

**Comprehensive Disaster Management Programme,
Phase-II
Bangladesh**

A Review of CRA and RRAP Facilitator's Guidebook

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I. INTRODUCTION

Bangladesh is one of the largest deltas in the world formed by a dense network of tributaries and distributaries of the mighty rivers- Ganga, Bhramaputra, and the Meghna. The country largely comprises low and flat land and is exposed to monsoon flooding for part or whole of the year. Coastal plains are experience cyclones, storm surges and inundation. About 80 percent of the land is categorised as flood plains. And river erosion is common. (MoEF, 2009)

Over the last 20 years Bangladesh experienced 6 major disasters (4 floods and 2 cyclones) affecting millions of people. In recent years, climate change has affected the coastal Bangladesh by ingress of sea water, and large tracts of land being rendered uncultivable due to salinity. Being predominantly an agrarian country, these disasters have severely impacted productivity and livelihoods of people. A fall in production, often results in lowering of consumption and a consequent rise in poverty and malnutrition. In the year 2001 the population of Bangladesh was 124.35 million and is expected to increase to 170 million by 2020.

A total of 40% of the population – approximately 60 million people – live in poverty in Bangladesh, and 25% of these are classified by the government as “extreme poor”. More than 50% of the poor in Bangladesh are rural landless households. Further, landlessness is increasing and alternative employment in villages is limited. (Holmes et al, 2010).

The extremely poor or bottom 10-20% are usually the most vulnerable. Amongst them women, children, the elderly and some ethnic and religious minorities are particularly marginalized and excluded. Over the past 10 years for every 3 lifted out of poverty, 2 fell back due to sudden health and other shocks. Owning fewer assets and without access to entitlements – such as effective health care, quality education, a hygienic latrine, safe drinking water, and social protection – these are the people least buffered against shocks. At the household level food insecurity caused by poverty, absence of livelihood opportunities or access to food may be exacerbated in the event of hazard events such as floods, cyclone or hailstorms.

The CDMP II

In its second phase, the five-year Comprehensive Disaster Management Programme 2010-2014 (CDMP II) has an overall aim of contributing to poverty alleviation in Bangladesh through

- disaster risk reduction and
- adaptation to climate change.

It is designed to extend and expand the risk reduction efforts of the first phase (2003-2009) following a multi-hazard approach to disasters, moving from relief and rehabilitation to more focused activities on risk.

CDMP II aims to institutionalise the adoption of risk reduction approaches, not only in its host Ministry of Food and Disaster Management (MoFDM), but more broadly across key ministries and agencies both in programming and in practical action. It is a central Government owned disaster management initiative in Bangladesh, a nationally implemented project of MoFDM lead by an Additional Secretary as the National Programme Director.

The Context and Rationale of this Review

In the first phase CDMP I, Community Risk Assessments (CRAs) and Risk Reduction Action Planning (RRAPs) were undertaken through implementing partners - NGOs, educational and semi-governmental institutions. They recruited project based staff, received CRA facilitation training from CDMP, conducted CRA sessions and developed Risk Reduction Action Plans (RRAP) with communities.

Findings from several lessons learned workshops and consultation sessions indicated weaknesses in the CRA process which potentially impact the quality of the outcome of the CRA and RRAP processes. These findings provided the backdrop of this Review. Further the consultant's TOR and a detailed discussion with the CDMP team identified issues of concern. These include:

1. The structure of the CDMP is such that the process is owned by NGOs. Therefore doubts are raised about its sustainability Ownership of the CRA process should ideally rest with the Disaster Management Committee (mandated local bodies) at different levels.
2. The CRA guidebook was not user friendly and the process required a long time to complete CRA in each union. The report writing process was seen to be a very lengthy process.
3. Some selected partners did not have adequate capacity to conduct CRA using the guidebook
4. Inadequate attention to climate change issues. CRA facilitators of the partner entities were not familiar with climate change issues and failed to address them in the CRA session and in the RRAP formulation
5. Socially disadvantaged groups (women, children, PwD, marginalized occupational group, ethnic community and minorities) were not sufficiently engaged and their concerns were not sufficiently included in the RRAPs; and
6. Inadequate communication and coordination with DMCs at different level (Union / Upazila / District) was observed in the process of doing the CRAs and RRAPs.
7. The scope to revise and revisit RRAPs after major events (such as cyclone Sidr or Aila) was missing.
8. Trans-union vision/ perspective was missing.
9. The ultimate question is whether the CRA is generating the right basis for practical planning and action to address the real risks faced by communities.

The overall objective of the assignment was articulated as:

1. To undertake a critical review of work undertaken to date in the formulation of the revised CRA & RRAP guidebook and to provide clear and actionable recommendations to support CDMP in finalization.
2. To suggest how to address social inclusion and CCA issues

II. APPROACH

The CDMP organised several individual and group meetings and the schedule is attached (see Appendix I). These included:

- Meetings with CDMP II team
- Meetings with local communities (Field visits to several areas in Jessore)
- Meeting with project partners
- NGOs engaged in Urban Disaster Risk Reduction Initiatives

Several similar handbooks were examined. Prominent amongst these were:

1. Mainstreaming disaster risk reduction: a tool for development organizations: Tearfund, January, 2005
2. Climate Vulnerability and Capacity Analysis - A Handbook – CARE, May 2009
3. Participatory Capacity and Vulnerability Analysis Training Pack (An Oxfam Disaster Risk Reduction and Climate Change Adaptation Resource), Edward Turvill & Honorio De Dios, Oxfam, GB, 2009.
4. Community based disaster risk reduction planning tool - Local level risk assessment of natural hazards and development of action plans for reducing the impact of disasters (Swiss Foundation for Development and International Cooperation), March, 2010
5. Practicing Gender and Social Inclusion in Disaster Risk Reduction: Facilitators guidebook - Directorate of Relief and Rehabilitation Ministry of Food and Disaster Management, Bangladesh, June 2009.

The background material shared by the project team and reviewed by the consultant consisted of the following:

1. Final Draft – A Facilitator’s Guidebook for Community Risk Assessment and Risk Reduction Action Planning
2. Comprehensive Disaster Management Programme: Government of the People’s Republic of Bangladesh, Ministry of Food and Disaster Management
3. Bangladesh Comprehensive Disaster Management Programme – Mid Term Review 2007
4. Report of Lessons Learned Workshop on CRA
5. Minutes of the Workshop on CRA Lessons Learned Held on : 09 April 2009.
6. Alfadanga Upazila :Final Report on Community Risk Assessment and Risk Reduction Action Plan, Alfadanga Upazila, April 2008, Dhaka (Annexure – Community Risk Assessment and Risk Reduction Action Plan on Upazila: Alfadanga District: Faridpur including Maps
7. Belpukuria: Description of CRA Activities in Belpukuria Union, Upazila: Puthia District: Rajshahi (Appendix – Community Risk Assessment (CRA) and Risk Reduction Action Plan (RRAP)

8. Comprehensive Disaster Management Programme (CDMP) Final Report on Community Risk Assessment and Risk Reduction Action Plan, Shibalaya
9. Community Risk Assessment and Risk Reduction Action Plan, Chakaria Upazilla, Cox's Bazar.
10. Child Inclusive Community Risk Assessment (CRA)
11. Training Report Organized Jointly by CDMP and Plan

At the end of a week long visit, broad suggestions were discussed with key officials of the CDMP II in the form of a preliminary note on 9th December, 2010. These were discussed and then firmed up in the form of this draft report.

III. REVIEW OF HANDBOOK

The idea of a CRA Guide which serves as a tool to enhance participatory process was excellent as it helps institutionalize local participation. The guide does provide a broad framework to ensure inclusion of diverse groups of people in the CRA process. Pg.2 rightly points out when and for whom the guide is to be used. Similarly the flow chart on pg.1 is very useful. The CRA leading to community level risk reduction plans- has rightly been identified as the “brightest jewel in the CDMP crown” during the mid-term review of CDMP I.

This section identifies issues that emerged and looks at positives and areas of improvement which pertain to the structure of the Handbook, its content, and the process- ie the way it is used.

1. A more detailed introduction

- A detailed introductory write up or a preface which explains- the context of CRA, the relationship between disasters, disaster risk reduction, development and climate change is required. For example need to recognise the social context, resources and local power structures in a broader developmental perspective should be articulated. A large repository of manuals on participatory development approaches - provide a wide range of options.

2. Communication Strategy at local levels

It has been pointed out that communication at the union level was not adequate; information was often provided to the DMCs but was not sufficient to involving them in the whole process.

- A clearly laid out communication strategy is needed so that the CRA process which is an intensive one- creates the requisite interest at the union level. For this- Posters, slogans, songs can generate greater awareness in the process and also help underline its significance. This would also generate requisite interest in the entire village and contribute to enhancing ownership.
- At present- there are some challenges related to ensuring social inclusion in the CRA process. The tendency to get more articulate members needs to be checked.
- In order to ensure adequate training of facilitators- a video film expressing how the process may be conducted- with diverse situations and contexts may be considered. This could serve as an added tool for training and periodic iteration for the facilitators. The scope to compile best practices drawn from actual experiences of facilitators needs to be explored proactively. These ideas should form part of the comprehensive communication strategy for the Communication specialist to act on.
- Building in the idea of exposure visits and the idea of sharing across unions would be useful within CDMP II.

- Implementing the above suggestions requires expanding the role of communication specialist. Currently this specialist is mainly responsible for producing documents for CDMP for wider dissemination.

3. **Creation of a Facilitator’s Handbook**

The quality of facilitation is an important factor that determines the quality of CRA process and the RRAPs. The training for CRA of facilitators is quite comprehensive and rigorous. However with attrition or when faced with bottlenecks and field level challenges, the responses of the facilitators or guidance from seniors varies considerably. A handbook could provide further guidance and rationale- detailing why certain actions are perhaps more appropriate than others. It could include several aspects such as:

- **Qualities of a facilitator:**

If facilitators are selected merely because they are recommended by an influential person in order to secure a job for a relative or a friend, the CRA process will suffer. That facilitation is a skill and the fact that the process requires certain personality traits in the facilitator, needs to be recognized. Similarly, an understanding of what should he/she bring to the session (what experiences, insights, perspectives) must also be articulated to ensure that the NGO makes some effort to select facilitators judiciously. For example- the facilitator must possess a genuine interest in people, an understanding of social structures and social stratification, power dynamics, an ability to explore and capture past experiences of the community with regard to similar situations, etc.

- **Tips on what to expect:**

The handbook could cover a variety of suggestions or tips. For example in the process of selection of members for the CRA - why and how social inclusion can be ensured – how to enable the group to go beyond individual interest to represent community interests (it has been reported that often group members tend to represent individual/ personal interest and lose their commitment as soon as they feel that there is no personal gain. This requires facilitation, motivation and communication about the broader social goals of community living.

- **Explaining why CRA?**

Why should communities engage in CRA which could take upto one week or even more- is a question that confronts many NGOs. This needs some clarification and articulation by CDMP II staff. Although it is the most fundamental question that facilitator’s are having to respond to - there is no parity in the responses they give. A section may be added on this in the Facilitator’s handbook that is proposed.

- **A detailed write-up on each of the exercises would be very valuable**

This will ensure that the exercises are understood well and the feeling that it is too long-drawn, time-consuming, etc would be addressed if the facilitators understand the significance and long- term value of this process (contributing to village devt plans, deepening democracy, value of informed participation in civic issues, etc).

- **Tips on what to do in specific situations**

Facilitators raised several questions about dealing with specific challenges in the CRA process. For example how to disseminate information, create a community

level interest, how to deal with a domineering member in the group and/or how to identify specific projects. These need to be included in the proposed handbook.

- **Periodic involvement of an experienced person**

As mentioned earlier, in the process of doing the CRA – facilitator’s skills are very important. However based on the experience so far since facilitators’ skills vary – it would be useful to include (in the flow chart on pg.1) – periodic involvement of an experienced person who could visit the village and validate the information gathered and assess if there is a skew in the sources from where data is gathered. This process would serve as a learning and provide ongoing training for the facilitators – especially in instances where facilitators are new or lack the requisite experience.

4. Substantive demonstration Projects for visibility and confidence building

If local community is to develop confidence in the CRA process, they must realize that the process holds great promise for reducing risks in the future. It also contributes to the process of participatory planning - which is sorely required in Bangladesh as local level physical planning remains weak or ad hoc. Identifying positive interventions following robust CRA process would serve as good demonstration for other villages where CRA is being initiated.

- The write up on pg.2 needs some modification- where the idea of the guidebook to help communities identify ‘all hazards’ risk and appropriate risk reduction option actually needs to be stitched together with the idea of bringing advanced technological and scientific information available to the world today (for example predictions / projections about what would happen to Bangladesh – in view of climate change). This is not to create alarm – but to enhance preparedness and also to underline the significance and urgency of appropriate adaptive measures required at the community levels.
- On pg 2, the first paragraph belies an assumption that participating in a process would give them a sense of ownership. However this has not happened to the extent required. Therefore other methods need to be added (also see point16).

5. Combining Indigenous knowledge with Technical Expertise

Coping with disasters like floods, cyclones, and storm surges is not new to the people of Bangladesh. Rainwater harvesting, coastal reforestation, floating agriculture- are all examples of DRR measures and CCA measures. Judiciously combining indigenous knowledge and practices with appropriate scientific knowledge and technology should be the aim in CRA II and the same needs to be articulated and integrated in Facilitators’ training.

- In this context, it is important to specify how and where to obtain technical information such as – local hazards, their frequency, risks. Pg 12 on preparation of Hazard Venn states that Facilitator should research these aspects. The process of doing this research needs to be specified. In the absence of such guidance- facilitators simply ask the participants and go by what they say- rather than actually research –triangulating with several methods until comprehensive information is obtained.

Land use mapping – micro-zonation along with satellite maps must be added to the CRA process wherever available. For example if bridges and culverts are important infrastructures for maintaining water flows, areas that face drainage congestion need to be properly mapped and problems identified.

In flow chart on pg.1 – there is no indication of what scientific knowledge or external resources or skill sets the facilitator brings to the community. The nature of technical expertise available must be identified within the broader framework of CDMP. Similarly- most facilitators said that they were ill-equipped to cost the RRAP as it was a complex process. This too requires technical services.

- **More training for some exercises**

Causal Analysis on pg.29-30 (Activity 5):- This is a fascinating exercise and a valuable one. However- it requires systematic training and understanding on part of the facilitators.

CRA Step 4, Activity 7. Here- it would be very useful for the CDMP team and someone senior in the NGO to sit together with the UDMC and arrive at an understanding about which agency (govt dept or NGO) is best suited to implement each of the specific Risk Reduction Options identified or specific projects.

Similarly, in the process of draft strategy development (Pg36, example 11) the costing of many of the options proposed is often beyond the capacity of the group or facilitator.

6. Awareness of gender and social inclusion issues

This can be brought in- in a number of ways.

- A write up that clarifies and explicates the idea of vulnerable groups- which is not restricted to landless, women and disabled is required. It includes the elderly, ethnic and religious minorities, etc.
- Similarly for adequate inclusion of gender concerns, the Facilitators handbook would need to include a write up and a basic orientation to foster greater gender sensitivity. For example- the idea of looking out for sex disaggregated data in the CRA process and recognizing how women and girls are more vulnerable. A good example is on pg 25: cyclone. However - on Page 26 : example 7: risk statement : flood: instead of 3000 lives, participants can be helped to specify - how many men and how many women could lose their lives.
- The facilitators' handbook should suggest and explain whether and why people with disability, women, elderly and children are most likely to be affected.
- Practicing Gender and Social Inclusion in Disaster Risk Reduction: Facilitators guidebook, 2009 offers a number of useful exercises to address issues of gender and social exclusion. Similarly space needs to be created to address issues of diverse categories of vulnerable groups within the training. This could also be taken up in a section in the facilitators' handbook.

7. Skew in selection of primary stakeholders

The partners reported a skew in the selection of primary stakeholders. Facilitators generally focus on those who are knowledgeable, articulate, free and available

and can provide data on ‘our terms’. They are necessarily the better off and more powerful in the village who tend to represent their personal interests in the RRAP rather than those of the real needy and vulnerable.

Facilitator’s handbook should address this issue and spell out- how and why this skew is to be avoided.

8. Absence of data

Guidelines about what to do when no data is available with the union- (on pop., male-female ratio, land under cultivation, etc) are required. More time would be needed for the CRA if primary data collection needs to be undertaken- either in form of actual surveys or as rapid assessments.

9. Inadvertent and excessive focus on structural interventions

- This has been observed in the way the guidelines are approached. Most RRAPs include measures such as- construction of new cyclone shelters, health centres, veterinary centres, etc. Creating an illustrative menu of possible interventions- traditional and creative ones would be very useful. This would help communicate the idea of RRAPs which are far more comprehensive than single structural measure.
- Indigenous coping mechanisms must also be captured in the CRA. This would require suitable modification of the CRA Handbook.

10. Focus on local capacities for optimizing CRA process

- An assessment of capacities and history of development issues/interventions is currently missing. Avoiding the tacit assumption that this is the first intervention/process of this kind is important. The CRA process must focus on local capacities in the CRA process and be able to leverage these capacities appropriately.
- The range of NGOs, CBOs and other agencies working with sectoral focus in the Union must also be captured so that appropriate linkages can be made with ongoing schemes and programmes.

11. Copy Editing

Copy-editing of document is required. To indicate a few examples- Pg (iii) Spellings – “FOREWORD” & not Forword, Transect and not ‘Transact’ walk on pg. 1, 8 and other places.

12. Pictures

Some of the pictures need to be made culturally more appropriate and sensitive. (are facilitators always men?). Also graphic depiction of the CRA process and group discussion may be altered to include people sitting on the floor- which is more likely in actual practice.

13. Guide as an end in itself

The way the guide is used and administered needs considerable attention. For example there is a tendency on part of facilitators to use the guide as an end in

itself- rather than as a tool with in- built flexibility and room for creativity and contextualization. This idea can be put across appropriately in the facilitators handbook as also in the training.

14. Building Consensus

While inclusion of women is ensured, their ideas and suggestions are often put aside in the final sessions where they concede that men's suggestions and views are more relevant. Currently the Guidebook assumes that the process of community risk analysis and evaluation automatically results in consensus. The facilitators' experience is contrary to this and there are no guidelines about the way forward.

- The Facilitator's handbook should suggest ways of facilitating/ managing consensus building.
- In the Flow chart – a box could be added on the process of consensus building and in the Facilitator's handbook detailed analysis/guidelines could be provided on how to deal with situations where there is no consensus.

15. Not necessarily Empowerment and Participation oriented

The CRA process and the development of RRAP must be empowerment oriented and foster meaningful participation. It has the potential to transfer gains made into larger development processes. Through this a process of deepening democracy can unfold. However in its present form the way it is practiced it is not necessarily so. The training of facilitators and the proposed handbook needs to highlight this aspect which would also provide more meaning to the activities in the CRA process.

16. Ownership of CRA process

Some implementing partner organizations conducting CRA sessions at the union level did not keep the upazila and/or district DMCs properly informed.

- UDMCs view it as NGO work and not govt's work. A related question of who are they accountable to - UDMCs or to the CDMP staff- also comes up. A letter from govt official would help.
- There is a gap between CRA and implementation of RRAP. CRA creates expectations which may result in no action! The question of accountability is also important.
- A commitment from CDMP is required which ensures that the extensive time spent by the UDMC and others is going to fructify into definite projects. If not it must at least be seen as contributing to the process of development planning at the village level. The fact that the RRAP feeds into long term development needs to be emphasized –so that there is greater ownership by the UDMCs.

17. Absence of Functional UDMC

UDMCs exist only on paper in some places. Only the elected representatives know that they are on it. Others are not even nominated. At times the UDMC needs to be constituted and convened by the Facilitator. This requires more time and much more facilitation may be required. (Communication strategy to note this and specialist could develop leaflets on UDMC and the role of chairperson).

- In fact in order to ensure sustainability and ownership, in CDMP Phase II, the leadership of the entire CRA and RRAP processes need to be shifted to the DMCs. Rather than being the implementers, the partners supporting this process must shift to making the DMCs capable to assume related leadership responsibilities. Ways must be found for engaging local people in the process under the supervision of the DMC (e.g. potentially local level young educated unemployed men and women working as CRA facilitator on part time voluntary basis). Necessary training would be needed both by the DMCs and volunteers selected to use the PRA tools and CRA guidebook. Therefore in the long run the guidebook needs to be articulated as simply as possible, keeping the main objective uncompromised.

18. CRA process slows down during monsoon months

This needs to be factored in –in the program cycle to avoid facilitators being pressurized and then in order to complete tasks and meet deadlines- they use measures that may not do justice to the substantive CRA process. Short cuts adopted affect the CRA quality. Therefore factoring in seasonality and poor mobility during monsoon months is recommended.

19. Sustainability

- Ways of capturing development activities/projects and processes in the last 2 or 3 years in a union must be included in the CRA process to understand their incremental nature and also to maintain continuity.
- For each union identifying an exemplary set of priorities which can be funded by diverse agencies would be useful. This ensures that the process initiated has long term value for the development of village/unions. It would also help build convergence of schemes and projects.
- The CRA process must also encourage unions to look at possible sources of funding for various projects/actions identified.
- Developing comprehensive village development plans (Master Plans for Unions) which includes CCA concerns is an important aspect of working on trans union plans and projects. This requires capabilities.
- SIA-EIAs should be included before RRAP implementation. This suggestion was made by some of the partner NGOs and requires detailed discussion as it has several ramifications. It may be seen as a desirable practice but is also time consuming and will imply costs.

20. Data Sharing at National and local levels

The CRA process and reports generate extremely valuable data. It would be useful to ensure that the data base generated has some permanency (at local levels and at national level). It is suggested that this data and information be uploaded on to an appropriate platform and it should be made available to other users and development agencies.

21. Scope for some flexibility

RRAPs may need some alterations- in view of certain events. The scope for changes must be created especially when a region is affected by floods or other events or developments that impact the RRAP

22. Refresher trainings for Facilitators & CDMP partners

Periodic ongoing training for facilitators is recommended as there is some attrition.

Joint training for core staff and facilitators from time to time and encouraging sharing across NGOs is also recommended.

CDMP staff also needs some refresher training periodically- so that everyone (technical and social staff) understand CRA (and community level issues emerging thereof) in the same way.

23. An ongoing M&E process needs to be built in

Given the experience of CDMP I, several facilitators felt that there needs to be greater accountability within the programme at the Dhaka level. Also since the experience of facilitators – at the local level right from the start is so variable it would be useful to institutionalize some evaluation process or some feedback on the process at the minimum.

24. Does CRA and RRAP as conceived lead substantively to risk reduction?

This is a question that needs to be asked across all stakeholders. The CDMP should result in building resilience and reducing risks in the country.

While there may be clarity in vision and strategy, a well-devised implementation mechanism, and a systematic bottom-up monitoring and evaluation system may be useful.

25. CRA for Urban Areas

It is recommended that CDMP must have a separate CRA handbook for urban areas as issues of vulnerability and institutional mechanisms are distinct. Physical planning assumes much greater significance and with multiple agencies having diverse jurisdictions- working on CRA in urban areas becomes much more challenging. Some work has begun by NGOs –all of which must be leveraged in the context of urban CRA.

In order to leverage the gains made in CDMP I and to address the concerns raised at various levels this section has offered several suggestions. Significant amongst these are creating a Facilitators handbook that explains, clarifies and illustrates. In the CRA process- there is a need to share some of the best practices in structural and non structural measures for disaster risk reduction with facilitators and also with the Unions. As disaster risk reduction has come to develop significant overlaps with poverty reduction and climate change, the outcomes of CRA process must also reflect effective intersections of these three areas. The next section focuses on this theme.

IV. INTEGRATING CCA ISSUES IN DRR AND DEVELOPMENT

Disasters impede development of a community, a district or a nation. The level of disaster risk prevalent in a community is also linked to the developmental choices seen in the community (UNDP, 2004). In Bangladesh, risks which affect the lives of poor in rural areas largely arise from hazard events and vulnerability of assets and livelihoods to hazards. These risks may be reduced only when the impact of hazard events is prevented / mitigated or when the people have the necessary ability/capacity to recover from such negative impacts. Disaster risk reduction (DRR) refers to measures that reduce direct, indirect and intangible disaster losses. This generally includes mitigation and preparedness. The need to mainstream risk reduction¹ into relief and development planning and programming as well as conscious climate change adaptation (CCA) activities has been well recognized. The idea needs to be clearly articulated in CDMP II and the CRA guidebook. For example the Flow chart may show linkages with development planning and options. This would enable the development of closer links between disaster management and climate change adaptation.

Addressing root causes of disasters mostly through developmental interventions is of considerable significance and acknowledged by many scholars especially those with direct involvement in disaster situations. The emphasis on types of development interventions for disaster risk reduction varies and could range from community based development projects for vulnerability reduction to developing institutional capacities and operational abilities (UNISDR, 2002). Recommended actions for DRR would include:

- Creating institutional capacity for DRR (policy & legislative development) enabling building on local capacities, assets and resources
- Address root causes of disaster risk reduction through development actions
- Integrate aspects of DRR into relief and rehabilitation activities.
- Strengthen community and household based adaptation programmes and establish them in each of the disaster prone parts of the country.

The primary strategy of vulnerability reduction is to increase the capacity of local communities and organizations (including the state) to prevent, prepare for and respond to the impact of disasters-through changes in policies and practices. This is seen in the way CDMP is structured. However- the actual implementation requires much greater awareness on part of the project implementers about the need to consciously view these linkages and articulate them locally as well as in project documents. Similarly CCA issues also need conscious attention.

¹ Mainstreaming derives from a metaphor of a small, isolated flow of water being drawn into mainstream of a river where it will expand to flow smoothly without loss or diversion. Here it describes a process what incorporates DRR into relief and development policy and practice. It means radically expanding and enhancing DRR so that it becomes normal practice, fully institutionalized within an agency's development agenda.

Paying attention to development issues of a given region is extremely important in disaster risk reduction and disaster response. The complex causes of a disaster are rooted in conditions of vulnerability of people or the spaces they live in. The larger development context and public policies are as important as the external emergency assistance in form of physical resources (Anderson, 1985, Cuny, 1993, Kent 1987, Lavell, 1999). While programmes of disaster relief, risk reduction and development are quite distinct, in actual implementation- the division can be hazy.

DRR measures in the context of Bangladesh that could help a less developed community or region to recover faster from a disaster could be:

- Enhancing the availability of assets and capacities
- Social safety nets
- Land use planning and identifying safe and vulnerable areas
- Introduction of Building codes
- Early warning systems
- Rehabilitation of tanks and traditional water bodies-such as village ponds constitute an asset that serves several purposes. (Ground water recharge, barrier to floods, food security, sustained access to water, etc)
- Tree-planting, afforestation
- Micro and minor irrigation works
- Land levelling; flood diversion drains
- Infrastructure projects in flood prone areas
- Other works benefiting rural connectivity such as development and maintenance of roads connecting villages and village habitats.

Schematic convergence must be attempted especially at the local levels after detailed physical and social vulnerability mapping. This convergence is a necessity to ensure a relevant set of portfolios of projects on the shelf. For example convergence with the schemes for housing, tree planting, mangrove re-generation, horticulture development, fisheries development and/ or micro-irrigation can be forged at specific settlements. The Horticulture Department could assume responsibility for supply of saplings of fruits and vegetables for being planted in the lands assigned to landless. Implementation will require micro-zonation and area development plans developed with local community based planning.

Some inspired officers in the government departments (or amongst NGOs) may come together informally to make convergence happen. The CDMP or Government should develop formal guidelines to facilitate such convergence of development/ DRR projects or schemes.

DRR and CCA

Sea level rise in the coastal areas of Bangladesh; high intensity of rainfall; increased natural disasters (cyclone and storm surges); frequent and prolonged floods; scarcity of freshwater due to less rain and higher evapotranspiration in the dry season; drainage

congestion due to higher water levels in the confluence with the rise of sea level; widespread drought in the northern region; and wider salinity intrusion in the coastal zone.

In addition in Bangladesh, biodiversity is being threatened due to heavy pressure on the ecosystem. Strategic natural resources management as an adaptation response to climate change would include effective and wise use of wetlands including rivers, tributaries, distributaries and the flood plain systems. Climate resilient sustainable land (eco-system) management would also include proper land-zoning, its management, expansion and protection of forested areas and wise use of mineral resources. Many of the adaptation mechanisms will leverage mitigation benefits.

Similarly afforestation or climate resilient infrastructure could help sequestering carbon or help reduce emission of GHGs (MoEF) and use of crop varieties that are resilient to flooding, drought and salinity could help secure needs of resource poor farmers.

Appendix III provides a list of community based adaptation programmes and adaptive programmes that are climate resilient- as identified by MoEF, 2007. Similarly Appendix II lists projects proposed under NAPA, 2005, MoEF. These need to be carefully examined by CDMP II for convergence.

A dynamic basket of options in varying combinations for specific set of settlements which can be built upon systematically should be developed and implemented systematically. These can then be show-cased to inspire greater confidence amongst local people, elected representatives and NGOs alike.

Comprehensive Design and Planning Parameters

The Bangladesh Climate Change Strategy and Action Plan (BCCSAP) suggested two changes in the process of mainstreaming climate change. One is to introduce a set of design and planning parameters for projects, for selected target years which take into account likely climate change impacts (MoEF, 2009). This implies that much more comprehensive assessment and planning is required to create a sustainable, long- term and visible impact on DRR and CCA processes. Therefore implementing single standalone interventions without analyzing its impact on the overall risk reduction within the village or taking into account linkages with other interventions should be avoided.

The need is to work towards developing appropriate risk reduction strategies which are integrated with CCA strategies as a matter of course.

Modify the Process of Project Formulation: Use Technical Expertise

The BCCSAP also suggested in the process of project formulation all elements for taking decisions for climate resilience or climate sensitivity are included and correctly reflected. This requires revision of project formulation and making project designers aware about climate change issues so that concerns can be appropriately included in the planning process.

The NAPA (MoEF, 2009, p.42) identified lack of adequate tools, knowledge and methodologies to provide guidance and advice to decision makers especially in different sectors at the technical level. Bringing in sectoral consultant to provide technical assistance to the implementing partners so that they can professionally develop and implement proposals, seek connection with other programmes, and build greater convergence in their approach is an important addition that needs to be made. This process of generating good knowledge, data, methodologies and tools as well as sound implementation and disseminating the same widely would be very useful. This is where CDMP II can add considerable value.

V. CONCLUSION

The success of CDMP II in a large measure will depend on how it impacts **vulnerability of people and nature of outcomes for people**. Structural and non-structural measures and institutional mechanisms must translate into substantive gains for people in terms of not only sustaining but improving their quality of life- in a country like Bangladesh where poverty, unemployment and inequality are stark and the country depends in a large measure on donor resources for its development projects.

The nature of **linkages** the CDMP makes between **disasters and development** will determine its success. For example strengthening livelihoods and asset base is key to vulnerability reduction in rural Bangladesh (It seems that far too many NGOs are involved in relief work).

CDMP can be viewed as a significant resource for the country that has the potential to foster participatory planning at the grassroots. It is also an opportunity **to deepen democracy** in a context where institutions of local democratic governance are weak or exist only on paper.

Thus while the CDMP II holds much potential- the ability to translate its intent and to mitigate disaster risks depends in part upon the ability of all stakeholders concerned to work systematically towards building a just equitable social, economic and political structures and processes and upholding the rights and entitlements of the poorer or most vulnerable sections of the community.

DRR should be viewed as supporting the trajectory of sustainable development and development, should support development and CCA. Actions towards DRR, climate change adaptation and development should be mutually reinforcing. Mainstreaming climate change in local, national, sectoral and spatial and development planning and ensuring that impacts on vulnerable groups are prioritized in plans is becoming very important in the context of Bangladesh.

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Appendix I
Schedule of Consultant

Date	Activity	Venue	Remarks
<i>Saturday, 4 December 2010</i>			
11:50	Arrive Dhaka (from Mumbai) <i>Flight: 9W276</i>	Hazrat Shahjalal International Airport, Dhaka	Hotel to collect
16:00	Mission briefing with UNDP's Climate Change, Environment & Disaster (CCED) team	Aristocrat Inn Hotel	Steven Goldfinch & Sifayet Ullah
<i>Sunday, 5 December 2010</i>			
09.00	Reviewing CDMP existing CRA practice and progress so far achieved (detailed presentation followed by Q&A session with CDMP technical staff)	CDMP, Disaster Management & Relief Bhaban (Level 6) 92-93 Mohakhali Dhaka	Mr. Mohiuddin to coordinate with relevant CDMP technical staff
14:00	Review Risk Assessment tools / documents being used by other organizations	CDMP Office	
<i>Monday, 6 December 2010</i>			
10.00	Meeting with Dr. Mahbuba Nasrin, Sociology Department and member of the Centre for Disaster and Vulnerability Studies, for discussions on addressing gender issues in CRA.	University of Dhaka	CDMP to collect from hotel at 09:00 Mr. Mohiuddin to accompany

11:30	Meeting with Country Director, Center for Disability & Development to have discussions on inclusion of disability issues in CRA	Center for Disability & Development	Mr. Mohiuddin to accompany
15:30	Meeting with DRR Manager, Concern World Wide on CRA in urban setting	Concern World Wide	Mr. Mohiuddin to accompany
<i>Tuesday, 7 December 2010</i>			
10:00-12:30	Consultation meeting with CDMP Phase I CRA partners	CDMP Conference Room	Mr. Mohiuddin to coordinate
14:00	Meeting with Sookhee Kwak, UNDP Gender Specialist	UN Offices, 18th Floor IDB Bhaban	Confirmed
17:40	Depart Dhaka for Jessore <i>Flight: 4H545</i>	Domestic Terminal, Hazrat Shahjalal International Airport	By flight Mr. Mohiuddin to accompany on visit
18:20	Arrive Jessore and drive to Khulna		
20:00	Arrive Jessore, overnight at Hotel Castle Salam	Hotel Castle Salam Khulna City	
<i>Wednesday, 8 December 2010</i>			
07:30-16:00	Field visit: hold discussions with local government officials (UDMC, PIOs UNOs) and participating communities, visit interventions etc	Satkihra District	Mr. Mohiuddin to accompany
18:35	Depart Jessore for Dhaka	Jessore Airport	By flight

	<i>Flight: 4H546</i>		
<i>Thursday, 9 December 2010</i>			
09:30	Mission debrief with Robert Juhkum, UNDP Deputy Country Director	Office of D-CD (P), UNDP UN Offices, 18th Floor IDB Bhaban	With Steven Goldfinch, Sifayet Ullah and Otin Dewan CDMP provide transport
11:00	Depart for airport		CDMP provide transport
12:50	Depart Dhaka (for Mumbai) <i>Flight: 9W275</i>	Hazrat Shahjalal International Airport	

KEY CONTACTS

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01720167948

Appendix II

List of the Proposed Projects under NAPA 2005, MoEF

1. Reduction of climate change hazards through coastal afforestation with community focus
2. Providing drinking water to coastal communities to combat enhanced salinity due to sea level rise
3. Capacity building for integrating climate change in planning, designing of infrastructure, conflict management and land-water zoning for water management institutions
4. Climate change and adaptation information dissemination to vulnerable community to raise awareness
5. Construction of flood shelter, and information and assistance centre to cope with enhanced recurrent floods in major floodplains
6. Mainstreaming adaptation to climate change into policies and programmes in different sectors(focusing on disaster management, water, agriculture, health and industry)
7. Inclusion of climate change issues in curriculum at secondary and tertiary educational institution
8. Enhancing resilience of urban infrastructure and industries to impacts of climate change including floods and cyclone
9. Development of eco-specific adaptive knowledge (including indigenous knowledge) on adaptation to climate variability to enhance adaptive capacity for future climate change
10. Promotion of research on drought, flood and saline tolerant varieties of crops to facilitate adaptation in future
11. Promoting adaptation to coastal crop agriculture to combat salinization through maize production under Wet Bed No-tillage Method and Sorjan systems of cropping in tidally flooded agro-ecosystem
12. Adaptation to agriculture systems in areas prone to enhanced flash flooding- North East and central region through No- tillage potato cultivation under water hyacinth mulch in wet sown condition, and Vegetable Cultivation on Floating Bed
13. Adaptation to fisheries in areas prone to enhanced flooding in North East and Central Region through adaptive and diversified fish culture practice

14. Promoting adaptation to coastal fisheries through culture of salt tolerant fish special in coastal areas of Bangladesh
15. Exploring options for insurance and other emergency preparedness measures to cope with enhanced climatic disaster (e.g. flood, cyclones and drought)

Source: Bangladesh Capacity Development Action Plan for Sustainable Environmental Governance, Ministry Of Environment And Forests, Government Of The People's Republic Of Bangladesh, December 2007, Annex 2.1, pg.238-239).

Appendix III
Community Based Adaptation Programmes, MoEF, 2007

Community Based Adaptation Programmes				
Output	Activity	Nature of CD	Time frame	Implementing Agency
1. Enhanced education, awareness and training system promoted	1.1 Inclusion of climate change related issues in primary/secondary curricula	Sys	S/M	Board of Education Relevant Ministries
	1.2 Education, training and awareness rising programmes for development organizations working at community level and their CBOs	Ins	S	NGO Bureau / DOE
	1.3 Awareness programmes regarding the outbreak and treatment of diseases triggered by climate change	Ind	M	Ministry of Health, DPHE
2. Improved health, hygiene, housing and sanitation facilitated	2.1 Establishment of mobile clinics under Government supervision	Ins	M	Ministry of Health, DPHE
	2.2 Increased number of cyclone shelters, with storage facilities for food, essentials and livestock	Ins	M/L	LGED, DPHE, DMB
	2.3 Ensuring water availability through setting up deep tube wells and rain water harvesting	Ins	M	LGED/DPHE
	2.4 Sustainable housing programme for the community people keeping in mind devastating cyclones/storms	Ins	M/L	NHA

3. Livelihoods and Alternative Income Generating Activities promoted	3.1 Collection and preservation of indigenous/local varieties of seeds that are salt tolerant or less water intensive and drought resistant	Ind/Ins	M	DAE
	3.2 Diversification of crops for better adaptation, including cultivation of medicinal plants and temperature tolerant varieties such as wheat/vegetables	Ind/Ins	S/M	DAE/BADC / BRRRI/NGOs
	3.3 Provision of micro-credit to the affected, coupled with technical know-how for developing their traditional occupations	Ind	S	BRDB/NGOs/ PKSF/DoE
	3.4 Carrying out pilot and demonstration projects on adaptation to climate change to show effectiveness of community based adaptation project and livelihood improvement	Ins	M	DoE
	3.5 CD for CBOs for retention of indigenous knowledge	Ins	M	NGO Bureau
	3.6 Expansion of floating garden in water-logged areas for year-round crop production	Ins	M	NGOs

Climate Resilient Adaptation Programme				
Output	Activity	Nature of CD	Time frame	Implementing Agency
1. Climate resilient adaptation programme in place	1.1 Designation of alternative focal points for Rio Conventions in all ministries / agencies	Ind	S	MoEF
	1.2 Specialized training in negotiation skills for key officials	Ins	M	MoEF
	1.3 Mainstreaming climate resilient development planning for all projects/programmes	Ins	L	Planning Commission
	1.4 Networking and information sharing amongst agencies/departments	Ins	S	MoEF/DoE
	1.5 Module for policy-makers on environmental issues	Ins	M	BPATC
	1.6 Promoting the transfer of technologies for adaptation	Ins	M	DoE
	1.7 CD for the Dept. of Health and its professionals to handle vector borne diseases due to climate change	Ins	M	Department of Health
	1.8 Develop project to identify and assess the technology needs for different sectors	Ins	S	DoE
	1.9 Preparation and development of Digital	Ins	M	BMD/BWDB/ SoB

Climate Resilient Adaptation Programme				
Output	Activity	Nature of CD	Time frame	Implementing Agency
	Elevation Mapping (DEM)			
	1.10 Development of Climate Risk Reduction Action Plans	Ins	S	DoE
	1.11 Initiating dialogue with high level policy-makers in the ministries with special thrust on the MoEF, Ministry of Water Resources, Ministry of Finance and Planning etc. to demonstrate importance of climate change adaptation and linkages with development efforts	Ind	S	MoEF, FD, MoWR
	1.12 CD of the concerned officials for systematic observation of climatic variation and regular monitoring	Ins/Sys	M/L	MoE/BMD/SP ARRSO/FFWC
	1.13 Modelling in particular relation to general circulation models and their down scaling to regional and national levels for better impacts assessment. Existing institutes having experience and involved in the modeling exercise can be a starting point	Ins	M	DoE/BMD/SP ARRSO/BUET /CEGIS/BARC /IWM
	1.14 Capacity building for planning departments of the sectoral ministries can be initiated for integrating adaptation to climate change	Ins	M	MoEF/Planning Division/All Ministries

Climate Resilient Adaptation Programme				
Output	Activity	Nature of CD	Time frame	Implementing Agency
	1.15 Establishment of an International Climate Change Centre in Bangladesh	Ins	M	MoEF/Planning Commission/MoFA
2. Sustainable agricultural crops promoted and practiced	2.1 Promotion and replication of saline tolerant variety in the coastal area of Bangladesh	Ins	M	DAE
	2.2 Introduction of crop insurance in the climate risk areas of the country	Sys	S	Ministry of Commerce/DAE
	2.3 Sensitization of public and private insurance companies to introduce crop insurance in the climate risk areas of the country	Sys	S	MoC/Sadaran Bima Corporation/DAE
3. Sustainable infrastructure constructed to cope with CC	3.1 Construction of roads, rails, tele-communication, gas line, airport and other service sectors keeping in mind the adverse impacts of CC	Ind	M	Moc, T&T, RHD, MoEMR

(Source: Bangladesh Capacity Development Action Plan for Sustainable Environmental Governance, Ministry Of Environment And Forests, Government of the People's Republic Of Bangladesh, December, 2007).