Monga
Seasonal Food Insecurity in Bangladesh
Understanding the Problem and Strategies to Combat it

prepared by
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Sundarganj, Dhaka, Bochum 2006
Acknowledgement

I spent ten months as a volunteer for the German non-governmental organization (NGO) NETZ Partnership for Development and Justice in Bangladesh and was engaged in research on the monga phenomenon for about half a year. I mainly stayed at the local NGO Gana Unnayan Kendra (GUK) in the field office in Sundarganj and the head office in Gaibandha Sadar. Although the research was done using the infrastructure of GUK and with financial and mental support of NETZ, me as a person and my opinions are not representing an institution and are not influenced by any organizational ideology. However, I am very grateful for all support from GUK and NETZ and the individuals involved in these organizations.

GUK offered me the assistance of Rokonuzzaman Zillulla, who was working as a monitoring officer that time. He was motivated to contribute to my work far beyond my expectations. He spent a lot of time during and after office hour with me, visiting the field and discussing on monga and other topics. His knowledge in English made it possible to understand the people beyond my limited capacities in speaking and understanding Bengali. I am also grateful to the local staff of GUK in Sundarganj, who were living with me and made me feel at home.

I am thankful to Felix Gossrau and Niko Richter for reviewing my report and giving valuable feedback and to Dr. Meghna Guhathakurta for giving me the opportunity to make my work available to a wider audience.

Life in the study villages is hard and talking about severe problems is not easy for those who suffer. However, people were willing to share with the foreigner and I was welcomed very openly.

My wife Laura gave me the chance to stay abroad and supported all I was doing. Coming back to her was the most important moment during that year.

Sebastian Zug, Bochum October 2006
Abbreviations and Glossary

aman  rice grown in the monsoon season
Ashar  mid June to mid July
Ashwin  mid September to mid October
aus  rice grown in the late dry/early monsoon season
BAL  Bangladesh Awami League (biggest opposition party)
Bhadrak  mid August to mid September
BNP  Bangladesh National Party (leading party in the government)
boro  rice grown in the dry season
BRAC  Bangladesh Rural Advancement Committee
BRRI  Bangladesh Rice Research Institute
BSS  National News Agency of Bangladesh
CARE  international NGO
CFW  Cash-for-Work
Chaitra  mid March to mid April
char  island in the river formed of alluvial sediments
CLP  Chars Livelihoods Programme
contract labor  e.g. during harvest: A group of laborers makes a contract with a landlord. They harvest a certain field for a negotiated payment. The time they need for harvest is not relevant.
CPD  Centre for Policy Dialogue
DER  Disaster and Emergency Response
DFID  Department for International Development (UK)
district  administrative unit; Bangladesh consists of 64 districts
FFW  Food-for-Work
GDP  gross national product
GF  Gratuitous Relief
greater districts  The administrative system in Bangladesh was reformed in the 80s. Districts were subdivided. Former Rangpur District for example was subdivided into Gaibandha, Kurigram, Lalmonirhat, Nilpharmari and Rangpur, which are now called districts. To make a differentiation between old and new districts possible, ‘greater’ is prefixed to old districts.
hat  big market that usually takes place once a week at the same location
GUK  Gana Unnayan Kendra
Jaisthay  mid May to mid July
Jamaat-e-Islami  coalition partner of BNP
Kartik  mid October to mid November
khas land  government land
kula  special bamboo tray for winnowing paddy
lac  Lac is an animal resin secreted by the lac insect which can be processed to varnish or similar products.
little monga  monga-like phenomena before boro is harvested
mound unit of measurement for paddy. 1 mound is equal to 37.3 kg paddy in most regions in Bangladesh, in Sundarganj 1 mound is equal to 42 kg paddy.

MP Member of Parliament
NETZ NETZ, Partnership for Development and Justice
NGO nongovernmental organization
OMS Open Market Sale
PPRC Power and Participation Research Centre
PRSP Poverty Reduction Strategy Paper
RDRS Rangpur Dinajpur Rural Service
RIB Research Initiatives, Bangladesh
SAARC South Asian Association for Regional Cooperation
samity a local group organized by a NGO
share-cropping People cultivate the land of a landlord and have to return a certain proportion of the harvest
share-raring People rare livestock for other owners. The profit is shared.
Sraban mid July to mid August
taka currency of Bangladesh, 1 US Dollar = 67 taka (1.7.2006)
TR Test Relief
transplantation process of removing paddy from a small densely seeded field and to replant the plants in an equal distance to a big field
UN United Nations
union administrative unit; Sundarganj Upazila consists of 15 unions
UP Union Parishad, elected local governance on union level
upazila administrative unit; Gaibandha District consists of 7 upazilas
USS Udayankur Seba Sangsta
van rickshaw-like vehicle for transporting goods
VGD Vulnerable Group Development
VGF Vulnerable Group Feeding
WFP World Food Programme
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**Introduction**

Monga or seasonal food insecurity is not a new phenomenon in rural Bangladesh, but the topic just started to catch public interest in the last years. Pushed by the media, it became part of the political debate between the government and opposition parties and found its way into Bangladesh’s Poverty Reduction Strategy Paper. To the NGOs and other actors in the development process monga is now an important concern, for which they collect funds and implement projects.

The basic explanation of the monga phenomenon is widely known: employment and income opportunities of the rural poor strongly decrease between transplantation and harvest of paddy. The lack of income reduces their ability to cover nutritional requirements.

Actors, who are involved in the issue, have built up a good knowledge about the problem, but this knowledge is so far not being adequately shared and not accessible. This report is an attempt to bring the knowledge together in order to analyze monga as comprehensively as possible. It combines secondary information with an empirical study in three villages in Gaibandha District. However, more detailed interdisciplinary research is needed to completely understand monga.

The chapters 2 to 6 are an attempt to explain and to analyze monga from different points of view while chapter 7 focuses on strategies to address it. The chapter has two objectives. It summarizes the currently used strategies and it tries to point out other strategies. Inclusion of strategies, that are not or not sufficiently used to address monga, is not to be understood as a suggestion for solving monga, but as a contribution to the process of discussing on strategies to address monga.
1. **Methodology**

The report is based on different information sources. Various secondary data was reviewed. Scientific literature with a focus on seasonal poverty in the context of Bangladesh is only very limited available. The topic is strongly interlinked with poverty in general and issues like ecological vulnerability, coping strategies and economy. Valuable information related to monga could be found in those publications. Various reports of NGOs have been taken into consideration, as well, although the information given there has to be seen critical, as these reports are mainly not based on a systematic analysis and are sometimes very biased. To analyze the macro level, statistical data, mainly from the *Bangladesh Bureau of Statistics* was used. As not much is written about monga, expert interviews with scientists and NGO workers helped to get a broader view on the topic.

An empirical study was conducted in Tarapur Union of Sundarganj Upazila in Gaibandha District. Three settlements were selected. Gagoa Bat is situated on the embankment of Teesta River. Char Khorda and Char Latshala are two neighboring *chars* of Gagoa Bat, which are attached to the mainland and with each other during the dry season. People in the study households of Char Latshala settled some 10 years ago and have comparatively better agricultural opportunities than people on the studied settlement on Char Khorda, were people settled about 3 years ago on sandy soil, which is hardly cultivatable.

Most of the study area was covered by an economic empowerment program of the local NGO GUK in its initial phase. Working closely together with the staff of the NGO made it easier to get in contact with the people in the area, but it also might have had an influence on their answers. A qualitative methodology was used. Various families have been interviewed one or several times and focused group discussions have been conducted. Interviews were not restricted to people affected by monga, but were also held with traders, landowners, and government officials. Interviews were conducted in Bengali, sometimes with the help of an interpreter.

2. **Defining Monga**

The manifestation of the phenomenon called monga is food and nutrition insecurity. To understand the causes of monga, a conceptual framework of food and nutrition security\(^1\) can give a guideline.

The achievement of sufficient nutritional status depends on the three factors 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

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\(^1\) See Weingärtner 2005, p.5f; Food Security is achieved, if adequate food (quantity, quality, safety, socio-cultural acceptability) is available and accessible for and satisfactory utilized by all individuals at all times to live a healthy and happy live.
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 on the market.

Utilization refers to the quality of the 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 can vary in time. This temporal dimension is included in the framework as stability. A distinction can be made between chronic food insecurity - the inability to meet food needs on an ongoing basis -, 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.

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 regions’ is mainly based on paddy cultivation. The employment opportunities for agricultural day-laborers therefore mainly depend on seasonal labor requirements for this crop. In-between transplantation and harvest only little labor is needed and as a result the income of day-laborers is low. Like the agricultural laborers marginal farmers face monga, too. Their financial assets reduce towards the harvest. They have to give successive inputs to their fields, but they receive the return for their work not until after harvest. 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 indirectly affected by the agricultural lean season. This is the case for all those who depend on the income of people affected by the agricultural lean season, like small traders and beggars. 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 the prices for basic foods often increase during monga.

Affected people reduce the quantity of nutritional intake. To compensate the common but comparatively expensive food, 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 in the main monga period is already weakened through the preceding flood period when illnesses like diarrhea are very common. Diarrhea remains a problem during monga and worsens the situation because

![Figure 1: Framework of Food and Nutrition Security](source: Weingärtner 2005, p.3)
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\textsuperscript{2}, which has negative impact on their health and makes it even worse for them to overcome the short but serious monga period.

The \textit{availability} of food in the understanding of the framework is no problem. A sufficient amount of food exists in Bangladesh and monga affected districts even produce a food surplus. Bangladesh as a whole is not self sufficient in food production in most years, but government and private commercial imports as well as international food aid ensures the availability on national level\textsuperscript{3}.

Monga differs every year in its severity because mainly \textit{accessibility} and \textit{utilization} vary in their \textit{stability}. Agricultural production is underlying different natural risks, like early floods and heavy or late rains that can destroy crops and therefore also employment opportunities. Furthermore, the price fluctuations during monga differ. Interventions of NGOs and the government like \textit{Cash-for-Work} (CFW) have influence on the stability, too. Programs like CFW bring income and enable the beneficiaries to access food on the markets. These short-term interventions and other activities to combat monga will be discussed in chapter 7.

Definitions used in the debate among NGOs, scientists, the government and journalists are contradictory, although they mainly agree on their central definitions. It is widely agreed, that monga is a phenomena of food insecurity, which is strongly connected to a seasonal employment deficit.

If people are talking about monga, they differ in the geographical use of the term. Hossain Zillur Rahman for example reserves the term for the ecologically vulnerable northern part of the country\textsuperscript{4}. He calls similar phenomena in other regions seasonal poverty and excludes therefore all these regions from the monga definition. Other authors do not connect monga at all to a geographical area\textsuperscript{5} or mention locations like the \textit{north-western districts, west of the Brahmaputra}\textsuperscript{6} as regions where monga mostly, but not exclusively, occurs.

In the public discussion monga is strongly related to the seasonal food insecurity in north-western Bangladesh. It is a problem, that monga is also understood as a synonym for seasonal food insecurity in general. The use of the term monga for both cases suggests that there is no seasonal food insecurity in other regions of Bangladesh. However, it is

\textsuperscript{2} E.g. Kabir 2005, p.64.
\textsuperscript{3} See WFP 2005 and Kabir 2005, p.70f.
\textsuperscript{4} See Rahman 2005.
\textsuperscript{5} S.g. Shawkat Ali ~2003.
\textsuperscript{6} E.g. DER 2004b, Hasan 2006, p.2.
also a problem there, although generally less severe. It is therefore very important to be aware of different uses of the term monga concerning locality.

A similar problem in the definition exists concerning time. For some monga is restricted to the time before harvest of aman rice. Often a period of one and a half to three months are mentioned.⁷ Others use the term in a wider period of time and include the respective time before boro rice is harvested around mid March to mid April.⁸

It is said that the term monga originates from the northern districts. Monga is a popular expression for a severe food crisis. In other parts of the country other expressions like akal are used for the same or similar situations⁹. The observation of Mahmudul Hasan¹⁰ that people within the so-called ‘monga regions’, which are more orientated towards the districts east of Jamuna, do not know the term monga, was also the case with some inhabitants of a char in Gaibandha’s Shaghata Upazila, which is geographically close to Jamalpur.

In the study area all people understood the term monga. They frequently defined it as the time, where there is no work or as akal or ovab, which expresses scarcity.

The important aspect for them is the qualitative change of their livelihood. They mainly did not connect monga by themselves to a certain time in the calendar. But if they were requested to do so, nearly all mentioned Ashwin and Kartik as the most severe periods while Chaitra was mentioned less frequent and it was often said, that it is less severe.

In this report the definition of monga is restricted to the time preceding the harvest of aman and to north-west Bangladesh as the people use the term monga by themselves and the public mainly restricts monga to this period as well. The definition is geographically further limited to ecologically vulnerable parts. The reasons will be described in detail in chapter 4.2.

Monga is a seasonal food insecurity in ecologically vulnerable and economically weak parts of north-western Bangladesh, primarily caused by an employment and income deficit before aman is harvested. It mainly affects those rural poor, who have an undiversified income that is directly or indirectly based on agriculture.

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⁷ E.g. DER 2004a mentions 2-3 month, Rahman 2005 and many others mention the Bangla months of Ashwin and Kartik (16 September-14 November), Afsar 2005 mentions October to mid November as the monga period.
⁸ WFP 2005.
⁹ See also Ibid.
Comparable situations in the second important lean period before the *boro* harvest will be called ‘little monga’, the term ‘monga-like situations’ will be used for phenomena of food insecurity caused by lack of employment in other regions or during other periods of the year.

3. **The Outside Perspective on Monga**

Nowadays, the term monga is widely known in Bangladesh. The national media reports about the seasonal food insecurity by using the term monga very frequently. Furthermore, the term has been politicized and the debate on the topic in the capital Dhaka is sometimes far from the real necessities of the affected people.

The political opposition regularly blames the government for not taking sufficient steps to address monga. While the government was hosting the SAARC summit in November 2005 opposition leader Sheikh Hasina attacked the government for not taking monga serious: “I also request the government headed by [the] Prime Minister to visit immediately the monga-affected districts of the region”. She attacked the government in a populist manner concerning the costly decoration of Dhaka City for the meeting: “Had the government allocated a portion of the money spent for such a gorgeous illumination, the acute poverty-hit people of the northern region would have get a meal.” The Bangladesh Awami League (BAL) and other opposition parties frequently carried out own relief programs in ‘the monga regions’ to underline the weak performance of the government.

The government, on the other hand, uses monga to show that their programs are successful instruments to tackle rural poverty. The governmental news agency BSS quoted official sources concerning the monga in 2005 as saying that “adequate steps taken by the government [in form of an] adequate supply of food grains helped the people to overcome the monga in all the districts of greater Rangpur. […] So-called 'Monga' exists only in the media reports now-a-days.”

The Bangladeshi society is highly 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.”

14 Rahman 1995b, p.278.
During the big floods of 1998 this *psychology of famine*\textsuperscript{15} intensified by reports in international newspapers and magazines, helped to prevent the famine. The debate on monga is strongly related to this psychology of famine, because the political actors fear to be held responsible for a famine or to be accused that they are not engaged in preventing a famine like situation.

For local NGOs the term monga has turned into a kind of brand for their products. NGOs in northern districts can easier sell ‘their products’ in the sense of acquiring projects, by claiming that the project will reduce the people’s suffering related to monga in the respective area. Titles of projects contain now frequently the word monga like in the one of World Bank’s *Monga Mitigation Initiative Pilot Program*.

Concerning those NGOs, which are implementing programs, a paradox has to be taken into consideration regarding their interest in addressing the problem. As local NGOs can allocate a lot of money for programs related to monga, it would be a big loss for them if a permanent solution to monga would be developed. They have therefore a certain interest, that monga remains a problem in their working areas. How far this paradox has influence on the work of the NGOs can not be clarified in this report.

4. **Monga in a Geographical Perspective: Who is Affected?**

Those who frequently read a Bangladeshi newspaper know where monga is most prevalent. Some articles even just mention ‘the monga regions’ or ‘the monga districts’ because they know that their readers will understand. Monga is a phenomenon that is in the opinion of the educated public clearly connected to north-western Bangladesh. The following map is an attempt to combine the localization of monga in different reports and in two national newspapers. As the data for the map is not a result of a detailed study but of a review of more or less reliable recent sources, it has to be seen very critical. It only shows the perception on the location of monga.

\textsuperscript{15} Kiene 2004, p. 197.
The Location of Monga: A Review of Secondary Data (2003-2005)

Prevalence of Monga*

<table>
<thead>
<tr>
<th>Prevalence Range</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 - 0.01</td>
<td>Light Gray</td>
</tr>
<tr>
<td>0.02 - 0.10</td>
<td>Gray</td>
</tr>
<tr>
<td>0.11 - 0.15</td>
<td>Light Orange</td>
</tr>
<tr>
<td>0.16 - 0.20</td>
<td>Orange</td>
</tr>
<tr>
<td>0.21 - 0.60</td>
<td>Pink</td>
</tr>
<tr>
<td>0.61 - 0.71</td>
<td>Red</td>
</tr>
<tr>
<td>0.72 - 0.80</td>
<td>Light Pink</td>
</tr>
<tr>
<td>0.81 - 0.85</td>
<td>Dark Pink</td>
</tr>
<tr>
<td>0.86 - 0.90</td>
<td>Dark Red</td>
</tr>
<tr>
<td>0.91 - 1.00</td>
<td>Maroon</td>
</tr>
</tbody>
</table>

* Index on Prevalence of Monga: Available literature and reports on monga were reviewed. Literature with an attempt to localize monga regions was included in the index. Two daily newspapers were reviewed and articles were integrated, if the monga affected regions were named on district level. If there was a differentiation made between moderately and severely affected areas, moderate affected areas were counted as 0.5. Data on district and upazila level was used. Each of the following data sources was counted equally:

- New Age: average of all articles 2004-2005

Figure 3: The Location of Monga

Information is only correct if printed in colour.
4.1. Chronic and Seasonal Poverty in National Comparison

Figure 3 shows a dominance of monga in the districts of greater Rangpur (Gaibandha, Kurigram, Lalmonirhat, Nilpharmari, and Rangpur). If there is a very rough localization of monga given, often greater Rangpur and additionally - to a far lesser extend - greater Dinajpur (Dinajpur, Thakurgaon, and Panchagarh) are mentioned.

As monga is mainly defined as seasonal employment shortage, and it has turned into a kind of synonym for it, one might get the impression that seasonal employment shortage in Bangladesh and connected lower intake of foods is only present in “the” monga regions. This is not true at all. Seasonality of agriculture is a problem all over rural areas in Bangladesh. Even in regions that are said to be better developed.

Ahmed Ali\textsuperscript{16} shows for his study area in Saturia Upazila of Manikganj District, which is comparatively better-off\textsuperscript{17}, that people have to reduce the number of meals during the pre-harvest period and that they sometimes replace rice with root-crops like sweet potatoes, which is considered as ‘poor men’s crop’.

Nasreen Ahmad conducted a research in several regions of Bangladesh during the months when the households face scarcity. She found out that “irrespectively of location Badhro, Aswin and Kartik [monga] are the three main month of scarcity/deficit followed by the months Ashar, Sraban [floods] and Chaitra [little monga]”\textsuperscript{18}. The author directly links the reasons for the scarcity in Ashwin and Kartik to a lack of agricultural work during the lean season of aman rice cultivation.

These examples show that according to our above given definition, monga-like situations are prevalent in other regions of Bangladesh, too, but are not called monga there. The Poverty Trends Project in 1990/91 was probably the

\textsuperscript{16} See Ali 2005.

\textsuperscript{17} According to a poverty mapping (see Bangladesh Planning Commission and WFP 2005) Saturia belongs to the group of upazilas with the lowest incidence of chronic malnutrition (0-25% of the population consume less than 1.805 kcal/day). In a another mapping (see Bread for the World and RDRS 2005, p.33) Saturia is also not classified as very high or high food insecure.

\textsuperscript{18} Ahmad 2005, p.87.
most comprehensive study that covered the topic seasonal poverty. Rahman and Mahabub Hossain\textsuperscript{19} compared the wage rates during the monga 1991 with the average wage rates in normal periods when various agricultural activities are in full swing.

As you can see in Figure 4 significant seasonal variation in agricultural wages were prevalent in nearly all regions of Bangladesh. For Bangladesh as a whole there was an average drop of 30\% in the daily wage rate. The decline was biggest in greater Rangpur. Day-laborers earned only half of the money they usually earn\textsuperscript{20}. Rahman reviewed this data in 2005: “One of the important changes which has taken place over the 1990-2005 period is the general reduction of the seasonal poverty problem across Bangladesh and its continued persistence in the ecologically vulnerable parts of northern districts”\textsuperscript{21}.

Although detailed data on the concentration of seasonal poverty in the northern districts is missing so far, there is a general perception that the problem is more severe in those districts than anywhere else in Bangladesh. Agreeing on this hypothesis, reasons for this geographical deviation can be analyzed.

Poverty in monga prone areas is not only a seasonal problem. In various publications on poverty in general these areas always belong to the most affected ones. A comparison of the poverty mapping of the Bangladesh Planning Commission (Figure 5) and the map on the perception on monga (Figure 3) shows a significant correlation between monga affected areas and areas with a high proportion of people, who cannot afford to eat more than 1,805 kcal per day.

The focus of chronic poverty on the north-western districts is also supported by the 1995-96 findings of the Bangladesh Bureau of Statistics\textsuperscript{22}. Their measurement was based on calorie intake and expenditure. The nine worst-off districts were Jamalpur, Sherpur, Panchagarh, Rangpur, Siraigonj, Kurigram, Gaibandha, Lalmonirhat, and Nilpharmari. All

\textsuperscript{19} See Rahman and Hossain 1991, Table 2.
\textsuperscript{20} See Rahman 1995a, p.236.
\textsuperscript{21} Rahman 2005.
districts of greater Rangpur are included in this group

Looking at the wages for agricultural labor, the data of the Poverty Trends Project (Figure 4) shows significant lower daily wage rate in greater Rangpur District. Data from 2004\(^{23}\) shows the same phenomena. The daily average wage for male laborers in greater Rangpur was with 50.9 taka per day without meals only 68% of the average wage rate in Bangladesh (74.5 taka).\(^{24}\) Only greater Dinajpur had a similar low wage rate (52.1 taka). Agricultural laborers in all other greater districts were significantly higher paid with 60.7 to 109 taka per day.

The different data shows that ‘the monga districts’ are generally poorer than other districts. More people suffer chronically from malnutrition and day-laborers earn significantly less than in other regions. When people suffer more from poverty all around the year, it is a logical consequence that seasonal shocks have a bigger effect on their livelihoods, as if they had higher income and a better nutritional status in normal periods. There are different reasons and explanations why the northern districts are more vulnerable. Figure 6 illustrates, that in ‘the monga districts’ a bigger part of the population is earning its daily living from agricultural labor compared to most other regions in Bangladesh. Kurigram is the only district in whole Bangladesh, where more than half of the population (50.5 %) was working as day-laborers in 1996. Their proportion in the other districts of greater Rangpur is far above average, too. As monga is a problem of seasonality of agriculture it mainly affects marginal farmers and agricultural laborers. Since those districts have a bigger proportion of them, they are more vulnerable to monga.

‘The monga districts’ are seen to be economically weaker than other districts. As there are no comprehensive studies available on a regional comparison concerning economy, the GDP calculated for the various districts can give a rough guideline. Greater Rangpur belongs to the regions were the GDP is comparatively low. In 1999/2000 Gaibandha was the district with the lowest

\[^{23}\text{See Bangladesh Bureau of Statistics 2005b, p 204-209.}\]

\[^{24}\text{The data on the daily wage rates also supports the hypotheses that the monga prone areas (in this case greater Rangpur) developed slower. The average daily wage of a day-laborer in Rangpur in 2004 was only 68% of the national average. In the fiscal year 1991-92 it was with 76% significantly higher. (see.: Monthly Bulletin, BBS, 1998. cited in: Bangladesh Bureau of Statistics 2004a, p.450).}\]
GDP in whole Bangladesh. The other districts of greater Rangpur with the exception of Rangpur with its urban centre are also far below the average. But there are other pockets in Bangladesh where the GDP is similar low.

Taking only the GDP’s component of manufacturing into consideration, Bangladesh is very heterogeneous. Lalmonirhat, the weakest district concerning manufacturing accounts for only 244 taka per year and capita. This is only 9% of the country’s average and 1.6% of the strongest district Dhaka. Greater Rangpur in general belongs to the weakest regions with Lalmonirhat, Nilpharmari, and Kurigram as the three weakest districts in the country. The Bangladesh Bureau of Statistics published data on the number and type of manufacturing industries in all districts, which can be found in Annex 1 for greater Rangpur. Although their data seems not to be very reliable it shows the limited employment opportunities in greater Rangpur. Observation showed that in all districts paddy processing, brickfields, and saw mills exist. According to the data of the Bureau of Statistics also tobacco related industries play a certain role in all districts of greater Rangpur but a relevant number of persons are only employed in Rangpur District, where also some other smaller industries can be found.

The main employment in the region remains agriculture, which is bound to the above described seasonality. The paddy processing industries are mainly creating employment after harvest, and not during monga, which is taking place before harvest. Bricks can only be produced when there is

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26 See Annex 1 and Bangladesh Bureau of Statistics 2004b, Table 12.
no rain. The seven brickfields in Sundarganj are operated from about mid of November to March and employ about 100-300 laborers including those who transport soil by van to the brickfields. During the preceding monga period only a very small number of laborers are needed to take preparations for production.

Other off-farm employment is mainly not bound to the same seasonal patterns as agriculture. In those regions, where off-farm employment is more common, a regular and oftentimes higher income can be achieved by the employees and more labor is available for the agricultural labor force. The reasons for the economic backwardness concerning industries in these districts could not be sufficiently clarified so far. Different arguments like the far distance and bad road communication to Dhaka as well as lower expertise in doing business of the northern people were sometimes mentioned during expert interviews as well as a politically motivated negligence of the region.

The argument of political negligence needs to be looked at in more detail. Regarding the last three governments, people from the north were not very strongly represented in it. In a political system, like the one in Bangladesh, where political patronage plays a major role in government actions, it is important for the development of a specific region, that representatives from that region are also represented in the government to advocate for their region.

General Ershad ruled Bangladesh until his military regime was overthrown by a mass movement in 1990. He originates from Rangpur and has therefore still many supporters in whole greater Rangpur. In the parliamentary elections in 1991, 1996, and 2001, candidates from his party won most of the respective regional constituencies. The 1991 elections were won by the BNP, who formed an informal coalition with Jamaat-e-Islami. But no single constituency in greater Rangpur was won by the coalition and therefore nobody represented this region in the government. The same happened during the rule of BAL from 1996 to 2001, when only Jamaat-e-Islami could win a seat in parliament beside Ershad’s Jatiya Party. Members of Parliament (MP) from the north are a bit better represented in the currently governing coalition. Three seats were won by the leading BNP, two by their coalition partner Jamaat-e-Islami. This is still very low compared to the total number of 22 available seats.

One of the crucial topics related to monga is agriculture. There are some specifics of agriculture in ‘the monga region’. The information given in this report is not based on a detailed analysis on the agriculture in the northern districts. It only summarizes some of the often mentioned aspects.

Agriculture in the northern districts is very much based on paddy production. Rangpur and Dinajpur belong therefore to the important surplus regions concerning the

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production of rice and wheat\textsuperscript{28}. As Figure 8 shows, Rangpur has a cropping intensity of 200\% which means, that in average people harvest two crops on one field per year.

This cropping intensity is the second highest together with Jamalpur after Bogra. Although the intensity of agriculture is very high, the diversification of agriculture is comparatively low. Agricultural employment is therefore very much connected to the seasonality of rice that requires no labor during the problematic season. Higher diversification can reduce the lean season, as other crops have different processing needs. Diversification with labor intensive crops like vegetables could increase the total labor demand.

4.2. Development of the River Belts

A geographical comparison on district level on monga is not sufficient. The problem of monga has to be differentiated within ‘the monga districts’. Not all areas of districts like Kurigram and Gaibandha are affected. Figure 3 shows that the upazilas especially along the rivers Jamuna and Teesta are seen to be more affected than other sub-districts. Prevalence and severity of monga within upazilas and even within single unions is not identical. Various geographical, ecological, and social aspects have influence on the prevalence of monga in one specific area.

In the general perception the \textit{chars} within Jamuna and Teesta River as well as the low lying lands along the rivers are mostly affected. Due to the character of the rivers those people have to fight with additional problems. As the river beds are not very stable, the river erodes every year fertile land on the banks and washes some \textit{chars} away while new ones emerge. As a result many people are being displaced and loose their lands. Land rights are very complicated. The land administration seems to be very corrupted, therefore poor people often loose their land to powerful people. Houses are damaged during floods and their assets like livestock and boats are in risk every year. This increases the vulnerability of the local population. To a certain extend displaced people leave the region, but most settle again on other \textit{chars} or on \textit{khas land} on the embankments on the mainland. On these embankments the incidence of poverty is therefore comparatively higher.

\textsuperscript{28} According to the data of Kabir 2005, p.87 Dinajpur has a surplus of 49\% and Rangpur 37\% (Fiscal Year 1999/2000).
The floods determine and limit agricultural activities, as fields are not available for cultivation during certain periods and the risk of damage of crops is comparable higher, because the floods are not exactly predictable. As there is a higher risk of crop failure in these areas, there is a higher vulnerability for the potentially affected groups of marginal farmers and day-laborers, whose yield or employment opportunities decrease with crop losses.

As Jamuna River mainly deposits unfertile course sands\textsuperscript{29} in the northern districts and fertile smaller materials further south, the agriculture on the northern \textit{chars} is even worse than on other \textit{chars} in Bangladesh. Fertility increases if the \textit{char} got older and finer materials deposited. Harvest is often lower than on the main land and irrigation is only possible to a very limited extent because the sandy soils have only a very low water carrying capacity and dry out very fast. Although the cropping intensity in ‘the monga districts’ is very high, much \textit{char} land in these districts is only single cropped\textsuperscript{30}. Agriculture is for these reasons less profitable and more risky on northern \textit{char} land than on the mainland, especially the areas above flood level.

Beside hazards and agricultural reasons, \textit{char} dwellers are socially disadvantaged mainly due to a limited access to markets and services as they are sometimes more than two hours by boat away from the mainland. Long distances have to be covered to sell and purchase products, which consumes time and money. The employment opportunities of \textit{char} dwellers are even less diversified than the ones of other rural poor in the district. Rickshaw or \textit{van}-pulling is not possible and there are no brickfields, no saw mills, less paddy mills and nearly no construction work. Working as commuter in urbanized areas is often not possible because of the distance.

Services of the government and NGOs, like micro-credit, are often said to be less\textsuperscript{31}. Figure 9 illustrates this problem concerning the level of literacy. The literacy rate for those living on \textit{char} land is mainly below the rate for the mauzas on the mainland. How far other aspects, like NGO activities and government services like health, agriculture, and livestock related services as well as possibilities for

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\textsuperscript{29} See Sarker, Huque and Alam 2003, p.67.


\textsuperscript{31} E.g. Ibid., Annex 7 p.8.
political participation, are affected, needs to be further analyzed.

The entirety of the above given aspects sums up to the severity of monga. If the seasonal food insecurity in the floodplains of the northern districts is more severe than in other districts, following hypotheses might explain in short the reasons for it.

Monga persists on the chars and on the flood affected river banks in the northern districts, because these people are generally more vulnerable due to ecological, agricultural, and social reasons. They are therefore more affected by chronic poverty. Their ability to cope with the lean season, that is also prevalent in other regions, is consequently limited.

4.3. Monga in the Village
As described above monga has to be seen with different geographic scales from a national comparison of districts to a regional comparison down to villages or local communities. But also within the village people are not affected equally, because families have different sources of income, different amounts of income, different household compositions, and apply various coping strategies.

The primary group of monga affected people consists of those, who have to rely on agricultural labor as their only or major income source either on the fields of others or on their own small properties. Agricultural wage laborers are nearly exclusively day-laborers. They have only income according to agricultural seasonality that is mainly determined by paddy cultivation. Many of them live from hand to mouth, and if they cannot earn income like during the lean season, they face food insecurity. In the case of monga, income opportunities decrease after the transplantation of paddy and strongly increase for harvest.

The marginal farmers possess some land of their own or cultivate land that belongs to others. Common deals between the landlords and the rural poor are share-cropping, mortgage and lease. Marginal farmers are often not clearly distinguishable from agricultural laborers, as many do agricultural day-labor as well.

Marginal farmers face a different pattern than day-laborers. They have no income from the land between two harvests and they have to cover the expenses for input on their fields like seeds, fertilizer, irrigation – in case of boro – and sometimes for labor during periods of high labor demand like field preparation and transplantation. They have to spend a lot of money, but receive the profit only after harvest. Their financial resources therefore decrease towards the harvest. If their resources and coping strategies are not enough to cover their daily expenses, food insecurity like for the day-laborers can arise. Furthermore, they face uncertainty because of unstable agricultural conditions. Hasan\textsuperscript{32} reports from cases where floods destroyed the harvest and the farmers could not afford to replant because of a financial shortage. If families had a more diversified livelihood

\textsuperscript{32} Hasan 2006 p.2.
strategy and had income from off-farm employment as well, the impact of the agricultural lean season would be lower.

Also farmers, who own a big amount of land, face the seasonality of agriculture, as they receive their main income during harvest. It can be expected that they will usually not suffer from food insecurity, since they have enough financial reserves or assets. Interviews at different shops in Sundarganj, which sell items for the better-off, like jewelry and shoes, showed an increase in the turnover after harvest. This circumstance shows that the life of the rural upper class and the spending patterns are also influenced by the seasonality of agriculture, but on a different level.

Other working groups are connected to agricultural activities as well. The income opportunities of *van-pullers* decrease during the lean season because they largely transport agricultural goods. In Sundarganj a Hindu cast produces bamboo products. Their most important products are big baskets for storage of rice and *kulas*. During monga they suffer, as nobody buys their products and they are without work, because they can only afford to buy a limited amount of bamboo to produce in advance.

All those who produce or sell products for consumption of the rural poor are indirectly affected, because people minimize their consumption. Hawkers, who sell cheap jewelry, sweets, and crockery in Tarapur Union, reported that their income decreases heavily during the months of *Ashwin* and *Kartik*, while they have the highest turnover after harvest of *boro*.

Those who live from begging or the generosity of others also face a big decrease in income. Many families without a male member, who is fit for work, often earn their living from begging. If the income of other people decreases, it becomes very hard for them to receive some money or food.

Monga can differ in severity within the households. There is a general gender dimension concerning the intra-household allocation of food in Bangladesh. In a review of various studies on the topic, Lawrence Haddad et al. summarized, that a pro-male bias in nutrient allocations appears to be most prevalent in South Asia, including Bangladesh, although not all studies came to that conclusion. According to the WFP

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33 See also Kamruzzaman 2003, p.31f. He shows for different study areas, that the opportunities and the income for *van*-pulling are connected to agricultural seasons.


35 WFP 2005, p.4.
children, disabled, as well as pregnant and breast-feeding women face the greatest nutritional risks within the household during monga.

A general phenomenon of crises is that not all people are affected. Often several people also profit from the sufferings of others. The distressed people are searching for different ways to receive money for their daily consumption during the crisis. Some sell their assets like livestock and land or their future potentials like labor and harvest in advance. As people have to sell in order to obtain urgently needed money for consumption, they accept a price that is far below the market price during other times. The ones who buy from them have a far higher profit than usual. Those who are engaged in the local credit market can earn high profit as people are willing to pay interest rates of more than 25% per month.

5. Dimensions of Monga

Various causes of monga have been mentioned several times above. This chapter is an attempt to look at monga with different thematic focuses.

5.1. The Agricultural Dimension

The major reason for monga is employment shortage during the lean season. To understand the lean season phenomena, agricultural activities have to be analyzed.

Agriculture in the affected regions mainly depends on paddy. During monga in Ashwin and Kartik nearly exclusively aman rice is standing in the fields. According to information of the Upazila Agriculture Office in Sundarganj only an insignificant area of the Upazila is planted with some early varieties of vegetables and with crops, which take a whole year until harvest like banana and ginger.

The income of agricultural day-laborers is therefore strongly interlinked with the seasonality of paddy. There are two times in the cultivation process of paddy, which require a substantial number of laborers. Some thirty days after the seedlings have been sown on a very small field, they are usually transplanted to a big field. Within about one week a big amount of work has to be done for plowing the field several times, for leveling and for the transplantation of the seedlings. The second labor intensive step is the harvest which gives work for cutting, transporting, and husking. With harvest also employment in the paddy processing becomes available. After having a lot of expenses during cultivation, also the hard period for the farmers is finished, as they receive the profit of the harvest. In between transplantation and harvest, intercrop activities can only provide little labor. Fertilizer and possible pesticide application needs hardly any labor. Only once or twice weeding can employ a significant number of people some 20 to 30 days after transplantation.

It is not possible to fix the times of agricultural labor demand of rice into a calendar because planting and transplanting times differ strongly as they depend on rain
and the flood situation. The farmers use different varieties which need different input and have different maturing times. The farmer’s choice of seeds is strongly related to the soil and the exposure to flood and water logging. To understand the interrelation between agriculture and employment, further interdisciplinary research of agriculturalists and social scientist is needed. Without research on this interrelation the monga phenomena cannot be understood sufficiently, the implementation of rice-based strategies can have adverse effects and monga cannot be predicted satisfactory.

As there are two major seasons for rice cultivation in Bangladesh, there are two lean seasons. The monga in the months of Ashwin and Kartik is very present in public, while the media is hardly reporting about the little monga in the month of Chaitra. The little monga is mainly less severe than monga, because of reasons, which are mainly connected to the agricultural differences of crop cultivation during the aman and boro season.

In contrast to the aman season the diversification during the boro season is comparatively high. In 2005/2006 only 86,1% of the cultivated area in Sundarganj Upazila was planted with paddy, while the other area was planted with other grains (4,9%, mainly wheat), vegetables (3,6%), potatoes including sweet potatoes (2,8%), and other crops like lentils and oil seeds (2,7%). Char areas are far higher diversified than the mainland. Paddy cultivation in the winter season depends on irrigation, as there is less or no rain. The soils of the chars are not intensively irrigated, because the water carrying capacity of the sandy soils is too low, and irrigation is therefore expensive. People mainly plant crops that require less irrigation like wheat, millet, onions, chili, and groundnuts.

The chars offer consequently other employment opportunities, which do not follow the patterns of paddy cultivation, while the mainland remains dominated by paddy. In the study area people from the embankments of Gagoa Bat also frequently found employment on the near-by chars for potato harvest, onion transplantation, weeding on various field and similar activities.

Agricultural diversification and the resulting higher diversification of employment opportunities is one important reason, why the little monga in the month of Chaitra is less severe. Furthermore, boro needs more labor input in the critical time for irrigation and additional weeding and brings more yield. Additionally people have more opportunities to find off-farm employment, as it is the peak season for construction works and earthworks and also the brickfields offer lots of employment opportunities.

During harvest time, laborers can expect a higher income than during the aman harvest. This gives them some security. As rains already start, the harvest has to be done quickly. A higher labor shortage is created which leads to higher wages than in the aman season. There is additional work needed to dry the straw and as the yield is higher, more employment is offered for harvesting, transporting and processing of paddy. This

36 Unpublished data from the Upazila Agriculture Office Sundarganj.
minimizes the negative effects of money-lending or similar strategies on the livelihoods of the laborers, as they can repay loans more easily during the harvest period.

For the marginal farmers boro has some advantages and disadvantages compared to aman. Their profit is usually better as the yield is substantially higher, but they need more input on the fields especially for irrigation and fertilizer. However, planting of boro rice is more predictable because it is less risky. The plants are not endangered by the floods like in the aman season. To a far smaller extend hailings and storms can destroy or damage the crops. Less natural risks reduce the variability in severity of the little monga.

5.2. The River Dimension

Char land and flood affected mainland in the northern districts are said to be the most monga affected area. The region is dominated by Jamuna River and its biggest contributor Teesta. The rivers affect the population in two different temporal dimensions. The floods are a cyclical phenomenon for the individual, which affects people’s livelihood every year, but with a different severity. Erosion takes place every year, too, but it does not affect everybody. If people are affected the damage on their livelihoods can be very destructive.

Research was mainly done on Jamuna River, as it is Bangladesh’s river with the largest annual discharge before it joins with Ganges and becomes Padma. Jamuna is a very young river. Up to the 18th century the main waters coming to Bangladesh from the north were flowing through the basin of today’s Old Brahmaputra37. Jamuna grew bigger and transports now the major waters. The process of widening is not finished yet. In 1992 Jamuna was on average 11.2 km wide and widened on average 184 meter per year in the period from 1983 to 1992.38 This data refers to the whole Jamuna River, but satellite images show, that erosion in greater Rangpur District is roughly the same39. As widening of Jamuna takes place, more chars emerge in the river, but the char area is not growing equally to the loss of mainland. Altogether there is a loss in quantity and as the chars are less fertile also in quality of land. “After its avulsion 200 years ago, the Jamuna River grasped nearly 260,000 ha of land and only in the last 28 years it destroyed about 70,000 ha of land. It implies that only in the last few decades, the river displaced hundred thousands of people”40.

For the individual person erosion can lead to a loss of homestead and agricultural land which is the major productive asset in rural areas. People are often displaced several times in their lives. It is not only a loss of material assets, people have to start to build up new social relationships. It is more difficult for displaced people to enter into relationship

37 The Jamuna River is only called Jamuna where it is floating in the new river bed. Upstream from the meeting point with Teesta and in India the river is still called Brahmaputra because it is floating in its old bed.
38 See: Sarker, Huque and Alam 2003, p.66.
40 Sarker, Huque and Alam 2003, p.75.
with a patron for share-cropping, money-lending, or employment, as they are not known to the patrons in the beginning. The affects of erosion are a reason for the poverty of the individual. But as erosion affects a huge proportion of the population along the river, this is also a major reason why poverty in general is more prevalent there. A higher degree of poverty that is partly caused by erosion results in a higher vulnerability to seasonal poverty or monga.

Flood affects people every year, but as the extent of the floods is variable, it has a different impact on their livelihoods. The floods usually take place during the month of Ashar and Sraban (mid June to mid August) and therefore precede the plantation period of aman and monga. The floods can result in a loss of assets for the population. Houses are damaged and the unpredictability of the flood can harm agricultural activities. Livestock rearing becomes a hard task. Animals die because of downing or water prone diseases. Fodder is hardly available, since all grazing grounds are underneath water surface and stocking of straw is often not done sufficiently. The physical health of people gets weakened, as diseases like diarrhea increase.

After the flood the people in the river basins are physically weaker than usual and they have often to compensate a loss of assets. Therefore many of them cannot build up enough cash or food reserves to get through the following lean season. It is therefore more likely in the river basins that the lean season turns into food insecurity, than in those areas where the floods does not weaken the affected part of the population.

5.3. The Market Dimension

The prices for goods fluctuate in time. Major seasonal patterns of market price fluctuation have impact in the monga period. These fluctuations are mainly accelerating the monga phenomenon. Sufia, a woman from Gagoa Bat, put it in a nutshell by saying, that everything she is buying during monga becomes expensive, while the prices for all the products she can sell decline. Her observations are being supported by interviews and analysis of market data.

Figure 10 shows two annual peaks for the rice price since the 1980s. These peaks are prior to the harvest of aman and boro. According to the data the price is higher during the little monga than during monga. This can be explained by the higher yield of boro which results in a higher availability after the harvest leading to a bigger decrease of price. Data from the 1970s shows a completely different pattern with the peak in the rice price in July. The increase in
cultivation of boro relative to aman and aus is the major factor behind these changes in seasonality.\textsuperscript{41}

Local people spend a major proportion of their income for purchasing rice especially during times of food insecurity. Fluctuations in the price of rice have therefore direct impact on the amount of rice a family can consume. A local shop in Gagoa Bat and most of the interviewed families confirmed the increase in rice price during monga.

Not only rice is affected, but also vegetables, which are very important for the nutrition of the people. The vegetable price is lowest from January until the end of the little monga in April as this is the high season of winter vegetables. The prices steadily increase until October and remain high in November before they strongly decrease in December.\textsuperscript{42} During monga only some early varieties of vegetables can be harvested. On the one hand vegetables are nearly not affordable for the rural poor during monga, but on the other hand the high prices bring the chance to earn money by planting early varieties on homestead gardens.

In some years the increase in prices of rice and other essentials is stronger than in others. The yearly variations in the price hike is an outcome of complex interaction between natural calamities that damage crops and bring down the targeted crop production, artificial food crisis due to hoarding of food grain by the private traders and government interventions to stabilize prices etc.\textsuperscript{43}

In times of shortage people try to sell various things they have, to obtain money for consumption. They have a high pressure to sell, as they need the money urgently. Therefore, they often accept a lower price than the usual market price.

A wholesaler of chicken, who buys on Mirganj Hat in Sundarganj and sells in Dhaka, told that his profit increases during the floods and the months of Ashwin and Kartik (monga). During the floods many people want to sell their chicken, because they fear that they might die. During monga people need to sell them to buy basic foods. People are therefore willing to sell at a low price. The trader estimated that the price for chicken decreases by 20-30\% during floods and by 10-20\% during Ashwin and Kartik respectively. His profit increases, since the price in Dhaka remains stable. A similar decrease in the price was reported for cows by the Izaradar of a hat in Sundarganj, who runs the market by lease. He said that the price for cows decreases during monga by 15-20\% and during the floods by 10-15\% because of the same reasons as for the chicken.

Beside livestock people can sell products like bamboo. This can have the function of an emergency reserve. If it has grown to a certain height, it can be cut and sold as money is needed. A trader transports bamboo from different places in Gaibandha, where the price is low, to Fulchari Hat. He sees two seasons in the year, when the price is fluctuating. During the months of Jaisthay and Ashar storms destroy many houses and the

\textsuperscript{41} See Dorosh, Shahabuddin and Farid 2004, p.60.
\textsuperscript{42} See Elias and Hussain 2000, S.40f.
\textsuperscript{43} E.g. WFP 2005.
price of a bamboo that is usually 100 taka can rise to about 120 to 150 taka. During Kartik the price goes down to about 80 taka, since many people like to sell but the demand is low.

A case study in Gagoa Bat of Abdul Rahman showed that the decline of prices does not only affect the local market but has influence on the selling of products to related persons, too. Rahman has a small bamboo plantation with about 20 plants next to his house. During the monga in 2005 he sold one bamboo to his neighbor to buy rice. He received 50 Taka for a bamboo that he thinks is worth about 60-70 taka during normal times.

5.4. The Temporal Dimension
The question when monga takes place was already discussed while defining monga in chapter 2. Currently Bangladesh faces two periods of food insecurity induced by agricultural employment shortage: monga and little monga preceding the harvest of aman and boro respectively.

There were significant temporal changes in lean season phenomena, when irrigated boro rice was introduced in Bangladesh. Before irrigation was introduced, boro could only be planted very marginally, because there is no rain during winter. Instead aus was planted in March or April, as the first rains are starting during that time. Boro replaced aus because it is not possible to plant aus and boro on the same field, because aus has to be planted before boro can be harvested.

“The incidence of the summer lean season has significantly decreased. However, the autumn lean season coming after the planting of the aman crop and with the harvest time still a month or more away remains very much the routine order of the day affecting nearly all parts of the country. Indeed, the success of the green revolution in terms of winter planting has accentuated the autumn deficit because the winter rice, boro crop has largely displaced the secondary early summer aus crop which was harvested in autumn.”

No study has been done so far on the long-term change of the severity of monga. In the village Gagoa Bat most people said that monga was affecting the community stronger in the past and nobody died because of hunger in the last years. They mainly mentioned two reasons for the improvement of the situation. As seasonal labor migration has increased many families can have an additional income during the monga periods, although the wages are low because of a labor surplus in most regions of Bangladesh. The improvement of the transport facilities and the communication facilities to send back money to the family in the village is one of the main reasons for the positive change. In Gagoa Bat another specific regional aspect plays a big role. Although many houses are situated directly on the unprotected bank of Teesta River, erosion did not take place in the village during the last years and people did not lose their major assets like homestead or agricultural land.

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In an inter-annual comparison, monga differs in time and severity. The severity for the individual and for the overall situation in the region is determined by a wide range of factors. Monga affects the livelihoods less, if people can build up some reserves in form of food, money or assets they can sell. Therefore the time preceding monga has to be taken into consideration as well. If the preceding boro harvest was poor, the profit of marginal farmers is low or there is even a loss. Income opportunities of day-labourers reduce as well. Floods are a very crucial time for the people in the floodplains every year, but as floods differ in their extent, the impact on the livelihood of the people varies. If the floods are very strong, like in 2004, more people loose assets like land and livestock; their houses are damaged or destroyed. They are also weakened because of a higher incidence of diseases. Their reserves are therefore reduced or are not existent for the coming monga. They become more exposed to monga.

As the harvest of aman usually marks the end of monga, the stability of this crop is very important. Sometimes the flood takes too long and the farmers cannot plant crops in the lowland or they have to wait until they can transplant the seedlings. If the seedlings are transplanted late the yield decreases. The standing aman crop is sometimes damaged by excess rains or if the flood unexpectedly returns. DER reported for 2004 that “due to the great extent of flooding this year, significant loss of land due to river erosion, coverage of fields in infertile sand, and the unusually heavy rainfall in September, about 80% of standing crops were damaged or destroyed in the ‘monga’ affected districts”\(^45\). In the end of July 2006 several local people in the study area already feared that the monga would be more severe this year, as there was a lack of rain during the transplantation time, which partly will lead to a total loss of crop for several farmers. If such damages affect the crop, the income of farmers, including the vulnerable marginal farmers, decreases and less employment is offered to agricultural day-laborers. Monga becomes therefore a more serious problem in the respective year.

Rahman\(^46\) compared the situation of 1991 that had a big share of natural calamities with the normal year of 1990. Several parts in greater Rangpur experienced two rounds of floods in 1991 and according to local estimates 36% of the cropped area was affected. In a rapid survey 94 households in Rangpur were asked on how many meals they are currently\(^47\) taking per day and how many they took in the respective time during the last year. In 1991 59% of all households took only one meal per day on 4-7 days per week. In 1990, however, this proportion was only 26%. Rahman sees the major reason for the worse situation in the natural calamities. He also mentions some other minor aspects as well. As a cattle disease for example was effecting some areas and many cattle died, marginal farmers could not plow their fields themselves but they had to hire tractor services instead.

\(^{45}\) DER 2004a.
\(^{47}\) 10\(^{th}\) to 20\(^{th}\) of October 1991.
The dynamics of the agricultural labor market as described above are not the same every year. This results in a high or low income for the affected people. If the prices of essentials increase stronger than expected, affected people can only buy and consume less. The degree of price increase differs from year to year. To Rahman\textsuperscript{48} 2005 was a year with a disproportionate high price hike of essentials. This created an additional component of vulnerability for the rural poor.

The government and some NGOs have several strategies to address monga quickly, when it appears. These interventions mainly aim on a short-term improvement of food availability for the individual households through relief as well as CFW or Food-for-Work (FFW) programs. If and how these interventions are implemented has an important effect on food security in the area. It is important to assess the situation quickly and reliably to find the right amount of interventions needed. If the situation is seen less critical than it is or if the wrong people are targeted, programs cannot sufficiently mitigate the situation.

During the implementation of an individual project like the road maintenance program financed by CFW internal problems, like missing building materials and various problems linked to corruption as well as external influences, can lead to the result that a program is not finished in time or carried out inadequately. Rahman\textsuperscript{49} reports that excessive rain hampered the implementation of construction works in 1991. If the works cannot be carried out, the workers cannot be paid and the livelihood of their families does not improve, as intended.

Other long-term development activities like micro-credit can turn into a big burden for those, who have to pay back their installments every week. The micro-credit institutions and the government banks have the possibility not to take repayments during monga, but often many insist on the payment. If installments are stopped, this brings relief to the affected, if not sufferings remain higher.

Sometimes politics has strong impact on taking measures during monga. Government officials decide on if and how much relief is appropriate to tackle the problem. As described in chapter 3 the topic of monga is part of a heated debate between the government and various opposition parties. This debate can lead to a non-adequate response to the situation, because of political considerations. In 2003 this debate had impact on the activities of some NGOs. Debapriya Bhattacharya et al. mention that “some NGO workers indicated that since the government was not acknowledging the prevalence of monga, they did not dare to initiate any targeted programme”\textsuperscript{50}.

For the monga phenomena in a certain region the above described factors determine how severe the situation in the respective year could be. The degree of severity, however, is not the same for every single household. Although the general monga phenomenon might be moderate in the village, individual families can be affected worse

\textsuperscript{48} See Rahman 2005.
\textsuperscript{49} See Ibid., p.243.
\textsuperscript{50} See Bhattacharya 2003, p.17.
than in other years. Reasons for this can be illness, the phasing out of a support program like Vulnerable Group Development (VGD), disproportional high loss of assets during floods, or indebtedness because of dowry. For some households serious food insecurity prolongs although the harvest has started. This happens for example to those, who sold their labor in advance and therefore do not receive income when harvest starts, because they have to work for free at that time.

Sometimes the monga period takes longer for all when the cultivation of aman is delayed. In the flood affected areas aman cultivation is bound to the floods and the time of the floods varies. Paddy can only be transplanted to the big field after the flood water has gone. If paddy is transplanted late, harvest and income opportunities are delayed and monga takes longer.  

The last severe national famine in Bangladesh took place in 1974. There are some interesting parallels between this famine and the monga phenomena. Monga is not caused by a shortage in available food, but by a weak access of rural poor to food. In 1974 the total harvest of the year was disproportional high, because the aman crop, harvested until beginning of 1974 and the following boro and aus crops where higher than in previous years. In fact availability of food in 1974 was highest in the period between 1971 and 1976.

Heavy flooding during summer and autumn 1974 resulted in extensive crop damages in the newly planted aman crop. “The famine, however, developed and peaked much before those reduced harvests arrived, and indeed by the time the primary crop (aman) was harvested, the famine was over and gone”. The flood had a big effect on the rural labor marked, as the loss of crop led to a loss of employment for agricultural laborers, especially for the process of transplantation.

A second important aspect responsible for the famine was a massive increase in the market price of rice. Although the availability of rice was high, because of the previous good harvests, prices increased tremendously during the lean season of 1974. This increase was mainly caused by the expectation of the traders that the coming rice harvest would be substantially lower. They therefore expected a very high rice price after harvest. Mainly because of this expectation, the prices already increased, when the availability was still very high. However, the expectations of high food prices after the harvest of aman went far ahead. This chaotic market situation led to a very high price in the lean season and to a sharp decrease when the damaged aman crop was harvested, because of an overestimation of the expected prices after harvest.

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51 See WFP 2005, p.4.
52 See Ravillion 1990, 57f.
53 See Drèze and Sen 1989, p.28.
54 Ibid., p.29.
55 See Ravillion 1990, p.15 and p.57-60 and Drèze and Sen 1989, p.29.
The rural poor, mainly living from agricultural labor, could not fulfill their basic food needs, as their income strongly decreased and the prices for rice increased. These are the major reasons which led to starvation and to a strong increase in mortality. The phenomenon of low employment and high prices happens every year during monga. The lean season 1974 turned into a famine, mainly because the decrease in employment and the increase in prices were more severe than in usual years.

There are not only parallels in the way monga and the famine in 1974 developed, but there is also a geographical correlation. Greater Rangpur was the major affected old district measured by the proportion of people who where seeking for relief, although per head availability of food was 26% higher than in the national average and 10% higher than in the previous year\(^56\).

6. Monga from the Individuals Perspective – Coping Strategies

This report discussed monga so far from a distant viewpoint looking on statistical figures, geographical units, agricultural patterns, etc. The affected are individuals or individual families who live in villages and who have to face this problematic period. The impact of monga on their lives as well as the possibilities they have and the strategies they use to overcome the situation will be analyzed in this chapter.

People try to minimize the effect of the lean season on their livelihoods. In the local context different coping strategies were developed by the people themselves or emerged through interaction of the affected with various institutions or with other individuals who do not suffer from monga.

In this report, it was tried to divide the coping strategies into four types: preventive strategies are applied before monga takes place, while the other three strategies are a reaction to an acute situation. From their own initiative the families can react on an acute monga situation with two groups of strategies. As the manifestation of monga is a limited availability of financial resources and food reserves, they can either try to find new ways to allocate additional money or food by resource-opening strategies or they can reduce their needs by expenditure reduction strategies. If they cannot or do not want to use those strategies and their social or institutional set-up allow, they can fully or partly rely on safety-net strategies.

6.1. Preventive Strategies

As discussed above, monga is mainly a problem for those who are vulnerable, because they are chronic-poor. The strategy that bears most potential, but also one of the most difficult ones, is to improve the general situation. If people succeed to improve their livelihood by buying agricultural land or productive assets like a rickshaw or finding an

appropriate work that brings them enough income, they can be strong enough to overcome monga or at least mitigate its impact on their livelihood.

Livelihood diversification can have a positive impact on the ability of the family to overcome the agricultural lean season. It often leads to a general better income. It can also create income in those times, when the agricultural lean season does not bring profit to those rural poor with an undiversified income source based on agriculture. A diversified income as a preventive strategy is not limited to non-agro-based activities. Furthermore the planting of trees like olive can profit the people during monga, as the harvest coincides with the monga period.

Beside those two long-term or mid-term preventive strategies, there is an important short-term strategy. The marginal farmers and agricultural laborers do mostly not only face scarcity during the year, but usually have times of surplus as well. During harvest most people can earn more in form of money or yield than they need for their daily consumption.

As the crisis every year shows, many people do not manage to build up enough savings from the surpluses during harvest to overcome the monga period. To understand why they are not doing so, more in-depth analysis is needed. Following hypotheses try to deliver some explanations. To some people it might be difficult to do savings, because the surplus they earn during harvest is absorbed by obligations, like the repayment of loans, they have from the preceding period of shortage. They may also not see the necessity to do savings, because of other strategies that exist during monga. Past programs like relief or CFW might have caused the expectation, that if monga becomes severe, they will receive assistance.

Most local people have a need for some luxury as Case Study 2 shows. In the time they could at least do some savings, they are sometimes led into temptation, which reduces their efforts in preparing themselves for the critical time. Another reason for a low accumulation of private savings for monga could be, that many beneficiaries are involved in NGO programs like micro-credit, where they have to give regular cash savings. As they are doing savings within their samities, they might not be able or might not see it as necessary to do private savings as well. If a time of shortage arises, they often cannot withdraw their savings from their accounts, because most of the micro-credit regulations restrict taking savings in these cases.

Case Study 2, Gagpoa Bat
Shyamoli (17) and Dilip (~22) are married and have a one-year-old son. Although both of them went to school for 10 years, they could not find other employment than working as agricultural day-laborers. Dilip had a comparatively good and stable income (50-60 taka/day) for about two months, when the Union Parishad (UP) was building a road. They could only save a little money, because they were eating three meals a day and were even buying fish and milk. Shyamoli received 100 taka from her brother and expended another 100 taka of her money to buy a new sari. She went with a friend, nicely dressed with her new sari, a borrowed handbag and shoes by rickshaw to Sundarganj to visit some relatives.
6.2. Resource-Opening Strategies
Many people cannot or do not accumulate enough savings in cash or goods for overcoming the monga period. Allocation of money during the critical time from different sources is a very common coping strategy.

The access to formal short-term loans for consumption during the monga period is very limited. Some people try to receive loans from micro-credit providers, while most have to borrow money from local money-lenders. These informal money-lenders know about the problematic situation of the monga affected people and they can therefore profit from the sufferings by taking very high interest rates. The conditions for loans differ in literature.

In the study area two types of loans with different conditions are predominant. During normal times people can receive loans with 10% interest per month from local money-lenders, who mainly but not exclusively live on the mainland.

During the months of Ashwin and Kartik people can often only receive loans with very unfavorable conditions. If they take a loan of 500 taka, they have to pay back 500 taka and additionally one mound of paddy after the harvest. The value of one mound of paddy during aman harvest 2005 was about 350-400 taka. It can be assumed that people take the loan for about 3 months. In this case they pay a monthly interest rate of about 25%. If they take the loan closer towards the end of monga the monthly interest rate is even higher. A lot of people do not manage to pay back the loan at all or can only pay back part of it after harvest. They are often pressured to pay back another mound of paddy or they have to pay a regular interest rate of 10% as described above.

It is obvious that this system is very exploitative, not only during monga. 10% per month is even in normal times far too high. Those who are lending money have very high profits, but they put a high pressure on the livelihood capacities of those who are taking the loans. It has to be clearly analyzed, why they are doing so and why they seem to have no social responsibility towards the people who are often their neighbors or members of their community. The rural poor mostly have no other choice, than to accept their conditions, as they do not have many alternatives to allocate money. Rahman states for greater Rangpur that “there are relatively few resource-rich people, who could be a major

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58 See: Food Planning and Monitoring Unit of the Ministry of Food and Disaster Management 2005, calculated from the paddy price on the town market in Rangpur (1 mound in Sundarganj =42kg).
source of crisis-period borrowing to tide over the deficit period\textsuperscript{59}. The number of money-lenders and the amount of money that can be lent is therefore limited. During many people need to take a loan, but the supply is not able to cover the demand. This makes it possible for money-lenders to take high interest rates.

Getting a loan with good conditions depends on the relation to people who are able to give loans. Some people manage to get small loans with small interest from family members, while others even have to pay interest to close relatives like siblings. Interviews with people, who are living from begging, showed that even loans with bad conditions are not available for them, as their capacity to pay back a loan is very low and money-lenders do not want to take the risk not to be paid back the money. The interviews gave the impression that those, who are poorer, have to pay higher interest than those who have more assets or better income opportunities. The money-lenders know about the problematic situation of the monga affected people and they can therefore profit from their vulnerability by taking very high interest rates.

Many people take loans from different money-lenders, as the latter either do not give loans that are high enough or do not give a second loan before an old loan is paid back. As money-lenders usually do not know how many other loans a family already has taken, they give loans to people, who are already deep in debt. To those families it is very hard to develop their lives because the burden of the installments is very high. One family managed to reduce the interest rate of their loans by taking a micro-credit of 4,000 taka from BRAC for repaying other loans, which were partly taken during monga time.

Those people in the study area who have more capacities can buy on credit in the local shops or at close-by Choiton Bazar, if they know the owner of the shop. People take goods from the shop and repay it usually in the next days if they have income. During monga they frequently pay back after about one month or even more. If people borrow for more than a couple of days, they have to pay back one taka more for one kg of rice. This is a relatively low interest rate. But these arrangements are restricted to the opinion of the shopkeeper about the ability of the borrower to repay. The poorest are therefore excluded from this borrowing system. Anyway the amount of money which can be borrowed in this way is comparably low. People can receive maximum goods worth about 100 taka without payment from one shop.

\textbf{Case Study 4, Char Khorda}
Rashid and his wife Rashida live with their daughter on Char Khorda. They have an untypically highly diversified livelihood. Rashid has a toolbox and works as a carpenter and they possess some agricultural land. Their third income is the only shop on the whole char. They sell rice, soap, biscuits and some drugs.
They give credit only to selected people, who they think can pay back the money. During Ashwin and Kartik more people do not pay during purchase. In that time they have about 5,000 taka outstanding money, while it is only about 1,000 taka in normal times. They sometimes take an interest free loan from Rashida’s sister to buy products during monga.

\textsuperscript{59} Rahman 1995a, p.243.
Most affected people know that they will have income during harvest. Either because they will have yield on their own field, or they will receive employment. Some distressed people try to sell this future potential. Marginal farmers sell their yield and agricultural laborers their labor in advance. Like in the money-lending system comparable negative effects emerge, because many of the rural better-off use the worse situation of the rural poor for their personal profit.

If harvest is bought in advance the price is far below the market price. Bhattacharya\textsuperscript{60} found some people, who sold one mound of paddy for 175-200 taka in advance during monga 2004, which was worth about 350 taka\textsuperscript{61} during the following harvest period. Rahman found in his study, that “many labourer households were forced to contract forward sale of their labour at less than half the rate they could have earned normally.”\textsuperscript{62}

All strategies of lending money and selling labor and crops in advance bring certain mitigation for the people during the crisis period, but it also prolongs the period, because monga for them is not finished when harvest starts. They either have to use most of their money for repaying loans or they do not earn from the yield they produce or the work they are doing, because they were already paid before. The exploitative nature of money-lending in Bangladesh bears a high risk of a long-term dependency for those who take loans.

In times of crises people have the possibility to transform their assets into money to cover their daily expenses. It is reported that families sold\textsuperscript{63} their land or took a mortgage\textsuperscript{64} on it. Land is the most important asset in rural areas. If people loose this asset, their livelihood capacity for the future strongly decreases. Other assets like livestock, trees, bamboo, jewelry, and furniture are sold as well.

A general problem with distressed sales is that the prices for goods that can be sold by the rural poor are lower than usual as explained in chapter 5.3. Selling assets can be the result of a preventative strategy. Assets that have been built up with the intention to sell them in times of need can be sold during monga and are a security fund.

Above described strategies are attempts to open different external mainly financial sources, in order to compensate the insufficient income opportunities. Other strategies

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\textbf{Case Study 5, Char Latshala}

Maidul (~30 years) lives with his wife and his two children on Char Latshala. Maidul earns the main income of the family as an agricultural day-laborer. He migrates also frequently to other districts in search of employment.

Nearly every year during Monga he sells his labor in advance. He receives 40 taka per day. When he is working during harvest he only gets one meal, while the other laborers receive 70 taka and one meal. If he does contract labor, he could even earn 100 taka per day.
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\textsuperscript{60} See Bhattacharya 2005, p.109.
\textsuperscript{61} See: Food Planning and Monitoring Unit of the Ministry of Food and Disaster Management 2005, calculated from the paddy price on the town market in Rangpur. (1 mound =37.3 kg)
\textsuperscript{62} Rahman 1995a, p.242.
\textsuperscript{63} E.g. DER 2004b, p.1.
\textsuperscript{64} E.g. Rahman 1995a, p.253.
start one step earlier. They try to change the adverse employment situation, which is main reason for the shortage in money. As the supply of labor is high during monga people try to cope with that surplus by reducing their financial expectations. As the map on labor (Figure 4) shows, the wages decrease strongly during the lean period.

The other immediate employment generating strategy is to seek labor in other regions of Bangladesh, since monga does not affect whole Bangladesh equally. An important coping strategy of the rural poor, not only during times of scarcity, is seasonal labor migration\textsuperscript{65}. Interviews in the study area showed that seasonal labor migration started some 10 to 15 years ago. There are mainly two situations that lead to seasonal migration: a lack of employment opportunities in the home regions of migrants or an employment surplus at the destinations.

During the harvest period labor is short nearly all over Bangladesh. The wages therefore increase and people from the north can earn substantially more if they migrate to other places, and as a side-effect wages of those who remain in the villages increase as well, because the labor supply within the monga areas declines. People migrate in this period mainly for agricultural employment in other rural areas but also for working in the brickfields, earth and construction works and as rickshaw-pullers. In the study area, people migrate in large numbers to Gaibandha’s southern neighboring district Bogra as well as to far districts like Dhaka, Feni, and Chittagong. The high importance of seasonal migration is indicated by two bus companies that offer a daily low cost direct bus service from Sundarganj to Chittagong.

The second season for migration is monga, when it is not the favorable income opportunities in other regions that pull the laborers, but it is the absent employment opportunities in their home villages that push them. During monga agricultural employment is not only scarce in ‘the monga regions’, but all over Bangladesh, as nearly all agriculture in Bangladesh is based on the cultivation of paddy and therefore follows similar employment patterns. Agricultural migration is limited, because the little demand in labor is mainly covered by the local people at the destinations of migration. More agricultural work is available towards the end of monga, when people migrate to the places where harvest starts earlier. Although the options in these fields are very low, some people migrate for agricultural labor. The profit is usually considerably lower.

\textsuperscript{65} Information on seasonal migration is mainly from Azmal Kabir (Proshika), who is conducting a study on seasonal labor migration in Tarapur Union/Sundarganj Upazila/Gaibandha District, other information is based on own interviews.
Furthermore, in the monga period there is a lower demand for migrants in the construction sector, for earth works and on the brickfields. These works do not start in full-swing because of frequent rains and the remaining floodwaters.

It is only the demand for rickshaw-pullers in the cities which does not decrease. However, as most other migration opportunities are very limited and monga puts a high pressure on the livelihoods of potential migrants, more men than usual come to the urban areas during that time. Rickshaw-pulling becomes less attractive, as many people follow this coping strategy and more rickshaw-pullers are in Dhaka than usual. Rickshaw-pullers in Dhaka said that the number of trips per day decreases, because they get fewer passengers, and that many pullers take passengers for lower fares to increase the frequency of trips. Renting a rickshaw during that time is more difficult since the demand is high. During monga owners of rickshaw garages often take about 10 taka more per day. Income in this business is therefore substantially lower during monga.

Although migration in the monga period is not very lucrative, many people in the study villages saw seasonal migration during monga as one of the most important reasons that led to a decrease of the monga phenomena in the last years. Improved road communication, migrant networks, services like money transfers, increasing experience of the migrants is contributing to the success of migration and its effect on poverty alleviation in general and on monga mitigation in particular.

Seasonal migration is a very important strategy in a region, where the lack of employment opportunities is one of the major determinants for a disproportional high economic underdevelopment. However, it is sometimes mentioned that seasonal migration has also some negative effects, like the insecurity of the remaining family concerning sexual harassment or other discrimination, and the risk of negatives impacts on the migrants like gambling and polygamy. However, interviewed migrant families in the study areas did not mention these aspects as a severe problem.

6.3. Expenditure Reduction Strategies

It is a logical conclusion that if the income of a family who lives in chronic poverty decreases, while other coping strategies cannot compensate this decline, they have to reduce their lifestyle. They will first reduce all expenses that are not of urgent needs like jewelry, clothing or ice-cream for their children. These are mainly expenses that are restricted to times of disproportional high income and are nearly never done during times of shortage. Buying materials for repairing the house or a tube well is usually postponed to the harvest period. The lower purchasing power is reflected in the seasonality of the turnover of shops and hawkers selling these goods, as explained in chapter 5.3.

In addition many people have to change their food intake in quality and quantity. People reduce the amount of food they consume everyday in two ways. They either eat smaller meals and/or skip whole meals. Interviews with different families showed that
food intake is reduced to one or two meals per day, while most of them consume two or three meals during normal times.

The quality of foods is being reduced in various ways. People stop buying comparatively expensive items for their meals. They consume less milk, eggs and vegetables. Meat is out of reach for most of the rural poor during other times, too. People reduce the quality of their food and buy unclean broken rice, which is about 25% cheaper on the local market. One family reported that they sort out small broken pieces of rice from the chaff, which is used by their better-off neighbor as a burning material. Some families change to wheat, if the rice price exceeds the price for wheat. Furthermore people consume food that they do not eat during normal times. People in the study area collect wild growing taro varieties and eat parts of the banana tree.

Monga as a phenomenon of food insecurity manifests, if coping strategies cannot prevent the people from using their strategy of reducing their daily food intake to overcome the lean season. Reducing quality and quantity of food has bad effects on various aspects of people’s life. Their physical status weakens and they become more exposed to illnesses, while they are lacking in money to pay for treatment. Therefore, their ability to work decreases, too.

6.4. Safety-Net Strategies
People are members of various networks, from which they can profit during times of crises. The most important is the extended family. If one family from the network suffers exclusively or to a bigger degree from a crisis, they can be supported by their relatives. Relatives may give them food or borrow money without or with low interest.

Hasan\textsuperscript{66} found in his study that community support plays a major role in supporting the weakest segments of the local community. People would not allow other people in the community starving to death. Even though most of them are very needy, the neighbors would share their scarce food with them. The effectiveness of community support is seen very critically by the villagers in the study villages. As nearly everybody suffers from the lean season, it is often not possible to support neighbors.

Beside personal networks, people can try to access services of NGOs and the government. The NGOs and the government offer several programs that are specially designed for addressing a monga situation or profit the people indirectly during monga. Various relief programs are carried out like Vulnerable Group Feeding (VGF) of the government that distributes a certain amount of grains for a few months to those families, who have been targeted as being most vulnerable. Additionally, various NGOs and individuals distribute different kinds of relief.

The second type of activities is related to a short-term employment creation. The government and the NGOs carry out CFW or FFW programs to build and maintain physical infrastructure and to raise common or individual grounds for flood protection. If

\textsuperscript{66} See Hasan 2006, p.9.
People usually do not rely on one type of coping strategy, but try to combine different strategies to overcome the situation. Reduction of food intake is a very frequent strategy that has to be applied if other strategies are not sufficiently working.

As people already have various strategies, NGOs and government have to take these strategies into consideration while planning comprehensive programs to address monga. Many coping strategies bring relief on the one hand but have big negative affects like exploitative money-lending on the other hand. Currently the focus is mainly on the deliverance of alternatives with lower negative impacts. But there is also scope for an improvement of existing coping strategies.

7. **Strategies to Combat Monga**

Food and nutrition security has to be a major focus for actors in the development process, as Bangladesh is one of the weakest nations in this aspect according to the *Human Development Report 2005*. The report states that 30% of Bangladeshis were malnourished in the period from 2000 to 2002. Bangladesh had the highest rate, beside Cambodia, in whole South and South-East Asia. The figures for infants with low birth weight are even more alarming. Bangladesh is ranking with 30% on the third last place of 168 countries, for which this data is available. A special regional focus has to be set on the northern districts, because the incidence of food insecurity is disproportional high there as Figure 5 shows. As monga is a major phenomenon of food insecurity, it has to be addressed with special attention.

Looking at monga from a rights-based viewpoint, the Government of Bangladesh has the obligation to actively combat food insecurity and monga as one of its major manifestations. The government has ratified all the major international human rights instruments relevant to the right to food. Article 15 of the Bangladeshi constitution states:

> “It shall be a fundamental responsibility of the State to attain, through planned economic growth a constant increase of productive forces and a steady improvement of the material and cultural standard of living of the people, with a

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67 See UNDP 2006.

68 The UNDP defines undernourished people as people whose food intake is chronically insufficient to meet their minimum energy requirements.

69 ‘Infants with low birth weight’ refers to the percentage of infants with a birth weight of less than 2,500 grams. Data refers to the period 1998-2003.
view to securing to its citizens (…) the provision of basic necessities of life, including food, clothing, shelter, education and medical care.”

The inclusion of the right to food in the constitution puts additional pressure upon the government to actively address all forms of food insecurity.

The government knows about the problem and has put a focus on monga in the Poverty Reduction Strategy Paper (PRSP), which was published in 2005. They announced a “holistic approach to social protection [against] anticipated risks such as monga and seasonal poverty”. The actions so far were very limited. Bhattacharya wrote in his analysis of the Bangladesh economy that a fund was allocated in the budget of the fiscal year 2005/2006 to aid the seasonally disadvantaged poor, but the fund remained unused although monga took place within that period. Even the modality of expenditure has not been finalized yet. It has to be observed, how the government will tackle its self-declared priority area seasonal poverty.

Monga has to be understood in all its dimensions to find the right combination of strategies to address it. Until the problem is understood sufficiently, actions addressing it can be counterproductive. The following diagram is an attempt to visualize the main problems that are related to monga and to show various aspects, where action is already taken or could be taken in future. The diagram does not claim to be complete. Hopefully it will be extended by the ideas of the interested reader about problems and dimensions that were not considered in this report.

The diagram is a kind of problem tree. Causes for monga are presented in the upper part, while the problems that result from monga are shown below. All problems included in the tree were more or less detailed explained in the preceding chapters.

It is a logical conclusion that if there was no seasonal shock, monga would not exist. But monga is not only caused by the seasonal shock. People should be able to cope with such a situation, if they would not be chronically poor. If these two aspects are fulfilled, the individual is facing monga. He can avert monga, by using various coping strategies. If these coping strategies do not work, he will be affected by monga and be exposed to food insecurity. Many current coping strategies have negative effects that are shown in the lower part of the diagram. These negative aspects and the monga in general are accelerating chronic poverty.

Various strategies are already applied, which have an effect on monga prevention, although most of these strategies are not specially designed for monga. All known strategies that are currently implemented or are part of the discussion on strategies are included in the tree.

70 Government of the People’s Republic of Bangladesh 2004. Article 15.
72 Bhattacharya 2006, p.10.
There is the need to be creative, to find appropriate solutions for monga. The diagram shows therefore some strategies that are not part of the debate so far. To mention these strategies is meant to allow discussion on several points, although some of these strategies might not be very feasible.

An overview of all strategies is given on the page following the problem tree. The strategies are linked with numbers to the problems in the tree and are explained in the following chapters.
Figure 11: Problem Tree on Monga

People with a high capacity leave the chars
- remote: difficult access to govt. services, markets & employment
- weak services of Government and NGOs
- political neglect
- weak marketing of agricultural products
- decrease in prices for objects that can be sold
- increase in prices of essentials
- political neglect
- decrease in prices for objects that can be sold
- natural determination of paddy cultivation
- late planting and harvest of aman
- low homestead income
- Off-season for brickfields, construction and earth works in the region and outside

Nearly no off-farm employment
- flood/erosion: loss of employment, health, housing, land livestock etc.
- unequal land distribution + land grabbing
- weak marketing of agricultural products
- decrease in prices for objects that can be sold
- natural determination of paddy cultivation
- late planting and harvest of aman
- low homestead income
- Off-season for brickfields, construction and earth works in the region and outside

Low industrialization & off-farm employment
- problems of or created by coping strategies
- manifestation of monga
- reduction of quantity and quality of food
- negative short- and long-term impacts on health

Facing monga
- problems of or created by coping strategies
- manifestation of monga
- reduction of quantity and quality of food
- negative short- and long-term impacts on health

Causes of monga
- problems resulting from monga
- special underdevelopment of chars (& flood prone areas)
- underdevelopment of the region
- unfavourable seasonal market situation
- low farm and off-farm employment or income
- Low farm and off-farm employment or income
- decreasing quantity and quality of food
- negative short- and long-term impacts on health

Strategies: see next page
Figure 12: Strategies to Address Monga

This list refers to the problem tree on monga on the previous page. It includes currently applied strategies and pilot projects. Furthermore it tries to find strategies for problems, which have so far not been addressed. The list is meant to contribute to a discussion on strategies but it is no suggestion on strategies.

**Short-term strategies**
1. food relief
2. gruel kitchens
3. FFW and CFW programs
4. sale of subsidized food
5. OMS
6. consumption loans of NGOs and the government with no or low interest
7. paddy bank
8. payment holidays for installments of micro-credit and similar programs
9. possibility to take savings of micro-credit and similar programs for consumption

**Mid- and long-term strategies**

**Awareness building, motivation**
10. strengthening of security mechanisms within the community
11. awareness building for local elite to reduce exploitation
12. agricultural extension work (government and NGOs)
13. motivate people to sell products for a higher price before monga and save this money for the monga period
14. motivate people to diversify their livelihood
15. motivate people to do savings
16. motivate big landlords to sell land and to invest the money into industries

**Livelihood improvement, income generation**
17. adjustment of government infrastructure building and maintenance to the monga season
18. asset transfer
19. micro-credit
20. improvements of the migration system e.g. employment of monga affected people for government projects at the destinations
21. promote homestead income opportunities like trees, vegetable and lac cultivation that can be harvested during monga
22. introduction of crops that need labor or bring profit during monga
23. propagation of share-cropping (connected to awareness building for an improvement of the system)
24. propagation of share-rearing (connected to awareness building for an improvement of the system)
25. skill development trainings
26. connect underprivileged children with existing businesses (carpenter etc.) to work as helper and to receive skill training.
27. promotion of small industries (low technology)
28. promotion of food processing
29. promotion of small, medium and/or large industries
30. government-subsidized economic development

**Organization, formation**
31. organization of laborers
32. organization of agricultural producers (cooperatives etc.)
33. organization of people for joint businesses
34. formation of pressure groups consisting of people from all hierarchical levels.

**General programs**
35. regional development program
36. focus of donor programs on char land
37. general education programs
38. improvement of infrastructure/access to mainland and services for char population
39. improvement of government services and NGO services
40. replacement of weak government services through NGO activities
41. disaster management programs
42. support programs for victims of river erosion
43. stress on cooperation on monga alleviation (NGOs and government)

**Political and legal framework**
43. political regulations for money-lending, share-cropping etc.
44. improvement of khas land distribution
45. improvement of land registration system
46. land reform
47. political reforms to minimize effects of political patronage

**Research**
48. research on possibilities to postpone harvest time of aman
49. research on crops that can be harvested during monga
50. research on high value crops and feasible production areas
51. research on cropping patterns
52. research on paddy cultivation (varieties and techniques)
53. research on markets and local potentials; linking up producers with markets; interregional exchange of business ideas
54. general interdisciplinary research on monga to understand the phenomenon and to develop
7.1. **Short-term Strategies**

In an acute monga situation, when local people reduce their food intake, the government, NGOs and some individuals have some mechanisms to support them and to prevent starvation. Strategies can address the problem from three directions. The most direct way is to provide food straight to the people. This is commonly known as relief. It is also possible to increase employment opportunities to earn money to enable them to buy their food themselves. The third method addresses the price fluctuation that is generally adverse in the monga season.

Strategies of direct relief assistance are followed by various actors. However, most relief is channeled through various government programs. The government operates regional food storages, which are filled with grains that are purchased for a fixed rate during harvest time as well as imported or donated from other countries. The systems, the type of contribution, the target group, and the duration of the programs differ.

Some are designed to address chronically poor members of society throughout the year. Women can receive 30kg of rice per month for a period of 18 months through VGD, which is implemented mainly in cooperation with the WFP. Although the program is not directly addressing monga, it generally reduces the vulnerability of the family towards food insecurity during a period of 18 months and especially during the critical lean seasons. Other programs allow reacting to acute situations. If the severity of monga makes it necessary to give people relief, the government can launch VGF, Gratuitous Relief (GF) or Test Relief (TR), which provide single or multiple rations of food for a few months.

Appropriate targeting is crucial in these programs. For VGD and VGF beneficiaries are usually selected by the *Union Parishad* (UP). The selected women receive a card which entitles them to collect food relief. The selection process is a big problem in the study union. The most vulnerable families cannot receive VGF or VGD cards. It is an open secret that a VGD card costs approximately a bribe of 1,000 taka, which the poorest cannot afford. In the distribution process frequently one or two kilograms are given less to cover the handling loss and the transportation cost of the UP. NGO employees, who are monitoring the activities of the UP, said that the weight is secretly further reduced.

In the VGD distribution during *boro* harvest in Dahabanda, a neighboring union of Tarapur, a man bought cards from three women and received the allowance after giving his fingerprint. He said the women sold him the cards for this month, because they did not want to go to the distribution and needed money instead of rice. Members of the UP confirmed that women frequently sell the allowance in advance and the UP accepts this system. Selling future potentials, like harvest and man-power, is common practice. VGD cards in the eye of a poor family are a similar asset, which brings regular profit. It is therefore hardly surprising that VGD cards are sold.

The government and the international donor agencies have to work strongly on the improvement of their relief systems in order to ensure that in the end really those
profit who need support. Furthermore, the government relief programs as they are currently carried out in the study area strengthen the local system of hierarchical exploitation of the poor and hinder a sustainable development thereby.

Long-term results can hardly be expected from cyclical relief programs. People can manage more food for a certain time, but after the program is over monga will hit them again like before.

If monga is assessed to be severe, many NGOs and private groups distribute food relief as well. During monga 2004 various national and international NGOs distributed mainly food packets consisting of grain, oil, salt, and sugar. However, concerning the numbers of families reached, the NGOs do not play a major role, as they target some thousand people per district while the government for example targets some 100,000 people per program and district.

In the political debate opposition parties including BAL frequently demanded from the government to build up gruel kitchens to feed the hungry. This suggestion is not appropriate. People are not affected by natural disaster, which bars them from cooking on their own.

The paddy bank is a new idea that is specially designed for monga. Pilot projects are currently running in Rangpur and Nilpharmari. In the beginning investment is needed to stock up the paddy bank. The paddy bank is managed by a local committee. They decide on the distribution of paddy to individual families during monga. During harvest time people have to pay back the paddy they withdrew from the bank. As they have income during harvest, it should be possible for them to pay back. The biggest advantage of the paddy bank is the reduction of the desperate people’s need to receive money by exploitative deals with the local elite. It has to be observed which problems occur during the pilot phase. It will be crucial that the local community is able to manage the paddy bank and that operating costs can be covered. If the pilot projects are successful, the concept can be expanded.

Besides directly providing food, improvement of the people’s access to money is the second important group of strategies to quickly improve the livelihood of an affected family during monga. Many families already have access to money through local coping strategies. However, these systems are mainly exploitative and can lead to indebtedness and dependency in a long-term run. Strategies that provide income to people can oppose the problem of money-lending and similar coping strategies. NGOs and government institutions can give out short-term consumption loans for 2-3 months to cover the short monga period.

Micro-credit and similar programs offer two big opportunities to increase the cash availability of their beneficiaries. It is already done by many NGOs, but not by all, to give payment holidays for installments during monga. A second possibility is to allow the beneficiaries to withdraw their savings, since the savings are property of the

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73 See DER 2004b.
beneficiaries. However, this practice is not allowed by the regulations of many micro-
credit programs.

Access to money can also be generated by providing work to people. CFW programs give employment to a big number of people for periods up to several weeks or even months. Sometimes FFW projects are implemented. People receive directly food instead of money, which can be an advantage during monga as food prices are high.

The government mainly uses CFW for building and maintaining roads, embankments and flood shelters. NGOs in the study area are mainly focusing on homestead and community ground rising as well as on building flood shelters. It is important that these programs are carried out according to the seasonal availability of employment opportunities. Implementing CFW programs during the harvest season does not benefit the poor, as they can have good income as day-laborers in the area or in other districts. The government should therefore adjust their construction activities as close as possible to the lean seasons.

The third possibility to enhance the situation for the vulnerable groups with a fast result is to improve their access to products from the market. The government has a system of Open Market Sales (OMS), which enables it to stabilize the prices of rice. The price usually increases towards harvest. As price fluctuations mainly depend on demand and supply, the government can lower the rice price by increasing the supply through OMS and they can reduce the demand by giving relief. A low rice price increases people’s ability to purchase rice.

The government sometimes sells rice to targeted people for a rate far below the market price. Hasan reports that in Chilmari/Kurigram 900 families per union could buy 6 kg rice for 4 taka per kg for two times during the monga in 2005. This has to be seen as a relief activity rather than market stabilization.

Various problems evolve with most of the short-term measures. They sometimes even deepen the difficulties to achieve long-term development. For a sustainable development it is important that people improve their livelihoods, in order not to be vulnerable towards seasonal shocks, or to build up their coping strategies. If people know that if the situation becomes difficult NGOs or the government will provide them with CFW or relief, they will probably not see a major need to develop coping strategies like accumulating savings. The so-called dependency syndrome can therefore destroy self motivation and it can create expectations concerning material values of beneficiaries towards NGOs. It is therefore not easy to work in a community with programs addressing social awareness etc., without providing assets.

Furthermore a dependency for the local NGOs is created, that need donor money to implement projects and to maintain their status quo or to grow. If donors agree, they might also implement programs, without consideration of the situation and its necessity.

75 See Hasan 2006.
On Char Khorda a local NGO built up a flood shelter through CFW. They paid the laborers 60 taka per day. After the first heavy rainfalls the flood shelter was damaged. The people living next to the shelter were asked why they were not taking initiative to repair the flood shelter before it would get totally destroyed. As they are very poor they gave the most logic answer. If they would repair it by themselves, the NGO would not employ them again for the needed work. However, in a long-term run this is not sustainable and might also have negative effects on the people’s self motivation to bring a change to their lives and into their communities.

To solve those problems and to achieve a long-term effect, as well, it might be possible to combine CFW with a component for community and awareness building. People could work less per day and they could meet after work to discuss problems. As they are suffering during monga, it can be expected, that they are more interested in discussing possibilities to change their situation in a long-term run.

It is crucial, that a local group of people takes the responsibility for maintaining created assets. People have to learn, that they are the owners of the result of their work and not the government or the NGOs.

The effect of ownership can be increased, if people are not receiving some 60 taka per day, which is far above the market price for labor and which is therefore also a kind of relief or a present. They should have the feeling to contribute to the project. This is possible if they receive a wage that is slightly below market level during that time. It would still profit them in total, as private employment even for a low wage is lacking. The program with a lower wage could have a longer duration or employ more members of a family because people have sufficient time. A family would earn in total the same money and could ensure their nutritional demands like during ordinary CFW projects.

7.2. Improvement of the Social Functions in the Community

Probably the most important reason for chronic poverty is the local social system, which is strongly based on hierarchy. One small part of the society owns big lands, has good access to lucrative jobs and can influence local people and government decisions. Those who suffer from monga are chronically poor, have no influence and frequently enter as clients into various relationships with patrons from the upper social strata. Many coping strategies of the local people base on such relationships. During monga, they take loans, accept minimal wages, sell labor, and harvest in advance and assets for a low price. Poor people have to accept the conditions dictated by the patrons, because they are very needy in times of scarcity. As described above, the patrons often misuse their power and dictate conditions that are very destructive to the livelihood of their clients.

The rural poor are not only exploited during monga. Also during normal times money-lenders take exploitative interests of 10% or more per month. Clients usually have no or only limited land possessions and patrons have often too much land to manage the laborers to cultivate it. They give out the land for lease or share-cropping. In the system
of share-cropping people have to return half of the harvest, while they have to deliver all inputs to the field. People accept these unfavorable conditions, as it provides them with an income source. Rearing of animals with bad conditions is done by clients for the patrons, too.

The upper class can become richer because they often have good relationships with government officials responsible for land registration. Land grabbing is a very common problem. This is especially severe on monga affected chars, which are instable. The poor cannot claim their lands back, as they have no opportunities to influence or bribe officials.

The main strategy to prevent people from exploitation is currently to replace services of the local elite by services with better conditions. Micro-credit is about the same as money-lending, but the interest rate is far lower. Free or repayment-bound asset transfers profit people better than share-rearing. Strategies like relief, CFW, consumption loans, and the paddy bank concept try to prevent people from entering into an exploitative relationship with a patron.

An interesting question is why local patrons, who are not in need, severely exploit members of their own community, although they must be aware of the bad effects they create for the livelihoods of their clients and for the development of the whole community. This question needs to be analyzed in further detail in order to assess if there is a possibility to change the prevalent system.

If the system remains unchanged, it will limit the sustainability of other projects that aim at income generation for the poor. If they suffer once more from any kind of crises, they might be forced to enter again into a relationship with a patron. They will gradually loose the assets gained through a development project to the patrons.

Instead of replacing the services of the patrons, it could also be tried to remove the exploitative character of the system. Theoretically money-lending and advance-selling of yield or labor are good systems. People receive support during times of shortage, which they have to pay back, when they have a certain surplus. Providing land for cultivation to landless and animals to people who are not able to invest could improve their situation. It is only the conditions which make these systems problematic. If conditions are improved in favor of clients, existing security mechanisms within the community could contribute to a sustainable development.

To remove monga and to minimize chronic poverty NGOs have to work with local elites, and not only with affected people. Awareness building has also to be given to them. They should be made aware about their responsibility for underdevelopment and they should be put under some kind of pressure. There are already some small projects which for example establish local committees to take influence on violations against social norms or on institutions like traditional informal mediations (shalish). Laborers can be organized, who jointly refuse to cultivate land for a little share of the profit and who refuse to work for minimal wages during monga season. The government can provide the legal framework in terms of establishing rules concerning patron-client relationships. The
optimum of this approach is to develop a community feeling. The rich have to fight jointly with the poor for the improvement of the whole community. NGOs can facilitate these processes and if it is successful, self determined development of local people and projects focusing on economic empowerment become sustainable.

7.3. **Agro-based Strategies**

Monga is a phenomenon of the agricultural lean season and it is therefore closely connected to agricultural activities. Strategies that address agricultural production can diminish the seasonal shock of the lean season and mitigate chronic poverty.

One of the big problems concerning monga is that there is only minimal agricultural income in form of employment or harvest during that time. There are various possibilities to increase income and income opportunities during the crucial period.

On the smallest unit of agricultural production, the homestead, some production can take place during monga. It became a focus of NGOs to promote some vegetable cultivation around the house. It is expected, that people increase the consumption of vegetables, which improves their diet, and that they also have some income by selling vegetables at the local market or to neighbors. Monga is the agricultural off-season for vegetables. If the right seeds for the specific conditions are selected, some early varieties of vegetables can bring a good profit to the producers. If the family takes over the strategy after the project is finished, it is a contribution to mitigate monga in a long-term run. There was also an attempt to use vegetable cultivation as a preventive short-term measure. Oxfam for example distributed vegetable seeds to potential victims of monga76.

Planting trees is a second method to create homestead income during monga. Some trees like olive can be harvested in the critical period and therefore could bring income to the owners of the trees. Some research has still to be done concerning trees which are suitable and should be promoted. This research has to include the local natural potential and the requirements of the trees and marketing opportunities.

Monga is most severe on the chars. Planting of trees is a risky task, as many chars erode before trees are old enough to be harvested and homestead gardening is more difficult, because soils are mainly of lower quality and very heterogeneous on small scale. It is a challenge to find the right vegetables for these conditions and on some places it might not be possible to profitably produce vegetables.

There is currently one pilot project carried out by the local NGO *Udayankur Seba Sangsta* (USS) in Nilpharmari which is supported for research by *Research Initiatives, Bangladesh* (RIB). They try to transfer *lac* production, which is already carried out in the region around Rajshahi and in other countries, to monga affected areas. *Lac* is an animal resin secreted by the *lac* insect (*Lacifer lacca*) that feeds on a variety of host trees. The resin can be processed to varnish or similar products. As *lac* is harvested during monga it can provide important income in this period. There are still some problems to be solved

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76 See DER 2004b, p.4.
concerning the cultivation. If the pilot project is successful and processing facilities and marketing is developed, a large scale promotion of lac in ‘the monga region’ can be taken into consideration.

Agro-based strategies can be applied for professional farming, too. Agriculture in the region, especially during the aman season is very low diversified. Crop diversification can increase employment and income in the crucial time. If the right crops are chosen diversification can lead to a general economic development. High value crops like vegetables need a lot of labor and can bring a far higher profit per area than paddy. The crucial points in crop diversification are research, agricultural extension, and especially product marketing. If NGOs promote crop diversification it should be taken into consideration to organize producers for marketing, since it is a general tendency that most of the profit remains with middlemen.

Another strategy, which some people see as the biggest contribution to a solution of monga, is the shortening of the lean season. Technical know-how is developed by the Bangladesh Rice Research Institute (BRRI) and strongly pushed by the NGO Rangpur Dinajpur Rural Service (RDRS), which covers most of the monga affected area. The idea is to shift harvest time. If harvest takes place earlier, monga affected people also receive work earlier. As a side-effect possibilities to plant winter crops earlier are enhanced. Three methods can be applied. Seeding can be done earlier, varieties can be planted that have a shorter maturing time, and paddy can be directly seeded, instead of transplanting the seedlings. Direct seeding reduces the maturing time about one week. The three methods can be used in combination and if the farmers follow the concept, harvest would already take place during the present lean season. It is expected, that if the day-laborers have income earlier, monga will not affect them. To develop this technology agricultural research on varieties, on cropping patterns, and techniques is needed and agricultural extension work has to be carried out to inform and to convince farmers.

There is some doubt if this strategy really can provide the expected profit. So far no detailed analysis has been done on effects of the introduction of technologies on the labor market. It has to be ensured that the rural poor profit and not landlords. Direct seeding is done by comparatively simple machines, which put seeds in a specific distance into the soil. No transplantation is needed, which is one of the most labor intensive steps. Less labor leads to lower income of the day-laborers. The lean season has an advantage for the laborers, too. As there is a labor shortage during the harvest, wages are high in that time. If a part of the harvest is done earlier, the shortage decreases and therefore the daily wage rate might become lower. These risks and others have to be eliminated. The example of this technology points out, that an interdisciplinary approach is needed in research on monga and in developing and implementing strategies.
7.4. Off-Farm Income Generation

The analysis of the economic situation in greater Rangpur in general and on *chars* in particular shows that the manufacturing sector is comparatively weak. Strengthening small, medium, or large scale industries could bring employment alternatives to the region. There are various strategies on different levels which can enhance the establishment of industries. Investors can be motivated by government interventions like subsidies or tax allowances. Building up large and medium scale industries would especially profit the region, but it is the *chars*, which suffer most from monga. The direct benefit of the *chars* from medium and large industries is relatively low, because these industries cannot be established on the *chars*, as the land is unstable and the risk of investment is too high. However, this kind of industrialization reduces the pressure on land and as a labor force is absorbed by industries the surplus concerning the agricultural laborers might decline as well. Agricultural working opportunities for individuals might increase.

Direct benefit for most affected people can probably only be achieved with small industries, including food processing. It is frequently mentioned, that handloom industries should be promoted. Especially those kinds of low technology industries are feasible for the living and working conditions on *chars*. Because of repeated displacement of char dwellers, industries should be easy to remove and transport. So far, promotion of small industries is no major task of NGOs in the study area.

It could be a priority for NGOs to do research for feasible products and production methods and to promote them. Besides lacking capital, people living on *chars* and in remote rural areas have only very few ideas, what they could produce. However, if they already have ideas on what they can and want to do, NGOs could support them more effectively.

In other cases NGOs could find suitable products. The most important task is market research. Locally innovative production methods, often developed by the local people themselves, are already in use and new products are produced for the local market. These products have to be found and promoted in other regions, with the expert knowledge of those who have developed it. One example from the Upazila covered in this study that could be promoted in other regions is that of a rope maker77. He developed a rope-producing machine made out of bicycle parts, which employs four people. It is not making them rich, but ensures sufficient income. One example that uses this approach in a slightly different way is the *lac* cultivation, explained in chapter 7.3, which is an idea taken from another region.

A third way to find a suitable product to be produced in a monga affected village is to survey the markets in the urban areas to find out which products are sold there, which could also be profitably produced in the monga affected areas. An exemplary

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77 Promoting rope making is a fictive example, which was not analysed for its feasibility so far.
product are blocks from wood for block printing, which need only low skills for carving and little input in carving tools and wood.

These three types of strategies require a detailed analysis of the product before they can be implemented. Potentials of the proposed production village and people’s skills have to be analyzed and compared with requirements for the respective product. It has to be analyzed, if marketing is possible and if potential producers can stand the competition. One crucial point concerning the products for urban markets will be to organize the producers for marketing. Different ‘pocket solutions’ have to be found, as one product cannot be produced in all monga affected village. The northern regions have currently still a big competitive advantage: wages are low, which is especially important in the initial phase.

A major obstacle to industrialization on various levels is the requirement of capital to start an industry. To build up a handloom costs a family some 10,000 taka. This money is often not manageable without the help of NGOs. They can support these kinds of investments with micro-credit or asset transfer with or without repayment, which are currently mainly focusing on distribution of livestock. If a family diversifies its income with off-farm activities, they will probably profit better than with livestock. The prices for the assets itself are in case of the handloom not very different. A handloom is only double price of a small cow. The big difficulty is the skill development of the people and the marketing of the products. People already know about livestock and were probably involved before in rearing of animals. For a new product, however, skills have to be developed.

Capital for investment is a major problem for bigger industries, too. An approach to create investment in the rural areas is to motivate big landlords to sell land and to invest money for building up industries, which might profit them more than agriculture. There are some constraints for the landlords to do so. Possessing land and having it cultivated by share-cropping or leasing it out is an easy and less risky way to profit. Industrial investment, however, bares big risks. If landlords can be convinced to do so, it will profit the small farmers as well, as the pressure on land will decrease.

To enhance employment, especially during monga, some people suggested improving the migration system. There could be preference given to monga affected people, when the government carries out construction works at migration destinations. It was also suggested, that migrants receive some short-term loans for covering travel costs and some money for the remaining family, which they have to pay back after their return. There are already systems existing to send money to the families from the destinations and to receive an advance. In the working area migrants were satisfied with the currently existing commercially systems, which already provide these kinds of services to them. It has to be analyzed, if interventions in the seasonal migration system can improve it, or if the system is already working sufficiently.

Promoting block production is a fictive example, which was not analysed for its feasibility so far.
7.5. General Issues Concerning Chronic Poverty

Monga is only one aspect of poverty in the region. Strategies addressing monga should be integrated in a wider framework. It would go far beyond this report to discuss strategies to address chronic poverty in detail. However, monga is strongly interlinked with chronic poverty and successful strategies in fighting chronic poverty will reduce monga. A general regional development program, including various aspects like education, health, agriculture, and employment could bring positive aspects, which would contribute to solve the monga problem.

As chronic poverty is most severe on chars, a specific focus has to be put on those areas. Especially some local NGOs started to work more intensively on chars in the last years. This change was partly pressured by the donors’ expectations, which funded programs like the huge Chars Livelihoods Programme (CLP) of the British Department for International Development (DFID). Programs focusing on chars have to consider issues related to the special problems of the inhabitants’ livelihoods. This includes especially disaster management and the improvement of people’s access to services. Government services like education on chars should be improved. In the case of education, NGOs in the study area are at present replacing missing services of the government mainly with non-formal education institutions.

Land distribution is a major problem in 'the monga regions’. The proportion of landless people is very high. A land reform could make them owners of land, which would profit them far better than cultivating land of others. However, a land reform is far from being implemented. Improvements in the khas land distribution and in the corrupted land registration system, which currently enables a lot of land grabbing, could be little steps in the right direction. It would also be possible to increase people’s access to land by promoting share-cropping with fair conditions. Here again, the major political parties of Bangladesh have to be taken into account to reform obsolete and unjust laws related to the possession and inheritance of land.

7.6. Research and Cooperation

Developing effective strategies for a problem strongly depends on the knowledge about the specific problem. Research on monga has to be continued and to be intensified to understand it, to develop strategies, and to evaluate these strategies. As this study tried to show, it is essential to work with an interdisciplinary approach as monga is interlinked with social science, agriculture, economics, politics, and law.

The scope of the present available knowledge on monga has not been used for assessing the local situation. There is neither a common understanding concerning the question which circumstances provoke monga, nor has there been an attempt to formulate indicators to analyze the situation. To formulate these indicators is of major importance in developing and implementing strategies to address monga. For long-term measures it has to be analyzed where exactly monga takes place. It is not sufficient to make such an
analysis only on Upazila level, because the manifestation of the various causes is very heterogeneous on a small scale.

A mapping of those regions that are frequently affected or vulnerable to seasonal poverty in Bangladesh has not been done so far. Studies like this are possible as general studies on poverty show. The most recent examples are the poverty mappings done by the Government of Bangladesh together with the WFP, as well as Bread for the World in cooperation with RDRS\textsuperscript{79}.

For short-term measures, like giving relief or doing CFW in the acute situation, the specific vulnerability of a community has to be compared with the factors that have an impact on the severity of the lean season of the specific year. This includes e.g. fluctuation of the price of essential goods and crop loss, caused by regional phenomena like late flooding or local phenomena like pests.

Some attempts already exist to assess monga when it happens. Different actors involved in the development process try to coordinate their activities\textsuperscript{80}. These efforts have to be institutionalized, and all relevant actors have to be included. The attempt of CARE\textsuperscript{81} to assess the monga of 2005 is just one example of uncoordinated planning\textsuperscript{82}. Missing indicators for the assessment of monga might be responsible for the deviant figures for various districts. Obviously, there is a need to develop a reliable system with clear indicators, which allows a quick assessment of the severity of the monga situation.

An interesting approach is followed by Power and Participation Research Centre (PPRC)\textsuperscript{83}. They did a forecast on the expected severity of monga prior to the monga of 2005. They intend to institutionalize this for the coming years. This approach can provide valuable information for the government and NGOs, which plan to respond to the situation by relief and other short-term activities. They can use the results of PPRC to adjust their activities to the requirements for the respective year. For a promising usage of PPRC’s information, it is necessary that they provide a more detailed analysis on the results of their study. It needs to be observed how PPRC will develop their activities in the coming years.

Cooperation is an important aspect in the development process in general and it is also relevant for monga. Ideas on strategies have to be shared between the government, NGOs and academics to develop sustainable long-term strategies. This kind of cooperation is currently done by the Focal Area Forum in Rangpur, which mainly focuses on agro-technology transfer. However, membership of local NGOs in this forum has to be increased and social scientists have to be included or another medium has to be found. Therefore, awareness campaigns about monga and the responsibilities of the above mentioned actors involved in relief activities seem to be important and promising.

\textsuperscript{79} Bangladesh Planning Commission and WFP 2005 and Bread for the World and RDRS 2005.
\textsuperscript{80} E.g. DER 2004b and Care 2005.
\textsuperscript{81} Care 2005.
\textsuperscript{82} Some of the data are incomplete due to Eid vacations.
\textsuperscript{83} Rahman 2005.
Cooperation for addressing an acute monga has to be institutionalized. During the last years, different actors like CARE and Disaster and Emergency Response (DER) tried to coordinate activities. It might be very helpful, if a monga forecast and coordination would be institutionalized. It has to be clear before monga starts which information is needed from different institutions and who is taking the lead.

**Conclusion**

Monga is more complex than it seems. It is a phenomenon created by various factors that are partly man-made and partly determined by nature. It is the temporal coincidence of different problems which have a big negative impact on the livelihoods of the rural poor in a specific time of the year.

However, monga was often not seen with a broad perspective. Monga was mainly explained by the seasonal working patterns connected to agriculture and partly by chronic poverty. Monga has also to be seen in many more contexts like economic performance, natural disaster, land administration, social relations and mechanisms, actions and interests of local and national government as well as the NGOs. Putting monga in a wide framework has to be continued in research and in actions.

One of the often neglected aspects is the local social system. The above explained practices of exploitation of the poor by the local elite belong to the major and most unnecessary hindrances to development in the affected regions and therefore also for solving the monga problem. Strategies that aim on improving the local relations within the hierarchy will not bring measurable impact within a short period. However, the focus should be more and more put on these strategies. Supply orientated strategies like relief and asset transfer have certain impact, but cannot change the root causes.

For comments, suggestions or discussion please do not hesitate to contact me.
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Annex


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<tr>
<th>District</th>
<th>Type of Industry</th>
<th>No. of Establishments</th>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>73</strong></td>
<td><strong>3522</strong></td>
</tr>
<tr>
<td>Lalmonirhat</td>
<td>Bidis Manufacturing</td>
<td>6</td>
<td>327</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>327</strong></td>
</tr>
<tr>
<td>Nilpharmari</td>
<td>Tobacco Stemming, Redrying</td>
<td>2</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Tobacco Manufacturing N.E.C.</td>
<td>7</td>
<td>224</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>259</strong></td>
</tr>
<tr>
<td>Rangpur</td>
<td>Rice Milling</td>
<td>92</td>
<td>1507</td>
</tr>
<tr>
<td></td>
<td>Manufacturing of Bakery Products</td>
<td>16</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>Distilling &amp; Rectifying of Spirit</td>
<td>2</td>
<td>336</td>
</tr>
<tr>
<td></td>
<td>Cigarettes Manufacturing</td>
<td>2</td>
<td>390</td>
</tr>
<tr>
<td></td>
<td>Bidis Manufacturing</td>
<td>68</td>
<td>9368</td>
</tr>
<tr>
<td></td>
<td>Tobacco Stemming Redrying</td>
<td>33</td>
<td>897</td>
</tr>
<tr>
<td></td>
<td>Saw Milling and Planning Mills</td>
<td>40</td>
<td>480</td>
</tr>
<tr>
<td></td>
<td>Structural Products of Bamboo</td>
<td>2</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Manufacturing of Soap and all Detergents</td>
<td>10</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>Manufacturing of Polythen Products</td>
<td>15</td>
<td>255</td>
</tr>
<tr>
<td></td>
<td>Bricks, Tiles and Non Clay Products</td>
<td>84</td>
<td>6384</td>
</tr>
<tr>
<td></td>
<td>Agricultural Machinery and Equipment</td>
<td>1</td>
<td>517</td>
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<td></td>
<td>Electrical Appliances</td>
<td>2</td>
<td>78</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>367</strong></td>
<td><strong>20768</strong></td>
</tr>
</tbody>
</table>

Source: Bangladesh Bureau of Statistics 2004b, Table 12

The statistic can only give a limited insight view in the manufacturing sector in Bangladesh, as only establishments are counted that have 10 or above employees. The quality of the data has to be seen critical as there are some major inconsistencies between different districts. Personal observations showed that not all industries like paddy processing, brickfields and rice milling were included in all districts. Nevertheless the table can give an impression on the manufacturing sector in the districts.

Definitions:

Manufacturing is defined as the mechanical or chemical transformation of organic or inorganic substances into new products, whether the work is performed by power driven machines or by hand, whether it is done in a factory or in a premise based location and whether the products are sold wholesale or retail.

An establishment is defined in operational terms as a unit combining activities and resources directed by a single owning or controlling entity towards the production of a homogeneous group of goods and services at a single physical location.
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