

Conference Proceedings



Third Annual National Conference on Urban Resilience to Climate Change

Building Climate Resilient, Migrant Friendly Cities and Towns

18-20 November 2018

Institute of Architects Bangladesh (IAB), Agargaon, Dhaka



ICCCAD

International Centre for
Climate Change and
Development



This publication is based upon the outcomes of the three days Third Annual National Conference on Urban Resilience to Climate Change and has been compiled from the notes taken by the respective rapporteurs. The publication is a summary from the organizers point of view and does not necessarily express the views of each individual participant.

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1 ACKNOWLEDGEMENT

The Third Annual National Conference on Urban Resilience to Climate Change has been jointly organized by the International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB) and the Asian Cities Climate Change Resilient Network (ACCCRN). The conference is co-sponsored by ActionAid Bangladesh, BRAC, Concern Worldwide, Christian Aid, ICLEI South Asia, GIZ Bangladesh, FSM Network & Practical Action Bangladesh, Plan International & SEEP, and WaterAid Bangladesh. This national conference is supported by Bangladesh Urban Forum (BUF) and Municipal Association of Bangladesh (MAB).

ICCCAD is grateful to the organizers, co-sponsors and supporters who made the conference a success. ICCCAD is also thankful to all moderators, session chairs, panelists, participants who brought their insights to the conference.

ICCCAD wants to thank all the rapporteurs and volunteers for their participation and hard work in making this conference run smoothly and contributing to this report.

2 ABBREVIATIONS

3R	Reduce, Reuse and Recycle
ABCD	Asset Based Community Development
ACCCRN	Asian Cities Climate Change Resilience Network
ADB	Asian Development Bank
ADP	Annual Development Plan
AR5	Fifth Assessment Report of IPCC
BARI	Bangladesh Agricultural Research Institute
BAU	Bangladesh Agricultural University, Mymensingh
BBS	Bangladesh Bureau of Statistics
BCAS	Bangladesh Centre for Advanced Studies
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BIP	Bangladesh Institute of Planners
BRAC	Bangladesh Rural Advancement Committee
BRDB	Bangladesh Rural Development Board
BPCL	Bangladesh Petrochemical Company Limited
BRUP	Building Resilience of the Urban Poor
BSMMU	Bangabandhu Sheikh Mujib Medical University
BUET	Bangladesh University of Engineering and Technology
BUF	Bangladesh Urban Forum
CA	Christian Aid
CBOs	Community Based Organizations
CCA	Climate Change Adaptation
C3ER	Centre for Climate Change and Environmental Research
CDC	Community Development Committee
CDKN	Climate & Development Knowledge Network
CHT	Chittagong Hill Tracts
CIP	Country Investment Plan
COP	Conference of Parties
CCVAs	Climate Change Vulnerability Assessments
CERM	Centre for Environmental Resource Management
CRS	Climate Resilience Strategy
CUS	Centre for Urban Studies
DEEP	Dhaka Earthquake and Emergency Preparedness
DoE	Department of Environment
DMCC	Disaster Management and Climate Change
DNCC	Dhaka North City Corporation
DPHE	Department of Public Health and Engineering
DSCC	Dhaka South City Corporation
DSS	Department of Social Services
EC	European Commission
ERP	Enterprise Resource Planning
FSCD	Fire Service and Civil Defense
FSL	Food Security, Livelihood
FSM	Faecal Sludge Management
GCF	Green Climate Fund
GDP	Gross Domestic Product
GED	General Economic Division
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICCCAD	International Centre for Climate Change and Development
ICLEI	International Council for Local Environmental Initiatives
IDMVS	Institute of Disaster Management and Vulnerability Studies
IDS	Institute of Development Studies, UK
IGS	Institute for Global Environmental Strategies
IPCC	Intergovernmental Panel on Climate Change

IUB	Independent University, Bangladesh
IUBAT	International University of Business Agriculture and Technology
ITN	International Training Network
IWFM	Institute of Water and Flood Management
JU	Jahangirnagar University
KCC	Khulna City Corporation
KfW	German State-Owned Development Bank
LGED	Local Government Engineering Department
LGD	Local Government Division
LGIs	Local Government Institutes
LGNET	Local Government Network
MAB	Municipal Association of Bangladesh
MEAL	Monitoring, Evaluation, Accountability and Learning
MoDMR	Ministry of Disaster Management and Relief
MoEFCC	The Ministry of Environment, Forest and Climate Change
MoLGRD&C	Ministry of Local Government, Rural Development and Cooperative
MoSW	Ministry of Social Welfare
NDC	Nationally Determined Contribution
NGOs	Non-government Organizations
NMT	Non-Motorized Transport
NSU	North South University
NUPRP	National Urban Poverty Reduction Program
OPM	Oxford Policy Management
PBT	Planetary Boundaries Initiative
PET	Polyethylene Terephthalate
PIP	Participatory Identification of the Poor
PKSF	Palli Karma Shahayak Foundation
PRA	Participatory Research Appraisal
PROKAS	Promoting Knowledge for Accountable Systems
PWSS	Piped Water Supply System
RAJUK	Rajdhani Unnayan Kartipakkhya
RDA	Rural Development Authority
RE	Renewable Energy
RMG	Readymade Garments
SDGs	Sustainable Development Goals
SEEP	Social and Economic Enhancement Programme
SEZs	Special Economic Zones
SLDs	Shared Learning Dialogues
SLR	Sea Level Rise
SOD	Standing Order on Disaster
SREDA	Sustainable and Renewable Energy Development Authority
STP	Strategic Transportation Plan
UCEP	Underprivileged Children's Education Programme
UDD	Urban Development Directorate
UDP	Urban Development Programme
ULAB	University of Liberal Arts Bangladesh
UMIMCC	Urban Management to Internal Migration due to Climate Change
UNFPA	United Nations Population Fund
UNDP	United Nations Development Program
UNFCCC	United Nations Framework for Climate Change Convention
UPPR	Urban Poverty Reduction programme
VERC	Village Education Resource Center
WAVE	Women Against Violence in Election
WCED	World Commission on Environment and Development
WDMC	Ward Disaster Management Committee

3 BACKGROUND

URBAN RESILIENCE CONFERENCE

Bangladesh has been experiencing rapid urban population growth for the last few decades. This growth follows an imbalanced spatial distribution, mostly directed towards Dhaka, the capital city. More than 60% of Bangladesh's urban population is concentrated in four major cities: Dhaka, Chittagong, Khulna, and Rajshahi. By 2035, nearly 110 million people are expected to inhabit urban areas in the country, constituting about half of its total population. Migration from rural climate-stricken areas to urban, developed areas is common. Climatic events including: flood, cyclone, river bank erosion, saline water intrusion and drought, are key drivers of migration into major cities. At the same time, economic opportunities and higher quality public facilities contribute pull factors for urban migrants. The growth of informal settlements, housing development projects, and associated infrastructure construction on the outskirts of Bangladesh's cities occurs at the cost of loss or degraded natural resources, which subsequently affects all residents' wellbeing.

Cities and urban centres are hubs of economic activity and innovation, as a result, such areas will be a major force in assisting countries to achieve the Paris Agreement and the Sustainable Development Goals (SDGs). Building resilient cities and urban areas is at the core of a resilient Bangladesh. The country needs to incentivize citizens to migrate to nearby urban centers instead of continuing to concentrate in major cities. It is projected that around 13 million people within Bangladesh are likely to be displaced by 2050, eventually migrating to Dhaka and other big cities, where climate migrants displaced by disaster are expected to outnumber the other non-climate induced internal migrants. Given already stressed capacity to offer access to sanitation and drinkable water, it will be difficult for cities like Dhaka to absorb this massive influx of climate migrants. Building climate-resilient and migrant-friendly cities and towns across the districts of Bangladesh is necessary to prevent the adverse effects of climate change.

Secondary cities and towns adjacent to economic hubs, seaports, river ports, and export processing zones are ideal locations for growing urban centres. However, making cities and towns climate resilient and migrant-friendly requires extensive planning, coordination among key stakeholders, and investments in both human and physical resources. Implementation of this new concept necessitates a comprehensive programme to bring tailored solutions to climatic risks faced by different municipalities and peoples. In this initiative, cooperation from relevant organizations must be anchored in the support of the central government. Transformative adaptation across the local, district and national levels can help build climate resilience in cities capable of absorbing millions of climate migrants.

In this context, the Asian Cities Climate Change Resilience Network (ACCCRN), International Center for Climate Change and Development (ICCCAD), and Bangladesh Centre for Advanced Studies (BCAS), along with multiple other partners have organized the Third Annual National Conference on Urban Resilience to Climate Change from 18 to 20 November 2018 at the Institute of Architects Bangladesh (IAB), Dhaka. This conference is aimed at sharing research, identifying knowledge gaps in policy and action plans, and exploring ideas and options for multi-stakeholder collaboration on the vision of migrant-friendly, climate resilient cities across Bangladesh. In the process of exchanging these insights, this conference is also anticipated to increase the capacity of city corporations, municipalities, and Community Based Organizations (CBOs) for building climate resilient and migrant-friendly cities and towns from the bottom up.

Outputs and Outcomes

Involving various stakeholders including urban experts and policymakers from national, regional and global levels, has brought wider expertise and enabled knowledge dissemination. This conference helped enhance the scope of public and private partnerships with inclusive CBOs in order to build city-level resilience. Eventually, these connections will help create a knowledge sharing network to record experiences and serve as an important resource for not only formulating policies on relevant issues but also implementing respective action plans through informed advocacy. This document of conference proceedings has been prepared and widely distributed beyond the conference by ICCCAD and its associates. These conferences on urban resilience will continue to recur in Bangladesh yearly under the organization of ICCCAD and its partners.

4 BIOGRAPHIES

	<p>Dr. Shamsul Alam Member, Planning Commission <i>Chief guest, Inaugural Session and Chief guest, Concluding Session</i></p>		<p>Dr. Saleemul Huq Director, ICCCAD at IUB <i>Session Chair, Inaugural, Concluding Session; Plenary 6 and Plenary 7, Special remarks, Plenary 2&3; PSB2; Discussant, Plenary 1 and PSC2; Moderator, PSE2; Guest of Honor, PSD1</i></p>
	<p>Dr. Atiq Rahman Executive Director Bangladesh Centre for Advanced Studies (BCAS) <i>Special Guest, Concluding Session</i></p>		<p>John I. Carruthers, Ph.D., Director, Sustainable Urban Planning Program College of Professional Studies, The George Washington University <i>Keynote presenter, inaugural session</i></p>
	<p>Professor M. Omar Rahman Vice Chancellor, Independent University, Bangladesh <i>Special Guest, Concluding Session</i></p>		<p>Professor Ainun Nishat Professor Emeritus, Centre for Climate Change and Environmental Research (C3ER), BRAC University <i>Special guest, Concluding Session and Chief Guest, PSE2</i></p>
	<p>Mostafa Quaium Khan Adviser, Bangladesh Urban Forum <i>Session chair, PSA2; Session chair, Plenary 4; Session Chair PSB1; Discussant, Plenary 7 Moderator, Plenary 1</i></p>		<p>Professor Nazrul Islam, Chairman, Centre for Urban Studies Session Chair, PSB1 and Special Guest, Concluding Session</p>
	<p>Dr. Atiur Rahman, Former Governor, Bangladesh Bank Special Guest, Concluding Session</p>		<p>Dr. Nurul Quadir, Additional Secretary (Climate Change), Ministry of Environment, Forest and Climate Change, <i>Chief Guest, Plenary Session 2&3</i></p>
	<p>Dr. S.M. Munjurul Hannan Khan, Additional Secretary, Ministry of Environment, Forest and Climate Change, GoB <i>Chief Guest, PSB2; Special Guest, PSE1</i></p>		<p>Mesbah Uddin, Joint Secretary, LGD & Project Director, EU support health and nutrition sector to the poor in urban Bangladesh <i>Special Guest, Plenary Session 1</i></p>

	<p>Uttam Kumar Saha Strategic Lead- Urban and Energy, Practical Action Bangladesh</p> <p><i>Welcome speech and Moderator, PSC1</i></p>		<p>Nazmul Huq Duke, Councilor and Chairman, Health Standing Committee, Chattogram City Corporation</p> <p><i>Special Guest, Plenary Session 1</i></p>
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	<p>Emranul Haq, Consortium Manager, Concern Worldwide</p> <p><i>Keynote Presenter, First Plenary Session</i></p>		<p>Nasir Uddin Ahmed, Mayor, Chandpur Municipality</p> <p><i>Special Guest, First Plenary Session</i></p>
	<p>Mahabub Hossain, Additional Secretary, Urban Development Wing, LGD, MoLGRD&C</p> <p><i>Session Chair, First Plenary Session</i></p>		<p>A.K.M Musha, Country Director, Concern Worldwide Bangladesh</p> <p><i>Welcome Speech, first plenary session</i></p>
	<p>Md. Abdul Hakim Majumdar, Project Director, Urban Primary Health Care Service Delivery Project</p> <p><i>Special Guest, First Plenary Session</i></p>		<p>Zahida Fizza Kabir, Executive Director, Sajida Foundation</p> <p><i>Special Guest, First Plenary Session</i></p>
	<p>Mr. S. M. Mehedi Ahsan, Sector Specialist for Resilience Cities, KfW</p> <p><i>Designated Discussant, Plenary 2 & 3; Designated Discussant, Plenary 7 and Panelist, PSE2</i></p>		<p>Sarder Shafiqul Alam Coordinator, Urban Climate Change, ICCCAD</p> <p><i>Welcome Address, Inaugural; Panelist, PSA2; PSB2; Keynote Speaker, PSC2; Plenary 7 and coordinate the conference sessions</i></p>

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	<p>Dr. Antony Gnanamuthu Ph.D., DRR Delegate, Coordinator German Red Cross Bangladesh Delegation</p> <p><i>Panelist, PSA1</i></p>		<p>Tapan Kumar Chakraborty, Head of FSL & DRR, Action against Hunger- Bangladesh</p> <p><i>Panelist, PSA1</i></p>
	<p>Md Mokhlesur Rahman, Monitoring, Evaluation, Accountability and Learning (MEAL) Manager/ Christian Aid Bangladesh</p> <p><i>Panelist, PSA1</i></p>		<p>Nitai Chandra De Sarkar, Assistant Director GIS, DDM</p> <p><i>Session Chair, PSA1</i></p>
	<p>Ms. Karishma Amjad, Doctoral Candidate, University of Dhaka</p> <p><i>Panelist, PSA2</i></p>		<p>Mr. Md. Abdul Halim Mia, Director (Research & Development), Bangladesh Social Scientists Foundation</p> <p><i>Panelist, PSA2</i></p>
	<p>Mr. Ferdous Ahmed, Lecturer, International University of Business Agriculture and Technology (IUBAT)</p> <p><i>Panelist, PSA2</i></p>		<p>Mr. Md. Mahmud Faiyaz, Graduate Engineer and Entrepreneur</p> <p><i>Panelist, PSA2</i></p>
	<p>Mr. Emani Kumar, Executive Director, ICLEI South Asia</p> <p><i>Session Chair and Moderator, Plenary Session 2 & 3</i></p> <p><i>Welcome and Wrap Up, PSB2</i></p>		<p>Dr. Md. Taibur Rahman, Deputy Chief, Programming Division, Bangladesh Planning Commission and Project Manager, Sustainable Renewable Energy Power Generation Project, UNDP</p> <p><i>Designated Discussant, Plenary 2 & 3</i></p>
	<p>Mr. Yunus Arian, Head of Global Policy and Advocacy, ICLEI World Secretariat, Germany</p> <p><i>Designated Discussant, Plenary 2 & 3</i></p>		<p>Mr. Md. Zulfikar Ali, Mayor, Mongla Port Municipality</p> <p><i>Designated Discussant, Plenary 2 & 3</i></p>

	<p>Mr. Md. Zannatul Ferdous, Mayor, Singra Municipality</p> <p><i>Designated Discussant, Plenary 2 & 3; Panelist, PSB1</i></p>		<p>Ms. Soumya Chaturvedula, Deputy Director, ICLEI South Asia</p> <p><i>Designated Discussant, Plenary 2 & 3</i></p>
	<p>Dr. Shehnaaz Moosa, Director, Climate & Development Knowledge Network (CDKN); PSB2</p>		<p>Dr. Nurun Nahar, Deputy Project Director, Programming Division, Planning Commission</p> <p><i>Panelist, PSB2</i></p>
	<p>Ms. Shaila Shahid, Senior Programme Coordinator-Gender and Climate Change, ICCCAD</p> <p><i>Panelist, PSB2; Keynote Speaker, PSE1;</i></p>		<p>Khan Motaher Hossain, Deputy Director, Dept. of Social Services, Khulna</p> <p><i>Keynote Speaker, Plenary Session 4</i></p>
	<p>Mr. Abdullah Al Mamun, Practical Action</p> <p><i>Discussant, PSB2</i></p>		<p>Md. Afzal Hossain, GIZ</p> <p><i>Discussant, PSB2</i></p>
	<p>Mr. Enamul Haq, GIZ</p> <p><i>Panelist, PSB2</i></p>		<p>Ulf Neupert, Team Leader, UMIMCC Project</p> <p><i>Keynote Speaker, Plenary Session 4</i></p>
	<p>Mr. Rupan Kanti Shil, Additional Secretary, MoSW, GoB</p> <p><i>Keynote Speaker, Plenary Session 4</i></p>		<p>Md. Tazkin Ahmed, Mayor, Satkhira Municipality</p> <p><i>Keynote Speaker, Plenary Session 4; Panelist, PSB1; Panelist PSE2</i></p>
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	Dr. Neelopal Adri , Lecturer, Department of Urban and Regional Planning, BUET <i>Panelist, PSC2</i>		Md. Zakir Hossain , Founder and Chief, Krishoker Sor (Farmers' Voice) <i>Panelist, PSC2</i>
	Professor Abul Kalam Azad , Department of Urban and Regional Planning, JU and President of Bangladesh Institute of Urban Planning <i>Discussant, PSC2</i>		Dr. Khurshid Zabin Hossain Taufiq , Director, Urban Development Directorate (UDD) <i>Designated Discussant, Plenary Session 7</i>
	Farah Kabir , Country Director, ActionAid Bangladesh <i>Session Chair, Plenary Session 5; Session Chair, PSE1</i>		Tanjir Hossain , Lead – Resilience and Climate Justice, ActionAid Bangladesh <i>Keynote Speaker, Plenary Session 5</i>
	Dr. Mohidus Samad Khan , Assistant Professor, Dept. of Chemical Engineering, BUET <i>Panelist, plenary session 5</i>		Ms. Nawshin Khair , Managing Director, Aranya and Country Coordinator, Fashion Revolution Bangladesh <i>Panelist, plenary session 5</i>
	Dr. Samiya Ahmed , Associate Professor, University of Liberal Arts Bangladesh (ULAB) and director of Centre for Sustainable Development <i>Panelist, plenary session 5</i>		Dr. Sharmind Neelormi , Professor, Department of Economics, Jahangirnagar University <i>Keynote Speaker, PSD1; Designated Discussant, PSE1</i>

	Dilruba Haider , Programme Specialist, DRR, Climate Change and Humanitarian Actions, Bangladesh Country Office, UN Women <i>Panelist, PSE1</i>		Shohail Bin Saifullah , Independent University <i>Discussant, Plenary Session 6</i>
	Nishat Tasnim , North South University <i>Discussant, Plenary Session 6</i>		Sumaiya Binte Selim , Jahangirnagar University <i>Discussant, Plenary Session 6</i>
	Jennifer Khadim , Coordinator, ICCCAD Youth Programme <i>Discussant, Plenary Session 6</i>		Saqib Huq , Coordinator, ICCCAD Climate Finance Programme <i>Discussant, Plenary Session 6</i>
	Nuzhat Imam , UNDP <i>Panelist, PSD1</i>		Dr. Md. Khalequzzaman , Assistant Professor, BSMMU <i>Panelist, PSD1</i>
	Md. Anowar Hossain Bhuyan , Slum Development Officer, DNCC <i>Designated Discussant, PSD1</i>		Mukta Akter , Girl from Informal settlement, Ward No 02 Mirpur, Dhaka <i>Designated Discussant, PSD1</i>
	Sirajul Islam , Chief Town Planner, Dhaka South City Corporation (DSCC) <i>Designated Discussant, PSD1</i>		Lovely Chowdhury , (zone 5) Councilor – Dhaka South City Corporation (DSCC) <i>Designated Discussant, PSD1</i>
	Imamul Azam Shahi , Head of Disaster Risk Management and Climate Change, Plan International Bangladesh <i>Session Chair, PSD1</i>		Imrul Kayes Muniruzzaman , Director-Fundraising and Learning, WaterAid Bangladesh <i>Keynote Speaker, PSD2</i>
	Md Abdus Salam Bapary , Superintending Engineer, Dhaka WASA <i>Panelist, PSD2</i>		Salim Jahangir , Mayor, Paikgacha Municipality <i>Panelist, PSD2</i>

	Md. Khairul Islam , Country Director, WaterAid Bangladesh <i>Panelist, PSD2</i>		Md Abdullah , P. Eng. MBA- Managing Director, Khulna WASA <i>Moderator, PSD2</i>
	Hasina Mushrofa , Programme Head, BRAC Urban Development Programme <i>Welcome Speech and Presenter, PSE2; Designated Discussant, Plenary Session 7</i>		Abu Sumon , Climate Change Expert, Inclusive Budgeting and Financing for Climate Resilience UNDP <i>Presenter, PSE2</i>
	Shah Masud Jahangir , Mayor, Gaibandha Municipality <i>Panelist, PSE2</i>		Md. Rafiqul Islam , General Secretary of MAB and, Mayor, Shariatpur Municipality <i>Panelist, PSE2</i>
	Mr. Md Shahjahan Miah , Chief Executive Officer Fardipur Municipality <i>Panelist, PSE2</i>		Abdul Baten , MAB President and Mayor, Bera Municipality, Pabna <i>Session Chair, PSE2; Designated Discussant, Plenary Session 7</i>
	Professor Jim Coleman , Director, Urban & Economic Development, Oxford Policy Management <i>Keynote Presenter, Plenary Session 7</i>		Dr. Md Shakil Akther , Head and Professor, Department of URP, BUET <i>Designated Discussant, Plenary session 7</i>
	Dr. Ishrat Islam , Professor, Department of URP, BUET <i>Designated Discussant, Plenary session 7</i>		Professor Dr Md Shahidul Amin , Department of Architecture. BUET <i>Designated Discussant, Plenary session 7</i>
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5 METHODOLOGY

5.1 Structure and Programme of the First Annual National Conference on Urban Resilience

MORNING		Day 1: 18 November, 2018 (Sunday)		Day 2: 19 November, 2018 (Monday)		Day 3: 20 November, 2018 (Tuesday)	
	08:30-09:30	REGISTRATION		REGISTRATION		REGISTRATION	
	09:30-11:00	Inaugural Session Multi Purpose Hall		Plenary Session 4: Access to Social Security and Public Social Services for Urban Climate Migrants and Vulnerable People Host: GIZ Bangladesh Multi Purpose Hall		Plenary Session 6: Student Involvement in Urban Climate Change: Challenges and Possible Solutions Host: ICCCAD Multi Purpose Hall	
	11:00-11:30	TEA BREAK					
	11:30-13:00	Plenary Session: 1 Sustainable Urban Health Services for Resilient Cities and Towns Host: Concern Worldwide Multi Purpose Hall		PSB1: Role of Stakeholders in Making Migrant-Friendly Cities and Towns Host: GIZ Bangladesh Seminar Room	PSB2: Knowledge Brokering to Promote Climate Resilience Through Low Carbon Development in Urban Areas Host: ICLEI South Asia Multi Purpose Hall	PSD1: Girls Jeopardy in Changing Urban Climate Host: Plan International Bangladesh & SEEP Multi Purpose Hall	PSD2: The Role of Progressive Tariffs in Sustainable Urban Water Services Host: WaterAid Bangladesh Seminar Room
AFTERNOON	13:00-14:00	LUNCH BREAK					
	14:00-15:30	PSA1: Barrier Analysis for Addressing Group Specific Risks in Earthquake in Dhaka Host: Christian Aid Multi Purpose Hall	PSA2: Out of the Box Session Host: ICCCAD Seminar Room	PSC1: End Product Diversification- a Pathway for Inclusive Faecal Waste Management Host: FSM Network Multi Purpose Hall	PSC2: Building Climate Resilient and Migrant Friendly Cities and Towns in Bangladesh Host: ICCCAD Seminar Room	PSE1: Gender in Urban Climate Policy and Action: Towards gender-just, Climate Resilient Cities and Communities Host: ICCCAD Seminar Room	PSE2: Prioritizing Climate Change and Local Level Resilience in Secondary Cities and Towns Host: BRAC Multi Purpose Hall
	15:30-16:00	TEA BREAK					
	16:00-17:30	Plenary Session 2 & 3: Cities and Regions TALANO Dialogues: The Bangladesh Dialogue Host: ICLEI South Asia Multi Purpose Hall		Plenary Session 5: Sustainable Consumption and Production, Fashion Industry and Urban Resilience to Climate Change: Connecting the Dots for Sustainable Solution Host: Action Aid Bangladesh in Partnership with University of Liberal Arts Bangladesh and Fashion Revolution Multi Purpose Hall		Plenary Session 8: Summary of the Conference: Towards Building Migrant Friendly, Climate Resilient Cities and Towns in Bangladesh Host: ICCCAD Multi Purpose Hall	
	17:30-19:00					Urban Climate Resilience Award and Concluding Session	

5.2 INAUGURAL SESSION

- Welcome Address:** **Mr. Sarder Shafiqul Alam**, Coordinator, Urban Climate Change, ICCCAD
- Keynote Speaker:** **Professor John I. Carruthers**, Director Sustainable, Urban Planning Program, and George Washington University
- Chief Guests:** **Professor Dr. Shamsul Alam**, Member and Senior Secretary of the General Economic Division, Planning Commission
- Session Chair:** **Dr. Saleemul Huq**, Director of ICCCAD at Independent University, Bangladesh (IUB)

The conference kicked off with an inaugural session chaired by Dr. Saleemul Huq, Director of ICCCAD at Independent University, Bangladesh (IUB), with Professor Shamsul Alam, Member and Senior Secretary of the General Economic Division, Planning Commission, as the chief guest. The inaugural session also included a welcome address by Sarder Shafiqul Alam, Coordinator, Urban Climate Change, ICCCAD and a keynote presentation from Dr. John I. Carruthers, Director, Sustainable Urban Planning Program, and George Washington University.



Dr Saleemul Huq's speech at the inaugural session

Sarder Shafiqul Alam in his welcome speech thanked all the hosts and participants for joining the conference. He acknowledged that the Third Annual National Conference on Urban Resilience to Climate Change has been organized by ICCCAD, ACCCRN and BCAS with support from several partner organization including ActionAid Bangladesh, BRAC, Concern Worldwide, Christian Aid, ICLEI South Asia, GIZ, FSM Network & Practical Action Bangladesh, Plan International & SEEP and WaterAid. Mr. Alam highlighted that based on lessons learned from the First and Second Annual National Conference on Urban Resilience to Climate Change, the 2018 conference focused on Building Climate Resilient, Migrant-Friendly Cities and Towns in Bangladesh. He remarked that the impacts of climate change-related hazards force people to migrate from rural to urban areas, resulting in rapid urban population growth in Dhaka, just as in many other cities of the world. These migrant people are again affected by climate change induced hazards like high temperature, flood, and waterlogging. He mentioned that the aim of the conference was to share the experience of stakeholders and actors on how to make climate resilient sustainable urban development plan as well as explore ways to both address the SDGs and to make cities migrant-friendly. He gave a word of caution regarding the fact that rapid population growth in Bangladesh's urban areas generates risks to social stability and infrastructure, further stressing preexisting vulnerabilities to disasters.

In the keynote presentation, Professor John I. Carruthers focused on the population boom of large cities and ongoing development projects taken in Bangladesh, especially the construction of the Padma Multipurpose Bridge. He stated that the country needs better road connections to save time and effort for people moving to cities and elsewhere. The Padma Bridge Project will increase access between the southern belt of Khulna and Dhaka, boosting the country's economy by allowing business people and economic inputs to move more easily. He predicted that such infrastructural interventions have the ability to change many social factors and bring economic changes; due to improved access, many people from the Khulna belt will migrate to city areas such as Dhaka in search of a better lifestyle. As well, he predicted that the pollution created by increased movement of people and resources could lead to degradation of the Sundarbans and of Dhaka City through uncontrolled

urbanization. In order to prevent adverse impacts (e.g. the over-crowding of Dhaka), better foresight needs to guide the planning of such projects. To deal with this issue, he recommended increasing rapid mass transit systems between large cities and secondary cities and towns, and between towns as well as rural areas, so that the options for people leaving their original home in search of income are greater.

The chief guest Professor Shamsul Alam emphasized the importance of planned urbanization for sustainable development in the country, this is going to be reflected in the upcoming Eighth Five-Year Plan of the government of Bangladesh, to be released in 2020. Which will draw on the hundred-year Bangladesh Delta Plan 2100, Both will be implemented through different projects on a priority basis. In addition to this planning work, the government has a vision to achieve all the 17 goals of SDGs by 2030. Professor Alam voiced his appreciation for the annual conference, noting that there is an urgent need to develop resilient urban cities as well as to create livable cities and towns for all internal migrant communities.



Professor Dr. Shamsul Alam, Member, GED, Planning Commission giving his inaugural speech as chief guest

To conclude the session Dr. Saleemul Huq mentioned that previously there were almost no connections among the NGOs, government bodies and other foreign organizations working on climate change. Now they come together at least once a year, Dr. Huq mentioned that building climate-resilient and migrant-friendly cities and towns in Bangladesh has become an urgent need in order to tackle the adverse effects of future climate change. He focused on youth participation in the decision-making process and recognized urban climate champions for helping to build resilience to climate change. He shared his hope that the conference would help address how to overcome the problem of data availability and data sharing, put more focus on youth development for tackling climate change and most importantly, bring the champions working on urban climate resilience in Bangladesh into the limelight through establishing awards for these endeavors.

5.3 TECHNICAL SESSIONS

There were seven plenary sessions and ten parallel sessions in the conference. The plenary sessions were titled:

1. Sustainable Urban Health Services for Resilient Cities and Towns;
2. Plenary Session 2 & 3. Cities and Regions Talanoa Dialogues: The Bangladesh Dialogue;
4. Access to Social Security and Public Social Services for Urban Climate Migrants and Vulnerable People;
5. Sustainable Consumption and Production, Fashion Industry and Urban Resilience to Climate Change: Connecting the Dots for Sustainable Solutions;
6. Student Involvement in Urban Climate Change: Challenges and Possible Solutions;
7. Summary of the Conference: Towards Building Migrant-Friendly, Climate-Resilient Cities and Towns in Bangladesh

The following parallel sessions covered various themes in the build-up to the plenary sessions:

1. Barrier Analysis for Addressing Group Specific Risks to Earthquakes in Dhaka;
2. Out of the Box Session;
3. Role of Stakeholders in Making Migrant-Friendly Cities and Towns;

4. Knowledge Brokering to Promote Climate Resilience Through Low Carbon Development in Urban Areas;
5. End Product Diversification - a Pathway for Inclusive Faecal Waste Management;
6. Building Climate Resilient and Migrant Friendly Cities and Towns in Bangladesh;
7. Girls' Jeopardy in Changing Urban Climate;
8. The Role of Progressive Tariffs in Sustainable Urban Water Services;
9. Gender in Urban Climate Policy and Action: Towards Gender-Just, Climate-Resilient Cities and Communities;
10. Prioritizing Climate Change and Local Level Resilience in Secondary Cities and Towns

The Asian Cities Climate Change Resilience Network (ACCCRN), and its Bangladesh partner, the International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB), jointly organized The Third Annual National Conference on Urban Resilience to Climate Change in association with diverse partners, which were: ActionAid Bangladesh with University of Liberal Arts Bangladesh and Fashion Revolution, BRAC, Christian Aid, Concern Worldwide, FSM Network, GIZ, ICCCAD, ICLEI South Asia, Plan International Bangladesh & SEEP, and WaterAid. This national conference is supported by Bangladesh Urban Forum (BUF) and Municipal Association of Bangladesh (MAB).

6 OUTPUTS AND DISCUSSIONS OF TECHNICAL SESSIONS: PARALLEL AND PLENARY

6.1 First Plenary Session: Sustainable Urban Health Services for Resilient Cities and Towns

Host/Co-sponsor: Concern Worldwide

Moderator: Mr. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum

Welcome Speech: Mr. A.K.M. Musha, Country Director, Concern Worldwide

Keynote Presenter: Mr. Emranul Huq, Consortium Manager, EU Health & Nutrition Project, Concern Worldwide

Designated Discussant: Dr. Saleemul Huq, Director, ICCCAD

Ms. Breda Gahan, Global Health & HIV and HIV and AIDS Programme Adviser, Concern Worldwide

Dr. A.M. Zakir Hussain, Senior Management Expert, EPOS, EU Support Health and Nutrition Sector to the Poor in Urban Bangladesh

Special Guest: Md. Abdul Hakim Majumdar, Project Director, Urban Primary Health Care Service Delivery Project

Mr. Mesbah Uddin, Joint Secretary, LGD & Project Director, EU Support Health and Nutrition Sector to the Poor in Urban Bangladesh

Ms. Zahida Fizza Kabir, Executive Director, Sajida Foundation

Mr. Nasir Uddin Ahmed, Mayor, Chandpur Municipality

Mr. Nazmul Huq Duke, Councilor and Chairman, Health Standing Committee, Chattogram City Corporation

Session Chair: Mr. Mahabub Hossain, Additional Secretary, Urban Development Wing, LGD, MoLGRD&C.

The session was opened by Mr. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum and moderator of this session with a welcome speech and a brief background on the topic of discussion. He mentioned that within the past decade, Bangladesh has made significant progress, particularly in the provision of health services in rural areas. However, urban areas haven't made similar progress in this sector, and increasing population growth is a major challenge in this regard as it increases stress on limited resources. He also addressed the inequity issue existing in the urban areas regarding access to health care facilities, especially for the people living in the slums. Taking this point together, he emphasized making plans and policies for the urban health care sector in order to cope with the growing population and resolve the problem of inaccessibility for the lower strata of people to quality services.



Mr Mostafa Quaium Khan moderating the first plenary session

Mr. A.K.M. Musha, Country Director, Concern Worldwide focused on the importance of the health sector to make cities resilient, especially for the poor. He mentioned that urban health care is largely dependent on the private sector, which relies on the generation of profit to continue operating. As with Mr. Khan, he affirmed that providing health care to the urban poor is one of the major challenges for this sector, and without building institutional capacity and equipping the health centers with needed facilities, it is not possible to overcome this

challenge. He expressed doubt about whether Bangladesh is ready for tackling any health hazard in the future, and hoped to gather direction, knowledge and recommendations from the session.

The Keynote presenter, Mr. Emranul Huq, Consortium Manager, EU Health & Nutrition Project, Concern Worldwide highlighted how population growth in the cities and municipalities are contributing to increasing challenges in the health sector in urban areas. The following issues were covered by his presentation:

- Lack of organizational structures within the health care sector, leaving it inadequate for growing population;
- Lack of preparedness within the City Corporations and Municipalities to implement health care services, despite the fact that the City Corporation and Municipality Act of 2009 calls for provision of health care services by these bodies;
- The preference of citizens for tertiary healthcare as a result of public centers' inability to serve all.
- The lack of progress in the "Urban Health Strategy" for health insurance, which was launched in 2014 but is still in its pilot phase;
- Even though people and organizations come forward voluntarily to help in times of health hazards (like Chikungunya), a proper framework, policies and plan are needed to tackle such malicious events more effectively;
- Poor people, especially the slum dwellers are the most vulnerable, poverty traps them in this cycle of vulnerability. As these people are the driving force of the cities, they must be prioritized when policies regarding healthcare are made;
- Linked to many of the above issues, he called on the government to take the lead to make the health sector integrated and inclusive.

Dr. Saleemul Huq mentioned that we need to know more about migration patterns, e.g. where migrants end up and the pressures on slums due to such movement. He added that migration has two primary steps– *"first, the decision to move and the second decision about where to make the move"*. The place chosen by the migrants in Bangladesh is in most cases Dhaka City, as it can address three crucial needs: (1) economic opportunity, (2) healthcare, and (3) education. On this note, he suggested that NGOs have a huge opportunity to help face this challenge by investing in these three sectors. In doing so, they may help shape the decision migrants make about where to go.

Ms. Breda Gahan, AIDS Programme Adviser, Concern Worldwide, shared 30 years of experiences working in the health sector, of which 20 years was spent in Bangladesh. She mentioned that climate change is strongly related to health, with adversities from climate change having the potential to cause mass health hazards. This links to conversations on climate change amongst security circles, which see this phenomenon as a threat multiplier. Furthermore, the urban population living in slums or on pavements are more exposed to the effects of rising air pollution, poor drinking water, inadequate food security, and safe sanitation. The most physically and socio-economically vulnerable groups are the worst affected, including children below the age of 5, women and girls, and people living with chronic illness and disabilities. She mentioned the urgency of response plans for Bangladesh, and that European Commission (EC) will continue to provide financial, environmental and other assistances as required.

Dr. A.M. Zakir Hossain, Senior Management Expert, EPOS, EU Support Health and Nutrition Sector for the Poor in Urban Bangladesh, gave an overview of the different dimensions of poverty (economic, social and technological) and how to navigate the challenges through resilience capacity building, adaptation and creating incentives for mitigation. He added that factors related to health conditions (e.g. air and water quality, food security, sanitation and hygiene), geographical variation amongst cities and municipalities of concern, organizational capacity and the characteristics of migration must be addressed when policies and frameworks are made for the

urban health sector. He concluded by saying that the motto should not be how much we do for the urban poor, rather how much we do so that they can improve their condition.

Open discussions:

In the open discussion, two beneficiaries of the EU Support Program expressed their satisfaction with the free quality service they had, which they otherwise could not access. Both the mayor of Manikganj and Mongla Port Municipality mentioned that their municipalities provide general health care services, but lack funds and an adequate number of doctors to ensure quality health care service from the municipalities.

Mr. Md. Abdul Hakim Majumder, Project Director, Urban Primary Health Care Service Delivery Project noted that ethical practice among health practitioners is lacking. As such, there is a need to ensure accountability and prevent negligence in health practitioners. He also put forward the inclusion of mental health treatment facilities as a consideration for urban health strategies.



Audience during the first plenary session

Ms. Zahida Fizza Kabir, Executive Director of Sajida Foundation, similarly expressed the necessity of transparency, accountability, a sense of responsibility and ethicality, and of regulation in the health sector. She stated that more focus needs to be put on government funds for health insurance, on school curriculum regarding hygienic practices and nutrition, and on the accessibility of the buildings by all, regardless of their ability. She also mentioned the urgency of sufficient investment in health care services, properly trained human resources, and facilities.

Nasir Uddin, Mayor of Chandpur Municipality, mentioned that the existing health service in his municipality, lacks medicine and government doctors, and thus is of low quality. For him, urban health services need to be established with more GOB support.

Mesbah Uddin, Joint Secretary, LG suggested that the health service budget allocation could provide free services for urban poor. Sajida Foundation and government health institutions can cooperate to provide health services during climatic disaster, especially for the urban poor people.

Mr. Nazmul Haq Duke, Councilor and Chairman, Health Standing Committee, Chattogram City Corporation focused on the improper spatial distribution of healthcare facilities in the country. He emphasized that maternity facilities should be distributed based on population. He also added the need to provide healthcare training and to create jobs in the health sector, which would address the concerns of other participants. This must include training of medicine shop staff to improve primary treatment service.

In the concluding remarks, Mahabub Hossain stated that in order to deal with increasing urbanization, there is a need to ensure newcomers have adequate employment facilities to enhance economic development. This includes access to proper health service to maintain good health. Given that mayors and other speakers mentioned the lack of doctors, medicine, technical support and funding to provide necessary health service at the municipality level, there should be a government policy and guideline for implementation at the local level. As well, they must establish a proper health service system with adequate doctors, medicine and funding. Such

system must be led by the government and involve relevant government institutions and assistance for non-government agencies and development partners. His hope was that the government of Bangladesh will take the lead in making the urban health sector more integrated, resourceful and inclusive.

Key Recommendations of the Session

- Make healthcare service accessible to the urban poor, especially the people living in slums;
- Include curriculum in schools to promote hygiene practices and also focus on improving the training for health professionals;
- Develop a legal framework exclusively for health in the urban sector and establish an urban-focused health institute at government level;
- Improve the provision of health services related to jobs, in order to assist the migrating populations moving to secondary cities;
- Private sectors and NGOs should come forward to assist the government in initiating these steps.

6.2 Parallel Session PSA1: Barrier Analysis for Addressing Group Specific Risks to Earthquakes in Dhaka

Host/Co-sponsor: Christian Aid

Moderator: Ms. Shahana Hayat, Humanitarian Manger, Christian Aid

Keynote Speaker: Ms. Dilara Zahid, Assistant Professor, Institute of Disaster Management and Vulnerability Studies (IDMVS) University of Dhaka

Speaker/Panelist: Dr. Antony Gnanamuthu Ph.D., DRR Delegate, Coordinator German Red Cross Bangladesh Delegation

Mr. Tapan Kumar Chakraborty, Head of FSL & DRR, Action against Hunger- Bangladesh

Md. Mokhlesur Rahman, Monitoring, Evaluation, Accountability and Learning (MEAL) Manager/ Christian Aid Bangladesh

Special Guest: Mr. Nitai Chandra De Sarkar, Assistant Director GIS, DDM

The moderator Shahana Hayat, Humanitarian Manager, Christian Aid opened the session by stating the objective to disseminate the findings from barrier analysis on gender disaggregated knowledge and group-specific risks of earthquakes in Dhaka, and to gauge the capability to address these risks. The plenary session was hosted by Christian Aid, German Red Cross and Action Against Hunger, all of which are consortium members of the Dhaka Earthquake and Emergency Preparedness (DEEP) Project.

Following the introduction, Dilara Zahid, Assistant Professor, Institute of Disaster Management and Vulnerability Studies (IDMVS) University of Dhaka discussed the findings from situational analysis on the risks of special groups, including women, children, elderly, and people with disabilities in an earthquake emergency. Dwelling/structure collapses due to buildings' ages are the primary risks. Secondary risks arise after the earthquake, namely from fires that are likely to occur from gas lines/cylinders, electric lines, chemical factories and from industries and mill factories. Following these, roads will become blocked, and bridges around Dhaka city can also be damaged.



Panelists discussion during the parallel session

Children, elderly, women and those with disabilities are most at risk because they are not aware of the gravity of earthquake. In most cases, they are not trained to respond and they cannot move fast. Women are confined at home, with less opportunity to share risk-related information and learn about early warnings. Sometimes because of strong religious norms some women hesitate to come out from their homes. Unfortunately, they also have the responsibility of ensuring the security of their young and old family members.

Drawing from these observations, Ms. Zahid recommended developing gender mainstreaming/inclusion guideline for dealing with DRR. Part of this should include a strategy to disseminate knowledge about earthquakes from electronic and print media, school teachers, TV, leaflets and posters, and word of mouth.

The following elements of Bangladesh's precarious situation were identified:

- High rise buildings and lack of open spaces for recreation, playground and green environment;
- High levels of industrial investment in infrastructure in flood prone areas of Dhaka city;
- The huge number of migrants continues to Dhaka, Although the population is already 16 million,
- Dhaka's is located on a fault line, exposing the city to risk- a 7.5- 8 magnitude earthquake (on the Richter scale) would devastate the city;
- For quality of life and risk management, narrow streets, lack of open spaces, and lack of nearby hospitals pose substantial constraints.

The following elements of Bangladesh's barriers in non- structural mitigation include:

- Lack of training on earthquake risk and other disaster mitigation;
- Serious lack of inspection and monitoring from Rajdhani Unnayan Kartipakkhya (RAJUK) side;
- Lack of year-round activity from The Ward Disaster Management Committee;
- Limitation of Trainings on earthquake disaster risk reduction which are organized by schools, NGOs and donors mainly;
- During the response to disasters, community people may become moblike, engage in unruly behavior, become aggressive, or get involved in political pressure.

The following elements of Bangladesh's barriers in structural mitigation include:

- Lack of retrofitted old buildings;
- Narrowness of spaces between buildings, which can cause domino-like effects;
- Lack of earthquake resistance in shelters;
- Lack of enforcement of the building code.

Dr. Antony Gnanamuthu, Coordinator, German Red Cross shared the DEEP project findings on the following questions:

- How to manage earthquake risks?
- How prepared is Dhaka?
- Do we have the necessary safety tools?
- How do we rescue people who are coming into Dhaka and convince some to move to other areas in view of pull and push factors on Dhaka?
- How can we maximise DRR in Dhaka?
- What capacity do the institutions and citizens in Dhaka have?

Dr. Gnanmauthu showed that there are fears that dwellings or structures may collapse, creating human casualties in the event of earthquake. There is a need for greater understanding about earthquakes and the risk of vulnerable groups like women and girls. It is prudent to understand how prepared individuals, groups and institutions are in order to address capacitation.

The session highlighted that training time is too short. Furthermore, it mentioned some factors that should be included in future guidelines such as, assurance of continuous earthquake simulation trainings and an increase the number of programmes for marginal groups like women and transgender groups.

Recommended actions

- Ensure that urban volunteers are trained and equipped;
- Master trainers programme of Red Crescent should include gender inclusion and psycho-social support;
- Integrate female leadership for comprehensive earthquake preparedness and response through Women Against Violence in Election (WAVE) and Ward Disaster Management Committee (WDMC);
- Establish a School Safety Plan with roles and responsibilities of head teachers and other teachers before, during and after disaster;
- Established Ward contingency plan with roles and responsibilities of Ward stakeholders including the Ward Councilor, WDMC members, and Urban Volunteers;
- Link institutions such as Fire Services and Civil Defense (FSCD), City Corporations, Ward councilors and WDMC members, and urban Volunteers;
- Ensure religious leaders and market associations receive orientation on earthquake and other emergency preparedness;
- Expand awareness through TV channels, radio messaging, YouTube, Facebook, posters, brochures, and so forth.

Important outcomes from the session

- Recognize that different vulnerabilities – related to the physical environment and society - have different policy needs;
- The capacity of urban volunteers needs to be enhanced to provide psychological support;
- DRR governance must be strengthened for better risk management;
- Disaster preparedness must be improved in order to ‘build back better’;
- Support for family-level earthquake preparedness - which accounts for the special needs of women - is required;
- Government must offer further preparedness incentives – in addition to the tax incentives currently related to installing fire extinguishers – for homeowners;
- Some urban stakeholders are taking climate resilience into their own hands, by offering insurance and engaging the private sector;
- Information and Communication Technologies (ICTs) can play an important role to connect people and processes;
- The current Standing Order on Disaster (SOD) focuses more heavily on rural areas than urban risks;
- There is a need to repackage all the important documents like Bangladesh DRM Framework, Sendai Framework, SOD and their info graphics to make them understandable for ordinary people and those with limited communication skills;
- All skills trainings on resilience must be tracked and documented.

Key Recommendations from this session

- To adequately address vulnerability, group-specific awareness and preparedness programs for women, children, people with disabilities, and transgender group from family to national levels is necessary.
- To enhance the capacity of urban volunteers, a primary point of improvement is training on psychological support.

6.3 Parallel Session PSA2: Out of the Box Session

Host/ Co-Sponsor: ICCCAD

Panelist: **Ms. Karishma Amjad**, Doctoral Candidate, University of Dhaka
Mr. Md. Abdul Halim Mia, Director (Research & Development), Bangladesh Social Scientists Foundation
Mr. Ferdous Ahmed, Assistant Professor, IUBAT-International University of Business Agriculture and Technology
Mr. Md. Mahmud Faiyaz, Graduate Engineer and Entrepreneur
Dr. Shafiqur Rahman, Associate Professor, Jahangirnagar University

Session Chair & Moderator: Mr. Md. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum

The “Out of the Box” session opened with a welcome speech from Mr. Md. Mostafa Quaium Khan Advisor, Bangladesh Urban Forum. He mentioned in his speech that the success of the 1st and 2nd conferences on Urban Resilience to Climate Change were so successful that it had fuelled this third annual conference. The different issues on building climate-resilient migrant-friendly cities and towns which were not incorporated in existing plenary and parallel sessions such as “Housing Problems of Climate Migrant Poor People” or “Zero Waste Management and Migration Facilitation Policy Framework for Local Government” were discussed in this session.



Audience during the out of the box session

Ms. Karishma Amjad from the University of Dhaka focused initially on the risks imposed by climate change in urban areas, especially those on the housing sector. She mentioned that housing is already a major challenge for cities due to massive population growth. To study the reasons for migration resulting from climate change, she developed a qualitative research methodology which led her to find the following:

1. The main reasons for climate migration are floods, droughts, *monga* (famine) and river erosion;
2. The ages of climate migrants range from 36-40 years at the most;
3. Migrants are mainly shifting to tin shed housing in slums, where rents are around 3000 BDT per month for a single room
4. These housing environments are ridden with mosquitoes, waste and drainage issues, often related to water logging and improper disposal facilities
5. Water supply and sanitation is poor in terms of quality, although no rigorous standard was used to judge this, quality was judged according to interviewee responses regarding taste, colour and odour of water.

She mentioned that the sample size was not sufficient to draw conclusions regarding the actual scenario of climate migrants coming to the slums of Dhaka. Deriving data was made difficult, given that migrants are at

times hard to track as they remain busy to work for livelihood outside their shelter. And because their settlement is built illegally and lacks basic facilities for survival, they feel worried and reluctant to give data.

In addition to her primary conclusions, Ms. Amjad stated that an essential area for focus is skill development and job creation for the migrants, as urban areas require a different set of skills for survival than rural areas. One of the audience members added that economic opportunity is often the main reason for such migration, and lack of it may exist both at the origin and also the destination of migration. The session chair, Mr. Khan, added that the provision of education to migrants – as a means of further increasing skills and capacities to adapt within a new economy - needs to be focused on as well.

Mr. Md. Abdul Halim Mia, Director (Research & Development), Bangladesh Social Scientists Foundation presented his proposal regarding participatory migration. He began by sharing how migration has always been a part of the history of our country, especially in times of natural disasters and political crisis periods; migrants have always moved from one area to the other in search for better accommodations. But accommodating the huge flux of migrants has also been a challenge for host communities, and many times the migrants are unwelcome. He suggested that migration is a continuous and inevitable process, and therefore the communities residing at migrant destination need to be prepared so that they may be more understanding and welcoming. He proposed that local governments need to be active in this regard and Bangladesh needs policies for making internal migration more deliberate. He added that a participatory approach can help the local government to come up with migrant-friendly policies which would also be more acceptable to host communities as well as those on the move. Done in this manner, the policies would be more inclusive and practical in nature. To Mr. Mia's presentation, an audience member added that we need studies to identify which portion of the host population has positive mind-set towards newcomers and what types of coping mechanisms are needed for creating migrant-friendly communities.

Mr. Ferdous Ahmed and Mr. Mahmud Faiyaz from International University of Business Agriculture and Technology (IUBAT) gave presentations on the need for improving waste management system in cities. Both of them put an emphasis on reconstructing the waste collection system to segregate different types of waste, and also to focus on recycling waste.

Mr. Ahmed focused on the positive elements of the ongoing development works in Bangladesh and how we can improve the sector of waste management in the cities. He expressed his satisfaction regarding the improvements made by the Dhaka North City Corporation in waste collection by using compact and covered bins. This effort was started under the late Mayor Mr. Anisul Haque. He mentioned that more than 70% of the waste in Dhaka City is biodegradable, although it unfortunately ends up in landfills or dumping sites instead of being composted or recycled. He put great emphasis on the recycling of waste material throughout the presentation, and called for collaboration among the mayors of different cities and towns with academics in this area.

Mr. Faiyaz addressed the issue of categorization of waste into three types, and the necessity of collecting and managing wastes in a segregated manner. He also introduced his small start-up that trains people in his community to reduce, reuse and recycle wastes using the '3R method' in Mirpur DOHS area. Initiatives that the organization has already taken include the categorized collection of wastes in the selected communities, putting on roadshows to increase awareness, encouraging community people to reuse plastic bottles for rooftop gardening, planting and making various handicrafts, as well as teaching children how to reuse plastic to build responsible future citizens. Through Political, Economic, Social, Technological, Environmental and Legal (PESTEL)

analysis, he presented the social, economic and technical impact of their work, and what they are expecting from the government. The analysis concluded that initiatives such as that in Mirpur DOHs have multiple benefits, including: helping to eliminate the gender bias by bringing men and women under the same umbrella, reducing wasteful consumption and expenditure on raw material through recycling and reuse, increasing the income of the 'floating people' or street children, and promoting innovation that focuses on compact recycling rather than wasteful consumption. He suggests that local government bodies can promote recycling and reuse by providing rewards to those who involve themselves in such activities and scholarships for innovators in the field, so that these groups and those inspired by their work may come up with policies that further promote action on waste.

Dr. Shafiqur Rahman, Associate Professor, Jahangirnagar University discussed the need to make urban transportation systems more inclusive and universally accessible and to implement a 3R policy in city waste management, both of which can help reduce carbon emission of the cities. He highlighted the need for addressing our habitual problems and to improvise the waste management system of cities and towns, noting that a participatory approach can help bring stakeholders of different social strata together for the collective cause. While discussing the issue of migration to cities, he mentioned that mostly mid-aged adults are the one migrating to cities (affirming the findings of Ms. Amjad) and that children later follow the migration of their parents. He suggested that a record of migrants' previous occupations, their present housing and workplace location should be required in order to make the cities friendlier for their lives. He also suggested the promotion of Non Motorized Transports (NMTs) to assist migrants and make the transportation sector greener.

Open discussion

The mayors of Mongla Port Municipality, Chaudagam Municipality and Manikganj Municipality expressed their need to be equipped with better technology and knowledge to improve their basic services. They also expressed their strong commitment for the betterment of their communities.

Key recommendations

- In addition to planning and training, there is a need to build a positive mentality toward climate migrants; diversity should be nurtured;
- Livable housing for migrant slum dwellers (and those already there) must become a focus for urban planners and relevant organizations;
- The proper collection and utilization of urban wastes is a key intervention point; this can be made more effective by encouraging the local population to participate;
- The provision of education to migrants can help improve their access to jobs and self-sustenance in terms of health, both of which can have economic benefits at the individual, communal, and national level;
- The government should take necessary steps to design integrative processes in terms of health, housing, employment, and other basic amenities.

6.4 Second & Third Plenary Session: Cities and Regions Talanoa Dialogues: The Bangladesh Dialogue

Host/Co-sponsor: ICLEI South Asia

- Key Note Speaker:** **Md. Ziaul Haque**, Director (Air Quality Management), Department of Environment, MoEFCC
- Chief Guest:** **Dr. Nurul Quadir**, Additional Secretary (Climate Change), Additional Secretary, Ministry of Environment, Forest and Climate Change, GoB.
- Special Remarks:** **Dr. Saleemul Huq**, Director, ICCCAD
- Designated Discussants:** **Dr. Md. Taibur Rahman**, Deputy Chief, Programming Division, Bangladesh Planning Commission and Project Manager, Sustainable Renewable Energy Power Generation Project, UNDP.
Mr. Yunus Arian, Head of Global Policy and Advocacy, ICLEI World Secretariat, Germany.
Mr. S.M Mehedi Ahsan, Urban Climate Resilient Specialist, KfW
Dr. Nurun Nahar, Deputy Chief, Planning Commission
Mr. Md. Zulfikar Ali, Mayor, Mongla Port Municipality
Mr. Md. Zannatul Ferdous Mayor, Singra Municipality
Ms. Soumya Chaturvedula, Deputy Director, ICLEI South Asia
Md. Akhteruzzaman, Programme Manager, UN Habitat
- Session Chair and Moderator:** **Mr. Emani Kumar**, Executive Director, ICLEI South Asia

Mr. Emani Kumar, Executive Director, ICLEI South Asia introduced the Talanoa Dialogue by saying that it started in COP23 with the objective to improve the climate change discussion. Already 16 dialogues have taken place, with the last one happening in India on 31st October, 2018. In South Asia, only India and Bangladesh have conducted the dialogue.

Md. Ziaul Haque Director, MoEFCC, shared findings from the IPCC 1.5°C Special Report and discussed Bangladesh's NDC in his keynote presentation. He discussed the long-term goals of Paris Agreement, its scientific estimates and emission estimates. He noted that although Article 2 describes the purpose of the agreement as limiting global temperature increase to 1.5°C, Article 4.1 countries to peak global emissions as soon as possible.

Mr. Haque explained that, during COP23, Fiji changed the nomenclature into Talanoa Dialogue (Paragraph 20) with a view to create the scientific case and political momentum for parties to increase mitigation action and ambition, and to reflect this in revised NDCs which are to be communicated by 2020. Talanoa dialogues seek to answer three questions: *Where are we? Where do we want to go? and How do we get there?* At COP24, a half-day high-level roundtable on the Talanoa Dialogues will be held. It is hoped that this dialogue will result in building consensus regarding the findings of the 2018 IPCC report and a clear political commitment for ambitious levels of emissions reduction.

The IPCC released the 1.5°C Special Report in October 2018. While sharing the findings of IPCC special report,



Mr Emani Kumar from ICLEI moderating the Talanoa Dialogue session

Mr. Haque stated that human activities have already caused 1°C of global warming and if the current rate continues, global temperature will increase 1.5°C by 2030, at the earliest and 2052 at the latest. There are clear differences in keeping the world temperature increase at 1.5°C compared to 2°C in terms of extreme weather events, sea level rise, food security linked to droughts and floods, and ocean acidification. Technically and financially it is possible to restrict the world's temperature average to 1.5°C increase if immediate actions are taken both in adaptation and mitigation.

While discussing the role and effort of NDCs in Bangladesh Mr. Haque shared that, the current NDC of Bangladesh has both mitigation and adaptation objectives. It is trying to implement and pursue low-carbon climate-resilient development pathways and trying to reduce at least 5% of national emissions by 2030 in the power, transport and industry sectors. Mitigation commitments are also focused on these three sectors. Existing mitigation strategies are centered around energy efficiency and energy management. If Bangladesh gets international support in finance, technology and capacity building, it will be able to reduce emissions by at least 15% by 2030.

Recommendations by Mr. Haque:

- A Planetary Boundaries Initiative (PBI) declaration can help parameterize international decision-making on climate;
- There must be consensus-building among global leaders from all areas of the globe is fundamental for further progress;
- Bangladesh should put forward adaptation measures and specific cost of investment for mitigation actions;
- Several initiatives for mitigation measures could be set forward for (a) Building codes, (b) Solar houses, (c) Improving boiler efficiency, (d) Solar irrigation systems and (d) Solar roof top programs.

Md. Ziaul Haque finally recognized the efforts of the Ministry of Environment, Forest and Climate Change (MoEFCC) in preparing a Country Investment Plan (CIP) to address the challenges identified in the major environmental policies and prioritized investment programs. The CIP has 4 pillars: sustainable development and management of natural resources, environmental pollution reduction and control, adaptation, mitigation and resilience to climate change, and environmental governance.

In the special remarks, Dr. Saleemul Huq gave credit to COP23 president, the Prime Minister of Fiji who introduced the Talanoa Dialogue, through which everyone can now have a say about achieving the global warming goal. In addition to national-level participants, this dialogue invites all citizens around the globe to come up with a topic and talk about the target, our progress in attaining it, and what to do to achieve that target. These questions and discussions which result will be put to the global leaders.

The chief guest, Dr. Nurul Quadir, Additional Secretary, MoEFCC mentioned that the comparative scenario of 2 degrees and 1.5 degrees has already been presented with the impacts. Globally, Bangladesh continues to advocate for 1.5°C warming limitation because of its ongoing experience with climatic impacts. We will not be able to protect ourselves if we don't think holistically, not just of country but of the world. A large Influx of population will migrate to the urban areas from rural areas because of both the push and pull factors; cities are being pressurized by various factors and the changing climate is only adding greater risk. While mentioning the Bangladesh scenario, he added that Bangladesh has created an NDC roadmap very recently, through which the ultimate target of 1.5 degree can be achieved. At the global level, all people are welcome to raise their voice, where the discussion should be inclusive and transparent.

Taibur Rahman, Deputy Chief, UNDP explained that there are three major sectors for economic development which depend on energy. These are power, industry and transport. All three sector should be targeted as the urban area consumes 70% of the total energy and the emission is linked with it. The country's energy capacity is currently constituted by only 5% RE. The Renewable Energy Policy and the 7th Five-Year Plan has a target 10% of Renewable Energy (RE) i.e. 2000 MWh by 2020. Given the amount of waste generated in the country (see Session 6.3) of these proceedings, there is huge potential for converting waste to energy. This alternative energy source can also assist in the transition toward low-carbon urban development. To achieve this, the main needs are access to new technology and private sector investment. Currently, the UNDP & Global Environment Facility (GEF) are supporting low-carbon urban energy projects globally.

SM Mehedi Ahsan, Urban Climate Resilient Specialist from KfW; mentioned that the German government and KfW bank have made significant contributions to the development of Bangladesh by supporting all different levels, from the national to local. One of the new areas for private donors to explore involves long-term financial instruments to support community-level adaptation to address the challenge of climate migrants. As well, there is a need for investments in energy efficiency and renewable energy to facilitate mitigation of GHGs across the sectors of energy, transport and industry. Already, the country has solar home systems and irrigation pumps in rural areas and has approved a Green Climate Fund (GCF) project targeted in Khulna, Rajshahi, and Barisal to mainstream climate change concerns into infrastructure. Further progress will be achieved through the trust fund being set up by BRAC for climate migrants in urban areas. He sees potential for other development banks to work directly with cities to promote climate resilience.

Yunus Arikan (ICLEI) who joined over Skype, mentioned that South Asia is facing various climate hazards and challenges. His organization, ICLEI, is supporting the transparency, accountability and credibility of cities, towns and regions to tackle climate change, as the decision of the Paris Agreement includes all levels of society and government. For him, the Talanoa Dialogues are creating an opportunity to fix the NDCs and make them fit for the Paris Agreement by bridging sustainable, climate-resilient urban development and engaging all levels of government. He ended by restating the key expectations from COP24 for future climate action, which are: clarity, leadership, and collaboration.

Dr. Nurun Nahar, Deputy Chief, Planning Commission mentioned that Bangladesh's Planning Commission mainly works to develop plans and the annual development programme that finances the projects and programs of the Bangladesh government. Under these, climate change policy issues are being integrated into the planning and budgeting process, but in the 8th Five-Year plan and the country investment plan (2020), the issues will be more focused. He stated that the proper use of resources for those interventions needed. In spite of having limited resources, improved planning must be designed which does not need to wait for climate change fund to be released from the MoEFCC, and instead included in other ministerial budgets.

The local government representative from the Rajshahi City Corporation, Md Zannatul Ferdus, Mayor of the Singra Municipality, stated that climate change impacts are high in north Bengal, in particular, those on agriculture. Singra Municipality has taken steps towards improving resilience to these, with much help from ICLEI South Asia in renovating ponds, supporting eco mobile transport, and the creation of a Climate Change Action plan. If all municipalities receive solar street light from the government as per renewable energy policy, that will help both in saving energy and money. Md. Zulfikar Ali, Mayor of Mongla Port Municipality, mentioned that the Sundarbans are severely impacted by climate change. Currently, a new coal power plant is being set up near the Sundarbans that will affect the environment and fisheries. ICLEI South Asia has trained municipality

staff on climate change adaptation. However, abuse of funds is hampering the proper use of climate change funds which are meant to be used to improve drainage, roads, and building embankments in coastal belts, the latter of which must receive priority funding. Without taking proper actions regarding this matter, he stated it will not be possible for the next generation to face climate changes.

Soumya Chaturvedula, Deputy Director of ICLEI South Asia gave an introduction to the Urban LEDS II project and its launch in Bangladesh. She noted that urban energy use is projected to increase by 75-80% in 2030. In urban areas, new infrastructure and land use policies could reduce greenhouse gas emissions by 20-50% as of 2050. She also mentioned another five-year project called Urban LEDS II, where the objective is to reduce GHG emissions and the second phase of the project is focused on both adaptation and mitigation. For this, they will provide the technical assistance and financial instruments to come up with a comprehensive plan.

Md. Akteruzzaman of UN Habitat stated that there is need for a participatory approach in the urban planning process, highlighting that people's involvement is key for understanding the issues and implementing solutions. Solutions need to come from the ground level as that is where challenges are continuously unfolding. He additionally emphasized the need to account for the urban poor and include them in participatory processes. He posited that the problem is with unplanned urban development, which limits the success of interventions as projects are put forward haphazardly. Finally, he concluded noting the need to consider *all* risks associated with climate change (physical and social) for making city development initiatives migrant-friendly.

Participants reaffirmed:

- The need to focus on innovative solutions and mainstreaming climate concerns into other development projects;
- The need for an improved funding structure, including the supplementation of the national Climate Change Fund and revision of budgets

Key recommendations:

- Pursue low-carbon urban development by targeting emissions from the three major sectors: energy, industry, and transport;
- Bangladesh can possibly reduce at least 5% of its total emission by 2030s by targeting these three sectors given that the government receives international support in the form of technology, finance, and capacity building;
- National funding efforts must be complemented by with dealing with large-scale climate funds;
- Participatory planning, working with NGOs and Private sector

6.5 Fourth Plenary Session: Access to Social Security and Public Social Services for Urban Climate Migrants and Vulnerable People

Host/Co-sponsor: GIZ Bangladesh

Panelists:

Mr. Ulf Neupert, Team Leader, Urban Management to Internal Migration due to Climate Change (UMIMCC), GIZ

Mr. Khan Motaher Hossain, Deputy Director, Department of Social Services (DSS), Khulna

Mr. Kamruzzaman, Councillor, Rajshahi City Corporation

Mr. Md. Tazkin Ahmed, Mayor, Satkhira Pourashava

Mr. Rupan Kanti Shil, Additional Secretary, Ministry of Social Welfare (MoSW)

Chair and moderator: **Mr. Mostafa Quaium Khan**, Advisor, Bangladesh Urban Forum (BUF)

The chair Mr. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum (BUF) opened the session by stressing the significant number of people in Bangladesh being driven from their coastal homes by climatic stressors and forced to migrate to Dhaka. Most of these people end up in slums and squatter settlements, living in substandard conditions with very limited access to necessary facilities and services. There remains a crucial need for different actors, both from the government and non-government, to come together to address the issues involved.



Mr Ulf Neupert from GIZ talking about UMIMCC project during the conference

Following the chair's opening remarks, Mr. Ulf Neupert briefly introduced GIZ's Urban Management of Internal Migration Due to Climate Change (UMIMCC) programme, which is currently in its second phase. The programme intends to improve the living conditions of climate migrants in selected settlements in GIZ's partner cities through demand-oriented measures. Mr. Neupert referred to Bangladesh's National Social Security Strategy document, highlighting that to date, the national social security system in Bangladesh has largely been targeted at the needs of the rural population, while 30% of rural residents benefitting from social security, only 9% of the urban population receive similar support. A feasibility study conducted under the UMIMCC programme revealed that more than 90% of the identified climate migrants stated having never received any allowance from the Department of Social Services (DSS).

Under the UMIMCC programme, five workshops were conducted in different cities with Community Development Committee (CDC) members and communities to discuss the current level of support from DSS and to identify areas of improvement. A general lack of support from DSS was recognized, particularly for climate migrants. The bureaucratic nature of the agency also hinders the delivery of services to those who need them most. To address these issues, UMIMCC has been undertaking a number of interventions, including supporting the Ministry of Social Welfare (MoSW) to review existing social protection schemes to help identify gaps and ways in which support for the most vulnerable segments of the society can be prioritized. UMIMCC has also been delivering capacity development support to DSS and other Local Government Institutions (LGIs). Furthermore, UMIMCC has been working to establish a single information hub that will serve as the primary contact point and one-stop service centre for climate migrants and urban vulnerable population in Bangladesh. The information hub will provide information on social services offered by MoSW and will allow them to register for MoSW programs. In addition, the information hub will provide information on technical and vocational skills training opportunities for the urban poor.

Mr. Khan Motaher Hossain from Department of Social Services (DSS), Khulna presented, on the history and activity portfolio of DSS in Khulna city, providing a snapshot of DSS's different programs on social services. DSS has a wide array of programs targeted at different marginalized social groups and segments including old age persons, widows, persons with mental and physical disabilities, orphan children, hijras, and people engaged in indigenous professions. He described some of the elements of these social security programs including loan sizes, interest rates, and repayment periods. Very recently, DSS has taken up a special social security scheme which aims to provide financial support to those suffering from cancer, liver cirrhosis and other life-threatening illnesses. In addition, a special child security programme has been establishing government run foster-homes where orphans and abandoned children are raised till the age of 6 and then adopted into other foster homes.

Mr. Kamruzzaman from Rajshahi City gave insight into the services provided by the DSS in his municipality, including allowances for old aged people and widows. The Rajshahi City Corporation, in collaboration with GIZ, also provides free primary education to 22 primary schools in the city. However, he acknowledged that the amount of allowances provided is quite insubstantial and its equitable distribution is hindered by many challenges. He recommended that in order to enhance the effectiveness of social security schemes, it is important for the DSS to coordinate with urban local bodies, such as the mayors and councilors of respective municipalities and city corporations, on their service delivery and beneficiary selection.

Mr. Md. Tazkin Ahmed, Mayor, Satkhira Pourashava began by emphasizing the present state of low socioeconomic development in Satkhira, stating that the city is yet to become a major hub for climate migrants. However, the city has been undertaking measures of its own volition to support vulnerable social groups. The 'Maa o Shishu' hospital is presently being established which intends to provide free healthcare to support the citizens of Satkhira. He then highlighted the lack of clean drinking water as a major problem for the city, particularly for the urban poor. Mr. Ahmed also referred to the high levels of nepotism and bias involved in beneficiary selection as key drivers of the ineffectiveness of social service delivery in Bangladesh.

Mr. Rupan Kanti Shil, Additional Secretary, MoSW acknowledged the support which the MoSW has been receiving from GIZ's UMIMCC programme on climate migrants. He spoke about the initiatives undertaken by MoSW to assist the urban poor and highlighted some of their programs that help persons with mental and physical disabilities. He ended his remarks stating that as climate change worsens, an increasing number of people will be displaced from rural coastal areas of the country and forced to move to nearby urban centres.

Key recommendations

- The Department of Social Services should explore the possibility of developing a database on climate induced migrants, so that social security schemes can be designed accordingly and made more compatible with the work done by private organizations and local governments;
- To curb the probability of urban youth, particularly those that are poor, turning to drugs and crime, it might be beneficial to organize technical and vocational skills training;
- Establishing an independent monitoring body could help address the issue to nepotism and bias in the selection of beneficiaries for social security schemes;
- To more effectively develop urban policy, a focal ministry and department should be created;
- In order to ensure and enhance access to social security for climate migrants and the urban poor in general, there needs to be significant commitment from the government as well as NGOs and civil society actors in the country in order to ensure the effectiveness of these programmes.

6.6 Parallel Session PSB1: Role of Stakeholders in Making Migrant – Friendly Cities and Towns

Host/Co-sponsor: GIZ Bangladesh

Keynote Speaker: Mr. Khonker Taskin Anmol, PhD Candidate, University of Canterbury, New Zealand
Professor Janinka Greenwood, University of Canterbury, New Zealand

Panelists: Mr. Tazkin Ahmed, Mayor, Satkhira Municipality
Mr. Md Zannatul Ferdous, Mayor, Singra Municipality

Session Chair: Mr. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum (BUF)

The chair Mr. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum (BUF) opened the session with a brief on climate change-induced migration and how it can be tackled through collaborative action by different stakeholders. According to the chair, around 40 million people will be affected by climate change in South Asia, 10 million of which will be in Bangladesh. Loss and damage in this context will occur on a larger scale in this country and it will be up to the local people to handle the situation. Afterwards, the chair acknowledged GIZ's role in capacitating local disadvantaged people through training to face natural disasters.



Keynote presentation by Professor Janinka Greenwood

Professor Janinka Greenwood, University of Canterbury, NZ, presented her research on “Factors leading to success – developing a theoretical framework” regarding the process and flow of projects at the local level. The presenter opened that success is multi-faceted and it can be achieved by engaging everyone. It is crucial to identify how many people are affected by climate change, whether there is enough funding for addressing impacts, and how sustainable are the changes being proposed. She suggested that more research is needed to understand the cycle of climate change-induced migration by investigating the problem, planning for the right actions and critically reflecting on what has been done. Five factors which she found lead to success were identified:

1. **Support from the top** – All NGOs, local governments and local communities must work together. This requires an on-going consultation process which consists of integrated ideas, opinions and dialogues. The benefit of this is that the beneficiaries of the project can observe what is being done and how things are changing.
2. **Local relevance** – Importing expertise from abroad for consultation must be transferred into the local society's framework of thinking and doing in order to ensure local relevance of interventions. On this note, project developers must consider what opportunity there is for the local community to engage, what network exists and how far locals are with communication among themselves.
3. **Co-learning** – The success of this depends on recognising what each party already knows, allowing a space to learn from mistakes and to also have enough space for critical reflection. The collaborative attitude underpinning this needs solid communication among the beneficiaries who have different socio-economic educational backgrounds. It is necessary to define the power positions of those involved, in order to allow enough room for learning.
4. **Knowledge** – A sound knowledge base from practical experience and research from both field and literature is needed. This should be complemented by knowledge of market and social values to help in developing local leadership, valuing local knowledge and ultimately planning for implementation.
5. **Actively removing barriers** – The benefit of any project will lie in how actively the local community engages in continuing advocacy and mentoring others after the project ends.

Khonker Taskin Anmol, PhD candidate, University of Canterbury, NZ gave his presentation titled “Success Factors of Urban Management of Internal Migration due to Climate Change (UMIMCC) Project” talked about the active involvement of the local community and different organisations in the UMIMCC project in Bangladesh. The project by GIZ worked for increasing livelihoods skills, improving infrastructures in the slum area, increasing

work opportunities and establishing a healthy environment in the slums. To achieve maximum success, the project explored a collaborative approach of engagement of community people, local government, slum dwellers and other NGOs working in the same area.

The involvement of Underprivileged Children Education Programme (UCEP) and Caritas was also mentioned. UCEP ran trainings to make local community people more effective in the job market; providing skilled and experienced trainers who supported the trainees for job placement. At the same time, Caritas trained the local inhabitants of the slums and also helped with infrastructure development through ensuring the quality of housing design and materials used. The prime objective of the project was to empower the slum dwellers with livelihood training and to this end, the presenter emphasized that it was a success. He qualified this of the success by pointing to the number of trainees from greater Khulna who had been placed in the job sector and by indicating that the project has few drop-outs despite lack of cash payment. The project success also depended on the active involvement of local influential people and the local government. Some recommendation for future projects and further iterations of this project include extended training and follow-up activities in the area, establishing day care centres and breastfeeding places so the participation of women is ensured, and creating job opportunities such as nursing, paramedic positions, physiotherapy, and driving for the local population.

Open discussion:

The Mayor of Satkhira commented that one of the major challenges for migrant-friendly cities is to offer good living conditions. Unless this is secured there will be no prospect of establishing migrant-friendly cities. At the same time, other advantages such as small loan schemes and investing in labour through trainings will provide benefits to newcomers and the economy.

The Mayor of Sirajganj Municipality provided an insight on slum development which involves the city corporation. His city has taken into account climate change and the SDGs in its interventions, and involved the support of GIZ.



Audience in the PSB1 session

When talking about the GIZ project, it was mentioned that the community is the major source of success behind these activities. GIZ will focus on building capacity of the community people whereas other partner organisations focus on maintaining transparency and accountability. GIZ has created 80% of the job placement opportunities for the local community where it works. However, it was made clear that only the municipal authority of the city corporation can sustain the project after NGOs leave. This – longevity and sustainability of projects - is one area all stakeholders need to work on.

Key Recommendations:

- Engage everyone in the community to create successful climate-resilient migrant-friendly cities; without a combined effort it will be impossible.
- It is the job of the city corporations/municipalities to carry on the success of the development projects started under NGOs; only the local government and the community can help in sustaining such effort.

- A sound knowledge base from practical experience and research from both field and literature is needed to design urban interventions; secondary knowledge of market and social values will also be beneficial for properly addressing and working with community needs.

6.7 Parallel Session PSB2: Knowledge Brokering to Promote Climate Resilience Through Low Carbon Development in Urban Areas

Host/Co-sponsor: ICLEI South Asia

Introduction to CDKN

KA Project: **Ms. Shehnaaz Moosa**, Director, Climate & Development Knowledge Network (CDKN)

Panelists/Speakers: **Dr. Saleemul Huq**, Director, ICCCAD
Mr. Munjurul Hannan Khan, Additional Secretary, Ministry of Environment and Forests (MoEF)
Mr. Sarder Shafiqul Alam, Programme Coordinator, Urban Climate Change, ICCCAD
Dr. Nurun Nahar, Deputy Project Director, Programming Division, Planning Commission
Ms. Shaila Shahid, Senior Programme Coordinator, Gender, ICCCAD
Mr. Enamul Haq, GIZ

Chair and moderator: **Mr. Emani Kumar**, Executive Director, ICLEI South Asia

Mr. Emani Kumar, Executive Director of ICLEI South Asia opened the session welcoming everyone and introduced the presenters and speakers for the session. He mentioned the session objective was to launch the Climate & Development Knowledge Network's (CDKN) new programme and to learn what had happened in phase-1 of CDKN and what we can do in phase-2 in the future. He also mentioned ICCCAD can be the potential partner for the new phases of CDKN and in helping with building Bangladesh's NDC.

Ms. Shehnaaz Moosa, Director, CDKN began by expressing her pleasure to be able to launch the programme at a platform such as the National Conference on Urban Resilience to Climate Change. She provided an overview of the program's mission and mentioned the CDKN mission is to design and develop research for climate-compatible knowledge in order to support the public and private sectors, NGOs and actors at the local level. CDKN's aim is to link the regional and global level to help the poorest and most

vulnerable face climate change by supporting decision-makers in designing and delivering climate-compatible development, CDKN currently does so by working alongside four affiliated organizations across three continents. The new phase from 2018-2021 is based on knowledge, engagement and peer learning. Valued at USD 6.7 million over these years, the programme will work in 10 countries throughout Asia, Africa and South America and will aim to find ways to disseminate needs-targeted knowledge to achieve its desired impact. A further key focus of the programme is to promote and facilitate learning among peer groups and countries.

Dr. Saleemul Huq mentioned that CDKN Phase-1 was very interesting. The phase consisted mostly of research programmes including 3 broad components: [1]: developing country case studies in Africa and Latin America and



Shehnaaz Moosa from CDKN giving an overview of CDKN phase 2

run out the programmes in least developed countries; [2]: feed the information to LDC, developing countries and small island groups; and [3]: research and engagement of stakeholders.

In Bangladesh, the CDKN project focused on:

- Collecting and identifying the different issues of loss and damage in the context of Bangladesh,
- Making the country more capable to engage in global negotiations, and
- Informing developed countries so that they can initiate the funding process.

Opportunities in the new phase:

- Peer learning and knowledge sharing,
- Involvement of local universities, and
- Regular publicity, for example, through the Gobeshona platform where monthly seminars are arranged for PhD fellows to attend.

He recommended CDKN to place a special emphasis on peer learning in their new programme. He briefly spoke about ICCAD's Gobeshona program, which has been acting as a key player of knowledge management on climate change in Bangladesh and referred to the Gobeshona web portal as well as the monthly seminars. He highlighted the Science and Policy Dialogue Day at the annual Gobeshona conference which provides a platform for researchers to share knowledge and experiences with policymakers in the country.

Mr. Munjurul Hannan Khan, Additional Secretary, MoEF&CC shared his experiences with CDKN during the first phase, during which he led a CDKN-funded research study on climate-induced migration. He highlighted that bridging the gap between researchers and policymakers continues to be a challenge in Bangladesh. From the policy side, it was very difficult to use available data. Oftentimes, political incentives and motives hinder research findings being translated into policy action. He suggested CDKN explore the gaps and ensure better engagement between the policy makers and researchers, as well as minimize the gap between knowledge and migrants. He also recommended properly addressing the problems of cities, and addressing the SDGs and climate goals to increase our own development. For both of these, software-based monitoring and evaluation of projects in the Planning Commission is needed.



Group photo of panelists during the launching of CDKN programme

For both of these, software-based monitoring and evaluation of projects in the Planning Commission is needed.

Mr. Khan finally suggested that CDKN invest in building capacity of national organizations so that they are better able to design bankable projects. He concluded by sharing the Government of Bangladesh's recent initiative in setting up a Climate Change and Environmental Research Centre – which is expected to be free of the bureaucratic red tape that tends to exist within government agencies, and should serve as an open platform for GoB, NGOs, researchers, and academia to come together to generate and share knowledge.

Mr. Sarder Shafiqul Alam, Coordinator, ICCAD also shared his experience of working with CDKN during Phase-1. A large component of the work was drawing knowledge from grassroots communities to identify community-based adaptation measures. According to him, the focus during the current phase should be to understand what type of knowledge we need to generate and identify effective ways of acquiring and disseminating this among

those who need it. In the phase-1 of CDKN, the project developed climate change knowledge gathering methodology. Mr. Alam stated that such types of climate knowledge used both globally and nationally should be disseminated.

Dr. Nurun Nahar, Deputy Project Director, Planning Commission highlighted that the need for enhanced access to knowledge and information extends across all levels and departments of the government. She stated that research and knowledge generation is a priority for the Government of Bangladesh (GoB) and constitutes a vital component of the country's development planning processes. Preparation of national policies, plans and strategies draw heavily from primary research. She shared some of the small-scale research studies commissioned by GoB to support the development of national plans and strategies, where the government has made significant investment in research and knowledge generation. CDKN may also play a major role in aggregating climate development knowledge which can be incorporated in the Annual Development Plan (ADP) of the Planning Commission. This knowledge could also influence resource planning and other activities of the Planning Commission. The issue of gender has already been incorporated in the 7th Five Year Plan. She stated that the private sector can be more focused on climate change issues, and that under CDKN's new phase, research and partnerships for good knowledge generation and management are important, both at the national and global level.

Ms. Shaila Shahid, Senior Programme Coordinator, Gender, ICCCAD suggested that one of the key initiatives that CDKN can undertake is identifying ways in which to increase the available information and delivered this to groups of women, as women are subjected to social barriers that restrict their access to knowledge (e.g. early warning systems because of their confinement within the home). On this note, she emphasized the importance of social group inclusiveness in climate interventions and of the research needed to reduce these gaps. Under the exploratory CDKN phase, women's labour groups should be considered and there should be a particular goal to achieve the inclusion target. She also recommended CDKN explore the linkage between climate change and women's health.

Mr Enamul Haq, GIZ shared some of the challenges with climate-induced disasters at the city level. At the city level, particularly within mayors, councilors and other officials, there seems to be significant knowledge and skill gaps in terms of understanding climate change and its impacts. Although people could not express these problems in climate terms, they were aware of the issues. This lack of knowledge often leads to undertaking ineffective measures to address climate change-related problems. For instance, officials do not know how to incorporate climate issues into their municipal plans, and local coordination committees and ward coordination committees are not functioning well. Cities also have developed master plans without considering the implications of climate change. Although cities have standing committees which can act as purveyors of knowledge, capacity development for city-level staff is crucial so that they can take into consideration climate-proofing of infrastructure. The Municipal Association of Bangladesh (MAB) could be involved in this process. As in many other areas of urban work, there is a need for more finance at the city level. The current research output should be to incorporate both the policy and municipal decision makers and integrated actions with the local level planning.

Open Discussion:

- In the discussion session that followed, different ideas about how local people and grassroots communities can get more actively engaged with CDKN's work were discussed.

- Involvement of all levels of people and sharing information should be facilitated through a friendly approach; cluster to cluster learning was seen as important for peer learning approach.
- The social inclusion of women is important, but also of indigenous communities, particularly those living in the Chittagong Hill Tracts (CHT), for knowledge management and generation processes.
- Chittagong Hills Tract people should be considered more in national policies and line ministries should work on ground level. This connects to a concern on traditional and indigenous knowledge becoming integrated into mainstream climate change knowledge.
- Md. Afzal Hossain pointed out the current BCCSAP 2009 is being updated but the sub-national level has not been prioritised. It needs to identify and incorporate the adaptation policies which the local people are adopting on their own. Also identified a need to develop an Enterprise Resource Planning (ERP) based platform for climate fund accreditation. He stated that Palli Karma Shahayak Foundation (PKSF) should allocate their funds equitably across all levels of society. He reiterated that climate change mainstreaming is needed in municipal-level projects and that the adaptation capacity of women must be enhanced at the country level. He further requested open access into the Green Climate Fund application process.

Key recommendations:

- Build awareness and capacity of urban officials such as mayors and councilors to help them understand the implications of climate change for urban systems and overcome the gap in knowledge which leads to undertaking maladaptive and ineffective measures to address urban climate change problems;
- Bridge the gap between researchers and policymakers for a smooth development planning process;
- Emphasize peer learning in the current phase of CDKN's new program.
- Consideration of vulnerable groups in CDKN's next phase, including women and indigenous groups

6.8 Parallel Session PSC1: End Product Diversification – A Pathway for Inclusive Faecal Waste Management

Host/Co-sponsor: Faecal Sludge Management (FSM) Network

Moderator: Mr. Uttam Kumar Saha, Strategic Lead – Urban and Energy, Practical Action

Discussant: Dr. Samir Kumar Sarkar, Director, Farm Technology, Irrigation and Water Management, Rural Development Academy (RDA)

Mr. A K Azad, Deputy Director (Law), Department of Environment (DoE)

Dr. Mohammad Jahangir Alam, Professor, Department of Agribusiness and Marketing, and Director, Institute of Agribusiness and Development Studies, Bangladesh Agricultural University, Mymensingh

Dr. Kawsar Uddin Ahammad, Principal Scientific Officer, On-farm Research Division, Bangladesh Agricultural Research Institute (BARI)

Mr. Irfan Shakil, recently completed Masters from Urban & Regional Planning Discipline, Khulna University

Session Chair: Dr. Rowshan Mamtaz, Professor, Department of Civil Engineering, BUET

Dr. Samir Kumar Sarkar focused on a project that started in 2009 entitled 'Asset Based Community Development (ABCD)'. Under this project, the RDA worked on the waste management of livestock, taking into consideration their impacts on environment. In his discussion, he emphasized the progress that they have made in waste

management over ten years. By categorizing these wastes as resources within the community, he drew attention to topics like the importance of community approaches and ‘multilayer’ cattle care. They rear the cows in a multilayered building and then collect cow excrement through underground piping systems, using gravitational force to finally transfer those wastes to a biogas plant. He highlighted that surprisingly the income to farmers from selling waste is often higher than that of selling milk.

Mr. A K Azad, Deputy Director, DoE explicated how safe management of faecal sludge is a big challenge for Bangladesh, especially for the municipalities and cities to sustain outstanding achievement in the sanitation sector. He stated that the GoB put special attention on FSM in its recently developed Water and Sanitation Strategy 2014, but there exists gaps on how to manage the end products in a sustainable way. He also mentioned that there is no collaboration among researchers and policy makers, and usually politicians do not show much interest in waste management. Hence, in addition to making the people aware of this issue, we also need to make the politicians and policy makers aware of the significance of FSM. He emphasized piloting all probable options for converting waste to resources in our country and to subsequently share the best practices. He concluded his speech by raising the need to empower the local government and bring moderate changes in the laws and regulations of the country in order to provide more freedom to the mayors and sub-district chairmen to take action on climate and waste management.



Panelists discussing on Feacal Sludge Management

When asked about the market aspects of the end products of the FSM chain, Dr. Mohammad Jahangir Alam, (informed the audience that there are many options for using this, such as rooftop gardening, flower industries, aquaculture, and agroforestry. However, he stated that social stigma and possible threats to human health create a serious hindrance to the use of sludge in food crops or other applications. This reluctance of common people for using faecal-based fertilizer is mainly responsible for its lack of market profitability. Though the young entrepreneurs are willing to use them, older farmers are not at all interested in using them. Therefore, there is a need for providing trainings on the benefits and uses of FSM end products. In this regard, he recommended that the government and private sector come forward to increase awareness. Finally, he recommended that organic fertilizer be acknowledged in the fertilizer policy.

While discussing the potential and significance of faecal sludge, Dr Kawsar Uddin Ahammad emphasized using organic fertilizer to maintain the pH balance of soil. He shared his research findings on the positive impact of using organic fertilized on different types of crops, explaining that in Bangladesh, most soil contains a very small amount of organic matter (less than 2%, and sometimes less than 1%). As a result, his institute initiated a pilot project for enhancing the quality of soil by using faecal matter as compost. This proved to be a success for the soil, and farmers also derived plentiful benefits. In response, many farmers became highly enthusiastic about using this input in their cropping activities, but not for the food production. He concluded his speech by requesting all participants to work towards eradicating the social stigma around FSM end products and to make people aware of their benefits.

Finally, Dr Rowshan Mamta, summarized the key points and opined that together we have come a long way in dealing with FSM waste, but still we have long a way to go. She acknowledged the important roles the private

sector can play in technological innovation, and that more research is needed to take our work to the next level. She mentioned that her organization (BUET) is already engaged in the process of advancing applications and assured that International Training Network (ITN) –BUET will provide all necessary support in technological innovation and research conduction.

Open Discussion:

Another discussant then emphasized the challenges NGOs usually face while working with FSM, sharing his experience with Shokhipur FSM project of WaterAid BD. In their FSM project, they collect waste and sludge from municipalities, treating almost 1200 metric tons sludge per year, and make compost fertilizer using these biodegradable wastes which local farmers buy at 30 taka/kg. In this process, WaterAid's main challenge is the efficient removal of pathogens and its higher treatment cost. He emphasized that, without considering environmental costs, it is not possible to make FSM model into a profitable business model. He added that in an average in Bangladesh municipality, 23,000 metric tons of waste are generated every day, of which 60-70% is organic and can be efficiently used as organic manure. By repurposing this material, methane emissions can be controlled and Bangladesh can begin exploring a carbon trading business within the waste sector.

Key recommendations:

- Consider the technical and management knowledge and skills gap on how to properly manage the treated sludge;
- Encourage more institutional research on an inclusive FSM model and promote best options to ensure their treatment facilities function accordingly;
- Break barriers and social stigma on the use of treated sludge to enrich the agriculture sector of Bangladesh;
- Proactively engage the youth in this sector and work for their capacity building;
- Develop a sustainable business model for the total supply chain and value chain of the end products, which could be a solution to the existing challenges of the faecal sludge management system;
- The government and private sector should come forward to help increase awareness about the benefits of FSM products, and organic fertilizer should be acknowledged in the agriculture policy

6.9 Parallel Session PSC2: Building Climate-Resilient, Migrant-Friendly Cities and Towns in Bangladesh

Host/Co-sponsor: ICCCAD

Keynote Speaker: **Mr. Sarder Shafiqul Alam**, Coordinator, Urban Climate Change of ICCCAD and Country Coordinator of Asian Cities Climate Change Resilience Network in Bangladesh.

Panelists : **Dr. Neelopal Adri**, Lecturer, Department of Urban and Regional Planning, BUET
Mr. Md. Zakir Hossain, Founder and Chief, Krishoker Sor (Farmers' Voice)

Discussant: **Dr. Saleemul Huq**, Director, ICCCAD
Professor Abul Kalam Azad, Department of Urban and Regional Planning, JU and President of Bangladesh Institute of Planners (BIP)

Session Chair: **Professor Nazrul Islam**, Chairman, Centre for Urban Studies (CUS), Dhaka.

Sarder Shafiqul Alam, Coordinator, ICCCAD gave the keynote presentation that focused on preparing secondary cities to accommodate climate migrants. Climate migration is increasing rapidly within the country, creating pressure on the major cities (mainly the most densely populated city, Dhaka). This in turn creates more informal settlements, a higher demand for housing and associated infrastructure, and accelerates damages to the urban ecosystem. In order to identify a mechanism to solve this issue, it is important to

shift the huge influx of displaced population to secondary cities. He mentioned that creating economic opportunities and implementing multi-stakeholder involvement may be key in addressing the issue.



Session chair, panelists and discussants in the session

Dr. Neelopal Adri, Lecturer, DURP, BUET mentioned that the climate-induced migrants in Bangladesh have limited knowledge about the risks and hazards of the destination they seek. Due to their inadequate knowledge, these migrants often end up settling in a city characterized by rapid urbanization, insufficient water and sanitation systems. They often migrate without arranging accommodation and job security, causing extra financial burden. Hence, there is a need for migrant rehabilitation and provision of job opportunities. On this note, she suggested that planning the cities to be settled is extremely important and urgent.

Mr. Zakir Hossain, Founder and Chief, Krishoker Sor introduced the audience to his initiative, which focuses on personal capacities and knowledge to save and protect the ecosystem. He initiated the project by encouraging tree plantation and taking care of the existing green areas in Bangladesh, and through encouraging community awareness.

Dr. Huq, Director, ICCCAD mentioned the need for information and study on climate migrants, their condition of living in origins and destinations, the causes behind migration and the factors that lead them to choose particular cities. The main focus should be on creating climate-resilient migrant-friendly cities, which would let migrants travel to alternative cities instead of Dhaka. He suggested also, that it is essential to change the psychology of the host population towards the migrating population and to help the migrating population find a path towards the citizenship within new communities.

Professor Abul Kalam Azad, President, BIP mentioned that since natural disasters occur every year and the severity of them increases day by day, it is not possible to address the migration issue by creating economic opportunity in the origins. Instead, secondary cities need to plan for incorporating a larger population, which will require more research, resources, and the cooperation of academia and professionals.

Professor Nazrul Islam, chairman, Centre for Urban Studies Dhaka emphasized the need for building migrant friendly and climate resilient cities and towns in Bangladesh. He appreciated the organizers as well as the panellists for arranging a discussion on this important topic. He concluded the session with optimism about creating pro poor urban centres in Bangladesh.

Open discussion:

- The discussants expressed the need for information at the origin of migrations (i.e. in places hit by disasters), so that the survivors of climatic disasters can make better decisions regarding which place to shift to;
- They also suggested building the local area in such a manner that would reduce the need for people to migrate;
- Participants voted the thought that If secondary cities had better opportunities, it would not be a requirement for these people to migrate to a densely populated city like Dhaka;
- Emphasis was finally given to the decentralization of major cities (to create more accessible options to migrants).

Key Recommendations:

- Identify job creation and service providing mechanisms in order to build migrant friendly secondary cities;
- Proper land use management is needed to reduce the impacts of climatic hazards in urban rural areas;
- There is a need to Establish better transport network and expert knowledge production to properly disperse displaced populations, and to decentralize people from densely populated big cities of the country.
- More self-sufficient growth centres all over Bangladesh could better support the new migrants.
- City plans must incorporate more research and resources on issues of climate resilience and migrant-friendliness.

6.10 Fifth Plenary Session: Sustainable Consumption and Production, Fashion Industry and Urban Resilience to Climate Change, Connecting the Dots for Sustainable Solutions

Host/Co-sponsor: Action Aid Bangladesh in Partnership with University of Liberal Arts Bangladesh and Fashion Revolution

Chair and Moderator: **Ms. Farah Kabir**, Country Director, Action Aid Bangladesh

Keynote Speaker: **Mr. Tanjir Hossain**, Lead- Resilience and Climate Justice, ActionAid Bangladesh

Panellists: **Dr. Mohidus Samad Khan**, Assistant Professor in the Department of Chemical Engineering, BUET

Ms. Nawshin Khair, Managing Director, Aranya and Country Coordinator, Fashion Revolution Bangladesh

Dr. Samiya Ahmed Selim, Associate Professor, University of Liberal Arts Bangladesh (ULAB) and Director of Centre for Sustainable Development

Ms. Farah Kabir, Country Director, ActionAid Bangladesh opened the session with a question for the audience regarding the connection between the fashion industry and sustainable consumption and production. With many opinions focusing on pollution, toxic effluent, waste management from the audience, the chair concluded that the fashion industry can play a critical role in attaining Sustainable Development Goal 12.



Panelists discussion in the fifth plenary session

Mr. Tanjir Hossain, Lead- Resilience and Climate Justice, ActionAid introduced the focus of ActionAid resilience activities particularly what it means to people, human rights, defining vulnerability, and the shocks and stresses due to the cyclones and floods that affect people's livelihoods. Transformations and institutional systems are also focus areas of the organization. In the keynote presentation he revealed that the fashion industry is contributing to 20% of global water waste, while apparel industry emits 10% of global carbon emissions. With more than 4500+ garment factories currently operating in Bangladesh, Dhaka's tanneries alone discharge nearly 22,000 cubic litres of toxic effluent daily into the Buriganga River.

Mr. Hossain provided a brief overview on the fashion industry and climate change

- The fashion industry is estimated to be worth 3 trillion USD
- Fashion industry is growing fast in urban centres
- A lot of production is from cotton, which covers 2.4% of global cropland
- The industry increases global water requirements by 20%
- Finally, the fashion industry emits 10% of global carbon emissions

The population in Dhaka is growing by millions, which is in turn contributing to pollution in the city and exposing other issues. If pollution management is not done well, the problems will increase eventually. Climate change issues are not only affecting our generation, but also the upcoming generations. For instance, many of the new-born babies have been detected with respiratory problems due to the air quality situation in Dhaka city.

In reference to the presentation, the chair requested the discussants to share their opinions, current initiatives and challenges in achieving SDG12. During open discussion concerns were raised by audience on:

- Clothing has multidimensional implications on climate change due to chemicals usage.
- Worrying amount of clothes brought by the Rohingyas and disposal of a large amount of these.
- The need to rethink what we need and how much is the requirement; the waste of clothes will add to current pollution.
- The younger generation comprehend the issue and are taking steps to be sustainable in daily life.

Dr. Mohidus Samad Khan, Assistant Professor in the Department of Chemical Engineering, BUET stated that there is an absence of updated data in terms of pollution load related to the amount and type of chemicals involved in the fashion industry. These limit us from establishing projections about environmental impacts for the future and effectively taking initiatives in the present. He added that it is important to understand where we are now and where we will be in the next 5 years based on economic growth in order to plan and act on possible pollution scenarios. We are all involved with the industry; to prepare for future impacts, we must think ahead and act with the future in mind.

Ms. Nawshin Khair, Managing Director, Aranya and Country Coordinator, Fashion Revolution Bangladesh shared her experience with using natural dye, which is quite expensive. She found it very challenging sometimes where the cost of production gets higher reducing profit margin. The mind-set of buyers needs to have a positive change towards sustainable fashion and use of natural dye.

Dr. Samiya Selim, Associate Professor, ULAB focused on the social aspect of fashion. She emphasised how clothes can be reused and integrated into the circular economy, and stressed the importance of technology and research in this field. She also spoke about how fashion can become more resilient and sustainable with efficiency of resource inputs, in particular, but using fewer (if any) natural resources.

Open discussion:

The discussion later covered a wide range of points including how marketing of products and the lifestyle of people have consequences, and related to both of these, understanding how much a person needs. With regards to policies and implementation of policies, the audience agreed that building awareness is critical to changing lifestyles towards sustainable ones. The session ended with consensus that there is still a lot to be done. While the people, institutions and industries are taking actions to reduce negative impacts on environment, it is critical to have informed and collective actions in a coordinated way.

In conclusion, the chair highlighted that fashion is not static, rather it changes with time. There is still time to develop more sustainable clothing habits and to come up with ideas to tackle pollution; the work simply needs to be done in cooperation with different sectors.

Key Recommendations:

- We need to rethink the amount of apparel that we consume, as the waste of clothes adds to global pollution throughout the lifecycle of products
- The mind-set of buyers needs to be positively changed towards sustainable fashion processes, including the use of natural dye.

6.11 Sixth Plenary Session: Student Involvement in Urban Climate Change: Challenges & Possible Solutions

Host/Co-Sponsor: ICCCAD

Discussant: **Mr. Shohail Bin Saifullah**, Student Independent University, Bangladesh (IUB)
Ms. Nishat Tasnim, Student, North South University (NSU)
Ms. Sumaiya Shudha, Student, Jahangirnagar University (JU)
Ms. Jennifer Khadim, Coordinator, ICCCAD Youth Programme
Mr. Saqib Huq, Coordinator, ICCCAD Climate Finance Programme

Session Chair: **Dr. Saleemul Huq**, Director of the International Centre for Climate Change & Development (ICCCAD)

The session was opened with the introductory speech by Dr. Saleemul Huq. In his speech, he mentioned that in connection to climate change, the older generation is creating problems and leaving them for the younger generation to solve. Migration due to climate change is going to be major concern in the coming years and 10 million climate migrants are expected in Dhaka in the next 15 years which will put huge pressure on the city. Can they be moved to the cities other than Dhaka? How can we make the other cities not only climate-resilient but also migrant-friendly? Aside from economic reasons, the quest for higher education

is another pull factor for people moving to Dhaka as most of the best educational institutions are located in this city. Therefore, improving services like quality education in the other cities might ease the pressure on Dhaka.



Dr. Huq also focused on the aspect of 'awareness-raising' amongst the youth and said, there are many ways of doing it and they mainly focus on the problems rather than the solutions. Contrary to the problems, solutions are disaggregated different stakeholders have different roles to play in that regard. As the university students are more or less aware of the problems of climate change ICCCAD looks for the solutions and uses platforms like Gobeshona to share them. ICCCAD's Youth Programme also provides a way for them to get engaged.

Dr Saleemul Huq giving his speech at the ICCCAD youth session

Mr. Saifullah, Student, IUB briefly talked about the activities of ICCCAD's youth programme. He emphasized on the importance of providing students with Bangladesh specific knowledge. He underlined the necessity of conveying to the youth the message that there is no difference between men and women, everyone in the family needs to work together irrespective of gender, when disaster hits.

The Ms. Tasnim Student, NSU mentioned that despite having many ideas students face obstacles implementing them. While talking about the challenges, he mentioned funding as a major one. Sponsor's interest rather than the project's objective comes first. The subject in which the student is enrolled is also taken into account. Moreover, the students in most cases don't know how to implement their ideas and where to get the support from. He also briefed about the activities of Green Planet club based at IUB.

Ms. Khadim, Coordinator, ICCCAD and Ms. Sumaiya Shudha, Student, JU highlighted students' clubs in their respective universities, added that, there is lack of intra and inter university collaboration among different clubs.

When Mr. Saqib, Coordinator, ICCCAD asked about the topics that students are interested in, they replied that the perspectives of problems and the interests of the students are area-specific, e.g. salinity in the coasts, drought in the northwest. Students from the urban areas are more concerned about the international issues whereas they should look into the local and the national ones first. Moreover, the ideas generated by females are often not taken seriously.

Most of the discussion revolved around the issues related to the availability of and the difficulties in obtaining funding. Lack of knowledge of the students about the administrative structure of the government also keeps them from participating at the policy level, as one of the discussants mentioned.

Questions and suggestions that came out during the discussion include but are not limited to are:

- If the students want to reach the community, communication mechanism and word choice is an important factors
- The issue of CSR funds could come up in the discussion
- How the underprivileged students can get involved in ICCCAD's youth programme
- Why so much talk about funding, where has the volunteerism culture gone?
- Produce student leaders from the indigenous communities

The discussants responded, communication mechanism is a problem in reaching the community but friendly attitude can cover that up. Volunteerism is still there, but is difficult in the face of so much stress in urban life and there should be certain amount of incentive.

Key recommendations:

- Funding is important but don't sit back if it's not there. Plan 'A' should be what can be done without funding, and what can be done with it should be plan 'B'
- Learning should come first
- Networking is crucial in getting involved

The chair suggested the audience to follow what goes on in the upcoming COP24 regarding the topic of individuals interest.

6.12 Parallel Session PSD1: Girls Jeopardy in Changing Urban Climate

Host/Co-sponsor: Plan International Bangladesh & SEEP

Keynote Speaker: Dr. Sharmind Neelormi, Professor, Jahangirnagar University

Panelist: Ms. Nuzhat Imam, UNDP

Dr. Md. Khalequzzaman, Assistant Professor, Bangabandhu Sheikh Mujib Medical University (BSMMU)

Designated

Discussants: Md. Anowar Hossain Bhuyan, Slum Development Officer, Dhaka North City Corporation (DNCC)

Ms. Mukta Akter, Female Representative from Informal settlement, Ward No 02 Mirpur, Dhaka

Mr. Sirajul Islam, Chief Town Planner, Dhaka South City Corporation (DSCC)

Ms. Lovely Chowdhury, (Zone 5) Councilor – DSCC

Guest of Honor: Dr. Saleemul Huq, Director, International Centre for Climate Change and Development (ICCCAD)

Session Chair: Mr. Imamul Azam Shahi, Head of Disaster Risk Management and Climate Change, Plan International Bangladesh

The session was opened after the introductory speech by the session chair Mr. Imamul Azam Shahi, Head of Disaster Risk Management and Climate Change, Plan International Bangladesh who mentioned that the session focus was on sharing the urban climate change practices and experiences of vulnerable women, girls and children. He expected a guideline by the session end that can be shared with different organizations.

He was followed by a video clip which exposed the recent condition of a slum near Dhaka Match Factory in Dhaka. The slum environment is damaged by overpopulation, lack of awareness, and improper waste dumping.

After the video, Dr. Sharmind Neelormi, presented her research on Sunamganj, Rangpur, Khulna and Gazipur from 2017. In this presentation, she illustrated that people are mindful about the exposure of rural areas, but not so much about urban area vulnerability. In addition, she mentioned the impacts of monsoon rain on the health and education of women in municipal areas were seldom portrayed. Similarly, public are almost solely concerned with visible impact, as a result, psychosocial trauma is ignored, particularly in the case of both children and women. There is a need to ensure good governance within at all relevant institutions for reducing the vulnerability of girls, women and children.

After the keynote presentation, Ms. Mukta Akter, Female Representative from Informal settlement, Ward No 02 Mirpur, Dhaka shared her experience on climatic disaster impact and girls' vulnerability in her urban community of Mirpur, Dhaka. She shared that climate change is one of the major factor responsible for people's behavioral



Mr Imamul Azam Shahi, chair of the session giving his welcome speech

change. At the same time, she acknowledged there is a lack of understanding about climate change hazards and impacts amongst children. She agreed that without discerning the specific case of children, no climate change initiatives can be successful in the long term. Insightfully, she shared that, since women on average spent more time in houses, they are likely to become bigger agents of change in terms of climate change impacts at the family level.

Ms. Lovely Chowdhury, Ward Councilor, Dhaka South City Corporation (DSCC), stated that the women and girls are troubled by problems with rainwater flooding and waterlogging in slums. She informed the audience that NGOs are hard at work seeking to reduce vulnerability of women, and the city corporation is providing cooperation to ensure better services for the urban poor. She felt that the government should undertake different initiatives for women, girls, children of slums to reduce vulnerability.

Mr. Sirajul Islam, Chief Town Planner of DSCC approximated that around 40% of people of Dhaka live in slum areas, and stated that most of them are migrating to the city due to river erosion in their home areas. For women, there are specific 'menstrual problems' due to lack of sanitation facilities available in slum areas. He acknowledged that DSCC has undertaken massive initiatives such as mosquito extermination, public toilet installation as well as encouragement of people to be more wellbeing conscious through multiple awareness campaigns and motivation workshops. Female participation in these workshops and campaigns is higher than that of men. Other interventions he suggested included, increasing rooftop gardening in the city and reducing tree cutting in urban areas. More broadly, he found that community people need to practice keeping a clean environment.

Ms. Nuzhat Imam, UNDP, conferred that due to lack of involvement in the decision-making process, children and women are most likely to get affected by any negative phenomena. Vulnerability is also influenced by wealth: poor women are more affected than rich. Due to malnutrition, children are more greatly affected by climatic disasters like cyclone and flood and often suffer more from different diseases. The needs of children must restructure urban health policy; a better child health system can ensure slums achieve sustainable economic development of the country, thereby supporting SDGs.



Ms Nujhat Imam, UNDP expressing her opinion

Dr. Md. Khalequzzaman, Assistant Professor, BSMMU shared around 33% of people are living in urban areas, which is likely to rise up to 64% within the year 2051; Out of those in urban areas, 40% of the people are living in slum areas with minimal amenities. There are serious health issues in these areas: around 34% women in slum areas are obese; around 17% of males and 22% of females living in slum areas are suffering from diabetes due to intake of excessive junk food and lack of exercise. Non-communicable diseases are also affecting slum people at an alarming rate, with most of the affected people being women and children. He found that a change of attitude about children's lifestyles, maintaining a clean environment, eating safe food and doing regular physical exercise for better health are all needed. For this, all school should have facilities for doing physical exercise which is essential for keeping better health for children.

The chair set the Q&A session objectives on susceptibility of girls and young women within informal settlements to the influence of climate change as well as on local government authorities' role in reducing the adverse impacts. During the session participants talked about a paradigm shift in terms of reduction of early age marriage, training of community-based volunteers on fire and earthquake safety, as well as the disproportionate suffering of women from skin diseases. In addition, psychosocial trauma due to heat stress was emphasized. Positively, participants noted that the Government of Bangladesh has already taken initiatives to encourage

people to promote a green environment by reducing tax for the homeowners who have gardens on their rooftops.

Dr. Saleemul Huq described how women, children, older people face greater risks in the face of climate change. There are many development-related problems in the slums, although many government agencies and NGOs are working there, they cannot eliminate the problems. He concluded that this conference provided opportunities for sharing our learning and identifying what can be done by individuals, communities and other stakeholders. What additional activities we need to undertake to overcome climate change related problems and how to implement those action effectively will be an ongoing process.

Suggestions that came out through the discussion during the session include but are not limited to:

- The need for NGOs to share their activities, plans, findings with the youth (and women);
- By involving women in decision-making processes, proper governance of urban areas needs to be ensured through transparency and accountability in public private partnerships;
- Psychological impacts should be given equal, if not more, importance alongside visible impacts on wellbeing;
- Undertaking a child-friendly approach must be part of any project planning;
- There must be an inclusion of more climate change and disaster chapters in primary and higher curriculum.

The Honorable Guest concluded the Parallel Session through the following recommendations:

- Solving problems can be done by tackling them yourself and not depending on others; make problems smaller where possible;
- ICCCAD can assist NGOs by conducting research, sharing research findings with relevant authorities particularly the city corporation and municipal corporation; and publishing research findings to help in preparing necessary policies.

6.13 Parallel Session PSD2: The Role of Progressive Tariffs in Sustainable Urban Water Services

Host/Co-Sponsor: WaterAid Bangladesh

Moderator: Md Abdullah, P. Eng. MBA- Managing Director, Khulna WASA

Keynote Speaker: Mr. Imrul Kayes Muniruzzaman, Director-Fundraising and Learning, WaterAid Bangladesh

Panelists: Md Abdus Salam Bapary, Superintending Engineer, Dhaka WASA

Mr. Salim Jahangir, Mayor- Paikgacha Municipality

Md. Khairul Islam, Country Director, WaterAid Bangladesh

On the last day of the conference, WaterAid hosted a parallel session on “The Role of Progressive Tariffs in Sustainable Urban Water Services”, where discussions were held surrounding the challenges of implementing progressive tariff models in the country. Inequality still prevails in every sector, including water, where the burden of this tariff is borne mostly by the underprivileged and marginalized of society.

The two-hour session was chaired by Md Abdullah, Project Engineer and Managing Director of Khulna WASA, with key participation by Md Khairul Islam, Country Director of WaterAid, and Imrul Kayes Muniruzzaman., Director of Fundraising and Learning at WaterAid.

Evidence on climate change is visible in the fact that 34% of the population residing in Dhaka city are migrants from the outskirts (World Bank 2017). This population continues to increase by 6% per year. With community

participation, capacity building and collective work through government interventions, we can make cities climate resilient and have migrant friendly infrastructure. Mr. Muniruzzaman's presentation showcased the case study of Paikgacha illustrating the proven potentials of adopting the progressive tariff on the Piped Water Supply System (PWSS) as a sustainable model for urban water services.

The schematic view of WaterAid's intervention in building migrant-friendly cities comprises of three major components of different dimensions:



Keynote presentation during the parallel session

- Physical - where the community advocates with Pourashova and plans for the implementation of the water supply system;
- Socioeconomic and Political – where an adequate institutional framework and the capacity-building of Pourashova's local representatives and the community through community consultation is extremely vital
- Organizational - where building political and community ownership of the progressive tariff system strengthens the Pani Shakkha and Water Committees towards a sustainable model.

The progressive tariff scheme of the PWSS is a model that needs to be socially accepted. It is measured by calculating the affordable rate for the community people compared to the quantity of water they get with the amount they are paying. This structured tariff scheme has been integrated with a metering and billing system which keeps track of individual households' usage and the respective tariff that needs to be paid in accordance with the usage. Having a feasible design which reaches a 'breakeven point' at its earliest is important as the PWSS requires a huge investment for the physical set-up across an area.

Overcoming the hurdles of the PWSS is highly challenging, yet doable. The Paikgachha case has proven the possibility of water services that are both pro-poor and financially viable in the long term. It reflects the best practice as a model for sustainable water supply in coastal small towns in Bangladesh, with an aim for equity in cost recovery. As a case, it also provides an examination of the willingness to pay through community consultations.

The session was wrapped with many promising ideas and several opportunities ready for building cities which are climate resilient.

Key recommendations

Vibrant discussions were held during the question-answer session where important takeaways were received, including:

- Emphasis on designing the progressive tariff in a way which will be both financially viable and socially acceptable;
- Focusing on meeting the growing demand for good quality water supply (despite the huge investments needed to design the progressive tariff process);
- Prioritizing collaboration and ownership amongst the sector along with government initiative to ensure a sustainable progressive tariff model;

- Increasing capacity-building and encouraging community participation to collectively combine efforts to influence and advocate for quality water supply for communities.

6.14 Parallel Session PSE1: Gender in Urban Climate Policy and Action: Towards a gender-just, climate resilient cities and communities

Host/Co-Sponsor: ICCCAD

Keynote Speaker: Ms. Shaila Shahid, Senior Programme Coordinator- Gender and Climate Change, ICCCAD

Special Guest: Dr. S.M. Munjurul Hannan Khan, Additional Secretary, Ministry of Environment, Forest and Climate Change (MoEFCC), Bangladesh

Panelist: Ms. Dilruba Haider, Programme Specialist, DRR, Climate Change and Humanitarian Actions, Bangladesh Country Office, UN Women

Designated Discussant: Dr. Sharmin Neelormi, Professor, Jahangirnagar University

Session Chair: Ms. Farah Kabir, Country Director, ActionAid

The session opened with a video presentation from keynote presenter Ms. Shaila Shahid (ICCCAD) on how Bangladesh is addressing gender issues, where she pointed out how important is it to maintain gender equity in climate change. Addressing this particular issue will have a positive impact on the development sector because women are one of the most vulnerable groups of people to climate change. This concerns not only rural areas but also the urban areas where there are poor, marginalised women in the slums. It is necessary to ask, are the available climate change policies, social provisions, economic interventions, and infrastructure female friendly?

The first presentation titled “Gender in Urban Climate Policy and Action: Towards gender-just, climate resilient cities and communities on gender in urban climate policy and action” talked about different dimensions of gender issues in the climate change sector.

Many migrant women in Dhaka’s slums come from the coastal zone which is vastly affected by climate change. They are faced with enormous challenges within the urban centres due to a lack of adaptive capacity and their increased sensitivity to both natural and man-made hazards. The presenter noted that the dynamics of urban growth must be sustainable enough to have space for coping with impacts on women. The presenter emphasized the fact that the word ‘gender’ does not always mean women but also men; gender denotes a category of people, but in the context of vulnerability it can mean men, elderly people, girls, and disabled people.

A number of push factors drive migration: loss of working days, rapid changes in land use, decreasing productivity, and rising insecurity. The gender division of labour is one of the most pressing matter for women; unequal wages and loss of economy affect women adversely. The education of girls is also being affected by climate change, seen through the number/percentage of girls dropping out from schools. This trend is more apparent in the rural area rather than the urban centres. The presenter noted that women actually contribute less in carbon emissions than men due to their different household responsibilities. Still, women face more



Ms Dilruba Haider talking about the gender action plan

challenges when it comes to security especially in the urban areas. Therefore, the urban climate change policies need to give gender issues serious consideration. The fact that women own less property makes them vulnerable. For example, women not owning mobile phones makes them less capable of technology usage and digital information access. Therefore, women receive information about natural hazards either via their male counterparts or do not receive information at all. This practice puts them more at risk than men and increases their dependence on men for climate resilience.

The Ms. Dilruba Haider, Programme Specialist, DRR, Climate Change and Humanitarian Actions, UN Women then talked about the Gender Action Plan of UNFCCC 2017-2019 under the Lima Work Programme. In this action plan the Parties of the UNFCCC will deal with the following:

- Capacity-building, knowledge sharing and communication
- Gender balance, participation and women's leadership
- Coherence
- Gender-responsive implementation and means of implementation
- Monitoring and reporting

Ms. Haider opined that women need to be capacitated through knowledge sharing and creating more access to technology to overcome climate change vulnerability. It is crucial to build leadership by having women participate in community decision-making processes. This can enhance women's ability to handle risks in a more efficient method.

Panel discussion:

During the discussion, Ms. Haider talked about how urban planning should take into consideration women's safety and security. The panelist stated that currently, our public services are not very female-friendly which indicates that the issue of gender was not integrated into the early planning processes. In the coastal areas of Bangladesh, men are the ones who migrate women and children are left behind. This practice is putting women in a very difficult position because not only do they need to earn for family members but they also have to take care of them. When women from the coastal areas migrate to Dhaka city for work, they face multifaceted challenges. Instead of getting good job opportunities they get trafficked into sex trading and other illegal work. The social network people have in the rural areas are impossible to sustain in the urban areas, and as a consequence, living alone in the urban areas becomes riskier for solitary females.

Rural people are rapidly migrating to Dhaka city due to different climatic hazards affecting rural areas by deteriorating their household assets. Climate hazard-affected people are unable to exploit livelihood opportunities in their original localities, so these vulnerable groups migrate to Dhaka for earning livelihood incomes in order to survive. Women and girls who spend more time at home cannot access early warning information which is mostly disbursed in the public places. Instead, they have to rely on their male family members to bring them the news of danger. This is also true for old and disabled people. The speaker suggested that perhaps the idea of equity instead of equality is needed to make climate services gender-just.

Some suggestions from the panel included the following:

- Make women skillful enough to be economically sufficient and know how and when to migrate.
- All climate change responses should be gender-friendly.

- Women, especially mothers, are the climate champions. Mothers act as the prime educator in delivering climate change knowledge to their children. Investing in them will prove fruitful in the long term.

Open discussion:

One participant indicated that without proper knowledge youth are also vulnerable. Therefore they will need training to build capacity to tackle climate change.

One participant suggested that any urban development should also keep in mind how to include women in the local planning process.

Another participant pointed out that urban population growth is much higher than rural population growth, at 4.6% vs 2.2%. Religious and social norms make women more vulnerable and second class citizens of society in many ways. Climate change policy and action has to be gender focused to achieve maximum result. The national urban policy addressed the gender issue in 2004 however it is still in the draft stage. Today we need to address this issue widely through raising social awareness and eventually policy will follow. Blaming men will not do any good.

Dr. Sharmin Nilormi, Professor Jahangirnagar University argued that identifying the indicators of development will be key to establishing a solid climate change and gender action policy. We need to ask what is the relationship between the urban climate change problems and women? Activism is different for women and any issue that concerns women should be holistic otherwise there will be endless holes which will affect the process later on. She also suggested that gender budgeting is essential for the present time.

Mr. Munjurul Hannan Khan, Additional Secretary, MoEFCC commented that the UNFCCC is male dominated. If women were the leaders in climate change all the action and policy planning would be more comprehensive, therefore we need more women involved directly in tackling climate change through decision-making processes. Climate services and benefits should also be equal. As well, when dealing with vulnerability, both men and women must be considered; if we create separate slots for women in action plans then it actually reduces the opportunity of better understanding of the situation.

Key recommendations:

- The need to revise Bangladesh current gender action plan.
- Participation and leadership of women is crucial for tackling climate change
- We cannot correct the damage that has been done, but we can make things better by helping and supporting the next generation, hence investing in youth is necessary.
- We need cohesion of policies, meaning all ministries need to work together to make climate change relevant policies more holistic.

6.15 Parallel Session PSE2: Prioritizing climate change & local level resilience in secondary cities & towns

Host/Co-Sponsor: BRAC

Moderator: Dr. Saleemul Huq, Director of the International Centre for Climate Change & Development (ICCCAD)

Welcome Speech: Ms. Hasina Mushrofa, Programme Head, BRAC Urban Development Programme

- Presenter 1:** **Mr. Abu Sumon**, Climate Change Expert, Inclusive Budgeting and Financing for Climate Resilience, UNDP
- Presenter 2:** **Ms. Hasina Mushrofa**, Programme Head, BRAC Urban Development Programme
- Presenter 3:** **Mr. S.M. Mehedi Ahsan**, Sector Specialist-Resilient Cities, KfW
- Panelist:** **Md. Tazkin Ahmed**, Honorable Mayor, Satkhira Municipality
Mr. Shah Masud Jahangir, Mayor, Gaibandha Municipality
Md. Rafiqul Islam, General Secretary of MAB and, Mayor, Shariatpur Municipality
Mr. Md Shahjahan Miah, Chief Executive Officer Fardipur Municipality
Mr. Alhaz Zulfikar Ali, Honorable Mayor, Mongla Port Municipality
Dr. K Z H Taufiq, Director, Urban Development Directorate (UDD)
Professor Dr. Mizanur Rahman, Advisor, MAB
- Chief Guest Speech:** **Professor Ainun Nishat**, Professor Emeritus Centre for Climate Change and Environmental Research (C3ER), BRAC University
- Session Chair:** **Mr. Abdul Baten**, MAB President and Mayor, Bera Municipality, Pabna

The session brought together national level experts, urban practitioners and mayors together to discuss issues that hinder the process of prioritizing climate change impacts and climate resilient urban development in some secondary cities and towns to find solutions for those problems. Mayors from climate change impacted towns highlighted their perspectives and existing opportunities. The discussions have led to expanding the scope of work to include policy advocacy and strengthening the capacity of municipalities. This session also helped identify investment opportunities for strengthening resilience of the urban poor.



Ms Hasina Mushrofa presenting on BRAC UDP

The session began with the presentation by Mr Abu Sumon, Climate Change Expert, UNDP on “Climate Public Financing for Urban Resilience”. In his presentation, it was clear that though Bangladesh government has significantly increased its budget allocation for climate finance in the last five years. There is lack of research on climate change resilient fund allocation for urban resilience, fund allocation appears to be greater in rural areas than that of urban areas. It is unclear how new sources of funds can be appropriated to the growing demand for climate finance, and if there is any opportunity cost incurred when funding from other sectors are reallocated in the climate finance sector. He noted that the funds available for BCCTF should be used more effectively to draw out the potential of climate-resilient and migrant-friendly cities. As well, only estimating future requirements is not often enough to convince policy planners in favor of climate allocation, in addition, we need to estimate the broader welfare potential from this investment. Subsequently, we need to reallocate existing unspent budget amount to address climate change impacts or build urban climate resilient.

Mr Mehedi Ahsan, Sector Specialist-Resilient Cities, KfW presented a case study of Barisal City Corporation in efforts to reduce the exposure to vulnerability and increase the adaptive capacity of its people to climate change. It is one of the coastal vulnerable cities in Bangladesh, primarily impacted by waterlogging. A KfW funded project has been working there on three outputs, including (a) reducing waterlogging vulnerability, (b) increasing economic opportunity and (c) making disaster resilient cities. Obtaining approval of the project was very time consuming. Project experts used the city development master plan data with rigorous climate vulnerability assessment methods. Based on assessment, expert made a list of different actions to reduce long-term climate change impacts of the city. These findings had to be revised during consultation with local stakeholders. Local stakeholders recommended undertaking actions that improve drainage systems and

excavate canals to reduce waterlogging rather than the construction of a flood control gate. The project has plans to raise major roads and preserve ponds. There is a need to improve the environment and social safety net programme for the city and improve services for the slum community.

Ms Hasina Mushrofa, Programme Head, BRAC Urban Development Programme talked about BRAC's interventions in climate change adaptation and local level resilience in Bangladesh. She explained that all the major cities and secondary towns face similar problems related to housing shortage, drainage, vulnerable infrastructure, and livelihood and social protection for the urban poor. Unplanned cities are more vulnerable to shocks as they often have to cope with pre-existing stresses. The migrants that are coming from climate-stressed regions add to these complexities. Changing one component of the complex urban system causes other components of the system to change. The goal of BRAC Urban Development Programme is improving wellbeing, resilience and realizing the rights of one million urban poor by reducing multi-dimensional poverty and deprivation. They promote resilient development through targeted intervention, income generating activities, health services, community mobilization, microfinance and other activities. She also emphasized the necessity of establishing an urban ministry as a governing body to initiate and coordinate planned urban development at national, regional and local scale. The National Urban Sector Policy which was drafted many years ago needs to be revised and published by the government soon with a vision towards climate-resilient urban planning. BRAC is also going to implement a social poverty assessment at the country level with the help of national experts to assess the accessibility of community infrastructure, currency and social protection measures that are crucial for the urban poor.

The Mayor of Gaibandha Municipality Shah Masud Jahangir spoke about his 100 year old municipality that is affected by the river erosion, which is occurring more frequently than ever before. He believes that local stakeholders' decisions are important for making more effective plans for any town. Gaibandha municipality recently reviewed the master plan from the Urban Development Directorate (UDD) which can ensure planned development process in the coming year.

Indeed Dr. K Z H Taufiq, Director, Urban Development Directorate (UDD) was pleased to say that UDD is making a paradigm shift in disaster resilient planning by giving technical assistance to external donors instead of relying on government funding to develop a master plan, in this case, for Gaibandha municipality.

Md. Tazkin Ahmed, Honorable Mayor, Satkhira Municipality talked about different development initiatives taken by BRAC and Satkhira Municipality in the last 2 years. Recently the master plan of Satkhira municipality was approved by the Government of Bangladesh which emphasizes re-excavation of the existing canals to reduce the water clogging problems in the town. The recent development initiative taken by the government has raised the people's spirits. Leaders and government officials need to maintain this spirit by prohibiting corruption and poor governance. Government should also provide more funds to address climate change impacts in all coastal towns.

Mr. Md Shahjahan Miah, CEO of Faridpur Municipality stressed the need for capacity-building of local government officials and mayors of the municipality to increase their understanding of climate change.

Mr. Zulfikar Ali of Mongla Port Municipality thanked the Municipal Association of Bangladesh (MAB) for their coordination role in overall capacity-building of mayors on resilient action. Mongla Municipality was severely affected by climatic disaster, high tide, and lack of water to drink, but now his town has developed into a 'smart town'. The town does not have a master plan yet, so he requested the preparation of a master plan as soon as possible.

Md. Rafiqul Islam, General Secretary of MAB and, Mayor, Shariatpur Municipality requested BRAC and other national and international donor organizations to fund the resilient development of six municipalities in the Shariatpur district, as it is the one of the most vulnerable districts in the country.

Dr. Mizanur Rahman, Advisor at MAB, emphasized the needed paradigm shift in decentralization of planning process from national policy makers to local leaders in order to promote sustainable development in secondary towns and municipalities.

Professor Ainun Nishat, Professor Emeritus of BRAC University said that climate change is affecting different regions of Bangladesh. In the future, increases in temperature will create uncertainty of rainfall, flood, drought, waterlogging problems, sea level rise impacts and a greater number of high tide-related impacts on coastal cities. Municipalities in the coastal areas also need appropriate drainage systems to prevent waterlogging during extreme weather events and more adaptation techniques in urban areas. The Cyclone Preparedness Programme (CPP) is a world-renowned program, but it still needs proper expansion and capacity-building on weather forecasting and early warning at local levels. There is still a lack of understanding on climate change-related future impacts on urban centers. There is a need for coordination between the Planning Commission, BWDP and local implementing bodies to construct climate resilient drainage, embankments and necessary infrastructure development. BRAC, ICCCAD and C3R should jointly facilitate climate change-related training for all municipalities so that the municipal corporation can make their plan to build their towns climate resiliently.

In the concluding remarks, Mr Abdul Baten, President of MAB, emphasized the need for a disaster management committee in different municipalities which can take the necessary roles in climate-resilient and migrant-friendly city development and resilience for the next generation. He stated that we should keep our commitment to doing real implementing work and thanked all the designated guests and participants for attending the session.

Key Recommendations

- BRAC, ICCCAD & MAB jointly should take initiatives to capacitate local government representatives on climate change adaptation.
- Different municipalities should form disaster management committees which can take the necessary role in building climate-resilient and migrant-friendly cities and towns.
- All city level master plans should be prepared and implemented with consideration of local climate change impact.

6.16 Seventh Plenary Session: Summary of the Conference

Host/Co-Sponsor: ICCCAD

Keynote Presenter:	Professor Jim Coleman , Director - Urban & Economic Development, Oxford Policy Management
Sessions' note Presentation:	Mr. Sarder Shafiqul Alam , Coordinator, Urban Climate Change, International Centre for Climate Change and Development (ICCCAD)
Designated Discussants:	Professor Ainun Nishat , Professor Emeritus, Centre for Climate Change and Environmental Research (C3ER), BRAC University Dr Shakil Akther , Head and Professor, Department of URP, BUET Dr. Ishrat Islam , Professor, Department of URP, BUET Professor Dr Md Shahidul Amin , Department of Architecture. BUET Dr. Khurshid Zabin Hossain Taufiq , Director, Urban development Directorate Dr. ATM Nurul Amin , Professor and Chairperson, Department of Economics and Social Sciences, BRAC University Dr. M. Shafiq-Ur Rahman , Associate Professor and Chairman, Department of Urban & Regional Planning Ms. Hasina Mushrofa , Programme Head, Urban Development, BRAC

Mayors of Cities and Towns

Md. Abdul Baten, President, Municipal Association of Bangladesh

Mr. S M Mehedi Ahsan, Urban Resilience Specialist, KfW

Mr. Mostafa Quaium Khan, Advisor, BUF

Session Chair: **Dr. Saleemul Huq**, Director, ICCCAD

The last plenary session of the conference aligned with the overall theme of bringing together all the co-hosts, urban practitioners, social thinker, academics and public, to generate solutions for building climate-resilient, migrant-friendly cities and towns. Participants in the final session were urged to identify gaps within the existing urban resilience framework which need to address in short term and long term. Recognizing necessary policy issues and making national and local action plans is essential to making cities and towns more climate-resilient and migrant-friendly.

Dr. Saleemul Huq, Director, ICCCAD started off by saying that everyone is aware of the need for building climate-resilient cities and towns in Bangladesh and to make these locations migrant-friendly as well.

Sarder Shafiqul Alam, Coordinator, ICCCAD shared major recommendations from all the individual sessions before requesting that all guests and participants join more discussion about draft findings and provide feedback to be included in the proceedings.

Professor Jim Coleman Director - Urban & Economic Development, Oxford Policy Management mentioned that the urban population in Bangladesh is growing rapidly and creating many challenges. The major challenges include infrastructure deficits, service delivery, shelter and affordable housing, migration and forced displacement, jobs for the younger population, availability of skills and technology, as well as organizational and fiscal capacity to implement necessary action.

In his presentation he also identified specific socio-economic challenges to resilience in cities.

These challenges are:

- *Job creation* for a rising, urbanising population;
- *Diversification* and balance within the export-oriented industrial sector;
- *Infrastructure upgrading* and *special economic zones (SEZs)*;
- *Economic evolution of the garments/textiles sector*;
- *Climate resilience of the agriculture sector*;
- *Significant, concentrated refugee population*;
- *Technology and ICT adaptation* across the economy;
- *Workforce participation*, skills and adaptability;
- *Remittances*; and
- *Slowing rate of poverty reduction*, especially in urbanising areas.

He proposed a holistic approach to urban resilience would require the following:



Professor Jim Coleman from OPM giving his keynote at the summary of the conference session

- *Policy mainstreaming & adaptive management* – for continuous improvement and learning;
- *Integrated and multi-sectoral governance* – e.g. cross-governmental approaches with Ministries of Finance, Economy, Industry, Urban Planning, and Agriculture working jointly;
- *Sectoral dynamics and economic resilience* – industry sectors should be targeted to ensure the relevant value chain components can be made resilient, special consideration must also be given to SEZs and economic resilience;
- *Urban-rural dynamics* – More must be done to understand agricultural resilience and its impacts on growing cities;
- *Cultural & social resilience* - Stabilising communities in the face of migration and rapid demographic change;
- *Climate Mitigation & Adaptation*;
- *Industrial Development*;
- *Economic Development and Housing*;
- *Labour Market Participation and Skills*;
- *Social Infrastructure and Municipal Services*;
- *Technology*;
- *Cultural and Society*.

The approaches should also consider both physical and environmental response to climate change, individual ministries and agencies understanding of resilience in their own terms – reinforcing the ‘physicality’ of the response, finally a National resilience policy considering the true nature of cities and towns and Citizen-centric requirements with need to understand how communities respond to resilience challenges and how their needs change over time as they diversify is needed.

The following feedback and recommendations were provided by special guests and participants:

SM Mehedi Ahsan, *“If cities are not citizen-friendly, how can we expect them to be migrant-friendly?”*

ATM Nurul Amin, *“Economists, geographers and urban planners should work together”*

Mr Mostafa Quaium Khan: *“We need transformation of policies into actions”*

Dr. Ishrat Islam : *“While making plans for megaprojects, climate resilience should be taken into account”*

Dr. Hamidul, *“Building migrant-friendly villages and ‘less populated countries’ should also be options”*

Syed Zainul Abedin, *“Cyclone shelters should be built in the cities, too”*

Dr. Ainun Nishat, *“Sanitation, waterlogging, salinity problems will aggravate due to climate change”. He said “Previously migration used to take place due to economic reasons only, climate change-induced migration is additional. Inability to address that will turn the cities into urban slums” -- “Planning should be started from now”*

Hasina Mushrofa, *“Such consultations/conferences should be done at the local levels too”. She told “Having a focal ministry for urban issues would be better”.*

Mayor, Sonaimuri Municipality, *“To implement the plans, power is necessary”*

6.17: Urban Climate Resilience Award and Concluding Session

Urban Climate Resilience Award: Sarder Shafiqul Alam, Coordinator, International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB)

Conference Summary

Presentation: Sarder Shafiqul Alam, Coordinator, ICCCAD

Special Guests: Dr. Ainun Nishat, Professor Emeritus, Centre for Climate Change and Environmental Research BRAC University

Dr. Atiq Rahman, Executive Director, Bangladesh Centre for Advanced Studies (BCAS)

Professor Nazrul Islam, Chairman, Centre for Urban Studies

Dr. Atiur Rahman, Former Governor, Bangladesh Bank

Professor M Omar Rahman, Vice Chancellor, Independent University Bangladesh (IUB), Dhaka

Chief Guest: Professor Dr. Shamsul Alam, Member, Senior Secretary, General Economic Division, Planning Commission. Bangladesh

Session Chair: Dr. Saleemul Huq, Director, ICCCAD

Dr. Saleemul Huq, Director, ICCCAD opened the session by thanking everyone for their active participation over the last three days of the conference. A wide array of actors including government officials, academics, NGOs, CSOs and media were represented at the conference and the chair was particularly pleased to see participation from mayors of different cities and municipalities. He hopes to forward recommendations coming out of the conference to respective government agencies and for incorporation into relevant policies and plans.

Sarder Shafiqul Alam, Coordinator, ICCCAD requested the Chief Guest and Special Guests of the concluding session to take part in giving the Urban Climate Resilience Award. He shared that, from this year the organizer of the conference will give a national award to the best urban resilience practitioners. The purpose of the award is to share best urban resilience practice with a wider community as well as to create competition for building urban resilience and migrant-friendly cities and towns in Bangladesh. A total of six organizations were identified for the Urban Climate Resilience Award 2018. He invited all selected organization representatives to take the award from the Chief Guest and Special Guests.



One of the urban resilience champions taking award from the chief and the special guests of the session

These award recipients are:

- (1) Mayor of Mongla Port Municipality – for developing a climate change adaptation plan and resilient town;
- (2) Mayor of Singra Municipality – for adaptation and mitigation initiatives taken by Singra Municipality to make it a Carbon Free, Resilient City;
- (3) Dhaka Ahsania Mision - for enhancing inclusive disaster resilience in Bangladesh;
- (4) Oxfam Bangladesh – for promoting sustainable building in Bangladesh;
- (5) Plan International - for making sustainable climate adaptation solutions accessible to the urban poor; and
- (6) BRAC - for providing climate-resilient, low cost urban housing in Satkhira Municipality.

After handing over all awards to recipient, Mr. Alam proceeded to share some of the key discussion points and findings from the different plenary and parallel sessions held during the conference.

Important recommendations include: Need of awareness raising and capacity building for urban community and stakeholders to reduce disaster risk; creating a long term database to monitor urban resilience activities; providing facilities for urban poor in nearest towns of climate affected communities; developing a migrant friendly environment in urban centres with resilient housing and infrastructure, livelihood diversification, education for children, improved health, water and sanitation facilities, effective waste and faecal sludge management. Improved connectivity between different cities and towns and rural areas, enhanced multi-stakeholder collaboration, and developing new policies and decentralization for building climate resilient migrant friendly cities.



Sarder Shafiqul Alam sharing summary of the conference

Dr. Atiq Rahman, Executive Director, BCAS said that food security, water security and energy security need to be ensured to build migrant-friendly urbanization. These must be included in the integrated planning for the security of migrant people in urban centres.

Dr Atiur Rahman, Forman governor, Bangladesh Bank told that challenges in urbanization need to be overcome by increasing economic development. For instance, garment industries accommodate a large number of migrant poor, but fail to make efficient use of natural resources. There is a need to more efficiently use natural resources in all industries. This can be supported by developing new technology options, which catalyzes urbanization. On this note, Dr. Rahman emphasized that Bangladesh needs greenness of people's minds, especially those of policymakers' and government decision-makers. For him, there is also a need to develop both rural and urban areas together. Dhaka city can be 'saved' by building resilient secondary cities and towns with adequate opportunities for migrant communities. He ended by saying, "Let's put our hands together for green development of the country."

Professor. M Omar Rahman, Vice Chancellor IUB emphasized that our young people can address climate change impacts in the future if public and private sectors cooperate and implement new ideas together, as well as support their pathways to innovation. "Pathao" is a new app developed by students to reduce travel time in Dhaka city as well as create a source of earning for young people in Dhaka. Professor Rahman encouraged attendees to learn from such types of new technology and asked institutions to encourage younger people to engage in the development of new technology and options for reducing urban poverty alongside other challenges in resilient city development. As an example, young groups can prepare digital mapping of slums and identify necessary basic needs to upgrade the condition of slums.

Professor, Nazrul Islam, Chairman, CUS suggested that technology parks and knowledge parks are needed to cope with new types of development in the world. Climate-resilient, migrant-friendly cities need decentralization, as a result we may need to discourage people from migrating to capital cities and provide them required facilities in smaller cities and towns. Similarly, there is a need to think about how to rehabilitate the large number of slum people for any large development project in urban centres.

Professor Islam also stated that we need to finalize our national urban development policy and follow that to achieve sustainable development. Accordingly, he indicated that there is a need for political commitment to approve the national urban development and that would help to achieve the SDGs.

The Chief guest Professor Dr. Shamsul Alam, Member, Senior Secretary, GED, Planning Commission stated that we have limited open space in large cities, therefore, we must plan in a holistic way that considers climate change impacts and population displacement due to these. Recently, Bangladesh has prepared its 100 Year Delta Development Plan, where many new elements are included. However, to ensure sustainable urban development through this plan, decision makers should consider all impacts of climate change and how to address these. Saying “Plans should be made keeping climate change in mind”, in particular, he highlighted that Bangladesh’s Delta Plan needs to include solar energy promotion like Germany, the Netherlands and China.

Professor Alam emphasized that there is a need to have joint efforts by sociologists, economists, and engineers as well as the establishment of city governors and development of *pourashava* as per local needs. He also emphasized issues around water, noting that we need to harvest more rainwater and reduce pressure on ground water. Finally, he mentioned that to make “Livable cities, livable *human settlements* should come first”.



Participants of the concluding session raising their hands to show unity in building climate resilient migrant friendly cities

7. Summary Findings, Recommendation and Actions

7.1 Summary findings

This Third Annual National Conference on Urban Resilience to Climate Change focused on identifying the necessary policy issues at local and national level action plans that will ensure urban hubs of Bangladesh to grow more climate-resilient and migrant friendly. The recommendations that came forward from this conference highlighted the urgency of ensuring basic amenities to the urban population as well as climate migrants. Like other countries, cities are the driving force of Bangladesh's economy as well as vulnerable to climate change related hazards. It is expected that by the year 2035, about half of the total population of Bangladesh will inhabit in urban areas. Majority of the migrants in Dhaka, Chittagong, Khulna, and Rajshahi who are coming from the climate hazard prone rural areas are facing shortage of basic facilities and infrastructure. So, it could be increasingly difficult for only four larger cities to absorb this massive influx of new migrants. Climatic factors and economic opportunities have been a major driver of urban migration. Hence, building climate-resilient and migrant-friendly cities and towns across the districts of Bangladesh has become of urgent importance, to tackle the adverse effects of climate change.

The three day conference consisted of seven plenary sessions and ten parallel sessions, which identified 26 key recommendations that can help to make our cities better adapted to climate change and migration. The climate migrants adds to the despairs of housing problems and waste management issues of our cities, and have been the major cause of slum expansion. To address the mushrooming slum population of the cities we need a long term urban migrant database and monitoring the movement of migrants into the city. Local government, Department of Social Services (DSS), Bangladesh Bureau of Statistic (BBS) and other relevant actors and stakeholder need to collaborate to ensure enhanced access to social security for climate migrants and the urban poor. To ensure effectiveness, there needs to be a significant commitment from the government as well as NGOs and civil society actors. It is very important that we establish an Urban Focal Ministry and department that will develop city level management plans and policies to address the implications of climate change on urban systems.

Migrant friendly climate resilient cities and towns needs adequate food, water and energy security along with proper waste management system for the city population. Access to safe water can be promoted through the introduction of water tariff model which is financially viable and socially acceptable. Water and Sewerage Authority (WASA) should assure incorporation of these progressive tariff model in other municipal areas within their jurisdiction. Development of knowledge and skills of service providers are needed to ensure proper waste management system in the cities and towns. Local government bodies should promote recycling of waste and reuse of waste materials by providing rewards for innovators. This will help encourage people's participation in point waste segregation and inspire policies that promote better waste management.

National government should emphasize the decentralization of power in relation to developing self-sufficient secondary cities and towns all over Bangladesh in order to better support the new migrants. Secondary cities and towns also need decentralized infrastructure to promote livelihood opportunities, quality education facilities, quality health facilities and social securities. These cities also need resilient mass transport systems and establish connectivity between rural and urban network to properly disperse the displaced population. To adequately address people's vulnerability to climate change and migration induced stress, group-specific awareness and preparedness programs for women, children, people with disabilities, and transgender group is necessary from local to national levels. Public private partnership and inclusive programme for all members of

society, men and women have to be brought under the same umbrella to promote good governance with ensuring transparency and accountability.

Reformation of educational institutions and training provisions will give individuals better access to jobs opportunities, encouraging self-sustenance, Job creations will also help the cities with the challenges of unemployment that precedes with the incoming influx of migrant populations, while encouraging Bangladesh's economic returns at the individual, communal, and national levels. Job opportunities catalyzed by urbanization create scope for technological advancements and new innovative research. Young minds need to be properly utilized in developing innovative technologies to resolve the needs of growing city population demands.

The suggestions put forward by experts in this conference re-enforced the need to tap into the immense potential of youth population in the cities. Investing in youth and supporting the next generation will make things better in years to come and also help in promoting more climate resilient city. New initiative-based projects implementation requires accessibility of funds. Funding is crucial, but if not available, there should be alternative plans like insurance and engaging in private sector investment. Institutional linkage and people's involvement with different initiatives will develop leadership and ownership amongst citizens, subsequently this will help the cities to tap into the immense potential of human capital in building smart climate resilient cities and towns in future.

7.2 Key Recommendations:

1. Creating Awareness

- Build awareness and capacity of urban officials, mayors, councilors and other relevant stakeholders to help them understand the implications of climate change on urban systems and overcome the gap in knowledge. This will help to reduce the risk of undertaking maladaptive and ineffective measures to address urban climate change problems.
- In addition to planning and training, there is also a need to build a positive mentality toward climate migrants; diversity should be nurtured.
- To adequately address vulnerability, group-specific awareness and preparedness programs for women, children, people with disabilities, and transgender group from family to national levels is necessary.

2. Database on Climate-Induced Migrants

- Create a long term database on urban migrants, especially who come from climate affected areas to understand their needs, monitor their wellbeing, and understanding the reasons.
- The Department of Social Services, BBS and local government organizations should explore the possibility of developing a database on climate induced migrants, so that social security schemes can be designed accordingly and made more compatible with the work done by private organizations and local governments.

3. Decentralization of Urbanization

- Decentralize infrastructure provision, education facilities, livelihood opportunities, health facilities, social securities and other facilities in secondary cities and towns in order to attract internal migration.
- Enhance connectivity and communication among cities, towns and rural areas so that people are encouraged to live in smaller cities and towns instead of larger cities.
- Secondary cities and towns all over Bangladesh connected by transport links and supported by suitable infrastructure in order to better support the new migrants.

4. Creating a competitive environment

- Acknowledge best practices in building migrant-friendly climate resilient cities and towns through national award giving.
- Document best practice documentation and disseminate this among all urban practitioners to enhance competition.
- Provision of face-to-face learning and sharing experiences periodically in different urban centres (beyond Dhaka).

5. Capacity Building on Urban Resilience

- The capacity of urban volunteers needs to be enhanced to provide psychological support to migrants and slum dwellers. Psychological impact should be given equal, if not more, importance as visible impact.
- To curb the probability of urban youth, particularly those that are poor, turning into drugs and crime, it might be beneficial to organize technical and vocational skills training.
- Capacity building and encouraging community participation can strengthen collective efforts to influence and advocate for quality water supply for communities.
- All skills training on resilience must be tracked and documented, and a refresher training arranged every year. The result of these training activities should be followed up for lessons learned at field level.
- BRAC, ICCCAD & MAB jointly should take initiatives to capacitate local government representatives on climate change adaptation and resilience.

6. Research and Understanding of Local Relevance

- A sound knowledge base from practical experience and research from both field and literature is needed to design urban interventions.
- Understanding climate change related physical and social vulnerability in urban centres can be advanced through proper studies.
- Identify priority actions for building urban resilience and ways to make migrant friendly cities and towns.
- We must map of urban stakeholders, their roles and responsibilities and identify mechanism on how to ensure their collaborative actions.
- Knowledge of economic potentials and social values of different communities should be explored to properly address climate resilience and migration.
- Emphasize peer learning in the ongoing urban development related programmes.
- Research findings need to be disseminated widely in both local and international language.

7. Land Use Management:

- An urban land use management plan needs to be developed for reducing physical vulnerability of climate change and ensure better resilience for urban poor.
- Participatory land use plan should be ensured for promoting better transport network, waste management, housing, commerce and industries, education and health facilities, ecosystem services and reducing impact of climate change.

8. City Level management plan

- All city level master plans should be prepared and implemented with consideration of local climate change impact.
- The gap between researchers and policymakers must be bridged for a smooth development planning process.

9. Disaster Risk Reduction (DRR)

- DRR governance must be strengthened for better risk management.
- Disaster preparedness must be improved in order to 'build back better'.
- Family level earthquake preparedness should account for the special needs of women in the wake of a disaster.
- Disaster management committee in different city municipalities need to play the key roles in building climate resilient cities and towns.
- There is a need to repackage all the important documents like Bangladesh DRM Framework, Sendai Framework, the Standing Order on Disaster and their info graphics, to make them understandable for ordinary people and those with limited communication skills.
- More cyclone shelters should be built in the coastal cities and towns as well.

10. Emission Reduction at city level

- Pursue low-carbon urban development by targeting emissions from the three major sectors: energy, industry, and transport.
- Use green technology in urban housing, peri urban agriculture, small and medium enterprise and industries.
- Use energy efficient lighting and everyday practices at all level.
- Ensure ecosystem resources and services preventing damages in wetland and forest resources.

11. Affordable Information and Communication Technology (ICT) for All

- ICTs (Information Communication and Technology) will play a vital role in connecting between climate migrant people and resilient urban centres for better informed migration.
- There is a need to focus on affordable, innovative solutions and time bound technologies for mainstreaming climate concerns into urban development projects.

12. Livable Housing for all

- Urban planners and local government organizations must focus on livable housing for all especially migrant slum dwellers; this will help to achieve some objectives of SDG goal 11.

13. Water Supply and Tariffs

- Ensure quality water supply in urban centres to promote secondary cities and towns as being migrant friendly.
- Design a progressive tariff on water in a way which will be both financially viable and socially acceptable.
- Prioritizing collaboration and ownership amongst the sector, along with government initiatives to ensure a sustainable progressive tariff model
- Implement progressive tariff model in secondary cities and towns through water supply authorities.
- Monitoring of the water tariff model functionality to ensure its effectiveness and wider use in urban center.

14. Waste Management Mechanism

- The proper collection and utilization of urban wastes is a key intervention point; this can be made more effective by encouraging the local population to participate.
- Technical knowledge and management skills should be developed and practiced for properly managing treated sludge.

15. Sustainable Fashion

- We need to rethink how to reduce our consumed cloth waste, in order to prevent global pollution

throughout the lifecycle of products.

- Sustainable fashion process needs use of natural dye and other sustainable inputs. The mindset of buyers needs to be positively changed.

16. Fecal Sludge Management (FSM)

- Encourage more institutional research on an inclusive FSM (Faecal Sludge Management) model and promote best options to ensure their treatment facilities function accordingly.
- Break barriers and social stigma around the use of treated sludge to enrich the agriculture sector of Bangladesh.
- Develop a sustainable business model for the total supply chain and value chain of the end products; could be a solution to the existing challenges of the faecal sludge management system.
- The government and private sector should come forward to help increase awareness about the benefits of FSM products like organic fertilizer for agriculture which should be included in the policy for implementation.

17. Urban Health

- Health care service should be made accessible to the urban poor, especially to slum dwellers.
- Private sector and NGOs should assist the government in designing a legal framework exclusively for urban health sector which improves health, housing, employment and other basic amenities.
- School curriculums should promote good hygiene practices.
- Professionals in health professions should have access to better training facilities. Education of doctors/ professionals, training across all levels of expertise will improve the provision of health services related to jobs, in order to assist the migrating populations moving to secondary cities.

18. Provision of Education

- The provision of education in secondary cities and towns for urban migrants will help to improve access to jobs, self-sustenance and better health practices, which can have social and economic benefits at the individual, community, and national level.

19. Financing for Urban Resilience

- Engaging the private sector in insurance and other financing mechanism in taking climate resilience into their own hands should be practiced
- Options need to be identified about what can be implemented on urban resilience projects with external funding support. Alternatively, other options need to be identified for what can be implemented without any funding from external sources.

20. Women Empowerment in Urban Resilience to Climate Change

- The current national gender action plan needs to be revised with inclusion of climate change resilience issues.
- In tackling climate change, women's participation and leadership need to be enhanced
- Women involvement in decision-making process can ensure, proper governance of urban areas Governance must allow for transparency and accountability in both the public and private sector.

21. Youth Engagement

- Undertaking a youth and child-friendly approach for urban resilience project planning is necessary.
- There must be the inclusion of more chapters on climate change and disaster in both primary and higher education curriculum.
- We should make things more climate resilient by helping and supporting the next generation; hence investing in the youth is necessary.

- Learning should come first to enhancing youth capacity on urban climate change adaptation
- Proactively engage the youth in urban sector and work for their capacity building

22. Enhanced Urban Knowledge Network

- Networking is crucial for getting involved in conducting research, sharing knowledge, enhance understanding on relevant issues and for making plan and actions effective.
- Universities, research organizations and NGOs should build networks for undertaking research, sharing research findings with relevant authorities especially city corporations and municipal corporation; they should publish their research findings to help prepare necessary policies.
- Existing urban development forums, associations and urban resilience knowledge platforms should strengthen their networking and collaboration for sharing lessons learnt, building capacity and undertaking new initiatives and activities.

23. Independent monitoring

- We must establish an independent monitoring body to address the issue of discrimination and bias in the selection of beneficiaries for social security schemes.

24. Multi-Stakeholder Collaboration

- Community engagement is crucial to create climate resilient migrant-friendly cities and towns.
- The city corporations and municipalities should carry on the success of the development projects implemented by NGOs.
- More collaborative actions of public and private institutes with local government and the community should be pursued.
- There is a need for cohesion of policies, meaning all ministries need to work together to make climate change relevant policies more holistic.
- National government should take the lead role to ensure multi-stakeholder collaboration

25. National Policies

- We must finalize the National Urban Sector Policy for sustainable urban development
- We must also integrate the idea of climate resilient migrant friendly cities and towns into the Five Year Plan, Perspective Plan and the 100 Years Delta plan

26. Ensure Political Commitment

- To effectively develop urban policy, a focal ministry and department should be created;
- Commitment is needed from the government as well as NGOs and civil society actors in the country ensuring enhanced access to social security for climate migrants and the urban poor in general, for building migrant friendly cities

7.3 Suggested Actions for building migrant friendly climate resilient cities and towns

Action	Implementing Agency (s)	Indicator (s)	Expected Outcome
Creating Awareness	Government Agencies; City Corporations and Municipalities; Private Sector; Research and Academic Institutions; Media	1. Level of awareness 2. Access to awareness programme 3. Understanding awareness materials	<ul style="list-style-type: none"> • Inclusive programs and opportunities available • Stakeholders awareness raised on building migrant friendly urban resilient cities and towns. • A positive mentality is nurtured towards climate migrants. • A very diversified awareness program for women, children, disabled and transgender group is promoted
Database on Climate induced migrants	Department of Social Services; Bangladesh Bureau of Statistics; City Corporation and Municipalities	1. Availability of relevant quality data 2. Data updated regularly 3. Access to data for stakeholders	<ul style="list-style-type: none"> • Available long-term database on climate change and migration and urban planning for relevant stakeholders and practitioners • Relevant government departments, city corporation and municipalities update data regularly
Decentralization of Urbanization	Central Government; Local Government and Private Sector	1. Access to government facilities, opportunities and basic amenities in secondary cities and municipalities 2. Employment opportunities 3. Local market development	<ul style="list-style-type: none"> • Government facilities, opportunities and basic amenities available in secondary cities and municipalities • Employment opportunities created • Developed local market
Creating Competitive Environment	Government agencies; City Corporations and municipalities; Private Sector; Research and Academic Institutions	1. New ideas generation 2. Project development and fundraising capability 3. Necessary urban development practices 4. Level of good governance	<ul style="list-style-type: none"> • Developed new ideas • Enhanced capability on project development and seeking fund • Healthy migrant friendly and resilient cities and towns; • Ensured transparency and accountability in urban development activities with proper documentation
Capacity Building on Urban Resilience	Government Agencies; City Corporations and Municipalities; Private Sector Research and Academic Institutions	1. Developed training modules and materials 2. Provided training for capacity building 3. Shared training lessons to wider community	<ul style="list-style-type: none"> • Enhanced knowledge and skills of Government officials, planners, urban practitioners, and NGOs and local communities. • Enhanced institutional capacities • Practiced urban resilience initiatives.
Research and Understanding of Local Relevance	Government Agencies, Research and	1. Availability and accessibility of research findings and documents	<ul style="list-style-type: none"> • Understand risk and vulnerabilities to climate change. • Identified actions to build

	Academic Institutions		migrant friendly cities and towns. <ul style="list-style-type: none"> Identified multi-stakeholders and their needs of collaboration.
City level Land Use Management Plan	Government Agencies (UDD, LGED), BIP and Urban Planners.	<ol style="list-style-type: none"> Relevant authorities and institutions engaged in city level master plan and plan for land use management Proper land use management plan available. 	<ul style="list-style-type: none"> City Level Master Plan developed. Land use plan developed for reducing climate change risk and physical vulnerabilities of cities and town. Cities and towns development as per the plan, considering better housing, transport, business center, education, health, waste management, ecosystem resources and services, institutions etc.
Disaster Risk Reduction	Government Authorities, Local government organizations, NGOs, CBOs, Local community, private sector and Media	<ol style="list-style-type: none"> Risk reduction strategies available for all stakeholders. DRR documents are repackaged and easy to understand by ordinary people with limited communication skills. 	<ul style="list-style-type: none"> Practiced DRR Framework, Standing Order on Disaster and strategies Reduced disaster risk of all stakeholders and communities in cities and towns.
Emission Reduction at city level	Government Authorities, Private enterprise and individuals	<ol style="list-style-type: none"> Emission reduction technology available (green technology) for urban communities and stakeholders Green technologies used by urban communities 	<ul style="list-style-type: none"> Emission reduced at city and town levels
Affordable Information and Communication Technology (ICT) for All	Ministry of Science and Technology; Scientists and Researchers	<ol style="list-style-type: none"> Technology is affordable and accessible for all. Climate change affected people using ICT for migration. 	<ul style="list-style-type: none"> Enhanced knowledge of ICT for climate change affected communities and urban practitioners Climate vulnerable people migrated to cities and town through using information communication and technology
Livable housing for all	Urban development and housing authorities, Private entrepreneurs	<ol style="list-style-type: none"> Access to affordable housing for all Availability of developer for building housing for poor migrants 	<ul style="list-style-type: none"> Build planned housing for all Upgrade slum housing for urban poor
Water Supply and Tariffs	DPHE ,Water Supply Authority and local government	<ol style="list-style-type: none"> Quality water supply available at city and towns Progressive water tariff system available and 	<ul style="list-style-type: none"> Access to quality water for all Sustainable progressive tariff system practiced at urban

	institutions	regularly update through monitoring	centers which are financially viable and socially acceptable
Waste Management Mechanisms	Central government; Government Service Providers; Local Community;	1. Functioning point separation of recycling materials of waste 2. Quality of waste recycled 3. Waste collection and dispose properly	<ul style="list-style-type: none"> • Reduction in drain clogs • Increased waste recycling • People will enjoy a cleaner and healthier city.
Sustainable Fashion	Central Government; Garment Industries	1. Market development of repurposed fabric 2. Demand for sustainable clothing lines and garments 3. Number of conscious buyers	<ul style="list-style-type: none"> • Conscious buyers and new business ventures promoting sustainable fashion. • Thrift stores and goodwill store will gain popularity
Fecal Sludge Management (FSM)	City Corporations and Municipalities, Government Agencies, Private Sector, Research Institute and NGO	1. Research on FSM 2. FSM convert to compost fertilizer 3. Available awareness building outreach program	<ul style="list-style-type: none"> • Enhanced Fecal Sludge Management • Created job opportunities' in treated FSM • Increased use of compost fertilizer in crop production
Urban Health	Department of Public Health & Engineering (DPHE), Public and Private Health Institutions, NGOs	1. Access to health facilities and service available for all 2. Reduced disease rate	<ul style="list-style-type: none"> • Established adequate health facility and support services for urban poor communities • Less incidence of transmissible disease outbreaks in the densely populated urban centers • Children are less vulnerable to diseases • Good health practices are widespread.
Provision of Education	Education Ministry, NGOs, Private sector	1. Access to education for all especially poor migrant communities (no one left behind) 2. Available job oriented education curriculum and teaching methods	<ul style="list-style-type: none"> • Enhanced access to job and self-sustenance; • Increased livelihood and wellbeing of individual • Enhanced economic benefits at the communal and national level.
Financing for Urban Resilience	Relevant Ministry, City Corporations and Municipalities, Private Financial Institutions	1. Access to fund to cities and municipalities 2. Allocation of budget according to need and resources 3. Alternative funding options from external sources has to be identified.	<ul style="list-style-type: none"> • Developed infrastructure (cyclone shelter, improved drainage system, flood shelter, waste management, education institute, housing, etc.) of climate resilient and migrant friendly cities and towns • Private fund available to improve housing for urban poor, create job and business opportunities and other basic needs and services

Women Empowerment in Urban Resilience to Climate Change	Central Government, Local Government, Private Sector, NGOs, CBOs and Local community and Media	<ol style="list-style-type: none"> 1. Number of women involvements in awareness raising and leadership training and activities 2. Economic opportunities available for women 3. Access to women participation across all levels of development activities and decision making programs 	<ul style="list-style-type: none"> • Women's voices and their needs are addressed in decisions making process or project and program implementation on urban resilience to climate change • Increased women leadership capacity
Youth Engagement	Central Government, Cities and Municipalities, Academic Institutions, Private, NGOs and Communities	<ol style="list-style-type: none"> 1. Access to youth engagement in leadership for urban resilience programs 2. Curriculums available focusing on youth leadership skills 	<ul style="list-style-type: none"> • Enhanced youth leadership and capacity on urban resilience to climate change, • Youths are actively participating in urban development program
Enhanced Urban Knowledge Network	Central government; Local Government; Media; Researchers; Urban Practitioners	<ol style="list-style-type: none"> 1. Available published scientific papers 2. Knowledge platform created for dissemination of knowledge 3. Assurance of funding 	<ul style="list-style-type: none"> • Enhanced knowledge for urban practitioners and stakeholder • People involved in new research and generate ideas on migrant friendly climate resilient cities and towns.
Independent Monitoring	Government Authorities, research organization and Academics	<ol style="list-style-type: none"> 1. Implementing quality of projects activities and processes 	<ul style="list-style-type: none"> • Established an independent monitoring system and team • Reduced discrimination and biasness in the selection of vendor and beneficiaries of projects and social safety net programs
Multi-Stakeholder Collaboration	Central Government, Local Government, Private Sector, Donor, NGOs, CBOs, community and Media	<ol style="list-style-type: none"> 1. Adequate collaboration and coordination for implementing projects and providing services 2. Availability of appropriate services to community people 	<ul style="list-style-type: none"> • Enhanced multi-stakeholder collaboration on building migrant friendly climate resilient cities and town
National Policies	Central Government	<ol style="list-style-type: none"> 1. SDG goal 11 and climate resilient guidelines are incorporated into urban sector policy 2. Policies and guideline are using urban development actors and stakeholder 	<ul style="list-style-type: none"> • Approved Urban sector policy • Urban centers developed as per policy and guideline to achieve SDGs especially goal 11
Ensure Political Commitment	Relevant Ministries; Departments agencies; Private Sector, Local Government, NGO	<ol style="list-style-type: none"> 1. Accountability and transparency practiced 	<ul style="list-style-type: none"> • Good governance practiced in building migrant friendly climate resilient cities and towns

ANNEX –I: Agenda (Detail Schedule of the Conference)

DAY ONE Sunday, 18 November 2018

08:30 – 09:30	Registration
09:30 – 11:00	Inaugural Session
Welcome address:	Mr. Sarder Shafiqul Alam , Coordinator, International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB)
Keynote Presenter:	Dr. John I. Carruthers , Director, Sustainable Urban Planning Program, College of Professional Studies, The George Washington University
Chief Guest:	Professor Shamsul Alam , Member, Senior Secretary, General Economic Division, Planning Commission. Bangladesh
Session Chair:	Dr. Saleemul Huq , Director, International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh
11:00 – 11:30	TEA BREAK
11:30 – 13:00	Plenary Session 1: Sustainable Urban Health Services for Resilient Cities and Towns
Host: Concern Worldwide	
Moderator:	Mr. Mostafa Quaium Khan , Advisor, Bangladesh Urban Forum
Welcome Speech	Mr. A.K.M. Musha , Country Director, Concern Worldwide
Keynote Presentation:	Mr. Emranul Haq , Consortium Manager, Concern Worldwide
Designated Discussants:	Dr. Saleemul Huq , Director, ICCCAD Ms. Breda Gahan , Global Health & HIV and AIDS Programme Adviser, Concern Worldwide Dr. A.M. Zakir Hussain , Senior Management Expert, EPOS, EU support health and nutrition sector to the poor in urban Bangladesh
Special Guests:	Md. Abdul Hakim Majumdar , Project Director, Urban Primary Health Care Service Delivery Project Mr. Mesbah Uddin , Joint Secretary, LGD & Project Director, EU support health and nutrition sector to the poor in urban Bangladesh Ms. Zahida Fizza Kabir , Executive Director, Sajida Foundation Mr. Nasir Uddin Ahmed , Mayor, Chandpur Municipality Mr. Nazmul Haq Duke , Councillor and Chairman, Health Standing Committee, Chattogram City Corporation
Open Discussion	
Session Chair	Mr. Mahabub Hossain , Additional Secretary, Urban Development Wing, LGD, MoLGRD&C
13:00 – 14:00	LUNCH BREAK
14:00 – 15:30	Parallel Session: PSA1: Barrier Analysis for Addressing Group Specific Risks in Earthquake in Dhaka
Host: Christian Aid	
Moderator:	Ms. Shahana Hayat , Humanitarian Manger, Christian Aid
Keynote Speaker:	Dr. Dilara Zahid , Assistant Professor, Institute of Disaster Management and Vulnerability Studies (IDMVS) University of Dhaka
Panelist:	Dr. Antony Gnanamuthu , DRR Delegate, Coordinator German Red Cross Bangladesh

Delegation
Mr. Tapan Kumar Chakraborty, Head of FSL & DRR, Action against Hunger- Bangladesh
Md Mokhlesur Rahman, Monitoring, Evaluation, Accountability and Learning (MEAL) Manager/ Christian Aid Bangladesh
Special Guest: **Mr. Nitai Chandra De Sarkar**, Assistant Director GIS, DDM
Session Chair: **Mr. Satyabrata Saha**, Additional Secretary of Ministry of Disaster and Relief.

14:00 – 15:30

Parallel Session: PSA2: Out of the Box Session

Host: ICCCAD

Panelist:

Ms. Karishma Amjad, Doctoral Candidate, University of Dhaka
Mr. Md. Abdul Halim Mia, Director (Research & Development), Bangladesh Social Scientists Foundation
Mr. Ferdous Ahmed, Assistant Professor, IUBAT-International University of Business Agriculture and Technology
Mr. Md. Mahmud Fatah, Graduate Engineer and Entrepreneur

Discussant:

Mr. Sarder Shafiqul Alam, Coordinator, International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB)
Dr. M. Shafiq-Ur Rahman, Associate Professor and Chairman, Department of Urban & Regional Planning, JU

Session Chair:

Mr. Mostofa Quaium Khan, Advisor, Bangladesh Urban Forum

15:30 – 16:00

TEA BREAK

16:00 – 19:00

Plenary Sessions 2 & 3: Cities and Regions TALANOA Dialogues: The Bangladesh Dialogue

Host: ICLEI South Asia

Key Note Speaker:

Md. Ziaul Haque, Director (Air Quality Management), Department of Environment, MoEFCC

Special Remarks:

Dr. Saleemul Huq, Director, International Centre for Climate Change and Development.

Designated Discussants:

Dr. Md. Taibur Rahman, Deputy Chief, Programming Division, Bangladesh Planning Commission and Project Manager, Sustainable Renewable Energy Power Generation Project, UNDP.
Mr. Yunus Arian, Head of Global Policy and Advocacy, ICLEI World Secretariat, Germany.

Mr. S.M Mehedi Ahsan, Urban Climate Resilient Specialist, KfW

Dr. Nurun Nahar, Deputy Chief, Planning Commission

Mr. Md. Zulfikar Ali, Mayor, Mongla Port Municipality

Mr. Md. Zannatul Ferdous Mayor, Singra Municipality

Ms. Soumya Chaturvedula, Deputy Director, ICLEI South Asia

Md. Akhteruzzaman, Programme Manager, UN Habitat

Chief Guest:

Dr. Nurul Quadir, Additional Secretary (Climate Change), Additional Secretary, Ministry of Environment, Forest and Climate Change, GoB

Session Chair and Moderator: Mr. Emani Kumar, Executive Director, ICLEI South Asia

Followed by Dinner

DAY TWO

Monday, 19 November 2018

09:30-11:00

Plenary Session 4: Access to Social Security and Public Social Services for Urban Climate Migrants and Vulnerable People

Host: GIZ Bangladesh

Keynote Speaker:

Mr. Ulf Neupert, Team Leader, UMIMCC Project

Panelists:

Mr. Khan Motaher Hossain, Deputy Director, Department of Social Services (DSS), Khulna

Mr. Kamruzzaman, Councillor, Rajshahi City Corporation

Mr. Md. Tazkin Ahmed, Mayor, Satkhira Pourashava

Mr. Rupan Kanti Shil, Additional Secretary, Ministry of Social Welfare (MoSW)

Open Discussion

Session Chair:

Mr. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum

11:00 – 11:30

TEA BREAK

11:30- 13:00

Parallel Session: PSB1: Role of Stakeholders in Making Migrant – Friendly Cities and Towns

Host: GIZ Bangladesh

Keynote Speaker:

Mr. Khonker Taskin Anmol, PhD Candidate, University of Canterbury, New Zealand

Ms. Proffessor Janinka Greenwood, University of Canterbury, New Zealand

Panelists:

Mr. Tazkin Ahmed, Mayor, Satkhira Municipality

Md Zannatul Ferdous, Mayor, Singra Municipality

Open Discussion

Session Chair:

Mr. Mostafa Quaium Khan, Advisor, Bangladesh Urban Forum

11:30- 13:00

Parallel Session: PSB2: Knowledge Brokering to Promote Climate Resilience Through Low Carbon Development in Urban Areas

Host: ICLEI South Asia

Introduction to CDKN KA Project: **Ms. Shehnaaz Moosa**, Director, Climate & Development Knowledge Network (CDKN)

Panelists:

Dr. Saleemul Huq, Director, ICCCAD

Mr. Munjurul Hannan Khan, Additional Secretary, Ministry of Environment and Forests (MoEF)

Mr. Sarder Shafiqul Alam, Programme Coordinator, Urban Climate Change, ICCCAD

Dr. Nurun Nahar, Deputy Project Director, Programming Division, Planning Commission

Ms. Shaila Shahid, Senior Programme Coordinator, Gender, ICCCAD

Mr. Enamul Haq, GIZ;

Session Chair and

Moderator:

Mr. Emani Kumar, Executive Director, ICLEI South Asia

13:00 – 14:00

LUNCH BREAK

14:00 – 15:30

Parallel Session: PSC1: End Product Diversification- A Pathway for Inclusive Faecal Waste Management

Host: FSM Network

Welcome Speech and Moderator: **Mr. Uttam Kumar Saha**, Strategic Lead – Urban and Energy, Practical Action

Discussant: **Dr. Samir Kumar Sarkar**, Director, Farm Technology, Irrigation and Water Management, Rural Development Academy (RDA)
Mr. A K Azad, Deputy Director (Law), Department of Environment (DoE)
Dr. Mohammad Jahangir Alam, Professor, Department of Agribusiness and Marketing, and Director, Institute of Agribusiness and Development Studies, Bangladesh Agricultural University, Mymensingh
Dr. Kawsar Uddin Ahammad, Principal Scientific Officer, On-farm Research Division, Bangladesh Agricultural Research Institute (BARI)
Mr. Irfan Shakil, recently completed Masters from Urban & Regional Planning Discipline, Khulna University

Open Discussion

Session Chair: **Dr. Rowshan Mamtaz**, Professor, Department of Civil Engineering, BUET

14:00 – 15:30 *Parallel Session: PSC2: Building Climate Resilient and Migrant Friendly Cities and Towns in Bangladesh*

Host: ICCCAD

Keynote Speaker: **Mr. Sarder Shafiqul Alam**, Coordinator, Urban Climate Change Programme, ICCCAD

Panelists: **Dr. Nilopal Adri**, Lecturer, Department of URP, BUET

Md. Zakir Hossain, Founder and Chief, Krishoker Sor (Farmers' Voice)

Discussant: **Dr. Saleemul Huq**, Director, ICCCAD

Professor Abul Kalam Azad, Department of Urban and Regional Planning, JU and President of Bangladesh Institute of Urban Planning

Session Chair: **Professor Nazrul Islam**, Chairman, Centre for Urban Studies (CUS), Dhaka

15:30 – 16:00 **TEA BREAK**

16:00 – 17:30 *Plenary Session 5: Sustainable Consumption and Production, Fashion Industry and Urban Resilience to Climate Change: Connecting the dots for sustainable solutions*

Host: Action Aid Bangladesh in Partnership with University of Liberal Arts Bangladesh and Fashion Revolution.

Keynote Speaker: **Mr. Tanjir Hossain**, Lead- Resilience and Climate Justice, ActionAid Bangladesh

Panellists: **Dr. Mohidus Samad Khan**, Assistant Professor in the Department of Chemical Engineering, BUET

Ms. Nawshin Khair, Managing Director, Aranya and Country Coordinator, Fashion Revolution Bangladesh

Dr. Samiya Ahmed Selim, Associate Professor, University of Liberal Arts Bangladesh (ULAB) and Director of Centre for Sustainable Development

Open Discussion

Chair and Moderator: **Ms. Farah Kabir**, Country Director, Action Aid Bangladesh

DAY THREE

Tuesday, 20 November 2018

09:30 – 11:00

Plenary Session 6: Student Involvement in Urban Climate Change: Challenges and Possible Solutions

Host: ICCCAD

Discussant:

Mr. Shohail Bin Saifullah, Independent University

Ms. Nishat Tasnim, North South University

Ms. Sumaiya Shudha, Jahangirnagar University

Ms. Jennifer Khadim, Coordinator, ICCCAD Youth Programme

Mr. Saqib Huq, Coordinator, ICCCAD Climate Finance Programme

Open Discussion

Session Chair:

Dr. Saleemul Huq, Director, ICCCAD

11:00 – 11:30

TEA BREAK

11:30 – 13:00

Parallel Session: PSD1: Girls Jeopardy in Changing Urban Climate

Host: Plan International Bangladesh & SEEP

Keynote Speaker:

Dr. Sharmin Neelormi, Professor, Jahangirnagar University

Panelist:

Ms. Nuzhat Imam, UNDP

Dr. Md. Khalequzzaman, Assistant Professor, BSMMU

Designated Discussants:

Md. Anowar Hossain Bhuyan, Slum Development Officer, DNCC

Ms. Mukta Akter, Female Representative from Informal settlement, Ward No 02 Mirpur, Dhaka

Mr. Sirajul Islam, Chief Town Planner, DSCC

Ms. Lovely Chowdhury, (Zone 5) Councilor – DSCC

Open Discussion

Guest of Honor:

Dr. Saleemul Huq, Director of the International Centre for Climate Change & Development (ICCCAD)

Session Chair:

Mr. Imamul Azam Shahi, Head of Disaster Risk Management and Climate Change, Plan International Bangladesh

11:30 – 13:00

Parallel Session PSD2: The Role of Progressive Tariffs in Sustainable Urban Water Services

Host: WaterAid

Keynote Speaker:

Mr. Imrul Kayes Muniruzzaman, Director-Fundraising and Learning, WaterAid Bangladesh

Panelists:

Md Abdus Salam Bapary, Superintending Engineer, Dhaka WASA

Mr. Salim Jahangir, Mayor- Paikgacha Municipality

Md. Khairul Islam, Country Director, WaterAid Bangladesh

Moderator:

Md Abdullah, P. Eng. MBA- Managing Director, Khulna WASA

13:00 – 14:00

LUNCH BREAK

14:00 – 15:30

Parallel Session PSE1: Gender in Urban Climate Policy and Action: Towards a Gender-Just, Climate Resilient Cities and Communities

Host: ICCCAD

Keynote Speaker: **Ms. Shaila Shahid**, Senior Programme Coordinator- Gender and Climate Change, ICCCAD
 Panelist: **Ms. Dilruba Haider**, Programme Specialist, DRR, Climate Change and Humanitarian Actions, Bangladesh Country Office, UN Women
 Designated Discussant: **Dr. Sharmind Neelormi**, Professor, Jahangirnagar University
 Special Guest: **Dr. S.M. Munjurul Hannan Khan**, Additional Secretary, Ministry of Environment, Forest and Climate Change (MoEFCC), Bangladesh
 Session Chair: **Ms. Farah Kabir**, Country Director, ActionAid

14:00 – 15:30

Parallel Session PSE2: Prioritizing climate change and local level resilience in secondary cities and towns

Host: BRAC

Welcome Speech: **Ms. Hasina Mushrofa**, Programme Head, BRAC Urban Development Programme
 Presentation : **Mr. Abu Sumon**, Climate Change Expert, Inclusive Budgeting and Financing for Climate Resilience UNDP
 Panelist: **Mr. Hasina Mushrofa**, Programme Head, BRAC Urban Development Programme
Mr. S.M. Mehedi Ahsan, Urban Climate Resilience Specialist, KfW
Md. Tazkin Ahmed, Honorable Mayor, Satkhira Municipality
Mr. Shah Masud Jahangir, Mayor, Gaibandha Municipality
Md. Rafiqul Islam, General Secretary of MAB and, Mayor, Shariatpur Municipality
Mr. Md Shahjahan Miah, Chief Executive Officer Fardipur Municipality
Mr. Alhaz Zulfikar Ali, Honorable Mayor, Mongla Municipality
Dr. K Z H Taufiq, Director, Urban Development Directorate (UDD)
Professor Dr. Mizanur Rahman, Advisor, MAB
 Chief Guest Speech: **Professor Ainun Nishat**, Professor Emeritus Centre for Climate Change and Environmental Research (C3ER), BRAC University
 Moderator: **Dr. Saleemul Huq**, Director of the International Centre for Climate Change & Development (ICCCAD)
 Session Chair: **Mr. Abdul Baten**, MAB President and Mayor, Bera Municipality, Pabna

15:30 – 16:00

TEA BREAK

16:00 – 17:30

Plenary Session 7: Summary of the conference: Towards building migrant friendly, climate resilient cities and towns in Bangladesh

Host: ICCCAD

Keynote Presenter: **Professor Jim Coleman**, Director - Urban & Economic Development, Oxford Policy Management
 Sessions' note
 Presentation: **Mr. Sarder Shafiqul Alam**, Coordinator, International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB)
 Designated Discussant: **Professor Ainun Nishat**, Professor Emeritus, Centre for Climate Change and Environmental Research (C3ER), BRAC University
Dr Shakil Akther, Head and Professor, Department of URP, BUET
Dr. Ishrat Islam, Professor, Department of URP, BUET
Professor Dr Md Shahidul Amin, Department of Architecture. BUET

Dr. Khurshid Zabin Hossain Taufiq, Director, Urban development Directorate
Dr. ATM Nurul Amin, Professor and Chairperson, Department of Economics and Social Sciences, BRACU
Dr. M. Shafiq-Ur Rahman, Associate Professor and Chairman, Department of Urban & Regional Planning
Ms. Hasina Mushrofa, Programme Head, Urban Development, BRAC
Mayors of Cities and Towns
Md. Abdul Baten, President, Municipal Association of Bangladesh
Mr. S M Mehedi Ahsan, Urban Resilience Specialist, KfW
Mr. Mostafa Quaium Khan, Advisor, BUF

Open discussion

Session Chair:

Dr. Saleemul Huq, Director, ICCCAD

17:30: 17:45

TEA BREAK

17:45-19:00

Urban Climate Resilience Award and Concluding Session

Conference Summary

Presentation:

Mr. Sarder Shafiquel Alam, Coordinator, International Centre for Climate Change and Development (ICCCAD)

Special Guest:

Dr. Ainun Nishat, Professor Emeritus, Centre for Climate Change and Environmental Research BRAC University

Dr. Atiq Rahman, Executive Director, Bangladesh Centre for Advanced Studies (BCAS)

Professor Nazrul Islam, Chairman, Centre for Urban Studies

Professor M Omar Rahman, Vice Chancellor, Independent University Bangladesh (IUB), Dhaka

Dr. Atiur Rahman, Former Governor, Bangladesh Bank

Chief Guest:

Professor Dr. Shamsul Alam, Member, Senior Secretary, General Economic Division, Planning Commission. Bangladesh

Session Chair:

Dr. Saleemul Huq, Director, International Centre for Climate Change and Development (ICCCAD)

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ANNEX III: Conference Links and Press Releases

Dhaka Tribune links-

Day1- <https://www.dhakatribune.com/bangladesh/2018/11/19/60-of-bangladesh-urban-population-in-metropolitan-cities>

Day2- <https://www.dhakatribune.com/bangladesh/environment/2018/11/20/speakers-for-building-resilient-migrant-friendly-cities>

Day3- <https://www.dhakatribune.com/bangladesh/event/2018/11/20/urban-resilience-awards-given-on-final-day-of-conference>

Day4- Dr Saleemul Huq's Column in the Daily Star-
<https://www.thedailystar.net/opinion/politics-climate-change/news/why-we-must-plan-urbanisation-now-and-fast-1663207>

Please also find the Social media link here-

conference FB page -<https://www.facebook.com/events/249064392427419>

twitter - #UrbanCC #UrbanConference

Conference Proceedings



Third

Annual National Conference on
Urban Resilience to
Climate Change 2018

*"Building Climate Resilient Migrant Friendly
Cities and Towns in Bangladesh"*

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