others, respectively.



This implies that daily labor selling is the primary source of livelihood among the majority of the poor households. This becomes more acute at the time of monga caused by seasonal floods or flash floods due to excessive rainfall accompanied by upstream flow of water from the upper region, river erosion and such other natural disasters. This situation actually made them jobless/workless in the agricultural sector ultimately forcing them to full starvation or occasional starvation. Flood or natural disaster seriously hampers the agricultural production which, in turn, made them vulnerable in their livelihood as laborers.

**5.27a Did you participate in any skills development training programs for livelihood improvement?**

Training prepares an individual to be more innovative and responsive to new ideas or development process. Training is, therefore, a means to sensitize the rural people and increase their receptivity to respond to new practices required by any development program. Communication through hand-on training has been described as an effective means of exchanging information about new technology, concept or development syndrome. It is thus evident that training has a vital role to play in bringing about one's changes in attitude and traditional mindset in order to prepare them for new leadership at individual, community and local levels to adapt to changed circumstances. It is also a learning process to change his behavioral pattern as well as his fellow members of the society in order to increase their efficiency at individual or group levels (Sison, 1987).

Table 5.27a presents some responses relating to participation of respondents in any skill development training program where 2.48% replied affirmative and the rest 96.57% in the negative. This implies that no or very little efforts were taken by GOs, NGOs, POs or donor agencies towards the overall development of human resources in the greater Rangpur region. This is one of the key parameters to be considered for judging the developmental attempts so far undertaken by them to improve their efficiency for participation in the process of monga mitigation or poverty alleviation in the region. This is one point to postulate why and how the people of greater Rangpur are lagging behind in all aspects of development.



Those who responded positively (only 3%) reported that their training was also limited to one to two (01-02) days only in the areas of poultry rearing, handicrafts and micro credit. The sponsoring agencies of such training programs were BRDB, Union parishad or local government and some prominent NGOs, among others, are RDRS, PKSf, BRAC, ASOD, Grameen Bank, Jagorini Chakra, Poppy etc. (Table 5.27a and 5.27b).

#### **5.28 How many meals do you take daily during monga time?**

Data furnished in the Table 5.28 revealed that around 2.50% households went on hungry without a single meal throughout the day, followed by 48.45% had only one meal a day, 46% two meals a day, while a small group of fortunate people (3%) had three meals a day. This indicates that more than one-half of the households (50.89%) were either without meal or one meal a day affecting them to lead a life of occasional starvation either everyday or alternate day.

#### **5.29 Daily requirements and buying capacity of rice/ wheat per family**

Table 5.29 showed that the households in all five districts could not be able to buy food items, specially rice or wheat against their requirements. This implies that they had to be occasional starvation very frequently and they are subject to always vulnerable at the time of monga which affects their physical as well as mental health and moral and economic deprivation.

#### **5.30a Did monga happen in your area last year?**

Nearly 84% of the respondents reported that they had experienced monga in their area of residence while 16% said nothing like monga happened in their area (Table 5.30a). This is a self contradictory statement with divided opinions among the respondents. This may be attributed to reflect in their mindset as to what they individually or collectively perceived about what is known as monga. Perception of an event or incident reflects in one's mind differently since all minds and brains are not made of same ingredients by the God.



**Table 5.30b What problems did you encounter during the time of monga?**

Table 5.30b summarizes a range of problems as perceived by the respondents during the turmoil time of monga. Problems frequently cited are presented as follows by rank order::

<b>Problems cited</b>	<b>Rank order</b>
• Monga means suffering, less eating, go hungry without food or almost fasting	1
• Crop loss/no havest/no work to earn money and buy food	2
• Survive on taking loan from others, monga made us indebted because of loan and loan taken for survival at high rate of interest	3
• Sitting idle at home as no works available	4
• No work or no/.less income but food prices high in this distress situation	5
• Increase disease making us sick with no money to buy medicine or consult doctors	6
• Outmigration to other districts for earning made us socially insecure	7

These are some of the striking problems, among others, described by the respondents





**5.31 What was the degree of monga vulnerability last year compared to last five years?**

An attempt was made to get to know the degree of vulnerability in the monga region. The degree of vulnerability was classified into three categories, such as 'more', 'less', and 'same as before'. Accordingly, respondents were asked to indicate the degree of vulnerability in their respective area compared to last five years. In response, over 65% leveled it 'more' and 15% termed it 'less', while 12% perceived it remaining the 'same level as before' i.e. nor increase or decrease with a little over 8% did not respond (Table 5.31). On an average 24% respondents from Nilphamari considered it 'more' followed by 21% in Rangpur and 13% in Gaibandha, while 12% of Lamonirhat thought it 'less'. This implies that the degree of vulnerability appears to be 'more' as perceived by the respondents. To cope with this vulnerable situation, external supports from GOs, NGOs and donors are needed to mitigate sufferings of the monga affected people as a temporary measure.

**5.32 How did you face or cope with monga last year?**

Data presented in the Table 5.32 revealed a wide variety of coping mechanisms or strategies as perceived by the respondents. More than 56% respondents reported that they coped with monga by taking loan from others at a high rate of interest or earning income through diversified non-agricultural activities like small business, rickshaw/van pulling, blacksmith, vendor, hawker, household help, etc. followed by 13% who went on hungry without food for days together, 12% by eating less or half-fed/ ill-fed and sometimes begging, 4% reported they did not have any advance idea or preparedness to face such adverse situation, more than 3% coped monga by selling their valuables/household goods/ trees/ domestic animals (cattle, goat, sheep, poultry birds, etc.), still a small group of about 3% faced it by collecting relief materials, VGF, VGD, Old-age pension, widow allowance, TR (test relief) and 100-days job creation program while another group of over 2% faced monga by spending hard-earned small saving, business profit and selling hidden stock of farm produce (Table 5.32). This implies that although they did not have any advance thinking or preparedness to face monga situation, yet they coped



with this adverse situation by borrowing money from others at high rate of interest or selling valuable household goods including hidden stock of farm products, sometimes they also went on hungry without meal for days together. All these temporary measures to mitigate monga also made them more vulnerable in the next season as multiplier's effects. This indirectly forces them to get into the poverty cycle with no scope of return to normal life style in the foreseeable future.

**5.33 How much food stock at your disposal to overcome Monga during the remaining days?**

To this question, 35% respondents informed that they had food stock only for 1-5 days followed by 7% for 6-10 days and nearly 4% for 11-20 days, while 47% did not respond. But a small group of respondents (2%) had a stock for 21-30 days and another 5% for more than 30 days (Table 5.33). This implies that those respondents who took part in the interviews, majority of them (over 46%) had food stock for 01-20 days indicating that they will likely to be under the occasional food deprivation during the time of monga. Those who did not respond, it seems, they are likely to go hungry without any single meal a day or may have a meal on every alternate day.

**5.34 In case of going through monga what coping strategies did you adopt to face it?**

More than 55% of the poor households reported that their coping mechanism to survive was by taking loan from others at an exorbitant rate of interest or advance labor selling at low rate and also advance grocery arrangement with the traders at high rate of commodity prices, while 14% by earning little income through non-farm activities or spending small business profit, 7% by eating less or no eating and thus going hungry without meals, 6% by selling valuable household goods, trees, cattles, etc. and 5% were fatalists who depend on God's help and blessings, respectively (Table 5.34). The remainders (5%) faced monga by the help of external supports like relief materials, TR, Old age pension, widow allowance or spending hard-earned saving or hidden stock of farm products stored secretly to cope with monga. These are some of the strategies they adopted to face monga.



**5.35a and 5.35b Is there any individual or organization who takes advantage of monga over your distress situation? If so, who are those taking advantage of your helpless situation?**

In response to this question, nearly 91% did not respond and 9% replied in the affirmative (Table 5.35a). Among those who responded 6% revealed advance labour selling at cheap rate followed by 41% as advance farm product selling at low price and almost a similar numbers reported deprivation of fair price of farm produce with deduction of unfair crop production share if they are share-croppers. Another considerable group of nearly 6% reported exploitation through providing loan at high rate of interest (Table 5.35b).

This indicates that there is always a group of exploiting people in every society. They look forward to harvest benefits or take advantage of helpless and distress situation of the suffering people, particularly in the monga region. They forced the affected people to sell their labour in advance at cheaper rate in exchange of cash money or advance selling of their farm produce at lower rate depriving them of their fair prices or wages by lending them money at high rate of interest. This process of exploitation deserves to be ended by the government and NGOs through allocation of enough resources, specially for the monga-prone affected people by opening a special window in the Central Bank in the name and style of 'distress credit' at softer terms for disbursement to the monga-affected poor people only.

**5.36 In case of advance selling of labour and farm product, how much money you used to loss by percent?**

Table 5.36 shows that among those who responded almost all of them (19%) informed 20-40% of money they lost by selling advance labour and farm products, while a very few reported 40-50%. They had to incur losses by this practice or advance labour and farm product selling. To this group of destitute, helpless and vulnerable people, this loss of 20-50% is a big concern for policy decision. This deserves to be looked into by the policymakers and planners to formulate policy guideline in order to safeguard the interest of this vulnerable monga-affected poor people.



**5.37 Opinions expressed by the respondents as to how to stop this unfair practices?**

The opinions provided by the respondents as perceived by them are presented in Table 5.37 and are summarized as follows by rank order

Opinions Cited	Rank Order
• BY way of advancing loan to the affected people	1
• Advance buying of farm product at pre-determined market price	2
• Awareness building and organizing social movement	3
• Through Social Safety Net Program (SSNP)	4
• Stringent measures against the violators by the government	5
• Organizing social resistance movement against the exploiters	6

**5.38 Possible Solutions suggested to the problems caused by monga as perceived by the respondents**

Table 5.38 presents the possible solutions provided by the respondents to the problems caused by the incidence of monga as perceived by them. These are summarized below by rank order.

Solutions Suggested	Rank Order
• Creation of job opportunities round the year	1
• Establish industries, mills and factories to create employment facilities	2
• Ensure economic activities through expansion of trade and commerce	3
• organize job-oriented skills development training programs	4
• No job, no income because of floods, river erosion, natural calamities etc.and so hungry	5
• No relief, give us work opportunity for income earning	6
• Distribute Khas land to landless farm workers	7
• We believe in God, whatever He does is good for us i.e. fatalists.	9

### 5.39 Problems encountered due to climate change and environment causing monga

As reflected in Table 5.39, following is a list of problems encountered by the respondents as perceived by them due to climate change and environmental effects that are considered as eminent causes of monga. Among the respondents about 37% did not respond while 63% reacted positively. However, the problems very frequently cited by the respondents are presented below by rank order:

<b>Problems encountered</b>	<b>Rank Order</b>
• River erosion, floods, drought, excessive rainfall causing flash floods, hailstorms and dense fog etc. made us landless, homeless, rootless, cropless and assetless.	1
• No work and no business activities due to excessive rainfall dense fogs, hailstorms, severe cold, etc.	2
• Fall sick and cannot work because of high temperature, cold, rainfall, fogs and hailstorms	3
• Climate change causes damage to standing crops, hampers grain formation to paddy, difficult to livestock and poultry rearing, disruption in road communication networks due to floods, excessive rainfall, fogs, hailstorms, etc.	4

The problems highlighted by the households heads appear to be serious matters of concern. They have rightly pinpointed the serious consequences of climate change and environmental hazards inflicted upon their lives and livelihoods. The floods and flash floods not only made them homeless and cropless but also stop their all economic and business activities apart from the disruption of road communication networks, cause immense suffering to the livestock and poultry rearing including health hazards and making them sick and idle resulting no income earning and going hungry without meal.



All these issues they cited as problems deserve to be drawn the attention of the national policymakers and planners who are concerned with munga mitigation.

**5.39 Have you been victim to munga due to climate change? If so, then what is the degree of munga vulnerability?**

To this question, nearly 92% households responded positively while only 8% did not respond. Among those who responded, their responses were classified into five categories ranging from very 'high', 'high', 'almost same', 'less' and 'very less' (Table 5.40). This classification was made to ascertain the degree of vulnerability caused by climate change and other natural disasters in the munga region. Among the respondents who reacted positively, majority of them (45%) termed the degree of vulnerability as 'very high' followed by 18% reporting it remained as 'almost the same' but over 16% termed it as 'high', 8% perceived 'less' and another 4% considered it 'very less' (Table 5.40). This implies that nearly two-thirds of them (63%) leveled the 'degree of vulnerability' varies from 'high to very high'. Thus the climate change seems to be an important factor for causing munga in the greater Rangpur region.

**5.41 Whom do you think among the group of people and organizations would not be helpful to face the calamities of munga or natural disaster?**

Data provided in the Table 5.41 revealed a wide range of information about the groups of people and organizations who will not be helpful to the affected people at the crucial times of their needs to face the calamities of munga or other related natural disasters. Among them, 59% of the households thought that the Union Parishad Chairmen and members were the persons who would not be helpful or stand behind the affected people during such calamities although they are the elected representatives of the local government organizations at the grass-roots level. This is a very serious negative impression they castigated against the UP representatives. The next group they levelled non-responsive is the NGO officials (6%), social development workers (2.64%), govt, officials (1.58%), and PVOs (0.59%). This implies that the munga-affected people have no or least confidence upon the UP Chairmen and members who, in principle, should be the most helpful and close aids to the affected people as their local level people's representatives.



They have also the least trust upon the officials of the GOs, NGOs, PVOs and social development workers who are, directly or indirectly, worked with the suffering people at the time of natural calamities like monga, floods, river erosion, famines, etc. An attempt could be made at the policy level to re-orient the local government officials, specially UP Chairmen and members and also GOs/NGOs officials to provide all kinds of support and succour to the affected people in times of their crucial needs and crisis. This is needed to offset or remove the negative impressions already formed against them for the sake of crisis management and local level socio-economic development.

#### **5.42 Where do you sell or market your agricultural produce?**

Table 5.42 provides information relating to the marketing outlets of the households where they used to sell their surplus production of farm produces. According to them, there are groups of buyers such as village retailers or middlemen (fari'as) at the village market and wholesalers or dealers.

Among those who responded, 12% reported that they sell their farm products to the village market followed by 0.9% through village retailers or middlemen (locally called 'farias') and 0.59% through the wholesalers or dealers. Interestingly, 87% households did not respond. This implies that a great majority of them (over 82%) are landless so they do not produce surplus nor do they produce enough that needs marketing. Whatever quantity they produce, if any, they consume them at the family level. So marketing of agricultural produce does not appear to be an important issue for them.

**5.43 Have you been cheated /deprived to getting fair price of your farm produce? If so, provide the reasons of not getting the fair price.**

Data furnished in Table 5.43 showed that 91% of the households did not respond. Among those who provided information relating to the marketing of farm produce, only 5% told less price given by the farias or middlemen, followed by 2% termed middlemen or farias as cheaters, 1.45% did not know the market price of farm produce as they are illiterate while 0.72% reported bad road communication between the farmgate and market assembling places. This implies that since the households are very poor having no land or small farm size they do not produce enough for marketing, rather they do not bother about what they produce and what is needed for marketing to get a fair price of their agricultural produce.

**5.44 What do you suggest to ensure year-round fair price of your farm products?**

The valuable suggestions provided by the respondents are summarized in the Table 5.44, although over 87% did not respond. Suggestions recorded are however presented below by rank order:

<b>Suggestions Provided</b>	<b>Rank Order</b>
• Fair price chart be hanged/ pasted in the prominet market places for public awareness	1
• Ensure govt. fixed price while selling farm products	2
• Administrative steps be taken to ensure fair price through enactment of law.	3
• Improve road networks to encourage more buyers to the remote places	4
• Do what govt. thinks good for the welfare of the producers	5
• Arrange direct purchase from the farmgate by the govt agencies	6



The suggestions thus provided may be looked into at the policy level to ensure fair market price of the farm products with an ultimate goal of encouraging more production at the farmers' level as well as ensuring fair price to the producers which, in turn, will be favourable at the consumers' level. Thus the interest of the producers as well as the consumers will be safeguarded through healthy competition among the buyers-sellers.

**5.45a Have you been ever gone to other districts for doing agricultural jobs during monga ?**

To this question, nearly 40% households replied in the affirmative while 60% in the negative (Table 5.45a). This indicates that outmigration to other districts is in practice among the respondents to earn income for their survival. Historically, people of greater Rangpur are simple and family-oriented. They do not usually like to cross the river Jamuna unless they are forced or displaced by natural disasters. Their family members also do not encourage them for outmigration to other districts because of both social and economic reasons. They feel insecure if the male household heads go outside the homestead or home town. This is also quite logical to discourage them particularly by the wives, as also learnt through informal discussion with other inmates of the household. The main reason behind this assumption that once they go to other districts in search of job or earning income, some of them may not return home and settle there where they worked, get married again and not take care of the previous wife and children left at the ancestral home. In that case, wives are the worst victims who are socially at risk and financially also not getting any support from the husbands. Based on this intuition, wives are discouraging their husbands to go to Dhaka or other far-way districts for earning.

**5.45b Please name the districts you went to earn money during monga**

To a subsequent question, where do they visit for earning money they mentioned as many as 16 districts. The most frequently cited districts based on number of citations and preference are : Comilla, Dhaka, Bogra, Brahmanbaria, Tangail, Noakhali, Syhlet, Chittagong, Feni, Mymensingh, Sherpur, Barisal, Rajshahi, Munshiganj, Patgram, (Lalmonirhat), Dinajpur, etc. (Table 5.45b). These are some of the districts, among others, where they probably get comfortable to work.



One interesting thing is conspicuous to see the dozens of banners of different colors hanging on roof tops of shops or business enterprises located along the roadside of the regional highway leading from Kurigram to Nageswari-Burungamari road. Any one first time travelling to this area may get confused to see the multi-colored banners and fastoons and their meanings to know why and what for these banners flying atop of the roadside business establishments. These banners are, in fact, the advertisements meant for drawing attention of the interested and prospective passengers or labourers willing to travel by buses from this area to the south-eastern districts of their choice, specially Dhaka - Chittagong route via Comilla, Noakhali, Feni, Choudhagram and Dhaka-Sylhet via Narsinghi, Brahmanbaria and Habiganj routes. From informal discussion with the locals as well as from the FGD participants it is transpired that these banners serve as their marketing channels for a large number of agricultural wage laborers who migrate to those districts during the time of munga for better income earning.

**5.45c. How many days you spent in other districts per trip?**

Table 5.45c revealed that 60% household-heads did not respond and among those who responded 34% of them spent more or less upto 30 days in each trip while they were on work in other districts followed by 5% who spent 30-60 days and less than one percent stayed 60 to over 90 days. This implies that they usually spent 30-60 days per trip in the migrated districts and then come home with some earnings to support the family at the time of distress to enjoy a comfortable time with the family members.

**5.45d. How much money you have earned per trip ?**

Data furnished in Table 5.45d indicated that the respondents earned more than Tk. 500 to 5000 per trip depending on the number of days they worked. More the days they worked, more the earning. Their average daily net income ranges from Tk. 100 – 150 beyond food and lodging which is borne by the employers. This appears to be a good income considering the off-season lean period when labor-intensive agricultural work is not abundant.

**5.46a and 5.46b Did your wife refrain you from going to other districts for earning? If so, please give reasons, why?**

To a related question whether the wife ever acted as a barrier to refrain them from going to other districts for earning, 4% replied in the affirmative while 96% in the negative (Table 5.46a). This implies that except for special reasons, wives were never a barrier of their going to other districts for work. This is a positive reflection of their wives.

Table 5.46b revealed the reasons cited by the respondents as to why some of their wives, though a negligible percentage point, were not found an obstacle or barrier to going other places for work. Among those who responded negatively, their responses are summarized as follows by rank order:

Reasons Cited	Rank Order
• Not aware of bad consequences	1
• Foresee problems of another marriage if he goes away or may not provide monetary support	2
• If husbands fall sick at far-way places	3
• Nobody likes to be away from home	4
• No male adult member at home to look after	5

There are some of the reasons cited by the respondents as perceived by them in respect of why wife becoming an obstacle for going to other districts for income earning.

**5.47 At what age do you arrange marriage of your daughters/sisters?**

Table 5.47 revealed the information relating to appropriate age of marriageable daughters and sisters in the monga-affected districts. In all districts combined, 67% or two out of three respondents indicated that the age of 16-18 years is the ideal for marriage, followed by 20% perceived 19-21 years, 10% thought it 13-15 years, 3% reported 22-25 years and still a negligible percentage (0.46%) considered as appropriate at the age of 10-12 years.



Early marriage between 10 and 18 years is considered as inappropriate although it is rampant in the monga region probably because of poverty situation and social pressure. Even now, the data presented in Table 5.47 showed that over 77% of the respondents still favoured their daughters' or sisters' marriage should be arranged from 10 to 18 years of age. It seems that they thought birth of a daughter is a curse to them since they have to provide dowry to the bridegrooms at the time of their daughter's marriage. Moreover, it requires huge costs due to social pressure otherwise they will be ostracized by the influential people of the society if certain social norms and rituals are not followed at the time of marriage.

**5.48a Do you arrange marriage of your daughter or sister below 18 years of age?**

Table 5.48a showed that 20% of the respondents replied in the positive side while 80% in the negative. This implies that early marriage is still in practice and 20% of them favoured it.

**5.48b Please provide reasons why you prefer to arrange your daughter/sisters' marriage before 18 years of age.**

In our country the official age of marriage for girls is 18 years and for boys is 21 years. But many people ignore this acceptable age for variety of reasons like poverty, social pressure, wills of the parents or grandparents, social safety and protection, social customs, etc.

Table 5.48b presents a good number of reasons cited by the respondents as to why they prefer early marriage of their daughters or sisters before the official age of 18 years. The reasons thus cited are summarized below based on the number of citations and preference by rank order.





Reasons Cited	Rank Order
• Younger the age lesser the amount of dowry needed	1
• Better to get them married off if good bridegrooms are available	2
• Marriage is a matter of luck, once they become grown up better to dispose of	3
• Being poor we cannot afford to provide food, cloth or education, so why should we keep them at home?	3
• Very difficult to keep marriageable daughters under control at home since bad boys run after them	5
• Nobody looks after all these hazards, so age does not matter	6
• Sometimes they fall in love and choose their life partners at their sweet will	7
• Being orphan having no parents its better to get them married off	8

These are the perceived reasons cited by the respondents regarding early marriage of their daughters or sisters before the official age of marriage at 18 years. This necessitates a stronger awareness building, social movement to motivate the parents about the ills or harmful effects of early marriage, particularly about their reproductive health, Members of civil society, mass media, GOs, NGOs and POs have a greater role to play in this regard.

**5.49 Do you have to give dowry at the time of your daughter/sister's marriage? If so, what is the mode of payment?**

Table 5.49 provides some interesting information concerning dowry at the time of their daughter/sister's marriage. Provision of dowry is in practice in our society since the time immemorial although there is nothing written in any society or religion in this regard. The amount of dowry and its terms and conditions varies from class to class in the society based on the social standing of the couples and their parents. But in the monga region or in greater Rangpur dowry is a must without any question at any level of the couples. Without dowry no marriage takes place as reported by respondents and also revealed by the findings of FGD and case studies.



It is evident from the above table that 9% did not respond while the rest 91% positively reacted. The mode of payment of dowry varies from cash money through ornaments, valuable household items, homestead with dwelling house to cultivable land. Payment of cash money also ranges from Tk. 5000 to 300,000 depending on the quality and qualification apart from social status of the couples and their parents. Information provided in the table indicated that about 62% of the respondents used to pay dowry between Tk. 5000 and 25,000 followed by 12% ranging from Tk. 25,000 to 50,000, 3.41% informed between Tk. 50,000 and 100,000, respectively. Some respondents though small in numbers reported that the parents of the bride had to pay dowry their homestead with dwelling houses as well as cultivable land, the last resource of the parents. This means that parents of the brides become homeless, landless and assetless, and consequently rootless for payment of dowry, This is, of course, a social menace and social ill that should be addressed by the guardians of the society. A social movement may be organized by the govt. to contain this menace with the active participation of GOs, NGos, Civil society, mass media, educationists, intelligientia, local govt. officials like UP Chairmen and members with enactment of stringent law for the violators.

**5.50a and 5.50b Do you smoke regularly? If so, why ?**

To a query whether they smoke or not, nearly 54% replied in the affirmative while 46% in the negative (Table 5.50a). Smoking is a social disease and health hazard for all shades of people men, women, young and children alike.

Smoking is rampant in greater Rangpur region since the raw material of Bidi and cigarettes, the tobacco, is abundantly grown in the monga region. As a result, more tobacco-based industrial establishments are located every where and any where in the region. So people connected with tobacco production, manufacturing, processing and marketing are very much habituated in smoking, Besides tobacco by-products like gul, shada' jarda etc. are made of tobacco leaves causing the health hazards for people of all ages, particularly children.





Table 5.50 b provides a good number of reasons cited by the respondents as perceived by them. All these reasons are presented below by rank order.

	<b>Reasons Cited</b>	<b>Rank Order</b>
	Cannot give up now, become addicted to and bad habit developed since childhood	1
	Get relieved of tension of food insecurity and family problems for the time being	2
	Feel bad without smoking, and cannot concentrate on works	3
	Cannot get rid of old habits	4
	Learnt bad habits from bad companionship, so cannot give up totally	5

The reasons cited above may be taken into consideration while preparing the anti-tobacco campaign by different agencies of GOs and NGOs who are connected with eradication of tobacco cultivation and promoters of anti-tobacco campaigns.



**B. Feedback from the Field Level Administrators, Policymakers and Implementers of Different Programs and Projects Undertaken by GOs, NGOs, POs, etc.**

**1. Socio-demographic Profile of Administrators, Policymakers and Implementers of greater Rangpur region**

The distribution of administrators and policymakers-respondents according to their socio-demographic characteristics such as age, gender, marital status, family size, educational attainment, organizational affiliation, area of specialization, years of service in the present position, etc. are presented in the supplementary Tables 1-7 and other feedbacks or responses in Table 8-27, respectively.

The findings showed that 22% of the respondents were young and within the age range of 26-40 years, 58% middle-aged within the age bracket of 41-55 years, while another 20% were 55 years and above. Their overall age varies from 26-63 years with an average of 43.82 years and SD 8.36. As expected majority of the policymakers (over 58%) were middle-aged and fell within the age range of 41-55 years and combinedly beyond 55 years, they constituted 78% (Table 1).

Table 2 shows that 92% of them were males while 8% females. In respect of civil status, 97% were married and 3% unmarried (Table 3). As regards the family size, 75% had a smaller family size of 2-4 members, 24% had 4-6 members per family while only one percent had a larger family size of over 6 persons (Table 4). The average family-size was found to be 3.85 with a range of 2-9 members per household and SD 1.12. However, the average family size of the policymakers (3.85) is quite below the national average of 4.9 per household and that of greater Rangpur region of 4.6 per family (BBS, 2009).

The data presented in Table 5 revealed that the policymakers had the highest educational attainment with 10% of them having Ph D degrees, 60% had Masters and 30% were 4-years Bachelors degree holders. Almost all of them had the opportunity to get advanced trainings abroad for several times to update their knowledge and professional achievement, particularly the district level administrators like DC, SP, ADC, ADM, DD (Agri.), etc. The relatively young officers working at the Upazila level also had the Ph. D degrees. This implies that the younger officers took the opportunity to get the highest level of academic accomplishment.

Table 6 showed that the respondents were affiliated to different nation building organizations of both District and Upazilla levels like civil administration, police administration, department of agricultural extension (DAE), research organization, academic institutions, development administration (practitioner), senior NGOs executives, PKSf, media personnel, etc. More than 57% respondents belonged to government organizations (GOs), 31% NGOs and the rest 12% represented various organizations of research, academics, development institute and media.

Data presented in the Table 7 indicated the years of working experience in the munga-affected areas as well as tenure of services in the present position. They had an average service length of 16-26 years and 5.38 years in the munga region with SD 8.75 and 5.31, respectively and a range of services varying from 2-38 years in total and 1-24 years in the present position. The findings also showed that majority of the policymakers and administrators had specialization in civil administration, resource management, economics, public administration, agro-rural development and human resource management

**2. Involvement in the implementation of programs/projects relating to munga mitigation and names of those interventions.**

Table 8a and 8b revealed that when they were asked about their involvement in the implementation of any program / project relating to munga mitigation in the greater Rangpur region, 63% of them replied in the affirmative while 37% in the negative. The names of the projects they got involved were : VGF, VGD, TR, 100-days job creation, PKSf-funded PLDP II, munga mitigation project through cultivation of early maturing rice variety namely BRRI- Dhan 33 and DFID-funded chars livelihoods programs or CLP (asset transfer program as grant money like poverty reduction through livestock and poultry rearing, etc).

To a further query, whether the munga-affected people were really getting benefits from such interventions, 64% replied positive while 36% negative (Table 9a). How the project participants were being benefited to a further inquiry, they provided a series of responses which are reproduced below: access to cash flow, food aid, relief materials, food for work, cash for work (100-daysjob creation program),VGD, VGF, TR, rice harvesting in munga-month through cultivation of early maturing BRRI-Dhan 33, micro-credit, etc.



Table 10 showed level of awareness of the respondents about incidence of monga in the greater Rangpur region. The level of awareness was however classified into three groups, such as ‘fully aware’, ‘partially aware’ and ‘not aware’. In this regard, 74% of them were ‘fully aware’, followed by 11% ‘partially aware’ and only one percent ‘not aware’ respectively.

### 3. Understanding the Meaning of Monga

The term ‘monga’ is defined by different groups of respondents differently as perceived by them. Although there is a short-cut definition as ‘poverty or shortage of food in a particular lean period of the year when there is no work opportunities nor any other scope of income earning for the agricultural laborers i.e. in the months of mid September to mid November. However, when the respondents were asked to define the concept of monga, they provided a variety of responses as its meaning (Table 11). All of their responses are presented below by rank order.

<b>Monga Defined</b>	<b>Rank Order</b>
● No work, no income, no money to buy food items and temporary unemployment due to seasonal shortage of agricultural works prior to amon harvesting	1
● Seasonal shortage of food and no purchasing capacity due to lack of cash flow	2
● People living below the poverty line as it is a poverty-stricken area	3
● Access to technical know-how or knowledge due to lack of institutional support	4
● Monga is a kind of seasonal poverty syndrome with no work and income earning opportunities	5
● Monga is a time-dependent (timely fixed) seasonal food crisis period	6
● Monga is more of a political issue rather than actual reality or situation	7
● Periodic poverty due to non-availability of agricultural activities and other source of income earning (prior to amon harvesting)	8
● Monga is a motivated and a bogus term mostly used by media and political elements as an instrument to exploit the situation.	9

The terms described above defining the meaning of monga appear to be very interesting. Thus the understanding of monga incites anyone to go into the deepest possible to get the real insights of the term *per se*. Monga has also got the connotation of political flavour and media propaganda apart from its socio-economic dilemma.

By analysis of all the terms and statements as cited by the respondents a conclusion can be drawn about the real meaning of monga. Thus literally the term monga is defined as a **‘seasonal deprivation of food due to non-availability of agricultural activities and no other sources of income earning opportunities during the pre-harvest time of amon paddy, specially in the Bangla months of ‘Ashwin and Kartick’ (mid September to mid November)**. Moreover, during this odd season, prices of food items also go up. As a result suffering of the monga-affected people goes unabated with no buying capacity of food items compounded by their high prices and thus suffering increases leaps and bounds.

#### **4. Incidence of monga and its duration**

To a question ‘when does monga take place’, a number of responses concerning the incidence of monga were recorded, although 19% did not respond. Nearly 36% reported that monga takes place in the month of September to November, 14% in Ashwin-Kartick’ (mid September – mid November), 10% in August – October, while 4% in the month of March –April, respectively (Table 12.).

It is a fact that monga usually occurs twice a year – the ‘big’ one or severe monga takes place in the post-floods months of September-November prior to amon paddy harvesting while the ‘small’ one or ‘less’ severe monga happens in the Bangla months of Chaitra-Baishakh (March – April) prior to Boro paddy harvesting. It does not get so much widespread media reporting since other non-agricultural job opportunities like road construction, earth cutting, brickfields, rickshaw/van pulling, etc. are available alongwith farm activities in a smaller scale with no suffering of floods, river erosion and related natural disasters.

From the information contained in the above statement it appears that monga happens twice-one in September-November and the other in March – April, respectively..

To a further query 'how long does monga exist', the highest number of respondents (29%) replied that monga exists for about 60 days, followed by 28% reporting it exists 90 days, 15% for 30 days, 8% for 120 days, and still a small group (3%) said it exists for about 150 days, although 17% did not respond (Table 13). However, the average days of existence of monga appears to be 61.25 days with a range of 0-150 days and SD 39.4, respectively.

If the three figures from 30-90 days are combined together, the percentage of people responded stands at 72%, or in other words nearly every three of four respondents said that monga exists from 30-90 days in a year covering the both monga – one in post-flood wet season but prior to amon harvesting and another one in flood-free dry season prior to boro paddy harvesting. From this analysis it could be concluded that monga, in fact, exists for about 2-3 months in a year covering both post-flood wet season in the months of September to November and flood free dry season in the months of March-April spreading over both big and small monga, respectively.

##### **5. Occurrence of monga and its extent of suffering**

To a related question, when the respondents were asked (at the time of interview in the months of September –November) to indicate whether monga already started or not, 63% of them replied in the affirmative while 37% in the negative (Table 14a). To a further query, if it so, then what was the extent of monga suffering affecting the people, majority of them responded to this question narrating its scale of suffering. The extent or scale of monga was measured in a 4-point Likert Scale, such as 'very severely', 'moderately', 'not affect so much' and 'not affect at all', respectively. In order to assess the measurement of scale of monga, 43% of the respondents termed it 'moderately', followed by 7% 'not affect so much', 6% said it did 'not affect at all', while 7% of them reported 'very severely' (Table 14b). If the three responses out of four are combined together the scale of suffering of monga stands at 56% ranging their feedbacks from 'moderately' to 'not affect at all'. So it can be said the scale of monga was not so severe during the year of investigation i.e. the year 2008.



## **6. Vulnerability of Monga and its Impact on Peoples' Sufferings**

Respondents were asked to indicate whether monga affected last year (the year under investigation) in their locality and if so, what was its vulnerability. To this, nearly 82% of them replied in the affirmative while 18% in the negative (Table 15a). The vulnerability of monga or its extent of suffering was classified into three groups, such as 'most' severe (intolerable level), 'to some extent' (tolerable level) and 'did not affect so much'. Over 44% of the respondents reported that the vulnerability was to 'some extent or tolerable level' followed by 'most severe' or intolerable level (28%), and 'did not affect so much' by 10%, respectively, while 18% did not respond (Table 15b). From the analysis of the first and last two figures combinedly, the level of vulnerability stands at 54% (44%+10%) from 'tolerable level' to 'did not affect' so much responses are considered. So the level of vulnerability appears to be at tolerable level. Findings from FGD and case studies also supported this statement.

## **7. What is the severity of monga this year compared to previous years?**

The severity of monga was measured in three levels, such as 'more severe' 'less severe' and 'almost same level' i.e. not high nor low. When the respondents were asked to tell about the level of severity of monga, more than 54% reported it as 'less severe' this year compared to the previous years, followed by 14% as 'almost same level' while 11% termed it as 'more severe', respectively (Table 16). If two responses of 'less severe' and 'almost same level' are grouped together, the figure comes around 68% i.e. more than two-thirds of the respondents reported it as 'less severe to almost same level'. This implies that the severity of monga this year (year of investigation) was less or remains almost the same level compared to the previous years. Findings of FGD, case studies and survey proper (main text of manuscript) also provided the same conclusion.

To another question whether monga vulnerability increases or decreases in the recent year, nearly two-thirds (64%) respondents reported it decreases slowly, followed by 10% termed it remains static i.e. neither increases nor decreases, while 8% said it increases severely, although 18% did not respond (Table 17). But from overall analysis it appears to be decreasing gradually as supported by the 74% respondents.



**8. Does monga occur every year in this locality? If so, for how many years has it been happening?**

To this question, every four out of five respondents (81%) were of the opinion that monga has been happening in their respective localities almost every year, while 19% differed who were on the negative side (Table 18a). In the follow up question, they were found divided over the years of happening monga in the previous years. Over one-third of them (35%) reported it has been happening during the last 5-10 years while more than 44% perceived that it has been happening for last 20 years or even more. It is a question of memory to recollect and it is difficult to recapitulate the past events correctly. Whatever may be the situation, it appears to have been happening in the past years ranging from 5 to 20 years and more. So this is an age-old problem which needs to be addressed in a planned way so that strategies could be formulated and designed in a phased way i.e. short, medium and long-term planning for its permanent solution rather than sporadic approach.

**9. Specific reasons cited why monga occurs in this particular region of greater Rangpur compared to other districts?**

When the policymaker-respondents were asked to cite specific reasons why monga occurs only in greater Rangpur district instead of other districts they provided a long list of some thoughtful insights which were presented in Table 19. All these insightful responses were summarized as under by rank order.

	<b>Reasons Cited</b>	<b>Rank Order</b>
•	No other scope of alternative employment opportunities except agriculture, people are not hard working, low income area (less wage rate), so they are poor.	1
•	Perennial floods, river erosion and droughts (as it is a riverie zone geographically)	2
•	No industrial establishments for creation of job opportunities and alternative sources of income earning	3



•	Most people are poor and landless, low quality of sandy soils in the char lands where crops do not grow	4
•	No technical skills and competencies due to lack of skills training support	5
•	Lack of education, poor literacy rate and thus lack of knowledge	6
•	Disaster-prone area with natural calamities like droughts, floods, river erosion and climate change vulnerability	7
•	Lack of social and political commitment, lack of political awareness.	8
•	Ultrapoor poverty stricken people who are basically lazy and idle, not self-motivated to go out ( for better income) to other districts (beyond the river Jamuna).	9
•	Actually monga is mostly media-created rather than actual situation since it is not so severe every year	10
•	Low wage rate (for agricultural laborers)	11
•	Early marriage, dowry system, polygamy, so over population with high population growth rate	12
•	Monga exists in all districts but people here are less mobile compared to other districts	13
•	People are lazy, idle and less aware in greater Rangpur compared to other districts	14
•	Rangpur region is a calamity-prone vulnerable area due to floods, river erosion, climate change, droughts, etc.	15

These opinions expressed by the respondents are really commendable which bears their in-depth insights about the occurrence of monga, particularly in the greater Rangpur region. The peculiar geographical location truncated and surrounded by so many big rivers actually made them vulnerable to the vagaries of nature and poverty stricken. Lack of political awareness, social and political commitment are also important factors to make them helpless and nature's dependent. No organized efforts in respect of resources allocation in the heads of education, infrastructure, institutional credit, skills development training and above all, no establishment of industrial units to create alternative sources of employment opportunities were hardly undertaken. In fact, no visible development interventions were

undertaken in Rangpur region before the regime of military dictator and ex-President General H.M. Ershad.

Now it is the right time to address those issues raised above before the situation goes further from bad to worse.

**10. Knowledge about food habit of monga affected people and type of foods they used to take during monga period.**

To a query whether the respondents were aware of about what kind of foods people eat at the time of monga, 74% replied positively while the rest (26%) in the negative (Table 20a). To a further question, what type of foods they used to eat during monga time, 24% of them reported that people eat rice with poor quality vegetables available at free of cost at the roadside or khas lands, followed by 15% told rice mixed with sweet potato, 12% reported rice with banana stalks and poor quality leafy vegetables or arum leaves and 9% said overnight water soaked rice with potato curry/ mesh and also other combination of foods as depicted in the Table 20b. It seems that monga affected people survive under difficult stress situation in fighting with nature and hostile environment.

**11. Social problems like early marriage, dowry, polygamy, in Rangpur region and their possible solutions.**

12.

Incidence of early marriage, dowry and polygamy appears to be a rampant practice in the monga region of greater Rangpur district. Early marriage is a social disease and a violation of the fundamental human rights, particularly the reproductive health of the victims is concerned. So is the ill practice of dowry and polygamy. These are some of the issues that need to be addressed at the policy level with all seriousness and priority.

To a query to the respondents to get to know about the social problems as indicated above, 69% of them replied in the affirmative while the rest (31%) in the negative (Table 21a). To a further question, what and how they could handle these social menace, they provided a series of opinions towards the possible solutions of such problems. The insights and opinions cited by them (Table 21b) are presented below by rank order:



	<b>Solutions Suggested</b>	<b>Rank Order</b>
•	Motivation for awareness building	1
•	Establishment of more industries, mills and factories	2
•	Stop early marriage, dowry, polygamy	3
•	Organize vocational/technical training for skills development	4
•	Promote income generating activities (IGA) and male migration to other districts	5
•	Provide bank loan at low rate of interest for increased crop production and business/economic activities	6
•	Attempt be made to increase food production to reduce poverty	7
•	Social mobilization for entrepreneurship development	8
•	Ensure marketing facilities and rural market development	9

The suggestions provided by the respondents deserve attention of the policymakers for formulating appropriate interventions to get them involved in the agro-rural development activities with a view to reducing their poverty level and thus saving them from the grip of monga.

**12. Do you think agricultural diversification and synchronized planting will help generate alternative income opportunities to face monga? if so please provide suggestions as to how to implement this idea.**

To a related question to the respondents whether agricultural diversification would help generate alternative sources of income earning opportunities, 53% of them indicated a positive signal while the remainders (47%) differed in this proposition (Table 22a).

To a further query, how could they think it is possible, they provided a range of suggestions which, if implemented, will go a long way to generate alternative sources of income earning opportunities (Table 22b). The probable solutions they suggested are furnished below by rank order:



	<b>Suggestions Provided</b>	<b>Rank Order</b>
•	Large investment in establishing big industries and agro based industries	1
•	Development and promotion of early maturing HYV rice varieties	2
•	Ensure supply of production inputs like HYV seeds, fertilizers, pesticides institutional credit at low interest rate, irrigation facilities with subsidy.	3
•	Promote research and studies to generate information for new programs formulation in agriculture	4
•	Demonstration on best land use practices and changing cropping pattern	5
•	Introduce sand-friendly crop varieties including fruits, vegetables and spices	6
•	Introduce large scale afforestation in the char areas (greenbelt scheme) for improvement of soil quality, soil conservation and protection from river erosion	7
•	Provide technical training support for skilled manpower development	8
•	Promote cultivation of high value crops (HVCs) instead of tobacco	9
•	Large-scale investment for educational growth and development including infrastructure development	10
•	Provide micro credit with low interest rate	11
•	Generate new technologies and their transfer to the farmers for increased production	12
•	Create more job opportunities round the year	13
•	Promote GOs, NGOs partnership for rapid development	14
•	Distribution of Khas land to landless and poor farm workers	15

The above suggestions put forwarded by the respondents need attention of the planners and policymakers for policy formulation as well as design of appropriate interventions to mitigate the sufferings of the monga-affected people.



**13. Do you recommend establishment of more agrobased industries to face monga? If so, how this could be made possible?**

The greater Rangpur Region is primarily agriculture-dependent. Historically it is a surplus agro-production area. The major crops grown over there are : rice, Jute, sugarcane, maize, wheat, potato, tobacco, various types of HVCs, like vegetables, fruits, spices, etc. Because of its surplus production of agricultural crops, there is an abundant scope for establishment of agrobased industries. Keeping this view in mind, the respondents were asked to give a feed back and considered opinions whether such commercial venture could be made possible, 75% of them replied in the affirmative and 25% in the negative (Table 23a).

To a further query, how their ideas and insights could be materialized, they suggested a wide variety of opinions (Table 23b) which are summarized below by rank order :

	<b>Measures suggested</b>	<b>Rank Order</b>
•	Establishment of agrobased and bamboobased handicrafts industries	1
•	Public and private partnership (PPP) to initiate establishment of large industries.	2
•	Jute mills/sugar mills at smaller scale be established	3
•	initiative for entrepreneurship development	4
•	Provide skills development training for skilled manpower development/IGA program	5
•	Develop vegetables, fruits and spices (chillis, ginger, turmeric etc.) and gur-making processing industries at small scale for commercial production	6
•	Create employment opportunities for income earning	7
•	Establish small and medium enterprises (SMEs) for employment creation.	8
•	Ensure supply of gas, power and raw materials for big industries including development of Uttara EPZ at Nilphamari	10



All the measures suggested above by the policymakers-respondents are matters of concern and deserve policy decision. They covered all the potential areas where location-specific and abundance of raw materials are easily available for establishment of industries to face munga.

**14. Do you find ample scope of establishing cottage and bamboobased handicrafts industries to overcome munga problem? If so, what are your suggestions to implement this proposition?**

Anyone visiting the greater Rangpur region for the first time would be surprised to see the millions and billions of bamboo clumps and population located in every household and countryside roads leading from the urban centres to the remote villages. Resources of bamboo is a very promising asset where no other crops are grown. Any pragmatic attempt to make best use of this bamboo population will be economically dividend and commercially profitable.

Based on, this observation and best use of this resourceful asset, the respondents were asked to indicate whether there is any possibility of establishing bamboo based handicrafts industrials, 68% of them gave their opinions in favour of this proposition while 32% in the negative (Table 24a).

To a further query they provided a variety of suggestions (Table 24b) which are summarized below by rank order.

	<b>Suggestions provided</b>	<b>Rank Order</b>
•	Establish felt-need bamboobased handicrafts industries depending on resources	1
•	Impart technical/vocational training programs to produce skilled manpower	2
•	Allocate enough financial resources for promoting local agrobased industries	3
•	Market linkage for handicrafts products be ensured	4
•	Potato chips, corn flakes industries be established because of abundance of raw materials are available at cheaper rate.	5
•	Dairy farming and beef fattening farms and poultry rearing programs be launched	6
•	Awareness raising and motivation initiatives for the local people	7

•	Motivate people for outmigration to other districts and overseas employment	8
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The measures to this effect suggested by the policymakers-respondents appear to be of great importance. All these suggestions, if implemented, will go a long way to contain monga by providing them alternative sources of employment opportunities and income earning.

**15. Is trafficking of women and children a major problem in the monga-affected districts? If so, what are your suggestions to address this problem ?**

Trafficking of women and children is a major problem, particularly in the bordering districts. Monga affected areas are not an exception, although it is not so rampant in those areas. Against this backdrop respondents were asked to point out whether such menace exists in their administrative area, 32% of them agreed while 68% in the negative (Table 25a). As regards to address this problem for its solution, they gave a number of suggestions (Table 25b) which were summarized below by rank order.

	<b>Suggestions provided</b>	<b>Rank Order</b>
•	Public awareness building through motivation	1
•	Border or other law enforcing agencies be made alerted and vigilant to combat this menace	2
•	Strict vigilance and implementation of law by law enforcing agencies	3
•	Remove ignorance of people and educate them through motivation and awareness building	4

The measures suggested to contain the problem may be helpful to the policymakers as well as border and regular law enforcing agencies as a guideline or reference point in addressing the issue in the actual area of operation.

**16. Do you think climate change and global warming are key factors in aggravating the severity of monga? If so, please explain how these cause monga.**

The issue of climate change and global warming is a global concern. Right from the G-8 conference to the regional and national levels everybody is serious enough about the impact of climate and global warming that are the prime assaulting factors for natural disasters like tsunami, aila, earthquake, etc in the recent memory.

The greater Rangpur region is surrounded by some big rivers like Teesta, Jamuna, Dul Kumar, Padma, Brahmaputra, Darla, Ghagot, Jamuneshawri, etc. and hundreds of small rivers and rivulets falling into them. Although floods are an annual event. huge floods seem to be becoming more frequent turning into deluge that destroys crops, livestock heads, lives and properties of people including riverbanks erosion making the people to plunge into extreme poverty when they lose their cultivable lands and dwelling houses due to river erosion.

Temperature increase caused by climate change means that more snow will be melt in the Himalayas each summer and thus waters would run into the rivers increasing the chances of flooding and riverbanks erosion. The resultant effects of increased sea levels and frequent flooding due to climate change and global warming would mean that salinity is getting into the soils, making crop fields near the coastal belt useless for farming. The saline salt is also killing off mangrove forests that are a vital protection against cyclones, storms and tsunamis. Climate change could also increase the number and intensity of tropical storms in the country.

All these issues caused by climate change are the concerns of the policymakers. Keeping this view in mind, policymakers-respondents were asked to get to know to what extent they were knowledgeable about the impacts of climate change in aggravating the scale of monga, more than one-half (54%) of them replied in the positive side and the rest (46%) in the negative (Table 26a).



In favour of their arguments, they cited a number of responses (Table 26b). Their suggestions indicating the causes of munga due to climate change and global warming are presented below by ranker order.

	<b>Perceived causes of munga due to climate change and global warming</b>	<b>Rank Order</b>
•	Floods, riverbanks erosion	1
•	Crop loss due to flash floods caused by excessive rainfalls in the upstream	2
•	Economic hardship/financial crisis due to unemployment	3
•	No industries, no work opportunities to earn money	4
•	Poverty, unemployment and no scope of income earning opportunities	5
•	No harvest due to droughts, floods, excessive rainfalls	6
•	Cyclones, water surge, hailstorms, severe cold, high temperature, droughts etc. due to climate change.	7

These are some of the climate change issues which might be the causes of, or in aggravating the munga in the Rangpur region. The policymakers may have a look into these issues while formulating the policy guidelines.

**17. Do you have any other suggestions to solve munga problem? If yes, please provide your insights towards solving these problems.**

To a related question while the respondents were given the options to provide their valuable insights, 54% of them agreed and 46% disagreed (Table 27a). The insights they provided (Table 27b). were presented below by rank order.

<b>Insights/Suggestions Provided</b>	<b>Rank Order</b>
• Employment creation or job opportunities	1
• Establishment of agrobased industries, labor-intensive small industries, big investment in light engineering industries.	2
• Floods, river erosion, cyclones, hailstorms, etc	3

- Impart technical/vocational trainings for skilled manpower development 4
- Ensure works for monga-affected people 5
- Launching of Govt. special program to address monga 6
- GOs-NGOs coordination 7
- Develop short duration early maturing amon rice varieties and synchronized harvesting with before or during monga period for job creation 8
- Formulate special law to mitigate monga 9

The suggestions provided by the policymakers-respondents may be perused by the national planners and policymakers as a guideline or reference point while preparing any policy or intervention to address the monga issue. These appear to be the valuable insights and suggestions provided by the field level administrators, implementers and policymakers of different programs undertaken by GOs, NGOs and donor agencies who are directly connected with the monga victims. So they are more knowledgeable and insightful than the theoretians or good times countryside travelers using high cost pajeros and prados, etc.



## C. Findings of Focus Group Discussion (FGD)

As many as 20 focus group discussions (FGDs) were organized at least two in each upazila. FGDs were conducted using pre-designed checklist among the respondents who were severely affected by monga. Opinions expressed by them are presented below :

Following opinions were expressed by FGD participants :

### 1. What is meant by Monga?

- Lack of job opportunities.
- Lack of food from the month of Bhadra to Kartick.
- Poverty always.
- No agricultural activities during Monga period (i.e.; Aswhin-Kartick).
- No harvest due to seasonal floods, river erosion.
- Regular river erosion made us landless, homeless, shelterless, rootless and assetless

### 2. When does Monga happen?

- Mostly in the month of Bhadra, Aswhin and Kartick and also in Chaitra and Bhaishakh (Mar.-April)
- End of Bhadra to mid Kartick (severe Monga.or big monga)
- Falgun-Chaitra- Bhaishakh (Less severe Monga or small monga)
- These two types of big and small Monga are being encountered by the Monga affected people almost every year.

### 3. How long does it (Monga) exist?

- Two to three months.
- Two and a half months (big Monga) at the time of mid Bhadra to Kartick.
- One and half months (small Monga) during the month of Chaitra- Bhaishakh.
- This two type of Monga combinedly lasts for about 100 days.

### 4. What are the causes of Monga?

- River erosion.
- Floods.
- Excessive rain.
- Agriculture labors remain idle and cannot find any job at the time of monga (Ashwin-Kartick), flash flood, dense fog and cold, drought, severe chilling, excessive rainfalls etc.

rainfalls.

- No cultivable land, no crop to harvest.
- Living on others' land as mercy by makeshift arrangement.
- Ancestral home and agricultural land were washed away by river erosion several times during their life time. Ultimately they have no choice but to build houses on others' land as a mercy shown by the landlords. Sometimes they also build their houses on river bank or khas land. As a result they cannot raise any poultry birds, duck or cultivate any homestead vegetables. They cannot raise any domestic animals nor cultivate fishes in the ponds owned by the landlords.

**5. How many meals a day are taken during Monga period?**

- Most of the times one meal in a day.
- Sometimes some people eat 1 to 2 meal in a day.
- Sometimes not a single meal a day, i.e. they go without meal during the whole day.
- Sometimes they go without meal even for a week
- Some people told that they go without food not only during Monga period but also other times of the year. During researchers' visit at the time of Ramadhan just before Iftar an old women of about 80 years of age expressed a sign of poverty telling "for us Ramdhan goes round the year". This means that they can't find adequate food not only in the month of Ramadan or Monga period but equally they are under starvation or lack of food during the other period of the year.

**6. What do they eat with rice during monga?**

- Alongwith rice they take arum, banana sheath and/or other eatable grass or wild vegetables available free of cost in the road side/khas land and cultivable field.
- Sometimes they also buy different types of cheaper vegetables from the market if they could earn money.

**7. What coping strategies do they follow to face Monga?**

- They are unable to take any advance coping strategies as they do not have cash money nor they could build up food security due to poverty. Despite they are fully aware of the Monga consequences they cannot equip themselves to face it because of their year-long poverty and no cash flow at their disposal. Majority of the Monga affected people are quite aware of the techniques of survival mechanisms at the time of Monga but cannot execute their plan due to lack of hard cash, food stock or any other resources at their disposal. Not only during Monga but also during other times of the year they remain unfed or undernourished due to cash money, reserve food stock or other convertible exchangeable resources.

**8. What are the major crops grown in the Monga affected area?**

Rice, wheat, maize, potato, jute, tobacco, sugarcane, various types of vegetables, spices, groundnut, mustard, etc. round the year.

**9. Do you have any cultivated land, if so what is the season wise cropping pattern?**

To this query, almost all of them replied that they do not have any cultivable land nor even homesteads except very insignificant number of people who had a small piece of cultivable land ranging from 01 decimal to 15 decimals. So they don't have enough opportunity to raise crops or undertake any project of rearing goats, cattle fattening, ducks, and poultry or fish cultivation practices.

**10. Do you cultivate any crops within the backyard space of homestead?**

- There is no backyard land for cultivation of vegetables or any other crops.
- Whatever small spaces of land available they can not bring them under cultivation for lack of capital or cash money.

- Sometimes they go for cultivation but do not get good yield since they can not give inputs. Even those planted are washed away by floods in most of the time. As a result there is nothing left for them to harvest.

**11. How do you maintain your daily livelihood during monga and what are the sources of livelihood?**

- We maintain our livelihood by borrowing money from the money lenders or well-to-do neighbors at an exorbitant rate of interest.
- We maintain our livelihood in a manner of half fed, ill-fed or sometimes go for starvation or some times one meal in a day.
- We also take loan from NGOs and neighbors at a high rate of interest. We do not get any financial support from the affluent neighbors. They keep distance from the needy people like us at the time of Monga so that nobody could approach them for any help or alms fearing that we are unable to repay the loan if they lend us.

**12. Why does Monga happen in greater Rangpur and not in other districts? Reasons they cited are:**

- Most of the Monga affected people are landless as a result of which they can not produce anything for their livelihood.
- Flood is a perennial problem in greater Rangpur mostly caused by a number of big and small rivers like Teesta, Jamuna, Brahmaputra, Darla, Bangali, Korotoa, Dudkumar, Gagot, etc.
- Most of the agricultural lands are low and therefore subject to floods.
- Whatever small amount of land they have, they can not produce good crops due to lack of capital investment like fertilizers, pesticides, irrigation water, good quality seeds etc.
- Natural calamities like floods, cyclones, river erosion, drought, excessive rain, flash flood etc. are common in greater Rangpur compared to other districts. As a result crop production is severely affected in the riverine pockets.
- We can't migrate to other districts for search of job as we can not afford to travel because of financial crisis

- Our literacy rate is very poor. So we afraid to go outside of our locality.
- Rangpur is traditionally agricultural dominated area. We don't have any skills other than agricultural operations. Because of lack of competency we literally afraid to go to Dhaka or elsewhere for looking job.
- There is no industry in our locality. So we don't have any option to go for working and other alternative sources of income except agriculture labours.
- In case of outmigration to Dhaka, Comilla, Sylhet, and other districts, wife and children refrain them from going out apprehending that the outgoing husband or father, may not come back in immediate near future. This may cause a sense of insecurity and ignorance for the family members left at home. In that case they may not get financial support from the men in question rather they would be at stake for want of both financial and social security.
- Because of malnutrition, lack of education and other employable skills, people are less intelligent and therefore they cannot compete with others.

**13. Is there any early marriage in your area?**

- It was in practice before but not now. Because of strict rules imposed by the government, this practice of early marriage has reduced considerably.
- Sometimes few cases happen but they face problem when they go to the local government (UP) offices for birth registration. So it is now discouraged. Moreover, people currently become more aware of this situation than before
- People consider girl children as burden to their family. So they want to get relieved of if the girls are married off early.
- Young girls/ (ranging from 10-15 years) are on high demand for marriage as parents do not have to pay dowry.

**14. Is there any dowry system in your area?**

- It is a must. Without dowry no girls are married off. The amount of dowry may be cash or kinds. Again amount of dowry depends on prospect of the bridegroom. If he does a good job or better educated then the demand for dowry amount also goes up.

- Poverty is a perennial problem. In the process Monga affected people become assetless/landless and thus become further victim of poverty in arranging their daughters' marriage. At the time of their daughter's marriage they are to give dowry compulsorily ranging from an amount of Tk 40,000 to 1, 00,000. In addition, they are to provide transportation costs to the bridal party for their return journey apart from arranging a good dinner for the bridal party and valuable gifts to the bridal group and groom himself. This is particularly more applicable in case of Hindu community
- In some cases dowry negotiation takes place secretly between the parties just to avoid the social criticism but without it no marriage occurs in reality.

**15 Is there any incidence of women and children trafficking in the locality?**

- Usually there is no direct proof of it.
- We heard that it happens in the past but not now.
- Some said that a truck load of women and children was likely to traffic but it was caught red-handed by the local law enforcing agency.

**16. Why young children of about 8 - 10 years old used to smoke regularly?**

- It is because of environmental effect. Since greater Rangpur region is a prominent place for producing tobacco from time immemorial. Moreover, many tobacco-related industries especially bidi making are in existence for many years. Most of the young children around the industries are the workers of bidi making compaines. Consequently they become habituated of smoking since they have easy excess to bidi and other tobacco related products. Once they get habituated they become addicted to it and hence cannot escape from this bad habits.
- Outside the industries, both the parents (father-mother) used to smoking so the children also become habituated of chewing bidi since these are easily available.
- Sometimes because of poverty they used to smoking to get relief of tension and hungry. In this process they become addicted to smoking.

**17. Do you have any knowledge of family planning?**

Almost all of them replied in the affirmative. They are also in the habit of applying those family planning devices. As a result population boom is not so severe among the Monga affected people. Average family size varies from 4 to 6 except a few who have large families. But family size appears to be larger among the Monga affected people living in an around the tobacco factories, particularly in Lalmonirhat sadar, Gangachhara and Kaunia where large number of tobacco companies are established. Main reason of producing more children in such locations is to earn more additional money by working in those factories by the tender-aged children. They think that having more children means more income. Besides, they think producing more children is a kind of insurance to them as they could be able to earn more money for the family. A child of 6 to 7 years old could earn around 30 to 40 taka per day at the rate of Tk 5 for production of 1000 sticks while an adult gets a payment of Tk 50 to 60 a day. But factory management prefers employing young children of 6 to 10 years old since they are more efficient in production.

**18. Does the health worker come to your village regularly?**

Sometimes they visit to advice how to practice family planning devices which are supplied free of cost. They mostly advice women to take pills and other devices and hardly they consult the men to adopt condoms and relevant devices. This implies that women are the users of such devices and victims of negative impacts of those materials, if any, while the men are free of any tension or hazards of using such family planning devices.

Workers from different NGOs also visit us advising adoption of family planning materials. But health workers from the government department seldomly come and advice about the importance of health practices and nutrition.

**19. How far the schools are located and do you send your children to the school?**

Schools (public & NGO) are located within half km to one and a half km in the main land. But it is two to three km in case of char lands.

In replying to the question whether they send their children to school they replied in the affirmative. But they are unable to continue going to school since they cannot provide school dress and proper food and nutrition. Children after returning from school become dog-tired and ask for food but parents can not provide food to their children. Ultimately children become dropout from the school and look for earning income. They pushed a question “how could we send our children to school as we are unable to provide food and cloth to them”. This implies that dropout rate among the children of the Monga affected people is very high and therefore unable to continue studies because of poverty. The time spent going to school they may go to other houses for earning bread. In that case how could we expect better education and living for them.

**20. Do you have any plan for coping strategies of Monga?**

Yes, we have. But how could we implement it as we do not have surplus food nor money to preserve for Monga. While we cannot provide one meal a day, how could we implement plan for coping mechanism?

Some farmers having a small piece of land could keep separate a few small bags of maize preserved for consumption during the period of Monga. But percentage of such people is very negligible and insignificant.

### **Perceived suggestions as to how to mitigate Monga**

- Organize various training programs for awareness building and motivation of the Monga affected people. Suggested training programs are:
- i) Poultry rearing ii) Goat rearing iii. Fish cultivation iv. Handloom production v) Bamboo made handicrafts and cottage industries vi) Cultivation of vegetables, fruits and crops production vii) Cattle fattening etc.
- Since implementation of all these training programs needs a sizeable investment they should be provided credit and inputs for investment with interest free loan or low rate of interest
- .When they were asked why they are not taking loan from NGOs or other credit giving agencies they replied that many times we approach those agencies for providing loan but they do not respond to our request positively as we are poor and we cannot repay our loan as per their schedule. So they do not take any risk in providing loan to the assetless and homeless people like us. We are poor, day labors and live on hand to mouth, most of the times we go without food, how could we go for such investment for raising poultry birds, fish cultivation, fruits and vegetable cultivation, beef fattening and all such business enterprises.
- Most importantly they want opportunity to work rather than getting relief which is very humiliating and disgraceful to them. So give us job, no relief please.
- Also ensure market linkages in case of bamboo-made handicraft products and hand-loam products.
- Establish agro-based small and medium enterprises (SMEs) in respect of spices (chili, ginger, turmeric), sugarcane, jute, vegetables, maize, fruits, RMGs etc.).

- Establish large industries like jute, sugarcane, cotton for creation of more employment opportunities
- .Develop Uttara EPZ for establishment of more industrial units for job creation utilizing the scope of cheap labors.
- Arrange supply of gas and power to Uttara EPZ for industrial promotion

### **Findings of FGD at Imam Modaler Char, Berubari, Nageshwari, Kurigram**

In the char lands of Imam Momdal, there are 450 households of which only 20 families had got cultivable land and the rest are landless. These landless people even do not have their own homestead but they live on others' land. Their livelihood condition is very precarious since they do not have any other occupations or earning source. They do not have any other options but to go without food for days together until they receive any relief (cash or kinds) by GOs, NGOs or donor agencies.

People of these charlands do not have any other profession since their crop lands are usually washed away or destroyed by the occasional floods or flash floods. As a result they are unable to grow any kind of crops in the char land which are devoid of moisture during the normal times or drought period when there are no floods.

As they are so hard up in terms of cash flow no NGOs are even coming forward to help them since they do not have repaying capacity. They are absolutely assetless, resourceless or possess employable skills to do any income earning job.

### **DFID funded CLP (Chars Livelihoods Programs)**

One NGO namely Bangladesh Development Service Centre (BDSC) with financial assistance from DFID has been working there to support those helpless people in one time grant aid in cash money upto Tk 17,000 to purchase cattle, goat, boat or

any other income earning devices, six hundred taka per family as grant for the cattle feed per month, taka five hundred per month as nutrition allowance for sending their children to school. Besides they also provide medicare support through their employed paramedics including family planning devices. Those paramedics also make an effort for awareness building of the people to take care of their health, hygienic practices, nutrition values and advice them where from these services could be available. Package program of DFID funded grant support operation (asset transfer) is really commendable.

Besides, these 20 families having landed properties also exploit the helpless people in the form of extending loan money to them with high rate of interest and other unusual terms and conditions inflicted upon them. These helpless people arrange their daughter's marriage by selling every thing including their homestead to repay that money lenders or usurers. This is one symptom of exploitation by the so-called handful exploiters of having landed properties. Apart from this, there is a clear case of climate change and global warning as floods, droughts, river erosions are in sight conspicuously. Regular perennial floods in fact made them homeless, assetless, rootless, landless to lead a precarious livelihood, an unfortunate state of sorrowness and unhappiness throughout their remaining part of life

### **Education and Communication**

In the educational arena the locality is far from satisfaction. There is only one primary school and no high school or college within the vicinity of 10 to 15 km. The children could read up to primary level of education but they could not be sent to high school or collage which are not available in the locality. It takes about 6 to 7 hours to reach any upazila or high school or collage at the upazila level head quarters and about two days to go to the district head quarter, spending one day for one way upward journey and another one day for return journey. Whatever might be the distance of educational institutions the greatest hurdle is the communication by boat. The ferry boat service starts journey at 8 in the morning

from the nearby river gut and it returns in the afternoon only once daily. If anybody fails to avail of this boat journey he is stuck-up for the whole day. Because of such backward communication people or children are unable to avail the educational facilities available at the upazila or district headquarters. Consequently, there are no high school graduates among the 450 households in the char areas.

### **Population Growth**

This Imam Momdal Char area is relatively over populated compared to other Monga affected areas. This high incidence of over population appears to be primarily due to non awareness of family planning among the reproductive couples and non-visit of family planning service providers because of non-accessible to the area by road, river transport or other means of transportation. Due to inaccessible to the area there is no other recreation facilities like sports, cinema, video show, television or any other modern amusement. Illiteracy and chronic poverty may also be the other factors for high population growth.

## **Analysis and Summary of Findings of Focus Group Discussion (FGD)**

The FGD-participants opined that monga is of two types – one ‘big’ monga prevailing in the months of Ashwin-Kartik is of severe in nature happened in the post-flood wet season mostly due to lack of agricultural job opportunities and income earning prior to amon harvesting causing food deprivation and half-fed or hungry without meals, while the ‘small’ monga is not so severe held in the dry season months of Chaitra-Baishakh just before harvesting of Boro paddy.

Conventionally, monga is a state of food deprivation caused due to lack of employment opportunities and income earning. In addition, perennial floods, river erosion making them landless, homeless, shelterless, rootless, cropless completely dependent on other people and vagaries of nature. The temporary-food scarcity (i.e. no purchasing capacity to buy food for the family although abundantly available) made the monga-hit people even not to have two square meals a day, resulting in severe malnutrition as they are unable to have regular meals for days together. Lack of homestead or agricultural land also does not allow them to get the opportunity of self-employment like poultry rearing, goat raising or fishing. Food habits is also precarious. Only poor quality rice is eaten with vegetables like arum leaves and stems banana sheath or collected wild vegetables available free of cost at khas land or canal banks. The poor and marginally landless people are also affected by monga. But the ultra-poor and absolute landless are the ones who suffer most by monga.

The monga-hit ultra-poor cannot find credit or cash flow to cope with monga by doing some small business or support the hungry family. NGOs also do not support them with any kind of credit or cash money as they do not have the repaying capacity, not the question of GOs or other agencies arises. The people who have small crop land cannot depend on their crops for leading a secured life style mainly because of floods, flash floods due to excessive rainfalls in the upstream, droughts, hailstorms, etc. make them pauper by destroying their standing crops where they invested whatever little savings they had. So their crops often make them burden rather than supporting their security.

The respondents when asked as to how do they maintain their daily livelihood and its sources, they replied 'by borrowing money' from the money lenders or well-to-do neighbors at an exorbitant rate of interest. All these factors forced them into vicious cycle of poverty. Poverty has a greater impact on women folk. The culture of dowry makes them more vulnerable. Young girls are often asked to pay less or no dowry than their older sisters because of their tenderness and pretty look. So younger the girls lesser the amount of dowry. Early marriage is however on decline trend because of declining stringent law, as reported by them, monitoring by NGOs and government officials.. However, due to prevalence of dowry there is a trend for marriage at the age of 10-15 years by making them perceived as 'burden' to their families.

Other social vices, such as drug, smoking (tobacco), use of 'gul', 'jarda', etc and other related ones, even their parents used to smoke 'to get rid of tension, frustration and helplessness of poverty". It appears that the people of monga-hit areas are knowledgeable and aware of family planning practices. The average size of the family, however, varies from 4-6 except a few well-off families which is below the national average of 4.9 per household.

The poor people of Lalmonirhat sadar, Gangachhara and Kaunia of Rangpur get employment in the local 'Bidi' factories at a low wage rate of Tk. 60-80 per day. A child of 6-10 years could earn Tk. 40-50 daily at the rate of Tk. 50 for production of 1000 sticks, while an adult gets Tk. 70-80 a day. But the factory management are in favour of employing 6-10 years old children whose output at the day's end is higher compared to the adults.

All these factors have a negative impact on education of children. This also facilitates the practice of child labour. So the children enter into the labour market for struggle to earn a living at an early age rather than going to school.

It seems that the respondents have the perception of planning a strategy to cope with monga by growing more food. Some people having a small piece of land to cultivate

can preserve some bags of maize for consumption during monga. This indicates that they know the techniques or strategies as to how to obtain and consume food rationing during monga. Here lies the ways and means of strategies to overcome the monga vulnerability.

However, some of the specific suggestions of mitigating monga were provided by the FGD participants. These were reproduced below :

- Organize technical training programs for skilled manpower development so that they become eligible for local and overseas employment.
- Besides, other trainings like improved cultivation of crops, fruits, vegetables and spices, poultry rearing, animal husbandry like dairy and beef-faltering, fishing, bamboo based handicraft making and cottage industries, nursery gardening, etc. may also be organized for benefits of all groups of monga-hit people.
- Along with the trainings, soft loan or credit at low rate of interest should also be ensured with directives of utilizing the credit in meaningful ways.
- They feel humiliated if given them relief, rather they want work opportunity to earn their livelihood in descent way.
- Also ensure market linkages with buyers of both home and abroad for smooth marketing of their bamboo-made handicrafts.
- Establish agro-based small and medium enterprises (SMEs) of spices (ginger, garlic, turmeric, chilli) as well as jute, sugarcane, maize, potato, fruits and vegetables, ready made garments (RMGs), etc.
- Develop Uttara EPZ with supply of gas and power for industrial promotion
- Establish large industries for creation of employment opportunities.

## D. Findings of Case Studies

### \*Km óvW - 1

byg Zvi Kò| eqm 35 eQi| vqx wbevm jvjgwbinyUi Avv`ZgviX Dc`Rjvi %ek`Mv`gi  
A`b`i Rig`Z| cvievwik Rxe`b weevwZ Ges 4 mšv`bi RbK| Afv`ei Zvobvq KLbI  
`f`ji c`\_ cv evov`Z cv`iwb| we`kl t`Kvb weI`q cwkq|Y t`bB e`j K`òi mwb`ó t`Kvb  
t`ckv t`bB| hLb t`h Kv`Ri m`hvM cvq t`mUvB K`i| R`bli ci t`\_K `wi` I qIav  
wbZ`v`b`i m`z|x| `xN 35 eQ`ii GB Rxe`b t`Kvb`b 3 t`ejv t`cU f`i t`L`Z cv`iwb Kò|  
t`h`b KvR cvq t`m`b t`Kvb iKg Dbv`c`U mev`B`K w`b`q w`b Kv`U| Avi KvR bv t`c`j  
mviw`b bv t`L`q \_vK`Z nq| bv t`L`q \_vKv t`h KZ K`ói Zv f`<sup>3</sup> fMx bv n`j eSv hv`e bv|  
Kò g`b K`i t`hvM`Zv t`bB e`j Kgms`vb nq bv| Zel t`h me KvR Ki`Z cv`i t`m`\_t`jv  
fv` -KvZK gv`m Zvi w`bR G`jvKvq mPivPi \_v`Kbv| t``ki Ab`vb` v`b w`M`q gRix  
LvUvi B`"Q K`òi \_vK`jI A`bKUv fq Ges cv`wgK LiP t`hvMv`Z bv cvivi Kvi`Y KLbI  
hvIqv n`q D`Vwb| Kò w`b`R cov t`jLv Kivi m`hvM bv t`c`jI cov t`jLvi ,i`Z m`áK  
fvj e`S| Avi ZvB t`h Zvi t`Q`j t`g`q`K fvj `f`j cov`Z Pvq| w`š UvKvi Afv`e Zv  
m`ae n`"Q bv| K`òi AvM`ni Kvi`Y AviWAviGm G e`vcv`i mn`hvMZvi nvZ evov`jI  
K`òi evevi t`Mvovgxi Kvi`Y t`kl chš Zv m`ae nqib| K`òi `tL fMevb t`Kb GZUv  
Mixe N`i RbI w`j? t`hLvb t`\_K t`Kvb `c t`Lv hvqbv| t`jv`fi emeZx n`q  
Avb`QvKZfv`e h`I t`Kvb `c t`L Zvi GZUKI ev`Kevqb m`ae nqib| G`Z K`i  
`tL`eva Av`iv ev`o| fMev`bi w`bKU K`òi GKUvB PvIqv hZ`b GB cv`ex`Z t`eP \_v`K  
t`m Zvi cie`v`ii mev`B`K w`b`q t`hb AšZ `B t`ejv t`L`q-c`i t`eP \_vKvi gZ KvR Ges  
Kv`Ri gRix cvq| Kò AvR mviw`b bv t`L`q Av`Q| Avevi KLb Lvevi cv`e ZvI Zvi  
Rvbw t`bB| GB Kvi`Y K`òi t`Pv`L g`L t`Kej nZivk I DrKÚv| me`kl `tLfviw`š K`ú  
w`KQuv AvKvZ Ges Arfgv`bi m`i e`j Ònvgv`Mv GZUv Kó bv w`q fMevb Zvi Lv`P w`b`q  
t`M`jB cv`iÓ|

\*Km óvW - 2

`xN 35 eQ<sup>+</sup>ii Rxe<sup>+</sup>b ïa ¶lav Ges `vvi<sup>+</sup>`i mv<sup>+</sup>\_ mL<sup>+</sup>Zvi Av<sup>+</sup>iK bvg <sup>+</sup>Zvdv<sup>3</sup>4j|  
jvjgbinvU <sup>+</sup>Rjvi Av<sup>+</sup> `ZgviX Dc<sup>+</sup>Rjvi AŠMZ gni<sup>+</sup>LvPv Mv<sup>+</sup>g Zvi Avevm <sup>-</sup>vb|  
e<sup>+</sup>v<sup>3</sup>MZ Rxe<sup>+</sup>b <sup>+</sup>Zvdv<sup>3</sup>4j 2 mšv<sup>+</sup>bi RbK| AZ<sup>+</sup>š e<sup>+</sup>v<sup>+</sup>g<sup>+</sup>vb <sup>+</sup>jvK <sup>+</sup>nn<sup>+</sup>m<sup>+</sup>e mgv<sup>+</sup>R mL<sup>+</sup>v<sup>+</sup>Z  
\_vK<sup>+</sup>j| e<sup>+</sup>v<sup>+</sup>x Kv<sup>+</sup>R jvMv<sup>+</sup>bvi <sup>+</sup>Kvb <sup>+</sup>¶l<sup>+</sup> <sup>+</sup>bB e<sup>+</sup>j <sup>+</sup>Zvdv<sup>3</sup>4j bv<sup>+</sup>Lvk| me<sup>+</sup>KQ e<sup>+</sup>S ¶Kš  
Kv<sup>+</sup>R jvMv<sup>+</sup>Z cv<sup>+</sup>i bv e<sup>+</sup>j `tL <sup>+</sup>tevaUv A<sup>+</sup>b<sup>+</sup>i <sup>+</sup>P<sup>+</sup>q A<sup>+</sup>bK <sup>+</sup>tekx e<sup>+</sup>j Rvbvq|

eZgv<sup>+</sup>b <sup>+</sup>Zvdv<sup>3</sup>4j LeB AfveM<sup>-</sup>| <sup>+</sup>h<sup>+</sup> `b mvi<sup>+</sup> `b Kvgjv LvU<sup>+</sup>Z cv<sup>+</sup>i <sup>+</sup>tm<sup>+</sup> `b Zvi Avq 40-  
50 UvKv Ges <sup>+</sup>tm<sup>+</sup> `b <sup>+</sup>KvbiKg 1-2 <sup>+</sup>tejv AØvni<sup>+</sup> <sup>+</sup>te<sup>+</sup>P<sup>+</sup> <sup>+</sup>v<sup>+</sup>K| c<sup>+</sup>ik<sup>+</sup>gi Zj<sup>+</sup>bvq gRix  
<sup>+</sup>Kb Kg cvq Zv fvj fv<sup>+</sup>eB <sup>+</sup>Zvdv<sup>3</sup>4j e<sup>+</sup>S| ¶Kš, gL e<sup>+</sup>S mn<sup>+</sup> Kiv Qvov Av<sup>+</sup> ¶KQB Kivi  
<sup>+</sup>v<sup>+</sup>K bv| Lv<sup>+</sup> ` Zv<sup>+</sup> jKvq ZB ZZxqvsk meRx | GK Ask <sup>+</sup>gvUv fvZ <sup>+</sup>v<sup>+</sup>K| meRxi meUKB  
iv<sup>-</sup>vNvU <sup>+</sup>\_<sup>+</sup>K Kio<sup>+</sup>q Avbv Kpi cvZv A<sup>-</sup>ev Pii K<sup>+</sup>i Avbv KjvMv<sup>+</sup>Qi <sup>+</sup>gvPv| Av<sup>+</sup> <sup>+</sup>h<sup>+</sup> `b  
KvR cvqbv <sup>+</sup>tm<sup>+</sup> `b bv <sup>+</sup>L<sup>+</sup>q <sup>+</sup>v<sup>+</sup>K<sup>+</sup>Z nq| GRb<sup>+</sup> Zvi <sup>-</sup>xi mv<sup>+</sup>\_ cvqB SMOV nq| SMOvi  
Kvi<sup>+</sup>Y gb Lvi<sup>+</sup>c <sup>+</sup>v<sup>+</sup>K Ges Kv<sup>+</sup>Ri Afv<sup>+</sup>e <sup>+</sup>tekxi fvM mgqB <sup>+</sup>teKvi <sup>+</sup>v<sup>+</sup>K e<sup>+</sup>j D<sup>-</sup>vm g<sup>+</sup>b  
ZvgvK Lvq| c<sup>+</sup>Z<sup>+</sup> `b <sup>+</sup>tm 100-125 ¶U ¶e<sup>+</sup>o Lvq hvi evRvi gj<sup>+</sup> 6 <sup>+</sup>¶K 7.50 UvKv| ZvgvK  
Lv<sup>+</sup>qv<sup>+</sup>Z <sup>+</sup>h Zvi kv<sup>+</sup>iiXK ¶¶Z n<sup>+</sup>Q <sup>+</sup>R<sup>+</sup>bI <sup>+</sup>tm c<sup>+</sup>i<sup>+</sup>qv K<sup>+</sup>i bv| KviY Zvi g<sup>+</sup>Z Gf<sup>+</sup>e  
<sup>+</sup>te<sup>+</sup>P <sup>+</sup>v<sup>+</sup>Kvi Rb<sup>+</sup> h<sup>+</sup>x bv K<sup>+</sup>i g<sup>+</sup>i hv<sup>+</sup>lvB fvj| ¶Kš Zvi `tL hviv A<sup>+</sup>Ĝ GjvKvi ¶e<sup>+</sup>o  
evbv<sup>+</sup>bvi KviLv<sup>+</sup>bv <sup>+</sup>q<sup>+</sup>Q, Zviv ïa ¶e<sup>+</sup>o ¶e<sup>+</sup>µi UvKv ¶b<sup>+</sup>Z Gvm Mvov<sup>+</sup>Z Mvm jvM<sup>+</sup>q G<sup>+</sup>m  
UvKv ¶b<sup>+</sup>q XvKvq P<sup>+</sup>j hvq| Mvm jvM<sup>+</sup>q <sup>+</sup>q KviY Zvgv<sup>+</sup>Ki M<sup>+</sup>Ü Zv<sup>+</sup> `i kix<sup>+</sup>ii ¶¶Z n<sup>+</sup>e|  
<sup>+</sup>Zvdv<sup>+</sup>À<sup>+</sup>j i g<sup>+</sup>Zv ZvgvK <sup>+</sup>L<sup>+</sup>Kv<sup>+</sup> `i UvKvq gv<sup>+</sup> jKiv GKvU<sup>+</sup>i ci GKvU KviLv<sup>+</sup>bv M<sup>+</sup>o Zj<sup>+</sup>Q  
ivRav<sup>+</sup>x<sup>+</sup>Z| <sup>+</sup>Kvb<sup>+</sup> `b L<sup>+</sup>R <sup>+</sup>q<sup>+</sup>L<sup>+</sup>b A<sup>+</sup>Ĝ GjvKvq Zv<sup>+</sup> `i Zvgv<sup>+</sup>Ki e<sup>+</sup>emv GZ fvj n<sup>+</sup>Q <sup>+</sup>Kb?  
<sup>+</sup>KbBev <sup>+</sup>Zvdv<sup>+</sup>À<sup>+</sup>j Ges Zvi gZ Ab<sup>+</sup>iv GZ<sup>+</sup>ekx ZvgvK d<sup>+</sup>K, KvibvU KLbI ¶R<sup>+</sup>Ám Ki<sup>+</sup>Z  
Av<sup>+</sup>m<sup>+</sup>vb|

fv<sup>+</sup>el<sup>+</sup>Z c<sup>+</sup>ik<sup>+</sup>íbv t fv<sup>+</sup>el<sup>+</sup>Z <sup>+</sup>Kvb c<sup>+</sup>ik<sup>+</sup>íbv bvB| KviY Zvi c<sup>+</sup>ik<sup>+</sup>íbv ev<sup>-</sup>evq<sup>+</sup>bi <sup>+</sup>Kvb  
<sup>+</sup>¶l<sup>+</sup> ev m<sup>+</sup>hvM <sup>+</sup>bB| ZvB me Avj<sup>+</sup>ni Dci <sup>+</sup>Q<sup>+</sup>o <sup>+</sup>q<sup>+</sup>Q Ges Avj<sup>+</sup>ni<sup>+</sup>K Zvi `tL<sup>+</sup>eva  
Rvb<sup>+</sup>bvi Rb<sup>+</sup> GKbfv<sup>+</sup>e ZvgvK d<sup>+</sup>K AvKv<sup>+</sup>k <sup>+</sup>taqv Qvo<sup>+</sup>Q| h<sup>+</sup> ` Avj<sup>+</sup>ni c<sup>+</sup>¶ <sup>+</sup>\_<sup>+</sup>K GZKó  
vbim<sup>+</sup>bi <sup>+</sup>Kvb e<sup>+</sup>e<sup>-</sup>v Av<sup>+</sup>m| KviY <sup>+</sup>tm vekvm K<sup>+</sup>i Avj<sup>+</sup>ni AvKv<sup>+</sup>k Av<sup>+</sup>Qb|

### \*Km óvW - 3

Kiebi Bmjvg| eqm-16, evox M½vPov, Dc†Rjv m`i| †ckvq GKRb viKkv PvjK| †QvU  
tejvq †cvjI †iv†M GKU cv nvi†q†Q| Zvici †\_†K 1U gvÎ cv †b†q Rxeb msMvg  
Pvj†q hv†Q| viKkv PvkV ,ov†bv AZ`š K÷Ki n†jI †bgg ev`eZvi †kKvi Kiebi|  
hv`I GKRb cvZeiÜ †n†m†e †f¶ve†Ëi gva†g mn†RB UvKv DcvRb Kiv †hZ, †Kš †m  
c†\_ cv evovq †b Kiebi| KviY Zvi AvZ!m†y†b ev†a| †Kš Kiebi Le tekx`tL†eva K†i  
hLb †Kvb e`w<sup>3</sup> Zv†K cvZeiÜ e†j Ges cvZeiÜ nIqv†Z Zvi viKkvq Po†Z Pvg bv| AÎ  
GjvKvi AnaKvsk †jvKB Mixe e†j viKkvq Po†Z Pvg bv| Zvi Dci viKkv Pvj†q  
mviw`b †h Kq UvKv DcvRb K†i Zv w`†q gv Ges †QvU fvB †evb†`i †b†q †Kvb iK†g  
Abv†i Aav†i w`b †K†U hvq| Kiebi f†ov Kiv viKkv Pvjvq| Zvi `c hv` GKU  
viKkv †Kb†Z cv†Zv Zv†j cvZw`b f†ovi UvKv ,b†Z n†Zvbv| GBRb`MZ `B eQi a†i  
A†bKevi †m Dc†Rjv mgvR Kj`vY A†dmv†i Øvi` n†q†Q m`g<sup>3</sup> cvZeiÜ FY D†Ëj†bi  
Rb`| †Kš †Kvb dj nqv eis A†ZK†ó†i DcvRZ 250-300 UvKvi †g†ó Dr†KvP †n†m†e  
mgvRKj`vb A†dmv†i fvB†K Avc`vq†b Ki†Z n†q†Q| Kieb†i g†Zv c†ievi, mgvR,  
Ggb†K ivó Zv†`i gZ cvZeiÜi K\_v fv†e bv| c†Z`†K Zv†`i†K MjMn fv†e| GB Rb`  
msmvi Movi B†Q \_vK†jI cvZeiÜ e†j Zv†K †KD †g†q w`†e bv| A\_ev w`†jI †hŠZK  
cv†e bv| ZvB `c `cB †\_†K hv†e| †hŠZK bv †c†j weevn Kivi UvKv †K †`†e? Avevi  
Uvbn †cvo†bi msmv†i bZb Avi GKRb evovZ m`m†K †K LvIqv†e| ZvB gb†K †m k<sup>3</sup>  
K†i †d†j†Q| GLb Avi ni nv†gkvB `c †`†L bv Kiebi Bmjvg|

#### †Km óvW 4

ZviKj, Rvgvj, dinv`, gwkDi, Kwei, Rg†k` bv†gi 6vU evjK| hv†` i c†Z†Ki eqm 5  
†\_†K 12 eQi| Giv mevB jvgvbinvU m†ii evm>`v Ges AviiWAviGm †Rjv Awd†mi  
500 M†Ri g†a` G†` i emZevox| 6 RbB AvKR weioi KviLvqv KvR K†i Ges meviB  
cvb, weio, ,j BZvW` m`vq cvlqv me †bkvi mv†\_ `vi`b mL`Zv Av†Q| GB mL`Zv †Zix  
Ki†Z AvKR weioi Ges GLvbKvi cii†e†ki h†\_ó Ae`vb|

Iiv mevB †jvK m††L w`we` G RvZq †bkv K†i \_v†K| KLbl eoi v †KD Zv†` i evob  
K†iib| eis agcv†b eo†` i mvnv` Ki†Z wM†q Ges weio d`v±ix†Z KvR K†i webv cqmvq  
weio cvevi Kvi†Y Le Aí eqm †\_†KB Zviv mevB Avm<sup>3</sup> n†q †M†Q e†j AwfgZ cKvk  
K†i| gRvi e`vcvi G RvZxq †bkv †h Zv†` i Rb` †iZKi Zv Zviv Rv†b bv| mevB Lvq  
e†j Zviv Lvq| mevB GK K\_v †lavi Zvobvq \_vK†Z cv†i bv e†j GKU mg†qi Rb`  
n†j| †lavi Rvjv f†j \_vKvi Rb` Zviv G c†\_ cv evovq| G ai†Yi †bkv RvZxq `e`  
Lvevi Kvi†Y hW` Zv†` i †iZ nq Z†e Zv†` i †Kvb `tL †bB| KviY †L†Z bv civi K†óí  
†P†q Am` n†q g†i hvlqv A†bK fvj| R†bli ci †\_†K Rxb h†x hx Pvjv†Z n†Q e†j  
I†` i KviIB ††j hvevi mfvm` nqvb| Avevi AvKR weioi KviLvqv wki kigK w†m†e  
Zv†` i h†\_ó K` i Av†Q e†j Zv†` i wczv gvZv Avq †ivRMv†i cvVv†Z `v`Q` `teva K†i|  
gRvi e`vcvi 6vU evj†KiB ciev†ii AvKvi eo| mevB ciev†ii m`m` msL`v 5-10  
Rb| GZ eo civevi evbv†Z weioi KviLvvi h†\_ó fvgKv Av†Q| KviY Zv†` i eiev-gv  
Rv†b tekx mšyb Rb| w`†j Zviv weioi KviLvqv KvR cv†e Ges ciev†ii Avq †e†o hv†e|  
6vU evj†Ki Kv†iviB cov †jLv bv Kivi `tL†eva KvR K†i bv| I†` i GKUVB `c weioi  
KviLvqv KvR K†i †hb `tejv †Kvb iK†g †L†q †e†P \_vK†Z cv†i|

**†Km óvW - 5**

ZQjgv, eqm 40, evox bvlZviv, kvjnWU, Wgjl Pj k eqi eqmB 9U mšvbi gv nZ  
†c†i †m Le MweZl vgx ARGDİb, †ckvq †b gRi | †h †b KVR cvq †m †b 1 †ejv  
Aavn†i mevB†K †b†q †Kvb iK†g †L†Z cv†i | KviY cWİ †b 3 †ejvq Zvi c†iev†i 8  
†KvR Pv†j i c†qvRb | †Kš mviW †b A†b†i R†g†Z KVR K†i †h gRix cvq Zv†Z 1 †\_†K 2  
†KvRi †ekx Pvj †Kbvi mva †\_v†Kbv | MZ 24 NvUvq c†iv c†iev†i 11 RbB Af<sup>3</sup> Av†Q  
Ges GLb chš †Kvb Lvevi †hMv†Z cv†ib e†j ZQjgv Ges ARGDİb †BR†biB †Pv†L  
g†L İa bv †vKvi †e †bv | Z†e †Q†j †g†q †h †ekx Zv†Z Zv†`i †Kvb Avc†mvm †bB | KviY  
meB Avjw†i †vb | †lavi Rvjv f†j †vKvi Rb † ZQjgv Le †Rv†o †e†o Uv†b Ges †lavi  
Kó fj†Z †Póv K†i | ZQjgv Rvbvq g†vi mgq Avk b - KvZK gv†m mviW †b Lvevi bv  
RU†j gv†V-Nv†U K†o†q cvlqv me†R G†b †m× K†i †L†q †KQUv mg†qi Rb † n†j | †lavi  
Rvjv †gUv†bv †hZ | †Kš, GLb Kov†bv me†RI f†v†M †Rv†Ubv | ZQjgvi Av†qlc G ††k  
miKvi Av†Q A†bK abx e†w<sup>3</sup> eM Zv†`i †KDB ZQjgv†`i †\_†K bRi †`q bv | İa †fv†Ui  
mgq †`Lv hvq, †fvU †c†q †b†mPZ n†j Uv-Uv †`q P†j hvq | Zv†`i Avi †`Lv †g†j bv |  
Le †h†Mi mgq miKvi gv†S-g†a † Zv†`i †\_†K bRi †`q, Z†e GLv†bl Zviv ivRbWZi  
†kKvi | NI †`†j †Ksev †g†vi/†Pqv†g†v†bi AbMZ ††j i n†jB miKvix †i†jd Zv†`i f†v†M  
R†U | Ab †\_vq Lw†j nv†Z evox †di†Z nq | miKvi me mgq †i†jd †`†Z cv†e bv | GUv  
ZQjgv Rv†b | †Kš me mgq Zv†`i †e†P †vKvi Rb †c†Ui Lvevi †hMv†Z n†e | ZvB Zviv  
†i†jd Pvq bv | Kg Pvq | hv†Z Kg K†i †b†R†`i Lvevi †b†Riv †hMv†Z cv†i | A†b†i †bKU  
nvZ cvZv †Ksev miKv†i †bKU †i†jd Pvlqv Am††v†bi G Uv ZQjgv fvj K†iB Rv†b |  
ZvB †m †vqx KVR Pvq | Mv†g-M†Ä GiKg AmsL † ZQjgvi g†bi evmbv KZUKb ciY n†e  
†Ksev Av†`š ciY n†e †Kbv Zv †`Lvi A†c†lqv Avgi v mevB |



## \*Km óvW - 7

Rxeb h\*x i Av\* iK bvg bieiY| eqm 28 eQi| evox bxjdvgvix tRjvi Wgjjv Dc\* Rjvq| 6 tev\* bi g\*a" tm ZZxq| GK mgq XvKvq Mv\* gUm d" vKUi x\* Z kigK w\* m\* e KvR Ki\* Zv| nVvr Am^ Zvi Kvi\* Y U\* K \_vK\* Z cv\* iwb ZvB evox\* Z tdiZ Avm\* Z n\* q\* PQ| eix nIqv| ci t\_\* K h" l ^vgy-msmvi Movi ^c t` L\* j l 28U emš MZ n\* q tMj Wš biei\* bi ^c ^cB t\_\* K tMj| GK w` K `vii\*` i wbcob Avi Ab" w` K thšZ\* Ki Kivj \_vev Zvi ^c\* K ev^ e ic w` \* Z cv\* iwb| GLb biei\* bi gv\* S w` bivZ ia nZvk v` vbv te\* a Av\* Q| w` b gRi eev Zvi w\* Ri emZ evwU weµ K\* i eo `B tev\* K thšZK w` \* q we\* q w` \* j l biei\* bi t\* qj^ GUv mæe n\* Q bv| th tgvUv As\* Ki thšZK e" ZZ tKD Zv\* K N\* ii eD K\* i w\* bev| biei\* bi eev gv e\* j t\* g\* q\*` i wKfv\* e GK\* ejv Lvevi thvMv\* Z cvwibv, thšZ\* Ki UvKv tKv\_vq cve? Avi thšZK bv w` \* j Avgv\*` i t\* g\* q\* K tK w\* e? biei\* bi tQvU wZbU tevB mevB we\* qi Dch<sup>3</sup> n\* j l t\* mB GKB Kvi\* Y Zv\*` i Kvi" iB we\* q n\* Q bv| GB Rb" gv\* S gv\* S eev gvi KvQ t\_\* K nZfvMx, Kcvj tcvov, Acqv BZ" w` RvZxq wZi^ vi i\* b\* Z nq| GB GjvKvq kZ kZ Ggb biei\* b i\* q\* Q th Zv\*` i GKRB l thšZK e" ZZ we\* q nq bv| GB Kvi\* Y tKvb msmv\* i bZb gL t\* g\* q n\* j R\* bli ci t\_\* K eev gv nZvkq t\* fv\* M| òGB e" S bZb K\* i gv\_vi Dci Avi GKU tevSv thvM n\* j vó t\* f\* e|

bvg Zvi iingv| wZ<sup>-</sup>v b`x fv½<sup>+</sup>bi wkKvi n<sup>+</sup>q A<sup>+</sup>b<sup>+</sup>i evox<sup>+</sup>Z A<sup>-</sup>vqxfv<sup>+</sup>te emevm Ki<sup>+</sup>Qb  
jvjgubnvU <sup>+</sup>Rjvi nwwZevÜv Dc<sup>+</sup>Rjvi GK cZ<sup>-</sup>š A<sup>+</sup>Â<sup>+</sup>j| eqm Zvi AvbgvwbK 75 eQi|  
<sup>-</sup>vgx AvdvRDvİb dWki 85 eQi eq<sup>+</sup>mi fv<sup>+</sup>to b<sup>+</sup>q c<sup>+</sup>o<sup>+</sup>Qb| eZgv<sup>+</sup>b vZwb evaK<sup>+</sup>RwbZ  
Ges AbeiZ Abvny<sup>+</sup>i kh<sup>-</sup>vkqx n<sup>+</sup>q c<sup>+</sup>o<sup>+</sup>Qb| Zv<sup>+</sup>`i cvP <sup>+</sup>Q<sup>+</sup>j-<sup>+</sup>g<sup>+</sup>q| Zb<sup>+</sup>#a<sup>+</sup> vZbRb  
<sup>+</sup>Q<sup>+</sup>j, `BRb <sup>+</sup>g<sup>+</sup>q| mevB weevnZ Ges hv<sup>+</sup>i msmvi w<sup>+</sup>b<sup>+</sup>q Ab<sup>+</sup>Î emevm Ki<sup>+</sup>Q| ex<sup>+</sup>v gv Ges  
Amnvq evevi <sup>+</sup>LvR Lei Zviv <sup>+</sup>Zgb iv<sup>+</sup>Lb bv| KviY Zviv| Afv<sup>+</sup>ei Zvobvq RRviZ |  
B<sup>+</sup>Q Ki<sup>+</sup>j I mvg<sup>+</sup>\_i Afv<sup>+</sup>te gv-evevi hZ <sup>+</sup>bqv wKsev <sup>+</sup>Lvibv Ki<sup>+</sup>Z cv<sup>+</sup>ib bv|

iingv<sup>+</sup>`i evox Ges RvqMvRvq wZbei wZ<sup>-</sup>v b`xi M<sup>+</sup>f we<sup>+</sup>jb n<sup>+</sup>q <sup>+</sup>M<sup>+</sup>Q| eZgv<sup>+</sup>b iingv  
cviwPZ GKR<sup>+</sup>bi avbx Rvgi <sup>+</sup>Kvbvq <sup>+</sup>QvU GKvU b<sup>+</sup>oe<sup>+</sup>o N<sup>+</sup>i Am<sup>-</sup> <sup>-</sup>vgxmn emevm K<sup>+</sup>ib|  
RvqRvqv wKsev Avq <sup>+</sup>ivRMvi wKQB <sup>+</sup>bB| miKvix wivjd Ges cokxi AvbK<sup>+</sup>j<sup>+</sup> <sup>+</sup>Kvbg<sup>+</sup>Z  
<sup>+</sup>te<sup>+</sup>P Av<sup>+</sup>Qb-A<sup>+</sup>bKvUv bv evPviB <sup>+</sup>g<sup>+</sup>Zv| H mgq wQj igRvb gvm| wK ivbv Ki<sup>+</sup>Qb, wKfv<sup>+</sup>te  
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Kw<sup>+</sup>o<sup>+</sup>q G<sup>+</sup>biQ, N<sup>+</sup>i mvgvb<sup>+</sup> <sup>+</sup>gvUv Pvj wQj Zv w<sup>-</sup>qB jveov ivbv K<sup>+</sup>iwQ Ges H w<sup>-</sup>q `BRb  
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<sup>+</sup>Zv nvgv<sup>+</sup>`i Rb<sup>+</sup> mviv eQiò GKwU jxv `xN<sup>-</sup>vm w<sup>+</sup>b<sup>+</sup>q GK bvMv<sup>+</sup>i K<sup>-</sup>v, <sup>+</sup>jv ej<sup>+</sup>jb iingv|  
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Zvi ivbv Kiv nwoUv w<sup>+</sup>b<sup>+</sup>q| <sup>+</sup>Ljvg nwo<sup>+</sup>Z <sup>+</sup>h cwigv Lvevi Av<sup>+</sup>Q Zv w<sup>-</sup>q GKRb  
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KviY BdZv<sup>+</sup>ii cvq Avav NvUv Av<sup>+</sup>M Zvi evno cri<sup>-</sup>k<sup>+</sup>b hvB| ZvB wZwb BdZvi Kivi  
Ave<sup>-</sup>vi Rvbv<sup>+</sup>jb Avgv<sup>+</sup>`i<sup>+</sup>K| Zvi GB mnR-mij gb I AvšiiKZv <sup>+</sup>L Avgi<sup>+</sup>v AveK  
n<sup>+</sup>q hvB| Avgv<sup>+</sup>`i m<sup>+</sup>½ hv wQj Zv w<sup>-</sup>q <sup>-</sup>jvg iingv<sup>+</sup>K Zvi AvšiiKZv I ggZ<sup>+</sup>ev<sup>+</sup>ai  
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## Chapter VI

### 6.1 Summary, Conclusions and Implications

#### 6.1.1 Summary

##### Research objectives

The specific objectives of the study are to : (i) describe the socio-economic and demographic profile of the household head-respondents, (ii) analyze the factors promoting the causes of monga, (iii) ascertain the status of landowning, access to land and livelihood pattern and share-cropping system, (iv) assess the vulnerability of monga due to climate change and environmental hazards; (v) determine the hindrances about the rural markets and marketing of their farm produce; (vi) identify the striking problems as perceived by the respondents as to what contributes to the incidence of monga; (vii) suggest policy guidelines for mitigation of monga, and finally (viii) explore the relationship between some selected characteristics (age, education, farm size, income, family size) and incidence of monga.

##### Analytical Framework for Incidence of Monga

Nothing happens in isolation or vacuum. So is the case of monga that occurs as an ultimate consequent of so many factors or actors. Thus the incidence of monga involves an interplay of so many diverse elements or forces such as institutional, economical, social, political and natural systems of a given society. A clear understanding of all these elements may be useful in analyzing the structure and function of a monga region and its consequential impacts on the suffering people or victims of monga in the northern region of greater Rangpur district. All these issues are logically presented in the analytical framework as a basis for clear understanding of the dynamics of monga (Figs 2.1 and 2.2).

### **Political Economy of Monga : An Overview**

Traditionally, Rangpur is a food-surplus region with paddy centered economy. Paddy is the most dominant and labour-intensive crop. Land distribution is skewed with more than 80% people being poor, landless and marginally landless. As a result, poor and landless agricultural laborers do not find any job opportunities during the post-flood lean period in the Bangla months of 'Ashwin-Kartick' (mid Sept.-mid Nov.) particularly between the period of transplantation and harvesting of amon paddy, a major crop in the northern region.

From the macro level comparison among the regions, it shows that the greater Rangpur is less developed than other regions of the country. Affected by big rivers, the overall scenario of region's underdevelopment in respect of communication networks, no significant investment in industrial sector, regular occurrence of perennial natural disasters like floods, droughts, river erosion, excessive rainfall, high temperature, severe cold, hailstorms, water surges, cyclone, etc. contributes greatly to the process of under development. The relatively weak political leadership is perhaps another major factor for such syndrome of underdevelopment apart from its isolation from the capital city Dhaka and port city Chittagong truncated by the mighty rivers such as Padma, Jamuna, Teesta, Jamunashwari, Darla, Dudkumar, Ghagot, Bangali, etc. which in fact, become bane to the people of Rangpur region. All these factors combinedly made the region both economically and politically weak and backward.

In a political system based on patronage it is important to be represented in the government. to advocate for allocation of larger chunk of resources for the regional development. If there is no representation in the parliament who can boldly and loudly speak for the region, it is unlikely to get adequate allocation of resources. It also becomes customary to blame the government in power by the opposition when there is monga in the northern region. One such example may be cited when the then govt of Khelade Zia was hosting the SAARC Conference in November 2005 in Dhaka, the then opposition leader (now Prime Minister) Sheikh Hasina bitterly criticized the govt for not taking monga issue seriously. Even she said "I also request the govt headed by

Prime Minister (Khaleda Zia) to visit immediately the munga-affected districts of the (Rangpur) region". She attacked the govt in a populist manner concerning the expensive decoration of Dhaka city for the summit, further adding "Had the govt allocated a portion of the money spent for such a gorgeous illumination, the acute poverty-stricken people of the northern region would have get a meal" (Zug, 2006). This is how one party blames the other to undermine the weak performance of a particular party who were in the govt. Likewise also the govt. issues press releases to offset the opposition blame saying that "adequate steps already taken by the govt to supply plenty of foodgrains to the affected people and have overcome the munga (BSS : 11 Nov. 2005). This is how political debate on munga becomes surfaced. This debate also goes on and on, particularly pushed by the frequent media reports which sometimes are far from the reality.

A new paradigm has been proposed to eradicate munga involving a trilogy of three major stakeholders' participation in the process. These are political, bureaucratic and social systems in a given society or region. The key thesis behind this proposition is that all these three systems are to work together interwovenly with sincere dedication and commitment towards solution of this intricate problem permanently. This process of munga mitigation through involvement of these three social systems or actors has been illustrated in a diagram (Fig 3.1) for clear understanding of munga syndrome and its permanent solution for good. Unless the proposed three key stakeholders do not work together hands-in-hands the munga syndrome may recur perennially and the victims thereof will continue to suffer and also may be fallen again to the poverty trap.

### **Methodology**

The principal method used in this study was one-to-one field survey using semi-structured interview schedule. Other tools and techniques such as FGD, PRA participants observation, informal discussion with opinion leaders and Case Studies were also employed to supplement and cross-verify the information collected through face-to-face interview schedule. The study was conducted in five districts of greater Rangpur region (Rangpur, Nilphamari, Lalmonirhat, Kurigram, Gaibandha) spreading over 11 upazila, 29 unions and 81 villages. Total number of household heads of the munga-affected area covered by survey were 1517. The gender ratio of the

respondents covered were 90% males and 10% females, the ratio being 9:1. Data collection took about seven (7) months starting from late August 2008 to early March 2009. In addition, feedbacks and opinions from 72 field level administrators, policymakers and implementers of munga related programs and projects undertaken by GOs, NGOs and POs at the district and upazila levels were also obtained in order to get to know about their knowledge, feelings, attitudes and perceptions towards the incidence of munga and its extent of vulnerability inflicting upon the affected people. Data were analyzed and interpreted using both descriptive and inferential statistics like frequency count, mean, percentage, standard deviation, range, rank order and paired t-test and chi-square test to compare the means of two groups.

## **Major Findings**

### **Socio-economic Characteristics of Household Head-Respondents**

Ninety percent (90%) of the respondents were males and 10% females, the ratio being 9:1. The mean age of the respondents was 42.01 ranging from 20-90 years. The average level of education is 1.26 years with more than 53% illiterate, followed by 30% can sign only. These two groups if taken together constitute 83% who are functionally illiterate. The average family size is 3.09 per household which is less than the national average of 4.9.

As regards the occupation, 55% of the respondents are day laborers, followed by 13% farming, 11% household help, 7% rickshaw/van puller, 2% fishing, 1.8% hawker/vendor, 1.10% rice mill worker/chattal, respectively. More than 85% are married, 2% unmerried, 9% widowed, 2% separated and 1.0% divorced. The annual income range varies from Tk. 100 to 11,03,010 with 1.32% having no income. Over 85% households had yearly income ranging from Tk. 2,000 – 50,000. With this meagre income how could they maintain their livelihood is a big question. It is evident that over 97% respondents had no organizational participation.

### **Understanding of Monga**

The concept of monga is defined by different groups of respondents in different ways according to their perceptions. About 16% of them consider monga due to shortage of money which made them unable to buy food items, followed by 16% as poverty, river erosion and floods, 15% food shortage resulting in going hungry without meals, 13% due to crop loss or no harvest because of floods, river erosion and drought, while 10% termed it a seasonal distress condition with no agricultural work opportunities. By analysis of all such statements, **monga can be coined as a seasonal food insecurity or food deprivation in the lean season of 'Ashwin and Kartick' (mid Sept.--mid Nov.) preceding to the harvest of amon paddy when employment and income earning opportunities from agriculture sector are nearly seized due to floods, river erosion, droughts and other natural calamities. This definition is restricted to this study only based on the feedbacks and perceptions of the household head-respondents.**

### **Time of happening Monga**

Peak period of monga varies from 'Ashwin to Kartick' (mid Sept – mid Nov.) prior to harvesting of amon paddy. This is also called 'big' monga in terms of severity and 'small' monga usually takes place in the dry season of 'Chaitra-Baishakh' (March – April) before harvesting of boro paddy.

### **Duration of Monga**

Duration of monga varies from time to time, place to place and year to year depending on the nature and intensity of natural calamities like floods, droughts, river erosion, excessive rainfalls, etc. According to majority of the respondents (over 80%) actual duration of monga (covering both big and small ones) ranges from 60-90 days based on the severity of natural disasters as indicated above.

### **Degree of Vulnerability of Monga**

Majority of the respondents (55%) opined that the degree of vulnerability of monga was 'moderately vulnerable' meaning it is at tolerable level in 2007, while 41% termed it 'most vulnerable' i.e. above the tolerable level. It is surprised to note that no media reports published in any newspapers relating to happening of monga in greater Rangpur Region in 2008. This might perhaps be due to the army-controlled caretaker government running the state affairs after one/eleven. The media personnel may be subject to harassment by armed forces if they resort to any wrong or misleading report published in either print or electronic media. Thus no reporting about monga was conspicuous or in sight during the entire period of 2008 when army was in defacto control of state affairs..

### **Severity of Monga in 2008 compared to previous years**

More than 57% respondents perceived that the severity of monga in 2008 was 'less' and 25% of them thought it was 'almost the same'.. This implies that the severity of monga is gradually in declining trend. External support programmes, namely 100-days job creation, VGF, VGD, old-age pension,. TR, FFW, FFE, widow allowanc, etc undertaken by GOs-NGOs seem to be the contributing factors for such declining trend.

### **Whether Monga is ilncreasing or Decreasing**

About 82% of the respondents taken from all districts perceived that it is 'increasing' as opposed to 15% considering it 'decreasing'. An unusual reply of 'increasing' the extent of monga does not seem to be factually correct as the research team observed its severity is gradually declining. This is an over statement which may be attributed the fact that they may expect a big volume of relief materials, either cash or kind, which is attached to the over emphasizing the extent of monga by providing a rosy picture which is, in fact, an idea far from reality.

### **Reasons Cited Why Incidence of Monga in Greater Rangpur only but not in Other Districts**

To a question, why monga occurs in greater Rangpur district only and not in other districts, a majority of those who responded (23%) opined that no work opportunity is there in the lean season of 'Ashwin-Kartick' prior to harvesting of amon paddy since the region is absolutely dependent on agriculture, followed by 21% as river erosion and floods being a riverine zone, another 12% as perennial floods causing cropless and poverty-prone area, more than 12% as no industrial enterprises or mills/factories and still a small group viewed it as they are illiterate they are unemployed, idle and no scope for overseas employment due to economic hardship apart from poverty-stricken area. Some also expressed resentment against the local political leaders and well-off neighbors who do not support them in times of crisis nor do they take care of the poor community by extending their helping hands towards them. No opportunities are available for skills development training making them eligible for gainfull employment both at home and abroad. Two things now come to the fore : one is lack of work opportunity in agriculture sector, and the other one is illiteracy making them unemployed and jobless compounded with no industrial establishment to work. The affluent neighbors are also not supportive to them in times of needs and crisis thus terming it of lacking their social responsibility towards the poor neighbors.

### **Consumption of Food items During Monga**

Majority of them consumed one or two meals a day mostly in the morning and at night and do not take mid-day meal or lunch. In the morning, they usually eat over night water-soaked rice with arum leaves and stems or banana sheath as curry or any other cheap and poor quality vegetables available free of cost at the roadside Khas lands. They used to cook at night only and share it with all members of the family and keep a portion of it (one-half) for the morning meal. So they used a variety of food combinations including 'chira-muri' with mollasses for consumption in the morning. Sometimes they go hungry without single meal a day, sometimes on alternate day,. Even they go without food for a week. Thus the monga is a bane or curse for them that

forces them to going without meal or one/two meals a day and sometimes one meal on alternate day.

### **Land Ownership**

Land is an important asset for crop production, food security, shelter and many other economic activities. It is also a guarantor of socio-economic development and employment opportunities. So, access to land is a crucial issue for social status and economic power (Barkat et al, 2009). Nearly 40% of the respondents in the study area are either landless or absolutely landless having neither homestead nor any piece of cultivable land. Every one of two households (51%) are either landless or functionally landless having land ranging from only one decimal to fifty decimal. If these two groups are combined together the absolute landless group constitutes more than 91%. This implies that the land distribution in greater Rangpur is absolutely skewed with large concentration of land in the hands of a fortunate few.

### **Distribution of Khas Lands in Greater Rangpur District.**

There is a huge amount of agricultural Khas land available in the greater Rangpur region which comes to around 65,336 acres of the total, while non-agricultural khas land is about 25,293 acres of the. Thus the total amount of Khas land (agricultural + non-agricultural) stands at 90,629 acres (36,692 ha) in the greater Rangpur district. This is the percentage share of the total amount of agricultural khas land in Bangladesh (8,03,309 acre) while total amount of non-agricultural khas land is 16,86,354 acres. So, the total amount of khas land available in Bangladesh is 24,89,663 acres or 10,07,961 ha (1.08 million ha) combining both agricultural and non-agricultural khas land (Barkat et al, 2009).

This indicates that a sizeable amount of khas land in greater Rangpur could be easily distributed to the landless farm workers as every three of four households wanted to arrange distribution of khas land who lost their farm lands to river erosion many times in their life times. This gives a two-fold benefits-they could bring those khas lands under cultivation producing enough food to feed their hungry months and on the same time and would go a long way to get rid of monga starvation and would help build food

security at the household level and also socio-economic development of the region. But again it absolutely depends on the political commitment and sweet will of the government or political party in power.

### **Cultivation of 'Barga' land or Sharecropping System**

Only 25% of the respondents are involved in 'Barga' cultivation or sharecropping system. Among them, only 13% involved in 'Boro' season, 2% in amon season, 1% in 'rabi' season while 9% in all seasons. Since most of the households in the region are either landless or marginal farmers having a small piece of farm land ranging from 05 to 50 decimals. So they had to earn their livelihood either through labor selling or through barga cultivation or crop sharing system. But land is available for share cropping mostly in Boro season only when the investment cost is high in terms of production-inputs (seeds, fertilizers, pesticides, irrigation and management practices), thus the production cost is high in boro season compared to amon season when investment is very little. This indicates that landowners prefer to lease out their lands on 'barga' system only in boro season which is not so profitable for the tenants. The tenants want barga land for both boro and amon seasons by which they could make a balance of the cost of inputs they bear on boro season. Thus the agriculture could be made more profitable for the tenants if the land is leased out by the landowners for at least two seasons. This is also supported by Hussain (2007)

### **Access to Livelihood**

Livelihood is managed through a number of ways and means right from labor selling, farming, fishing, rickshaw/van pulling, households help or servants/ maids, begging to collection of relief materials or alms/donations from others. But more than one-half (53%) of the respondents maintained their livelihood through selling labor by working in others' lands or house, followed by farming (12%), household helps (11%) small business/ part-time job (8%), rickshaw/van pulling (7%), begging (3.5%), getting relief materials/alms/donations from others (3.5%), respectively. So labor selling is the primary source of livehood among the majority of the poor households.

### **Participation in Skills Development Training Programs**

Only 3% respondents participated in the training programs covering three areas of training such as poultry rearing, handicrafts making and micro credit only. This indicates that skills development training is still a maiden area in the region which could be organized in a large scale so that people of this underdeveloped region could participate to improve their efficiency for self-development and also for wage earning both at home and abroad.

### **Number of Meals Taken during Monga Time**

Nearly 3% households went on hungry without a single meal throughout the day, followed by 48% had only one meal a day, 46% two meals a day while 3% had three regular meals a day. This indicates that more than one-half of (51%) households had to go either without meal or one meal a day which leads them to an occasional starvation either everyday or alternate day.

### **Percived Striking Problems Encountered by Respondents During the Time of Monga**

The most frequently cited problems by rank order narrated by the respondents during the time of monga are : a) food deficiency, so less eating or go hungry without meal like almost fasting, b) crop loss, no harvest due to floods and no work to earn money to buy food and medicines, c) survived on taking loan from others at high rate of interest, d) sitting idle at home or roadsides as no works available, e) no work, no income but food prices high in this distress situation f) Increase sickness and disease with no ability to buy medicine or consult doctors, and g) migrate to other districts for earning livelihood which nobody likes, etc.

### **Degree of Monga Vulnerability Last Year compared to Last five Years.**

The degree Of monga vulnerability appears to be 'more' last year as perceived by 65% of the respondents compared to last five years, followed by 15% 'less' and 12% remaining 'the same level as before'. This needs external supports from GOs, NGOs, donors, etc to cope with this vulnerable situation to mitigate the sufferings of the affected people or monga shock as a temporary succour.

### **Coping Mechanisms to Face Monga**

More than 56% respondents adopted a coping strategy to face monga by taking loan from others at an exorbitant rate of interest or earning through diversified non-agricultural activities like small business, rickshaw/van polling, vendor/hawker, household help, followed by 13% who went on hungry without food for days together, 12% by eating less or half-fed, sometimes begging (3%), by selling valuable household goods, (3%) by collecting relief materials, VGF, VGD, TR, old-age pension, 100-days job creation, etc. This indicates that they did not have any advance idea or preparedness to face monga situation, yet they survived it or coped with it by taking loan or half-fed or going hungry without food

### **Advance Labor Selling and Farm Products**

When asked only 19% reported that they do this practice while 81% in the negative. Among those who responded, 6% revealed advance labor selling at cheap rate, followed by 4% as advance farm product selling at low price and almost a similar numbers reported deprivation of fair price of farm produce with deduction of unfair crop production share and nearly 6% reported exploitation through providing loan at high rate of interest. This process of exploitation could be checked by opening a special window in the Central Bank in the name and style of '**Distress Credit**' at softer terms for disbursement to the monga-affected poor people only. To a further query they informed about 20-40% of money of the value of labor selling or product value they lost by selling advance labour or product selling. This is a big loss to them as they are poor and assetless.

### **Possible Solutions Suggested to the Problems Caused by Monga**

A variety of solutions suggested by the respondents to the problems caused by monga. The most frequently cited solutions to such problems summarized by rank order are : (a) creation of job opportunities round the year, (b) establish industries to create employment opportunities, (c) ensure economic activities through expansion of trade and commerce (d) organize job-oriented skills development training programs, (e) no work, no income because of floods, river erosion, natural calamities and as a result go hungry without food, (f) give us work opportunity for income earning but **not relief** which makes us dependent on others' charity, (g) distribute khas land to landless farm workers, and (h) we believe in God, whatever. He does, is good for us. This seems that some of them are fatalists.

### **Causes of Monga as perceived by Respondents**

Following are the causes of monga as perceived by the respondents which are summarized by rank order :

- a) River erosion, floods, drought, excessive rainfall causing flash floods, hailstorms, severe cold, dense fog, etc. that made us landless, homeless, rootless, cropless, assetless and pauper.
- b) No agricultural work, no business activities due to excessive rainfall, dense fogs, hailstorms, severe cold, etc.
- c) Increase disease, fall sick and no income to buy medicine or consult doctors, cannot work because of abnormal climate like high temperature, excessive rainfall, severe cold, hailstorms, etc.
- d) Natural disasters caused by climate change and environmental effects damage standing crops, grain formation hampers to paddy, difficult to livestock and poultry rearing, disruption in road communication networks due to floods, excessive rainfall, dense fog and hailstorms.
- e) No industrial establishment to earn alternative sources of income nor even SMEs to get wage based works

- f) No scope of self-employment due to financial hardship and available credit
- g) No purchasing capacity to buy food and medicine
- h) Migration to other districts for earning income which nobody likes.

The problems of monga thus highlighted by the households appear to be serious matters of concern and policy decisions. The problems of floods and flash floods coupled with river erosion not only made them homeless, assetless and cropless but also stop their all economic activities apart from disruption of road communication networks, immense suffering of health-related hazard causing them sick and idle, livestock and poultry rearing hazards as well.

### **Marketing of Agricultural Produce**

Majority of the households (82%) are landless and they do not produce surplus which needs marketing outlets.. Whatever small quantity they produce, if any, they consume them at the family level. So marketing of agricultural produce does not seem to be an important issue for them.

### **Suggestions to ensure year-round fair price of farm products**

The respondents, when asked, provided some suggestions which may be looked into at the policy level to ensure the fair price of farm products to the producers. Most frequently cited suggestions are reproduced by rank order. These are : a) fair price chart be hanged/ pasted in the prominent market places for public awareness, b) ensure govt fixed price while selling farm products, c) administrative steps be taken to ensure fair price through enactment of law, d) improve road networks to encourage more buyers from outside to the remote places, e) arrange direct purchase from the farmgate by the govt. agencies, and f) do what govt thinks good for the welfare of the producers, respectively.

### **Outmigration to other districts for doing agricultural jobs during monga**

To a related query every two out of five households (40%) reported that they have gone to other districts for income earning at their distress times. The districts they preferred to frequently visit are: Dhaka, Bogra, Narsingdhi, Brahmanbaria, Comilla, Feni, Chittagong, Sylhet, etc. Further they informed that they usually spent 30-40 days per trip and earned Tk. 100-150 per day, while food and lodging are free of cost which provided by the employers.

### **Age of Marriage and Provision of Dowry**

Every two of three households (67%) thought that the ideal age for daughters' marriage is 16-18 years except a few who preferred to arrange marriage at the age of 10-15 years, while 3% reported 22-25 years, By ignoring the official age of marriage at 18 years, a sizeable numbers of them (20%) still prefer early marriage at the age of varying 10-15 years. The varied reasons they cited for early marriage, among others, are : a) youger the age lesser the amount of dowry or sometimes no dowry (because of tenderness and good look), b) better to get them married off if good bridegrooms are available, c) once they become grown up better to dispose them of, d) being poor cannot provide food, cloth or education, why should they be kept at home, e) difficult to keep them under control at home as bad boys run after them, f) Nobody looks after all these hazards, so age does not matter, g) Sometimes they fall in love and choose their life partner at their sweet will which defames the family prestige and honour, and h) being orphans having no parents its better to get them married off.

To another question about amount of dowry and its mode of payment, 60% of them replied that they used to pay dowry ranging from Tk. 5000 to 25,000, followed by 12% from Tk. 25, 000 to 50,000 while more than 3% from 50,000 to 100,000, respectively. Somebody who are rich have to pay dowry upto Tk. 300,000 depending on the quality, qualification and family status of the bridegrooms. But everybody has to pay dowry without which no marriage takes place. Regarding mode of payment, they informed that it may be hard cash, ornaments, valuable household items like TV, wrist watch,

wedding bands, furniture, bridal dress, radio, and also homesteads with dwelling houses, farm land, cattle/cow, etc. This practice of dowry is, of course, a social disease which should be addressed by the GOs, NGOs, civil society, mass media, union parishads, teaching community in a coordinated way

### **Smoking Habits**

Smoking is a serious social menace and a cause of health hazards for all shades of people-men, women, young and children alike. It is so rampant in greater Rangpur region that nobody could believe unless he has seen it. More than 54% of respondents reported that they used to smoke since childhood. Tobacco crop, the raw material for 'Bidi' and cigarettes manufacturing, is abundantly grown in the monga region. So huge tobacco-based industrial establishments are located every where and anywhere in the region. So, people connected with production, manufacturing, processing and marketing of tobacco products and by-products (gul, jarda, shada, etc.) are very much habituated in smoking. The most frequently cited reasons of smoking are :

- a) cannot give up now, become addicted to and bad habit developed since childhood,
- b) get relieved of tension of food insecurity and family problems for the time being,
- c) feel bad without smoking and cannot concentrate on works, and
- d) learnt bad habits from bad companionship, so cannot give up totally.

Thus the reasons cited above may be taken into consideration while preparing the anti-tobacco campaign by GOs, NGOs, POs, WHO who are connected with eradication of tobacco cultivation and promoters of anti-tobacco campaigns.

### **Feedback from the Field Level Key Stakeholders (DC,ADC,UNO, DDA, UAO, Researchers, NGOs Executives, etc.)**

The average age of the district and upazila level administrators, policymakers and implementers of monga related programs is 43.82 years with a range from 26-63 years. Ninety two percent (92%) of them were males and 8% females, while 97% were

married and the rest (3%) unmarried. The average family size was 3.85 with a range of 2-9 members per family which is quite below the national average of 4.9. The policymakers and administrators, as expected, had the highest educational attainment with 10% of them having Ph.D degrees, 60% Masters and 30% had 4-years Bachelors degree holders. Almost all of them had the opportunity to get advanced overseas trainings for several times to update their knowledge and professional efficiencies. Most of them were affiliated to different nation building organizations of both district and upazila levels. More than 57% respondents belonged to GOs, 31% NGOs, and the rest (12%) involved in the organizations of research, academics and media. They had an average service length of 5.38 years in the monga region in the present position varying from 2-38 years as total length of service in their service career. The monga mitigation programs they were involved were: 100-days job creation, VGF, VGD, TR, FFW, FFE, old-age pension, widow allowance, PKSF-funded PLDP II, DFID-funded CLP (asset transfer), promotion of BRRRI Dhan-33, etc. Nearly two of three respondents (64%) informed that the monga-affected people were really getting benefits from such programs in the form of cash flow, food aids, relief materials, micro credit, asset transfer (as grant money for purchase of cattle/ boat/rickshaw/van, family child nutrition, poultry rearing, etc).

The responses provided by them regarding the understanding of monga, its occurrence, vulnerability and duration were almost identical to household-head respondents. So these issues were not distressed here to avoid repetition of the same thing over and over. However, the reasons 'why monga occurs in greater Rangpur District compared to other Districts' were presented below by rank order because of their importance : The specific reasons cited by them were :

- a) No other scope of alternative employment opportunities except agriculture, people are not hard working, low income area (less wage rate), so they are poor.
- b) Perennial floods, river erosion and droughts (as it is a riverine zone geographically),
- c) No industrial establishments for creation of job opportunities and alternative sources of income earning,
- d) Most people are poor and landless, low quality of sandy soils in

the char lands where crops do not grow, e) No technical skills and competencies due to lack of skills training support, F) Lack of education, poor literacy rate and thus lack of knowledge, g) Disaster-prone area with natural calamities like droughts, floods, river erosion and climate change vulnerability, h) Lack of social and political commitment, lack of political awareness, i) Ultrapoor poverty stricken people who are basically lazy and idle, not self-motivated to go out ( for better income) to other districts (beyond the river Jamuna), j) Actually monga is mostly media-created rather than actual situation since it is not so severe every year, k) Low wage rate (for agricultural laborers), l) Early marriage, dowry system, polygamy, so over population with high population growth rate, m) Monga exists in all districts but people here are less mobile compared to other districts, n) People are lazy, idle and less aware in greater Rangpur compared to other districts, o) Rangpur region is a calamity-prone vulnerable area due to floods, river erosion, climate change, droughts, etc.

The other findings alongwith above were also supported by the findings of the FGD and case studies which were more or less identical except some minor issues. Detailed findings of FGD and case studies may be gleaned in the respective sections. So these, were not repeated here to avoid duplication.

## 6.1.2 Conclusions

Understanding a social and economic structure and its underlying processes entails knowledge of an individuals' social standing within and outside his social environment, his position relating to his needs and interests, problems and constraints. His interaction with the conditions or operational realities affecting his changes in social and economic status, farm life, availability of resources, personal mindset to realize an adverse and distress conditions due to natural calamities (floods, river erosion, drought, hailstorms, crop loss or near-famine situation) is another important step to internalize his overall economic and social standing. An exploration into the socio-economic phenomenon affecting his life and family, resources, environment within the framework of munga vulnerability is one aspect of this study. Through these processes, the concept and consequences of munga vulnerability could be better understood as to what extent he is really subject to undergoing the sufferings of munga, the patterns of interaction he is having with various elements of the social system (Bhuiyan, 1987). So the dynamics of munga seems to be an interface of such phenomena as political, bureaucratic, and social systems. Unless these three groups of people in a social system are made to work hand-in-hand, the concept of eradication /mitigation of munga may not work rather bound to fail. Thus these three components have a role model to play in the eradication of munga. It is to be clearly understood by all concerned i.e. policymakers, administrators, implementors, including those key elements like political, bureaucratic and social groups..

However, based on the findings of this study, following conclusions could be drawn:

- a. Most of the respondents had no record of formal schooling and therefore they were mostly illiterate. Average family size appeared to be small and less than the national average. Majority of the respondents were day-laborers and the principal occupation for their livelihood was day-laboring in others' homestead or farm land. Every four out of five respondents had annual income ranging from Tk. 2,000-50,000. More than ninety seven percent of the respondents had no participation in any organizational

activities. This seems to limit their outdoor exposure to self-improvement and nation building activities.

- b. The concept of munga has got differing meanings to different individuals as perceived by the respondents. However, they appeared to be knowledgeable about the comprehensive meaning of munga. The 'big' munga usually takes place in the month of 'Ashwin-Kartick' in the post flood lean season prior to harvest of amon paddy and 'small' munga happens in the dry months of 'Chaitra-Baishakh' before harvesting of boro paddy. Munga thus continues for about 60-90 days a year as stipulated above.
- c. The vulnerability of munga, as majority of the respondents opined, was not so severe this year compared to the previous years, rather it is gradually in declining trend.
- d. It is surprising to note that no media reports in any newspapers relating to the incidence of munga was conspicuous or in sight in the greater Rangpur in 2008. This might perhaps be due to the army-controlled caretaker government running the state affairs after one/eleven. The media personnel may be subject to harassment by the combined armed forces if they resort to any wrong or misleading report published in either print or electronic media.
- e. Majority of the respondents perceived that the severity of munga was 'less' in 2008. The contributing factors behind this may be external support programs like 100-day job creation, VGF, VGD, TR, old-age pension. FFW, FFE, widow allowance, etc. undertaken by the GOs & NGOs. Some of them were also of the opinion that intensity and vulnerability of munga is gradually 'decreasing' as opposed to majority of them levelled it 'increasing'. Over emphasizing the idea of 'increasing' may be convincing them that if they provide a rosy picture more relief materials, either cash or kinds, may be pouring in abundantly which is, in fact, an idea far from reality.
- f. Munga takes place in greater Rangpur Region due to a variety of reasons such as perennial floods being a riverine zone, river erosion, drought, hailstroms, excessive

rainfall, severe cold, cyclones, water surges because of climate change and environmental effects, illiteracy, unemployment, traditionally poverty-prone, no industrial establishment for employment creation, no support for conducting vocational training programs to produce skilled manpower who could be eligible for gainful employment either at home or abroad. Some also expressed resentment against the local political leaders and affluent neighbors who did not support them in times of crucial needs or bad days nor do they take care of them by extending their helping hands towards the suffering community. This appears to be lack of social responsibility towards their own community

- g. Majority of the households consumed one or two meals a day mostly in the morning and at night, and skip mid-day meal or lunch. In the morning they usually eat overnight water-soaked rice with arum leaves/stems or banana sheath (mutcha) as curry or any other poor quality vegetables available free of cost at the roadside khas land. They used to cook at night only and share it with all family members and kept the rest (one-half) for the morning meal. They also go hungry without single meal a day or even a week, sometimes on alternate day. So the monga seems to be a bane for them. Besides, they also take a variety of food combinations including dry foods like 'chiramuri' with molasses in the morning.
- h. Most of the households appeared to be absolutely landless having no homestead nor any piece of cultivable land. Every nine out of ten households are absolute landless and functionally landless having a small area of land ranging from five to 50 decimals only. This was also supported by PKSf report (2008). This implies that the land distribution in greater Rangpur is really skewed with large concentration of land in the hands of a fortunate few.
- i. A huge amount of agricultural Khas land approximately 65,336 acres (26,452 ha) and non-agricultural khas land of 25,293 acres (10,240 ha) totalling 90,629 acres (36,692 ha) is currently available in the greater Rangpur region as against 24,89,663 acres (10,07,961 ha or 1.08 million ha) of khas land available in Bangladesh (Barkat et al, 2009).

More than three out of four households demanded distribution of khas land to those who lost their farm lands to river erosion several times in their life times. So a sizeable amount of khas land in greater Rangpur region could be easily distributed to the landless farm workers as demanded by them. This gives two-fold benefits : One is increased crop production enabling them to feed their hungry mouths and food security build up at the household level, and the other one is to get rid of monga starvation resulting in intake of adequate calory for good health and also socio-economic development of the monga-prone region. But it absolutely depends on the on-going land reform process of the government and political commitment of the party in power.

- j. One out of four households is involved in 'Barga' cultivation or sharecropping system. But land is available for sharecropping mostly in the 'Boro' season only where the investment cost is high in terms of production inputs (seeds, fertilizers, pesticides, irrigation and crop management practices) compared to amon season or robi season. This implies that landowners prefer to lease out their lands on 'barga' or crop-sharing system (1:1 or 1:3) only in Boro season which is not so profitable for the 'bargadars' or tenants. The tenants want 'barga' for both amon and boro season through which they could make a balance of the inputs cost they invested on boro season. This implies that agriculture could be made more profitable for the tenants if the lands are leased out by the landowners at least for two seasons covering both boro and amon season. This finding is also corroborated by Hossain (2007) who conducted a similar study in Kurigram district.
- k. Majority of the respondents maintained their daily livelihood through selling labour . Other sources of livelihood are farming, fishing, household help, small business or part-time contractual job, rickshaw /van pulling, begging, getting relief/ alms/ donations from others. This implies that labor selling is the prime source of livelihood among the majority of the households in greater Rangpur region since it is an agriculture-dependent belt where most of the people are landless.

- l. Ninety seven percent of respondents did not get an opportunity to participate in any skills development training programs for their empowerment in self-employment or wage employment. This indicates that this is still a maiden area in the region which could be organized in a large scale to improve their professional efficiency and skills development giving them an opportunity for wage earning both at home and abroad.
- m. Majority of the households could eat once or twice a day with 3% going hungry without a single meal per day or even sometimes a week without food. This implies that more than 90% lead a life of occasional starvation either every day or alternate day.
- n. The most frequently cited problems encountered by the households at the time of munga are a) seasonal food deficiency, so less eating or go hungry without food, (b) no harvest / crop loss due to floods resulting in no work to earn money and buy food , c) survive on taking loan at high rate of interest which made us indebted, d) sitting idle, gossip at home or roadsides as no works available, e) this is a distress situation when no works available to earn money but food prices high, f) increase disease and sickness with no ability to buy medicines or consult doctors, and g) outmigration to other districts for earning livelihood, etc. The problems cited were summarized by rank order as indicated above
- o. Most of the households adopted a number of coping mechanism to face munga. The most notable ones are : a) taking loan at an exorbitant rate of interest, b) earning money through diversified non-agricultural activities like small business, rickshaw/van pulling, c) go hungry without food every day or alternate day for days together or even more than a week, d) eating less or half-fed, sometimes begging, selling valuable household goods (trees, cattle, poultry, farm products, etc.), e) external supports like 100-days job creation, VGF, VGD, TR, old-age pension, widow allowance, FFW, FFE, collecting relief goods, donations or alms, etc.
- p. One out of five households indicated that they did the practice of advance labour selling and advance farm product selling at relatively low rate or price of normal times, and also take loan at high rate of interest. They used to get 20-40% less amount

compared to normal time. This is a big loss to them since they are poor and assetless living on hand to mouth for their livelihood.

- q. The respondents cited some possible solutions to the problems they faced during munga. These are : a) creation of job opportunities round the year, b) establish industries for employment opportunities c) ensure economic activities through expansion of trade and commerce, d) organize job-oriented skills development training programs, e) floods, river erosion and other natural calamities take away our standing crops rendering us pauper, assetless and dependent on others, f) **No relief** please, give us works to earn income to lead a descent life; g) distribute khas land to landless farm workers who lost their lands to river erosion.
- r. The households identified the major causes or factors of munga by rank order as : a) river erosion, floods, drought, rainfall, cold, hailstorms, dense fogs, and such other natural calamities which made us landless, homeless, assetless, rootless, cropless and pauper, b) no agricultural works, no business activities due to rainfall, dense fogs, hailstorms, cold, etc, c) increase disease, fall sick and no income to buy medicine or consult doctors, d) natural disasters caused by climate change and environmental effects damage standing crops, hamper grain formation of paddy, (e) no industrial establishments to earn alternative sources of income nor even SMEs to get wagebased income, f) no scope of self-employment due to financial hardship, g) no purchasing power to buy food or medicines h) outmigration to other districts for earning income which nobody likes.
- s. Majority of the households are landless and therefore they do not have surplus farm produce for which they need any marketing outlet. Whatever small quantity they produce, they consume them at the family level. So marketing of agricultural produce does not seem to be an important issue for them. But they suggested to hang/paste fair price chart in the prominent places for public guidance and awareness as well as improved road networks to attract more buyers from outside to the remote places in order to ensure fair prices for the producers and also to create a sense of market competition among the market players.

- t. Every two of the three households thought that the ideal age for marriage is between 16 and 18 years except a few who preferred early marriage at the age of 10-12 years ignoring the official age of marriage at 18 years for girls and 21 years for boys. The reasons they cited for early marriage are : a) younger the age lesser the amount of dowry or sometimes no dowry needed, b) better to get them married off if good grooms are available, c) Once they are physically grown up, better to dispose them of, d) being poor cannot provide them food, cloth or education, why should they be kept at home, e) difficult to keep them under control at home as bad boys run after them. f) sometimes they fall in love and choose their life partners which defames the family good name and prestige, etc. The mode of payment of dowry may be a) hard cash b) valuable household goods (TV, bicycle, ornaments, furniture, wrist watch, bridal dress and c) asset transfer like homestead with dwelling house, farm land and cattle/cow, etc. Amount of cash varies from Tk. 5,000 to 100,000 or even sometimes upto 3,000,000 depending on the quality, qualification and family status of the grooms. But none is spared and everybody has to pay dowry without which no marriage takes place. This implies that dowry is a social menace. How this could be avoided is everybody's concern.
- u. Smoking is a social disease and it is the cause of health hazards for all ages of people, men, women, young and children alike. It is so rampant in Rangpur region that nobody could guess unless he has seen it by himself. Majority of the respondents used to smoke regularly since childhood without which they cannot concentrate on works. This indicates that they become addicted to and habituated. The frequently cited reasons of smoking are :
- b) cannot give up now as they developed this bad habit since childhood.
  - c) get relieved of tension of food insecurity and family problems for the time being,
  - d) cannot give attention to work and feel bad without smoking
  - e) learnt this bad habit from bad companionship since early days.

All these suggestions seem to be useful for the policymakers and the promoters of anti-tobacco campaign, mostly organized by GOs, NGOs, WHO and others who are connected with eradication of tobacco cultivation and anti-tobacco campaigns.

### 6.1.3 Implications

Any planned change does not occur in isolation. So is the case of munga mitigation. It involves an interplay of so many diverse elements or dimensions like political, bureaucratic and social groups. A clear understanding of these dimensions would be useful in analyzing the social and economic structure of the munga-affected poor and ultra-poor people who suffer the pinch most.

In order to mitigate munga in the greater Rangpur region, a number of factors are involved, directly and indirectly, in the process. To offset them, the three groups of individuals such as political, bureaucratic and social are to be interwovenly worked together to reach to a desired level of direction, else it may not be possible to effect a desired change.

Implications may be drawn in two ways. One is **theoretical** which concerns a number of issues for action and policy decisions and the other one is **practical** which concerns of issues that deserve immediate attention for implementation.

#### 6.1.3.1 Theoretical Implications

##### **Key Issues of Concern of Action and Policy Decision**

Some of the key issues of concern are discussed in this section for action and policy decisions. These are : a) organizational, b) investment, c) environmental, d) health and e) institutional.

##### **a) Organizational issues**

All programs-related activities and relief materials for distribution among the munga-affected people are carried out by different agencies without proper coordination among them. As a result, somebody get it while others may not. This levels a scope to talk out by the real benefactors. This is a general complaint by a few beneficiaries who are not getting the new job opportunities created by the CTG worth of 20,000.000 million taka project for 100 days works program. Similar programs like VGF, VGD, old-age pension, widow allowance, test relief, FFW, FFE and all such social safety net programs (SSNP) also come under this purview. In order to make them operationally sound and effective, concerted efforts are needed to integrate the three groups of people such as politicians, bureaucrats and social groups (civil society, teaching community, etc.) in an effective way.

### **Contribution of NGOs/RDRS**

Many NGOs, most prominent among them: RDRS, BRAC, ASA, Proshika, Grameen Bank, ASOD, ESDO, Jagaroni Chakra, Poppi, BDSC etc, have been working in the north-west Region of Bangladesh for about 2-3 decades. They have, of course, made a modest achievement in minimizing the poverty level among the poor and ultra-poor people of the region, particularly in the greater Rangpur district. Among them, the contribution of RDRS is commendable. They are, in fact, pioneer in the socio-economic as well as infrastructure development of the Rangpur region. We are not aware of, nor do we have any statistics, about success and achievement of other NGOs. But records, reports and physical development of RDRS are available which indicate the laudable achievement of RDRS in their working areas in the sectors cited above.

The most notable parameter of RDRS efforts to reduce the vulnerability of the monga-affected people through agricultural diversification, particularly promotion and extension of advanced new rice technology like BRRI Dhan-33 - an early maturing mon rice variety having only 110-115 days life cycle from seeding to harvesting. The most beautiful and interesting feature of this variety is early harvesting time specially in the monga-month of Kartick (mid Oct. to mid Nov.) compared to other HYV mon rice varieties like BR-10, BR-11, Pajam etc. which are ready for harvesting at least 40-50 days later. The RDRS through its different projects and programs made a vigorous effort to promote and expand this early maturing mon rice variety in collaboration with DAE and BRRI, the developer of this variety through genetic modification, in their working areas and motivate the farmers for adoption of this new technology and cultivation of this variety as a pilot project to generate employment opportunities for the farm laborers, in one hand, and build up food security for the farmers on the other with an ultimate goal to keep the food prices at an affordable level for mutual benefits of both producers and consumers. The average per hectare yield of this new variety ranges from 2.4 – 2.5 metric tonnes, as available information from DAE and BRRI confirmed. For combating monga during its crisis period in the monga-prone districts and creating new job opportunities for the farm workers, DAE in collaboration with partner NGOs, specially RDRS, are contemplating to expand the cultivation area under this new

variety to over 50,000 hectares of land in greater Rangpur region in the upcoming monsoon production season. By and large the single contribution of RDRS for promoting this new BRRRI Dhan – 33 variety to overcome the monsoon syndrome by creating agricultural job opportunities for the monsoon-hit farm laborers prior to harvesting of other monsoon rice varieties is praise-worthy. Similar effort made by BRRRI also deserves appreciation for letting rays of hopes for their survival.. Against this backdrop the services rendered by RDRS in respect of promotion and transfer of this new rice technology to the monsoon-hit poor farmers to offset the monsoon syndrome is undoubtedly commendable.

**b) Investment Issues**

It is conspicuous that the monsoon-affected region is a victim of public investment in terms of professional training programs, opportunities, communication network, industrial entrepreneurship, business climate, gas connectivity, adequate power generation, professional or para professional employment opportunities, etc. This is a micro level observation concerning volume of investment between the monsoon region and the central part of the country. Unless this regional disparity in terms of large investment is taken care of, mitigation of monsoon and suffering thereof appears to be a far cry. This is the opportune moment the government and local political leadership could think of in terms of large investment in education, industries and power generation sectors back in mind the eradication of monsoon forever.

**c) Environmental Issues**

Navigation through silted rivers like Teesta, Brahmaputra, Jamunashwari, Ghagot, Dud Kumar, Dharla, Korotoa, Bangali, Mohananda, etc. has been causing immense suffering to the people during the dry season while they used to cause an inhuman suffering at the time of rainy season. Global warming and climate change are also causal factors for river erosion, floods, excessive rainfall, droughts, hailstorms, high temperature, severe cold, dense fogs,. cyclones, water surges, earthquakes, river siltation and such other associated havocs. This necessitates a longterm comprehensive plan for mitigation with donor's supports for dredging of the mentioned rivers. It is heartening to note that the present government has already been talking about river training and dredging of big rivers with donors' supports to pave the way for year-round navigation and irrigation infrastructure.

Now it is the turn of the regional political leadership to harvest this benefits since the ball is now rolling in their courts.

**d) Health Issues**

Rangpur region is traditionally a favourable area for growing of tobacco abundantly. Because of cheap and easy availability of raw materials, a large number of tobacco industries are established. As a result, young children (even 6-8 years) of school-going age get full-time employment in making 'Bidi' at taka 5 per 1000 sticks. Their work place inside the factory is absolutely unhygienic for human habitation. Since the children from munga-affected areas have no other choice but to engage themselves knowing fully well that they are subject to victims of TB, cancer, hypertension, diabetes, pneumonia, conjivitis, breathing problems and many other associated diseases. Their parents also allow them to work in those industries as an alternative source of income earning to maintain their family.

Moreover, smoking is a common phenomenon there. Almost all of them, regardless of age –adults male and female, youth and children of 7-8 years alike are found smoking of tobacco and tabacco byproducts like 'gul' 'jarda' 'shada' (made of tobacco leaves) . Unless some immediate drastic steps are not taken to refrain them from smoking, it may create a health havoc over there and surely there would be a generation gap if the situation is not arrested urgently on top priority basis.

**e) Institutional Issues**

Availability of credit is a great factor to get the affected people involved into the economic activities including self-employment. Since the target groups are mostly poor and landless, nobody comes forward to provide them money without collateral. Even NGOs, PRIME project of PKSF do not lift their fingers to extend credit to them as they do not have repaying capacity. In view of such distress condition to overcome, following mitigation measures are suggested:

- **Operation of Distress Credit Wing in Monga Region**

To open a lending window in the Central Bank (Bangladesh Bank) in the name and style of '**Distress Credit Wing**' for disbursement of collateral free soft loan at low rate of interest to the monga-affected poor and ultra-poor people only of greater Rangpur Region. This would help them to be self-employed by starting a small business, bamboo-based handicrafts and basket making, rickshaw/van hiring, tailoring, weaving, carpentry, black smith, bullock cart, vending/hawning or such other demand-driven professions convenient to them. Actual mode of loan disbursement, lending guideline, rate of interest and duration of repayment, size of instalments, and such other minor details could be worked out later once the basic concept of idea is agreed upon.

- **Formation of Peer Group Empathetic Volunteers**

This is a new concept put forward considering the lack of social commitment already raised by the monga-hit people. Idea behind formation of this empathetic volunteers group is that the like-minded peer groups from the affluent families may come forward at times of crucial needs to help the marooned people like the tsunami and aila disasters through self-donation or donations received from other philanthropic people to save the affected people at the time of monga. This would serve as a forum to help the affected people in one hand, ensuring social responsibility towards the helpless community people on the other. As knowledge goes, there are many well-to-do /rich people in greater Rangpur region who could come forward to formation of such volunteers group for the sake of serving the distressed humanity. There are many such examples across the globe who worked like this at the time of natural disasters like earthquake, eruption of volcano, tsunami, aila, typhoons, cyclones, water surges, etc. in both developed and developing countries. This may serve as a forum as well as a pressure group to generate resources for giving a

sucour to the monga-affected poor people. This also requires an institutional shape through strong motivation.

### **6.1.3.2 Practical Implications**

Based on the findings of this study following practical implications may be drawn in respect of what can be done to address the key concerns of monga mitigation from the practical point of view:

- a. Seasonal unemployment during the post-flood lean period of 'Ashwin-Martick is a regular phenomenon. An initiative to address this unemployment issue is the popular demand of the monga-hit poor and ultra-poor people.
- b. Most of the monga-affected people are extremely poor and landless. Distribution of agricultural khas land to landless farm workers who lost their farm lands to river erosion appears to be a viable and pragmatic proposition.
- c. More investment in industry sector for creation of more employment opportunities as an alternative sources of income earning seems to be a time demanding approach for removal of regional disparity through allocation of more national resources.
- d. Establishment of SMEs, particularly potato-based (potato chieps) and maize-based (corn flakes) industries as well as small scale mini sugar Mills and Jute Mills also appears to be a promising areas for consideration with a view to generating employment opportunities.
- e. Further promotion and development of Uttara EPZ through supply of gas and power seems to be more pragmatic approach for creation of more job opportunities.

- f. Some of the sick and labor-intensive RMG enterprises may be re-located or shifted to Uttara EPZ from Dhaka EPZ or other EPZ to improve efficiency and maximize profits by absorbing cheap and abundant labours available in the monga-hit area.
- g. There is an abundant scope for crop diversification through promotion of high value crops (HVCs) like vegetables, fruits, spices and aromatic rice varieties.
- h. Growing of some sand-friendly crops, namely groundnut, water melon, sweet gourd, sweet potato and maize could be tried for maximizing production by making proper use of charlands and thus build up food security.
- i. Huge production of bamboos in monga region is really an asset, Bamboo-based handicrafts and basket making industries may be established with market linkage for smooth running of the enterprises.
- j. Small industries for processing of mango, sugarcane mollasses, ginger, turmeric and other exotic varieties of spices may be a new window for employment opportunities.
- k. Strategic plans such as short, medium & long term may be formulated to eradicate monga for good. This may be implemented through allocation of internal resources and also donors' supports in required cases.
- l. Comprehensive area development (CAD) program may be undertaken for overall development of the farm families in all areas of intervention like crops, livestock, fisheries, forests, health, education, nutrition, infrastructure development, etc. Experience of BARD in this regard may be utilized for successful operation of the project.
- m. Research and development (R&D) of early maturing short duration among rice varieties (ie BRRI-Dhan 33, BINA-Dhan-7) to generate employment opportunities during the time of monga for unemployed rural poor and farm laborers tends to be another milestone to supplement and complement the trilogical approach to be institutionalized

among the key stakeholders (political, bureaucratic and social systems) as proposed earlier in Fig 3.1.

- n. Special program for monga-hit region may be launched by organizing skills development training programs to produce technically skilled manpower who will be eligible for gainful employment both at home and abroad. Arrangement may also be made to provide interest free loan or at lower rate of interest to get them involved in agricultural production activities including crops, livestock, fisheries, forests, infrastructure development in a bid to contain monga.
- o. Motivational programs for awareness building in bad effects of early marriage and dowry, anti-smoking campaign highlighting its harmful consequences may be organized.
- p. Investment in education sector also deserves to be initiated since there is no alternative to quality education for poverty alleviation visa-vis monga mitigation.
- q. A formidable size of unemployed youths and adults could be made productive through short, medium and long-term planned programs in human resource development by public-private-partnership (PPP) initiative, if need be, by getting the donor agencies involved in the process.
- r. Various kinds of researches like action or adaptive research, pilot or policy research may be continuously conducted to get feedback from the field to re-design the existing information generation policy for rapid socio-economic development of the monga-hit region. Area survey research for identification of monga-affected population may also be undertaken for initiating intervention.
- s. A more forceful need becomes surfaced to foster closer cooperation and coordination between and among three groups of major stakeholders like politicians, bureaucrats and social groups to expedite the process of monga mitigation. This trilogical approach may go a long way to eradicate the curse of mong for good.

- t. More dialogue between the project holders and beneficiaries appears to be helpful in the process of understanding each others' view point for meaningful social action and interaction and also exchanging ideas and experiences.
- u. Setting up of vocational/technical training institutes, one each at every upazila, for skilled manpower development to make the unemployed youths and adults eligible for gainful employment both at home and abroad.
- v. Permanent solution to monga mitigation necessitates the commitment and integration of the politicians, bureancrats and social groups to work together for creation of necessary resources duly complemented with endeavors for generation of employment for the poor through industrial entrepreneurship development.
- w. Identification of actual monga-affected people or households as a special research project may be a viable proposition since it is a pre-requisite to proper planning for monga mitigation
- x. Formation of '**Monga Special Fund**' through Public-Private-Partnership (PPP) to permanently address the Monga for its eradication seems to be a notable initiation
- y. Development of short duration hybrid amon rice varieties to generate early agricultural activities for landless farm workers alongwith diversification and promotion of High Value Crops (HVCs), particularly vegetables, fruits, spices, aromatic rice, may be undertaken by the Ministry of Agriculture through its constituent components like BRRI-DAE-BINA-BARI.
- z. The last, but not the least is another proposition for placement and relocation of monga-affected poor and ultra-poor people to some tea gardens located in Panchagarh district for seasonal but regular semi-permanent employment opportunities for a period of at least six (6) months beginning from June to November every year. The research team leader had a direct discussion with the top management of some tea planters operating in panchagarah. One such tea company offered him to provide at least 1000 workers in his company for six months every year

with free accommodation facilities at a wage rate of Tk. 100 daily per worker and also other facilities applicable to them time to time. It also transpires from the discussion held with them that at Panchagarh area, other big and medium tea planters may also absorb at least another 10,000 to 15,000 workers if some authorities take initiative to this end at the institutional level. This appears to be a golden opportunity for the monga-hit people to get some employment opportunities towards solving the monga problem to some extent as a temporary measure.

## **Suggestions for Further Study**

This study was limited to one aspect of access to land and livelihood patterns in terms of agricultural perspective and marketing of agricultural produce in eleven upazilas only out of 35 upazila in greater Rangpur region. Other aspects such as poverty alleviation, munga mitigation, climate change and global warning including environmental hazards caused by floods, river erosion, droughts, high temperature, excessive rainfall, etc. apart from analysis of social and economic structure of the affected people living in the Char areas and their livelihood patterns, agricultural diversification encompassing crops, livestock, fisheries, forests, landuse pattern, cropping intensity, employment through relocation of labours etc. may be useful to suggest corrective measures or redesign the implementation strategies or approaches in undertaking social safety net (SSN) programs like 100-days job creation, VGF, VGD, TR, Old-age pension, widow allowance, etc. Sociological case studies on different components cited above may also be helpful to provide new direction to, and insights into the underlying philosophy of the munga mitigation approach. Policy research, action/ adaptive research or academic research may also be undertaken in all areas of intervention mentioned above since, as yet, no comprehensive studies of such nature seems to have been undertaken in Bangladesh in the area of munga mitigation.

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**Table- 1** Distribution of respondents by age

Age category	District	Upazila	Total
26 - 40	7	9	16 (22.2)
41 - 55	30	12	42 (58.3)
> 55	13	1	14 (19.4)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

Range: 26 – 63

Average: 43.82

SD: 8.36

**Table- 2** Distribution of respondents by gender

Gender/ Sex	District	Upazila	Total
Male	45	21	66 (91.7)
Female	5	1	6 (8.3)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 3** Marital Status of the respondents

Marital Status	District	Upazila	Total
Unmarried	1	1	2 (2.8)
Married	49	21	70 (97.2)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 4** Family Size of the respondents

Family size (Nos)	District	Upazila	Total
2 – 4	34	20	54 (75.0)
4 – 6	16	1	17 (23.6)
> 6	0	1	1 (1.4)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

Range: 2 – 9

Average: 3.85

SD: 1.12

**Table- 5 Educational qualification of the respondents**

Level of education	District	Upazila	Total
Bachelors	15	7	22 (30.6)
Masters	30	13	43 (59.7)
Ph.D	5	2	7 (9.7)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 6 Distribution of respondents by type of organization they are affiliated to**

Type of organization	District	Upazila	Total
Government Officials (GOs)	31	10	41 (56.9)
NGOs Officials (NGOs)	11	11	22 (30.6)
Researcher/ Academics/ Professionals	4	0	4 (5.6)
Development Practitioner	4	0	4 (5.6)
TV/Media Personnel	0	1	1 (1.4)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 7 Working experience in the Monga affected area**

Years of experience	District		Upazila		Total	
	<i>Years of Experience in monga area</i>	<i>Total Length of Service</i>	<i>Years of Experience in monga area</i>	<i>Total Length of Service</i>	<i>*Years of Experience in monga area</i>	<i>**Total Length of Service</i>
<b>1 - 10</b>	40	12	20	14	<b>60 (83.33)</b>	<b>26 (36.11)</b>
<b>11 - 20</b>	6	17	2	5	<b>8 (11.11)</b>	<b>22 (30.56)</b>
<b>21 - 30</b>	4	21	0	3	<b>4 (5.56)</b>	<b>24 (33.33)</b>
<b>Total</b>	<b>50</b>	<b>50</b>	<b>22</b>	<b>22</b>	<b>72 (100)</b>	<b>72 (100)</b>

\* Range: 1 – 24

Average: 5.38

SD: 5.317

\*\* Range: 2 – 38

Average: 16.26

SD: 8.75

**Table- 8a Whether involved in the implementation of any program/ project relating to Monga mitigation**

Responses	District	Upazila	Total
Yes	32	13	45 (62.5)
No	18	9	27 (37.5)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 8b Name of the program/ project in which they are involved**

<b>Program/ Project</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No Response	18	9	27
VGF/VGD/100 days/ TR	10	1	11
Training of IGP	2	3	5
PRIME project of PKSF	4	4	8
Poverty reduction by livestock (goat, sheep, cow) & poultry rearing	5	4	9
Monga mitigation through early amon paddy cultivation	4	0	4
PLDP-II (PKSF project)	3	0	3
Crop production of BRRD Dhan-33 and 39	4	1	5
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72</b>

**Table- 9a Whether Monga affected people are getting benefits from the programs/ projects undertaken**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
Yes	31	15	46 (63.9)
No	19	7	26 (36.1)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 9b How are Monga affected people being benefited by this program/ project**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	19	7	26
Access to income/ micro-credit/ cash flow/ low income/ cash and kinds/ credit supports, etc.	17	8	25
Training for skills development/ employment/ work opportunities/ income for agricultural day labour/ technology/ farmer IGA training/ access to technical knowledge, etc.	23	11	34
Moral support/ Financial help/ Provide work facilities	11	3	14
Access to food/ food aid/ food security at crisis for marginal farmers/ Provide relief & cloths, etc.	19	12	31
Through cash for work/ food for work/ Income earning improved purchasing power/ getting job opportunities/ access to	14	9	23

employment/ involved income generating activities			
Physical mitigation. ie: plinth raising, tree plantation/ Seed supply, etc.	3	0	3
Land use, Cropping pattern/ awareness raising/ Getting direct support to face disaster	4	1	5
Rice harvesting in monga month/ irrigation facilities/ early crop production & early harvesting of BR-33, etc.	7	3	10
Earth work/ VGD/ VGF Programme/ 100-day Project	4	1	5
Asset transfer like Cattle/ Sheep and Goat Livestock & Poultry rearing increased purchasing power	6	2	8
Dairy Product (Milk) sold/ cow dung sold/ livelihood improved/ through skill development on alternative livelihood options	4	2	6
<b>Total</b>	<b>131</b>	<b>59</b>	<b>190</b>

Some respondents gave more than one reply

**Table- 10 Are you aware of Monga in your working area?**

Level of awareness	District	Upazila	Total
No response	7	3	10 (13.9)
Fully Aware	38	15	53 (73.6)
Partially aware	4	4	8 (11.1)
Not aware	1	0	1 (1.4)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 11 What do you mean by the term ‘Monga’?**

Responses	District	Upazila	Total
No response	12	1	13 (10.08)
No work/ no money/ lack of income/ no security of employment or work/ seasonal shortage of work/ lack of cash to buy food/ temporary unemployment situation / less work opportunity	19	18	37 (28.68)
No food purchasing capacity/ crises of food/ Seasonal shortage of food / lack of purchasing capacity	16	12	28 21.70)
Periodic poverty due to non availability of agriculture activities, no wealth even to earn livelihood.	4	0	4 (3.10)

Access to technical knowledge/ support	3	7	10 (7.75)
Lack of purchasing power/ Poverty prone area/ people living bellow the poverty line	11	4	15 (11.63)
Monga is more of a political issue rather than actual situation	3	2	5 (3.88)
Monga is a deliberately motivated bogus term, mostly media created, used as an instrument to exploit the situation	2	2	4 (3.10)
Monga is periodically poverty/ when no jobs/ earning not available/ no land	5	2	7 (5.43)
Seasonal crisis period/ time dependent poverty period	4	2	6 (4.65)
<b>Total</b>	<b>79</b>	<b>50</b>	<b>129 (100)</b>

Some respondents gave more than one reply

**Table- 12 When does monga take place?**

Responses	District	Upazila	Total
No response	10	4	14 (19.4)
Sept. - Nov	19	7	26 (36.1)
Oct - Nov	8	4	12(16.7)
Ashwin - Kartik	7	3	10 (13.9)
Aug - Oct	4	3	7 (9.7)
March - April	2	1	3 (4.2)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 13 How long does monga exist?**

Number of days	District	Upazila	Total
No response	9	3	12 (16.7)
30	8	3	11 (15.3)
60	17	4	21 (29.2)
90	14	6	20 (27.8)
120	2	4	6 (8.3)
150	0	2	2 (2.8)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

Range: 0 – 150

Average: 61.25

SD: 39.14

**Table- 14a Do you think monga already started?**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
Yes	31	14	45 (62.5)
No	19	8	27 (37.5)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 14b To what extent does it (monga) affect the people?**

<b>Scale of monga</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	19	8	27 (37.5)
Very severely	0	5	5 (6.9)
Moderately	23	8	31 (43.1)
Not affect so much	4	1	5 (6.9)
Not affect at all	4	0	4 (5.6)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 15a Did monga affect last year?**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
Yes	39	20	59 (81.9)
No	11	2	13 (18.1)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 15b What was its vulnerability?**

<b>Vulnerability/ extent of suffering</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	11	2	13 (18.1)
Most severe (intolerable level)	8	12	20 (27.8)
To some extent (tolerable level)	24	8	32 (44.4)
Did not affect so much	7	0	7 (9.7)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 16 What is the severity of Monga this year compared to previous years?**

Severity of monga	District	Upazila	Total
No response	12	3	15 (20.8)
More severe	3	5	8 (11.1)
Less severe	27	12	39 (54.2)
Almost same level, i.e: not high nor low	8	2	10 (13.9)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 17 Does monga vulnerability increase or decrease in the recent year?**

Degree of vulnerability	District	Upazila	Total
No response	11	2	13 (18.1)
It increases severely	1	5	6 (8.3)
It decreases slowly	31	15	46 (63.9)
It remains static, i.e: neither increases nor decreases	7	0	7 (9.7)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 18a Does monga occur every year in this area?**

Responses	District	Upazila	Total
Yes	39	19	58 (80.6)
No	11	3	14 (19.4)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 18b For how many years has it been happening in this locality?**

Years	District	Upazila	Total
No response	11	3	14 (19.4)
For last 2-3 years	1	0	1 (1.4)
Last 5 years	7	3	10 (13.9)
Last 10 years	11	4	15 (20.8)
Last 20 years or more	20	12	32 (44.4)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 19 Please cite specific reasons why monga occurs only in this particular district every year**

<b>Reasons cited</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	9	2	11 (6.75)
No industries/ poor industrialization/ lack of job opportunities due to no industry	18	6	24 (14.72)
No alternative employment opportunities/ no scope of work/ People are not hard working/ low income area/ less income/ work less/ no alternative work	21	10	31 (19.02)
Lack of skills & competencies/ no job opportunity/Lack of skill training	7	3	10 (6.14)
Regular River erosion and floods/ droughts	16	10	26 (15.95)
Landless/ sandy soil/ lack of good land/ low land	11	1	12 (7.36)
Ultra poor/ poverty/ idleness/ do not like to go out to other districts	3	2	5 (3.07)
Lack of social and political commitment/ lack of political awareness	6	1	7 (4.29)
Early marriage/ High population growth rate/ over population/ dowry/ polygamy	1	2	3 (1.84)
Media created/ actually media made monga though it is not severe every year	4	1	5 (3.07)
Droughts/ disaster prone area/ natural calamite/ climate change	5	3	8 (4.91)
Monga exists in all district but here it is less mobility due to other areas	2	1	3 (1.84)
Less literacy rate/ low literacy rate/ lack of knowledge/ illiteracy/ lack of education	6	4	10 (6.14)
Low wage rate	1	3	4 (2.45)
Vulnerable area due to floods river erosion	0	1	1 (0.61)
People are Lazy/ lazy minded/Less awareness/ idleness	2	1	3 (1.84)
<b>Total</b>	<b>112</b>	<b>51</b>	<b>163 (100)</b>

**Some respondents gave more than one response**

**Table- 20a Do you have any idea about what monga affected people eat during monga period?**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
Yes	36	17	53 (73.6)
No	14	5	19 (26.4)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 20b Types of foods they used to eat at the peak time of monga**

<b>Type of foods used/ taken</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	14	5	19 (15.70)
Rice and vegetables of poor quality available at roadside/ khas land	19	10	29 (23.96)
Overnight water soaked rice and potato curry	7	4	11 (9.09)
Banana shoots/ stalks & leafy vegetable/ maize/ arums and rice	11	3	14 (11.57)
Kaon rice/ sweet potato	11	7	18 (14.88)
Wheat ruti + potato mesh	2	5	7 (5.79)
Overnight water soaked rice and green or red chilli/ poor quality vegetables available free of cost	3	3	6 (4.96)
An unusual food they eat mixed with vegetables	7	2	9 (7.44)
Collecting road side vegetable available free of cost and small rice	5	3	8 (6.61)
<b>Total</b>	<b>79</b>	<b>42</b>	<b>121 (100)</b>

**Some respondents gave more than one response**

**Table- 21a Do you think some social problems like early marriage, dowry, polygamy, etc. become more prominent in the monga affected areas?**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
Yes	24	26	50 (69.44)
No	11	11	22 (30.56)
<b>Total</b>	<b>35</b>	<b>37</b>	<b>72 (100)</b>

**Table- 21b Provide your considered opinions as to how to solve those problems**

<b>Solutions Suggested</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	24	11	35 (17.07)
Involvement in income generation works/ male migration to other district	4	2	6 (2.93)
Training/ Vocational training for skill development	12	9	21 (10.24)
Loan from bank at lower rate of interest	1	5	6 (2.93)
Increase food production to reduce poverty	3	2	5 (2.44)
Stop early marriage, dowry, polygamy	14	7	21 (10.24)
Motivation for awareness building	47	15	62 (30.25)
Establishment of more industries	24	14	38 (18.54)
Ensure marketing facilities and rural market development	3	0	3 (1.46)
Social mobilization for business development	2	2	4 (1.95)
<b>Total</b>	<b>138</b>	<b>67</b>	<b>205 (100)</b>

**Table- 22a Do you think agricultural diversification and synchronized planting will help generate alternative income opportunities to face monga?**

Responses	District	Upazila	Total
Yes	28	10	38 (52.8)
No	22	12	34 (47.2)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 22b Provide pragmatic suggestions as to how to implement this idea.**

Suggestions Provided	District	Upazila	Total
No response	22	12	34 (25.19)
Cultivation of early maturing HYV rice varieties	9	3	12 (8.89)
Cultivation of HVC instead of tobacco	3	2	5 (3.70)
Ensure supply of seeds, fertilizer & irrigation facilities with subsidy	8	2	10 (7.41)
Micro credit with low interest rate	4	0	4 (2.96)
Introduce sand friendly crops, fruits & vegetables species	3	5	8 (5.92)
Large scale afforestation in the Char Areas for soil improvement and stop river erosion	5	3	8 (5.92)
Large investment in industries/ agrobased industries	10	3	13 (9.63)
Education growth through large scale investment	4	1	5 (3.70)
Promote research and study and new programmes	5	5	10 (7.41)
Demonstration on land use pattern and changing cropping pattern	7	2	9 (6.67)
Distribution of Khash land to poor/ landless	2	0	2 (1.48)
Provide new technologies and transfer technology to farmers	4	0	4 (2.96)
Create more jobs round the year	2	1	3 (2.23)
Promote GOs-NGOs partnership for better development	2	0	2 (1.48)
Through training/ and technical support	4	2	6 (4.45)
<b>Total</b>	<b>94</b>	<b>41</b>	<b>135 (100)</b>

Some respondents gave more than one reply

**Table- 23a Do you recommend establishment of more agrobased industries to face monga?**

Responses	District	Upazila	Total
Yes	40	14	54 (75)
No	10	8	18 (25)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 23b How this could be made possible?**

Measures suggested	District	Upazila	Total
No response/	20	9	29 (21.32)
Establish SMEs	5	0	5 (3.68)
Establish Chillis/ Spices (Chillies, ginger, tusmeric etc.) Gur-making Processing Industries for commercial production at small scale.	3	3	6 (4.41)
Skill development training on IGA	7	0	7 (5.15)
Agrobased/bamboo made/Handicrafts industry	26	12	38 (27.94)
Jute mills at small sugar millsscale be established	4	8	12 (8.82)
Public and Private initiatives to establish industries	9	4	13 (9.56)
Potato by-products (potato chips, etc.)	3	0	3 (2.21)
GO-NGOs collaborative initiatives for entrepreneurship development	7	3	10 (7.35)
Employment opportunities be created	5	1	6 (4.41)
Ensure supply of gas power and other raw materials for big industries including ultra EPZ	2	0	2 (1.47)
Provide soft loan/ credit with low rate interest	4	1	5 (3.68)
<b>Total</b>	<b>95</b>	<b>41</b>	<b>136 (100)</b>

Some respondents gave more than one response

**Table- 24a Do you find ample scope of establishing cottage and bamboobased handicrafts industries to overcome monga problem?**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
Yes	27	22	49 (68)
No	13	10	23 (32)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 24b Please suggest measures how to implement this proposition**

<b>Measures suggested</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	23	10	33 (23.24)
Through training/ technical support to produce skilled manpower	19	11	30 (21.13)
Established felt need industry/ handicrafts on resource availability	22	9	31 (21.83)
Financing local agrobased industries	8	8	16 (11.27)
Handicrafts product market linkage	7	3	10 (7.05)
Potato chips/ corn flakes industries	4	2	6 (4.22)
Dairy farming/ beef fattening/ poultry rearing	4	2	6 (4.22)
Awareness raising among the people	2	3	5 (3.52)
Motivation for out migration to other districts	5	0	5 (3.52)
<b>Total</b>	<b>94</b>	<b>48</b>	<b>142 (100)</b>

**Some respondents gave more than one answer**

**Table- 25a Is trafficking of women and children a major problem in the bordering area of monga affected district?**

Responses	District	Upazila	Total
Yes	11	12	23 (32)
No	29	20	49 (68)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 25b What are your suggestions to address this social and humanistic problem?**

Suggestion Provided	District	Upazila	Total
No response	31	12	43 (26.06)
Remove Ignorance of people and educate them through motivation and awareness building	8	4	12 (7.27)
Strict vigilance and implementation of law by the law enforcing agencies	22	7	29 (17.58)
Awareness building/ public consciousness building through motivation	27	15	42 (25.45)
Border and other law enforcing agencies be vigilant to combat this menace	17	22	39 (23.64)
<b>Total</b>	<b>105</b>	<b>60</b>	<b>165 (100)</b>

Some respondents gave more than one answer

**Table- 26a Do you think climate change and global warming are key factors in aggravating the scale of monga?**

Responses	District	Upazila	Total
Yes	28	11	39 (54.2)
No	22	11	33 (45.8)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 26b If yes, please explain those as to how they cause monga**

<b>Causes of monga</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	22	11	33 (18.97)
Food/River erosion	21	9	30 (17.24)
Lack of financial support/ Economic hardship	6	11	17 (9.77)
Droughts/ no harvest	9	2	11 (6.32)
Cyclones/ water surge/ hailstorms/ excessive cold, high temperature, droughts, etc	7	3	10 (5.75)
Flash floods/ crop loss	17	8	25 (14.37)
No industries/ no work opportunities	9	7	16 (9.20)
Poverty/ unemployment/ no income earning opportunities	9	4	13 (7.46)
<b>Total</b>	<b>113</b>	<b>61</b>	<b>174 (100)</b>

Some respondents gave more than one answer

**Table- 27a Do you have any other suggestions to solve monga related problem?**

<b>Responses</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
Yes	26	13	39 (54.2)
No	24	9	33 (45.8)
<b>Total</b>	<b>50</b>	<b>22</b>	<b>72 (100)</b>

**Table- 27b If yes, please provide your insights towards solving these monga-related problems**

<b>Insights provided</b>	<b>District</b>	<b>Upazila</b>	<b>Total</b>
No response	25	9	34 (20.73)
Impart training for skills development	9	7	16 (9.76)
Establishment of agrobased industry/ labour intensive small industries/ investment in light industries	21	7	28 (17.07)
Ensure work to monga affected people	9	4	13 (7.93)

Short duration crop production synchronized harvesting before/ during monga period for job creation	2	1	3 (1.83)
Stop river erosion/floods/ cyclones/ hailstorms	12	14	26 (15.85)
Employment creation	19	10	29 (17.68)
To create special law to mitigate monga	3	0	3 (1.83)
Launching of Govt. Special program to address monga	5	3	8 (4.88)
GOs-NGOs coordination	3	1	4 (2.44)
<b>Total</b>	<b>108</b>	<b>56</b>	<b>164 (100)</b>

**Some respondents gave more than one answer**

## Appendix - B

### List of Persons Met

District	Name	Designation	Organization
1. Rangpur.	Mr. Md. Abdul Ahad/Ataur Rahman	DC	DC Office
	Mr. Kollol Kumar Chakraborty	ADC (Rev)	DC Office
	Mr. Md. Shamsul Alam	ADC (Adm)	DC Office
	Mr. Md. Faruque Hossain	ADC (Education & Development)	DC Office
	Mr. Nazrul Islam/ Salahuddin	NDC	DC Office
	Mr. Nazmul Huda	Magistrate	DC Office
	Mr. Md. Hazrat Ali	DD(Agri)	DAE
	Mr. Shankar K. Das	DGM	BSCIC
	Mr. Nurul Islam	PC,	DYD
	Mr. Mizanur Rahman	DPC	O
	Mr. Abdur Razzaque Khan	PC	BKMEA
	Mr. Manesh K. Saha	PSO	BARI, RAAS
	Dr. Syed Samsuzzaman	Director (LH)	RDRS
	Mr. Imrul Kayes	Director (NBI)	RDRS
	Ms. Sabina Yasmin Lubna	Coordinator (NBI)	RDRS
	Mr. M.G. Neogi	Agri Coordinator	RDRS
	Mr. Julfiquar Ali Jewel	MEO (NBI)	RDRS
	Mr. Jasimuddin	Coordinator (NBI)	RDRS
	Ms. Mahmuda Khandaker Bithi	PM (Research)	RDRS
	Mr. Apurba Sarker	PC	RDRS
	Dr. Hammadur Reza	PSO	BARI RARS
	Mr. M.A. Mannaf	PSO	-do-
	Mr. Roushanuzzaman Talukder	DLO	DLO Office
	Mr. M.A. Rouf	DFO	DFO Office
	Dr. M.A Mazid	CSO & HEAD	BRRI,RS
	Mr. Anwarul Haque	SO	do
	Mr. Robban Ali	PPS	DAE
	Md. Osman Ghani	DTO	

2. Nilphamari	Mr. Md. Rashedul Hasan Mr. Moloy Kumar Roy Mr. Ali Reza Mazid Mr. Moniruzzaman Mr. Abdul Moyeen Mr. Mohammad Ullah Mr. H M Rokib Haidar Mr. A T M Shafiqul Alam Mr. Md. Younus Ali ATM Saiful Alam Md. Masum Reza Mr. Rafiqul Islam	DC ADC (Rev) ADC (Adm) ADC (Gen) Magistrate Magistrate Magistrate Magistrate DD (Agriculture) PD/GM Executive Engineer Counsellor	DC Office DC Office DC Office DC Office DC Office DC Office DC Office DC Office DAE UTTARA EPZ UTTARA EPZ UTTARA EPZ
3. Lalmonirhat	Mr. Md. Ala Uddin Fokir/Rafiqul Islam Mr. Md. Abdul Karim Mr. Sarwar Mahmud Mr. Showdagar Mustafizur Rahman Mr. Abu Bakar Siddique Mr. Shahnewas Khan Mr. Md. Aftab Uddin Khan	DC ADC (Rev) ADC (Adm) ADC (Gen) Magistrate UNO DD(Agri)	DC Office DC Office DC Office DC Office DC Office Sadar UNO Office DAE
4. Kurigram	Mr. Quamruzzaman Mr. Mahbubur Rahman Mr. Sarwar Jahan Mr. Jahurul Islam Mr. Sirajul Huq Mr. Abu Kaiser Khan Mr. Sohel Ahmed Mr. Shafique Ahmed Mr. Mahbubur Rahman Mr. Rashedul Hasan Mr. Habibullah Mr. Mohsin Ali Mr. Sheikh Ahmed Reza Mr. Dewan MA Mazid Mr. Fazlul Karim Dr. Shafiqul Islam Mr. Joynal Abedin Mr. Nazrul Ghani	DC SP ADC(Rev) ADC(Gen) ADM Magistrate -do- do do do do DD(Agri) DTO PPS HORT SPECIALIST DD(HQ) PC CPC	DC Office SP Office DC Office DC Office DC Office DC Office DC Office DC Office DC Office DC Office DC Office DDAE DDAE DDAE DDAE DAE RDRS RDRS
5. Gaibandha	Mr. Abu Mohammad Yousuf Mr. Abul Bayes Mian Mr. Md. Siddiqur Rahman Mr. Ranjit Kumar Das Mr. Redwan Ahmed Mr. A N M Mizanur Rahman Amin Mr. SAM Saiful Islam	DC ADC (Rev) ADC (Adm) ADC (Edn. & Dev) NDC DD (Agriculture) DTO	DC Office DC Office DC Office DC Office DC Office DAE DAE

Upazila	Name	Designation	Organization
1. Dimla	Mr. Abdus Sabur Mondal Mr. Md. Shamsurzzaman Mr. Liakot Ali Khan  Mr. Abul Kalam Azad Md. Habibur Rahman	UNO AEO District Program Co-ordinator Upazila Manager Accountant	UNO Office DAE RDRS  RDRS RDRS
2. Jaldhaka	Mr. Shahidul Islam Bhuiyan Mr. Afsar Ali Mr. Abdur Rashid Prodhan Mr. Nurul Islam Mr. Rasidul Arefin Mr. Akramul Alam	UNO UAO AEO AAEO Senior Manager Area Manager	UNO Office DAE DAE DAE RDRS RDRS
3. Hatibandha	Mr. Md. Lotfur Rahman Mr. Md. Ali Azam Mr. Shosty Chandra Roy Mr. Md. Enamul Haque Mrs. Sharifa Pasha Md. Sajedur Rahman Mr. Abdul Mannan Mr. Md. Emdad	UNO UAO UAO (acting) AEO Assistant Manager Legal Supervisor Branch Manager Project Co-ordinator	UNO Office DAE DAE DAE RDRS RDRS RDRS ASORD
4. Kaliganj	Mr. S M Abu Huraira Mr. Md. Danib Ullah Mr. Md. Abdul Matin Mr. Rajib Ullah Mr. Mokul Dey Mr. Shafiqul Islam	UNO UAO AEO AEO Co-ordinator Area Manager	UNO Office DAE DAE DAE RDRS RDRS
5. Aditmari	Mr. Y M Zia Uddin Al-Mamun Mr. Md. Hamidur Rahaman Mr. Md. Keramat Ali Mr. Md. Muradzzaman	UNO UAO AEO AAEO	UNO Office DAE DAE DAE

6. Kaunia	Mr. Anowar Hossain Mr. Md. Firoz Ahmed	UNO UAO	UNO Office DAE
7. Gangachhara	Mr. Md. Ziaul Haque Mr. Rafiqul Islam Ms. Shahida Rokeya Ms. Shahid-al-Rokeya	UNO UAO AEO UP Member	UNO Office DAE DAE UP Office
8. Saghata	Mr. Kollol Singh Mr. Yousuf Rana Mondal Mr. Jahidul Haque Chowdhury Mr. Md. Abdul Latif	UNO UAO AEO AAEO	UNO Office DAE DAE DAE
9. Gobindaganj	Mr. Md. Abdul Mannan Mir Mohammed Abdur Razzak Md. Khorshid Alam Mr. S.N. Sarker Mr. Dilip Kumar Sarker Mr. Moksed Ali Mr. Md. Abdul Hai Masud Mr. Md. Sirajul Islam (Modhu)	UNO UAO AEO MD CDO CDA CDA CDA	UNO Office DAE DAE RSM RSM RSM RSM RSM
10. Nageshwari/ Burungameri	Mr. Md. Hasan Ali Mr. Md. Obaidul Haque Md. Mosharaf Hossain Mr. Shahinoor Rahman Mr. Bankim Roy Mr. Habibur Rahman Mr. Ahsanul Kabir Mr. Sirajul Islam	ED PM ATO ATO Manager Manager Manager Manager	BDSC " " " RDRS " " PKSF(Prime Cell)

## Semi-structured interview schedule



















**Questionnaire for Opinion Survey of Field Level Administrators, Policymakers and Implementors of Different Development Programmes undertaken by GOs, NGOs and Donor Agencies for Monga Mitigation in Greater Rangpur Region**

**[Instruction :** Please feel free to answer the following questions. This is absolutely a research study designed for academic purpose only to get an in-depth understanding of the dynamics of Monga and its vulnerability affecting the poor and ultra-poor people in this area. Your active cooperation will definitely help the research team to have a comprehensive idea and internalize the entire process of monga which has become a very sensitive issue to planners, policymakers and researchers. Your answer will be kept **strictly confidential**. You may or may not sign your name.]

Respondent No \_\_\_\_\_ Name of interviewer : \_\_\_\_\_

Date of interview : \_\_\_\_\_ Time \_\_\_\_\_ Place of interview : \_\_\_\_\_

Name of Zila/Upazila : \_\_\_\_\_

**Block I : Personal Information**

1. Name of respondent (Optional) : \_\_\_\_\_
2. Official status/ position : \_\_\_\_\_
3. Name of organization : \_\_\_\_\_
4. Age (as of last birth day) : \_\_\_\_\_
5. Sex : Male  Female
6. Marital Status : Single  Married  Widow/ Widower   
 Separated / Divorced :
7. Family size :  total members
8. Educational Qualification:  
 Degree obtained : \_\_\_\_\_ year obtained : \_\_\_\_\_  
 Area of specialization : \_\_\_\_\_
9. Please check which category you belong to :
  - Government official (GO)
  - NGO Official
  - Donor Agencies
  - Researcher / Academics/ Professional (doctor/engineer/ retd.Govt. Official/ army official)
  - Politician / Social Worker / Civil Society
  - Extension Official/Rural development official / Development practitioner
  - Local government representative (Chairman/Member)

Local elite/opinion leader

Contd...P/2

10. How long have you been working in your present position in this Monga affected area?  years
11. What is the total length of your service/ profession  years
12. Area you involved in any program/ project relating to Monga mitigation?  
Yes  No
- 12.1 If yes, please name the program/ project you are working with : \_\_\_\_\_
13. From your experience, do you think that the monga-affected people are really getting benefits from this program/project ?
- 13.1 If yes, please indicate/describe how they ( monga-affected people) are being benefited :  
a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

### Block II : Information related to Monga Mitigation

1. Are you aware of Monga in your working/command area ?  
a. Aware  b. Partially aware  c. Not aware
2. Frankly speaking, what do you mean by the term Monga ?  
a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
3. When does it (Monga) take place in your working area ? From \_\_\_\_\_ To \_\_\_\_\_
4. How long does it exist ? \_\_\_\_\_ days / months
5. Do you think Monga already started in your area ? Yes  No
- 5.1 If yes, to what extent it affects the people ?  
a. (It affects) very severely   
b. (it affects) moderately  (i.e. at tolerable level )  
c. (It does) not affect so much  d. (it does) not affect at all
6. Did Monga affect last year or previous years ? Yes  No
- 6.1 If yes, then what was its vulnerability i.e. extent/scale of suffering ?  
a. Most severe (intolerable level)   
b. Some extent (tolerable level)   
c. Did not affect so much
7. Compared to last year and years before last year, what is the severity of Monga this year ?

- a. More severe       b. Less severe   
 c. almost same level i.e. not high nor low
8. Does Monga vulnerability increase or decrease in the recent years ? If so, then what extent ?
- a. It increases severely       b. It decreases slowly   
 c. It remains static i.e. neither increases nor decreases

**2**

9. Does Monga occur every year in this area:    yes       No
- 9.1 If yes, from your experience could you please tell us for how many years it has been happening in this locality ?
- a. For last 2-3 years       b. last 5 years   
 c. last 10 years       d. last 20 years or more

10. Apparently it seems that monga does not exist in other districts but why does it recur/happen every year in greater Rangpur Region only ? Please give us the specific reasons why it occurs in this particular district every year in a regular phenomenon ? Reasons are :
- a. \_\_\_\_\_      b. \_\_\_\_\_      c. \_\_\_\_\_  
 d. \_\_\_\_\_      e. \_\_\_\_\_      f. \_\_\_\_\_

11. Do you have any idea about what do they (monga affected people) eat during monga period?
- yes       No

- 11.1 If yes, please provide us the types of foods they used to eat at the peak time of monga :
- a. \_\_\_\_\_      b. \_\_\_\_\_      c. \_\_\_\_\_      d. \_\_\_\_\_

12. Are you involved in any program/ project relating to monga mitigation ?
- Yes       No.

- 12.1 If yes, please name the program/project you are working with/were involved \_\_\_\_\_

13. From your experience, do you think that the monga affected people are getting benefits from this program/project?

- 13.1 If yes, please indicate/describe how they are being benefited :
- a. \_\_\_\_\_      b. \_\_\_\_\_      c. \_\_\_\_\_

13. What problems did you encounter with regard to implementation of such monga-related programs ? Please list them with suggestion(s) for their improvement.

Sl.No.	Problem(s)	Suggested solution(s)
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a.		
b.		
c.		

15. What are the other steps, do you think, would be appropriate to mitigate munga in your area ?  
a. \_\_\_\_\_ b. \_\_\_\_\_  
c. \_\_\_\_\_ d. \_\_\_\_\_
16. How do they (munga affected people) poor and ultra poor cope with munga at its peak period or what do they do to tide over the survival mechanism during Munga  
a \_\_\_\_\_ b \_\_\_\_\_ c \_\_\_\_\_
17. Do you have any list of munga-affected people or households in this Upazila/Zila you are working in? Yes
- 17.1 If yes, we would appreciate if you please provide us the list thereof  
Provide  Not provide  To be provided

**Block III : General Information :**

**3**

1. In the munga-affected areas, do you encounter any social problems i.e early marriage, dowry, polygamy, male migration to other districts etc.)  
yes  No
- 1.1 If yes, please tell us how do you solve them ?  
a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
2. Do you think that agricultural diversification specially through cultivation of high value crops (vegetables, fruits, spices, etc.) and synchronized planting of early maturing rice varieties will help mitigate the sufferings of the munga affected people ? Yes    
No
- 2.1 If yes, please help us providing pragmatic suggestions as to how to implement this idea.  
a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
3. Do you recommend establishment of small and medium scale (SME) agrobased industrial enterprises (like ginger, chilli, turmeric processing, power-driven gur-making units, etc.) will help generate alternative income opportunities to face munga ? Yes  No
- 3.1 If yes, please tell us how this could be made possible ?  
a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
4. All the munga-affected districts of greater Rangpur region are blessed with abundant bamboo resources. Do you find ample scope of establishing cottage and bamboo-based handicrafts industries to overcome munga problem ?  
. Yes  No
- 4.1 If yes, please suggest how to executive this idea ?  
a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
5. Do you find any other alternative income earning opportunities for the munga-affected people? If so what are those ?  
a. \_\_\_\_\_ b. \_\_\_\_\_  
c. \_\_\_\_\_ d. \_\_\_\_\_
6. It is the general impression that triflicking of women and children tends to be a major problem in the boardering area of munga-affected districts. Do you agree ?

Yes

No

6.1 If yes, what are your suggestions to address this social and humanistic problem ?

b. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

7. Do you think climate change and global warming (i.e. river erosion, droughts, floods, cyclones, water surges, etc.) have some impact in aggravating the scale of monga in this area?

Yes

No

7.1 If yes, please elaborate them ?

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

8. If you have any other insights/suggestions as to how to solve the monga-related problems of this area, please feel free to list them :

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

Signature (optional) :

Date signed :

**Thank you very much for providing your valuable insights, helpful suggestions and sincere cooperation in completing this questionnaire.**

CHECKLIST FOR CONDUCTING FGD/PRA

1.  $g\frac{1}{2}v$  ej<sup>+</sup>Z Avcbv<sub>i</sub>v  $\mathbb{K}$  e<sup>+</sup>Sb t
2.  $g\frac{1}{2}v$  K Lb nq t
3.  $g\frac{1}{2}vi$   $\bar{v}vq$ ZKvj KZ  $\mathbb{W}$ `b t
4.  $g\frac{1}{2}vi$  KviYmgn  $\mathbb{K}$   $\mathbb{K}$  Zv ms<sup>+</sup>¶<sup>+</sup>c ejb t
5.  $g\frac{1}{2}vi$  mgq Avcbv<sub>i</sub>v Kq <sup>+</sup>ejv Lvb t  
 K) GK<sup>+</sup>ejv  L) `B <sup>+</sup>ejv  O)  $\mathbb{Z}$ b <sup>+</sup>ejv
- 6]  $g\frac{1}{2}vi$  mgq f<sup>+</sup>v<sup>+</sup>Zi mv<sup>+</sup>\_ Ab<sup>+</sup>  $\mathbb{K}$   $\mathbb{K}$  ZiZiKvix ev gvQ/gvsm Lvb t
7.  $g\frac{1}{2}v$  <sup>+</sup>gvKv<sup>+</sup>ejv Kivi Rb<sup>+</sup> Avcbv<sub>i</sub>v AvMvg <sup>+</sup>Kvb c<sup>-</sup>  $\mathbb{Z}$   $\mathbb{W}$ b<sup>+</sup>q  $\bar{v}$ <sup>+</sup>Kb  $\mathbb{K}$ ?  
 n<sup>v</sup>  bv
- 7.1 h<sub>i</sub>Z Avcbv<sub>i</sub> DËi n<sup>v</sup> n<sup>+</sup>q  $\bar{v}$ <sup>+</sup>K, Zvn<sup>+</sup>j  $\mathbb{K}$   $\mathbb{K}$  c<sup>-</sup>  $\mathbb{Z}$   $\mathbb{W}$ b<sup>+</sup>q  $\bar{v}$ <sup>+</sup>Kb G m<sup>+</sup>ú<sup>+</sup>K  $\mathbb{K}$ Q ejb t
8. Avcbv<sup>+</sup>`i Pv<sup>+</sup>Ii Dc<sup>+</sup>hvMx <sup>+</sup>Kvb Avev`x R<sub>ig</sub> Av<sup>+</sup>Q  $\mathbb{K}$ ? h<sub>i</sub>Z  $\bar{v}$ <sup>+</sup>K Zvn<sup>+</sup>j H R<sub>ig</sub><sup>+</sup>Z  $\mathbb{K}$   $\mathbb{K}$  dmj Avev` K<sup>+</sup>ib Zv <sup>+</sup>g<sup>+</sup>šmg<sup>+</sup>f<sup>+</sup>ËK km<sup>+</sup> Kvh<sup>+</sup>µ<sup>+</sup>g ( Cropping pattern ) ejb t  
 K) L<sub>ivc</sub> 1 (gvP -Rb) L) L<sub>ivc</sub> - 2 (RjvB <sup>+</sup>K A<sup>±</sup>v<sub>ei</sub>)  
 M) i<sub>ve</sub> <sup>+</sup>g<sup>+</sup>šmg ( b<sup>+</sup>f<sup>+</sup>xi - <sup>+</sup>de<sup>+</sup>qvix)
9. Avcbv<sup>+</sup>`i G<sub>jv</sub>Kvq mvaviYZt  $\mathbb{K}$   $\mathbb{K}$  carb cavb dmj (major crops) Avev` Kiv nq G m<sup>+</sup>ú<sup>+</sup>K ejbt
10. Avcbv<sub>i</sub> evoxi Av<sup>+</sup>½bvq (Homestead) <sup>+</sup>Kvb dmj Avev` K<sup>+</sup>ib  $\mathbb{K}$ ? h<sub>i</sub>` K<sup>+</sup>i  $\bar{v}$ <sup>+</sup>Kb Zvn<sup>+</sup>j <sup>+</sup>m, <sup>+</sup>jvi bvg ejb t
11. Avcbv<sub>i</sub>v  $g\frac{1}{2}vi$  mg<sup>+</sup>q  $\hat{b}$   $\mathbb{W}$ `<sup>+</sup>b R<sub>xve</sub>Kv  $\mathbb{W}$ bev<sub>n</sub> (livehihood pattern) K<sup>+</sup>ib Kx f<sup>+</sup>ve Zv ej<sup>+</sup>eb  $\mathbb{K}$ ?
12. Av<sub>enl</sub>qvMZ Kvi<sup>+</sup>Y (<sup>+</sup>hgb b`x f<sub>v</sub>½b, eb<sup>v</sup>, AvZ e<sub>wó</sub>, Abve<sub>wó</sub>, So-Zdvb, f<sub>vg</sub>K<sub>ú</sub>, mv<sub>ig</sub>qK eb<sup>v</sup> (flash flood), N<sub>Y</sub>So (cyclone), Li<sup>+</sup>mvZv b`x<sup>+</sup>Z Pi cov, BZ<sup>+</sup>v<sub>i</sub>) Avcbv<sup>+</sup>`i R<sub>ieb</sub> hv<sub>i</sub>vi Dci <sup>+</sup>Kvb cfve c<sup>+</sup>o  $\mathbb{K}$ ? G e<sup>-</sup>v<sub>cv</sub><sup>+</sup>i Avcbv<sup>+</sup>`i m<sub>ip</sub>išZ gZvgZ  $\mathbb{W}$ `b?



22. Avcbvi tQ+j-g+q+K K iXZgZ -+j cvVb ? n`v  bv
- 22.1 DËi nW n+j, Zviv -+j hvq Kfvte  
 K) cv+q +n+U  L) wi · v/f`v+ b  M) mvB+K+j  ev+m
23. DbZ cxZ+Z dmj +ivcb, nvm-giMx cvjb, `avj Mvfx cvjb I Mi" tgvUv ZvRvKiY BZ`v` `vel+q Avcbviv BvZc+e +Kvb cKqIY vb+q+Qb K ? n`v  bv
- 23.1 h` vb+q \_v+Kb Zvn+j KZRb, KZ`+bi cKqIY, K ai+bi cKqIY Ges Kviv GB cKqIY Kvhµ+gi D``vMx (sponsoring agency) vQ+jb Zv `qv K+i ej+eb K ?
- 23.2 H mg- cKqIY +\_+K Avcbviv K K DcKvi +c+q+Qb Zv ejb t
- 23.3 fvel"+Z H ai+bi cKqI+bi gva+g Avcbv`i Rxeb-hvÎvi gvb DbZ Ki+Z AvMnx vKbv Rvbvb t
24. Avgiv Rvb cIZ eQiB AÎ GjvKvq g½v n+q \_v+K| Bnv tgvKvejv Kivi (coping strategy) Rb` Lv` `bivcËvmn K K AvMvg e`v MnY K+i \_v+Kb Zv ej+eb K ?
25. Avcbv`i GjvKvq KgiZ miKvix ev temiKvix (GbRI) cZôv+bi KvhKviZv (effectiveness) m+ú+K KQ ejb| D³ cZôvbm+ni g+a" +Kvb Kvb cZôv+bi Kvhµg Avgv`i me+P+q DcKvix Ges fvj e+j g+b K+ib t
26. Avcbv`i DbZ RxebhvÎv I RxeKv vbev+ni Rb` miKvix ev temiKvix cZôvb +\_+K Kx Kx Kvhµg vb+j Avcbviv me PvB+Z tekx DcKZ n+eb Zv ejb t
- K) vijd ev vebv+j` ÎvYmvGM
- L) Kgm+` Drcv`b FY/qI` FY ( Production Micro-credit at low rate)
- M) nvm-giMx cvjb, `avj Mvfx I Mi" tgvUvZvRvKiY velqK cKqIY Kvhµg
- N) DbZ cxZ+Z PvIvev`, kvK-meIR I djgj Avev` m+ú+K cKqIY
- O) evk-+eZ m+ú`+K KvPvgvj vn+m+e MY" K+i qI` I KvUi vkí -vcb
- P) DËi v Bv+cRW+K Av+i v kv³ kvjx K+i ^Zvi +cvIvK vkí ( RMG ) -vcb
- Q) gkjv cµqvRvZKiY vKsev KvIvfËK qI` I gvSvvi vkí cZôvb -vcb (gviP, Av`v, imb, nj`, a+b, Av+Li ,o BZv` ) cµqvRvZKiY vkí -vcb)
- R) Ab`vb` h` \_v+K ZvI D+jL Ki"b