Inputs provided by: (please provide the name of your organization)

1. General description of mandates and objective(s) of your organization / associated network with institutional structure

(Please provide information on organizational mandates and objective(s) of the organization / associated network with organizational/institutional structure, as explicitly and/or implicitly relevant to addressing loss and damage associated with climate change impacts, including extreme weather events and slow onset events. Please feel free to expand the boxes as needed throughout the template.

The International Centre for Climate Change and Development (ICCCAD) is a research and training centre based at the Independent University, Bangladesh (IUB) in Dhaka (http://centers.iub.edu.bd/icccad/). It is a global centre to facilitate and disseminate research and provide teaching and training on climate change and development through its research in Bangladesh, which experiences a wide range of impacts from extreme events to slow onset processes. The Centre's mission is to gain and distribute knowledge on Climate Change Adaptation (CCA) by building and spearheading a network of Southern based partner institutes, whose combined effort would add to the knowledge base and increase capacity in the global South.

<u>Mission:</u> To gain and distribute knowledge on climate change and specifically adaptation and thereby facilitating capacity building of key stakeholders and helping people to adapt to climate change with a focus on the global South.

In the pursuit of its overarching mission, ICCCAD effectively functions in a three-way partnership between:

- *The Independent University, Bangladesh (IUB)*, a leading private university in Bangladesh with established faculty and programmes in the areas of environment and development.
- *The International Institute for Environment and Development (IIED), an* internationally renowned institute based in London focused on issues at the intersection of environment and development.
- *The Bangladesh Centre for Advanced Studies (BCAS),* a leading research centre in Bangladesh that has been studying environmental issues in the country for over 25 years.

Goals:

- Training future and current leaders in climate change and development
- Conducting research to generate peer reviewed publications on climate change adaptation, loss and damage and other topics related to climate and development
- Building capacity, specifically of least developed countries
- Building a network of partners, mainly consisting of Southern based institutes

ICCCAD's core objectives are:

- Addressing the critical challenges posed by climate change
- Building an international centre for creating and sharing knowledge
- Learning from practical experience in a climate-vulnerable country

In working towards its core objectives, ICCCAD operates through three primary initiatives:

- Courses and Training:
 - Climate change-related training through short courses and workshops
 - Masters of Science (MSc) in Climate Change and Development in partnership with the School of Environmental Science and Management within IUB.
- Knowledge Management
 - A web portal for research on climate change in Bangladesh
 - A website with frequent updates including blogs and articles
 - Active presence in social media via Facebook, Twitter and Youtube
 - o Network of alumni from past short courses and programmes
- Research
 - Action Research for Community Adaptation in Bangladesh (ARCAB), a long-term research program on community-based adaptation
 - GIBIKA (named for a Bengali word meaning "livelihoods") a five-year research partnership between ICCCAD and UNU, funded by the Munich-Re Foundation
 - Loss and Damage, a project with several components at the national, regional and international levels
 - o Internship and visiting researcher program

2. Relevant operational framework(s)

(Please provide information on the relevant operational framework(s) (e.g. programming principles, resource allocation strategies, coordination mechanism for operations at different levels etc.) within your organization/associated network as relevant to implementing work related to risk management for loss and management associated with climate change impacts)

COURSES AND TRAINING:

Short Courses:

ICCCAD runs regular short courses for NGOs, donors, the media, government and the private sector, among others. In addition to initiating courses for local participants and Bangladeshi stakeholders, ICCCAD also provides tailor-made courses for organizations and departments that are seeking to enhance their capacity in regard to climate change. The courses are designed with the purpose of bringing professionals in a multitude of fields from developing countries around the world under one roof, for an intensive, multi-day course on climate change and related topics. Participants not only learn from ICCCAD's course instructors, but they also share their own knowledge and experiences, and build relationships for future collaboration through South-South exchange. Starting from

November 2009, 13 short courses have been conducted by ICCCAD in Bangladesh.

Master of Science in Climate Change & Development:

The masters programme is housed at IUB and administered in conjunction with the School of Environmental Science and Management. The programme began in April 2013, with an inaugural batch of 6 students. It is a 36-credits, 12-15 month 3-semester taught programme, with the option of a thesis in the final semester. Students are also given the option to do a 12-month internship with ICCCAD, at the end of which they will be expected to carry out a climate change-themed research project.

RESEARCH

Action Research on Community Adaptation in Bangladesh (ARCAB):

The purpose of ARCAB (<u>https://www.arcab.org</u>) is to link practitioners, researchers and other partners to generate and share knowledge on community-based adaptation (CBA) projects across the country to enhance the capacity of NGOs to support climate resilient communities. ARCAB has adopted a long-term research agenda that will span several decades, with a focus on 'learning by doing'. This research is designed to cover a wide range of CBA themes, from economics to the role of children, etc.

Visiting Researchers and Internship Programme:

ICCCAD hosts researchers from across the globe for mutually beneficial exchanges. Researchers come from both the academic and professional sectors from a wide array of countries, associating themselves with ICCCAD on short-term or long-term arrangements, during which time they engage in climate change-related research and fieldwork (in conjunction with ARCAB).

- Visiting researchers who are masters students or PhD candidates are assigned to the appropriate ICCCAD and ARCAB team to work on specific ongoing projects, based on their respective interests and academic requirements (e.g. master's dissertation, PhD thesis).
- Professionals/practitioners with experience in and/or specializing in climate change and development-related areas affiliate themselves with ICCCAD and work together with the core staff on a wide variety of projects, such as ARCAB's community-based adaptation workshops in rural areas, collaborations and partnerships with national and international NGOs based in Dhaka, etc.
- ICCCAD also offers month long internships open to both national and international candidates. Interns function in a more general capacity relative to the visiting researchers, i.e. they are familiarized with ICCCAD's mission, goals, organizational structure, and the wide variety of the Centre's climate change and development-related projects and initiatives

Loss and Damage (www.lossanddamage.net/national-actions)

ICCCAD and its partners are supporting research in Bangladesh and other LDCs to improve understanding of this emerging issue and inform international negotiations. Since 2011, ICCCAD has been overseeing a national project aimed at better understanding loss and damage in Bangladesh as part of the global Loss and Damage in Vulnerable Countries Initiative implemented with partners GermanWatch, United Nations University (UNU) and the Munich Climate Insurance Initiative and funded by the Climate and Development Knowledge Network. In Bangladesh ICCCAD has commissioned research on a variety of issues related to how best to assess the risk of loss and damage and develop and implement approaches to address it in Bangladesh. The Bangladesh-specific component of the Loss and Damage in Vulnerable Countries Initiative is being carried out with three objectives in mind:

- 1. To help the Government of Bangladesh (GoB), stakeholders and Least Developed Countries (LDCs) negotiators in the United Nations Framework Convention for Climate Change (UNFCCC) process to better understand loss and damage and the gaps and needs for assessing and addressing it in a national context.
- 2. To move forward stakeholder-based activities in relation to loss and damage
- 3. To identify possible approaches to loss and damage to inform other LDCs as they develop their own loss and damage strategies

3. Focus areas of risk management for loss and damage associated with climate change impacts

(Please provide information on the areas of work in relation to the items included in decision 3/CP.18 as listed in the introductory note as well as any additional focus areas, that your organization/associated network has been mandated to address. These could include relevant institutional policy statements/operational guidance documents etc. Please provide web links where further details can be found.)

The work we have done and are currently doing in relation to the needs identified in Decision 3/CP18 is as follows:

- (a) We have completed research on the information gaps and capacity needs for assessing loss and damage in Bangladesh and currently applying for funding to develop a methodology to assess loss and damage in Bangladesh together with BRAC University.
- (b) We have completed several research papers on addressing loss and damage and have provided several policy recommendations for enhancing those strategies including on how risk transfer approaches such as microinsurance can be used as a tool to address loss and damage. We are now working with the Government of Bangladesh to develop a working group to translate this research into policy. We are also working with WorldFish on a background paper and workshop to scope the potential for index-based insurance in Bangladesh.

- (c) We have completed a paper on assessing loss and damage in Bangladesh, which includes the data and capacity needs and gaps that need to be addressed to better understanding what areas/populations are most at risk of loss and damage. As stated above we are planning to initiate work to develop a methodology to assess the risk of loss and damage beginning in September 2013.
- (d) We have provided recommendations to the Government of Bangladesh on how to enhance (and in some cases scale up) policies to address loss and damage. We are currently working on a proposal for funding for a scoping study on a national mechanism to address loss and damage in Bangladesh.
- (e) We are working to increase the involvement of the private sector in adaptation activities through networking events.
- (f) ARCAB is working with partner organizations to build a knowledge base around CBA action and knowledge transfer to enhance the capacity of NGOs to support climate resilient communities. ARCAB is also planning to undertake research on approaches to address loss and damage at the community level.
- (g) In the next phase of our work under the loss and damage project we will be developing a methodology on assessing loss and damage and enhancing the accessibility and collection of data will be a key component of that.

4. Geographic coverage

We have been working primarily in Bangladesh but are currently expanding our work to other parts of South Asia and the Asia Pacific region as a whole. We are currently working on a proposal for funding for research programs on loss and damage in Bhutan, Nepal and Pakistan. In addition we launched the Asia Pacific Forum on Loss and Damage earlier this year and the website recently went live at: <u>http://www.apan-gan.net/resources/themes/loss-and-damage</u>. The content is evolving and we are looking for input but ultimately we hope to establish a community of practice and a forum to exchange knowledge and best practices on approaches to assess and address loss and damage in the region.

5. Key stakeholders

- Government of Bangladesh
- Comprehensive Disaster Management Programme (CDMP) [a partnership between the GoB and UNDP]
- Climate and Development Knowledge Network
- GermanWatch
- Munich Climate-Insurance Initiative
- 11 international NGOs working with ICCCAD as Action Partners through ARCAB:
 - Save the Children
 - o CARE
 - Practical Action
 - Concern Worldwide
 - Oxfam
 - o Islamic Relief

- Christian Aid
- Plan Bangladesh
- CARITAS
- WaterAid
- o ActionAid
- International, national, and regional institutions as research partners:
 - o Bangladesh Centre for Advanced Studies
 - o International Institute for Environment and Development
 - Institute of Development Studies
 - Independent University, Bangladesh
 - Stockholm Environment Institute
 - University of Leeds
 - o CGIS
 - Food Hazard Research Centre
 - The University of Melbourne
 - Khulna University, Bangladesh
 - o Rajshahi University, Bangladesh
 - Imperial College, London
 - International Rice Research Institute
 - International Centre for Diarreal Disease Research
 - United Nations University
 - Institute of Water Modelling

6. Implementation modality / delivery mechanisms

GIBIKA

GIBIKA focuses on examining how different social and environmental stressors impact livelihoods. The project aims at understanding these stressors better to understand the tipping points, which alter lives and force people to adopt alternate livelihood strategies or migrate. This is a five-year research project (beginning in 2013), in partnership with Munich Re Foundation (MRF) and United Nations University – Environment and Human Security (UNU-EHS). The project will expand knowledge and community-based action on social resilience and CCA. The project will account for community-level impacts and national-level policy implications of climatic variability (such as changing rain patterns causing increased river and coastal flooding), and longer-term shifts in climate patterns. GIBIKA has three ongoing activities:

- 1. Research on Livelihood Resilience
- 2. Resilience Academy
- 3. Climate Change Mobility Analysis through using Cell phone Data

1. Research on Livelihood Resilience:

In general, the research agenda aims at testing our original hypotheses about social resilience for populations exposed to extreme forms of environmental stress. The research questions are aimed at

improving our knowledge of social resilience in contexts that are most impacted by climate change (and other related environmental stresses) and are therefore becoming less productive and less inhabitable. Our broad research questions are:

1.1) What early warning signals exist that a particular system is being overwhelmed by environmental stress?

1.2) Can we transmit early warning signals to stakeholders in ways that allow them to take meaningful action?

2.1) As stresses accumulate and places become uninhabitable and unproductive by degrees, what are the determinants of social resilience across old and new places?

2.2) What new models for resilience communities are there that consider livelihood diversification across old and new places, migration and remittance sending?

Researchers from ICCCAD and UNU-EHS have selected six field sites for conducting this research: (Exposure to cyclones)

1. Gabtola, Sarankhola Upazila, Bagherhat District

2. Mazer Char, Mothbaria Upazila, Pirozpur District

(Riverbank erosion)

3. Singpur, Nikli Upazila, Kishoreganj District

4. Jatrapur, Khanpara UP, Kurigram Sadar Upazila, Kurigram District

(Drought)

- 5. Babupur, Shapahar Upazila, Naogaon District
- 6. Jamalpur, Shapahar Unizila, Naogaon District

2. Resilience Academy:

In the most vulnerable regions of our planet, the impacts of extreme weather events such as floods and droughts threaten lives and livelihoods. The most affected regions include large deltas, small islands, and exposed coastal regions, as well as arid and semiarid lands, and areas affected by glacier and permafrost melt. People on the frontlines of climate change, in many cases, will face aggravated baseline risks, extremes and slow-onset effects, which include coastal inundation, catastrophic floods, and extended drought conditions. These stresses have the potential to render spaces effectively unproductive and uninhabitable. A central question for practice, policy, and research revolves around the resilience of people whose livelihoods systems and settlements are threatened by these overwhelming extremes. The resilience academy will provide a platform for connecting communities of expertise (early phase practitioners, academics, and policy analysts), examining livelihood resilience in the face of local and regional realities, and co-creating concepts to foster resilience.

Five resilience academies are planned, alternately in Bangladesh and Germany. The first four academies form two pairs. One cohort of participants will attend the first and second academies and a second cohort will attend the third and fourth academies. Each set of Academies will be held once in the South, in Bangladesh near Dhaka, and once in the North, near Munich in Germany. The fifth and final academy will bring the two cohorts together. In each cohort, the participants will begin projects in the first year, and bring them into the second year. Together with the fifth event, this model will

give the participants the opportunity to deepen their individual competence as well as strengthen their network.

3. Climate Change Mobility Analysis through using Cell Phone Data

Using mobile phone data to map population movements in response to natural disasters, this pilot project aims to demonstrate the relevance of this methodology – which has been successfully applied in other countries – in the Bangladeshi context. ICCCAD is partnering with UNU and Flowminder to conduct a pilot research project on population movements in two affected coastal regions following cyclone Mohasen. Through this pilot project we expect to generate academic papers and other reports to disseminate the results. Overall, this pilot project aims to identify clear patterns of disaster-related mobility, and it is our hope that this study will enable a vastly more targeted and cost-effective approach to disaster response and relief efforts in Bangladesh. ICCCAD, UNU-EHS and Flowminder has signed a 'Letter of Intent' to do this research. An MoU has been mutually agreed by the ICCCAD and Grameen Phone and is due to be signed soon.

ARCAB:

Action Research for Community Adaptation in Bangladesh (ARCAB) is a long-term programme of action research that aims to address knowledge gaps through the generation of longitudinal data and evidence of effectiveness of CBA. ARCAB conducts and researches Community Based Adaptation (CBA) at locations from five major Ecosystem Zones and one urban site in Bangladesh, working through "action partners", "research partners", and "knowledge management partners." ARCAB has four pillars of work:

Action:

ARCAB is helping its INGO partners implement CBA activities in climate-vulnerable communities. These interventions will respond to both slow onset climate changes and sudden-onset climate hazards that are likely to increase in frequency and scale under climate change.

Action Research:

An ongoing programme of action research undertaken by "research partners" supports CBA interventions. The research themes are described in detail below. The first three years will include an assessment of vulnerability and adaptive capacity as well as some initial interventions for long-term study on the scale and nature of ways in which communities can adapt to climate change.

Knowledge management and communication:

The learning that emerges from the action research will be disseminated both back to the "action partners" as part of ongoing capacity building on CBA; and to the wider adaptation community of practice through "knowledge management partners." This includes active outreach to government, donor and civil society stakeholders engaged in wider scale adaptation planning. This will ensure the

programme actively contributes to shaping and informing ongoing adaptation planning across scales. This component will include interactions and mutual learning between local communities and government actors at both local as well as national scale.

Capacity building and learning by communities of practice:

ARCAB is helping to build the capacity of both action research partners and also long-term information users including local and national government stakeholders. The "research" pillar will examine the effectiveness of the CBA interventions, as well as the effectiveness of CBA communication strategies. This research will feed back into CBA intervention design and implementation through capacity building activities.

LOSS AND DAMAGE

The loss and damage project started out as a 13-month project funded by the Climate and Development Knowledge Network with the goal of enhancing understanding of loss and damage and how to address it in a least developing countries. The work itself consisted of seven research papers and four stakeholder workshops and stakeholder management activities to enhance awareness and increase the "buy-in" of stakeholders, especially policymakers. That work has now been completed and we are now moving into the next phase of our work which consists of:

- Scoping study to understand what is required to develop institutional arrangements to address loss and damage in Bangladesh and promote coherence across sectors and disciplines along with the establishment of a working group consisting of high-level representatives to examine possible mechanisms.
- Regional level work with ICCCAD providing coordination and working with national partners in Bhutan, Nepal and Pakistan to help those countries develop research programs on loss and damage.
- Further developing the website of the Asia Pacific Forum on Loss and Damage to promote exchange amongst those working on the topic.

Please provide information related to the technical, financial and institutional support mechanism

Please provide information related to reporting, if any

7. Key activities / outputs to date

- Eleven short courses on topics ranging from climate change and urbanization to monitoring and evaluating community-based adaptation
- MSC program on climate change and development
- Research program on vulnerability and resilience with partner UNU, funded by the Munich Re Foundation (GIBLIKA)
- Loss and damage research program to better understand how to assess and address loss and damage at the national level in Bangladesh which has produced seven papers and four stakeholder workshops and is beginning to generate peer review papers
- Research program on community-based adaptation (Action Research on Community Adaptation in Bangladesh) and partnerships with 11 INGOs
- •

8. Any additional information and contact details

For more information please contact Saleemul Huq at <u>saleemul.huq@iied.org</u>.