



2023

10 March to 16 March

# GLOBAL GOBESHONA CONFERENCE 3

## Table of Contents

1. Acronyms.....	i
2. Introduction.....	v
3. Acknowledgement .....	vi
4. Program Overview .....	vii
5. Highlights of the 2nd Gobeshona Global Conference .....	xi
6. A Note From The Director.....	xii
7. Inaugural Session .....	1
8. Scaling up Locally-Led Adaptation: Lessons Learned from Urban Poor & Grassroots in Applying LLA.....	7
9. Securing the Food Systems of Asian Mega-Deltas for Climate and Livelihood Resilience.....	11
10. Adaptation Technologies for Building Resilience to Climate Change: Bridging the Global and Local.....	16
11. Innovation in Locally Led Adaptation: Solutions for Resilience Women, Youth, Refugees and Indigenous Communities.....	20
12. Intersectional Solutions that Advance Locally-Led Adaptation, Climate Mitigation, and Human Well-being.....	23
13. From Vulnerability to Sustainability: The Journey of Climate Migrants .....	26
14. Climate Policy World Café: Supporting Locally Led Adaptation in Bangladesh.....	29
15. Climate Change Impact and Agriculture of Bangladesh: Adaptation Options.....	32
16. How Locally-Led Actions can Ensure Sanitation Facilities in the Face of Changing Climate.....	36
17. A Value-Based Approach to Understanding Non-Economic Loss and Damage .....	41
18. Addressing the Local Level Vulnerability Under Young People Leadership .....	46
19. Climate Change Impact on Human Rights: Analytical Cases from Bangladesh.....	50
20. ICCCAD- Loss & Damage Forum: Connecting Local to Global.....	53
21. Challenges and Opportunities for Promoting Locally Led Adaptation: Cross Learning from Nepal, Fiji, Vietnam.....	60
22. Gender Responsive Climate Resilient Agriculture .....	63
23. Friendship’s Climate Youth.....	67
24. Adaptation Action Coalition Secretariat: Integrating Locally Led Adaptation into National Adaptation MEL systems.....	70

25. Loss and Damage: A Grassroots Perspective .....	73
26. Knowledge Sharing From Scaling Climate Change Adaptation Knowledge And Technologies For Empowering Women .....	78
27. Making locally led adaptation gender transformative: The barriers and possibilities .	82
28. Bringing Adaptation Financing to Where it Matters the Most - A Case Study from the LoGIC Project in Bangladesh .....	86
29. Industrial Decarbonization: Lessons Learned from the RMG Industry.....	90
30. Adaptation Research Alliance: experiences in bridging research to action.....	94
31. Starting with the first mile to support effective Early Warning Systems at scale .....	97
32. Climate Resilience Academy in South Asia .....	100
33. The role of technologies, ecosystem-based approaches, partnerships and finance ...	103
34. Transparency in adaptation to enhance ambition of NDCs .....	108
35. Reflections on an initial risk typology for doing LLA .....	113
36. From rain gauges to probabilistic forecasts - Climate services capacity strengthening at different levels in LAC .....	116
37. International Cooperation Reimagined .....	119
38. NOAA Data and Tools for Sea Level Rise and Coastal Flooding.....	122
39. Gender Perspective of Early Warning System in Bangladesh.....	125
40. Climate Justice for Local Stakeholders at the International Court of Justice .....	129
41. Evidence from LLA Initiatives: Methodological challenges and enquiry into what success looks like .....	133
42. Valuing The Invaluable: Methodologies For Assessing Non-Economic Loss and Damage .....	136
43. Tools for Enhancing Anticipatory Capacity – from Arts to Modelling.....	139
44. Ethnic communities in Bangladesh: Their Struggle against the adverse impact of Climate Change.....	142
45. Pathways to Transformation: Coastal and Delta Communities .....	146
46. Climate Justice: Climate Policy Regime and Litigation Perspectives .....	151
47. Learning and advancing action on devolved decision making and understanding climate risk.....	154
48. Roundtable on bridging the data gap for LLA.....	157
49. Locally led needs assessments of loss and damage finance .....	161
50. Co-production of Metrics and Policy Options for Locally Led Adaptation and Climate Justice Efforts in Africa .....	164

51. Towards new models of knowledge exchange for sustainability transformations: A multi-sited dialogue .....	167
52. Managing heat in the urban environment in a warming world .....	170
53. Climate information services for resilient food systems in the Asian Mega Delta ...	174
54. Climate Change Management in Chattagram Hill Tracts and Scope for LLA .....	178
55. Evidence based loss and damage approach to understand changing climate .....	182
56. Lessons from Mukuru: Building climate resilience in urban informal settlements...	186
57. Scaling Up Youth-led Adaptation Technology Solutions in Africa .....	189
58. Low carbon adaptation – solutions from Bangladesh.....	194
59. Building preparedness for hydrological extremes .....	199
60. Adaptation Gap Report 2022 – taking stock of global progress on adaptation planning, financing, implementation and effectiveness.....	202
61. Ecofeminist Responses to Gender Inequality and Climate Change.....	206
62. Climate Finance Ecosystem and Blended Finance for Organic Waste Management Projects in Latin America .....	209
63. Challenges and Opportunities in the Monitoring of Locally-led Adaptation Initiatives.....	212
64. Global goal on adaptation: How can we operationalize it? .....	216
65. The Scope of Solar Irrigation Pumps in Bangladesh .....	220
66. The panelist of The Scope of Solar Irrigation Pumps in Bangladesh session .....	220
67. Women-led solutions to food insecurity and livelihood in the face of climate change .....	223
68. Exploring Climate Solutions: Catalytic Grant Programme .....	227
69. How do we measure locally led adaptation?.....	233
70. A conversation with the winners of the 2022 GCA Local Adaptation Champions Awards .....	237
71. Practical Action for Addressing Loss and Damage .....	240
72. Closing Ceremony .....	244
73. Session Summary:.....	246
74. List of Contributing Members .....	247
75. Photo Gallery .....	253

## Acronyms

AAB	ActionAid Bangladesh
AACS	Adaptation Action Coalition Secretariat
AAI	African Adaptation Initiative,
ADB	African Development Bank
AF	Adaptation Fund
AF2023	Adaptation Futures 2023
AIDMI	All India Disaster Mitigation Institute
ALIN	Arid Lands and Information Network
APN	Asia-Pacific Network for Global Change Research
ARA	Adaptation Research Alliance
ARIN	African Research and Impact Network
BARI	Bangladesh Agricultural Research Institute
BAU	Bangladesh Agricultural University
BCAS	Bangladesh Centre for Advanced Studies
BRRRI	Bangladesh Rice Research Institute
BRAC	Building Resources Across Communities
BSMRAU	Bangladesh Sheikh Mujibur Rahman Agricultural University
C3ER	Centre for Climate Change and Environmental Research, BRAC University
CASA	Climate Adaptation Support Activity
CCAP	Center for Clean Air Policy
CCDB	Christian Commission for Development in Bangladesh
CCJ-B	Centre for Climate Justice – Bangladesh

CRDC	Community Resource Development Centre
CSD	Center for Sustainable Development
DORP	Development Organization of the Rural Poor
ENDA	Environmental Development Action in the Third World Energie, Senegal
ETH	Ethereum Foundation
EPIC	Educational Partnerships for Innovation in Communities Network
ER	Eco Registry
FS	FRIENDSHIP
GCA	Global Center on Adaptation
GIZ	German Development Cooperation
GOB	Govt of Bangladesh
GOV	Government of Vanuatu
GRP	Global Resilience Partnership
GTW	Greentech for Women
GU	Griffith University
HC	Huairou Commission
HSI	Helvetas Swiss Intercooperation
ICCCAD	International Centre for Climate Change and Development
IDS	Institute of Development Study
IDCOL	Infrastructure Development Company Limited
IFC	International Finance Corporation
IFSD	Institute of Study and Development Worldwide

IUB	Independent University Bangladesh
IA	Irish Aid
IWMI	International Water Management Institute
KGF	Krishi Gobeshona Foundation
LD	Living Deltas Hub
LU	Loughborough University
LoCAL	Local Climate Adaptive Living Facility
LLFS	The Leadership and Learning for Sustainability Lab, McGill University
MJF	Manusher Jonno Foundation
MECs	Modern Energy and Cooking Services
NCCARF	National Climate Change Adaptation Research Facility
NU	Newcastle University
NOAA	The National Oceanic and Atmospheric Administration
PA	Practical action
PRC	Prakriti Resources Centre, Nepal
PD	Project Drawdown
SCD	SEEDS Collaborative DAO
SCIAF	Scottish Catholic International Aid Fund
SDI	Slum Dwellers International
SEI	Stockholm Environment Institute, United States
SF	Sajida Foundation
SG	Scottish Government,
SNA	Solidaridad Network Asia
SS	Shushilan
TCH	Tomorrow' Cities Hub
ULAB	University of Liberal Arts Bangladesh

UNDP	The United Nations Development Programme
UNEP	The United Nations Environment Programme
UNEP-CCC	UNEP Copenhagen Climate Centre
UNW	The United Nations Entity for Gender Equality and the Empowerment of Women
UNWFP	United Nations World Food Programme
UOB	University of Brighton
UOM	University of Manitoba
UOS	University of Sussex, UK
USW	University of Washington
US	United States
USAID	The United States Agency for International Development
USE	Embassy of the United States of America, Dhaka
WA	Water Aid Bangladesh
WASP	The World Adaptation Science Programme
WF	World Fish
WRI	World Resources Institute,
WUR	Wageningen University & Research
YO	Youngo



## **Introduction**

The 3<sup>rd</sup> annual Gobeshona Global Conference focused on monitoring Locally- Led Adaptation (LLA) and resilience organized by the International Centre for Climate Change and Development was held virtually from 10th to 16th March 2023. The conference was a platform aimed to link local, and international researchers, scholars, policy-makers, and practitioners to participate, support, and leverage the upstanding intentions and creativity of local communities to develop and implement solutions dealing with climate change and monitor progress. The conference also aimed to address the quality of research and take initiative to give research a real meaning so that publication becomes effective in response to climate impacts and LLA by encouraging constructive discussion and feedback among researchers. This year's conference brought together 1686 attendees from Bangladesh and abroad.

This seven-day-long conference ran over for 24 hours each day, comprising virtual sessions which included panels and open discussion focusing on adaptation strategies in local communities as well as research groups and practitioners from both developing and developed countries around the world. The conference schedule combines over 72 sessions, such as; Thematic Webinars, Organizational Sessions, Networking & Participatory events. The Gobeshona conference series, centers on 'actionable research' that can help make effective policies and inform climate actions to support vulnerable communities. Research that are presented within the conference are encouraged to focus on: Practical lessons, Effective solutions, Innovative ideas – that can be put into action.

To access the potential recordings of the sessions and media please visit

<https://conference.gobeshona.net/>


## **Acknowledgement**

The Gobeshona Programme of ICCCAD would like to express our sincere appreciation to all those who contributed to the success of the 3<sup>rd</sup> Gobeshona Global Conference. This conference brought together participants from all around the world, including representatives from national and international renowned organizations. We would like to express our sincere gratitude to the conference's session host organizations. The conference was made instructive, interesting, and pertinent for a variety of attendees thanks to their significant contributions and knowledge. Their assistance and participation are greatly appreciated, and we hope to work with them again in the future. We appreciate their involvement in the conference and their commitment to its success. We would like to express our gratitude to our supporting partners IIED and Global Resilience Partnership (GRP), as well as to our government partners Government of Bangladesh, Scottish Government and Government of Vanuatu, whose important assistance and involvement played a crucial role in the execution of the conference.

We also want to thank our interns for their devotion and hard work in making sure everything went properly behind the scenes. Their contributions were really valued and crucial to the conference's success. Finally, we would like to express our gratitude to the conference organizer and the programme team for their persistent efforts and dedication. Their diligence, commitment, and focus on detail were essential to the conference's success.

We would like to once again extend our sincere gratitude to everyone who helped make the conference a success.

## Program Overview

 Session Recording Links	
<b>Day 01: Friday 10th March</b>	
Inaugural Session	<a href="https://www.youtube.com/watch?v=OUbHQSEo_ww&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH">https://www.youtube.com/watch?v=OUbHQSEo_ww&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH</a>
Session 1	<a href="https://www.youtube.com/watch?v=FuOL9XAmT6M&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=2">https://www.youtube.com/watch?v=FuOL9XAmT6M&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=2</a>
Session 2	<a href="https://www.youtube.com/watch?v=kDgDo-O09X8&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=3">https://www.youtube.com/watch?v=kDgDo-O09X8&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=3</a>
Session 3	<a href="https://www.youtube.com/watch?v=n_Lfc6vFu98&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=4">https://www.youtube.com/watch?v=n_Lfc6vFu98&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=4</a>
Session 4	<a href="https://www.youtube.com/watch?v=brwbcte-vXw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=5">https://www.youtube.com/watch?v=brwbcte-vXw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=5</a>
Session 5	<a href="https://www.youtube.com/watch?v=6o96Q5oIzaY&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=6">https://www.youtube.com/watch?v=6o96Q5oIzaY&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=6</a>
<b>Day 02: Saturday 11th March</b>	
Session 1	<a href="https://www.youtube.com/watch?v=FNcbWHWumbY&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=7">https://www.youtube.com/watch?v=FNcbWHWumbY&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=7</a>
Session 2	<a href="https://www.youtube.com/watch?v=8eXm3E-69Co&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=8">https://www.youtube.com/watch?v=8eXm3E-69Co&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=8</a>
<b>Day 03: Sunday 12th March</b>	
Session 1	<a href="https://www.youtube.com/watch?v=BZd0tmySmz0&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=9">https://www.youtube.com/watch?v=BZd0tmySmz0&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=9</a>
Session 2	<a href="https://www.youtube.com/watch?v=W0S1AUD1c_0&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=10">https://www.youtube.com/watch?v=W0S1AUD1c_0&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=10</a>
Session 3	<a href="https://www.youtube.com/watch?v=3SxSKh0vQRc&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=11">https://www.youtube.com/watch?v=3SxSKh0vQRc&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=11</a>
Session 5	<a href="https://www.youtube.com/watch?v=sQ4Tiwrsp3U&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=12">https://www.youtube.com/watch?v=sQ4Tiwrsp3U&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=12</a>
Session 6	<a href="https://www.youtube.com/watch?v=HgJuli1XhMg&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=13">https://www.youtube.com/watch?v=HgJuli1XhMg&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=13</a>
Session 7	<a href="https://www.youtube.com/watch?v=KHv3XbAv6Ao&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=14">https://www.youtube.com/watch?v=KHv3XbAv6Ao&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=14</a>

<b>Day 04: Monday 13th March</b>	
<b>Session 1</b>	<a href="https://www.youtube.com/watch?v=AxiNuL6IDbw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=15">https://www.youtube.com/watch?v=AxiNuL6IDbw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=15</a>
<b>Session 2</b>	<a href="https://www.youtube.com/watch?v=uzznPqja0Qw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=16">https://www.youtube.com/watch?v=uzznPqja0Qw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=16</a>
<b>Session 3</b>	<a href="https://www.youtube.com/watch?v=-1aVIQPNLiA&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=17">https://www.youtube.com/watch?v=-1aVIQPNLiA&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=17</a>
<b>Session 4</b>	<a href="https://www.youtube.com/watch?v=4_jbH_6bFhE&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=18">https://www.youtube.com/watch?v=4_jbH_6bFhE&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=18</a>
<b>Session 5</b>	<a href="https://www.youtube.com/watch?v=IY6szLlyHko&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=19">https://www.youtube.com/watch?v=IY6szLlyHko&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=19</a>
<b>Session 6</b>	<a href="https://www.youtube.com/watch?v=i-14QwCGd9c&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=20">https://www.youtube.com/watch?v=i-14QwCGd9c&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=20</a>
<b>Session 7</b>	<a href="https://www.youtube.com/watch?v=i-14QwCGd9c&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=20">https://www.youtube.com/watch?v=i-14QwCGd9c&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=20</a>
<b>Session 8</b>	<a href="https://www.youtube.com/watch?v=uebZGS5RcKU&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=22">https://www.youtube.com/watch?v=uebZGS5RcKU&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=22</a>
<b>Session 9</b>	<a href="https://www.youtube.com/watch?v=07yT4aEYa7k&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=23">https://www.youtube.com/watch?v=07yT4aEYa7k&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=23</a>
<b>Session 10</b>	<a href="https://www.youtube.com/watch?v=If4eBL3WwRs&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=24">https://www.youtube.com/watch?v=If4eBL3WwRs&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=24</a>
<b>Session 11</b>	<a href="https://www.youtube.com/watch?v=fb2-BpOh_Ck&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=25">https://www.youtube.com/watch?v=fb2-BpOh_Ck&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=25</a>
<b>Session 12</b>	<a href="https://www.youtube.com/watch?v=Of594HrGR9A&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=26">https://www.youtube.com/watch?v=Of594HrGR9A&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=26</a>
<b>Session 13</b>	<a href="https://www.youtube.com/watch?v=6ODpnC6xm-Y&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=27">https://www.youtube.com/watch?v=6ODpnC6xm-Y&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=27</a>
<b>Session 15</b>	<a href="https://www.youtube.com/watch?v=Ll8EpJ3osEU&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=28">https://www.youtube.com/watch?v=Ll8EpJ3osEU&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=28</a>
<b>Session 16</b>	<a href="https://www.youtube.com/watch?v=aO9Ixw6nxPw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=29">https://www.youtube.com/watch?v=aO9Ixw6nxPw&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=29</a>
<b>Session 17</b>	<a href="https://www.youtube.com/watch?v=RoIB0-cuAKk&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=30">https://www.youtube.com/watch?v=RoIB0-cuAKk&amp;list=PLklpCmasXpcn9eMXlk5LXQmTzeCn3SZHH&amp;index=30</a>

## **Highlights of the 2nd Gobeshona Global Conference**

The 2<sup>nd</sup> Gobeshona Global Conference was held virtually from 27th March to 1st April 2022 with interactive sessions focusing on “Exploring Locally-Led Adaptation & Resilience for COP 27”. More than 1500 participants from around the world, engaged in the 88 sessions hosted by renowned organizations. Some highlights from the 2nd Gobeshona Global Conference includes:

### **Workshop on ‘Loss and Damage’**

Some impacts of climate change that extend beyond adaptation and mitigation, is not a new concept. As one of the most important ways to reduce these Losses and Damages is through Locally Led Adaptation, a workshop was arranged for the first time within the conference with the hope of efficiently enabling the vulnerable countries to understand and tackle both the economic and non-economic damages. The participants were free to openly discuss with some globally recognized change-makers via this platform.

### **A Platform for Future Researchers and Leaders**

It is the children and young people of today who will be facing the worst effects of Climate Change. Therefore the platform was kept reachable to all groups and received applications from young enthusiasts who are working on Climate research and negotiations.

The youths in action being the agents of change, entrepreneurs and innovators are also problem solvers and have a great potential to generate positive social change in the world. And we want to continue creating opportunities for young professionals who will benefit from the GOBESHONA knowledge platform.

### **Experience Sharing**

A significant importance was given to the real climate warriors- who tackle climate change with their minimalistic adaptation strategies. Session organizers emphasized exhibiting how the local and climate-affected communities are burdened by the competitive access to funding though having the capability to build back better.

Interpreters were arranged to acknowledge the wide range of participation from communities and climate-affected regions, encouraging attendees to take part and share their thoughts on locally-led measures taken in their region, eventually raising a robust exchange of view

## A Note From The Director



The third Annual Gobeshona Global Conference focused on monitoring Locally- Led Adaptation (LLA) and resilience was held from 10th to 16th March 2023 with an overarching theme of linking local with global.

It followed the same format as the first and second conference in 2021 and 2022 with over seventy virtual sessions, which ran over 24 hours over seven days with the first eight hours focusing on Asia Pacific Time zones, the second eight hours on the Africa and Europe time zones and the third eight hours on the Americas.

The sessions were held by a mixture of community groups in both developing as well as developed countries, research groups from around the world who are working on LLA as well as funders and development partners. Each session was used to share respective activities and practices as well as lessons from different groups and locations. This has created a global community of LLA for which the annual Gobeshona conference is an exceptional event.

This report is a proceeding of the conference, which aims to share the key-messages from all the sessions of this year's conference. There is an unfortunate realization from the conference that adaptation is no longer sufficient once impacts of climate change start to occur and cause losses and damages. We may now have to include loss and damage in the agenda of the annual Gobeshona conference from next year.

Prof. Saleemul Huq

Director, ICCCAD

## Inaugural Session



*The Panelists of the Inaugural Session*

**Host:** International Centre of Climate Change and Adaptation (ICCCAD)

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

**Session Speakers:**

1. Dr. Saleemul Huq, Director, ICCCAD
2. Hasin Jahan, Head of WaterAid Bangladesh.
3. Runa Khan, Founder and executive director, Friendship
4. Dilruba Haider, Programme Specialist, UN Women
5. Farah Kabir, Head of ActionAid Bangladesh
6. Dr. Samiya Selim , Director and Professor, Center for Sustainable Development, University of Liberal Arts Bangladesh.
7. Dr. Hamidul Huq, Director, Institute of Development Studies and Sustainability at UIU
8. Md. Golam Rabbani, Head of Climate Bridge Fund Secretariat at BRAC
9. Mokhlesur Rahman, Executive Director at Center for Natural Resource Studies (CNRS)

### **Speaker 1: Dr. Saleemul Huq**

Dr. Saleemul Huq commenced the session by providing a brief overview of the Gobeshona platform, a platform established for researchers studying climate change in Bangladesh almost a decade ago. The name of the platform, "Gobeshona," which derives from the Bengali language and means "research," was chosen. The platform intends to bring together scientists studying all facets of climate change. The Gobeshona Conference was previously held in person at the Independent University Bangladesh (IUB) for 4–5 days. But beginning in 2021, the meeting switched to an online format because of the COVID-19 pandemic. The Gobeshona platform was able to expand the conference into a seven-day event that was available to people all over the world thanks to the online format. The conference's focus this year is on locally driven adaptation and resilience. Participants from diverse nations will discuss their experiences putting the eight LLA principles into practice and offer insights into which concepts work and which don't. Researchers and organizations from all over the world can present their knowledge on climate change adaptation and resilience at the conference. Dr. Saleemul Huq welcomed the panelists to share their ideas and views after the session opened with a Bangladeshi anecdote to engage the international audience.

### **Speaker 2: Hasin Jahan**

1. The core of LLA is from empowering women and addressing structural inequality. Hasin Jahan mentioned her work was focused on participatory rural appraisal. The debut of Water Aid's climate resilient program in 2010 presented a sizable hurdle because many people at the time were unfamiliar with the concept of climate change. They had to come up with methods for assisting communities in comprehending how climate change affected their daily lives.
2. To assist communities in identifying their vulnerabilities and creating climate resilience plans, they created the Participatory Ward Vulnerability Assessment (PWVA), a participatory approach. Each community member participated in the bottom-up PWVA process, outlining their needs and creating a plan for their ward, which was then incorporated into the bigger union-level plan.
3. In accordance with the guidelines of Local Level Adaptation (LLA), they have been striving to assess and enhance their work. Although they have made strides, they still require outside assistance to fully adhere to the principles in a more efficient manner.



### **Speaker 3: Runa Khan**

1. In Bangladesh, the mainstream strategy for combating climate change and reducing poverty should include locally-led adaptation (LLA), which is crucial when working with distant populations. With this strategy, interventions can be better tailored to the unique requirements and situations of communities, having a greater impact and producing better results.
2. The most important aspect of projects is their impact, and for that to occur, people must absorb the interventions that are offered to them. This means that in order to make sure that interventions are culturally relevant, sustainable, and effective, initiatives must be created in collaboration with communities and involve them in decision-making processes.
3. In order to combat climate change in Bangladesh, integrated solutions are required, such as lowering the illness load, enhancing water availability, and community-specific education initiatives. To optimize impact and establish synergies, this calls for cooperation amongst various sectors and actors, including local communities, NGOs, and governmental organizations.

### **Speaker 4: Dilruba Haider**

1. Successful disaster management and risk reduction programs within communities depend on empowering local organizations, particularly women's organizations.
2. Women's organizations can identify qualified people for assistance during disaster relief activities and hold contractors accountable.
3. She also discussed how a climate change and gender program helped a woman named Mahera, who was residing in poverty in the Sundarbans region, improve her standard of living. Climate change and gender initiatives can improve the lives of women like Mahera and strengthen the conviction that women have the ability to affect positive change in their communities.

### **Speaker 5: Farah Kabir**

1. Farah Kabir has a strong background in public policy and women's rights, and in the mid-2000s, while living in the UK, she developed an interest in climate change issues. She later joined the organization Action Aid, which works with communities on issues like disaster relief, conservation, and livelihoods.
2. The person experienced an awakening realization while working with Action Aid after seeing many disasters quickly, underscoring the pressing need to

prioritize climate change. The federation of 47 nations that Action Aid is a part of was persuaded to make climate change a priority after that, and it has been one of their main areas of attention ever since.

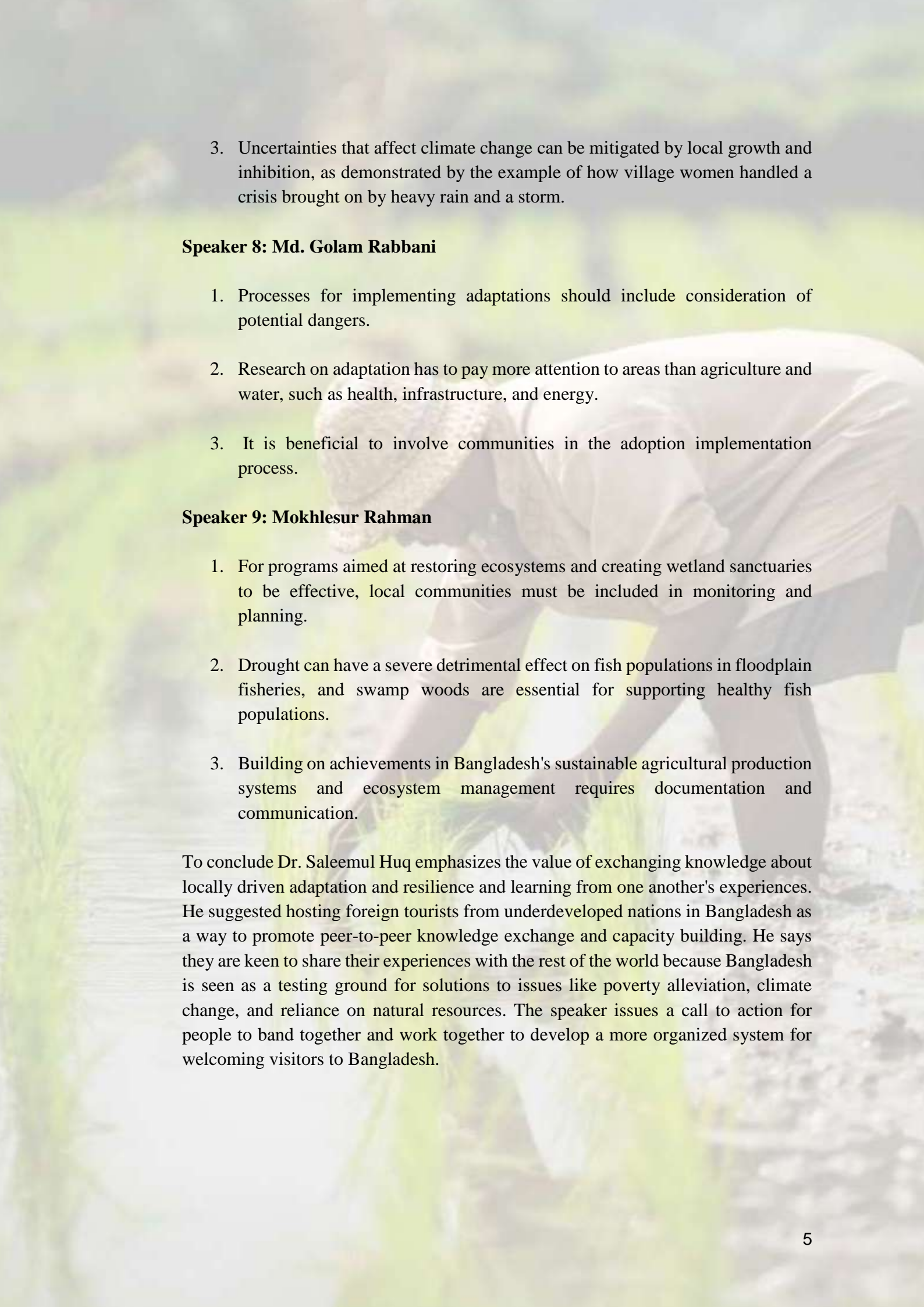
3. She worked with Bangladeshi communities to address climate change issues centered on identifying locally appropriate adaptation strategies, which required a lot of innovation. This included saving seeds, building shelters, and developing community-friendly shelter designs. In general, their strategy focused on collaborating with communities to identify solutions that were suited to their particular needs and resources.

#### **Speaker 6: Dr. Samiya Selim**

1. Natural resource decisions have historically been made with little consideration, which has resulted in activities that are harmful to the environment and contribute to climate change. In order to address this, efforts should be made to increase the capacity of regional institutions and local communities, giving them the ability to prioritize climate change when managing natural resources and equipping them with the knowledge and information necessary to do so.
2. It is crucial to engage in a trans disciplinary manner, involving stakeholders from several sectors and disciplines, to address complex concerns like environmental degradation and climate change. This entails engaging with other stakeholders, including as politicians, civil society organizations, and the commercial sector, in addition to moving away from academic publications as the key indicator of success.
3. The principles of locally led adaptation must be adhered to while creating climate change programs. Since they are in the best position to recognize and put into practice solutions that work for them, this entails interacting with and prioritizing the needs, knowledge, and viewpoints of the local communities. In order to effectively combat climate change, it also entails assisting regional organizations.

#### **Speaker 7: Dr. Hamidul Huq**

1. Local initiatives are more effective than those made by politicians and other outsiders, thus it's crucial to accept and encourage local expertise, needs, and potential.
2. Sustainability can be attained through bridging the gap between local and external power as well as by methodically collecting and disseminating knowledge to impact decision-making processes.

- 
3. Uncertainties that affect climate change can be mitigated by local growth and inhibition, as demonstrated by the example of how village women handled a crisis brought on by heavy rain and a storm.

**Speaker 8: Md. Golam Rabbani**

1. Processes for implementing adaptations should include consideration of potential dangers.
2. Research on adaptation has to pay more attention to areas than agriculture and water, such as health, infrastructure, and energy.
3. It is beneficial to involve communities in the adoption implementation process.

**Speaker 9: Mokhlesur Rahman**

1. For programs aimed at restoring ecosystems and creating wetland sanctuaries to be effective, local communities must be included in monitoring and planning.
2. Drought can have a severe detrimental effect on fish populations in floodplain fisheries, and swamp woods are essential for supporting healthy fish populations.
3. Building on achievements in Bangladesh's sustainable agricultural production systems and ecosystem management requires documentation and communication.

To conclude Dr. Saleemul Huq emphasizes the value of exchanging knowledge about locally driven adaptation and resilience and learning from one another's experiences. He suggested hosting foreign tourists from underdeveloped nations in Bangladesh as a way to promote peer-to-peer knowledge exchange and capacity building. He says they are keen to share their experiences with the rest of the world because Bangladesh is seen as a testing ground for solutions to issues like poverty alleviation, climate change, and reliance on natural resources. The speaker issues a call to action for people to band together and work together to develop a more organized system for welcoming visitors to Bangladesh.



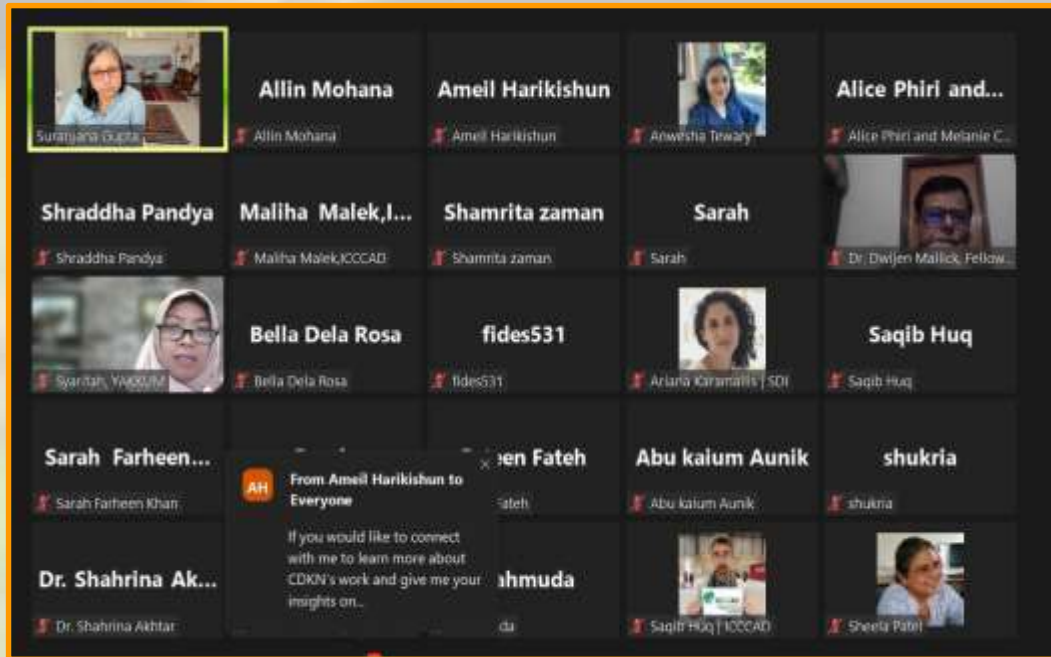
### **Three key takeaways from the end of the session:**

1. Scientists working on various facets of climate change in Bangladesh are brought together via the Gobeshona platform, which hosts an annual conference on local adaptation and resilience.
2. Participatory rural appraisal, creating climate resilience plans, involving communities in decision-making, empowering women's organizations, and involving regional institutions and local communities in natural resource management were some of the locally led adaptation strategies covered at the conference.
3. Comprehensive strategies were stressed, along with addressing structural inequities and empowering women, as well as increasing access to water, lowering disease rates, and initiating community-specific education initiatives.

### **Session Summary:**

The Gobeshona platform was established almost a decade ago for researchers studying climate change in Bangladesh. The platform brings together scientists studying all facets of climate change, and it holds an annual conference that was previously held in person but switched to an online format in 2021 due to the COVID-19 pandemic. This year's conference centered on local adaptation and resilience. The panelists talked about various strategies for locally led adaptation, such as participatory rural appraisal, developing plans for climate resilience, involving communities in decision-making processes, empowering women's organizations, and involving regional institutions and local communities in the management of natural resources. They underlined the value of working with local communities to find solutions that are appropriate for their specific requirements and resources. The speakers also emphasized the necessity for comprehensive approaches, including reducing the number of illnesses, improving water accessibility, and launching community-specific education programs, as well as the significance of addressing structural inequalities and empowering women.

## Scaling up Locally-Led Adaptation: Lessons Learned from Urban Poor & Grassroots in Applying LLA



*The panelist of the Scaling up Locally-Led Adaptation session*

**Host:** Huairou Commission

**Moderator:** Suranjana Gupta, Huairou Commission (HC)

**Session Speakers:**

1. Violet Shivutse, Founder-Director of Shibuye Community Health Workers and Chairperson of Huairou's Governing Council.
2. Alice Phiri, Urban poor community leader from Zambia Homeless People's Federation.
3. Sarah Nandudu, Urban poor community leader from National Slum Dwellers Federation of Uganda
4. Syarifah Anggreini, Grassroots leader and organizer from YAKKUM Emergency Unit, Indonesia.
5. Melanie Chirwa, Program Manager, People's Process on Housing & Poverty in Zambia.
6. Ameil Harikishun, Finance Thematic Lead, Climate Development Knowledge Network (CDKN).

**Speaker 1: Violet Shivutse**

1. Uniqueness of social movements - facilitates peer learning and mentorship of grassroots women leaders. Are struggling but innovate and find solutions. Implementing these solutions according to local contexts in various regions.
2. Negotiations are continuous in the process - with governments, partners and other actors. This facilitates recognition from various stakeholders.

3. Advocacy cannot be done singularly. Movements promote stronger advocacy and advance our voices. Eg: Governors Day with Farmers - recognition of grassroots communities, formally recognized Land-lease guidelines.

**Speaker 2: Alice Phiri**

1. Coming from a large settlement where grassroots women are organized - started by carrying out savings and credits through the Urban Poor Fund. Gives power to the women for economic security.
2. Groups are conducting data gathering and generating local knowledge. They are negotiating with governments for land rights. Peer exchanges strengthen knowledge exchange. Engaging with partners also.
3. Groups are carrying out backyard gardening, plantation drives. Green spaces are used as gathering spaces by women, for training, discussions and reflections on climate change issues.

**Speaker 3: Sarah Nandudu**

1. Important for communities to organize and raise their issues to the government. Mobilization tools, community profiles and map the gaps in the communities. We do this together with the city council. Create partnership based on the needs of communities.
2. Partnership must support knowledge sharing and learning from each other. Need partners help communities build on their already existing innovations. Better access to resources that are inclusive. Partners can help introduce local communities / groups to their networks — connect with allies
3. In Uganda we tried an eco-friendly toilet. They do not pollute the groundwater. Grassroots invest in environment friendly initiatives that reduce pollution, wastes and create a clean environment. Women's access to finance is critical. We work on how informal dwellers can access resources.

**Speaker 4: Syarifah Anggreini**

1. Women's groups have very important roles in collecting local data, managing and using data for meeting community needs. Uniqueness of women's group as it is involved in many community activities. Women's groups become a database of the local community. We have target data of people who are eligible for government programs.
2. Local adaptation efforts should be led by communities. This is how meaningful participation happens. It is not enough to give financial support. Mentoring and capacity building is needed. Partners should see women as knowledge experts.

3. Inclusive and effective partnerships mean that vulnerable and marginalized groups are included. Risks need to be shared. It shouldn't be the responsibility of the women's group, but partners should work together to address any issues or challenges that occur.

**Speaker 5: Melanie Chirwa**

1. Grappling with issues of poverty and vulnerability to climate change. Challenges - policies are good, but implementation is a struggle. Eg: Land policy says 50% of land should go to women. But poor and vulnerable women are not able to access this. They do not often have documentation needed to be eligible for these schemes.
2. Leadership that engages and brings women together. In collectives they are able to face some of the issues. Financing-access to finance is difficult as the process of applying is tedious and proper information for these women is very difficult. Planning laws and planning standards don't always support grassroots communities. Evictions and demolitions. Eg: Flooding recently. Support is just emergency relief. Communities need to be organized and able to advocate with the government not just for immediate response, but address the deeper structural issues.
3. Priorities of communities are heard. We have external researchers coming in and taking data in an extractive manner. Not using or acknowledging local knowledge. Lots of resources within our communities. Need to be respectful of how communities work, and partner with them to build resilience.

**Speaker 6: Ameil Harikishun**

1. Partnering with grassroots social movements to understand what their priorities are. What does amplification mean? Listen to the voices and understand the agendas and priorities of communities.
2. Women generating local data. CDKN is trying to get the knowledge and bridge it to donors and funders, and help them understand the crucial role that these communities play in how finance is disbursed and in the development of projects.
3. Unpack the knowledge and bring it to the partners to inform climate adaptation programs, finance etc. How do we move away from the role of communities as beneficiaries? How can local communities be drivers of change? Communities have the capabilities.

### **Three key takeaways from the end of the session:**

1. Social movements bring their own constituency, learning tools, knowledge, financial mechanisms, governance structures and experiences to the table. They act as aggregators, with inbuilt mechanisms to connect groups to create scale and impact according to local contexts.
2. Grassroots women can be repositories of local knowledge. There are many examples of grassroots-led community data being used to support vulnerable groups and ensure last-mile delivery of resources and schemes. Partners/external institutions need to be respectful of communities and use their knowledge to learn collaboratively, ensuring that community knowledge benefits communities.
3. Transparent and inclusive partnerships that ‘amplify’ the voices and agendas of grassroots women are needed. They are working to move from looking at communities as beneficiaries and start seeing them as drivers of change. Accompanying finance, there must be a sharing of learnings, risks and capacities. Governments, development institutions and other stakeholders must ensure that locally identified priorities and needs are being met.

### **Session Summary:**

Social movements are distinct in the constituency they bring, the learning tools, knowledge, governance structures, and experiences that they possess. In the context of the LLA space, the importance of grassroots movements in collecting knowledge, mobilizing collectives, and organizing is highlighted. However, mainstream and financial institutions do not always support grassroots communities, raising questions about inclusion for these communities and the meaning of long-term support. Communities have a significant stake in development and climate-resilience work, and they are already organized and addressing local challenges. Women have tools and experience in transferring innovations and supporting groups to implement them in their local contexts, and they possess inbuilt mechanisms to connect groups to create scale and impact. Social movements can act as aggregators in this regard.



## Securing the Food Systems of Asian Mega-Deltas for Climate and Livelihood Resilience



*The panelist of the Securing the Food Systems of Asian Mega Mega-Deltas for Climate and Livelihood Resilience session*

**Host:** International Rice Research Institute (IRRI),  
International Maize and Wheat Improvement Centre (CIMMYT),  
Living Deltas Hub, Wageningen University & Research - WUR

**Moderator:** Mrs Catharines Terwisscha van Scheltinga, WUR

**Session Speakers:**

1. Dr Humnath Bhandari, IRRI
2. Mr. Giasuddin Choudhury, Deputy Team Leader, Bangladesh Delta Plan Technical Team
3. Dr Manoranjan Mondal, IRRI
4. Dr. Gert-Jan Wilbers, WUR
5. Dr. Kien van Nguyen, An Giang University

**Speaker 1: Dr Humnath Bhandari**

1. The CGIR has launched a research program, "Securing the Food Systems of Asian Mega Deltas," to develop resilient mega deltas in Bangladesh, India, Myanmar, Vietnam, and Cambodia by incorporating science, innovation, and policy.
2. The Asian Mega Delta program focuses on the three Mega Deltas that are home to about 400 million people with high population density, poverty, malnutrition, and climatic stress such as extreme precipitation, drought, salinity, sea level rise, and extreme heat.

3. The program's main objective is to develop a resilient, inclusive, and productive Delta that maintains social ecological integrity, adaptive climate and other stress, and supports human prosperity and well-being. It includes designing Delta production systems, nutrition-sensitive agriculture, reducing climate risk, governance, and designing evidence-based policies.

**Speaker 2: Mr. Giasuddin Choudhury**

1. Bangladesh is located in the delta region where three major rivers (Ganges, Bonutra, and Magna) flow through the country, providing abundant water resources that are critical for its sustained economic growth and social development. However, the country also faces several challenges, including drought, storms, sea-level rise, and natural disasters, which make proper planning and management of the delta region a priority.
2. The Bangladesh Delta Plan aims to achieve a safe, climate-resilient, and prosperous delta by ensuring long-term water and food security, economic growth, and environmental sustainability while effectively reducing vulnerability to natural disasters and building resilience to climate change. The plan includes six goals, including flood risk management, water resource development and management, food security, environmental security, governance, and spatial planning.
3. The plan is a holistic one and aims to address the management of water security, food and nutrition security, economic growth, environmental sustainability, social development, and institutional governance in each project. The plan includes an investment plan with 80 projects and programs, and the goal is to create an enabling environment for growing crops and enhance the resilience of the agriculture sector, which is the most climate-sensitive sector in the country. The plan includes baseline studies on agriculture and other subjects to identify climate change as a significant threat to Bangladesh's aspiration to ensure food security, poverty alleviation, and sustainable development.

### **Speaker 3: Dr Manoranjan Mondal**

1. Water resources in the Ganges Coastal Delta offer a huge potential for Bangladesh to increase food security and production. The government has already constructed recycled holders to protect 1.2 million hectares from cyclones and tidal surges. However, the productivity of this zone is low, and there are challenges in adapting to traditional water management and cropping practices in the coastal area.
2. Over the past 20 years, researchers have developed various technologies to improve agriculture productivity and resilience in the coastal zone of Bangladesh. For instance, in the south-central zone, two to three crops are grown in a year, while in the south-western zone, salinity and slow productivity are the main challenges. Dr. Mandal proposes that foreign irrigation can increase productivity, but input production systems cannot be adopted without proper drainage.
3. Traditional cropping practices in the coastal area involve opening and closing the fields for cultivation of rice and other crops. However, this practice is risky due to unpredictable weather patterns, such as high rainfall in May, which can damage the crops. Therefore, Dr. Mandal proposes the adoption of nature-based solutions, such as ecosystem intensification and foreign irrigation, to improve agriculture productivity and resilience in the coastal zone of Bangladesh.

### **Speaker 4: Dr. Gert-Jan Wilbers**

1. Agricultural production and water sources: The speaker provided an overview of the main agricultural production zones in the Mekong Delta of Vietnam, highlighting that 50% of the land is cultivated with rice, and other crops such as vegetables and fruit orchards are also prevalent. The speaker also talked about the water sources used for agricultural production, such as canal water, groundwater, and rainwater, with the use of canal water and groundwater being higher during the dry season.
2. Water-related pressures faced by farmers: The speaker also discussed the water-related pressures faced by farmers in the Mekong Delta, such as water shortages due to the over-extraction of canal water, as well as groundwater shortage during some parts of the year. Additionally, salinity was identified as a significant issue, affecting a large part of the Delta and lasting for up to seven months per year.
3. Transition pathways: Finally, the speaker discussed the identification of transition pathways for agricultural production in the Mekong Delta,

considering the water-related pressures faced by farmers. The presentation aimed to explore how the transformation of the food system could be achieved in the region, considering water management and sustainability. The speaker presented the research conducted by the team at Wageningen University on household interviews and focus group discussions with farmers in the Delta to identify these transition pathways.

#### **Speaker 5: Dr. Kien van Nguyen**

1. Status of organic rice in the Mekong Delta: The speaker explains that there are three types of organic farming in the Mekong Delta. These include individual farms, organic agriculture cooperatives, and private businesses or rice export businesses. The farmers receive support from the government, NGO social enterprise, and international organizations. Several companies and cooperatives have invested in organic rice farming in the Mekong Delta.
2. National and provincial government policy and opportunity and challenge: The Vietnamese government has issued organic standards and planned for organic agriculture for 10 years. Each provincial government has detailed planning for their province, and investors can invest in organic agriculture projects over 3 million US dollars for five years. The government supports farmers' cooperatives and businesses who invest in organic agriculture in the province.
3. Outcome of the five years efforts of organic rice transformation: The first FSA comes from businesses and cooperatives. Most rice export or rice retailer or rice export company investors invest in organic rice farming. The speaker provides a visual of the organizations and investors supporting organic agriculture in the Mekong Delta, including FAO, Mekong Organics, and University of Barcelona, among others.

#### **Three key takeaways from the end of the session:**

1. The importance of diversity and inclusivity in the workplace: The speaker emphasized the need for organizations to foster an inclusive environment where everyone feels valued and respected, regardless of their background.
2. The benefits of remote work: The speaker discussed the advantages of remote work, such as increased flexibility and reduced commuting time. They also highlighted the need for organizations to invest in the necessary tools and technology to support remote work.
3. The role of leaders in driving organizational change: The speaker stressed the importance of leadership in driving change within an organization. They

encouraged leaders to be proactive in addressing issues related to diversity and inclusion, and to be open to feedback from their employees.

**Session Summary:**

The session was focused on the topic of "Leadership in the Digital Age" and explored the challenges and opportunities that leaders face in the rapidly changing digital landscape. The session featured three keynote speakers who provided insights and perspectives on different aspects of digital leadership, including the importance of embracing innovation, cultivating a growth mindset, and creating a culture of trust and collaboration. Overall, the session emphasized the need for leaders to be adaptable, proactive, and collaborative in order to effectively navigate the complexities of the digital age.

## Adaptation Technologies for Building Resilience to Climate Change: Bridging the Global and Local



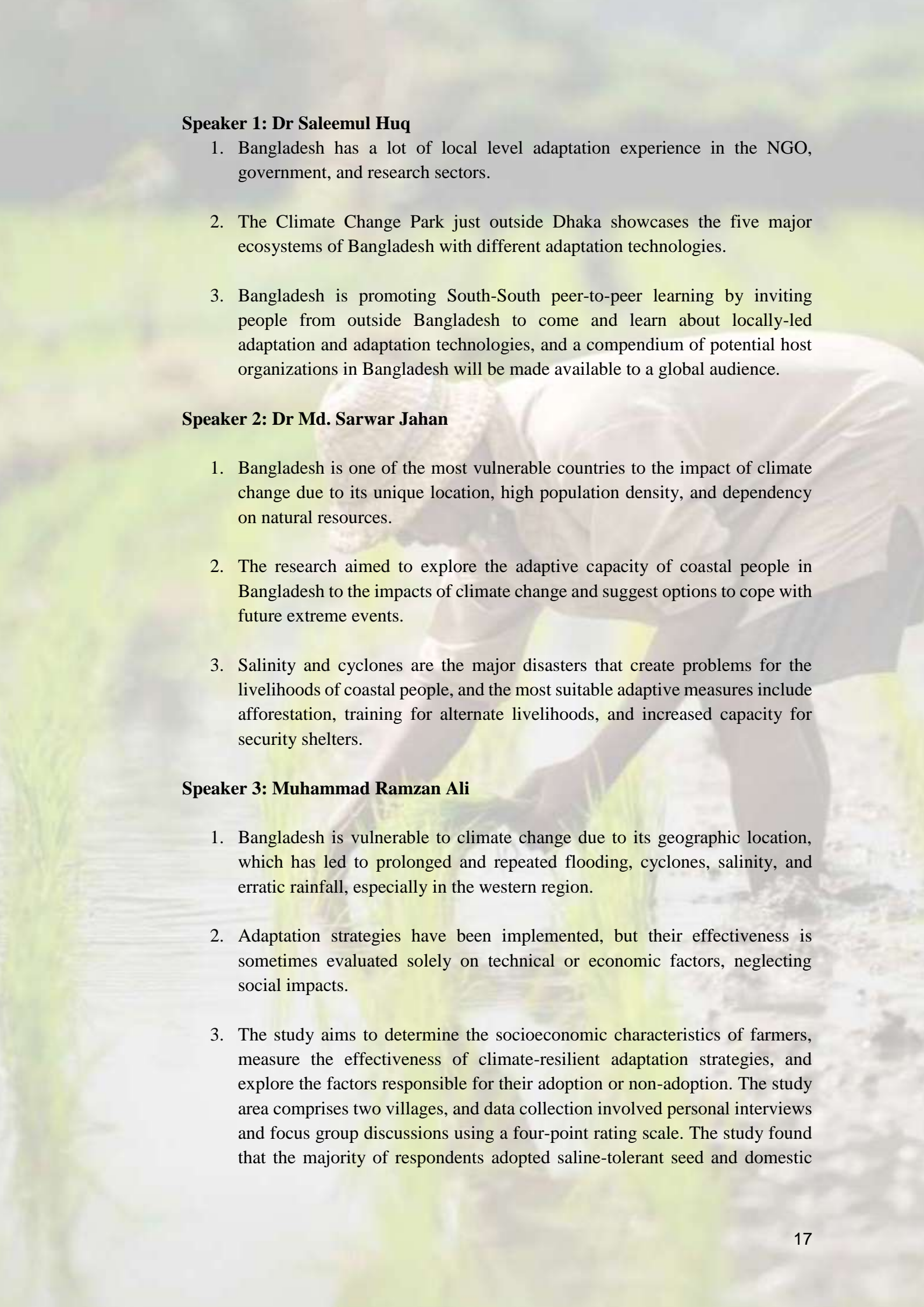
*The panelist of the Adaptation technologies for building resilience to climate change session*

**Host:** Christian Commission for Development in Bangladesh

**Moderator:** Mousumi Halder, Sr Capacity Building Officer, Climate Change Program, (CCDB)

**Session Speakers:**

1. Dr Saleemul Huq , Director, International Centre for Climate Change & Development (ICCCAD)
2. Juliate Keya Malakar, Executive Director, CCDB
3. Mousumi Halder, Sr Capacity Building Officer, Climate Change Program, CCDB
4. Dr Md. Sarwar Jahan, Professor, Khulna University, Khulna, Bangladesh
5. Muhammad Ramzan Ali Research Officer, Climate Change Program, CCDB
6. S.M. Mehedi Ahsan , Country Manager - Bangladesh, Global Center on Adaptation
7. Dr G.K.M. Mustafizur Rahman , Dean, Faculty of Graduate Studies, Bangabandhu Sheikh
8. Mujibur Rahman Agricultural University
9. Md Foezullah Talukder, Head Climate Change Program



**Speaker 1: Dr Saleemul Huq**

1. Bangladesh has a lot of local level adaptation experience in the NGO, government, and research sectors.
2. The Climate Change Park just outside Dhaka showcases the five major ecosystems of Bangladesh with different adaptation technologies.
3. Bangladesh is promoting South-South peer-to-peer learning by inviting people from outside Bangladesh to come and learn about locally-led adaptation and adaptation technologies, and a compendium of potential host organizations in Bangladesh will be made available to a global audience.

**Speaker 2: Dr Md. Sarwar Jahan**

1. Bangladesh is one of the most vulnerable countries to the impact of climate change due to its unique location, high population density, and dependency on natural resources.
2. The research aimed to explore the adaptive capacity of coastal people in Bangladesh to the impacts of climate change and suggest options to cope with future extreme events.
3. Salinity and cyclones are the major disasters that create problems for the livelihoods of coastal people, and the most suitable adaptive measures include afforestation, training for alternate livelihoods, and increased capacity for security shelters.

**Speaker 3: Muhammad Ramzan Ali**

1. Bangladesh is vulnerable to climate change due to its geographic location, which has led to prolonged and repeated flooding, cyclones, salinity, and erratic rainfall, especially in the western region.
2. Adaptation strategies have been implemented, but their effectiveness is sometimes evaluated solely on technical or economic factors, neglecting social impacts.
3. The study aims to determine the socioeconomic characteristics of farmers, measure the effectiveness of climate-resilient adaptation strategies, and explore the factors responsible for their adoption or non-adoption. The study area comprises two villages, and data collection involved personal interviews and focus group discussions using a four-point rating scale. The study found that the majority of respondents adopted saline-tolerant seed and domestic

gardening as adaptation technologies, while irrigation facilities had low adoption rates.

#### **Speaker 4: Md Foezullah Talukder**

1. CCDB's work in addressing resilience building from a local perspective: The speaker discusses CCDB's approach to building resilience for poor and vulnerable communities in Bangladesh by reducing climate change and enhancing governance and adaptation policies. They highlight CCDB's development of a tool called Climate Roots Assessment Tool, which can quantify the risks of climate change for vulnerable peoples.
2. CCDB's community resilience building project: The speaker talks about CCDB's community resilience building project in coastal areas of Bangladesh. They discuss the three strategies CCDB followed in this project: bringing people in action, connecting life and livelihoods, and community-led platform building. CCDB developed the capacity of the community platform so that they can identify local knowledge for adaptation and utilize new technologies.
3. The importance of diversity of livelihoods in community resilience building: The speaker discusses the diversity of livelihoods of the community and how the community can find solutions to some of their problems related to their primary and secondary livelihoods through the community climate resilience center. The community climate resilience center will then be interconnected with the people for a long time.

#### **Three key takeaways from the end of the session:**

1. Bangladesh has significant experience in local level adaptation in the NGO, government, and research sectors, with a particular focus on coastal communities.
2. Adaptation strategies in Bangladesh have mainly focused on technical and economic factors, neglecting the social impacts, and a more comprehensive approach is required.
3. Community-led resilience building is essential, and it should focus on diversity of livelihoods, connecting life and livelihoods, and community-led platform building. The community should be empowered to identify local knowledge for adaptation and utilize new technologies.





**Session Summary:**

The session focused on climate change adaptation and resilience building in Bangladesh. Speakers discussed various adaptation strategies, including afforestation, training for alternate livelihoods, and increased capacity for security shelters, as well as the importance of social impacts in evaluating the effectiveness of these strategies. They also highlighted the role of local communities and peer-to-peer learning in promoting adaptation technologies. The speakers emphasized the need for diverse livelihoods and community-led platform building to enhance resilience in vulnerable communities. Finally, CCDB's Climate Roots Assessment Tool was presented as a valuable tool for quantifying the risks of climate change for vulnerable people.

## Innovation in Locally Led Adaptation: Solutions for Resilience Women, Youth, Refugees and Indigenous Communities



*The panelist of the Innovation in Locally led Adaptation session*

**Host:** Global Resilience Partnership and The United Nations Development Programme

**Moderator:** Shuchi Vora (Global Resilience Partnership)

**Session Speakers:**

1. Ms. Sheila Patel, Director. Society for the Promotion of Area Resource Centers (SPARC).
2. Ms. Anne-Cecile Ragot, Responsible for Development and Partnerships.
3. Mr. Emmanuel Irunya, Director. Moyo District Farmers Association.
4. Mr. Jemuel Perino, Chairman. Bukidnon Umay Amnon Tribe Kapu-unan To Mga Datu (BUKDA).

**Speaker 1: Sheila Patel**

1. The most important and powerful thing to remember is that adaptation needs to be deeply local with a global conceptual framework but adaptable to be used by individuals, communities.
2. There is a need to realign the development and climate change stakeholders so that local and global people sit side by side and knowledge and ideas will circulate freely. Climate and development needs to shake hands.

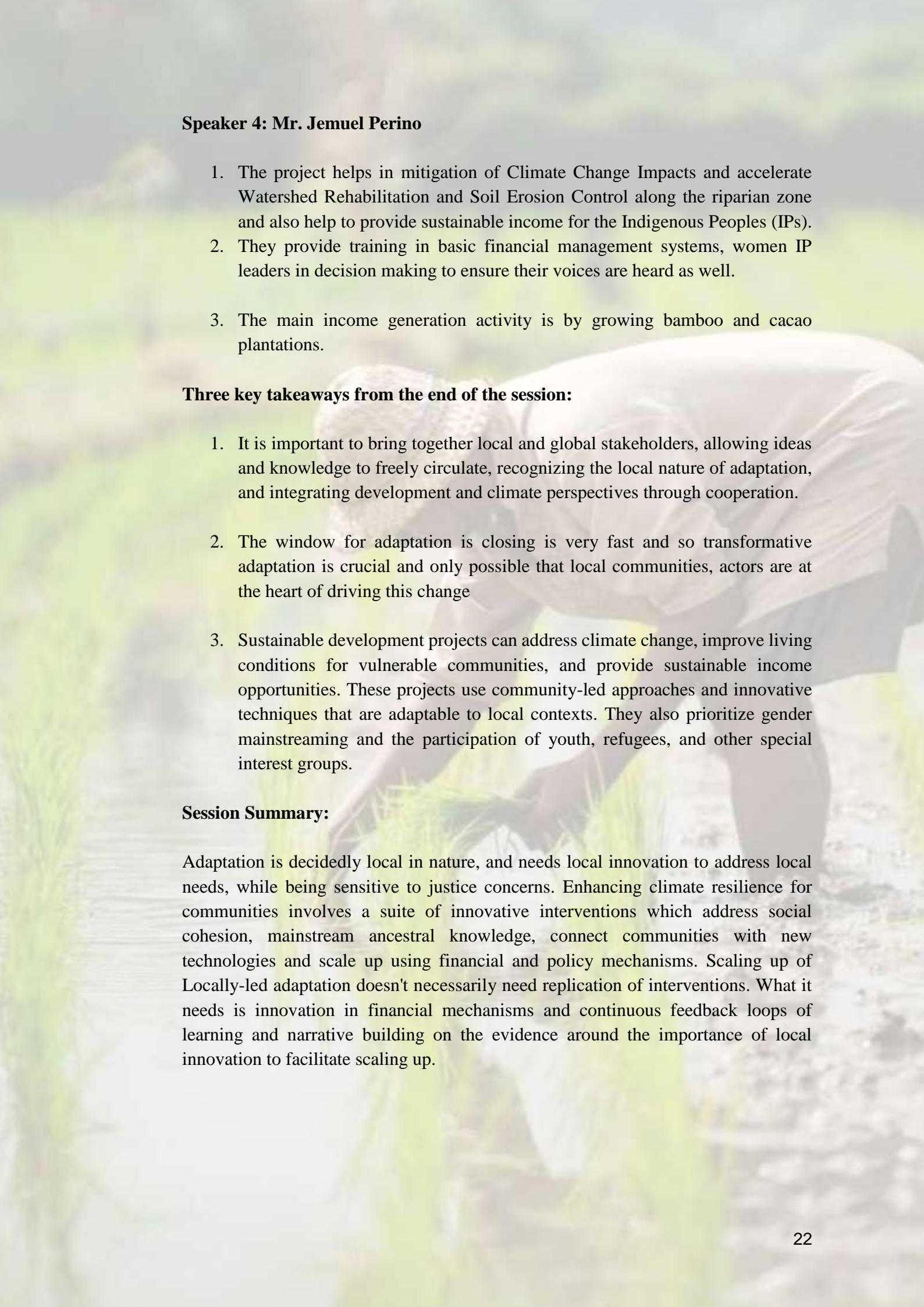
3. The project focuses on rejuvenating water bodies that are impacted by the rapid urbanization. The idea of the project is to locate the missing water bodies using remote sensing. Around 2500 water bodies have been identified out of which 1071 have been found to have vulnerable communities living around them. Various activities such as meeting and engaging with local communities /organizations /federations to discuss the project of water bodies in their respective settlements.

**Speaker 2: Anne-Cecileyo**

1. The Sahel region is considered to be the least to produce greenhouse gas emissions yet continues to be the most vulnerable to effects of climate change. This project focused on providing a sustainable and decent housing system to the majority of the population living in unhealthy living conditions.
2. The current condition is that people are living in tin houses under scorching heat , the project uses NUBIAN VAULT, a 3000 years architecture technique using earth and is more durable, comfortable, affordable and most importantly adaptable to the local community.
3. This project focuses on a market-based approach to implement, strengthen and diversify the training of locals. 25% of the total cost of the house is collected as personal contribution and the rest of the 75% is done in kind meaning that the locals themselves will participate in the construction of the house.

**Speaker 3: Mr. Emmanuel Iranya**

1. The project focuses on Moyo and Obongi (a refugee affected and hosting districts respectively) using a community-led conservation and restoration using the Farmer Managed Natural Regeneration model.
2. The project focuses on multiple interventions including advising farmers on climate proofing practices, providing efficient cooking technologies.
3. Engagement of youth, women, and refugees including other special interest groups work together to provide peaceful working conditions. Gender mainstreaming throughout the implementation and planning process.



**Speaker 4: Mr. Jemuel Perino**

1. The project helps in mitigation of Climate Change Impacts and accelerate Watershed Rehabilitation and Soil Erosion Control along the riparian zone and also help to provide sustainable income for the Indigenous Peoples (IPs).
2. They provide training in basic financial management systems, women IP leaders in decision making to ensure their voices are heard as well.
3. The main income generation activity is by growing bamboo and cacao plantations.

**Three key takeaways from the end of the session:**

1. It is important to bring together local and global stakeholders, allowing ideas and knowledge to freely circulate, recognizing the local nature of adaptation, and integrating development and climate perspectives through cooperation.
2. The window for adaptation is closing is very fast and so transformative adaptation is crucial and only possible that local communities, actors are at the heart of driving this change
3. Sustainable development projects can address climate change, improve living conditions for vulnerable communities, and provide sustainable income opportunities. These projects use community-led approaches and innovative techniques that are adaptable to local contexts. They also prioritize gender mainstreaming and the participation of youth, refugees, and other special interest groups.

**Session Summary:**

Adaptation is decidedly local in nature, and needs local innovation to address local needs, while being sensitive to justice concerns. Enhancing climate resilience for communities involves a suite of innovative interventions which address social cohesion, mainstream ancestral knowledge, connect communities with new technologies and scale up using financial and policy mechanisms. Scaling up of Locally-led adaptation doesn't necessarily need replication of interventions. What it needs is innovation in financial mechanisms and continuous feedback loops of learning and narrative building on the evidence around the importance of local innovation to facilitate scaling up.

## Intersectional Solutions that Advance Locally-Led Adaptation, Climate Mitigation, and Human Well-being



*The panelist of the Intersectional solutions that advance locally-led adaptation Climate Mitigation, and Human Well-being session*

**Host:** Project Drawdown

**Moderator:** Carissa Patrone Maikuri, Program Coordinator, Drawdown Lift, Project Drawdown

**Session Speakers:**

1. Carissa Patrone Maikuri, Program Coordinator, Drawdown Lift, Project Drawdown
2. Chigozie Nweke-Eze, Strategic Intelligence and Africa Program Lead
3. Sadia Rahman, Technical Coordinator- Global Advocacy
4. Komi Maglo, Executive Director, OPAS Togo

**Speaker 1: Carissa Patrone Maikuri**

1. The web page “28 Drawdown solutions” show that they have multiple co-benefits for climate mitigation, adaptation, AND well-being, and are a means for emerging economy countries to pursue renewable, low-carbon development pathways while addressing the socioeconomic needs of their populations.
2. Some solutions: Changing the way we grow food is critical for addressing climate change, secure land tenure (especially for women) is one component

of the Protecting and Restoring Ecosystems solutions group, Fostering equality: voluntary, rights based family planning and universal, high quality education.

3. There is solid and substantial evidence that these 28 climate solutions generate significant direct and indirect co-benefits to human well-being particularly around Income and Work, Health, Food Security, Education, Gender Equality, and Energy, and would be transformational in helping to alleviate poverty and increasing resilience to current and future climate change.

**Speaker 2: Chigozie Nweke-Eze**

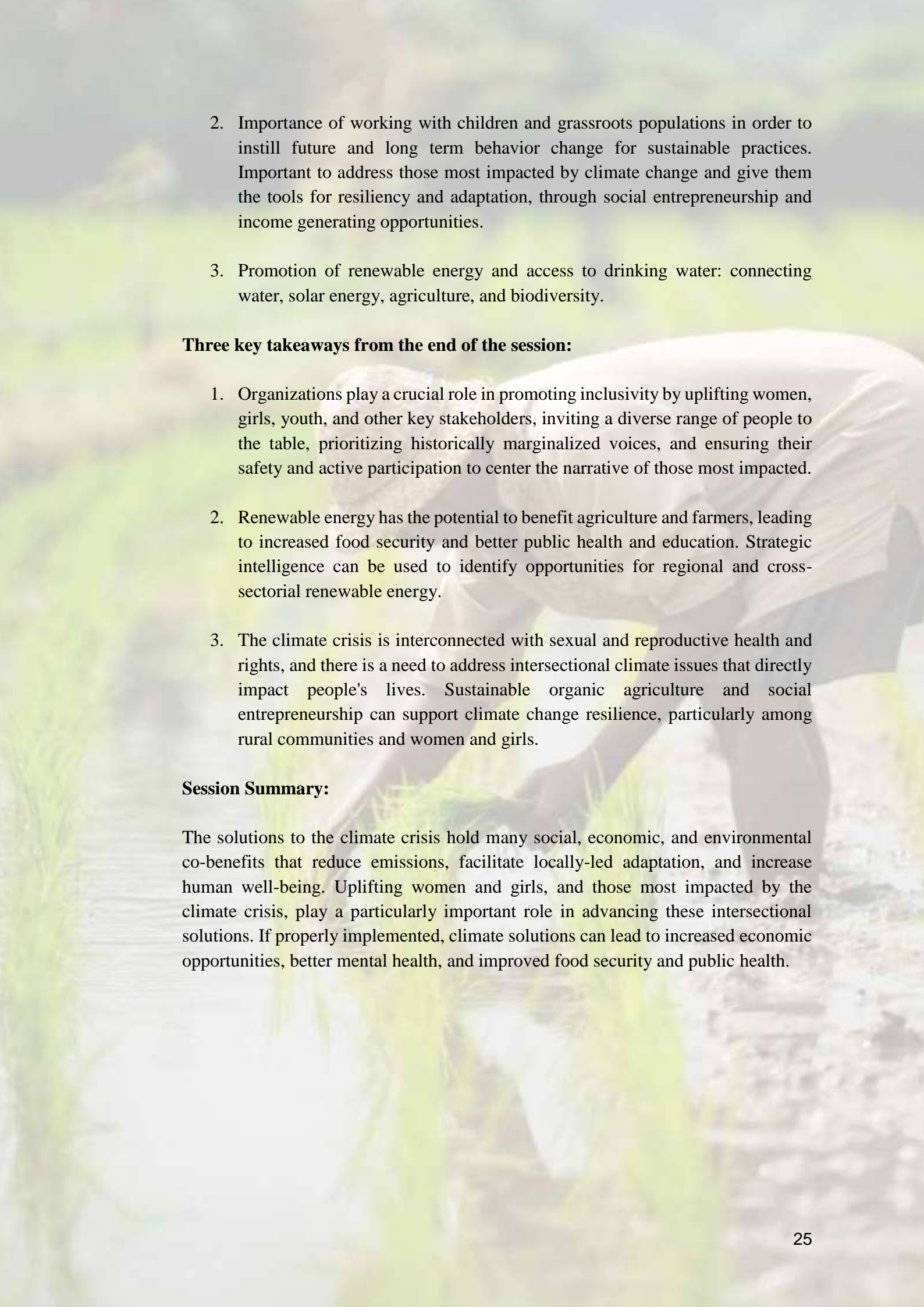
1. Strategic intelligence: strategically positioning renewables and strengthening regional and cross-sectoral renewable energy; reveal blind spots and identify windows of opportunity.
2. Renewables can benefit agriculture and farmers, which leads to increased food security, and thus better public health and education.
3. Energize Africa Campaign: renewable energy leadership and voices to show that renewables build up economies and unlock inclusive growth.

**Speaker 3: Sadia Rahman**

1. Climate change is one of the most fundamental issues connected to sexual and reproductive health and rights. For example, in climate affected areas, girls may marry quickly after climate disasters; have to cover long distances to collect water.
2. Connection to mental health and working to break the stigma of trauma related to climate change and climate migration (1 in 7 people are already being affected by climate change and will have to relocate).
3. Need to address the intersectional climate issues that directly affect lives and utilizing other mediums and tools for change.

**Speaker 4: Komi Maglo**

1. OPAS is focused on sustainable organic agriculture (training on best practices), environment (agroforestry to restore degraded lands, community plantations), and social entrepreneurship for women and girls (production and sale of agricultural products).

- 
2. Importance of working with children and grassroots populations in order to instill future and long term behavior change for sustainable practices. Important to address those most impacted by climate change and give them the tools for resiliency and adaptation, through social entrepreneurship and income generating opportunities.
  3. Promotion of renewable energy and access to drinking water: connecting water, solar energy, agriculture, and biodiversity.

**Three key takeaways from the end of the session:**

1. Organizations play a crucial role in promoting inclusivity by uplifting women, girls, youth, and other key stakeholders, inviting a diverse range of people to the table, prioritizing historically marginalized voices, and ensuring their safety and active participation to center the narrative of those most impacted.
2. Renewable energy has the potential to benefit agriculture and farmers, leading to increased food security and better public health and education. Strategic intelligence can be used to identify opportunities for regional and cross-sectorial renewable energy.
3. The climate crisis is interconnected with sexual and reproductive health and rights, and there is a need to address intersectional climate issues that directly impact people's lives. Sustainable organic agriculture and social entrepreneurship can support climate change resilience, particularly among rural communities and women and girls.

**Session Summary:**

The solutions to the climate crisis hold many social, economic, and environmental co-benefits that reduce emissions, facilitate locally-led adaptation, and increase human well-being. Uplifting women and girls, and those most impacted by the climate crisis, play a particularly important role in advancing these intersectional solutions. If properly implemented, climate solutions can lead to increased economic opportunities, better mental health, and improved food security and public health.

## From Vulnerability to Sustainability: The Journey of Climate Migrants



*The panelist of the From Vulnerability to Sustainability session*

**Host:** Helvetas Swiss Intercooperation and ICCCAD

**Moderator:** Ashish Barua, Programme Officer, Climate Change and Sustainable Development

**Session Speakers:**

1. Md Shamsuddoha, Chief Executive, Center for Participatory Research and Development-CPRD
2. Heather McGray, Director, Climate Justice Resilience Fund
3. Prof. Mizan R. Khan, Deputy Director, International Centre for Climate Change and Development, ICCCAD and Programme Director, Least Developed Countries University Consortium on Climate Change, LUCCC

**Speaker 1: Md Shamsuddoha**

1. Human dimension of climate change impact is ignored so the inurement of climate justice on the ground which resultants the impacts are, are being extended to secondary, tertiary touch level and forcing them to be migrated, to compromise their basic human base for both convincing the policy makers and to integrate those in our plan now.
2. Drawing attention to local Governments to facilitate migration for building their capacity of the future migrants so that they can have a job in urban context, but also to ensure urban components so that for the lead, the price is



very, is accessible to water sanitation with proper measurement of civic rights for all.

3. Global Policies are distracting our demand from the UNFCCC forum on multi-party demand for climate induced loss and damage. There is no particular political strategy for climate induced displacement. We measure decisions on how to entitle this displacement with dignity and full huge disbursement of land for disaster uprooted communities.

**Speaker 2: Heather McGray**

1. Young people need more attention on how they are adapting with the changing environment and the decisions that have been taken for them so that they can demand for their climate justice.
2. Entrance to the systems people rely on for their lives and livelihoods needs significant change, such as random distribution of social safety net packages which means many people are not aware about their rights and the responsibility of their governments.
3. According to recent COP27 decisions, do we all need to bring our own separate skills and abilities and perspectives together to build solidarity and build a movement to ensure funds for Loss and Damage through finding allies in our national arena and in the global spaces.

**Speaker 3: Prof. Mizan R. Khan**

1. Utilization of funds through capacity building with harnessing the human capacity as necessity is the key to living. Developed countries will require more expert employees, so we must critically investigate that opportunity.
2. Good homework is required for the NDCS and NABS, the national drivers, where we must come up with concrete solutions and also periodic submissions so that they are on the progress and also the Paris agreement-country can prepare its own position for loss and damage funding.
3. Organizations have to create a platform for displacement in a capacitive way as a disaster and migration policy-mentioned about capacity development, PJP's trainee program is the replication of this policy where they could see that in-situ adaptation is not possible for migration.



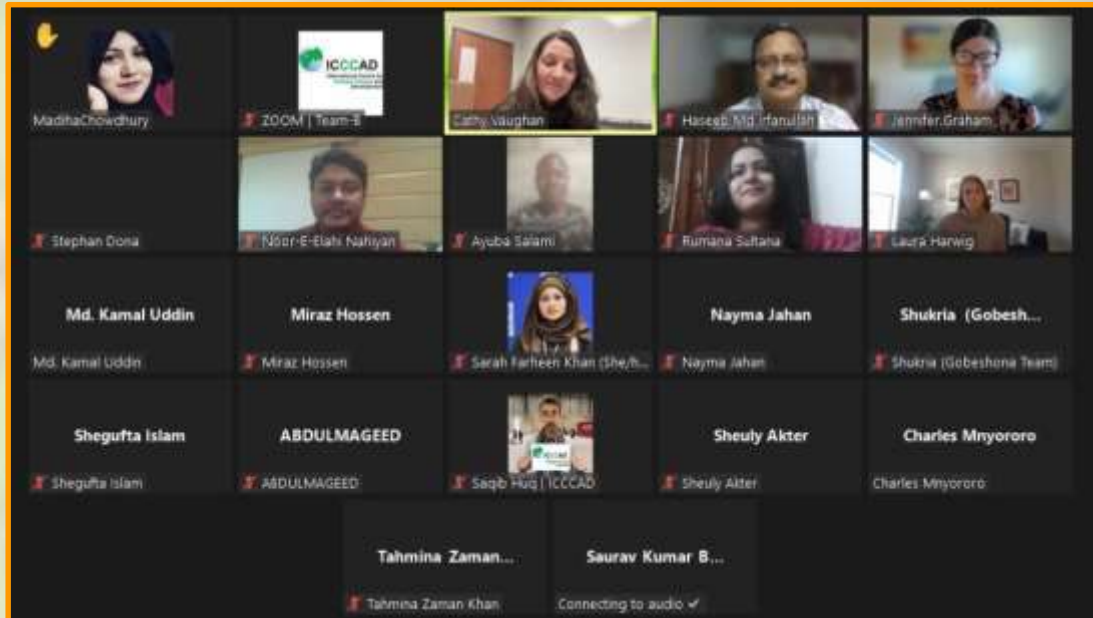
**Three key takeaways from the end of the session:**

1. Along with technical support there's a need to upscale adaptation activities like Technical education, demand based education, market demand based education and make a bridge between private sector not only in terms of technological adaptation but also provide them a safe house after they migrate or not!
2. NGOs can play a vital role in capacity building, social change, and shifting power dynamics by collaborating on alternative livelihood models, advocating for equitable safety net programs, and bringing the needs of disadvantaged communities to policymakers.
3. Need those systems to really be fair, to pay attention to gender, to pay attention to past and class and the many reasons people may be marginalized rather than taking those thoughts of challenging the systemic power. The most important gaps are that the current system and process conflicts with the financial need to change the view of the political party for loss and damage issues.

**Session Summary:**

There is a need for institutional structures and appropriate funding mechanisms at the local level to address in-situ migration, along with efforts to bring community voices to the global level and increase adaptation finance for loss and damage. Additionally, there is a need for a clear plan to reduce the use of power ships for climate justice, ensure the global financial fund is controlled by the community and hold governments accountable for climate justice without shifting responsibility. The Cancun agreement also includes a standalone paragraph on climate change-induced displacement migration.

## Climate Policy World Café: Supporting Locally Led Adaptation in Bangladesh



*The panelist of the Climate Policy World Café session*

**Host:** USAID Climate Adaptation Support Activity (CASA)

**Moderator:** Cathy Vaughana, Director of Learning, Innovation and Research, USAID Climate Adaptation Support Activity (CASA)

### **Session Speakers:**

1. Cathy Vaughana, Director of Learning, Innovation and Research, USAID Climate Adaptation Support Activity (CASA)
2. Dr Saleemul Huq, Director, ICCCAD
3. Jennifer.Graham, Technical Advisor, CASA

### **Speakers 1: Cathy Vaughan**

1. In Bangladesh they recently signed a contact paper with USAID Bangladesh to explore ways to support climate action. What kind of option that might be explored and improved to enable the environment.
2. This session was organized in a World Café format, allowing experts from Bangladesh and around the world to weigh in on progress and needs regarding the kinds of policy and economic shifts that can foster resilience and climate action related to Climate smart agriculture, Green growth and Shock-responsive social protective systems.
3. During the discussion involving 20 participants, various types of question answers focused on the enabling environment for climate action in

Bangladesh. The key points highlighted were the importance of policy and economic context, a comprehensive understanding of risks and vulnerabilities, the need for political will to address adaptation gaps, mandates to facilitate action, the significance of evidence-based research and appropriate capacities, and the role of technologies. These factors collectively contribute to creating a conducive environment for effective climate action in Bangladesh.

**Speaker 2: Dr. Saleemul Huq**

1. Ten years ago, we collaborated with USAID to establish it through a seed grant. As part of the ICCCAD initiative, our team is pleased to offer assistance in identifying activities that can enhance the ongoing efforts of over 50 institutions associated. These institutions are already engaged in various areas such as agriculture, water management, local leadership, and collaboration between government and non-government sectors. Additionally, both ICCCAD and Gobeshona can provide support in engaging USAID further.

**Speakers 3: Jennifer Graham**

1. Participants provided feedback on the question regarding policy and economic shifts that can advance climate-smart agriculture in Bangladesh. The specific points discussed included the necessity of promoting sustainable farming practices, incentivizing climate-smart agricultural technologies.
2. Climate Smart agriculture means making people smarter and taking longer time to get smart agricultural in Bangladesh. Farmers and young people are adopting new practices by internet or YouTube and they practice that in their field but that way is not a systematic way of learning, how to do it perfectly. It would be great to teach them in a systematic way to improve the farming and improve the transport system.
3. The key concepts mentioned are "shock-responsive social system" and "disaster risk financing." Training, supply, private sector involvement, accessing finance facilities, and technical guidance are important aspects. Information is needed to access markets and sell products. It is necessary to finance disaster-resistant housing, reduce disaster risk, adapt to risks, and improve social production systems. Addressing the community's preference for keeping cattle, provisions can be made for cattle management on high-resistance land. Additionally, a mobile charging system powered by solar energy is required.



**Three key takeaways from the end of the session:**

1. Focus on future challenges, not just on immediate problems.
2. Children from Charlands are affected by stunting; important to bring these voices forward to address health challenges.
3. Connecting with universities is a good option to build a scaled-up approach.

**Session Summary:**

A group of more than 20 people had a discussion about existing efforts to address climate change, focusing on Climate Smart Agriculture, Green Growth, and Social Protection System in Bangladesh. Planning and policy initiatives such as the 8th Five-Year Plan, Delta Plan, Prospective 2041, Mujib Prosperity Plan, and National Adaptation Plan are relevant. Climate smart agriculture through ecosystem-based practices like agroforestry and technical and vocational training is essential, particularly for people. They agreed that it's important to focus not only on immediate problems but also on future challenges. They discussed a wide range of topics and shared their knowledge and perspectives, which provided a broad understanding of the current situation.

## Climate Change Impact and Agriculture of Bangladesh: Adaptation Options



*The panelist of the Climate Change Impact and Agriculture of Bangladesh session*

**Host:** Krishi Gobeshona Foundation

**Moderator:** Dr Jiban K Biswas, Executive Director, KGF

**Session Speakers:**

1. Dr. Jatish Chandra Biswas, Coordinator, CRP-II
2. Dr. A. K. Shakur Ahammad, Professor, Dept. Fish. Biol. & Genetics, BAU, Mymensingh
3. Dr. Md. Morshedur Rahman, Professor, Dept. Dairy & Poultry Science, BSMRAU
4. Dr. Jiban Krishna Biswas, Executive Director at KGF.
5. Dr. Veronica Dore, Research Manager, Climate Change programme ACAIR, Australia
6. Dr. Saleemul Huq, Director, ICCCAD

**Speaker 1: Dr. Jatish Chandra Biswas**

1. Thermodynamics and humidity a surge could hasten the spread of illness and accelerate the proliferation of rice leaffolder.
2. The majority of smallholder farmers in northern Bangladesh have little adaptive capacity and are exposed to and sensitive to climate change.
3. A change in planting schedule and a heat-tolerant type might mitigate the impact.



**Speaker 2: Dr. A. K. Shakur Ahammad**

1. They discussed their research on determining the effects of climate change on tilapia (*Oreochromis niloticus*) development and seed production in conventional and experimental husbandry settings in order to create mitigation plans for long-term hatchery operation.
2. The Autoregressive Integrated Moving Average (ARIMA) model was used to anticipate the real scenario of tilapia production in Bangladesh.
3. The hatchery owners' perceptions of climate change are substantially influenced by erratic rainfall, high temperatures, and excessive sun radiation.

**Speaker 3: Dr. Md. Morshedur Rahman**

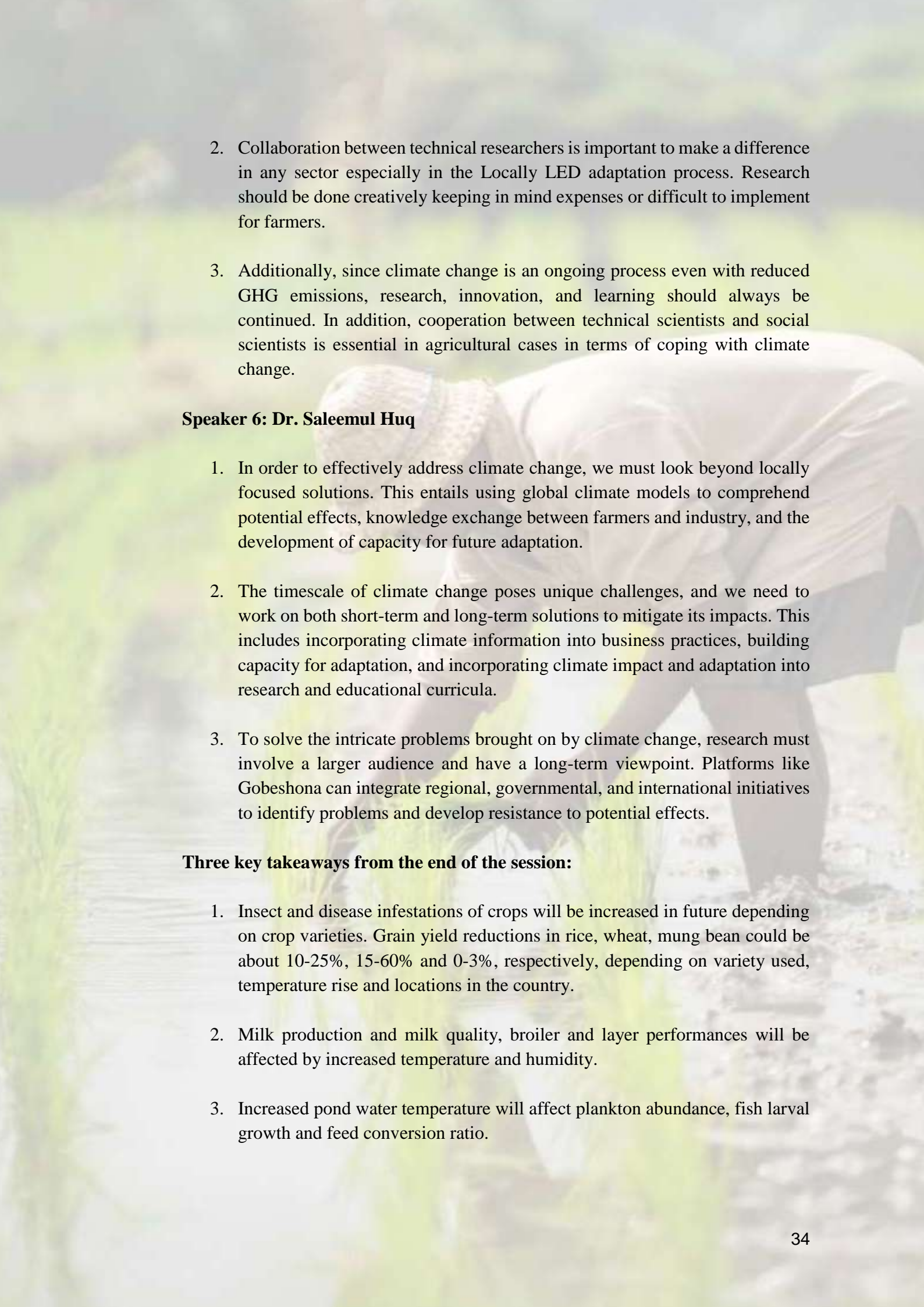
1. They are working on climate change adaptation in livestock and poultry, a special focus on heat stress on dairy and poultry, greenhouse gas (GHG) emission from manure management practices GHG practices from ruminant feeds, and ongoing adaptation strategies.
2. IOT based solution action to alarm about heat stress conditions of their farm and take according management strategy.
3. The goal of the research is to quantify or categorize various livestock species in order to choose the one with the lowest potential greenhouse gas output.

**Speaker 4: Dr. Jiban Krishna Biswas**

1. No research project can be properly carried out without having an acceptable amount of funding. Therefore, research should be conducted with the budget in mind.
2. Work should be done to ascertain how we can adjust and cause the least amount of environmental harm possible.
3. Farmers require adaptation techniques, but we also need to improve those strategies based on what we learn from the farmers' experiences so that we can bolster the farmers' capabilities.

**Speaker 5: Dr. Veronica Dore**

1. The type of research going on in Bangladesh and Australia is absolutely vital and on a leading edge.

- 
2. Collaboration between technical researchers is important to make a difference in any sector especially in the Locally LED adaptation process. Research should be done creatively keeping in mind expenses or difficult to implement for farmers.
  3. Additionally, since climate change is an ongoing process even with reduced GHG emissions, research, innovation, and learning should always be continued. In addition, cooperation between technical scientists and social scientists is essential in agricultural cases in terms of coping with climate change.

**Speaker 6: Dr. Saleemul Huq**

1. In order to effectively address climate change, we must look beyond locally focused solutions. This entails using global climate models to comprehend potential effects, knowledge exchange between farmers and industry, and the development of capacity for future adaptation.
2. The timescale of climate change poses unique challenges, and we need to work on both short-term and long-term solutions to mitigate its impacts. This includes incorporating climate information into business practices, building capacity for adaptation, and incorporating climate impact and adaptation into research and educational curricula.
3. To solve the intricate problems brought on by climate change, research must involve a larger audience and have a long-term viewpoint. Platforms like Gobeshona can integrate regional, governmental, and international initiatives to identify problems and develop resistance to potential effects.

**Three key takeaways from the end of the session:**

1. Insect and disease infestations of crops will be increased in future depending on crop varieties. Grain yield reductions in rice, wheat, mung bean could be about 10-25%, 15-60% and 0-3%, respectively, depending on variety used, temperature rise and locations in the country.
2. Milk production and milk quality, broiler and layer performances will be affected by increased temperature and humidity.
3. Increased pond water temperature will affect plankton abundance, fish larval growth and feed conversion ratio.



### **Session Summary:**

The session on climate change impact and agriculture of Bangladesh: adaptation options were initiated with the introductory remarks from the facilitator, Dr Shahrina Akhtar, Senior Technical Officer, KGF and moderator, Dr Jiban Krishna Biswas, ED, and KGF. Three topics were included in the session- crops and socioeconomics, livestock and fisheries for representing climate change impact in Bangladesh agriculture and delineation of adaptation strategies based on present research activities. It was found that the impacts of CC are visible through increased temperature, CO<sub>2</sub> levels, dry and hot spells and increased cyclones and floods and thus causing huge losses in Bangladesh agriculture. Model and growth chamber based studies showed that increased temperature will be responsible for increased population of rice stem borers and leaffolders population by about 2-3 generations in each cropping season. Similarly, disease infestations in rice and non-rice crops are most likely to be increased in future. Development of heat tolerant varieties/breeds, improved water, fertilizer, disease and insect pest management would be probable adaptation strategies for sustaining agricultural productivity in future. Moreover, the adaptive capacity of farmers should be reinforced by improved communication, transportation, livelihood diversification, and access to essential public services.

## How Locally-Led Actions can Ensure Sanitation Facilities in the Face of Changing Climate



*The panelist of the How Locally-Led Actions can Ensure Sanitation Facilities in the Face of Changing Climate session.*

**Host:** WaterAid Bangladesh

**Moderator:** Adnan Ibne Abdul Qader, Senior Advocacy Officer.

**Session Speakers:**

1. Adnan Qader, Senior Advocacy Officer, WaterAid Bangladesh,
2. Samiha Nuzhat, Associate Officer, Programme - Climate Resilience.
3. Ruhil Iyer
4. Kathryn Pharr, Climate Change Adviser , WaterAid UK
5. Mohammad Zobair Hasan, Deputy Executive Director (DED) & SWA South Asia CSO Steering Committee ( alternate) Representative Development Organisation of the Rural poor – DORP
6. Dr. Saleemul Huq, Director, ICCCAD
7. Partha Hefaz Shaikh, Director, Policy and Advocacy, WaterAid.

### **Speaker 1: Ruhil Iyer**

1. Talked about how sanitation is often overlooked in climate hazard/disaster impact assessment. Sanitation facility impacts consists of 80% of damages alongside impacts on drinking water.
2. Engaging local communities in the development of sanitation solutions is paramount for their effectiveness and long-term sustainability. By involving community members in decision-making processes, we can gain valuable insights into their specific needs, cultural practices, and challenges. This participatory approach ensures that sanitation facilities are tailored to the local context, fostering ownership and increasing the likelihood of successful implementation and maintenance.
3. Gender equality is a critical aspect that must be integrated into sanitation initiatives. Women and girls often bear the primary responsibility for household sanitation tasks, facing unique challenges such as limited access to safe and private facilities. By addressing gender-specific sanitation needs, we can empower women, improve their health and safety, and uphold their dignity. Involving women in decision-making processes related to sanitation planning and implementation is essential for achieving equitable and sustainable solutions that benefit the entire community.

### **Speaker 2: Samiha Nuzhat**

1. Talked about the Participatory Ward Vulnerability Assessment and how WARD vulnerability assessment helps assess micro level problems. Assessment takes into accounts WASH facilities impacted by climate change through past and future damages, demands and resources.
2. The Participatory Ward Vulnerability Assessment empowers local communities by actively involving them in the assessment process. Through participatory methods such as community meetings, focus groups, and surveys, we ensure that the voices of community members are heard, their knowledge is valued, and their priorities are reflected in the assessment outcomes.
3. The WARD vulnerability assessment goes beyond identifying the challenges faced by WASH facilities due to climate change. It also examines the interconnections between water, sanitation, and hygiene, and their impact on various aspects of community life, such as health, education, livelihoods, and gender dynamics. This holistic approach helps us develop integrated solutions that address multiple dimensions of vulnerability and foster sustainable development.

### **Speaker 3: Soyed Asadul Haque**

1. Shared ground realities of working in the coastal belt and how impacts on WASH, especially sanitation has created health problems, and contributes to migration.
2. Working in the coastal belt has exposed us to the harsh realities of climate change, where rising sea levels, increased salinity intrusion, and frequent natural disasters have severely affected the WASH infrastructure. The lack of proper sanitation facilities has led to the spread of waterborne diseases, posing significant health risks to the vulnerable coastal communities.
3. The deteriorating WASH conditions in the coastal areas have also contributed to forced migration as people seek better living conditions and improved access to basic amenities. The combination of ecological challenges, inadequate infrastructure, and limited resources has pushed many individuals and families to leave their homes in search of safer environments, leading to social and economic disruptions in both the origin and destination areas.

### **Speaker 4: Kathryn Phar**

1. Highlighted the importance of ground level research, and how it can help NGOs design better and inclusive climate programmes to achieve locally led adaptation.
2. Ground-level research provides valuable insights into the social, cultural, and economic dynamics of local communities, enabling NGOs to design climate programs that are contextually appropriate and responsive. By understanding the specific challenges and opportunities in the target area, NGOs can tailor their interventions to address the root causes of vulnerability and build on existing local knowledge and practices.
3. Locally led adaptation is crucial for long-term sustainability and resilience. Ground-level research facilitates meaningful community engagement, fostering a sense of ownership and empowerment among local residents. By involving community members in decision-making processes, implementing capacity-building initiatives, and promoting knowledge exchange, NGOs can support communities in becoming active agents of change and ensure that climate programs are not only effective but also sustainable in the face of future challenges.

### **Speaker 5: Zobair Hassan**

1. Talked about how the government can learn about administrative focused research to change systems and practices.
2. Administrative focused research offers a valuable opportunity for governments to gain insights into their own systems and practices, leading to evidence-based decision-making and informed policy reforms. By conducting research on administrative processes, governance structures, and service delivery mechanisms, governments can identify areas for improvement and implement targeted changes that enhance efficiency, transparency, and accountability.
3. Through administrative focused research, governments can proactively address systemic issues and streamline bureaucratic processes. By studying bottlenecks, identifying inefficiencies, and analyzing best practices, governments can introduce innovative solutions, optimize resource allocation, and foster a culture of continuous improvement. This research-driven approach can lead to more effective public administration, better service delivery, and ultimately, improved outcomes for citizens.

### **Three key takeaways from the end of the session:**

1. Participatory approaches like the “Participatory Ward Vulnerability Assessments” can help visualize community led approaches and locally led actions to address WASH needs, particularly for sanitation.
2. Consolidated locally led learnings can help influence policy makers understand what is needed both for WASH that can support locally-led actions or solutions.
3. Challenging and changing the existing systems, especially for sanitation, can improve framework for climate change adaptation practices. Learning from failures can help address adaptation techniques including losses and damages sustained to sanitation facilities in Bangladesh and other vulnerable countries.



### **Session Summary:**

The discussion centered on how cleanliness is sometimes disregarded when assessing climate hazards and disaster impacts. It stressed the significance of including neighborhood groups in the creation of sanitation solutions to guarantee their efficacy and long-term viability. It was emphasized that gender equality was a crucial component to incorporate into sanitation projects, addressing the unique demands and difficulties encountered by women and girls. It was addressed how the Participatory Ward Vulnerability Assessment (WARD) is a useful method for identifying micro-level issues and empowering local communities through their active participation. In the coastal belt, where climate change impacts on WASH, particularly sanitation, have caused health issues and forced migration, the unpleasant realities of operating there were highlighted. The need of conducting on-the-ground research was underlined in order to create inclusive climate programs that are locally driven and contextually appropriate. Administrative-focused research was emphasized as a way for governments to learn more about their policies and procedures, resulting in evidence-based policy adjustments. In order to enhance practices for adapting to climate change, particularly in sanitation, the major takeaways underlined the significance of participatory approaches, consolidated local learnings, and challenging established systems.

## A Value-Based Approach to Understanding Non-Economic Loss and Damage



*The panelist of the A Value-Based Approach to Understanding Non-Economic Loss and Damage session*

**Host:** University of Liberal Arts Bangladesh (ULAB)

**Moderator:** Dr. Samiya Selim, Director, Center for Sustainable Development, ULAB; Advisor of Climate Change and Disaster Management (CCDM) programme, Sajida Foundation

**Session Speakers:**

1. Mr. Johurul Islam, Community Mobilizer of CCDM programme, SAJIDA Foundation
2. Ms. Soneka, Climate migrant, Kurigram; living in Friendship Cluster village
3. Mohammad Budruzaman, Research Assistant, SAJIDA Foundation
4. Mr. Akib Javed, Project Coordinator, Center for Participatory Research and Development (CPRD)
5. Ms. Mahmuda Akter, Senior Research Associate, SAJIDA Foundation

**Speaker 1: Mr. Johurul Islam**

1. The matter of mental health is still a heedless concept in rural areas of Bangladesh, such as Gabura. After working here for 16 months, we have realized that the local people did not receive any rehabilitation in terms of their mental health concerns, which has caused gradual challenges in their daily lives.

2. The challenges faced by the local people of Gabura create a heavy burden on their physicality, forcing them to overlook their mental state. The unfamiliarity of their mental situation forbids them from speaking anything regarding the matter. Yet, we tried our best to provide moral and mental support as a service from our foundation.
3. One of our success stories is the story of Hasina Begum, the earning head of a family with a blind husband and a marital abandoned son with a baby. Taking care of three people without receiving any help is a big responsibility for anyone. The mental stress made her short-tempered and unapproachable to some extent. Yet, we tried approaching her in various ways. Our ultimate result was her cooperation and interest in our concern. She adapted our suggestions, and, Alhamdulillah, she is doing quite well now.

**Speaker 2: Ms. Soneka**

1. As local people facing the challenges of migration, we rely on support from organizations like Friendship to alleviate the hardships experienced by our families, ensuring our well-being and providing us with hope for a better future.
2. Local people are directly impacted by river erosion, facing various challenges such as disrupted access to education for children due to floods, reduced agricultural productivity leading to economic hardships, and a significant concern for food and water security in the affected areas.
3. Multiple factors are involved with river erosion. Although, thanks to the shelter of Friendship NGO, many of our issues have been resolved. Friendship has helped us in terms of lands, food, water security, toilets, and other advantages associated with the economy. The Friendship NGO has even provided a school for my children, which has decreased our concerns exceedingly.

**Speaker 3: Mohammad Budruzaman**

1. Based on my research, mental health is as important as physical health. The state of mental health, particularly for people living in rural areas, is associated with climate effects. And in addition, it is characterized by anger, sadness, anxiety, depression, and stress. Around 30 to 50 percent of people worldwide suffer in terms of their mental health because of the climate change effect. According to the Lancet study, currently depression is estimated 16.3% higher in Bangladesh compared to the previous studies because of the ambient temperature, humidity, seasonality, and flood exposure.



2. The climate effect is connected with literature as the suffering of women has increased through the process. The literary aspect of gender equality and equal rights should be taken into hands. Factors such as vulnerability, discrimination, patriarchy, and even poverty remain unrecognized if a woman is the earning head of the family.
3. Due to the water salinity, the vulnerability factors of women have outstretched immensely. Due to the water salinity, multiple concerns have increased with limited adaptability. As people are dependent on saline water consumption, health issues such as diarrhea, skin diseases, menstrual problems for women, social issues, and even gynecological issues are matters of concern that lead to stress, anxiety, and depression for women.

**Speaker 4: Mr. Akib Javed**

1. Due to river bank erosion, the lives of local people have changed over the years. One of the sufferings include mental health problems. The desperate situation comes when people have a fear of losing something in their life. Such fear leads to illegal activities such as drug addiction, domestic violence, prostitution, and other things that are not socially acceptable.
2. Throughout time, if people get displaced from their lands, they don't get value and identity in society. People who migrate or move to the slums because of losing their homes to river erosion get involved in labor activities. The bigger problems include social behaviors towards the migrants, particularly the widows - such as the tale of a widow, Rubi Alam, and her two daughters. They lost their house in 2018 due to river erosion. The migration life hasn't been favorable to Ms. Rubi. She was constantly stalked and threatened by local boys. There are similar tales of migrants due to the effect of river erosion.
3. Climate change hazards are associated with secondary and tertiary impacts, which lead to Non-economic loss and damages. For example, forced displacement, loss of cultural identity, school dropouts, sexual violence, and mental depression are the outcomes of their lives. Hence, they choose a different socially accepted path, such as prostitution, theft and robbery, drug addiction, and begging in order to live their life.

### **Speaker 5: Ms. Mahmuda Akter**

1. Based on the session conducted by multiple perspectives and research enthusiasts, the suffering is mostly by local people. Many people migrate a lot of times and start their life from the beginning. These factors include climate exchange issues, which are affecting their mental health. Hence, a connection between academia and local leaders' perspectives is needed.
2. To connect local leaders with Academia, we need to first identify the actual local leaders through FDGs or interviews. We need to find academic research papers that address the matter of climate and mental health. In addition, we also need to recognize the local dialogue/dialect so that it is easier for them to share their experiences more comfortably. This process may include joint research or organizing training programs.
3. We, the SAJIDA Foundation, provide a connection between academia and local leaders. We build strong relationships and identify common ground and partnerships by providing training sessions. There are a few steps that we follow: We identify the challenges from both ground and national levels, prioritize challenges, develop an effective plan, engage with the community, identify the resources like what kind of funds and manpower is needed, and implement the steps to ensure its success.

### **Three key takeaways from the end of the session:**

1. Mental health is a matter of concern that leads to various outcomes. It is associated with climate effects and river erosion. But people, because of these effects, focus on their physical matters instead of their mental states. Many locals are even unaware of the concept of mental distress.
2. Women suffer the most because of gender inequality in the local areas. Factors such as vulnerability, discrimination, patriarchy, and even poverty remain unrecognized if a woman is the earning head of the family. The vulnerability factors of women have outstretched immensely due to river erosion and water salinity. Thus, it led to multiple problems for women, especially the earning heads and widows.
3. The other factor is migration because of river erosion or climate effects. Migration creates displacement and identity crises in local lives. People who migrate from one place to another are in a constant loop of movement. They are often socially unaccepted, which leads them to illegal activities. Although changes are made by NGOs such as the SAJIDA foundation, CPRD, and FRIENDSHIP as they provide shelters and create opportunities for migrated people.



### **Session Summary:**

On Sunday, March 12, 2023, a webinar on "A Value-based approach to understanding Non-economic loss and damage" was organized by Gobeshona Global Conference jointly hosted by Dr. Samiya Salim, Professor, and Director at Center for Sustainable Development (CSD), ULAB, Ms. Tahura Farbin, Lecturer and Research Associate at Center for Sustainable Development (CSD), ULAB, SAJIDA Foundation, and Friendship. Each panel discussions were of 5 minutes, presented by Mr. Johurul Islam, Community Mobilizer of the CCDM programme, SAJIDA Foundation, Ms. Soneka, Climate migrant, Kurigram; living in Friendship Cluster village, Mohammad Budruzaman, Research Assistant, SAJIDA Foundation, Mr. Akib Javed, Project Coordinator, Center for Participatory Research and Development (CPRD), and Ms. Mahmuda Akter, Senior Research Associate, SAJIDA Foundation.

## Addressing the Local Level Vulnerability Under Young People Leadership



*The panelist of the Addressing the Local Level Vulnerability Under Young People Leadership session*

**Host:** ActionAid Bangladesh

**Moderator:** Nazmul Ahsan, Manager- Young People, ActionAid Bangladesh.

**Session Speakers:**

1. Farzana Faruk Jhumu, advocate for climate action with Fridays for future Bangladesh
2. Jannatul Nayeem, Activista-AAB, Satkhira
3. MA Tamim, Activista, ActionAid, Kushtia
4. Adnan Manik, Activista-ActionAid, Dhaka
5. Fariha Sultana Aumi, Activista- ActionAid, Dhaka

**Speaker 1: Farzana Faruk Jhumu**

1. Grassroots mobilization is essential for effective climate action and justice at the local level. Local communities have a unique understanding of their specific challenges and can implement tailored solutions that address the needs of both people and the environment.
2. Collaboration and coordination between local, national, transnational, and global entities are crucial for addressing climate change comprehensively. Local initiatives can inform national policies, transnational cooperation can facilitate knowledge exchange, and global solidarity can drive ambitious climate action.
3. Intersectionality is essential for effective climate action and justice at the local level. Recognizing the interconnectedness of social, economic, and environmental issues is crucial for addressing the root causes of climate change and ensuring equity in climate solutions.

### **Speaker 2: Jannatul Nayeem**

1. The challenges faced by young people in locally initiated movements for sustainable embankments and safe water in coastal areas stem from limited resources, lack of representation, and the need for long-term planning.
2. The way forward for young people in the embankment and water movement in coastal areas lies in fostering collaboration, leveraging technology, and promoting knowledge exchange. Collaboration between young people, local communities, government agencies, and non-governmental organizations can harness collective expertise, resources, and networks to address the complex challenges faced by coastal populations.
3. Empowering young people as agents of change requires addressing systemic barriers, promoting education and awareness, and fostering leadership skills. Structural barriers, such as limited access to education, gender inequality, and socioeconomic disparities, hinder young people's ability to engage effectively in the embankment and water movement.

### **Speaker 3: MA Tamim**

1. River erosion poses significant challenges for local communities, causing immense suffering and displacing people from their homes and livelihoods. The impacts of river erosion are particularly severe in vulnerable areas where communities rely heavily on the rivers for their survival and livelihoods. The loss of land, infrastructure, and agricultural fields due to erosion disrupts the socio-economic fabric of these communities, leading to increased poverty and vulnerability.
2. Locally led adaptation and mitigation measures are essential for addressing the challenges posed by river erosion. Local communities have an intimate understanding of their rivers and the dynamics of erosion. Through their knowledge and experience, they can develop context-specific strategies to adapt to and mitigate the impacts of river erosion.
3. Local young people are at the forefront of demanding effective solutions to address river erosion and other disasters. They witness firsthand the suffering and displacement caused by erosion, and they recognize the urgent need for action. Local young people advocate for increased investment in river management, infrastructure development, and early warning systems to mitigate the impacts of erosion.

#### **Speaker 4: Adnan Manik**

1. Local-led adaptation in agro-ecology involves utilizing traditional knowledge, ecological principles, and community participation to develop climate-resilient and sustainable agricultural practices. This approach recognizes the importance of local context, biodiversity, and ecosystem services in fostering resilient food systems.
2. Young people are demanding climate-resilient and sustainable agriculture that addresses the challenges of a changing climate while ensuring food security and environmental sustainability. They recognize the importance of transitioning from conventional, input-intensive agriculture to agro-ecological practices that promote biodiversity, soil health, and water conservation.
3. Sharing existing practices and knowledge exchange are crucial for scaling up local-led adaptation in agro-ecology. Many communities have already developed innovative agro-ecological practices that are tailored to their specific environmental and social contexts. By sharing these success stories and lessons learned, both locally and globally, it becomes possible to inspire and replicate these practices in other regions.

#### **Speaker 5: Fariha Sultana Aumi**

1. Young people are actively engaging in discussions and advocating for a renewable or green new deal. They recognize the urgent need to transition to renewable energy sources and promote sustainable practices across various sectors. Their thinking revolves around comprehensive plans that address climate change, environmental degradation, and social justice issues. They emphasize the importance of policy reforms, investments in renewable infrastructure, and the creation of green jobs to foster a sustainable and equitable future.
2. Young people are already leading by example through their local initiatives and practices in renewable energy and green entrepreneurship. They are implementing innovative solutions such as community-owned solar projects, wind farms, and decentralized energy systems. Young entrepreneurs are also establishing green businesses, such as sustainable agriculture ventures, eco-tourism initiatives, and waste management enterprises.
3. Young people have specific demands and expectations regarding renewable energy and green initiatives. They call for ambitious climate targets, increased investments in renewable energy infrastructure, and policies that incentivize

sustainable practices. They demand the prioritization of environmental education and awareness programs to equip future generations with the necessary knowledge and skills to contribute to a sustainable society. Additionally, they expect inclusivity and meaningful youth engagement in decision-making processes, ensuring their voices are heard and considered in shaping policies and initiatives.

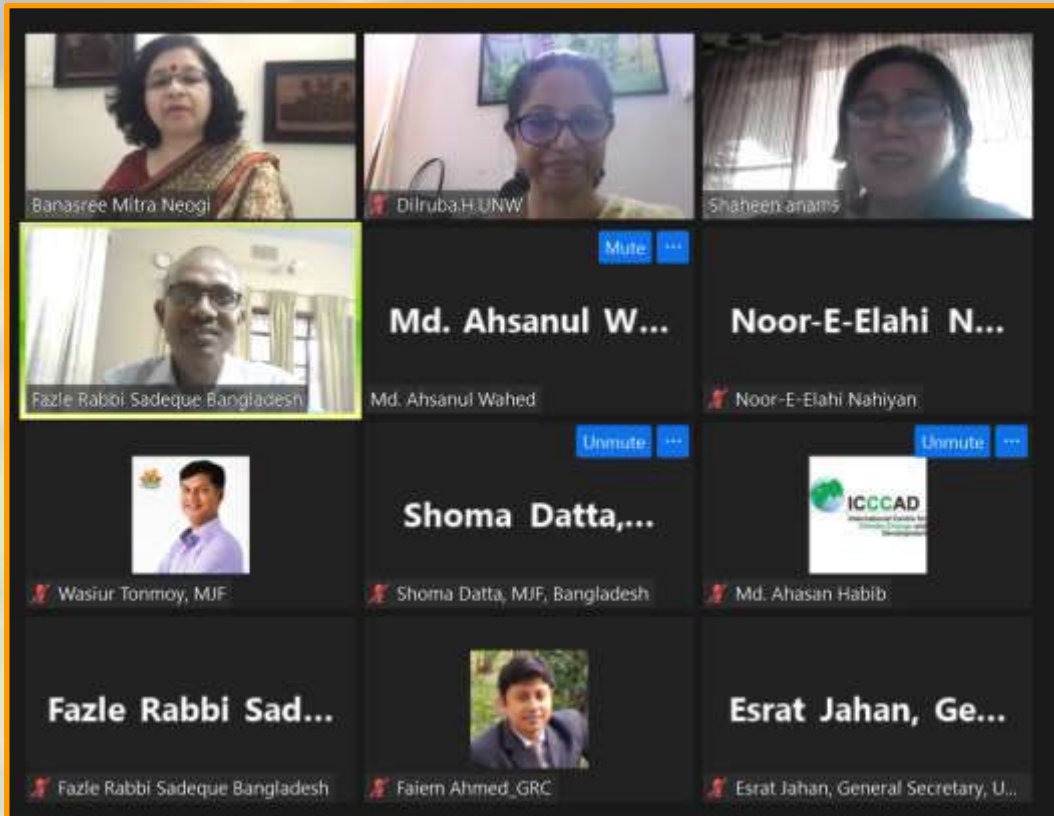
**Three key takeaways from the end of the session:**

1. Local communities in Bangladesh are taking action to address climate-related challenges such as embankment and water management, river erosion, and sustainable agriculture through locally-led adaptation and mitigation measures.
2. Young people are at the forefront of these movements, demanding climate justice and resilient, sustainable solutions.
3. There is a need for greater connectivity and collaboration between local, national, transnational, and global actors to address these challenges effectively and holistically.

**Session Summary:**

ActionAid Bangladesh hosted a session titled ‘Addressing the Local Level Vulnerability Under the Young People Leadership’ in 3rd Global Gobeshona Conference of Research, organized by International Centre for Climate Change and Development (ICCCAD) on 12th March 2023. The session was led and facilitated by the young people of ActionAid Bangladesh network. The session began with a presentation on Young people analyzing and addressing the local vulnerabilities - A way of resilience development. At the end, young people initiated a panel discussion by sharing their local campaign and advocacy initiatives as well as their demands in terms of mitigating different vulnerabilities related with climate change such as climate change and justice, climate strike, river erosion, sustainable embankment, water movement, local led adaptation, agro-ecology and so on. Different people from the global network joined in the discussion by raising questions, sharing experience and insights.

## Climate Change Impact on Human Rights: Analytical Cases from Bangladesh



*The panelist of the Climate Change Impact on Human Rights: Analytical Cases from Bangladesh session*

**Host:** Manusher Jonno Foundation

**Moderator:** Shaheen Anam, Executive Director, MJF

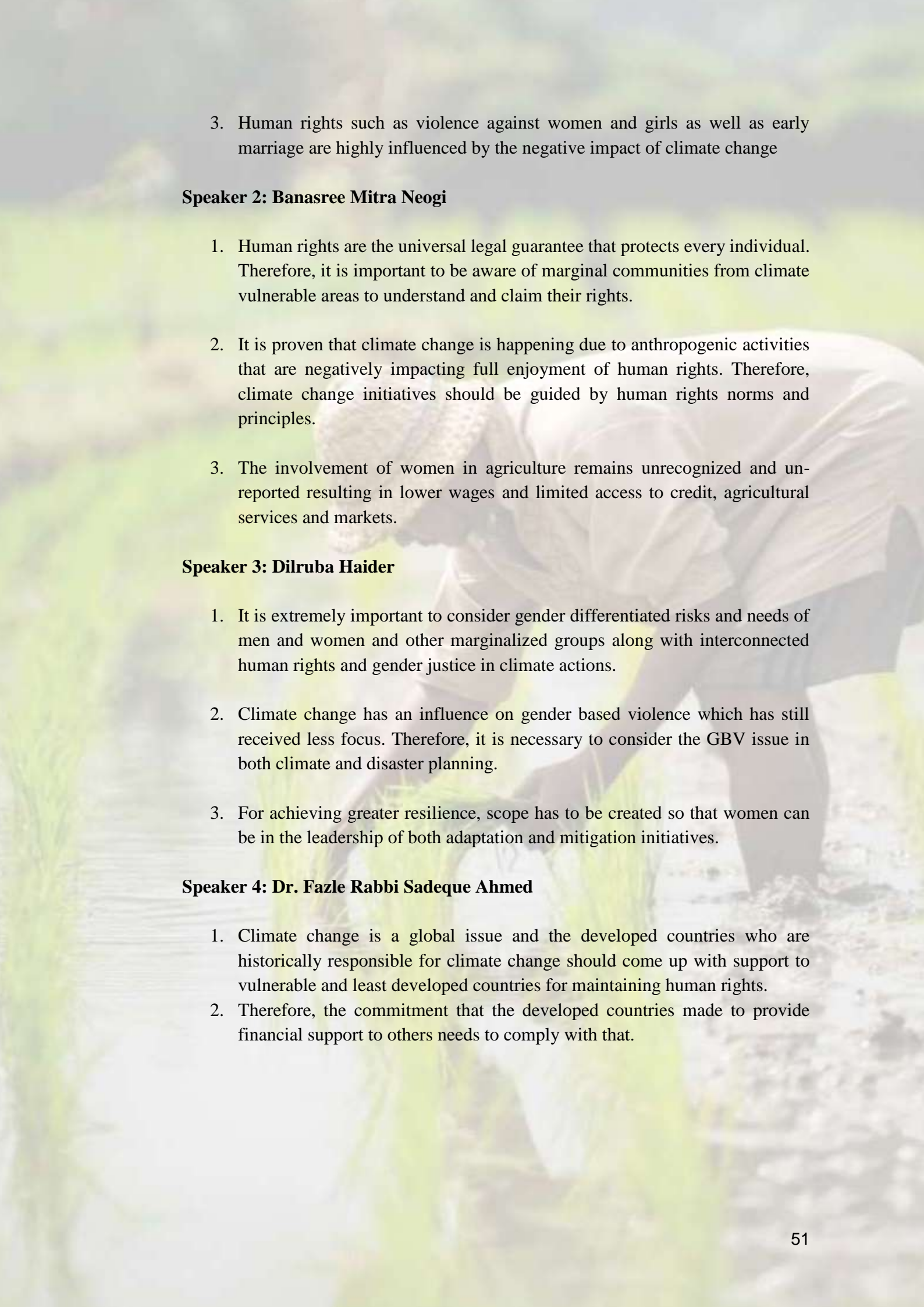
**Session Speakers:**

1. Shaheen Anam, Executive Director, MJF
2. Banasree Mitra Neogi, Director- Program, MJF
3. Dilruba Haider, Program Specialist, Climate Change, DRR & Humanitarian Action, UN Women
4. Dr. Fazle Rabbi Sadeque Ahmed, Deputy Managing Director-5, PKSF

**Speaker 1: Shaheen Anam**

1. Rebuilding livelihood or shelter may enhance resilience but it is important to address human rights for building greater resilience as violation of human rights affects every aspect of life.
2. In Bangladesh, women's human rights are uniquely impacted by the negative impact of climate change.



- 
3. Human rights such as violence against women and girls as well as early marriage are highly influenced by the negative impact of climate change

**Speaker 2: Banasree Mitra Neogi**

1. Human rights are the universal legal guarantee that protects every individual. Therefore, it is important to be aware of marginal communities from climate vulnerable areas to understand and claim their rights.
2. It is proven that climate change is happening due to anthropogenic activities that are negatively impacting full enjoyment of human rights. Therefore, climate change initiatives should be guided by human rights norms and principles.
3. The involvement of women in agriculture remains unrecognized and unreported resulting in lower wages and limited access to credit, agricultural services and markets.

**Speaker 3: Dilruba Haider**

1. It is extremely important to consider gender differentiated risks and needs of men and women and other marginalized groups along with interconnected human rights and gender justice in climate actions.
2. Climate change has an influence on gender based violence which has still received less focus. Therefore, it is necessary to consider the GBV issue in both climate and disaster planning.
3. For achieving greater resilience, scope has to be created so that women can be in the leadership of both adaptation and mitigation initiatives.

**Speaker 4: Dr. Fazle Rabbi Sadeque Ahmed**

1. Climate change is a global issue and the developed countries who are historically responsible for climate change should come up with support to vulnerable and least developed countries for maintaining human rights.
2. Therefore, the commitment that the developed countries made to provide financial support to others needs to comply with that.

### **Three key takeaways from the end of the session:**

1. Climate change is a global issue but it is impacting human rights both globally and locally. Therefore, addressing norms and principles of human rights and good governance are important to incorporate in climate programs for attaining greater resilience.
2. The impacts of climate change disproportionately affect women and girls than men due to socio-cultural norms of our traditional society. The climate initiative of MJF taught that it is imperative to consider gender and intersections differentiated risks as well as actions for enhancing resilience of marginal intersections from climate vulnerable areas. Recognition of women's contribution in economic growth as well as enabling their access to information, local planning, natural and financial resources, education, market and basic and agricultural services are vital for overall development of the country.
3. The experience of the climate initiative of MJF recommends addressing governance in climate programs along with addressing life and livelihood of climate vulnerable communities as weak governance further enhances troubled climate vulnerable communities. Community awareness on their rights, creating confidence of community to claim rights and using Social Accountability Tools (SAT) found to be effective in enhancing accountability and responsiveness of duty bearers.

### **Session Summary:**

The session has focused on human rights violations due to climate change. This session has been designed based on experience and lessons learned from the climate initiative of MJF. Climate change accelerates violation of human rights both globally and locally. The global problem created by the highest emitters impacting innocent victims like Bangladesh and ignorance is still visible from developed countries who are historically responsible for climate change as they are not fulfilling commitment to provide financial support for countries who are innocent victims and don't have institutional and financial capacity to cope with the changed adverse situation. On the other hand, the session, based on experience of MJF's climate initiative, emphasized human rights, governance and gender and intersection differentiated actions holistically for achieving greater resilience of marginal sections from climate vulnerable areas. Recognition of women's contribution in local and national economy along with enabling their access to information, local planning, natural and financial resources, education, market and basic and agricultural services for attaining resistance against climate shocks has been emphasized during discussion.

## ICCCAD- Loss & Damage Forum: Connecting Local to Global



*The panelist of the ICCCAD: Loss & Damage Forum session.*

**Host:** International Center for Climate Change and Development (ICCCAD)

**Moderator:** Nusrat Naushin, L&D Programme Coordinator.

**Session Speakers:**

1. Yvan Maillard-Ardenti Climate Justice Officer, Bread for All/Heks-EPER
2. Rawnak Jahan Khan Ranon, Community Representative, Bangladesh
3. Jevanic Henry. AOSIS Fellow, St. Lucia
4. Teo Ormond Skeaping, Artist
5. Edwige Some, PhD in Economics, UCAD
6. Mimansha Joshi, Adaptation Division Consultant, UN
7. Saify Iqbal, Capacity Building Programme Coordinator, ICCCAD
8. Farah Anjum, Strategic Communication Associate, GSCC
9. Fauzia Hossain, ICCCAD

**Speaker 1: Yvan Maillard-Adrenti**

1. Talked about advocacy work of Switzerland linked in Bangladesh and Indonesia.
2. Highlighted HEKS support in a climate lawsuit against the biggest cement factory, Holcim.
3. Briefed about protection measures for thin islands and reduction of Co2 emission of Holcim in order to avoid future harm and otherwise the company should pay compensation for loss and damage.

## **Speaker 2: Rawnak Jahan Khan Ranon**

1. The current scenarios in Netrokona, Bangladesh, highlight the devastating impact of floods on the region. With 39 unions across six upazilas affected by floods, communities in Netrokona face significant challenges in terms of infrastructure damage, displacement, loss of livelihoods, and threats to their overall well-being. The frequency and intensity of floods in the region disrupt the lives of the local population and exacerbate their vulnerability to climate change.
2. The degradation of cultural practices, such as the traditional food item "pitha," in Netrokona is a concerning consequence of the changing climate and the impacts of flooding. Pitha is a popular traditional dish in Bangladesh, typically made during cultural festivals and special occasions. However, with the increased frequency and severity of floods, the availability of key ingredients for making pitha, such as rice, jaggery, and various fillings, may be affected. This disruption not only poses a threat to cultural traditions but also affects the livelihoods of those involved in pitha production and sales.
3. The degradation of cultural practices like pitha underscores the need for comprehensive climate adaptation strategies in Netrokona. These strategies should integrate the preservation of cultural heritage and traditional practices alongside broader resilience-building efforts. By recognizing the importance of cultural practices and promoting their sustainability, local communities can preserve their identity, strengthen social cohesion, and maintain a sense of continuity even in the face of climate-related challenges. Efforts can include supporting local farmers and producers, promoting diversified and climate-resilient agriculture, and raising awareness about the significance of cultural practices as part of the region's overall resilience to climate change impacts.

## **Speaker 3: Jevanic Henry**

1. The impact of climate change on local communities: The speaker highlights how Laborie, a Caribbean fishing village, has been affected by rising sea levels and ocean warming, leading to a reduction in the amount of fish and threatening the livelihoods of the local population. This underscores the importance of understanding the local impacts of climate change and the need to connect these communities with global efforts to address loss and damage caused by climate change.
2. The role of local response mechanisms in building resilience: The speaker highlights the use of fish aggregating devices (FADs) as a response

mechanism to the declining fish population in Laborie. This illustrates the importance of supporting and developing local response mechanisms to build resilience and adapt to the impacts of climate change. This is a crucial component of connecting local communities with global efforts to address loss and damage.

3. The role of local communities in supporting recovery: The speaker notes how Laborie's fishers and consumers are playing a crucial role in supporting recovery and resilience building. This highlights the importance of engaging and empowering local communities in efforts to address the impacts of climate change. Connecting these communities with global efforts can help to create a more coordinated and effective response to loss and damage caused by climate change.

#### **Speaker 4: Teo Ormond Skeaping**

1. The role of storytelling in connecting local to global on loss and damage: The speaker emphasizes the importance of storytelling in highlighting the impact of loss and damage caused by climate change on local communities. By sharing personal stories and experiences, impacted communities can connect with global actors and create a greater understanding of the need for action. This approach is consistent with the theme of the Loss & Damage Forum of connecting local to global and highlights the importance of valuing local knowledge and experiences.
2. The promotion of a values-based approach to loss and damage: The speaker notes the importance of a values-based approach to loss and damage, which emphasizes the need to center the voices and experiences of impacted communities. By doing so, policymakers and other stakeholders can better understand the context-specific intangible losses and damages caused by climate change. This approach is aligned with the Loss & Damage Forum's theme of connecting local to global and underscores the importance of values, ethics, and equity in the decision-making process.
3. The role of local actors in building grassroots support for loss and damage policies: The speaker highlights the importance of showcasing the expertise and lessons learned by local actors in addressing loss and damage caused by climate change. By centering impacted communities in the decision-making process and creating spaces for dialogue, policymakers and other stakeholders can gain a greater understanding of the need for action. This approach is consistent with the theme of the Loss & Damage Forum of connecting local to global and underscores the importance of building grassroots support for loss and damage policies.

### **Speaker 5: Edwige Some**

1. **Impacts of climate change on Burkina Faso:** The speaker notes the various impacts of climate change in Burkina Faso, including droughts, floods, warming, and intense wind. These impacts have led to a decrease in livestock and agriculture yields, as well as food and water scarcity. Additionally, floods have caused damage to infrastructure, education, and health sectors. These impacts demonstrate the need to connect local experiences of loss and damage to global policy discussions at the Loss & Damage Forum.
2. **Policy gaps in addressing loss and damage in Burkina Faso:** The speaker notes several policy gaps in addressing loss and damage caused by climate change in Burkina Faso. These include a lack of forecasts and early warning products to reach farmers, missing feedback systems to improve data quality and relevance, a lack of integrated risk reduction measures, and limited awareness and knowledge of National Adaptation Plan (NAP) implementation. Addressing these policy gaps is essential for building resilience and reducing loss and damage in the country.
3. **Recommendations for addressing loss and damage in Burkina Faso:** The speaker recommends investment in disaster risk reduction and insurance mechanisms, improving access to climate information related to extreme events, promoting good governance, and ensuring that research findings feed into policy discussions. These recommendations are consistent with the theme of the Loss & Damage Forum of connecting local to global by highlighting the need for global action to support local efforts in addressing loss and damage caused by climate change.

### **Speaker 6: Mimansha Joshi**

1. **Enormous financial cost of loss and damage:** The speaker highlighted the huge financial cost of loss and damage due to climate change, particularly for developing countries. The estimated cost of loss and damage is expected to rise significantly over the coming years, with an estimated annual cost of 435 Billion USD by 2030 and 1 trillion USD by 2050.
2. **Funding commitments and pledges:** The speaker mentioned the funding commitments and pledges made by high-income countries outside of the United Nations Framework Convention on Climate Change (UNFCCC) for climate-vulnerable countries. The speaker named several founding countries, including Scotland, Denmark, Belgium, Austria, New Zealand, Germany,

Iceland, and France. However, the current funding is inadequate, with only 300 million USD pledged so far.

3. Importance of disaster risk reduction and early warning systems: The speaker emphasized the importance of investing in disaster risk reduction and early warning systems to mitigate the impact of climate change-related loss and damage. The funding allocation includes climate vulnerable countries research and contribution, storm warning system, and disaster risk reduction.

#### **Speaker 7: Saify Iqbal**

1. Providing introductory information on L&D: The speaker discussed the importance of providing introductory information on loss and damage (L&D) to increase awareness and understanding of the topic. This could help policymakers, practitioners, and negotiators to make informed decisions and develop appropriate strategies.
2. Interactive tools and short courses: The speaker emphasized the need for interactive tools and short courses to support L&D practitioners and negotiators. These tools could help them develop skills and knowledge necessary to address the complex challenges associated with loss and damage.
3. Workshops for young negotiators: The speaker also discussed the importance of organizing workshops for young negotiators before important events such as the Subsidiary Body meetings (SB) and Conference of the Parties (COP). These workshops could help young negotiators to learn about the current state of L&D negotiations and provide them with an opportunity to network with experienced negotiators.

#### **Speaker 8: Farah Anjum**

1. The speaker discussed recent news and events that demonstrate the impact of climate disasters, such as the twin cyclones in Vanuatu and severe flooding in southern Malawi. These disasters highlight the vulnerability of many countries to compounding climate risks and the urgent need to address loss and damage.
2. By highlighting specific events and their impact, the speaker aimed to raise awareness of the concept of loss and damage and its significance in the context of climate change. This awareness can help mobilize support for funding and other interventions to mitigate the effects of climate disasters.
3. The speaker underscored the need for immediate action to address loss and damage. Climate disasters are becoming increasingly frequent and severe,

and their impact on vulnerable communities is significant. The speaker's emphasis on the urgency of action could help drive policy change and support for initiatives to mitigate the impact of climate disasters.

### **Speaker 9: Fauzia Hossain**

1. The speaker introduced an online platform called the Loss and Damage Forum that includes a discussion board and forum. The platform aims to facilitate discussion and knowledge sharing among policymakers, practitioners, and other stakeholders interested in the topic of loss and damage.
2. The speaker discussed the operating procedures of the Loss and Damage Forum, which includes weekly updates on new resources and monthly meetings to discuss new arenas and updates. The aim of these updates and meetings is to keep the community engaged and up-to-date with the latest information and developments in the field of loss and damage.
3. The speaker emphasized the importance of participation and knowledge sharing on the Loss and Damage Forum. The platform is open to anyone interested in the topic and encourages users to share their knowledge and experiences. The speaker also mentioned the L&D Hub, which is a resource center that provides access to a range of information and tools related to loss and damage.

### **Three key takeaways from the end of the session:**

1. The Loss & Damage Forum is a collaborative platform and virtual workspace where resources and tools are shared among a group of practitioners, researchers, and decision makers across the world, with a prime focus of connecting local to global, to support and address climate change induced loss and damage.
2. Visual presentation/digital documentation method can effectively showcase people's experiences where their sentiment lies and it helps to spread it to a broader audience/global audience for the promotion of locally led stories. Hence, features as such
3. A coordinated and collaborative strategy, which includes actors ranging from local communities to national policy-makers to global negotiators is essential to effective mobilization of climate action, as seen during the historic decision of COP27. Hence, this Forum allows actors to connect and share knowledge to address losses and damages.

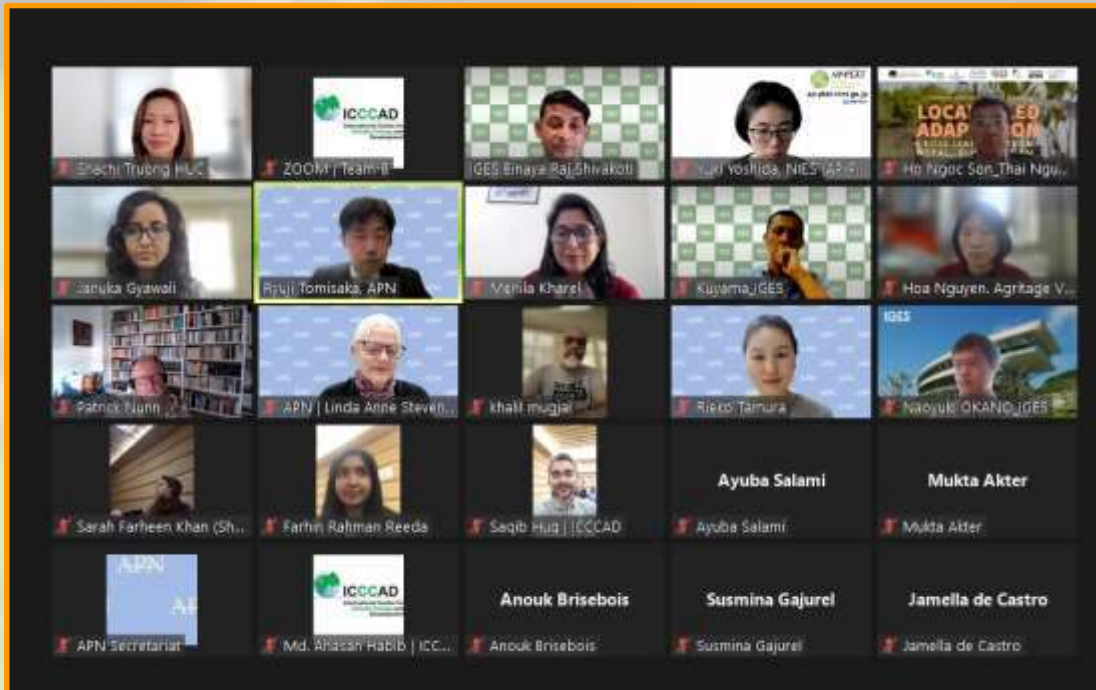




**Session Summary:**

The Loss and Damage forum discussed various issues related to climate change and its impact on local communities. The speakers emphasized the significance of involving regional and international efforts in addressing loss and damage brought on by climate change. In order to combat loss and destruction, they underlined the value of storytelling, advancing a values-based strategy, developing grassroots support, and investing in catastrophe risk mitigation and insurance mechanisms. Additionally, the speakers discussed the various effects of climate change on various geographical areas, including floods, droughts, food and water scarcity, infrastructure damage, and decreased livestock and agricultural yields. In order to lessen loss and harm in vulnerable nations, they also underlined the necessity of addressing policy gaps, enhancing access to climate information, and fostering good governance. One speaker emphasized the necessity for finance commitments and pledges from high-income nations outside of the UNFCCC as well as the significant financial cost of loss and destruction.

## Challenges and Opportunities for Promoting Locally Led Adaptation: Cross Learning from Nepal, Fiji, Vietnam



*The panelist of the Challenges and opportunities for promoting locally led adaptation session*

**Host:** Institute for Global Environmental Strategies (IGES) & Asia-Pacific Network for Global Change Research (APN)

**Moderator:** Binaya Raj Shiwakoti (IGES)

**Session Speakers:**

1. Prof. Patrick Nunn, University of the Sunshine Coast, Australia
2. Ms. Menila Kharel, Practical Action, Nepal, Nepal
3. Dr. Ho Ngoc Son, Thai Nguyen University of Agriculture and Forestry, Vietnam
4. Dr. Yuki Yoshida, NIES, Japan

**Speaker 1: Prof. Patrick Nunn**

1. The case study area is Tikina Malomalo. About 2900 people live there, and the area is typically affected by coastal hazards. Heavy rain and strong winds are associated with tropical cyclones. Infrastructure is vulnerable, and food and water security are affected by climate change.
2. As part of implementing the LLA project in this area, the project team has conducted consultations with villagers, and by doing so, it is trying hard to get them on board and gain ownership of the project.
3. This area has adaptation opportunities, such as income generation through eco-tourism, optimizing community resilience, climate-proofing livelihoods, relocating vulnerable settlements, and reconfiguring water and food security.

### **Speaker 2: Ms. Menila Kharel**

1. Model case sites are two districts in the Lumbini province. People living there are one of the most marginalized populations in Nepal, and agriculture is the primary source of livelihood in those areas. They are predominantly small-scale agriculture.
2. The project team has done the baseline analysis, and around 59.3% of respondents reported agriculture as their first source of income. The study also found that the aggregate score of women engaged in local government is just 21%, which is very low.
3. In Nepal, there are many adaptation-related policies and strategies in place. The second NDC states that 753 local governments are planning to implement climate-resilient and gender-responsive adaptation plans. The challenge is to move these policies into action.

### **Speaker 3: Dr. Ho Ngoc Son**

1. The model case site is in the north of Vietnam. It is a mountainous region and populated by many ethnic minority groups. It is a continuation of the ADC work on climate change in partnership with CARE International in Vietnam, DFAT, and others. They try to empower women. They also work with the private sector.
2. Challenges at the local sites include the need for devolution in decision-making to local actors. Structural inequalities faced by vulnerable groups, and understanding of climate risk is low. There is a lack of institutional and technical capacity and investments in local capacities.
3. LLA principles are endorsed by more than 80 organizations, which means those donors will strengthen activities on LLA. Local and traditional knowledge will play a key role in climate change adaptation. There are institutional frameworks to support LLA, and it will also involve the private sector.

### **Speaker 4: Dr. Yuki Yoshida**

1. The presentation will not introduce the case study sites but tools in the AP-PLAT that can be useful for this project. Lack of data, resources, and capacity. The AP-PLAT is trying to address it. It tries to support adaptation in the local context.
2. The first one is ClimoCast. It has a user-friendly interface to deliver the data on climate projections. Also, the Climate Impact Viewer provides information on climate impacts on different sectors. Also, ClimoKit is a database of tools and data by other organizations.

3. The AP-PLAT also has capacity development content such as e-learning materials and pages for adaptation planning.

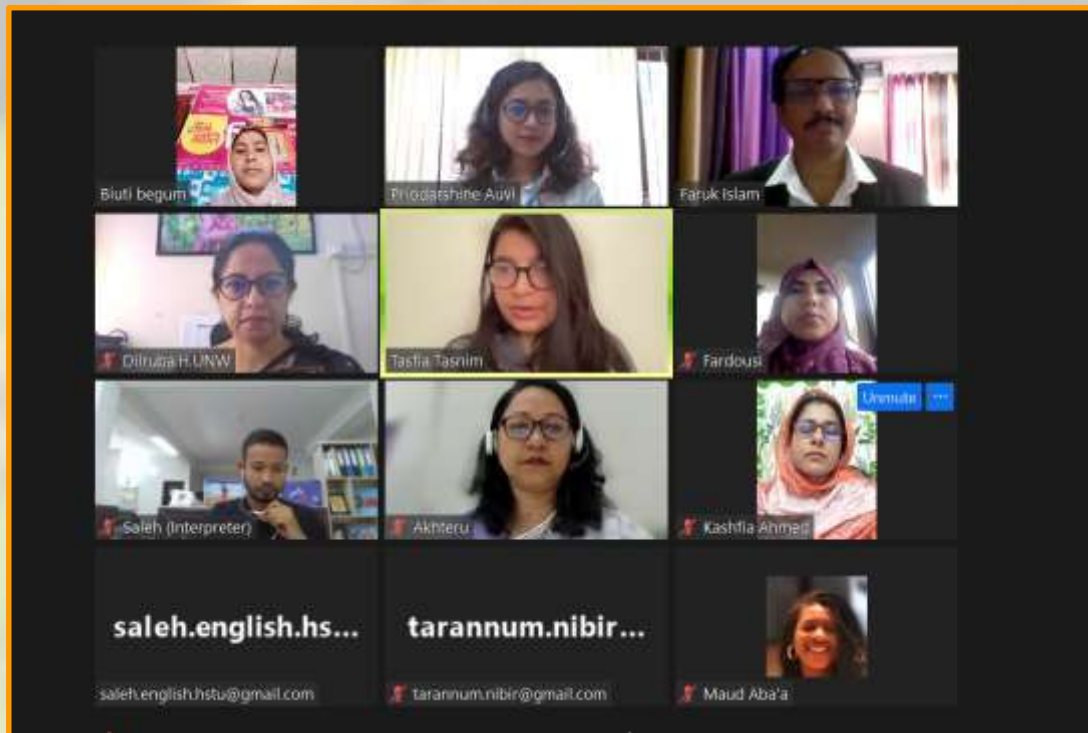
### **Three key takeaways of the session:**

1. The existing structure of inequalities affects how climate change impacts and disasters are felt in each context. Meeting the needs of the most marginalized group is key to successful adaptation. In this context, a gender-responsive approach is also crucial.
2. Local communities are knowledge holders and producers. Thanks to the recent promotion of action research in the field of climate change adaptation, there is also emerging knowledge co-produced by local people and scientists. We need to integrate different kinds of knowledge to realize the LLA.
3. Stresses that are felt in local contexts are not limited to climate risks. For instance, Pacific Islands are faced with the risks of tsunamis triggered by earthquakes and infectious diseases such as COVID-19. In responding to those complex challenges, the crucial approach is strengthening local adaptive capacities. Donors and funders should design their projects incorporating the LLA principles to enhance local capabilities.

### **Session Summary:**

This session discusses the importance of the locally-led adaptation and introduces the LLA project implemented by Asia-Pacific Network for Global Change Research (APN) and; Institute for Global Environmental Strategies (IGES) in local communities in Fiji, Nepal, and Vietnam. Representatives from each case study site have discussed their respective geographic and socio-economic contexts, as well as adaptation challenges and opportunities. After hearing the presentations, participants are put into three breakout groups (for Pacific, South Asia, and SouthEast Asia) and discuss the following themes: How relevant are the 8 LLA principles in the context you are working or familiar with? What are the potential uses of the 8 LLA principles for planning locally-led adaptation? In addition to regional platforms like AP-PLAT, how can we promote innovation for adaptation at the local level that fully engages indigenous, traditional, and local knowledge systems (ITLK)? Participants actively joined the discussion and shared their ideas on the importance of the LLA in responding to structural inequality and enhancing local capacity in adapting to climate change impacts, and they also discussed challenges and difficulties in implementing LLA projects.

## Gender Responsive Climate Resilient Agriculture



*The panelist of the Gender Responsive Climate Resilient Agriculture session*

**Host:** United Nations Entity for Gender Equality and the Empowerment of Women

**Moderator:** Ms. Dilruba Haider, Program Specialist, UN Women

**Session Speakers:**

1. Dr. Faruk Ul Islam, Aquaculture, Livelihoods, and Business Development Expert Presenter
2. Ms. Beauty Begum, Women Farmer, Village: Suverkuti, Union: Holokhana, District: Kurigram
3. Dr. Kashfia Ahmed, Chairperson, WIN MIAKI Ltd.
4. U S Rokeya Akhter, National Gender Specialist, Food And Agriculture Organization of the United Nations
5. Agriculturist Ferdousi Begum, Editor, Agriculture Information Service

**Speaker 1: Dr. Faruk Ul Islam**

1. Women in rural regions are disproportionately impacted by climate change, especially in developing nations where they are frequently left to run households and farms on their own as a result of male migration to cities and the rise in Female-Headed Households (FHHs).
2. With more than 50% of the workforce employed in agriculture and farming in Bangladesh, rural women play a critical role in these industries. The Practical Action and UN Women pilot project has demonstrated that women are twice as engaged as men in farm work and have put various locally-based

adaptation strategies into practice on the ground to reduce losses and damages from climate-related disasters.

3. Giving women the chance to make money through agricultural produce can improve their socioeconomic standing in the community and lower the incidence of domestic violence among their families. The burden of care work traditionally regarded as a "women's role" in society can be lessened by having access to and control of resources, information, and technology connected to farming and business. The webinar's videos on "Gender Responsive Climate Resilient Agriculture" showed various coping mechanisms employed by women farmers in Satkhira, emphasizing their crucial role in reducing the effects of climate change.

**Speaker 2: Ms. Beauty Begum**

1. During the COVID-19 epidemic, the farmer enhanced family nutrition by implementing the pitcher and hanging irrigation techniques he had acquired from the Practical Action and UN Women pilot intervention. This led to a successful vegetable harvest.
2. For farmers who were unable to leave their houses frequently, the agriculture call center's written and audio messages on seasonal crop illnesses and preventives were of great assistance. When required, the call center also offered professional assistance.
3. Due to the farmer's success in using these approaches, other women in the area are now interested in doing the same, which could result in new employment prospects and improved market connections.

**Speaker 3: Dr. Kashfia Ahmed**

1. Women execute a variety of tasks from dawn to dark, including homestead production, care labor, and managing livestock and poultry. They are the unappreciated driving force behind rural agriculture and the general economy.
2. Improving women's employment prospects and economic empowerment requires fostering their leadership and representation in agricultural organizations and decision-making processes, granting them access to technology, information, and extension services, and ensuring straightforward and equitable access to credit, land, and financial services.
3. Women must be valued as "climate champions" or "agricultural champions" due to their unique knowledge, skills, and experiences with regard to climate adaptive agriculture in order to break stereotypes, social norms, and harmful

practices that exist in society. This requires collaboration and coordination among local communities, local government, religious leaders, private sectors, and policymakers.

**Speaker 4: U S Rokeya Akhter**

1. More than 85% of farmers in Bangladesh have less than a hectare of land, and 60% of those who work in agriculture are women.
2. Every intervention by the FAO takes into account at least 30% female farmers, and the convenience of female participants in terms of training and meeting times and places is given priority.
3. In small-scale livestock production at the home level, such as raising goats and sheep, dairy, beef, and poultry value chains, as well as producing Sonali chicken, women play a vital role. The speaker emphasizes the necessity of group efforts to build a society where women are treated fairly in all respects.

**Speaker 5: Agriculturist Ferdousi Begum**

1. By establishing 499 Agriculture Information and Communication Centers (AICC) at the village level, the Agriculture Information Service (AIS) hopes to use ICT to reach out to local communities with agricultural information.
2. The Krishi Call Center, which may be reached at (16123), offers knowledgeable assistance to farmers regarding illnesses, insecticides, and do-it-yourself protection. Women make up about 30% of the calls, and their main areas of interest are horticulture, composting, livestock, poultry, and vegetable gardening.
3. The call centers have had difficulties due to the financial crisis, however Public Private Partnership (PPP) may offer a means to keep this service available. This would help not only female farmers but also other disadvantaged populations that have limited mobility.

### **Three key takeaways of the session:**

1. To discuss the challenges women face in getting involved in the agriculture sector, and how low-cost and locally adapted techniques of cultivation could alleviate some of the hurdles of the marginalized women farmers
2. To emphasize the changes in women's socio-economic status after engaging with homestead agriculture that leads to their leadership and decision-making skills.
3. To influence other stakeholders related to climate change, gender equality, and climate resilient agriculture to promote gender-responsive climate-smart agriculture, which is low-cost, locally-led, and driven by the relevant national policies, frameworks, and approaches like National Adaptation Plan (NAP) and Climate Change Gender Action Plan (CcGAP) 2022.

### **Session Summary:**

In a webinar on "Gender Responsive Climate Resilient Agriculture," speakers covered the crucial role of women in agriculture and the difficulties they encounter in developing nations like Bangladesh. Climate change has a disproportionately negative impact on women in rural regions since they frequently run their own houses and farms. Women are twice as likely as males to be employed in farm work, according to the Practical Action and UN Women pilot project, and they have also established locally-based adaptation techniques to lessen losses from climate-related disasters. Access to farming and business-related tools, information, and technology for women can raise their socioeconomic status and lessen domestic violence. Speakers underlined the significance of supporting women's leadership and involvement in decision-making processes as well as appreciating them as "climate champions" and "agricultural champions." Although financial limitations continue to be a problem, the creation of Agriculture Information and Communication Centers (AICC) and the Krishi Call Center offers women farmers agricultural information and assistance. The idea of a Public Private Partnership (PPP) is put out as a viable remedy for this problem.



## Friendship's Climate Youth



*The panelist of the FRIENDSHIP's Climate Youth session*

**Host:** FRIENDSHIP NGO

**Moderator:** Mr.Kazi Amdadul Hoque, Senior Director, Friendship

**Session Speakers:**

1. Mr. Ahmadul Haque, Director (Administration), Cyclone Preparedness Programme ( CPP)
2. Ms.Dr. Samiya Selim Professor & Director of Center for Sustainable Development (CSD), ULAB Advisor, Climate Change and Disaster Management (CCDM ) programme, Sajida Foundation
3. Ms. Ayesha Taasin Khan Bar-at-Law Senior Director and Head of Inclusive Citizenship and Education

**Speaker 1: Mr. Ahmadul Haqu**

1. Addressing water issues and their relationship to health is crucial, and the Friendship program connected the dots between many challenges to show how they battle and solve them in completely different ways.
2. The presentation made special mention of mental health. It is crucial to note the relationship between mental and physical health as well as the connection between mental health issues and disasters.
3. As there are numerous services and support provided by governments and other NGOs, yet many locals are unable to take advantage of them due to a lack of understanding, the necessity for paralegal work in the community is quite vital.

### **Speaker 2: Dr. Samiya Selim**

1. The importance of the youth problem is acknowledged, and the Cyclone preparedness program includes some mandatory agendas in response to threats and the consequences of storms in the coastal zone. The CPP primarily works in 30 coastal districts and has grown into 6 more riverine districts and various isolated geographic places.
2. The CPP program has a formal and historical mandate for youth participation. However, CPP is extending its reach with certain vertical actions. Every vertical intervention and every CPP activity is entirely run by Youths. The CPP initiative successfully attracted 19000 new young women volunteers as part of a movement for women's emancipation. CPP now has 38 000 volunteers.
3. Friendship's session is crucial for CPP since it was part in a multi-hazard response that comprised 4000 volunteers, and it will benefit much from the conversations that take place during this session in order to implement new activities in the CPP interventions. Looking forward to see future collaborations where Friendship and CPP collaborate more actively.

### **Speaker 3: Ms. Ayesha Taasin Khan**

1. In the various Friendship presentations that are really focused on Climate and youth, every Friendship sector that has seen youth indulgence has found it to be quite necessary that their youth should be mobilized and involved in the climate justice warriors because it is time to actually give justice to all the climate impacted people.
2. Youth involvement is crucial, and it is our obligation to find out what needs to be done. Through Friendship, we can involve the youth in knowledge-building, provide them with the necessary training, and involve them in disaster management activities.
3. Encourage young people to adopt the little stated pro-environmental behaviors. It is important to motivate youth to participate in policy changes since they can be motivated, contribute, and have highly important perspectives. Since it is so crucial to focus on them, it is essential to ensure that institutional mechanisms are included in their education, curriculum, and syllabus. Extracurricular activities, institutional projects, training and community activism should all be made mandatory in formal schooling.

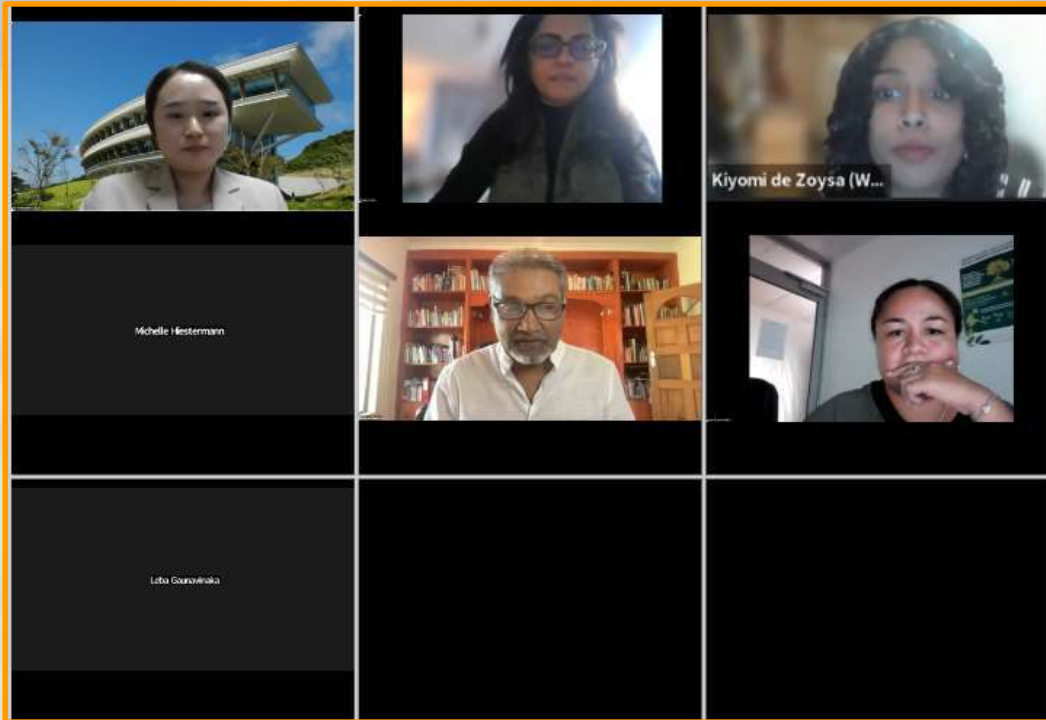
### **Three key takeaways from the end of the session:**

1. The session highlighted how Friendship engages youths to facilitate the implementation of locally-led climate actions in the remote northern and southern regions of Bangladesh. Some of the roles which youth play in the community to ensure water, food security, education, climate justice, and health.
2. Following the presentation, the experts from relevant sectors highlighted how they engage youth in each sector of Friendship (i.e. Climate Action, Health, Education, Inclusive Citizenship, and Sustainable Economic Development).
3. Following the experts' speeches on each sector, panelists provided a brief overview- the significance of engaging youth in climate action and the absence in any kind of decision making the process and actions of youth will not yield a fruitful result.

### **Session Summary:**

The Friendship program emphasized the need for creative solutions and disaster preparedness by highlighting the connections between water challenges, health, and mental health. Youth participation in addressing climate concerns has been emphasized, especially in the Cyclone preparedness program, where young volunteers actively take part in response activities. In order to meet the needs of communities affected by climate change and encourage pro-environmental habits, the session emphasized the importance of mobilizing and incorporating adolescents in climate justice activities. It was emphasized that institutional methods are essential for empowering youth and influencing policy changes, such as incorporating climate education and advocacy into formal schooling.

## Adaptation Action Coalition Secretariat: Integrating Locally Led Adaptation into National Adaptation MEL systems



*The panelist of the Adaptation Action Coalition Secretariat session*

**Host:** World Resources Institute (WRI)

**Moderator:** Rohini Kohli, Senior Technical Advisor Climate Change Adaptation Policy and Planning of UN Development Programme

**Session Speakers:**

1. Lebaiatelaite Gaunavinaka, UNITAR-UNOSAT, Fiji, Climate Change Division
2. Kei Kurushima, Institute for Global Environmental Strategies (IGES), Japan, Researcher,
3. Dhesigen Naidoo, World Bank and Presidential Climate Commission, Senior Advisor and Lead
4. Jean Paula Regulano, Climate Change Commission, Office of the President of the Philippines., Development Management Officer III
5. Rohini Kohli, Climate Change Adaptation Policy and Planning of UN Development Programme, Senior Technical Advisor
6. Kiyomi de Zoysa, World Resources Institute, Adaptation Action Coalition Secretariat, Communications and Engagement Specialist

### **Speaker 1: L. Gaunavinaka**

1. In this presentation, the speaker intends to discuss Fiji's key climate change instruments, which guide adaptation and locally led initiatives. They will provide examples of such initiatives and their corresponding monitoring, evaluation, and learning frameworks. The speaker will also touch on plan relocation guidelines and the standard operating procedure that is part of Fiji's plan relocation work.
2. They will emphasize the importance of the legislative instruments in establishing an enabling environment for implementing ambitious climate change actions and supporting climate-impacted communities to build resilience.
3. Additionally, the speaker will explain the institutional arrangements for Fiji's national adaptation plan and the ten sectors it covers, including the need for climate data and information to monitor progress effectively.

### **Speaker 2: Kei Kurushima**

1. It's interesting to see that the Mel system has been established at the national level and there are more than 100 local adaptation plans in Japan. It's good to see that each adaptation plan has progress indicators and an M&E system. However, it's important to note that integrating LLA into the Mel system in Japan is still a challenge, particularly at the local level, where the system is not yet developed much.
2. The overview of AP plot and its three pillars, which are two development scientific information and capacity development, is also informative. It's good to see that the platform is working on establishing a One-Stop comprehensive information platform, identifying opportunities for comprehensive strategies, and launching new projects.
3. Overall, it's clear that there is still work to be done in integrating LLA into the Mel system in Japan, particularly at the local level. However, it's good to see that Japan is actively working on international cooperation in adaptation through the AP plot.

### **Speaker 3: Dhesigen Naidoo**

1. The speaker is discussing the concept of a just transition and how it has become the dominant narrative vehicle for driving the energy transition forward. The just transition framework includes three pillars: procedural justice, distributive justice, and restorative justice.
2. The speaker emphasizes the importance of organizing for the movement in a way that invites the participation of all stakeholders, including those at the local level, to achieve procedural justice. They also stress the need to ensure

that all players in the system become beneficiaries of the intervention, which is distributive justice.

3. Finally, they emphasize the need for restorative justice, especially in areas where local communities generally get the bitter end of the stick. The speaker mentions that South Africa has organized itself to express itself in the Supernatural fora, including the UNF Triple C and the nationally determined contribution, and is proud of its latest NDC within the Paris Agreement.

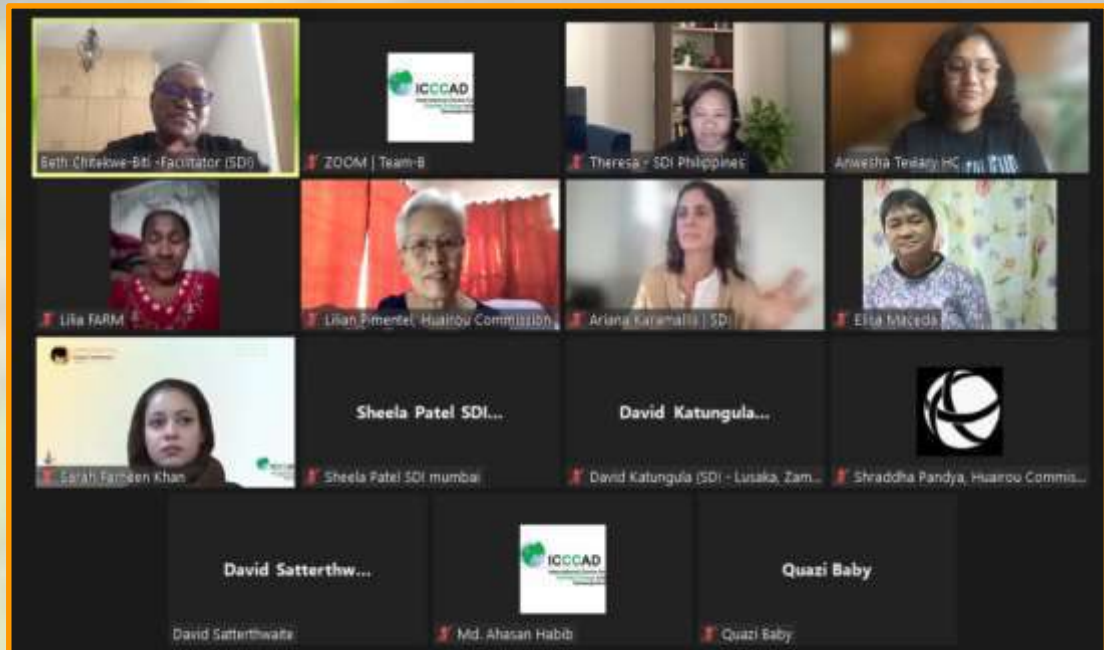
### **Three key takeaways from the end of the session:**

1. Fiji's key climate change instruments and the importance of legislative instruments in establishing an enabling environment for implementing ambitious climate change actions and supporting climate-impacted communities to build resilience.
2. The challenges and opportunities in integrating LLA into the Mel system in Japan, and Japan's active work on international cooperation in adaptation through AP plot.
3. The concept of a just transition, the three pillars of the just transition framework, and the importance of organizing for the movement in a way that invites the participation of all stakeholders to achieve procedural, distributive, and restorative justice.

### **Session Summary:**

Speakers discussed Fiji's key climate change instruments, legislative instruments, and institutional arrangements for Fiji's national adaptation plan. They emphasized the importance of climate data and information to monitor progress effectively. Additionally, they talked about the challenges in integrating LLA into the Mel system in Japan and the efforts to establish a One-Stop comprehensive information platform. They highlighted Japan's active participation in international cooperation in adaptation through the AP plot. Moreover, they discussed the concept of a just transition and its three pillars: procedural justice, distributive justice, and restorative justice. They emphasized the importance of organizing for the movement in a way that invites the participation of all stakeholders, including those at the local level, to achieve justice for all.

## Loss and Damage: A Grassroots Perspective



*The panelist of the Loss and Damage: A Grassroots Perspective session*

**Host:** Huairou Commission (HC), Slum Dwellers International (SDI)

**Moderator:** Beth Chitekwe-Biti, Director, SDI

**Session Speakers:**

1. Beth Chitekwe-Biti, Director, SDI
2. Lilia Hantanirina Ravoniarisoa, President, Rural Women's Federation of Madagascar (FARM)
3. Elisa Maceda, ULAP Confederation, Philippines
4. Margaret Bayoh, Sierra Leone Federation of the Urban & Rural Poor
5. Theresa Carampatana, President, Homeless People's Federation of the Philippines
6. David Satterthwaite, IIED
7. Sheela Patel, SPARC India
8. David Katungula, People's Process on Housing & Poverty in Zambia (PPHPZ)

**Speaker 1: Theresa Carampatana**

1. The changing climate is degrading our environment – or we are degrading our environment which is why we have climate change. The epicenter of these effects is experienced by the poor, especially in informal communities. Farmlands are now flooded or are part of the sea, threatening our food security. Worsening health conditions, including mental health, due to

destruction of homes, communities and livelihoods, infrastructure loss also disrupts schooling of children, transportation and mobility, and loss of economic opportunities. Homes that we build, that we've invested in for decades, are being wiped out in a single typhoon. These impacts are outside of the usual challenges that the urban poor face (eviction, demolition, fire).

2. The SDI is working to strengthen our communities and our members so that we can partner with local stakeholders, government, academia, to strengthen our capacity to respond and demonstrate both the scale of the challenge and our capacity. But they need more support! Improving savings mobilization, organizing women to develop skills to address food security, health, and disaster preparedness. They are also using community data to address these issues. They believe that organized communities have the best fighting chance to battle climate change impacts. They have the area-specific knowledge and the data required to respond.
3. They want the poor to be included in decision-making and formulation of strategies and solutions. There should be a long-term structure that should govern this kind of intervention. This is a long term problem that needs a long term solution. Journeying with the poor and capacitating them and helping them to be part of that collaboration with government and other stakeholders – if they have that, 50% of the problem will be solved. The poor are included and the decisions that they feel they want and they can do will be incorporated.

**Speaker 2: Lilia Hantanirina Ravoniarisoa**

1. Droughts, floods, and cyclones are occurring more frequently and more intensely, which is seriously disrupting local people and resulting in the loss of crops, revenue, and food security. Malnutrition, sleeplessness, and general weakness have emerged as a result, particularly affecting women who are responsible for supporting their families.
2. Communities living in dry regions are being compelled to look for food and a means of subsistence elsewhere, which is leading to an increase in climate-induced migration. However, these migrants frequently struggle to integrate into new communities, lose their old ways of life and cultures, and struggle to access basic amenities in their new surroundings.
3. The federation is strengthening neighborhood communities in response to these difficulties by fostering their resilience and offering assistance. This includes putting women in touch with partner organizations, teaching them how to boost farm yields and consider alternate sources of income, enabling their access to markets, and helping them with land leases when they move.





**Speaker 3: Margaret Bayoh**

1. In hillside settlements, human activities like farming and land clearance seriously exacerbate erosion and flooding. Climate change exacerbates the damage that these occurrences, like rolling boulders, cause.
2. It is necessary to increase the ability of communities in these at-risk locations to tolerate, respond to, and recover from these detrimental effects. In order to do this, it is necessary to raise awareness about climate change and its effects as well as to provide training and resources to improve catastrophe preparedness and response.
3. Flooding not only uproots people from their villages but also makes it difficult for them to get food and possibilities for employment, particularly for daily laborers. It is crucial to involve and sensitize community members, especially women, in the discussion with the local government and partner groups in order to address these difficulties. Communities may speak up for their needs and work toward more sustainable solutions through increasing communication and cooperation.

**Speaker 4: Elisa Maceda**

1. The quality of life and wellbeing of residents in Rodriguez, Rizal, and Philippines have been seriously impacted by disastrous flooding occurrences, such as the effects of typhoon Vamco in 2020. The effects of these catastrophes on physical and mental health are frequently disregarded and inadequately addressed.
2. Family safety is put at risk by the overcrowding and lack of privacy in evacuation shelters. Families affected by this situation are distressed for a variety of reasons, including lack of access to enough food, sluggish government assistance, and uncertainty regarding housing situations.
3. The Montalban Action Group is one example of a grassroots organization that is essential in helping the local population during and after disasters. They

offer training in disaster preparedness, coordinate resource mobilization campaigns, set up community pantries, encourage urban gardening for food security, and distribute food. These initiatives seek to increase community resilience while assisting individuals in coping with the difficulties of loss and destruction brought on by climate change-related disasters.

**Speaker 5: David Satterthwaite**

1. Despite their rhetoric, funding organizations frequently fail to develop efficient systems for distributing financial support. The SDI's municipal funds are recognized as a good example that other financing organizations ought to follow in order to effectively address community issues.
2. Community organizations may encounter considerable difficulties in obtaining funding and fulfilling the requirements related to it. Concerns are raised about the potential barriers to funding and the bureaucratic systems put in place by funding organizations.
3. The impact of many foreign funding institutions' delegation of project implementation to middlemen may be modest. Funding for grassroots organizations like HC and SDI has occasionally been given to multinational consultant funds and contractors rather than climate change organizations, which has resulted in the loss of chances for significant change. It is important for serious funders to take into account the cumbersome administrative procedures involved in receiving funds.

**Speaker 6: David Katungula**

1. In Zambia, severe flooding has been a persistent issue. By utilizing the strong grassroots mechanisms already in place, like those set up by SDI, we can encourage greater community involvement in solving these problems.
2. The unwillingness of international funding organizations to make sure that resources get to the most impacted populations is one of the biggest obstacles to receiving money for loss and damage. In addition, effective access to pertinent resources is hampered by the vague use of the terms "loss" and "damage" in local development frameworks and policies.
3. In order to advance the loss and damage (L&D) agenda both locally and worldwide, grassroots movements must work together and stand together. Advocates should work to make the government's L&D agenda clear and ask foreign funding organizations to give climate financing top priority for mitigating loss and damage in the most impacted areas. To effectively handle all of these difficulties, it is crucial to take into account both measurable and


non-quantifiable losses and damages, such as loss of lives and cultural impact, and arrange funds accordingly.

**Speaker 7: Sheela Patel**

1. To recognize the long-standing, previously unnamed issues facing communities affected by distress and displacement, it is critical to gather the collective experiences of such populations. This collection of data is essential to ensure that the needs and voices of these communities cannot be disregarded or marginalized by the international community.
2. The current efforts and messages of these communities are not effectively reaching the responsible authorities who can create accessible funding for their needs. There is a need to find alternative ways to amplify these messages and ensure they reach the right stakeholders who can make a difference.
3. In the face of the effects of climate change, the duty of women as carers during a crisis becomes particularly difficult. Initiatives like the Know Your City campaign can be used to highlight the active role of women as the first warriors in combating climate change. Recognizing the resiliency and agency of women in addressing climate change is crucial. In order to effectively recognize and respond to these damages, it is also critical to include eviction in the list of losses and damages and develop techniques to quantify these damages.

**Three key takeaways from the end of the session:**

1. Urban poor and grassroots women and communities in the global south are some of the hardest hit by the climate emergency. They are experiencing increasingly severe impacts and the losses and damages to their lives, livelihoods, and communities are widespread and severe. The magnitude of these quantifiable and unquantifiable losses are largely unknown to government and other stakeholders as they lack the tools and partnerships with these communities to know what is really happening on the ground.
2. Grassroots and urban poor communities have many of the tools, systems and methodologies required to facilitate effective quantification of losses and damages (through community-driven data collection and analysis, for example) and to effectively and efficiently channel financing for loss and damage to communities that need it most (thanks to decades of experience with their own community-managed urban poor and grassroots women-led community resilience funds).

- 
3. The role of women as the primary caregivers of their families becomes deeply stressful and traumatic for women as they battle against the impacts of climate change, do their best to rebuild after disaster, and struggle to provide for their families in the face of threatened or decimated livelihoods, food security, etc. This mental and emotional toll on women and families has a serious ripple effect and is one of the most invisible yet most profound losses/damages that exists at the nexus of climate vulnerability and poverty.

### **Session Summary:**

The session focused on understanding loss and damage from the perspective of grassroots communities whose lives depend on one survival mechanism at a time. Grassroots women leaders from the two global social movements (HC and SDI) shared stories of how organized urban and rural grassroots groups are addressing losses and damages related to the climate crisis and disasters – using tools, methodologies and partnerships developed by the communities themselves to identify and respond to their circumstances. They reflected on the capacities and strength of their organized constituencies / networks that play significant roles in collecting information and local knowledge about their communities and affected households to support institutions to understand L&D based on locally generated evidence and documentation of losses faced by communities – especially poor and marginalized women and their families living in rural, urban and impoverished settlements. These lessons and experiences should shape the larger discussion and policies on Loss and Damage.

## Knowledge Sharing From Scaling Climate Change Adaptation Knowledge And Technologies For Empowering Women



*The panelist of the Knowledge Sharing From Scaling Climate Change Adaptation Knowledge And Technologies For Empowering Women session*

**Host:** BCAS, ICCCAD, UoM, GoB

**Moderator:** Dr. Dwijen Mallick, Director, BCAS

**Session Speakers:**

1. Dr. Saleemul Huq , Director, ICCCAD
2. Sumaiya Binte Selim, Programme Coordinator
3. Md. Hafuzur Rahman, Research Officer
4. Shohail Bin Saifullah, Programme Coordinator

**Speaker 1: Sumaiya Binte Selim**

1. Exploratory study projects in the Bangladeshi districts of Sunamganj and Satkhira offer light on the diverse ways that climate change affects women in wetlands and poor coastal communities. These studies sought to comprehend the dynamics and reasons escalating the vulnerabilities of women and underprivileged populations to climate change.
2. Patriarchal standards, a lack of support, a lack of resources, a lack of awareness, and political influence are just a few of the reasons that have been identified as obstacles to alternative livelihoods for women. Increasing salinity levels in soil and water have

further negative effects on human health, including skin conditions, illnesses transmitted by water, heart conditions, and concerns with pregnancy.

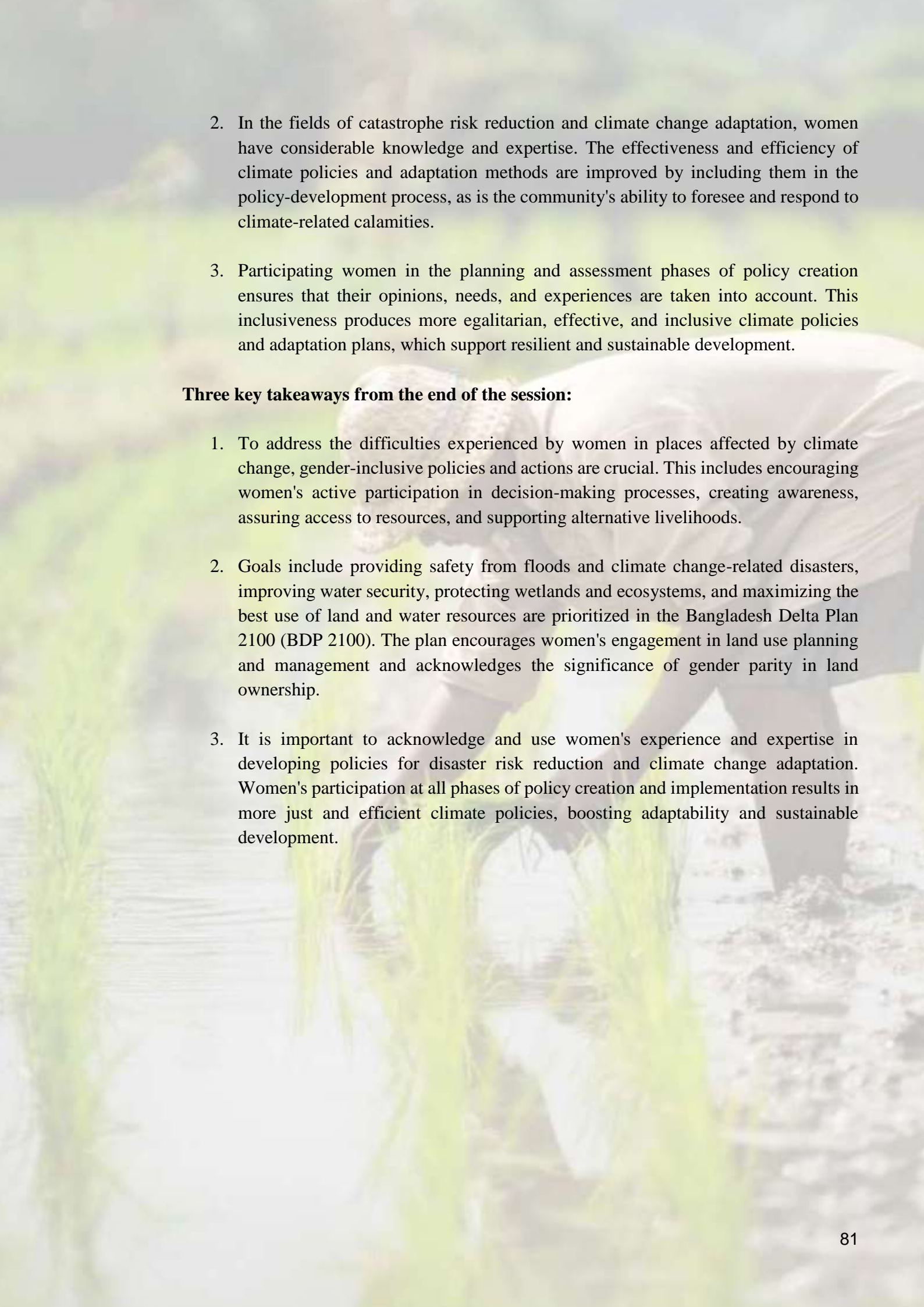
3. The research's recommendations emphasize the significance of women's participation and inclusivity in efforts to reduce disaster risk, favorable attitudes toward women's roles in climate resilience, efficient early warning system dissemination, the establishment of women-focused shelter and treatment centers, equal access to resources, and the need for more in-depth research to analyze differentiated impacts and develop better solutions for women's resiliency. For addressing the individual requirements and variety among women groups, integrative planning, sustainable livelihood options, and gender-inclusive disaster preparedness are also stressed.

**Speaker 2: Md. Hafuzur Rahman**

1. The Bangladesh Delta Plan 2100 (BDP 2100) is a thorough long-term strategy designed to manage the nation's delta system sustainably while taking the effects of climate change and other stresses into consideration. It focuses on water, land, and coastal management to preserve the stability of the delta's ecology and economy, which is essential for the well-being of two-thirds of the country's population.
2. The BDP 2100 gives priority to objectives like ensuring safety from floods and disasters brought on by climate change, improving water security and efficiency, managing river systems and estuaries sustainably, conserving wetlands and ecosystems, and making the best possible use of land and water resources.
3. The BDP 2100 addresses gender-related issues through cross-cutting concerns. By establishing a gender-sensitive land use planning framework that acknowledges women's contributions to the local economy and their rights to land ownership, it seeks to advance gender equity in land ownership. The strategy also places a focus on giving women access to opportunities for training and capacity building, on including them in decision-making processes, and on ensuring that the legal processes for obtaining land are gender-neutral. Improved food security, environmental protection, and general land use improvements can all be attributed to gender-responsive efforts in land resource management.

**Speaker 3: Shohail Bin Saifullah**

1. To address the disproportionate effects of catastrophes and climate change on women, women must be involved in the creation and implementation of policy. Women's exclusion from decision-making processes can lead to policies that do not effectively reflect their needs and objectives, prolonging gender inequities and weakening resilience.

- 
2. In the fields of catastrophe risk reduction and climate change adaptation, women have considerable knowledge and expertise. The effectiveness and efficiency of climate policies and adaptation methods are improved by including them in the policy-development process, as is the community's ability to foresee and respond to climate-related calamities.
  3. Participating women in the planning and assessment phases of policy creation ensures that their opinions, needs, and experiences are taken into account. This inclusiveness produces more egalitarian, effective, and inclusive climate policies and adaptation plans, which support resilient and sustainable development.

**Three key takeaways from the end of the session:**

1. To address the difficulties experienced by women in places affected by climate change, gender-inclusive policies and actions are crucial. This includes encouraging women's active participation in decision-making processes, creating awareness, assuring access to resources, and supporting alternative livelihoods.
2. Goals include providing safety from floods and climate change-related disasters, improving water security, protecting wetlands and ecosystems, and maximizing the best use of land and water resources are prioritized in the Bangladesh Delta Plan 2100 (BDP 2100). The plan encourages women's engagement in land use planning and management and acknowledges the significance of gender parity in land ownership.
3. It is important to acknowledge and use women's experience and expertise in developing policies for disaster risk reduction and climate change adaptation. Women's participation at all phases of policy creation and implementation results in more just and efficient climate policies, boosting adaptability and sustainable development.

### **Session Summary:**

The exploratory investigations carried out in Bangladesh's Sunamganj and Satkhira districts provided insight on the diverse effects of climate change on women in wetlands and underdeveloped coastal areas. Women's access to alternative livelihoods is hampered by elements like patriarchal standards, a lack of resources and assistance, a lack of understanding, and political power. Health hazards are also present as soil and water salt levels rise. The study suggests incorporating women in efforts to reduce catastrophe risk, encouraging positive views of their contributions to climate resilience, providing equal access to resources, building shelters specifically for women, and performing additional research to address varied consequences. Goals including flood and disaster safety, water security, sustainable river and coastal management, wetland protection, and gender-equitable land ownership are given top priority in the Bangladesh Delta Plan 2100 (BDP 2100). In order to increase resilience and sustainable development, it places a focus on women's participation, education, and inclusion in decision-making processes. Effective climate policies and adaptation strategies must take into account the knowledge and experience of women, include them in the creation and implementation of policies, and take into account their viewpoints.



## Making locally led adaptation gender transformative: The barriers and possibilities



*The panelists of the Making locally led adaptation gender transformative session.*

**Host:** Institute for Study and Development Worldwide (IFSD)

**Moderator:** Dr. Basundhara Bhattarai, Gender and Environment Senior Advisor of IFSD

**Session Speakers:**

1. Zulmira Costa, National Director, Universidade Nacional Timor Lorosa'e
2. Gyanu Maskey, Program Director, South Asia Institute for Advanced Studies
3. Karen Delfau, Water Governance, Gender, Knowledge Co-Creation Specialist
4. Popular Gentle, Adjunct Research Fellow, Charles Sturt University

**Speaker 1: Zulmira Costa**

1. Existing climate change issues like increasing temperature, extreme annual rainfall, ocean acidification and sea-level rise are negatively impacting the population. Reduced water sanitation has led to diseases which mainly is affecting women and children who are primarily responsible for water management at home. As the majority of Timor-Leste's population depends on agriculture, soil depletion and saltwater intrusions are affecting their livelihoods.
2. There is poor management of water resources, lack of appropriate policies and insufficient clean water supply that is creating an additional burden on women who are responsible for managing water for domestic use.
3. There is a need for proper water management - policy and integrated master plan, protection of water resources, integrated catchment modeling, land use maps, integrating indigenous knowledge, water quality assessment, community mobilization, and capacity building to address water challenges of Timor Leste.

### **Speaker 2: Gyanu Maskey**

1. Water collection and management activities in Nepal are mainly done by women/girls. Accordingly, water-related policies in Nepal are progressive with provisions made for equitable representation of women in the decision-making process. However, such provisions are not practiced.
2. Dhulikhel and Diktel case studies. In Diktel women are good at managing water while it is scarce, and this is adding a burden to them. Women members are having a hard time securing a position in the water user's committee and when the position is secured, it is usually women who are relatively privileged in that community. In Dhulikhel, more women are represented in the Water User Group but they are still facing participatory exclusion. Women are often allowed participation in 'feminine' activities/decisions but not the important decisions like managing funds. There is a lack of meaningful participation.
3. We should focus on capacitating women, intersectionality, re-imagining gender roles, and promote gender inclusion in water governance.

### **Speaker 3: Karen Delfau**

1. Technology for women - share knowledge, connect with one other, learn, amplify their voices, and legitimize their knowledge related to water. Mekong region - communities face consequences due to the hydropower projects, they are often forced to resettle. With her team through ODI, they have co-designed a process to support the development of a conceptual framework which is inclusive, accessible and integrated - can be utilized by international researchers and women living in villages which have little to no access to technology.
2. Creating a safe space with safeguards, a robust governance structure - online and offline structure, looking at how we can avoid unintended consequences. There is not much gender inclusive language in policies - agency, access, norms, and structures - there is a lack of understanding of why women's involvement is necessary.
3. We need to go beyond data collection and quotas - How do we value women's time? We are asking more from women, we want women to be involved but what about the structures that do not acknowledge women's time? The issue of equality vs equity needs to be considered properly.

### **Speaker 4: Popular Gentle**

1. Existing policies in Nepal support LLA for climate change but as most of the projects are often donor funded, local governments are having a hard time receiving

funds due to Nepal's institutional structure making it difficult to further plan and implement climate change adaptation that can be locally led.

2. Most of the vulnerability analysis is done using standard tools and the process looks at it through a risk-hazard framework with inadequate understanding of the social and contextual determinants. Much of the focus is on addressing impacts of physical hazards rather than vulnerable communities. So, there is a lack of autonomous adaptation by communities, not addressing underlying causes and pre-existing vulnerability, including gender inequality.
3. Adaptation must consider both climatic and non-climatic vulnerabilities, and incorporate ways that communities are already adapting in policies that will lead to locally led adaptation.

**Three key takeaways from the end of the session:**

1. Women play an important role in locally-led adaptation but their voices are often not heard or brought forward to the decision-making space. The existing gender roles established by the patriarchal system burdens women and their involvement in decision-making adds to the existing burden especially in terms of time commitment.
2. Even when there are progressive policies, the existing structures create barriers making it difficult to put it into practice, which ultimately makes it difficult for women to meet their needs as they continue to cope with the adversities brought on by climate change making them even vulnerable to existing gender-power imbalances.
3. When we are working towards a more gender transformative approach, we need to assure that the efforts we make not only empower women but also do not create additional burden for them. In this process, the ideas, frameworks or technology that we introduce should meet the needs of women because usually they mostly meet the needs of men only.

### **Session Summary:**

The mismatch between policy and practice and the requirement to accept complexity are obstacles to achieving transformative change in water governance and climate adaption. By involving women in political organizations, it is possible to encourage meaningful participation and the application of policies to practice. Local-level adaptation (LLA) efforts need the leadership of women and young people, who should be encouraged to take these positions. Local communities, especially women who depend on natural resources, offer significant information and coping skills that should be considered in vulnerability assessments. Lessening discrimination and influencing the educational system are two ways that youth can contribute to revolutionary change. It is necessary to raise digital literacy in order to incorporate locally driven technology into SDG-aligned climate change mitigation strategies. Technology needs to be available to disadvantaged populations and transform gender. Women's capacity enhancement is essential for their access to low-cost, nature-based solutions while avoiding maladaptation.

## Bringing Adaptation Financing to Where it Matters the Most - A Case Study from the LoGIC Project in Bangladesh



*The panelists of the Bringing Adaptation Financing to Where it Matters the Most session*

**Host:** UNDP & UNCDF

**Moderator:** Jasmin Blankennagel, Programme Officer (Climate Finance and Adaptation), UNDP

**Session Speakers:**

1. A.K.M Azad Rahman, Project Coordinator, LoGIC UNDP
2. Mohammad Fazla Azim, Joint Secretary of the Local Government Division & National Project Director of LoGIC
3. Nayoka Martinez-Backstrom, First Secretary, Environment & Climate Change, Embassy of Sweden to Bangladesh
4. Sophie De Coninck, Global Manager, Local Climate Adaptive Living Facility (LoCAL), United Nations Capital Development Fund (UNCDF)
5. Hubert BLOM, Attaché & Programme Manager for Green Inclusive Development at the Delegation of the European Union to Bangladesh

**Speaker 1: A.K.M Azad Rahman**

1. Vulnerable communities in Bangladesh engage more in coping measures than in adaptation measures because the costs of adaptation remain too high and they lack the climate information and adaptive capacities, as well as the funding required to implement adaptation solutions effectively.

2. LoGIC has two climate financing models; Community Resilience Fund (CRF) and Performance Based Climate Resilience Grant (PBCRG). Together, these two complimentary climate finance models are contributing to resilient communities, institutions, and infrastructures in Bangladesh.
3. The lessons learned include: awareness and capacity on climate change needs to be increased at all levels throughout the country, Legislative review of existing policies related to decentralization and climate change is needed to facilitate delivery of climate finance at the local level, Mobilizing local resources, such as local taxes, to increase and strengthen the sustainability of local climate change budgets can be explored, community and local government leadership, promoted through citizen empowerment, needs to be central to effective and sustainable locally-led adaptation, accountability mechanisms need to be established and baselines and indicators for climate finance need to be included in monitoring and evaluation, coordination among different stakeholders in the sector needs to be improved.

**Speaker 2: Mohammad Fazla Azim**

1. The role of local government in implementing the LoGIC project is critical for several reasons. Firstly, the local government is funding the project and is responsible for its implementation. One of the key components of the LoGIC project is capacity building. The project provides training to beneficiaries and local government officials on climate change adaptation and mitigation measures, as well as on the use of climate data and information. This enables them to develop climate-resilient plans and policies that are tailored to their local contexts.
2. Another important aspect of the LoGIC project is community engagement. The project works closely with local communities to ensure that their needs and perspectives are taken into account in the planning and implementation of climate change measures. This helps to build trust and ensure that the measures are effective and sustainable. Here is where the local government comes into play, as it is best placed to understand the unique challenges and opportunities facing their communities in the context of climate change. They have local knowledge and expertise that can be leveraged to develop effective climate change adaptation and mitigation measures that are tailored to the local context.
3. The local government is a key factor in the implementation of national climate policies and strategies. It is responsible for translating national policies into local action, which is essential for achieving the targets set out in national climate plans. LoGIC's climate financing model has proven to be highly successful and needs to be mainstreamed and institutionalized across Bangladesh to promote local action on climate change adaptation at scale. This will contribute to the overall sustainable development of our country.



**Speaker 3: Nayoka Martinez-Backstrom**

1. Investment has to be made in adaptation and the climate action initiatives have to take into consideration the local context because of different climate change.
2. LoGIC has empowered women through CRF, through which they have been able to implement different CALOs. In addition, LoGIC has now introduced Smart Climate Cooperatives, which is very innovative. Also, more productive activities can come out of Sweden's initiative of guarantee schemes with UNDCF.

**Speaker 4: Sophie De Coninck**

1. It is important to make sure adaptation is localized, but it's challenging to actually make it scalable. LoGIC builds on the LoCAL model such as Performance-Based Climate Resilience Grant (PBCRG). The grants are given to local government institutions and disbursed by them to build climate resilient infrastructure.
2. There is lots of room for more instruments and funds. Grants such as PBCRG are very less if we consider them in terms of per capita. Hence, LoGIC can try to access more funds to finance locally-led adaptation more efficiently.

**Speaker 5: Hubert BLOM**

1. LoGIC's objectives fit nicely and aligns with EU's Strategies
2. Faster Adaptation; Since LoGIC works with local population and its implementation strategy takes into account the local context, it can utilize faster adaptation.
3. More systematic approach to adaptation. The LoGIC model delivers locally and works through the local government and targets vulnerable groups.

**Three key takeaways from the end of the session:**

1. Explore innovative climate finance tools including concessional loans, green microcredits, insurance and other risk financing instruments, green bonds, or blended finance through PPP.
2. Continue to advocate for the benefits of locally-led approaches to climate adaptation and establish an institutionalized mechanism for locally-led adaptation through local government institutions.
3. Adopting risk insurance and transfer instruments to enhance vulnerable economies' and communities' resilience and introducing a social protection scheme for climate-vulnerable households.

## **Session Summary:**

Local Government Initiative on Climate Change (LoGIC) Project, UNDP has conducted a session on Climate Finance and Locally-Led Adaptation. The LoGIC project is a pioneer of locally-led adaptation in Bangladesh and has established an innovative, cost-effective adaptation financing mechanism that places vulnerable communities at the heart of decision-making to become local adaptation change makers. This session aimed to reflect on the lessons learned from LoGIC's climate financing model and offer policy directives for local climate financing in Bangladesh and beyond. We started off by presenting a video highlighting our project and introducing our partners. It was followed by a presentation by A.K.M Azad Rahman, LoGIC's Project Coordinator from UNDP. We then started our panel discussion with our esteemed guests and panelists: Mohammad Fazla Azim, Joint Secretary of the Local Government Division & National Project Director of LoGIC; Nayoka, Martinez- Bäckström, First Secretary, Environment & Climate Change, at the Embassy of Sweden to Bangladesh, Sophie De Coninck, Global Manager of the Local Climate Adaptive Living Facility (LoCAL) at UNCDF and Hubert BLOM, Attaché & Programme Manager for Green Inclusive Development at the Delegation of the European Union to Bangladesh.



## Industrial Decarbonization: Lessons Learned from the RMG Industry



*The panelists of the Industrial decarbonization session*

**Host:** International Finance Corporation (IFC)

**Moderator:** Ashani Chanuka Alles, Senior Operations Officer, IFC

**Session Speakers:**

1. Dr. Atiq Rahman, Executive Director, BCAS
2. Nishat S. Chowdhury, Program Manager, IFC- Partnership for Cleaner Textile (PaCT)
3. Salim Khan, Director, Echotex Limited
4. Archak Pattanaik, Teamhead Environmental Sustainability, PUMA

**Speaker 1: Rajesh Miglani**

1. The decarbonization journey is imperative for Bangladesh.
2. The RMG sector is taking the lead on resource-efficiency.
3. Collaboration is key to achieving our decarbonisation goals. We must work together – the government, industry associations, factories, brands, international organizations, and financial institutions, to promote energy efficiency and renewable energy in the RMG sector.

**Speaker 2: Nishat S. Chowdhury**

1. IFC is promoting green, resilient and inclusive development in the garments sector and our Partnership for Cleaner Textile (PaCT) Program is a great example of our commitment. It has helped over 400 textile and RMG factories and have excellent results. The program reduced freshwater use of 30 billion liters per year, which is equivalent to the annual need of almost a million people in Bangladesh. The program

also reduced over 670,000 tons of GHG per year, which is equivalent to removing 100,000 cars from the road. Although the current level of emissions is low compared to other countries, Bangladesh has committed to address emission across the industries.

2. More and more factories are nominating themselves for the PaCT program because they know that they must go green to remain competitive in the international market. Green initiatives ensure long-term business with buyers and help entry into new and different markets. They also help factories maintain a sustainable business and remain competitive in the global market.
3. Apart from RMG and textile, manufacturers of GHG intensive (eg. hard to abate) sectors such as chemicals (including plastics and fertilizers), construction materials and light manufacturing who are serious about net-zero ambition will need financing to meet these goals and identify decarbonization options.

### **Speaker 3: Salim Khan**

1. The requirement for access to financing is one of the main obstacles for the manufacturing sector in implementing sustainable practices, especially in industries like the RMG sector in Bangladesh, where investments in green initiatives are essential but demand assistance from stakeholders and customers.
2. For switching to renewable energy, there is currently no ready power infrastructure. The lack of a market for renewable energy certificates (RECs) makes it more difficult to implement renewable energy solutions.
3. However, there are ways for the manufacturing industry to deal with these issues, including spending money on water- and energy-saving technology, encouraging reuse and recycling, and putting sustainable practices like rainwater collection into practice. Adopting sustainability improves competitiveness, draws customers, and creates new markets in addition to being good for the environment.

### **Speaker 3: Archak Pattanaik**

1. In order to combat climate change and promote decarbonization, PUMA has incorporated climate initiatives into its business strategy.
2. Achieving a high proportion of renewable energy in its primary plants and encouraging suppliers to support the decarbonization drive are among the ambitious climate goals established by PUMA. Bangladesh's sustainability initiatives are greatly influenced by the fashion sector, particularly through companies like PUMA.

3. PUMA is actively investing in recyclable and biodegradable materials as a result of its growing recognition of the significance of consumer preferences for sustainable products. As a result of this promise, providers must make fresh technological investments to support these environmentally friendly procedures.

**Speaker 4: Dr. Atiq Rahman**

1. It's important for our RMG sector to take into consideration energy efficiency and energy consumption to build a more efficient system which in turn brings money to the company and good will for the product.
2. It is good to see that the industry is moving in the right direction: less water, less energy. This is the way to move forward. We advise the government to promote energy and water efficiency in all possible ways.
3. Technology is important. The garments industry has shown how good technology can reduce cost and pollution. Reducing pollution is good for our economic health and the health of our citizens and our ecosystem.

**Three key takeaways from the end of the session:**

1. The RMG industry in Bangladesh demonstrated how the right decarbonization solutions can reduce climate footprint. Initiatives such as IFC's PaCT program have guided the industry in this transformation.
2. There is a clear scientific evidence for the need to decarbonize and each of us have a role to play along the value chain individually. However, if we leverage each other, we can make a meaningful change.
3. Brands and factories are serious about decarbonization and are willing to invest to lower their carbon footprint.

### **Session Summary:**

The speakers at the session discussed the imperative need for decarbonization in the RMG industry in Bangladesh. The IFC's Partnership for Cleaner Textile (PaCT) program was highlighted as an example of how the industry can reduce freshwater usage and greenhouse gas emissions, making it more competitive in the international market. However, challenges such as access to finance, power infrastructure and the absence of renewable energy certificates (REC) market in the country were also discussed. The session emphasized the need for collaboration among the government, industry associations, factories, brands, international organizations and financial institutions to promote energy efficiency and renewable energy in the RMG sector. Finally, it was pointed out that the industry's willingness to invest in energy-efficient and water-efficient solutions indicated its seriousness about decarbonization. Overall, the session highlighted the importance of decarbonization and the role of collaboration in achieving this goal.

## Adaptation Research Alliance: experiences in bridging research to action



*The panelists of the Adaptation Research Alliance session*

**Host:** Adaptation Research Alliance (ARA)

**Moderator:** Suzanne Carter, ARA global engagement and partnerships

**Session Speakers:**

1. Suzanne Carter - ARA Secretariat
2. Mr Jesse DeMaria-Kinney- ARA Head of Secretariat
3. Sydney Church- ARA Secretariat
4. Alejandro Barcena – ARA Secretariat/IIED

**Speaker 1: Jesse DeMaria-Kinney**

1. A diversified membership of 180 members from the Global North and Global South demonstrates the Adaptation Research Alliance's (ARA) remarkable expansion. This fair representation fosters communication and knowledge sharing about climate resilience and adaptation.
2. With financial assistance from prominent institutions including the Australian Centre for International Agricultural Research (ACIAR), UK Research and Innovation, and the Bill and Melinda Gates Foundation, ARA has established co-creation spaces on a variety of theme topics. These areas act as forums for exchanging top tips and encouraging originality in adaptation research.
3. ARA has actively participated in UNFCCC procedures, submitting materials for the Global Stocktake and emphasizing the significance of incorporating local action into international initiatives for climate adaptation. The CLARE program now incorporates Adaptation for Impact concepts, and ARA has made significant contributions to the National Institute of Health and Care Research. The pledge of money from numerous donors at the ARA launch further solidifies its status as a crucial participant in efforts to build resilience to climate change.

### **Suzanne Carter**

On the ground views on how local adaptation can be counted towards Global Stock take (video):

The ARA and CDKN collaborated on a video to share on the ground views of how local adaptation can be counted towards the Global Stocktake. The video is accessible [here](#).

### **Speaker 2: Sydney Church**

1. The first round of micro-grants produced insightful results that demonstrated their usefulness in involving underserved communities and encouraging research that is solution-oriented. Additionally, they improved connections and found synergies between important players.
2. To find novel solutions and chances for climate change adaptation in the Global South, ARA is offering microgrants in its second round. With a focus on gender and social inclusion, these scholarships encourage transdisciplinary collaborations that combine study and action.
3. Out of 164 applications, 30 were chosen as successful grantees after being reviewed by 14 external reviewers from various geographic areas. The funds uphold the Adaptation for Research tenets and place a strong emphasis on integrating pertinent demographic data. It is anticipated that the award beneficiaries would be announced in May, which may open up new opportunities for them.

### **Speaker 4: Alejandro Barcena (IIED) and Suzanne Carter**

1. Suzanne provided an overview of the four co-creation spaces on the following four themes: Nature-based Solutions for equitable climate resilience, Smallholder Agriculture, LDC Capacity for National Adaptation Actions, Urban Resilience. The ARA Will be convening sessions at Community Based Adaptation Conference and Adaptation Futures on these topics.
2. In the process of appointing a facilitator to help surface adaptation issues that LDC Universities can contribute to solving through better linkages with national government. This co-creation programme is looking to attract funding for the full scale implementation.
3. For the first time in history more people live in cities than in rural contexts and cities are disproportionately located along coasts and rivers that are then more susceptible to climate risk. Despite this, cities receive a small proportion of climate finance. There is a need for bold, transformative solutions for enhancing urban resilience. The ARA Urban Resilience Co-Creation Space will ask those living and working in cities of the global South about their resilience needs. It will work with a large, representative steering board to process this into a new programme design. Donors will be engaged from the get-go to support this process.

A person wearing a light-colored shirt and dark shorts is bent over in a field, planting rice seedlings. The field is filled with rows of young rice plants. The background is a soft-focus landscape with greenery and a bright sky.

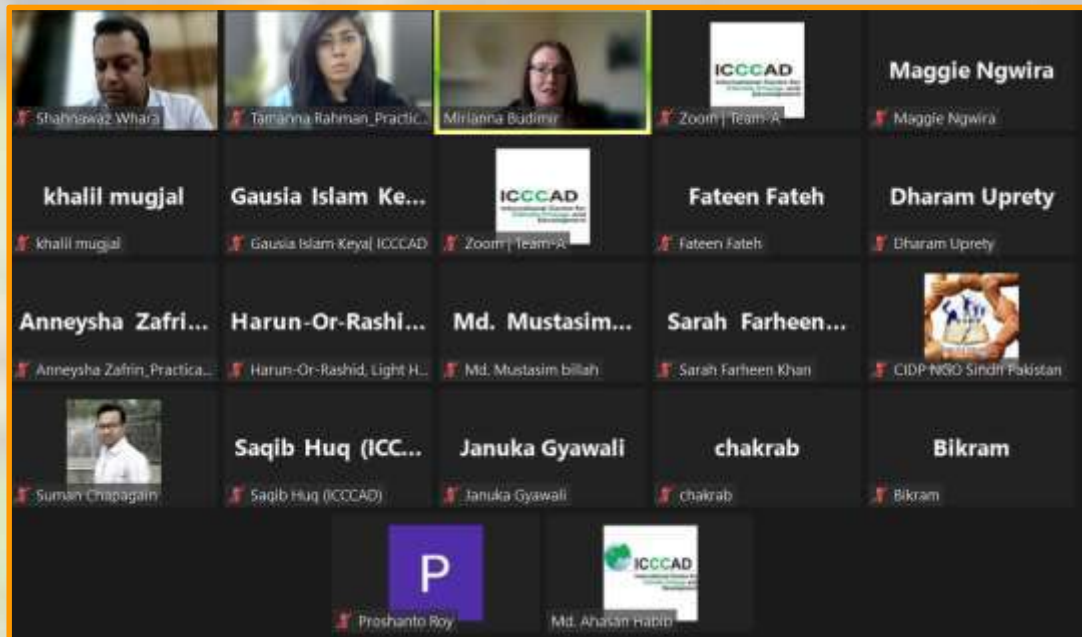
### **Three key takeaways from the end of the session:**

1. **Co-creation of new, funded, action research programmes:** The ARA is co-creating the design of four new programmes in 2023 that aim to deliver resources for action-oriented research, while recognizing the need to build capacity, particularly in developing countries, and to reduce risks for vulnerable communities. The four thematic co-creation topics cover Nature-based Solutions, Smallholder agriculture, urban resilience and adaptation planning in Least Developed Countries.
2. **Supporting grassroots action-research through micro-grants and beyond:** A second round has 30 micro-grants of £15,000 each have been selected to support local initiatives to identify issues of climate and resilience in their context. The ARA hopes that some of these grassroots activities will link to larger programmes and projects or scale up to larger projects themselves.
3. **Strengthening the footing of the ARA:** Internal processes are being implemented to ensure the smooth functioning of the Alliance to work with the 180 plus members and allow for greater collaboration. Secondly, ARA aims to increase the number and diversity of funders involved starting with a Funders Roundtable this April.

### **Session Summary:**

ARA shared key achievements since its launch 16 months ago at COP26. A new video on views from the ground of how local adaptation can be counted towards the Global Stocktake was screened and an announcement made of 30 new ARA Grassroots Action-Research Micro Grants to start work mid-year.

## Starting with the first mile to support effective Early Warning Systems at scale



*The panelists of the Starting with the first mile to support effective Early Warning Systems at scale session*

**Host:** Practical Action

**Moderator:** Shahnawaz Whara, Regional Climate and Resilience Advocacy Manager of Practical Action

**Session Speakers:**

1. Tamanna Rahman, Project Manager, Flood Resilience Project, Practical Action Bangladesh
2. Dharam R. Uprety, PhD. Thematic Lead- Climate and Resilience, Practical Action Nepal
3. Dr. Mirianna Budimir, Senior Climate Change and Resilience Expert, Practical Action

**Speaker 1: Tamanna Rahman**

1. Providing reliable, accurate, and timely forecasts is essential for effective early warning and early action.
2. Only 28.19% received flood early warnings in 2015-2020 (BBS, 2021) and early warnings received by women and girls are often filtered through the male members of the family.
3. Disaster Alert apps are there to ensure contextual information on hazards and empower people by availing forecasts. More investment is required to disseminate early warning and engagement of volunteers in the flood-prone areas.





**Speaker 2: Dharam R. Uprety**

1. Community-Based Early Warning System (EWS) is an integrated system which allows people to know that hazardous weather is on its way and respond accordingly.
2. Capacity of local government-understand, to translate risk to resilience need to be enhanced.
3. Transboundary coordination and communication is essential for making trustworthy EWS.

**Speaker 3: Dr. Mirianna Budimir**

1. There are challenges and gaps globally in all Early Warning Systems, often because of not being locally led in their design and implementation.
2. We need to have frameworks, processes, and structures in place to design locally led EWS from the beginning, and not as an afterthought.
3. We need to systematically develop EWS that take a people-centered and locally led approach to ensure we are investing in systems that are fit for everyone and reach the most vulnerable, saving lives and livelihoods.

**Three key takeaways from the end of the session:**

1. Dissemination coverage of EW is still low and investment is minimal.
2. EWS should be community-centric, gender-responsive and participatory.
3. The missing voices methodology approach is a useful tool for unlocking gender relations and social inequalities in early warning systems and ensuring that the voices of marginalized groups are heard.



**Session Summary:**

To achieve sustainable change for all genders, it is essential to ensure that community-based early warning systems reach everyone, including marginalized groups. This requires addressing cultural, social, and gender barriers, which can be done through the missing voices methodology approach that helps unlock gender relations and social inequalities. Women, girls, and marginalized gender groups often face inequality and injustice in access to status, power, and resources, so it's important to recognize, understand, and address the underlying causes of inequality.

## Climate Resilience Academy in South Asia



*The panelists of the Climate Resilience Academy on South Asia session*

**Host:** ICCCAD-CRAL

**Moderator:** Afsara Binte Mirza

**Session Speakers:**

1. Afroz Shah, Sr. Assistant Professor of structural Geology, Department of Geosciences, University of Brunei Darussalam.
2. Amila Lankapura, Faculty of Agriculture, Rajarata University of Sri Lanka
3. Moumita Das Gupta, Advocate at Supreme Court of Bangladesh and Research Fellow at Centre for Climate Justice-Bangladesh
4. Mohamed Shumais, PHD Student, Korea Polytechnic University.

**Speaker 1: Afroz Shah**

1. Mapping out the loss and damage caused by climate change is crucial to determine the necessary funds needed for compensation and adaptation.
2. Rising sea levels in South Asia have led to devastating floods in countries like Pakistan, resulting in loss of lives and significant economic damage.
3. Addressing loss and damage from climate change requires comprehensive efforts to put everything on the table, ensure equitable benefits, and promote timely action.

### **Speaker 2: Amila Lankapura**

1. Sri Lanka, ranked as the 60th most vulnerable country, is a tropical island that faces high susceptibility to natural disasters and climate change due to heavy rainfall, rapid urbanization, and population growth, leading to frequent flooding incidents.
2. The southwestern region of Sri Lanka in 2016 and 2017 witnessed agricultural losses, disrupted paddy cultivation cycles, livestock fatalities, damaged tea factories, and around 2 million households affected due to natural disasters.
3. Sri Lanka can create flood-resilient agricultural communities and minimize the potential loss and damage caused by extreme floods by using a “community-centered system-based approach”.

### **Speaker 3: Moumita Das Gupta**

1. All of the requests for advisory opinion (AO) are concerned about state obligations of the environment and to prevent adverse impacts of climate change.
2. In the AO OC 23/17 case, the Inter-American Court of Human Rights interpreted the scope of extra-territorial jurisdiction for environmental protection, considering the notions of control, directness, and foreseeability.
3. The Inter-American Court of Human Rights concluded that the potential harm resulting from states' acts or omissions related to carbon emissions was reasonably foreseeable.

### **Speaker 4: Mohamed Shumais**

1. Monitoring and evaluating the impacts of human-induced environmental degradation and climate change are critical in identifying effective interventions to protect public health, livelihood, and other aspects of life, as these threats cause irreversible harm to natural and human systems.
2. Understanding how communities have responded to and recovered from past incidents is crucial as it provides valuable insights into the factors that contribute to resilience.
3. Establishing effective monitoring and evaluation systems, as well as technical cooperation and finance mechanisms, are crucial for securing the right to a healthy environment.

A person wearing a white shirt and dark pants is bent over, planting rice seedlings in a field. The background is a blurred green field under a bright sky.

### **Three key takeaways from the end of the session:**

1. Climate change and human-induced environmental degradation pose significant threats to public health, livelihood, and natural and human systems, and thus require effective monitoring, evaluation, and intervention measures.
2. The legal frameworks and judicial interpretation of environmental protection, extra-territorial jurisdiction, and state obligations are essential in addressing climate change and mitigating its adverse impacts.
3. Building resilient communities and adopting community-centered system-based approaches are critical in minimizing loss and damage caused by extreme weather events, such as floods.

### **Session Summary:**

The statements collectively emphasize the urgent need to address climate change and its adverse impacts, including the irreversible harm caused to natural and human systems. Effective monitoring, evaluation, and intervention measures, along with technical cooperation and finance mechanisms, are crucial in securing the right to a healthy environment. The legal frameworks and judicial interpretations of environmental protection, extra-territorial jurisdiction, and state obligations are also essential in addressing climate change and mitigating its adverse impacts. Building resilient communities through community-centered approaches is a critical component in minimizing the loss and damage caused by extreme weather events, such as floods. The statements also underscore the importance of mapping out the loss and damage caused by climate change to determine the necessary funds needed for compensation and adaptation.

## The role of technologies, ecosystem-based approaches, partnerships and finance



*The panelists of the The role of technologies, ecosystem-based approaches, partnerships and finance session*

**Host:** Global Adaptation Network (GAN), UNEP

**Moderator:** Anna Kilponen, Regional Liaison for Asia-Pacific, Global Adaptation Network (GAN), UNEP

**Session Speakers:**

1. Ms. Tamara Coger, Senior Associate, Climate Resilience Practice, World Resources Institute
2. Assoc. Prof. Wjitbusaba Marome (Ann), Thammasat University, Thailand
3. Dr. Tessa Mar Llamas-Espino, Agriculture Specialist, City Government of Calamba, Philippines
4. Ms. Eugenia Kargbo, Chief Heat Officer, Freetown, Sierra Leone
5. Mr. Hector Velasquez, Coffee Farmer, El Salvador
6. Mr. Omar Saleh, Managing Director, Zephyr Consulting
7. Ms. Norah Ngeny, Associate Programme Management Officer, UNEP
8. Ms. Yulia Rubleva, Project Officer, IUCN

**Speaker 1: Ms. Tamara Coger**

1. Locally-Led Adaptation (LLA) is about recognizing the value of local knowledge and ensuring that local communities, governments and other local actors have equitable access to finance, information and decision-making processes for adaptation action.
2. The [8 principles for LLA](#) provide a framework to put it into practice. The principles are already endorsed by +100 organizations all over the world.
3. Adaptation is context-specific, therefore, LLA can respond to highly localized stressors and enables adaptation to align with the local cultural context making it

more effective. Additionally, LLA reduces administrative costs and externalities, resulting in higher cost-efficiency rates. Finally, LLA promotes a more equitable distribution of power and resources, which reduces inequality gaps.

**Speaker 2: Prof. Wijit Busaba Marome**

1. EPIC, the Educational Partnerships for Innovation in Communities, collaborates globally to provide policy, recommendations, and engage universities and students in strengthening local government resilience.
2. The project utilizes an impactful communication campaign to effectively raise awareness and promote positive changes in the urban area of Calamba City.
3. In collaboration with the local government of Calamba, the University of the Philippines Los Baños has implemented a project focused on improving health sanitation in lakeshore communities.

**Speaker 3: Dr. Tessa Mar Llamas-Espino**

1. The University of the Philippines, in collaboration with the local government of Columbia, has developed a project to address health and sanitation issues in lakeshore communities, focusing on sustainable development goals 3 and 6.
2. The project was developed during the COVID pandemic and involved extensive analysis, dialogue, and community engagement. An app was created to provide emergency numbers, information on city ordinances, and legislation related to plastic and Styrofoam use, while calendars were utilized to raise awareness about the environmental impact of plastic.
3. The city of Calamba has experienced multiple flood events that aggravate the sanitation issues in the communities. Despite the large availability of information and legislation related to waste management, communities do not have access to digestible materials and awareness raising on this topic is limited.

**Speaker 4: Ms. Eugenia Kargbo**

1. For the implementation of the project, four units at the local government, three community groups, and students of the Communication Approaches in Development program (DEVCOM) worked together to generate communication materials for the YouAreTheLAKE campaign.
2. In the way forward, the project has identified opportunities to engage the Urban Planning Studio class to develop urban design guidelines that respond to climate risks and are relevant at the district level.

### **Speaker 5: Mr. Hector Velasquez**

1. [CityAdapt project](#) aims at increasing the capacity of governments and local communities living in three medium-sized LAC cities (Kingston, San Salvador and Xalapa) to adapt to the effects of climate change through the integration of EbA into urban planning in the medium to long-term.
2. El Salvador is one of the countries most impacted by climate change. Hector's coffee farm is located at the base of a volcano and is highly susceptible to landslides triggered by changes in rainfall patterns. Hector has engaged in the project to address the climate risks that he and his family were facing.
3. As part of the project, Ecosystems-based Adaptation measures such as infiltration ditches and wells, ecosystem restoration, agroforestry, and live fences, were co-designed with Hector and coffee farmer's cooperatives in the Arenal Watershed. EbA has resulted to be a cost-efficient solution to prevent landslides in Hector's farm and floods downstream in the urban area of San Salvador. Additionally, the communities have perceived how the overall set of EbA measures have not only helped reduce the climate impacts but also increased fertility and productivity in their farms.

### **Speaker 6: Mr. Omar Saleh**

1. The SLAMDAM, has been developed as part of a project supported by The [Climate Technology Centre and Network](#) (CTCN) in Burundi. This technology consists of an easily deployable mobile water-filled barrier that effectively enhances resilience to flooding.
2. This technology can meet multiple purposes. For example, it is also used for reservation and irrigation purposes during the dry season.
3. The project also includes the development of a Flood Intelligence Service (FIS) was developed. This system deploys global or local specific datasets and generates 3Di hydrodynamic modelings. This system allows the Cost-efficiency analysis of the measures to mitigate floods and helps capitalize new climate investments.

### **Speaker 7: Ms. Norah Ng'eny**

1. Ecosystem-based Adaptation (EbA) faces barriers such as lack of awareness, limited knowledge for scaling up, technical capacity constraints, insufficient political and public support, governance challenges, finance constraints, and limited space for implementation.
2. The Global Ecosystems-based Adaptation Fund is funded by the International Climate Initiative (IKI) and implemented by IUCN and UNEP. The GEBAF is a catalytic funding mechanism for supporting innovative approaches to EbA to create an enabling environment for EbA approaches.



3. GEBAF looks for projects that align with the FEBA EbA Qualification Criteria & Quality Standards, which means they would (a) help people to adapt (b) make active use of biodiversity and ecosystem services, and (c) be built as part of an overall adaptation strategy. Additionally, the GEBAF prioritizes the applications that are inclusive of local communities and indigenous knowledge, and partners with local organizations.

**Speaker 7: Ms. Yulia Rubleva**

1. They are searching for creative projects that support people in adapting to climate change by creating a favorable environment through user engagement and action-oriented approaches, which are still in the process of development and definition.
2. The range of funding is USD 50000-250000 for projects to be developed in 24 months (amounts and time above these ranges are possible under strong justification).
3. This year, the GEBAF has opened two different tracks for the submission of proposals: (a) the general track and (b) the thematic track on urban EbA. The current call will be open until the 28th of April. All the information can be found on the [GEBAF website](#).

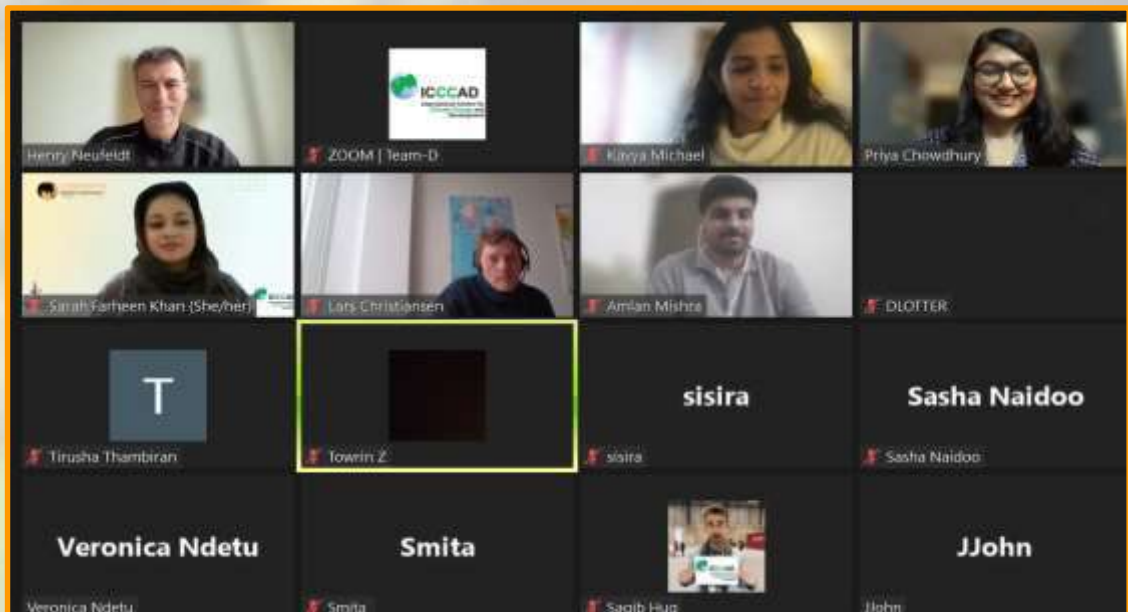
**Three key takeaways from the end of the session:**

1. Wider application of flexible program design and implementation of Ecosystem-based adaptation projects, as shown in the CityAdapt project, can deliver high and sustainable returns, especially when linked to community leadership and decision-making.
2. Models that promote partnership at the local level such as the EPIC model implemented by the University of Los Baños, have great potential to accelerate the uptake of locally-led adaptation and build up the evidence base for its use.
3. Funding and technology support initiatives, such as the CTCN and GEBAF, are addressing some of the barriers to Locally-led adaptation. There is a space of opportunity for these initiatives to endorse the principles of locally-led adaptation to increase their impact.

A person is shown from the waist down, bent over, planting rice seedlings in a field. The person is wearing a light-colored, long-sleeved shirt and dark shorts. They are holding a bundle of green rice seedlings in their hands. The field is filled with rows of young rice plants. The background is a soft-focus landscape with green hills and a clear sky. The overall scene is bright and natural, representing agricultural work.

### **Session Summary:**

The session was focused on locally-led adaptation (LLA) and showcased examples of LLA projects from different parts of the world. The speakers highlighted the importance of recognizing the value of local knowledge and ensuring that local communities, governments, and other local actors have equitable access to finance, information, and decision-making processes for adaptation action. Action in urban communities to strengthen local resilience through effective communication campaigns and engagement with the Urban Planning Studio class to develop urban design guidelines that respond to climate risks. Harnessing nature for climate resilience through Ecosystems-based Adaptation measures such as infiltration ditches and wells, ecosystem restoration, agroforestry, and live fences that were co-designed with local farmers to prevent landslides and floods and increase fertility and productivity Overall, the speakers emphasized that LLA is context-specific and can respond to highly localized stressors, enabling adaptation to align with the local cultural context, reducing administrative costs and externalities, resulting in higher cost-efficiency rates, and promoting a more equitable distribution of power and resources, which reduces inequality gaps.



## Transparency in adaptation to enhance ambition of NDCs

*The panelists of the Transparency in adaptation to enhance ambition of NDCs session*

**Host:** UNEP Copenhagen Climate Centre

**Moderator:** Henry Neufeldt, Head, Impact Assessment and Adaptation

**Session Speakers:**

1. Henry Neufeldt, Head, Impact Assessment and Adaptation
2. Priya Chowdhuri, Senior Research Officer, BCAS
3. Amlan Mishra TERI, Research Associate
4. Veronica Ndetu Unit Ministry of Agriculture, Kenya , Head of the Climate Change
5. Daleen Lötter Council for Scientific and Industrial Research (CSIR), Senior Climate

Science Researcher

6. Tirusha Thambrian CSIR, Senior researcher
7. Kavya Michael, Chalmers Technical University, Post Doc
8. Towrin Zaman Raya, Research Associate, ICCCAD

**Speaker 1: Henry Neufeldt**

1. The fundamental goal of ICAT (Initiative for Climate Action Transparency) is to improve national capacities for planning, carrying out, evaluating, and monitoring transparent and effective adaptation efforts in line with the UNFCCC Paris Agreement.
2. ICAT concentrates on four nations: Bangladesh, Kenya, South Africa, India, and the Dominican Republic, and offers focused assistance to bolster those nations' adaptation efforts.
3. The project materials created by ICAT include tools and methods for incorporating non-state and subnational actors into national policy frameworks for climate change adaptation, evaluating losses and damages brought on by climate change, and promoting effective adaptation solutions. With the help of these materials, adaptation planning and execution will be more transparent and accountable.

**Speaker 2: Priya Chowdhuri**

1. Government organizations can set new goals and measure progress effectively when they have a strong monitoring system for adaptation programs that demonstrates their dedication and competence.
2. ICAT has a process that begins with determining the needs of the Bangladeshi government before developing monitoring instruments and capacity-building programs. This seeks to strengthen the transparency of adaptation funds and the reporting process, allowing for improved project tracking and contributing to national and international reporting on adoption efforts.
3. ICAT makes use of web-based monitoring technologies that support a variety of user types, including project implementers who have unique login procedures. With a focus on thematic areas including food security, social protection and health, comprehensive catastrophe management, and infrastructure, these tools allow users to add and track the progress of their reports. The Sustainable Development Goals (SDGs) alignment and dashboard implementation further increase accountability and transparency in adaptation measures.

**Speaker 3: Amlan Mishra**

1. India is at high risk for disaster, and climate catastrophes like floods, droughts, cyclones, heatwaves, and cloud occurrences present serious difficulties. Floods alone are thought to have an annual GDP impact of roughly \$7 billion, which is a sizable sum for a developing nation.
2. Monitoring agricultural adaptation efforts is a main focus of India's National Bank of Agriculture and Rural Development (NABARD). Indicators from a variety of sectors, including the biophysical, sociocultural, technological, economic, financial,

and governmental domains are used in this monitoring.

3. The NABARD initiatives it runs place a strong emphasis on education, assessment, and the use of both qualitative and quantitative indicators. To guarantee successful execution and provide guidance for future initiatives, prioritization, replication, and progress assessments are also carried out.

#### **Speaker 4: Veronica Ndetu**

1. The main objective of ICAT adaptation Kenya is strengthening the capacity of the Agriculture sector in Kenya to implement, monitor and report adaptation actions in the agriculture sector.
2. The project's effort has been extensive and has included the creation of a capacity needs assessment, a training module for stakeholders, a climate smart agriculture (CSA) M&E tool, an online CSA reporting tool, papers listing reporting requirements for stakeholders, and materials enumerating reporting requirements for stakeholders.
3. To ensure effectiveness and innovative reporting on climate activities in the agricultural sector, a framework for monitoring and evaluating climate-smart agriculture has been developed. Ward, sub-country, country, and national reporting are all possible through the online reporting system.

#### **Speaker 5: Tirusha Thambrian**

1. A crucial step in determining the efficacy of early warning systems is the creation of a Monitoring and Evaluation (M&E) Framework for multi-hazard early warning systems in South Africa. According to the worldwide WMO framework, this framework is intended to assess the effectiveness of procedures and the dependability of the systems.
2. The case study demonstrated how the M&E framework enhanced South Africa's early warning systems' dependability and process efficiency. However, it is crucial to remember that a number of variables, such as risks and the extent to which adaptation measures have been implemented, mediate the effects of these systems.
3. While the M&E framework offers useful insights into the efficacy of early warning systems, it's important to take into account the bigger picture of how these systems function. When assessing early warning systems' efficacy, it is important to consider how social, economic, and political factors may also have an impact on their outcomes.

#### **Speaker 6: Daleen Lötter**

1. The discussion was on the need of estimating loss and damage as part of attempts to adapt to climate change and lower the probability of disasters. However, the limited tools, techniques, and data currently available to support this assessment highlight the need for additional study and data gathering.
2. The definition and measurement of the effects of climate change, as well as the identification of gaps in the data and methodology used to assess these

consequences, can all be aided by an international perspective on loss and damage. The framework created in the study offers guidelines on how data should be reported for national and international reporting purposes, aiding in the promotion of awareness and coordination of activities for disaster risk reduction and adaptation to climate change.

3. In order to better mitigate and prepare for the effects of climate change, it is crucial to recognize the gaps in the existing method of estimating loss and damage. The methodology created in the study can be used to pinpoint these gaps and direct further investigation and data gathering in this field.

#### **Speaker 7: Towrin Zaman Raya**

1. The term "Local LED Adaptation" (LLA) refers to a process of creating and implementing climate change adaptation plans that are primarily owned by local stakeholders and communities. This strategy acknowledges that local communities are the most at risk and gives them the power to manage their own resilience.
2. The ICCCAD is assisting regional organizations in Bangladesh in building or enhancing their skills and involving them in the adaptation process. It offers clear instructions on how to proceed and gives them chances to increase openness and accountability while selecting projects and carrying out adaptation projects at the local level.
3. The ICCCAD-created application is intended to monitor and assess the results of adaptation projects or efforts undertaken by the Bangladesh Climate Change Trust (BCCT). This tool will allow ICCCAD to track Bangladesh's main domestic fund for adaptation and strengthen locally driven adaptation in Bangladesh. Among other strategies, BCCT is one that aims to strengthen locally-led adaptation.

#### **Speaker 8: Kavya Michael**

1. Particularly with relation to gender in adaptation, which is tied to long-standing concerns of land and the precarity of female labor, marginalized narratives of just transition and adaptation are becoming more prevalent.
2. Beyond narratives of care, which have an affinity in women's biological features, there are conflicting conceptualizations of women as vulnerable victims and advocates in climate change adaptation.
3. The ICAT has a great opportunity to center gender issues in relation to more general development issues like land and labor, changing not only capacity building but also critical consciousness to challenge social norms around care that place an undue burden on women in adaptation actions.

#### **Three key takeaways from the end of the session:**

1. ICCCAD is working in collaboration with the Bangladesh Climate Change Trust in Bangladesh. The work highlights the need to incorporate modern, digitized, easily reportable, and replicable M&E frameworks to ensure project success. The broad themes covered under the framework are food security, social protection, and health and disaster-management infrastructure.
2. The work in India and Kenya focussed on the agriculture sector. The Indian framework focuses on tracking adaptation in agriculture through indicators spanning areas of bio-physical, socio-cultural, technological, economic, financial and regulatory. Kenya's work has been equally comprehensive and involved developing an M&E tool for Climate Smart Agriculture (CSA), an online CSA reporting tool, documents enlisting reporting requirements for stakeholders, a capacity needs assessment and a training module for stakeholders.
3. In South Africa, an M&E framework has been developed to test the effectiveness of early warning systems. The elements of the framework include efficiency of processes and reliability in line with the WMO framework at the global level, and the last component discusses impacts to assess the loss and damage and encompasses desired adaptation outcomes, gaps, need and response.
4. The last leg of the session highlighted the work under ICAT to address structural inequalities faced by women through youth-led initiatives. Speakers discussed the role of youth as agents for capacity building and their contribution to enhancing consciousness regarding gender bias in climate action.

### **Session Summary:**

The participants in this chat are discussing various projects and initiatives for tracking and monitoring climate change adaptation activities in various nations. The primary goal of the Initiative for Climate Action Transparency (ICAT), according to Speaker 1, is to increase nations' ability to transparently plan, carry out, monitor, and assess effective and efficient adaptation measures. Speaker 2 talks about the efforts made to follow up on adaptation projects supported by the Bangladesh Climate Change Trust (BCCT) as well as the process used by ICAT to create monitoring tools and build capacity for transparency in the financing of adaptation. Speaker 3 discusses the INDIA-National MEL Framework for Tracking Agricultural Sector Adaptation. This framework uses indicators from the biophysical, sociocultural, technological, economic, financial, and governmental sectors to track agricultural adaptation. Speaker 4 talks on the ICAT adaptation project in Kenya, which includes developing a capacity needs assessment, a stakeholder training module, a climate-smart agriculture (CSA) monitoring and evaluation tool, an online CSA reporting platform, and materials outlining reporting requirements for stakeholders. Speaker 5 talks about how the Monitoring and Evaluation (M&E) Framework for multi-hazard early warning systems in South Africa improves the dependability and process effectiveness of early warning systems. Finally, Speaker 6 highlights the shortcomings of the current approach of assessing loss and damage as well as the necessity of doing so as part of efforts to adapt to climate change and reduce the likelihood of disasters. The phrase "Local LED Adaptation" (LLA) and the procedure for including local stakeholders in adaptation planning and implementation.

## Reflections on an initial risk typology for doing LLA



*The panelists of the Reflections on an initial risk typology for doing an LLA session*

**Host:** IIED- Risks in LLA

**Moderator:** Jon Barnes, Climate finance specialist, IIED

**Session Speakers:**

1. Jon Barnes, Climate finance specialist, IIED
2. Sheela Patel, Chair of the Board, SDI
3. Suranjana Gupta, Senior advisor on community resilience, Huairou Commission
4. Vincent Gainey, Climate Resilience Advisor at Foreign, Commonwealth and Development Office

**Speaker 1: Jon Barnes**

1. The participant's concern about physical and safety risks in conducting LLA projects in areas where digital payments are ineffective or unsafe is valid and highlights an important risk to consider.
2. In Myanmar, where digital payments may not work reliably or may pose security threats, local organizations may have no choice but to physically transport cash to rural areas. This puts them at significant risk of theft or robbery, jeopardizing both the project's success and the safety of those involved. To address this risk



collectively, stakeholders could explore alternative payment methods or collaborate with local authorities to ensure the safety of project participants and funds during transportation.

3. Establishing contingency plans and implementing security measures can help mitigate the potential harm and disruption caused by such risks.

### **Speaker 2: Sheela Patel**

1. The whole development industry sees poor people as a risk. The volume of resources are seen as a threat. We don't know if we have all the right instruments to deliver the resources. The inability to deliver resources is seen as one of the greatest risks. The environment in which the state allows the resource to be utilized almost ignores the reality of the larger risk that holds the generational factor of where poor people live. The risks of all sorts are heaped on those who are the final recipients. LLA for financing has allowed for the first time to articulate challenges how democratic and top down they are and that needs to change.
2. To collectively sort out the different sets of risk and fear of failure is overcome by acknowledging the spectrum of risk that we have to start working. People living in different areas, different geographies, have to come together and take this amazing conceptual framework of LLA with different capacities and resources to fulfill the elements of LLA. We need to look at things that don't work not as risks but as impediments that have to be resolved politically, socially and financially.
3. To build a body of knowledge that challenges the recent development discourse as being full of risks, crisis, and full of unsolvable problems.

### **Speaker 3: Suranjana Gupta**

1. It is very hard to understand the risks from the local people and that is not adequately understood. We have to acknowledge that people who are poor are living with a number of risks as a matter of their survival.
2. The risk of designs needs to be addressed. A lot of it is based on sentiments and bias, and we need to ask ourselves, "What's going on with the organizations and rules, when it comes to finances?" We have to understand the local communities bring their own set of risks and strategies that need to be understood.
3. It is important to interrogate the type of institutional architecture and try and fulfill that with emphasis on grassroots organizations.

### **Speaker 4: Vincent Gainey**

1. Building up a community to support LLA and by supporting LCD led initiatives to utilize finances correctly.
2. Financing LLA needs to be prioritized and start the directional change of resources by understanding the needs of the local communities.
3. Whether we can change the course of big funding instruments to support Locally Led Adaptations. A transformation change will take time by raising the volume of resources.

**Three key takeaways from the end of the session:**

1. Looking at social movements as the most pedantic instrument that provides risk management to the vulnerable communities.
2. We have projected everything that we want to solve in 3-5 years which is completely alien and insufficient where issues of the poor people are not quite adequately understood. From the full world starting from the UN, development and SDG is on one side and climate is on another side. But they should actually be coherent such that they do not become dysfunctional.
3. Deep intergenerational poverty that started in the rural areas has deep governmental deficiencies. There's a deficit of transparency. The legal framework needs to be developed.

**Session Summary:**

The panel discussion revolves around the risks and challenges associated with Locally Led Adaptation (LLA) in financing. Speakers share their perspectives on the major risks involved in LLA, such as physical safety risks, the inability to deliver resources, and biased institutional architecture. They also discuss practical steps that can be taken to manage these risks, including building a community to support LLA, prioritizing financing for LLA, and transforming big funding instruments to support locally-led initiatives. The panelists emphasize the need to understand the risks and challenges faced by poor communities and acknowledge their own biases and sentiments in designing financial instruments. Additionally, they stress the importance of grassroots organizations and transparency in addressing intergenerational poverty and government deficiencies. Overall, the panel highlights the need to move away from projected solutions and prioritize a coherent and sustainable approach to addressing the challenges faced by vulnerable communities.

## From rain gauges to probabilistic forecasts - Climate services capacity



strengthening at different levels in LAC

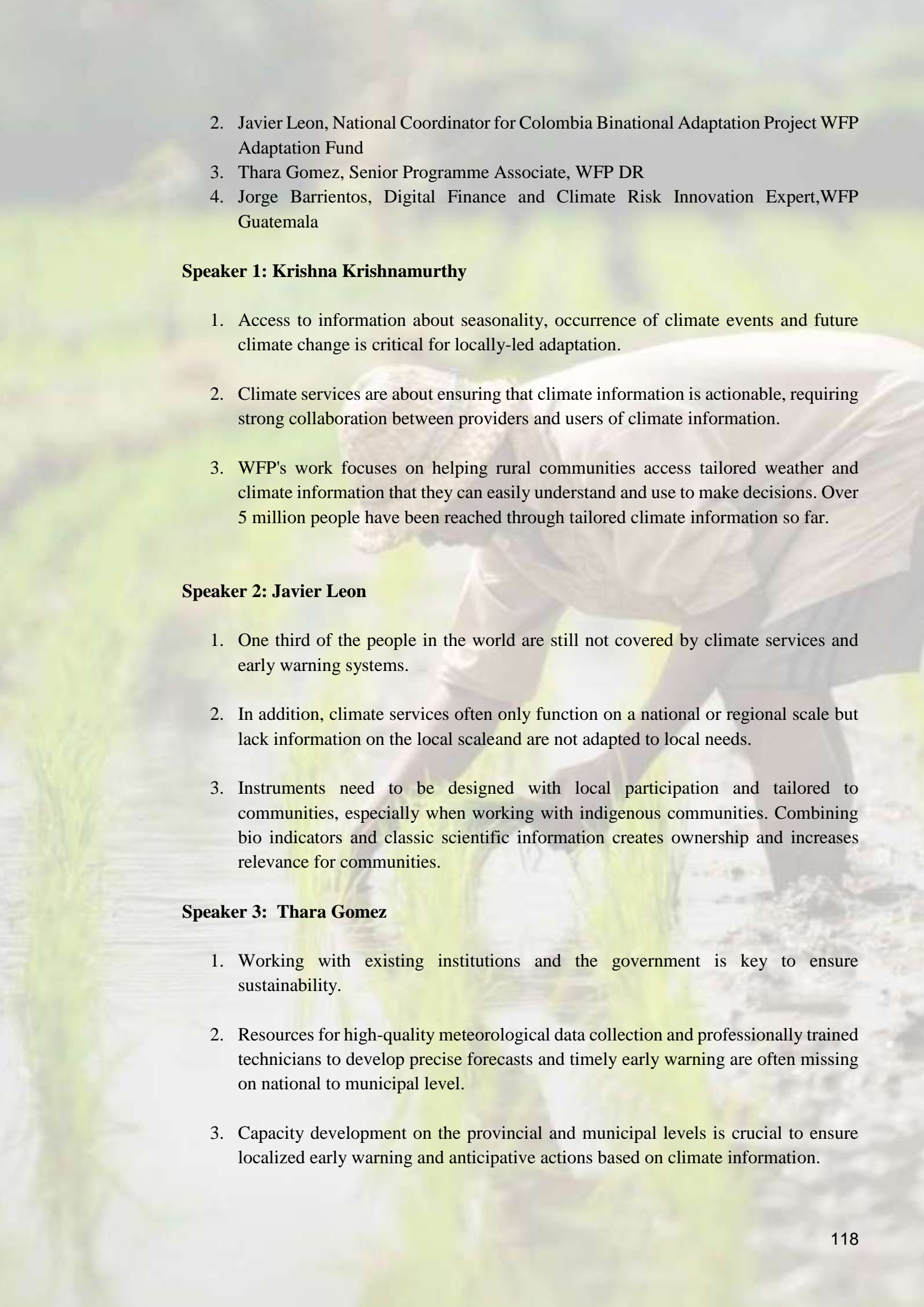
*The panelists of the From rain gauges to probabilistic forecasts session*

**Host:** United Nations World Food Programme

**Moderator:** Nadine Grimm-Pampe, Disaster Risk Finance and Insurance Operations at WFP

**Session Speakers:**

1. Krishna Krishnamurthy, Climate and Vulnerability Analyst, WFP RBP

- 
- A person wearing a light-colored shirt and dark pants is bent over in a field, working with plants. The background is a soft-focus green field.
2. Javier Leon, National Coordinator for Colombia Binational Adaptation Project WFP Adaptation Fund
  3. Thara Gomez, Senior Programme Associate, WFP DR
  4. Jorge Barrientos, Digital Finance and Climate Risk Innovation Expert, WFP Guatemala

**Speaker 1: Krishna Krishnamurthy**

1. Access to information about seasonality, occurrence of climate events and future climate change is critical for locally-led adaptation.
2. Climate services are about ensuring that climate information is actionable, requiring strong collaboration between providers and users of climate information.
3. WFP's work focuses on helping rural communities access tailored weather and climate information that they can easily understand and use to make decisions. Over 5 million people have been reached through tailored climate information so far.

**Speaker 2: Javier Leon**

1. One third of the people in the world are still not covered by climate services and early warning systems.
2. In addition, climate services often only function on a national or regional scale but lack information on the local scale and are not adapted to local needs.
3. Instruments need to be designed with local participation and tailored to communities, especially when working with indigenous communities. Combining bio indicators and classic scientific information creates ownership and increases relevance for communities.

**Speaker 3: Thara Gomez**

1. Working with existing institutions and the government is key to ensure sustainability.
2. Resources for high-quality meteorological data collection and professionally trained technicians to develop precise forecasts and timely early warning are often missing on national to municipal level.
3. Capacity development on the provincial and municipal levels is crucial to ensure localized early warning and anticipative actions based on climate information.



#### **Speaker 4: Jorge Barrientos**

1. Working with local climate agencies and agroclimatic discussion tables is key to establishing a climate data capture network and improving agroclimatic bulletins for rural communities with customized recommendations.
2. Training climate community leaders and interested youth in collecting, disseminating and monitoring weather data ensures ownership and sustainability. Participating youth have shown a particular interest in climate services and in the use of technology and apply it to modernize agricultural practices that they have learnt from their parents.
3. In the WFP's climate data capture and information strategy, it is crucial to include the agroclimatic discussion tables, the national weather agency, and the ministry of agriculture as these entities possess valuable knowledge and expertise in the field, to ensure an accurate climate analysis.

#### **Three key takeaways from the end of the session:**

1. Local communities are often the most vulnerable to the impacts of climate change and have valuable knowledge about their environment and livelihoods. Therefore, climate services must prioritize community engagement and participation, involve them in decision-making processes and connect scientific information with ancestral and local information such as bioindicators.
2. Climate services must provide locally relevant and actionable information to support adaptation efforts. The information should be tailored to the local context and provided in accessible formats that are easy to understand and use. This includes providing information through local radio broadcasts, mobile phone applications, or community meetings.
3. Climate services should foster existing institutions and strengthen collaboration among stakeholders, including local communities, government agencies, non-governmental organizations, and private sector actors. Strengthening existing local and national institutions ensures sustainability and ownership of climate services collection, analysis and distribution processes.

#### **Session Summary:**

To effectively address the impacts of climate change, climate services must prioritize community engagement and participation in decision-making processes, provide actionable and accessible information, and foster collaboration among stakeholders including local and

national institutions. This approach ensures sustainability, ownership, and tailoring of climate services to local contexts and needs. Climate services must prioritize community engagement and participation, involve them in decision-making processes and connect scientific information with ancestral and local information such as bioindicators. Climate services must provide locally relevant and actionable information to support adaptation efforts. Finally, strengthening existing local and national institutions ensures sustainability and ownership of climate services collection, analysis, and distribution processes.

## International Cooperation Reimagined



*The panelists of the International Cooperation Reimagined session*

**Host:** United Species, the Green Climate DAO, Edenia, EcoRegistry, Ethereum Foundation and SEEDS Collaborative DAO

**Moderator:** Agustin Matteri, Founder of United Species

**Session Speakers:**

1. Agustin Matteri, Founder of United Species
2. Juan Diran, Executive Director, EcoRegistry

**Speaker 1: Agustin Matteri**

1. Locally led adaptation is about decentralization and gaining power from the nearest institutional arrangement. Most climate projects are technocratic and ignore specific drivers of vulnerability related to local contexts. Proportionally, the poorest local

communities spend the most on facing the climate crisis, even though they contribute the least to the problem. The majority of current projects generate an appropriation of resources by international consulting elites and the exclusion of marginalized groups from decision in their own territories.


2. For climate adaptation finance, it is not reaching USD 340 billion a year. When we are speaking about the implementation of those funds, we are not even making it closer than it needs to be. Only 3% of all global adaptation initiatives real reductions in climate risks for local communities. United Species DAO is building a global, transparent and democratic work program to align each climate action project with locally led adaptation principles. We are working on projects in the communities of Huila, Colombia, Chaco, Argentina, Santa Teresa, and Costa Rica.
3. The solution is to propose creating a decentralized autonomous organization focused on helping local communities generate their own solutions. We will help local communities gain the knowledge and technology needed to adapt to climate change and reduce disaster risk. There needs to be decentralization of power, distributed inclusive networks and deep innovation.

#### **Speaker 2: Juan Duran**

1. EcoRegistry works with connectivity. It has built the Climate Assets Service Bus which is a tool that follows blockchain technology and that allows every single registry to exchange information so that everybody can have a language which is understood by all so that information is transparent and shared with everyone all over the world.
2. With information and a bureaucratic infrastructure that can lead us to the goal. As a community, we can create a goal and quantify and analyze to make decisions where the investments go to and come from.

#### **Three key takeaways from the end of the session:**

1. Local communities are the key to effective climate adaptation and resilience. Empowering them with the knowledge and technology to adapt to climate change can lead to more legitimate and successful projects in addressing the crisis.
2. The current global climate finance is insufficient and ineffective in reducing climate risks for local communities. A decentralized autonomous organization can provide a more direct and efficient means of knowledge transfer to help local communities generate their own solutions.
3. Blockchain technology can play a crucial role in creating a global, transparent, and democratic work program to align climate action projects with locally led adaptation



principles. The Climate Assets Service Bus, developed by EcoRegistry, can facilitate the exchange of information among registries and promote transparency in decision-making for climate investments.

**Session Summary:**

The speaker proposes integrating technology with climate resilience efforts to empower local communities with knowledge and solutions to adapt to climate change. They suggest creating a decentralized organization that allows communities to generate their own solutions and reduce disaster risks. The current technocratic approach often excludes marginalized groups from decision-making. The speaker also highlights the importance of connectivity in addressing the climate crisis and discusses EcoRegistry's Climate Assets Service Bus, which uses blockchain technology to facilitate information exchange between registries and enables communities to make informed decisions about investing in climate initiatives.



## NOAA Data and Tools for Sea Level Rise and Coastal Flooding



*The panelists of NOAA Data and Tools for Sea Level Rise and Coastal Flooding session*

**Host:** National Oceanic and Atmospheric Administration (NOAA) USA

**Moderator:** Miki Schmidt, Division Chief, Science and Geospatial Services at NOAA Office for Coastal Management

**Session Speakers:**

1. Doug Marcy, Coastal Hazards Specialist at National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management
2. Miki Schmidt, Division Chief, Science and Geospatial Services at NOAA Office for Coastal Management

### **Speaker 1: Doug Marcy**

1. There has been a historical land and sea temperature rise from the 1860s to 2020. The global climate change models come up with different emission scenarios. SSP 8.5 is the worst case scenario for global warming. The idea is to keep greenhouse gas emissions below 2°C.
2. Sea level change is caused by different drivers. All different processes are being studied to see how they contribute to global warming. There has been a 10-12 inch rise in the last 100 years, the same amount of rise is projected in the next 30 years. There will be a profound shift in coastal flooding over the next 30 years. Damaging floods are projected to occur 10 times more often by 2050.
3. Sea level sets a baseline for storm surge- the potentially destructive rise in sea height that occurs during a coastal storm. As local sea level rises, so does that baseline, allowing coastal storm surges to penetrate further inland. With higher sea level rises in 2050 and 2100 areas much farther inland would be at risk of being flooded.

### **Speaker 2: Miki Schmidt**

1. The cultural ties people have, have an impact on the sea level rise. Sea level rise at specific locations may be more or less than the global average due to local factors such as land subsidence from natural processes and withdrawal of groundwater and fossil fuels, changes in regional ocean currents, and whether the land is still rebounding from the compressive weight of Ice Age glaciers.
2. To make adaptation plans successful it has to be community led. Communities within a floodplain can participate in the National Flood Insurance Program's Community Rating System to identify and implement strategies that can improve flood resilience and earn credit to lower their flood insurance premiums.
3. It is important to realize the impact of climate change around the world to analyze and understand models more effectively.

### **Three key takeaways from the end of the session:**

1. The impacts of climate change are being realized around the world and the improved science is providing more certainty to the projections of sea level rise impacts. Future impacts of coastal storms will increase in scope because of sea level rise.
2. Understanding the extent of the impact from sea level rise is highly dependent on high-resolution elevation models and mapping. Elevation data combined with

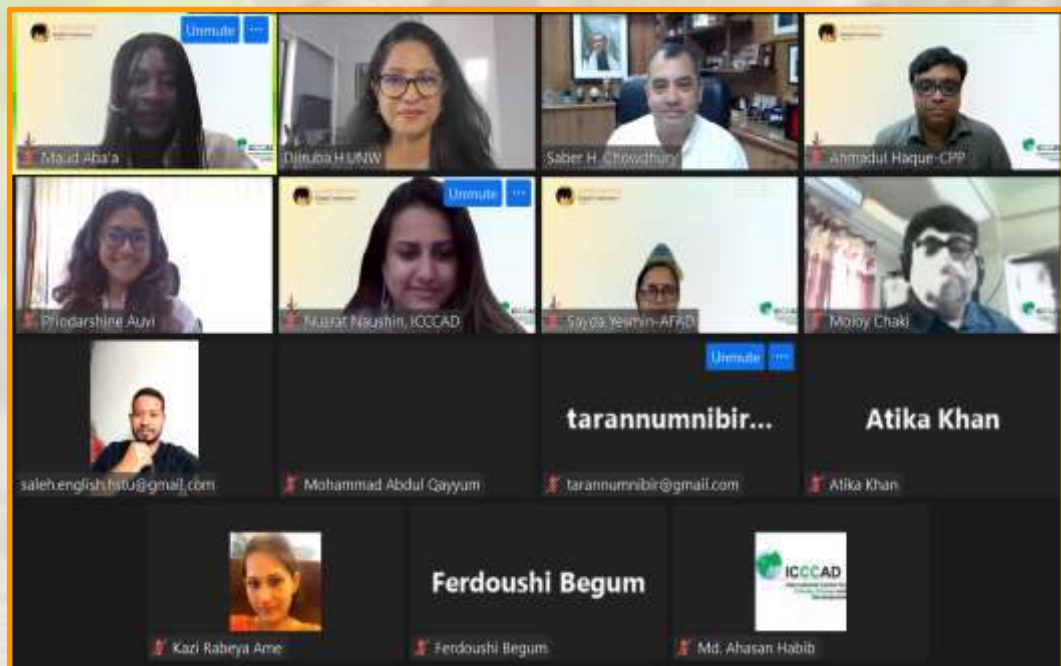
various other geospatial datasets provides coastal communities the information essential to decision making.

3. The U.S. National Oceanographic and Atmospheric Administration (NOAA) provides climate data and visualization tools to help coastal communities in the USA understand their risk to sea level rise and other climate-related impacts. The source code for the Sea Level Rise Viewer can be made available to anyone who would like to use it as they develop their local visualizations.

### **Session Summary:**

This session focused on the background on climate change impacts on sea level rise and components of inundation mapping, including data and methods for mapping sea level rise. The session provided an informative approach to inundation mapping topics as well as local and national scenarios for potential impact analysis. Technically driven and informative, the session provided relevant information for both coastal managers and technical mapping staff. The session included a lecture and mapping tool demonstrations that are at the core of many of NOAA's coastal products, tools, and services.

## Gender Perspective of Early Warning System in Bangladesh



*The panelists of the Gender Perspective of Early Warning System in Bangladesh session*

**Host:** UN Women

**Moderator:** Dilruba Haider, Programme Specialist, Climate Change, DRR & Humanitarian Action, UN Women

**Session Speakers:**

1. Dilruba Haider, Programme Specialist, Climate Change, DRR & Humanitarian Action, UN Women
2. Kausik das, Programme Analyst - Disaster, Climate Change & Humanitarian Programme, UN Women
3. Mohammad Abdul Qayyum, DRR expert, UN Women
4. Mr. Ahmadul Haque, Director, Cyclone Preparedness Programme

5. Adv Khodeza Nasreen, Member of the Parliamentary Standing Committee on the Ministry of Disaster Management and Relief, UN Women
6. Ms Sayda Yesmin, Chief Executive, Association for Alternative Development, UN Women

**Speaker 1: Dilruba Haider**

1. Even if the death rate has decreased, it is still crucial to make sure that marginalized women are aware of these warnings, comprehend them, and are sufficiently equipped to deal with any threats.
2. It is important to understand the nature of early messages that women receive, as well as how they received them to ensure their effectiveness.
3. The occurrence of natural disasters is accelerating, and their intensity is increasing in Bangladesh, hence the importance of focusing on disaster preparedness and early warning systems.

**Speaker 2: Mohammad Abdul Qayyum**

1. The National Resilience Programme (NRP) of UN Women, UNDP, and UNOPS seeks to advance risk-informed development and inclusive, gender-responsive disaster management in Bangladesh.
2. Women, transgender people, and sex workers are among the marginalized groups that have a difficult time getting access to early warning systems and preparing for natural disasters, particularly floods and cyclones.
3. Volunteers in community disaster management are a vital source of early warning for disadvantaged women groups, who might not have access to formal warning systems or mobile phones. To increase disaster preparedness and lessen vulnerability to natural disasters in Bangladesh, early warning systems must be made more accessible, timely, and beneficial for underprivileged people.

**Speaker 3: Mr. Ahmadul Haque**

1. The study's focus was the Women Empowerment Cyclone Preparedness Program's (WE-CPPP) Women Friendly Early Warning Dissemination Guidelines for Cyclone Preparedness Program (CPP). Women-friendly early warning system distribution, quantitative and qualitative approaches, as well as social metrics, have all been used to implement the study.
2. Social norms and gender-based violence continue to obstruct women's participation and representation in decision-making despite initiatives to increase their involvement in disaster preparedness.
3. It is crucial to teach and inspire women to take on the difficulties and include women volunteers of CPP in broadcasting early warning signals at all phases of approaching

cyclones in order to encourage women's participation in EW preparedness. To guarantee that women can effectively participate in EW preparedness, the appropriate tools and resources must also be made available. Works are already in progress.

**Speaker 4: Mr. Moloy Chaki**

1. Dissemination system is crucial for ensuring early warning to vulnerable groups, especially women.
2. Compared to cyclone warning, there is a lack of organization and clear direction for flood warning.
3. The distribution of flood warnings can be improved by capacity building, training, and gender-responsive messaging, and early warning dissemination should be included in policy directives.

**Speaker 5: Adv Khodeza Nasreen**

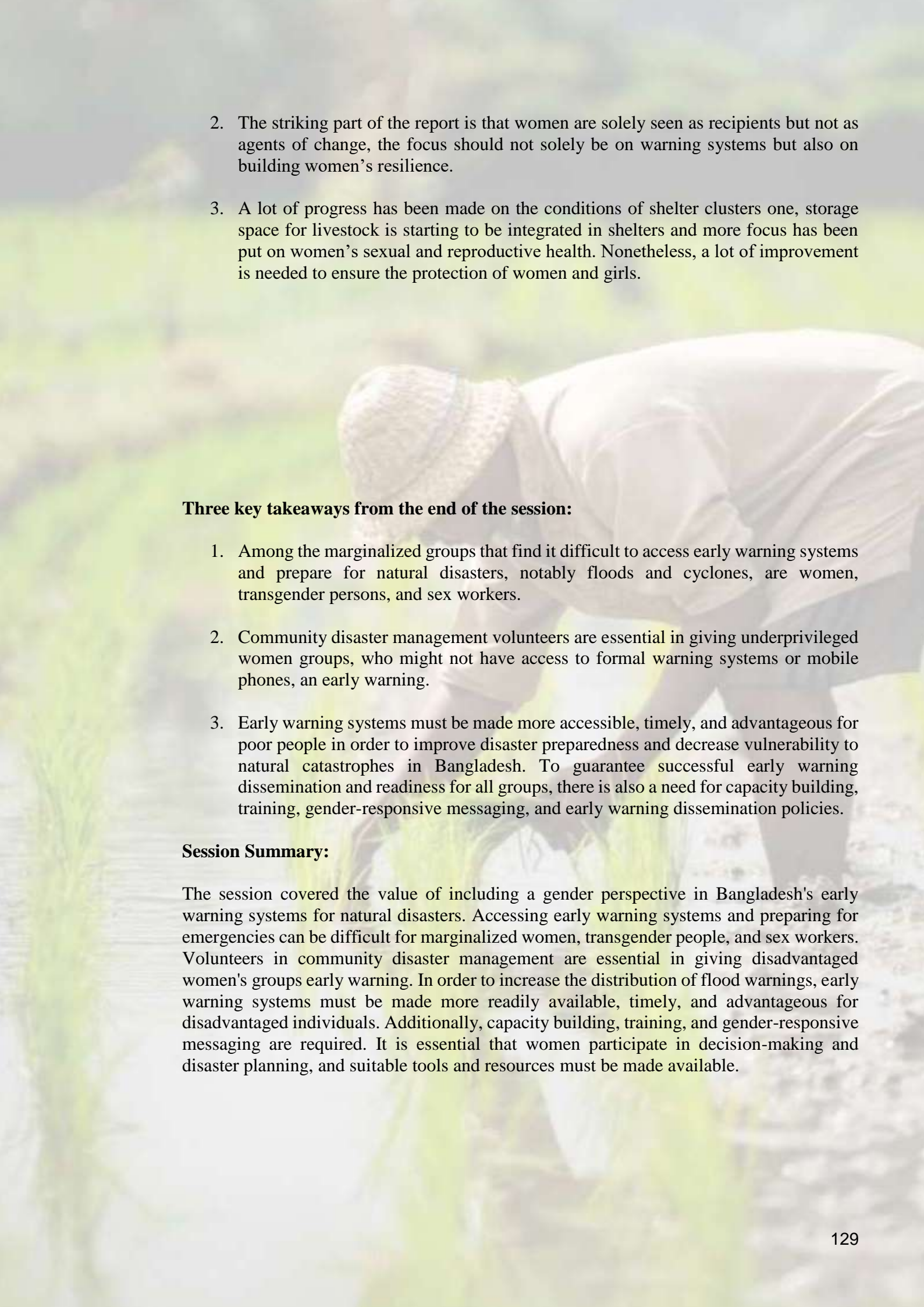
1. Due to its location near the Padma River, Rajbari is prone to natural disasters including floods and soil erosion.
2. The local population, which is primarily made up of low-income people, frequently loses their houses and possessions during severe calamities and must seek shelter.
3. The government and several organizations have put into practice women-centered early warning preparedness measures, including recruiting women volunteers and giving women adequate messages to assist them in preparing for severe disasters.

**Speaker 6: Ms Sayda Yesmin**

1. Kurigram, one of the most flood-prone and vulnerable places, is home to the women-led CSO Association for Alternative Development.
2. They perform volunteer training and awareness campaigns before floods and disseminate information to the neighborhood through a variety of channels, including biking.
3. They provide pregnant women, adolescent females, handicapped persons, and those who are vulnerable additional consideration during the preparation process.

**Speaker 7: Mr. Saber Hossain Chowdhury**

1. The link between research and policy is important studies can shape future action plans and strategies to be adopted. The study presented was particularly relevant due to the increasing frequency and magnitude of disasters in Bangladesh additionally its recommendations are concrete.

- 
2. The striking part of the report is that women are solely seen as recipients but not as agents of change, the focus should not solely be on warning systems but also on building women's resilience.
  3. A lot of progress has been made on the conditions of shelter clusters one, storage space for livestock is starting to be integrated in shelters and more focus has been put on women's sexual and reproductive health. Nonetheless, a lot of improvement is needed to ensure the protection of women and girls.

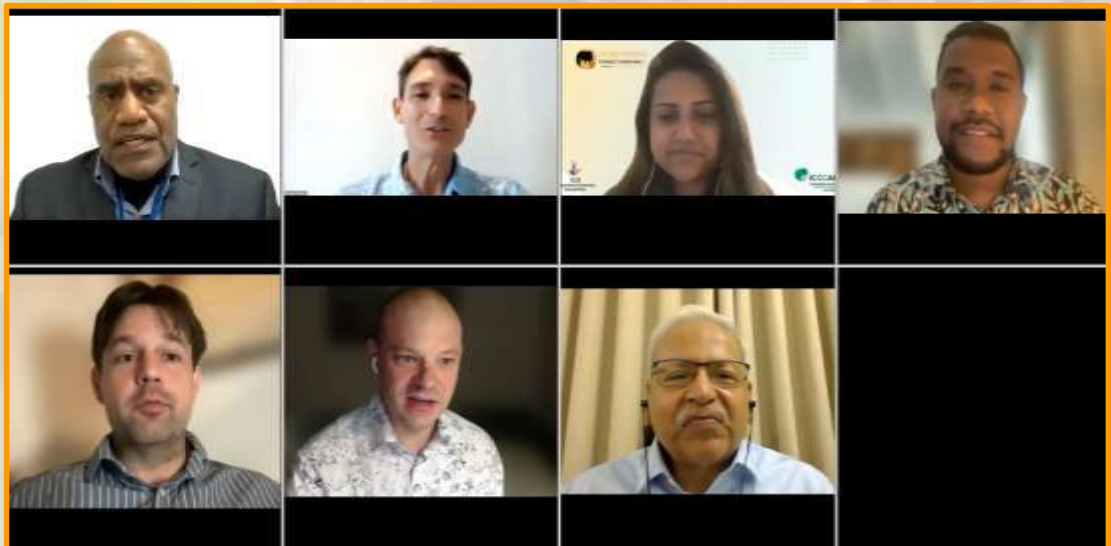
### **Three key takeaways from the end of the session:**

1. Among the marginalized groups that find it difficult to access early warning systems and prepare for natural disasters, notably floods and cyclones, are women, transgender persons, and sex workers.
2. Community disaster management volunteers are essential in giving underprivileged women groups, who might not have access to formal warning systems or mobile phones, an early warning.
3. Early warning systems must be made more accessible, timely, and advantageous for poor people in order to improve disaster preparedness and decrease vulnerability to natural catastrophes in Bangladesh. To guarantee successful early warning dissemination and readiness for all groups, there is also a need for capacity building, training, gender-responsive messaging, and early warning dissemination policies.

### **Session Summary:**

The session covered the value of including a gender perspective in Bangladesh's early warning systems for natural disasters. Accessing early warning systems and preparing for emergencies can be difficult for marginalized women, transgender people, and sex workers. Volunteers in community disaster management are essential in giving disadvantaged women's groups early warning. In order to increase the distribution of flood warnings, early warning systems must be made more readily available, timely, and advantageous for disadvantaged individuals. Additionally, capacity building, training, and gender-responsive messaging are required. It is essential that women participate in decision-making and disaster planning, and suitable tools and resources must be made available.

## Climate Justice for Local Stakeholders at the International Court of Justice



*The panelists of the Climate Justice for Local Stakeholders at the International Court of Justice session*

**Host:** Government of Vanuatu

**Moderator:** Malcolm Dalesa, Climate Attache Government of Vanuatu

**Session Speakers:**

1. Hon Ralph Regenvanu, Minister of Climate Change, Vanuatu
2. Lagi Seru, Pacific Island Climate Action Network Coordinator, Vanuatu
3. David Griffiths, Human rights strategy, Associate Fellow, Chatham House
4. Andreas Sieber, Associate Director of Policy and Campaigns at 350.org
5. Malcolm Dalesa, Climate Attache Government of Vanuatu
6. Dr. Saleemul Huq, Director, ICCCAD

**Speaker 1: Hon Ralph Regenvanu**



1. **Climate Change and its consequences:** The speaker discusses the impacts of climate change on the nation of Vanuatu and the entire planet, highlighting the rising sea levels, ocean acidification, and droughts that are affecting the people and their crops. The recent cyclones in Vanuatu have left the islands in a state of emergency, affecting 100% of the population.
2. **Legal obligations to address climate change:** The speaker emphasizes that the Paris Agreement and other international treaties contain clear obligations to prevent harm to the environment and protect human rights. The speaker believes that an advisory opinion on climate change from the International Court of Justice (ICJ) will help countries uphold international law and bring human rights thinking into energy and climate decisions.
3. **Clarification of legal obligations:** The speaker clarifies that the initiative is not intended to name or shame any particular nation, and no state will be required to do anything as a result of the ICJ's advisory opinion. The primary goal of this exercise is to bring clarity to the legal obligations already agreed under international law, looking at both historical and future emissions.

#### **Speaker 2: Lagi Seru**

1. The Pacific is at the forefront of climate change and climate change remains the single greatest threat to the livelihood, security, and well-being of the people of the Pacific.
2. The states have not been ambitious enough to reach the 1.5-degree target that was agreed upon in Paris and disconnect between science and other work at the political level.
3. This is an opportunity for civil society to build pressure between now and the 29th of March to demand their countries to vote in support of the resolution to seek an advisory opinion from the international court of justice.

#### **Speaker 3: David Griffiths**

1. The climate crisis is a human rights crisis, affecting multiple aspects of human rights.
2. The human rights system can be a valuable tool in responding to the climate crisis.
3. Taking action on the climate crisis is crucial to preserving human rights for the future.

#### **Speaker 4: Andreas Sieber**

1. **Importance of international law and legal clarity:** The speaker emphasizes the importance of legal opinions in informing the development of international law and

providing guidance for courts. They argue that although these opinions may not be legally binding, they carry great moral authority and can be used to provide clarity on legal obligations, which is essential for effective policy implementation.

2. The role of the UN in tackling climate change: The speaker highlights the significance of the Paris Agreement in providing a framework for collective action to address climate change. Despite not being legally binding, the agreement serves as a tool for policymakers to take back to their respective ministries and use as a mandate for action. The speaker argues that such a ruling can be quite helpful as a tool for implementation and can turn into public opinion, which is essential for making political progress.
3. The need for greater consistency and coherence in international climate policy: The speaker argues that while progress has been made in addressing climate change, more consistency and coherence are needed in international policy decisions. They believe that an advisory opinion can provide more consistency and coherence when it comes to principles of international law, and that this can be used to further implement the Paris Agreement.

#### **Speaker 4: Malcolm Dalesa**

1. The political process of the resolution on climate change and human rights has been a lengthy and complex one, involving a committed group of law students from the Pacific, leaders from the Caribbean region and Pacific island forum, and the Africa Caribbean Pacific state.
2. The Core Group of 18 countries, which includes microcosms of the UN membership with wide-ranging interests and perspectives, have been engaged in in-depth deliberations since September last year, which culminated in the conceptualization of the text of the resolution that aims to balance different political stances of the states with regard to human rights and climate justice.
3. The resolution has received overwhelming support with 105 co-sponsorships initially, and an additional 116 co-sponsorships later, with adoption expected on 29th March. The focus now will be on getting others to support the resolution and to coordinate submissions to the court in a holistic and coherent manner.

#### **Speaker: Dr. Saleemul Huq**

1. Climate change is causing unprecedented and devastating impacts around the world, and every country is going to be affected.
2. All citizens of the planet, not just leaders, have a responsibility to engage in dealing with this issue, as it is by far the number one global emergency.
3. We need to be held accountable for our actions, particularly by the next generation, who will inherit the planet that we are leaving behind.

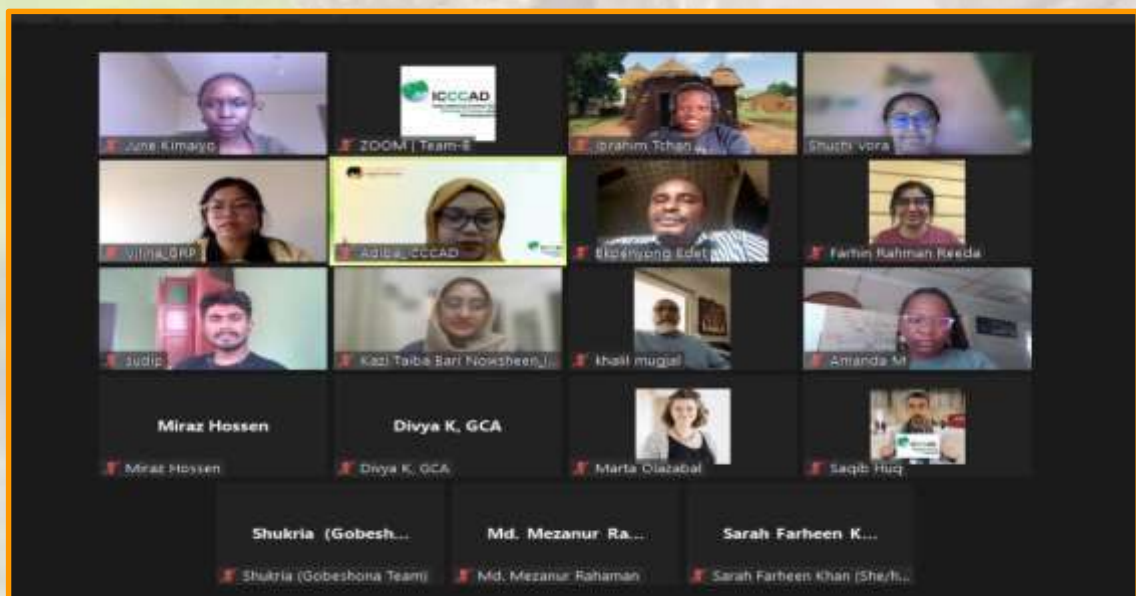
#### **Three key takeaways from the end of the session:**

1. Climate change is a serious threat to the livelihood, security, and well-being of people around the world, particularly in the Pacific region. The impacts of climate change are felt across multiple aspects of human rights.
2. There is a need for greater clarity and consistency in international climate policy, and international law and legal opinions can play a crucial role in providing guidance for effective policy implementation.
3. It is the responsibility of all citizens to engage in dealing with the issue of climate change, and accountability for actions must be taken, particularly by the next generation who will inherit the planet.

### **Session Summary:**

The speakers in this session discussed the urgent need to address climate change and the role of international law and human rights in doing so. They emphasized the devastating impacts of climate change on Pacific island nations, the importance of legal clarity, and the need for greater consistency and coherence in international climate policy. The speakers also highlighted the role of civil society in building pressure on governments to take action and emphasized the responsibility of all citizens to engage in addressing this global emergency. The upcoming resolution to seek an advisory opinion from the International Court of Justice received overwhelming support and will provide clarity on legal obligations to prevent harm to the environment and protect human rights.

## Evidence from LLA Initiatives: Methodological challenges and enquiry into what success looks like



*The panelists of the Evidence from LLA Initiatives session*

**Host:** Global Resilience Partnership

**Moderator:** Shuchi Vora, Lead - Resilience Knowledge Coalition

**Session Speakers:**

1. Shuchi Vora, Lead - Resilience Knowledge Coalition, Global Resilience Partnership
2. June Kimaiyo, Youth Engagement officer, Global Resilience Partnership

**Speaker:** Shuchi Vora and June Kimaiyo

The session started off with Shuchi introducing GRP to the audience.

What are the different ways in which we can capture evidence? Any unique tools that you are aware of?

1. Various kinds of methods were shared from experiences from the field, visual methods such as comic books for a rainwater harvesting system were shared by Farheen from ICCCAD and photography of climate change impacts over time by Sudip from India, a photojournalist.
2. During COVID, a visual method known as photo voice (Adiba, ICCCAD) is a method to capture day to day life changes and activities. This method is usually for a particular community for different forms like adaptation, wellbeing, health related activities measurement. They also used digital diary, is for particular time and for particular activities and is usually for an individual measurement. Both require smartphones.
3. Puppet show, community radio as whatsapp voice notes for bigger community outreach especially during disaster where networks/ media is not reachable for quicker action

What does success and failure look like? Reflecting on the mental models in our understanding of success and failure.

1. Using an iceberg model, Shuchi led the participants to take part in a systems thinking exercise to answer his question. Success meant different things for different people, a participant mentioned that happiness and improvement of health of the community was what success looks like. Gaining more partnerships, fulfillment and encouragement from the community are also ways to see what success looks like. Leverage and increased interest from partners act as an indicator of trends while Ibrahim, a participant, mentioned that community ownership is extremely important. Most projects are very dependent on one side of the coin, but it is also important that we see if it is valuable to the communities and whether it is helping communities to adapt to the dedication making process.

Who are the users and producers of evidence? Where does the demand for evidence originate?

1. Policy makers, practitioners, researchers, donors and communities usually use evidence and NGOs, project implementers, journalists, innovators, communities themselves produce this evidence. The need for evidence is decided by different groups such as funding agencies, decision makers, NGOs, financial institutions, external monitoring and evaluators etc. However the blind spots continue to exist in these projects that fail to include women, communities themselves.

### **Three key takeaways from the end of the session:**

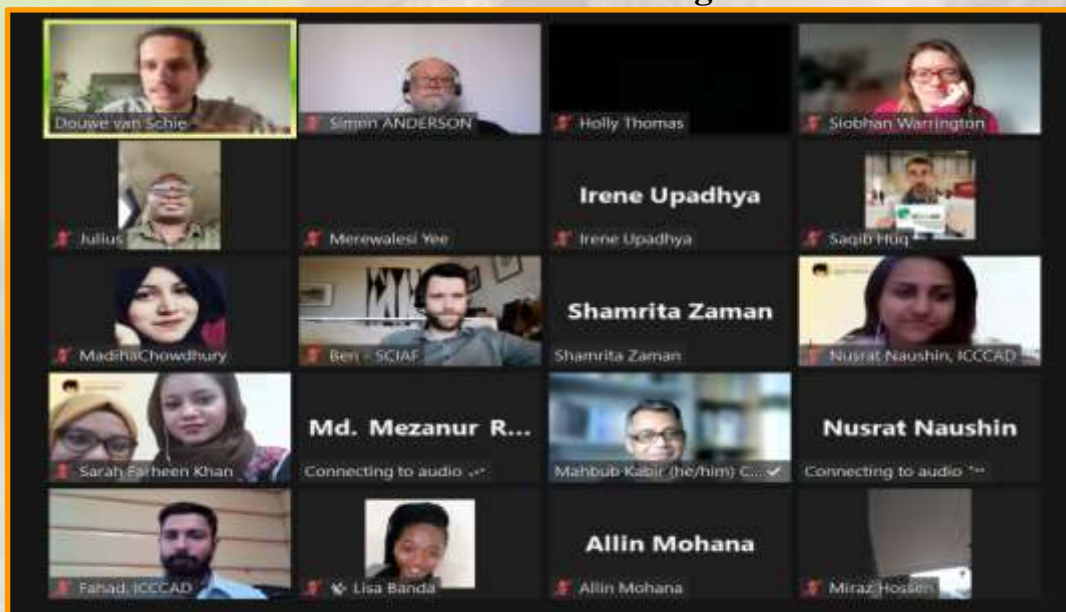
1. There is a need to involve and empower communities in LLA initiatives. Engaging community members in the planning and implementation of initiatives, building their capacity to participate in all stages and giving them a sense of ownership.
2. Communities are users and producers of evidence, and are decision-makers based on evidence. Communities' evidence needs should be pivotal to all resilience and adaptation measurement.

3. Long term and sustainable funding in order to build trust and partnerships with communities.

**Session Summary:**

The session discussed various ways to capture evidence, including visual methods such as comic books, photography, and the use of digital tools like photo voice and digital diary. The session also explored the concept of success and failure in LLA initiatives, with participants sharing their perspectives on what success looks like and the importance of community ownership. The session also emphasized the need to involve and empower communities in LLA initiatives, to consider communities as both users and producers of evidence, and to ensure long-term and sustainable funding to build trust and partnerships with communities.

## Valuing The Invaluable: Methodologies For Assessing Non-Economic Loss and Damage



*Panelists of Valuing The Invaluable: Methodologies For Assessing Non-Economic Loss and Damage session*

**Host:** Scottish Catholic International Aid Fund (SCIAF)

**Moderator:** Douwe van Schie, visiting researcher, Scottish Catholic International Aid Fund, SCIAF

**Session Speakers:**

1. Douwe Van Schie, visiting researcher, Scottish Catholic International Aid Fund, SCIAF
2. Afsara Binte Mirza, Junior Research Officer, International Centre for Climate Change and Development, ICCCAD
3. Merewalesi Yee, PhD candidate, University of Queensland/Transformative human mobility researcher
4. Julius Ngoma, National Coordinator at Civil Society Network on Climate Change

### **Speaker 1: Afsara Binte Mirza**

1. The project was conducted in Durgapur upazila, Netrokona district. 3 villages in the area were analyzed to ensure inclusion of different cultural groups like Hindu community, Muslim community and also indigenous people.
2. Data was collected from the local people of the community about the rainfall, temperature increase and hazards especially in 2022 and 1998 in order to govern the drastic changes that took place in 20 years. This participatory approach was held to determine the hazard intensity and non-economic loss and damage to create an extent of local values instead of depending on IPCC report values.
3. The approach was conducted in 3 villages to accumulate the values right and observe how the community addresses the values and also responds to the values. The non-economic aspect includes nature, religion, culture, society, family, health, mental health, serenity, education and also development. But when it comes to development, the economic aspect comes into picture as well. From the approach it was found that non-economic loss and damage is crucial to but it is hard to determine. From the results it came to light that women tend to value mental health more while indigenous people value culture while on the other hand young people value education more.

### **Speaker 2: Merewalesi Yee**

1. In order to assess non-economic loss and damage field work was conducted in 3 case study areas. The study areas are Toguru settlement, Fiji, Sese village, Fiji and Vunisavisavi village, Fiji. The case study was conducted in non-indigenous people.
2. Value based approach was conducted in order for people to identify the impacts and necessary actions, as what matters most to people to be worth preserving and protecting will determine effective and legitimate adaptation.
3. From the approach it was found that Indigenous communities have to face impacts of climate change like tidal inundation, soil erosion/ coastal erosion, salt water intrusion but one of the most poignant impacts is losing their graveyard and land under water.

### **Speaker 3: Julius Ngoma**

1. SCIAF and Trócaire building off the learning from previous programs proposed that the Scottish Government fund a key piece of action research that will address loss and damage issues affecting communities presently, engage affected communities in the process of helping to establish modalities for loss and damage programming and capture and disseminate knowledge to inform the global discourse on Loss and Damage.



2. This study attempted to investigate and provide guidance on various methodologies and approaches that could be used to determine NELD for different attributes such as loss of life and forced migration.
3. The report presents various tools and approaches that can be considered or used for reference when making assessments related to climate change NELD.

### **Three key takeaways from the end of the session:**

1. Participatory approach can help to determine non-economic loss and damage more accurately as involving local people will help quantify their loss, as they know what is more important to them.
2. Children should be added in the discussion of when it comes to loss and damage as they are the future generation it will help them prepare for the impact of climate change in the future.
3. The proposed action research aims to engage affected communities in establishing modalities for loss and damage programming and to inform the global discourse on Loss and Damage.

### **Session Summary:**

The quantification of non-economic loss and damage is a complex issue, as it is highly sensitive to cultural and local contexts. Case studies conducted in Fiji, Malawi, and Bangladesh have highlighted that non-economic loss and damages, such as the loss of graveyards, mental health issues, religious values, and cultural issues, can be challenging to quantify. This is due to the fact that the perception of such losses varies across genders and cultural dimensions, making it difficult to develop standardized methods of measurement. It is important to recognize that while economic losses can be readily quantified, the assessment of non-economic losses requires a more nuanced approach that considers the diverse cultural and social factors that contribute to their value.



## **Tools for Enhancing Anticipatory Capacity – from Arts to Modelling**

*The panelists of the Tools for Enhancing Anticipatory Capacity section*

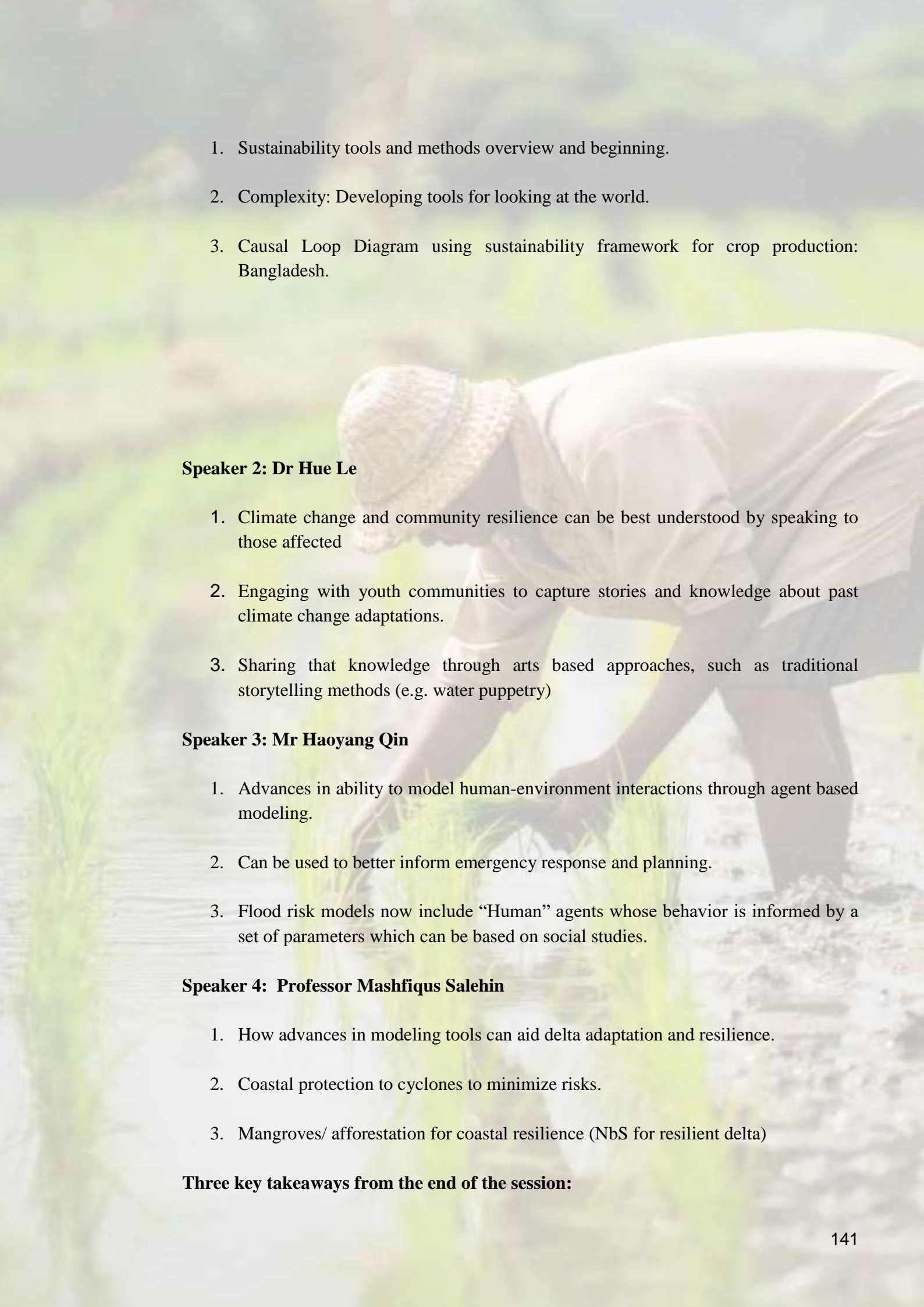
**Host:** Living Deltas

**Moderator:** Dr. Christopher Hackney,

**Session Speakers:**

1. Professor Craig Hutton
2. Dr Hue Le, Living Deltas and Senior Researcher and Lecturer at Vietnam National University
3. Mr Haoyang Qin, Living Deltas and PhD Candidate at Loughborough University
4. Professor Mashfiqus Salehin, Living Deltas and Professor| Institute of Water and Flood Management Bangladesh University Of Engineering and Technology

**Speaker 1: Professor Craig Hutton**

- 
1. Sustainability tools and methods overview and beginning.
  2. Complexity: Developing tools for looking at the world.
  3. Causal Loop Diagram using sustainability framework for crop production: Bangladesh.

**Speaker 2: Dr Hue Le**

1. Climate change and community resilience can be best understood by speaking to those affected
2. Engaging with youth communities to capture stories and knowledge about past climate change adaptations.
3. Sharing that knowledge through arts based approaches, such as traditional storytelling methods (e.g. water puppetry)

**Speaker 3: Mr Haoyang Qin**

1. Advances in ability to model human-environment interactions through agent based modeling.
2. Can be used to better inform emergency response and planning.
3. Flood risk models now include “Human” agents whose behavior is informed by a set of parameters which can be based on social studies.

**Speaker 4: Professor Mashfiqus Salehin**

1. How advances in modeling tools can aid delta adaptation and resilience.
2. Coastal protection to cyclones to minimize risks.
3. Mangroves/ afforestation for coastal resilience (NbS for resilient delta)

**Three key takeaways from the end of the session:**

1. Advances in our ability to model climatic extreme events and hazards allow greater preparedness and adaptation practices.
2. Combining physical modeling approaches with knowledge gained through arts and social science approaches can improve our representation of how communities respond and behave during extreme events, allowing transitions to more just and fair climate adaptation strategies.
3. Future advances involve capturing all behaviors (social, biophysical and climatic) in a numerical framework to investigate interactions and patterns of behavior.

### **Session Summary:**

This session brought together experts from across the disciplines of numerical modeling, socio-economic and humanities to discuss how the combination of all these approaches is necessary to best ensure the transition to fair, just and equitable livelihoods in delta environments in the face of a changing climate. Our speakers presented work on the key methods and tools used in sustainability science, new research into youth knowledge on climate change adaptation in Vietnam, agent-based modeling developments for flood risk management and biophysical modeling of climate extremes in the Ganges-Brahmaputra-Meghna delta. These talks stimulated great discussion about the future of the disciplines and approaches used in order to plan for, and predict, societal response to climate events, demonstrating that the opportunities afforded by these developments are key to achieving sustainable delta livelihoods. Overall, this session highlighted that new techniques and the combination of the science and the arts are necessary to ensure community adaptation and preparedness in a changing climate.

## Ethnic communities in Bangladesh: Their Struggle against the adverse



### impact of Climate Change

#### *Panelists of the Ethnic communities in Bangladesh session*

**Host:** Centre for Climate Change and Environmental Research (C3ER), BRAC University

**Moderator:** Dr. Nandan Mukherjee, Lead, Adaptation and Resilience UNESCO Water Centre, University of Dundee, UK

#### **Session Speakers:**

1. Ms. Roufa Khanum, Assistant Director C3ER, BRAC University
2. Mr. Dwijen Mallick, Research Fellow, BCAS
3. Ms. Sharmind Neelormi, Professor, Department of Economics, Jahangirnagar University
4. Ms. Snigdha Sarker, Student, Representative of the Ethnic Community
5. Mr. Dharitri Kumar Sarkar, Deputy Secretary, MoEFCC
6. Dr. Ainun Nishat, Professor Emeritus & Adviser, C3ER, BRAC University

#### **Speaker 1: Ms. Roufa Khanum**

1. Ms. Khanum presented the key findings of the study. At first, she explained the current scenario of ethnic communities and climate change in Bangladesh.
2. Then she explained the study methodology and six study areas which were identified considering the hazard and distribution of ethnic communities.

3. She spoke about the livelihood, culture, norms and festivals from the literature review and explained the problem matrix generated from field finding. She also focused on the policy gap regarding ethnic communities and the way forward to ensure proper rights for the ethnic communities.

**Speaker 2: Mr. Dwijen Mallick**

1. Dr. Mallick talked about community involvement and the need for institutional capacity building and arrangements of ethnic communities.
2. He talked about incorporating ethnic communities in a broader sense in policy documents such as NAP, ensuring the involvement of ethnic communities at local and national levels.
3. He added that local agencies of ethnic communities and local govt should come forward to ensure good governance and adaptation measures for the adverse impacts of climate change on ethnic communities.

**Speaker 3: Ms. Sharmind Neelormi**

1. Ms. Neelormi talked about the research gap of climate change impacts on ethnic communities.
2. She talked about the adverse impacts of climate change on vulnerable groups such as ethnic communities and women in developing countries.
3. She also added that more research scope should be created to bring out the adverse and marginalized conditions of these communities.

**Speaker 4: Ms. Snigdha Sarker**

1. Ms. Snigdha represented the struggle of the ethnic communities and the lack of accessibility to knowledge and resources to adapt to climate change impacts.
2. She talked about the adverse impacts of climate change on her community.
3. She also shared her youth agenda to reduce her community's vulnerability to climate change.

**Speaker 5: Mr. Dharitri Kumar Sarker**

1. Mr. Sarkar talked about the inclusive process of preparing NAP and focused on the inclusiveness of ethnic communities.
2. He also talked about a case study of an ethnic community and how the problem was identified and solutions were provided
3. He also talked about the adaptation initiatives on NAP and Mujib Prosperity Plan emphasizing ethnic communities. He noted that the NAP has suggested preparing an action plan regarding ethnic communities and involving ethnic communities in the implementation process.

**Speaker 6: Dr. Ainun Nishat**

1. Dr. Nishat stated the population, livelihood pattern, food, community management of natural disasters, caste systems, and the impacts of climate change on ethnic communities, and also about the importance of ethnic communities though they belong to minorities.
2. He noted that their traditional skills and culture should not be lost for improving their economic condition, especially through eco-tourism.
3. He talked about the propagation of vector borne disease because of climate change.

**Three key takeaways from the end of the session:**

1. The climate extremes are affecting groups disproportionately. We need action from the government, NGOs, and other stakeholders to assess the vulnerability of climate change in ethnic communities.
2. The role of youth in creating awareness and climate-resilient community. Accessibility to education makes these ethnic communities capable of climate extremes with their own adaptive measures, which have been practiced for years by them. Need adequate safeguarding access to basic services such as food and water. Creating an enabling environment and a level playing ground to ensure the economic development of ethnic communities.
3. Need to be more responsive to national plans and policies for ethnic minorities. Participation and ensuring equity in power arrangements to pursue the sustainable development goal.



**Session Summary:**

Ethnic/indigenous groups face adverse climate change impacts as they depend heavily on natural resources. This research identified the impact of climate change on specific ethnic communities of the country that are vulnerable due to their location and differences in culture from the general citizen of the country. Moreover, this study has identified the adaptation techniques they currently use to address climate change impacts. The session helped to address the research gap and formulate an inclusive and comprehensive policy and legislative framework.



## Pathways to Transformation: Coastal and Delta Communities



*Panelists of the Pathways to Transformation session*

**Host:** Institute of Development Studies (IDS), University of Sussex, UK

**Moderator:** Dr. Lyla Mehta, Professor at Institute of Development Studies (IDS), University of Sussex, UK

**Session Speakers:**

1. Mihir R. Bhatt, director of the All India Disaster Mitigation Institute (AIDMI)
2. Dr. Lyla Mehta, Professor at Institute of Development Studies (IDS), University of Sussex, UK
4. Adiba Bintey Kamal, Programme Coordinator, ICCCAD
5. Shibaji Bose, Health systems research to policy advocate
6. D. Parthasarathy, Professor, Indian Institute of Technology, Mumbai

**Speaker 1: Mihir R. Bhatt**

1. The TAPESTRY project shows that transformation may arise 'from below' in marginal environments such as the Sundarbans delta, where communities face high levels of uncertainty about not only income and assets but also a future. This includes locally led adaptation.

2. Three pillars: local leadership of youth and women; an adaptive approach and sustainability; and long-term financial and other support. The role of women is important in any pathway activity.
3. Awareness about emerging pathways to transformation must be made more widespread at all levels, especially at the local adaptation level.
4. We need to pilot, we need to demonstrate, and we need to interact back and forth to make the transformation pathway more vibrant.

**Speaker 2: Lyla Mehta**

1. In the TAPESTRY project, we are working with the poorest of the poor in marginalized coastal communities on the front line who live in 'marginal' environments. We're working with fishing communities in the megacity of Mumbai, camel herders and villagers in the dry lands of coastal Kutch, and people growing food on islands in the Sundarbans, the huge delta region in the Bay of Bengal. Climate change isn't some distant threat for them; it's a reality in everyday life. These communities are faced with new uncertainties from climate change and extreme weather, but also from processes such as expanding industries, property development, and pollution. They're not passive victims of these changes -- they're looking to transform the conditions they live in.
2. Initiatives in patches linked to strengthening livelihoods linked to existing vulnerabilities and lack of power and control over assets. Adaptation choices need to draw on multiple perspectives, alliances, place based knowledges/ assessments to address power imbalances & create transformative change. They are looking at locally appropriate and sustainable options that can help expand livelihood options for local people while at the same time looking at sustainability of existing resources such as forests and mangroves.
3. On both sides, the Sundarbans community is trying various agricultural adaptation measures to cope with the situation. Such as, a tower garden/plantation helps the community during the flood. The salinity can't harm the trees and the plants don't get washed away in flood water. In this way, the amount of damage is less than before. In the Indian part, they are taking many measures using indigenous knowledge for agricultural activities. The Rainwater harvesting system is an adaptation that is taken by Bangladesh, part of Sundarbans. It helps the family during the summer season to cope with the water crisis. In India, this type of practice can be replicated as a solution to the water crisis.
4. Communities of Sundarbans would like to return to traditional agricultural practices as it was more sustainable. The community is aware of the consequences of climate change but due to a lack of resources, they aren't able to take any measures.
5. However, when asked about the kind of life they would want their children to have, which would enable them to combat the impacts of climate change when it threatens to overwhelm the existing system, most of them suggested training and education as means for transformation. Training on alternative livelihood approaches will allow

their children to explore a wider range of livelihood options, beyond those that are vulnerable to environmental changes.

### **Speaker 3: Upasona Ghosh**

1. The co-produced initiatives of increasing salinity in soil and water are affecting the subsistence and livelihood of small and marginal farmers in the Sundarbans, which supported farmers through small input support, training on agronomic techniques and seed preservation banks, farmer champions, and the creation of a platform of stakeholders to ensure marketing and seed production facilities.
2. Continuous but permanent exclusion is imposed on an already existing landless section of the community, such as small fishers, jungle collectors, and agro-laborers. People who are gradually losing their lands due to erosion or salinity intrusion; farmers who are not getting enough profit. Technical issues include the need for organic manuring; community training by CBOs; time and labor intensive compared to general varieties; and high production costs compared to general varieties but lower output.
3. Local administration is encouraging salinity-resistant crop production and distributing the seeds. However, they are not buying the products because they do not have general marketability. Most of the agricultural lands are reclaimed from the forest. Communities often do not have proper paperwork. Hence, they are not getting the compensation in case of crop loss due to disaster
4. 'Technical' transformation vs. people-centeredness can solve the technical challenges, i.e., salinity ingression, but cannot solve the challenges related to policy or community transformation, which is supposedly transformative and apparently straightforward.

### **Speaker 4: Adiba Bintey Kamal**

1. A visual method has been used to incorporate the information both in India and Bangladesh. In terms of photo voice, most of them were female. The participants were mostly dependent on the Sundarbans' agricultural work.
2. Earlier, everyone in the area started cultivating shrimp instead of paddy. Cyclone Aila caused a lot of damage to all the shrimp farms. In addition, farmers are facing many more economic losses due to the virus in shrimp farms. Then everyone in the area realizes that even though the profit is lower in paddy cultivation, the amount of loss is very small. They then resumed paddy cultivation in collaboration with various NGOs. After three years of continuous loss of paddy cultivation and efforts, they are now able to cultivate paddy successfully in this area.

3. After Aila, when all the men in the area had to move out of the area for 5 to 6 months for their livelihood, the women of the area started cultivating paddy with training and assistance from various NGOs.

**Speaker 5: Shibaji Bose**

1. In the project, mixed methods were used. Photo voice, digital photo diary, documentary photography, children's paintings and batiks and film on community perceptions around transformative patches were used.
2. Children's painting and batik arts were used to support the students in voicing their experiences on living with climate change and its impacts, reflection and learning, and cross-community exchange.
3. Co-creation of letting go of the researcher's control, systematizing local experience and indigenous knowledge, using remote visual techniques during COVID, and community-led transformation, including indigenous seed banks, community-owned labs, and cross-country validation of locally led adaptations from below.

**Speaker 5: D. Parthasarathy**

1. Expansion of the alliances was one of the outcomes of the project. The most interesting part was that as the project continued and grew, the local partner also established new partnerships with others who were interested in the same theme as we were.

**Key takeaways from the end of the session:**

1. Awareness about emerging pathways to transformation must be more widespread at all levels, especially at the local adaptation level.
2. We need to pilot, we need to demonstrate, and we need to interact back and forth to make the transformation pathway more vibrant.
3. Adaptation choices need to draw on multiple perspectives, alliances, and assessments to address power imbalances and create transformative change.



**Session Summary:**

The session helped to understand multiple ways of understanding what is called “transboundary” in the context of the Sundarbans delta in India and Bangladesh. The project shows that transformation may arise 'from below' in marginal environments such as the Sundarbans delta, where communities face high levels of uncertainty about not only income and assets but also a future. This includes locally led adaptation. Locally appropriate and sustainable options that can help expand livelihood options for local people while at the same time looking at the sustainability of existing resources such as forests and mangroves. Awareness about emerging pathways to transformation must be more widespread at all levels, especially at the local adaptation level.



## Climate Justice: Climate Policy Regime and Litigation Perspectives

*Panelists of the Session of Climate Justice: Climate Policy Regime and Litigation Perspectives session*

**Host:** Centre for Climate Justice – Bangladesh (CCJ-B), Climate Litigation Acceleration (CLX)

**Moderator:** M. Hafijul Islam Khan (Hafij Khan), Director

### **Session Speakers:**

1. Ms. Tahura Farbin
2. Dr. Arpitha Kodiveri, Research Director, Center for Human Rights and Global Justice, School of Law, New York University
3. Prof. Cesar Rodriguez-Garavito, Professor of Clinical Law, Chair, Center for Human Rights and Global Justice, School of Law, New York University  
Director, Earth Rights Advocacy Clinic  
Director, Future of Human Rights Practicum
4. Adv. Moumita Das Gupta, Advocate, Supreme Court of Bangladesh, Research Fellow, Centre for Climate Justice – Bangladesh
5. Adv. M. Hafijul Islam Khan, Advocate, Supreme Court of Bangladesh  
Director, Centre for Climate Justice-Bangladesh  
Co-coordinator, Loss and Damage Team, LDCs Climate Group at UNFCCC

Member, Executive Committee of Warsaw International Mechanism for loss and damage at UNFCCC

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

**Speaker 1: Dr. Arpitha Kodiveri**

1. Globally, human rights based climate litigations are growing.
2. New theories are being innovated and existing theories are also being implemented in innovative ways.
3. Lawyers and Judges are working to promote the way forward.

**Speaker 2: Prof. Cesar Rodriguez-Garavito**

1. Legal adventure is going to begin in South Asia as well.
2. Besides governments corporate responsibilities are also important.
3. Litigation allows the climate victims to be argued and to be represented.

**Speaker 3: Adv. Moumita Das Gupta**

1. Ensuring fresh water flow is one of the several adaptation strategies against salinization.
2. Things are moving forward though there are still lots to do.
3. Courts are supporting the environmental rights and climate rights even before inclusion of those into the Constitution of Bangladesh.

**Speaker 4: Adv. M. Hafijul Islam Khan**

1. Polluter pay principle is the basis of the climate justice concept which is again based on the concept of liabilities and compensation.
2. Warsaw International Mechanism is taking a broader aspect of social approach.

3. A Transitional Committee is formed to decide about Loss and Damage financing modalities.

**Speaker 5: Dr. Saleemul Huq**

1. More than 100 countries are now supporting the ICJ AO.
2. To ensure liabilities and compensation, UNFCCC Avenue is not enough.
3. We are just at the beginning of many interesting things going to happen.

**Three key takeaways from the end of the session:**

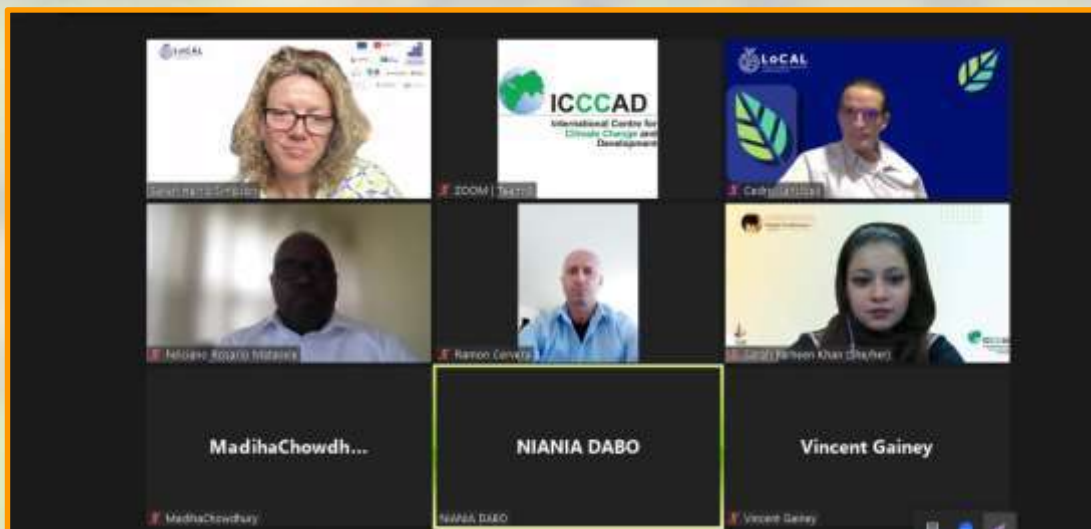
1. Globally, human rights based climate litigations are growing. New theories are being innovated and existing theories are also being implemented in innovative ways.
2. Polluter pay principle is the basis of the climate justice concept which is again based on the concept of liabilities and compensation.
3. To ensure liabilities and compensation, UNFCCC Avenue is not enough.

**Session Summary:**

During the session, several speakers shared valuable insights on various aspects of climate litigation and justice. Dr. Arpitha Kodiveri highlighted the global growth of human rights-based climate litigations and the innovation in theories and their implementation by lawyers and judges. Prof. Cesar Rodriguez-Garavito emphasized the upcoming legal adventure in South Asia and the importance of corporate responsibilities alongside government actions. Adv. Moumita Das Gupta discussed the significance of ensuring fresh water flow as an adaptation strategy against salinization and highlighted the support of courts for environmental and climate rights in Bangladesh. Adv. M. Hafijul Islam Khan explained the polluter pay principle as the foundation of climate justice and mentioned the Warsaw International Mechanism and the formation of a Transitional Committee for Loss and Damage financing modalities. Dr. Saleemul Huq mentioned the growing support for the ICJ AO and the need to go beyond the UNFCCC avenue to ensure liabilities and compensation.



## Learning and advancing action on devolved decision making and



### understanding climate risk

*Panelists of Learning and advancing action on devolved decision making and understanding climate risk session*

**Host:** Local Climate Adaptive Living Facility

**Moderator:** Sarah Harris, LoCAL Facility

**Session Speakers:**

1. Niania Dabo, UNCDF The Gambia
2. Landing B Sanneh, Chairman Mansakonko Area Council, The Gambia
3. Ramon Cervera, UNCDF Mozambique
4. Rosario Matavele, Local government representative, Mozambique

**Speaker 1: Niania Dabo**

1. The LoCAL mechanism gives communities the freedom to choose their adaptation priorities. LoCAL works with the local government authorities to develop a menu of eligible investments.
2. Using Cash for Work approaches in The Gambia, community members have the opportunity to work on climate investment projects themselves – this has been an important means of wealth generation, in communities with very limited resources.
3. Committees are set up to gather inputs and involve residents in identifying adaptation projects. These committees are set up at the ward level (which is below that of the local government authority) and ensure that all members of the community have a voice, including women and young people.

### **Speaker 2: Landing B Sanneh**

1. With LoCAL, the decision-making process is taken to another level, as it is in the hands of the local governments. The benefits of this approach are not only felt by the community members, who have a voice, but by the local government representatives, who also gain new skills and the opportunity to build their capacity.
2. Local governments working with the LoCAL approach in The Gambia have managed to overcome a previous perception that they are not an effective partner in development. Far from it, with LoCAL we have built confidence in local government authorities as a 'can do' partner.
3. The LoCAL approach has worked so well in The Gambia that local governments and other partners are now using their standard approach to channel finance for development activities through country systems.

### **Speaker 3: Ramon Cervera**

1. In financial terms, LoCAL operations in Mozambique are the largest globally accounting for over US \$60 Million of mobilized finance. The success and impact of LoCAL in Mozambique would not be possible without the commitment of donors notably Belgium, but also Sweden and Switzerland, who have believed in this approach and backed it with funds.
2. LoCAL investments are carried out with the input of engineers and taking into account climate models and projections. As a result, buildings and facilities constructed with LoCAL grants are resilient – many have already withstood cyclones and other extreme weather events.
3. LoCAL experience in Mozambique illustrates clearly that a high incidence of climate shocks and vulnerability to climate-related events has a direct impact on food security.

### **Speaker 4: Rosario Matavele**

1. LoCAL fosters inclusive action, including the participation of youth and civil society; people are asked what climate events most impact their community and actions are adjusted and investments selected accordingly.
2. LoCAL comes with capacity building and holds the local government accountable on how funds are spent, raising transparency.
3. With LoCAL, there has been investment in awareness raising and improved communication between local government and communities. This has resulted in a reduction of fatalities caused by climate shocks, such as tropical storms, cyclones and floods.

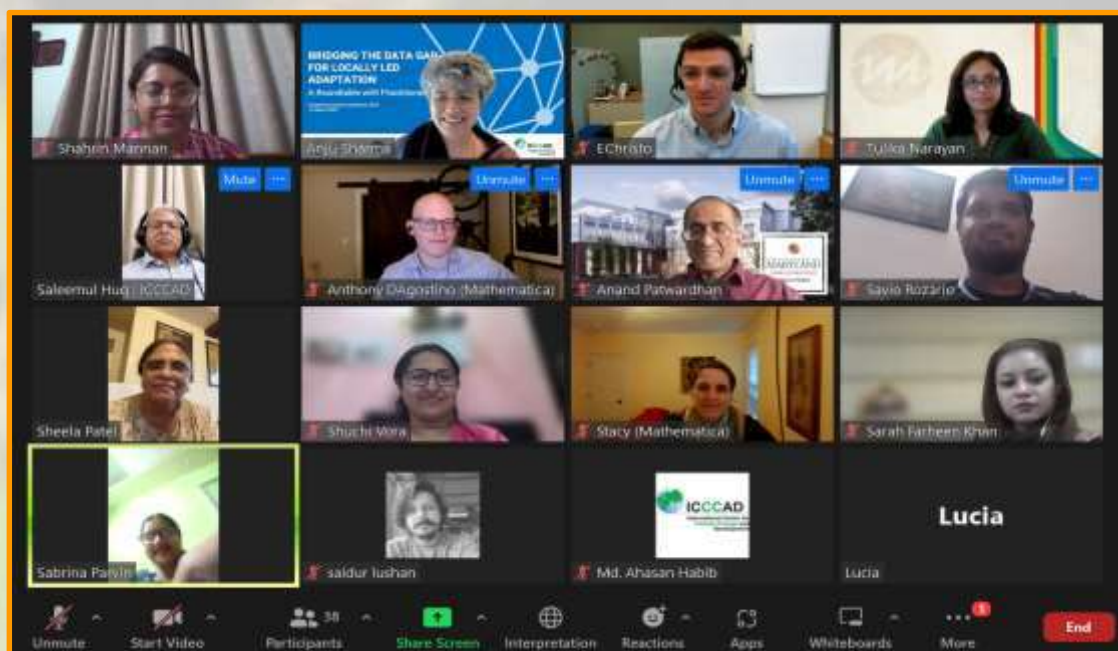
### **Three key takeaways from the end of the session:**

1. Ownership of adaptation activities is key to achieving results. LoCAL uses national systems to channel finance to communities, creating ownership at the local government level. Communities are involved in the identification and selection of investment actions, ensuring grass-roots ownership of investments that best meet community needs.
2. Finance is essential for successful and impactful adaptation. Mozambique is one of the most challenging adaptation environments, facing a number of climate threats, while the Gambia is the smallest nation on the African mainland with limited resources for resilience-building. Yet, in both of these Least Developed Countries strong adaptation results are being achieved with the financial backing and support of key donors.
3. LoCAL comes with capacity building and climate awareness raising, with many positive outcomes. In Mozambique, communities are recording a reduction in fatalities as a result of cyclones or floods as residents are more aware and communication systems have been improved. Oversight of the LoCAL grant payment system improves transparency and holds the local government accountable. In The Gambia, local governments are increasingly being seen as ‘can do’ development actors by partners, donors and CSOs.

### **Session Summary:**

Experiences from The Gambia and Mozambique, two Least Developed Countries on the African mainland, illustrates that the Local Climate Adaptive Living Facility is delivering local led adaptation results for communities. The focus on ownership, participation and inclusive action, underpins success, in line with LLA Principle 1. While understanding of climate risk, LLA Principle 5, and LoCAL’s focus on raising climate awareness and building capacity at the community and sub-national government level is delivering tangible outcomes – from school buildings that are able to withstand cyclones to a reduction in fatalities from extreme weather events.

## Roundtable on bridging the data gap for LLA



*The Panelist of Roundtable on bridging the data gap for LLA session*

**Host:** Global Center on Adaptation

**Moderator:** Dr. Tulika Narayan

**Session Speakers:**

1. Anju Sharma, Global Lead, Locally-led Adaptation, Global Center on Adaptation
2. Dr. Tulika Narayan, Vice President, Climate Change, Mathematica
3. Ms Sabrina Parvin, President Community Development Forum (CDF), Bangladesh
4. Shuchi Vora, Facilitating Learning for Strategy, Policy and Action, Global Resilience partnership
5. Dr. Anthony D'Agostino Senior Research Economist, Mathematica
6. Dr. Anand Patwardhan, Professor. University of Maryland

**Speaker 1: Anju Sharma**

1. In December 2022 the global hub on locally LED adaptation was launched by the prime minister of Bangladesh.
2. The whole process of data collection by communities is important and empowering for the community. It's important for the community to understand the risks and level of vulnerability. Not only data collection will convince them of the need to work as a community rather than an individual but also gives them a leveraging power over the government as they will have proof about their claims.
3. In the SDG process and climate change vulnerability there are a lot of ways of collecting data by different organizations but the community provided data may not

align with the data so in future this kind of data may need to be given importance for a proper implementation.

**Speaker 2: Ms Sabrina Parvin**

1. Due to its location in the coastal region of Bangladesh, Khulna is susceptible to the effects of climate change. Particularly the low-income community that resides in urban settlements truly experiences a volatile vulnerable condition; the housing stock is fairly shoddy, and during emergencies the local roadways flood.
2. CDF develops community action planning for this neighborhood. Following the identification of the effects of infrastructure, socioeconomics, and climate change, an action plan, social map, and settlement improvement plan are created.
3. Using the map created with the assistance of local leaders, they identify issues and present them to local governments, NGOs, and political leaders for answers or assistance in obtaining solutions.

**Speaker 3: Shuchi Vora**

1. When a community adopts a locally LED adaptation process for its region in any sector, it creates the data and the adaptation process, so it has knowledge of the process.
2. Data requirements could vary, but the skills required to use data as a tool can be duplicated. Regardless of the network they are using or the land they own, the procedure could be reproduced and recorded.
3. Ascertaining the effectiveness of climate-related interventions and policies is contingent on the accumulation of reliable and comprehensive evidence. This necessitates the process of layering up from data needs to information and ultimately knowledge. Through this process, data is transformed into actionable knowledge that can inform evidence-based decision-making.

#### **Speaker 4: Dr. Anthony D'Agostino**

1. Large amounts of data are available since research has been conducted over the past 30 years, but this information does not inform communities about the best crops to cultivate or the best actions to take. Climate forecasts that are not immediately actionable must be interpreted through specific sectors and local context so adequate locally led adaptation measures could be taken.
2. In order to link climate data to adaptation planning firstly for an about the scenario they try to make data which gives an idea about climate impacts that can form by some set of assumptions of future population, emissions or economy and then by using the data the generate a general circulation model which gives a forecast of future precipitation, temperature any component that factors.
3. However, the issue with these models is that the data exports at fairly large pixel sizes, so anyone within 100 kilometers of the model receives the same value. However, the weather can change significantly within a few kilometers, so in previous decades the focus was changed from a global to a regional focus for a more accurate regional forecast. In some situations, however, such as when deciding what agricultural methods to apply or what kind of urban cooling system to employ, sectoral models that instantly translate those data models into something more usable are required.

#### **Speaker 5: Dr. Anand Patwardhan**

1. The utilization of climate data to inform planning and action is of paramount importance, but it is imperative that the decision-making process commences with an assessment of the potential impact of climate change. Such an approach ensures that decisions are made with a view to how they may be influenced by evolving climatic conditions.
2. Climate risks is a construct that involves not only climate hazards but also exposure to community and also how to adjust to those hazards. The community is aware of its exposure, knowledge, capabilities, current adoption process, and so forth. The evolution of future clouds won't be the only factor in determining future vulnerability. The exposure and capacity to react are shifting along with the climate layers.
3. Ensuring accountability in the use of climate finance and directing funds towards vulnerable communities requires a rigorous monitoring and evaluation system. To build confidence among stakeholders and attract larger investments in the future, it is necessary to adopt a multifaceted approach that includes the establishment of benchmarks and targets, as well as rigorous impact evaluations. This approach can provide evidence of the effectiveness of climate finance interventions, help identify

areas for improvement, and ultimately contribute to more sustainable and impactful investments in the future.

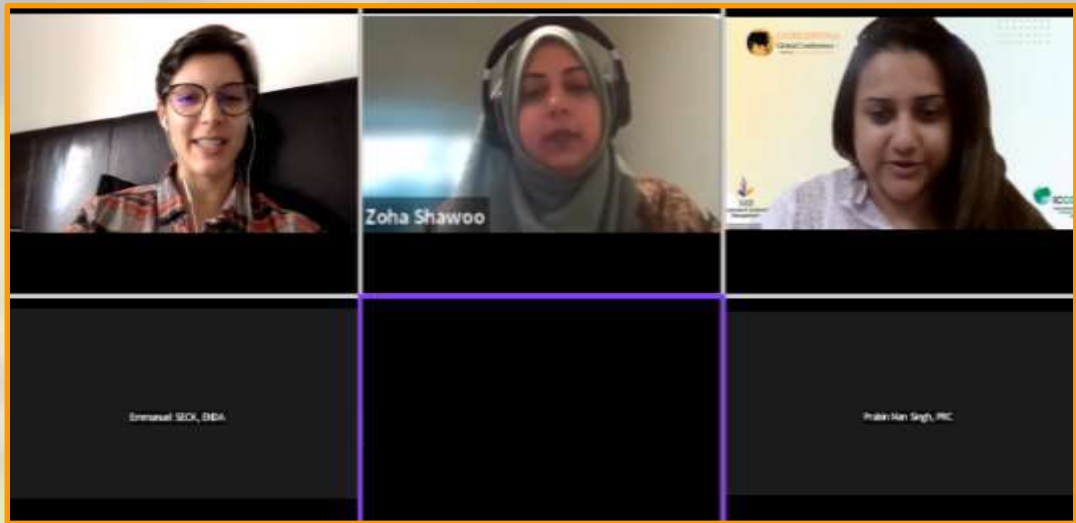
**Three key takeaways from the end of the session:**

1. Communities are already generating a lot of data and information relating to climate risks and vulnerability that should be recognized and used to inform local, national and global investments.
2. Communities are not only effective generators of data but also have the potential to turn big data into usable information and knowledge and to ensure it is disseminated.
3. Local communities in the greatest need, who lack the resources for frontloading, must meet onerous requirements for climate reasons and rationales in order to get climate money.

**Session Summary:**

The topic of the discussion was utilizing climate data to assist locally driven adaptation. The panelists talked on how crucial it is to involve local people in the data collection process and use their local expertise to inform climate-related activities and policy. They also stressed the need for trustworthy and thorough data to evaluate the efficiency of adaptation planning and guarantee accountability in the application of climate funding. Important lessons learned from the session include the value of recognizing and utilizing community-generated data, integrating communities in the decision-making process, and applying a diverse strategy to ensure sustainability and effect in climate finance initiatives.

## Locally led needs assessments of loss and damage finance



*The Panelist of locally led needs assessments of loss and damage finance session*

**Host:** Stockholm Environment Institute, United States

**Moderator:** Zoha Shawoo, Scientist, Stockholm Environment institute

**Session Speakers:**

1. Inès Bakhtaoui, Independent consultant & research — Loss and Damage and Adaptation Finance, Governance, Effectiveness, MEL
2. Zoha Shawoo, Scientist, Stockholm Environment institute
3. Prabin man Sing, PRC
4. Emmanuel SECK, Coordonnateur de Programme, Senegal

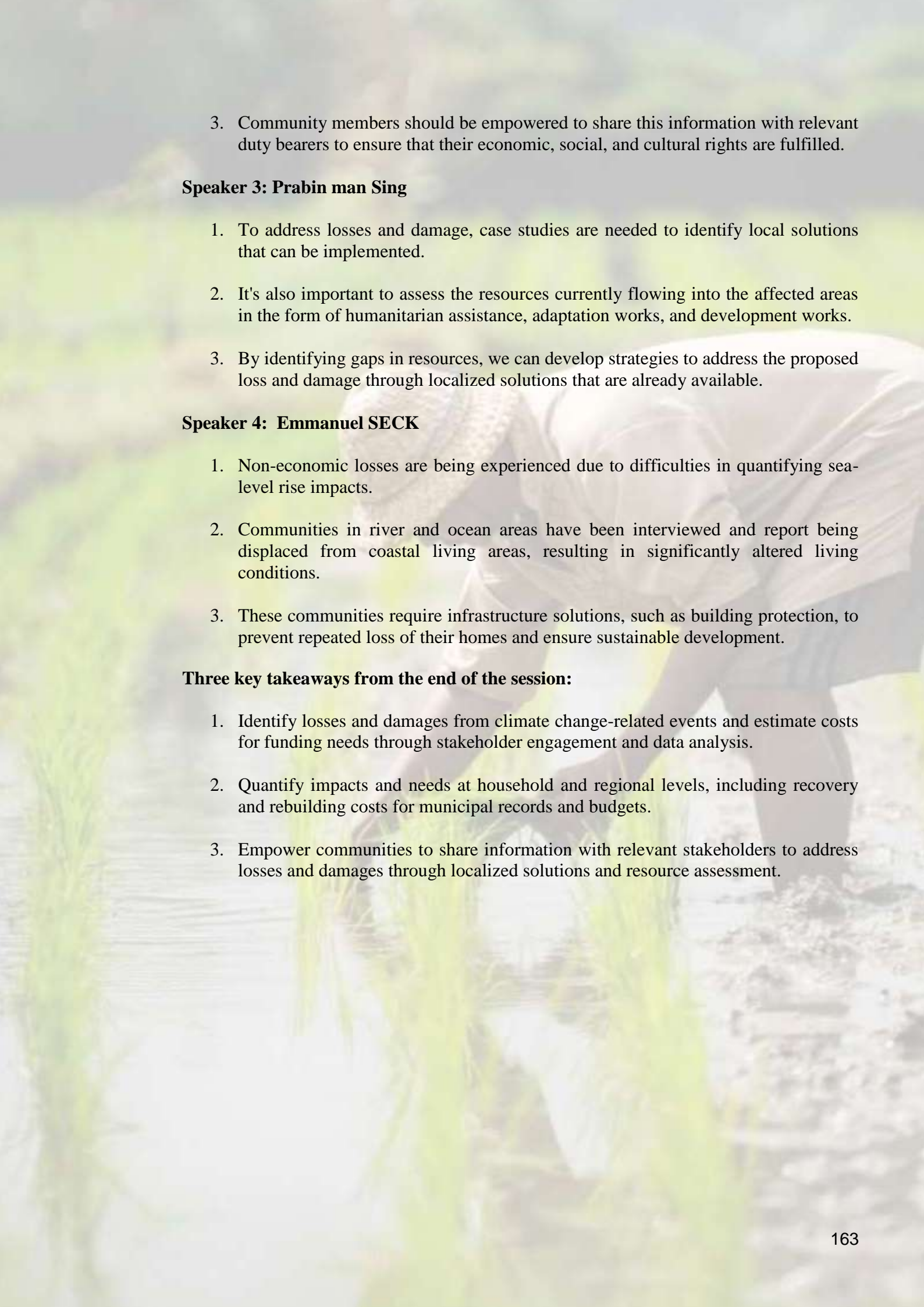
**Speaker 1: Inès Bakhtaoui**

1. Identify losses and damages suffered by communities due to climate change-related events.
2. Estimate the total costs borne by communities by quantifying losses and damages incurred.
3. Build evidence to advocate for funding needs for losses and damages through stakeholder mapping, consultation, and literature review and document analysis.

**Speaker 2: Zoha Shawoo**

1. For losses and damage, it's important to identify impacts and financial/non-financial needs, quantify at household and regional levels, and estimate recovery and rebuilding costs for municipal records and budgets.
2. Data processing and gap analysis are also needed to determine the total impacts and reduce losses and damage.



- 
- A person is seen from behind, carrying a large, light-colored bundle on their back. They are walking through a field of tall, green grass. The background is slightly blurred, showing more of the field and a clear sky.
3. Community members should be empowered to share this information with relevant duty bearers to ensure that their economic, social, and cultural rights are fulfilled.

**Speaker 3: Prabin man Sing**

1. To address losses and damage, case studies are needed to identify local solutions that can be implemented.
2. It's also important to assess the resources currently flowing into the affected areas in the form of humanitarian assistance, adaptation works, and development works.
3. By identifying gaps in resources, we can develop strategies to address the proposed loss and damage through localized solutions that are already available.

**Speaker 4: Emmanuel SECK**

1. Non-economic losses are being experienced due to difficulties in quantifying sea-level rise impacts.
2. Communities in river and ocean areas have been interviewed and report being displaced from coastal living areas, resulting in significantly altered living conditions.
3. These communities require infrastructure solutions, such as building protection, to prevent repeated loss of their homes and ensure sustainable development.

**Three key takeaways from the end of the session:**

1. Identify losses and damages from climate change-related events and estimate costs for funding needs through stakeholder engagement and data analysis.
2. Quantify impacts and needs at household and regional levels, including recovery and rebuilding costs for municipal records and budgets.
3. Empower communities to share information with relevant stakeholders to address losses and damages through localized solutions and resource assessment.

### **Session Summary:**

Losses and damages suffered by communities due to climate change-related events must be identified, quantified, and communicated to stakeholders to advocate for funding needs. This involves assessing impacts and financial/non-financial needs at household and regional levels and estimating recovery and rebuilding costs. Case studies can identify local solutions, and gaps in resources can be addressed by leveraging humanitarian, adaptation, and development works. Difficulties in quantifying non-economic losses from sea-level rise have been reported, with affected communities displaced and in need of infrastructure solutions to protect their homes and ensure sustainable development. Ultimately, community empowerment is essential for fulfilling economic, social, and cultural rights in addressing loss and damage from climate change.



## Co-production of Metrics and Policy Options for Locally Led Adaptation and Climate Justice Efforts in Africa



*Panelists of Co-production of Metrics and Policy Options for Locally Led Adaptation and Climate Justice Efforts in Africa session*

**Host:** Africa Research and Impact Network (ARIN)

**Moderator:** Leah Aoko, African Research and Impact Network

**Session Speakers:**

1. Charity Mwangi, Program Officer, SDI.
2. Jonathan Gokah, KASA Ghana
3. Jordan Hoegban, OJA Societe
4. Mikkel Funder, RARE

**Speaker 1: Charity Mwangi**

1. Communities are taking the lead in protecting their ecosystems.
2. This is through initiatives such as waste collection, recycling, urban agriculture activities, and conversion of waste spaces into productive green areas.
3. These efforts are however frustrated by poor resource mobilization and state neglect of informal settlements environmental concerns.

**Speaker 2: Jonathan Gokah**

1. There is an unprecedented increase in flooding and soil erosion along Ghana Coastal region due to climate change effects.

2. This has led to destruction of livelihood opportunities for the communities living along the coast with about 3000 people being displaced at the end of 2021.
3. To address this challenge, there needs to be community led governance initiatives and identifying alternative livelihood options for the communities living along the coastal region. Nature based solutions such as planting mangroves are also being exposed to curb the erosion menace.

**Speaker 3: Jordan Hoegban**

1. Soil Protection and Restoration Project using legumes and compost to improve food security and restore soil.
2. It is imperative for local communities to embrace a resilient agricultural system. This is through training and capacity strengthening for farmers to use their lands sustainably and to restore degraded lands.
3. Inadequate use of land exposes it to nutrient loss, erosion and increased CO2 emissions. This in the long term disrupts the food chain and results in low agricultural yields.

**Speaker 4: Mikkel Funder**

1. Sharm El Sheik Adaptation Agenda was silent on land rights yet they are central throughout with inadequate focus on: Agriculture, water and ecosystems, irrigation, coastal protection, infrastructure development and insurance schemes.
2. There is a need to avoid universalizing assumptions and instead engage farmers to understand their own preferences about what kinds of land rights helps them enhance farming outputs.
3. There should be efforts to not only protect existing ecosystems but also to restore and expand them.

**Three key takeaways from the end of the session:**

1. There needs to be a local government framework to enhance climate financing opportunities for community groups focused on enhancing their adaptive capacities. There was an emphasis on involving the policy makers in enhancing the adaptive capacity of vulnerable communities e.g. those in the informal settlements.
2. Nature based solutions have the potential of enhancing adaptive strategies to cope with climate induced coastal erosion. Additionally, the aspect of alternative

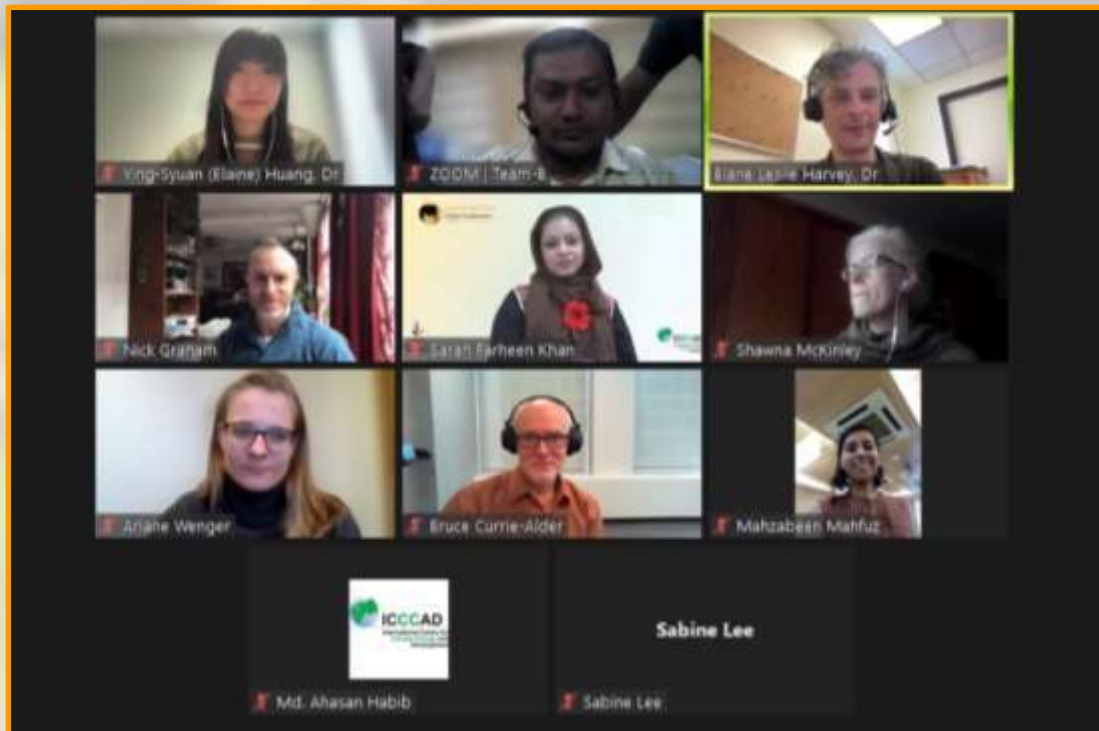
economic livelihood was highlighted as key to balancing economic development and development.

3. Adaptation needs to include the land rights decision and should be a bottom up multi stakeholder process that incorporates co creation of solutions with community groups and capacity building activities. For example, in Ghana, there needs to be strengthening of community structures to monitor and halt coastal soil erosion.

### **Session Summary:**

The session featured speakers who highlighted important issues related to community-led environmental protection, climate change effects on coastal regions, soil protection and restoration, and the significance of land rights in adaptation agendas. Charity Mwangi emphasized the role of communities in safeguarding ecosystems through waste collection, recycling, urban agriculture, and the conversion of waste spaces into green areas. However, these efforts face challenges such as poor resource mobilization and state neglect of environmental concerns in informal settlements. Jonathan Gokah discussed the escalating flooding and soil erosion along the Ghana Coastal region due to climate change, resulting in the displacement of thousands of people and the destruction of livelihood opportunities. He stressed the need for community-led governance initiatives, identifying alternative livelihood options, and implementing nature-based solutions like planting mangroves to mitigate erosion. Jordan Hoegban highlighted the importance of soil protection and restoration through initiatives like using legumes and compost to improve food security and restore degraded lands. He emphasized the need for local communities to adopt resilient agricultural systems, receive training and capacity strengthening, and address issues of nutrient loss, erosion, and increased CO<sub>2</sub> emissions that disrupt the food chain and lead to low agricultural yields. Mikkel Funder discussed the shortcomings of the Sharm El Sheikh Adaptation Agenda, particularly its silence on land rights despite their central importance in agriculture, water and ecosystems, irrigation, coastal protection, infrastructure development, and insurance schemes. He emphasized the need to engage farmers to understand their preferences regarding land rights to enhance farming outputs and emphasized the protection, restoration, and expansion of ecosystems. In summary, the session highlighted the proactive role of communities in environmental protection, the challenges faced in coastal regions due to climate change, the importance of soil protection and restoration for food security, and the significance of land rights in adaptation agendas. These insights emphasize the need for community-led initiatives, nature-based solutions, sustainable agricultural practices, and inclusive decision-making processes.

## Towards new models of knowledge exchange for sustainability transformations: A multi-sited dialogue



*The panelists of Towards new models of knowledge exchange for sustainability transformations: A multi-sited dialogue session*

**Host:** The Leadership & Learning for Sustainability, McGill University Adaptation Futures 2023

**Moderator:** Ying-Syuan (Elaine) Huang

**Session Speakers:**

1. Ying-Syuan (Elaine) Huang, The Leadership & Learning for Sustainability Lab, Adaptation Futures 2023
2. Dr. Blane Harvey (Speaker) McGill, Assistant Professor

**Speaker 1: Ying-Syuan (Elaine) Huang**

1. Discusses the three main big principles on Knowledge Exchange that are - Equity and Inclusion (Access to and representation in both process and content for all), Impact in Climate (Generate outcomes at individual and collective levels that enhance our ability to act) and Sustainability (Limits the ecological burden produced by the exchange).
2. An opportunity to reimagine our knowledge mobilization modalities and practices (research found a new way of being impactful and more sustainable during the pandemic). A design based research gives out the timeline of the research and identifies the good practices and the lessons learned. Talks about equity and

inclusion issues for traditional barriers (Cost, Travel, Language and Accessibility) and for virtual barriers (Connectivity / Tech Challenges and Time privilege).

3. Most people think conference participation is important for professional career development/advancement. Sustainability concerns, air travel is a challenge. Carbon emissions are not a determining factor.

**Speaker 2: Dr. Blane Harvey**

1. Reflects on the model of conferencing and knowledge exchange, how these are impactful, exchangeable and equitable in the face of climate change most concerned about also the climate sustainability in mind.
2. Hands-on experience that could limit equity and inclusions. The only way to get funding support for participating in a conference and paying the fees was to get a travel grant and get a free enrollment in that process. Impact experience like entirely PowerPoint presentations that limits the ability of the learning.
3. Engagement of offline and online global conference experiences would be different, getting the best of both pathways of participation. The desire of wanting virtual conferences, the barriers to planning these things are stuck in the revenue model, a creative revenue model would be a big win. Engagement participation, who joins in person and virtually is decided by the most important or privileged would join in person and people with lower status have to join virtually (happens mainly during senior to early career, global north to the global south and well-resourced and under-resourced).

**Three key takeaways from the end of the session:**

1. Existing memberships do not actually decide whether or not people should go to a conference, it needs a sense of community and what it means for a sustainability community to be good at.
2. Conferencing and knowledge exchange models need to be equitable, impactful, and sustainable, traditional funding models for conference participation may limit equity and inclusion, and limit the ability to learn.
3. Engaging both online and offline global conference experiences would be different, and a creative revenue model could help overcome the barriers.

### **Session Summary:**

Two presenters explored knowledge exchange and conferencing approaches throughout the event. Ying-Syuan (Elaine) Huang emphasized the significance of fairness and inclusion, climate effect, and sustainability in information exchange. She also underlined the importance of reimagining knowledge mobilization strategies and modalities in order to solve conventional and virtual access constraints. Dr. Blane Harvey discussed the constraints of conference funding mechanisms and how they hinder fairness and inclusion, as well as the disparities in involvement between online and offline conferences. The need for equitable, impactful, and sustainable conferencing and knowledge exchange models, the importance of a sense of community in deciding whether or not to attend conferences, and the potential of a creative revenue model to overcome barriers to participation are among the key takeaways from the session.



## Managing heat in the urban environment in a warming world



*The panelists of the managing heat in the urban environment in a warming world session*

**Host:** National Climate Change Adaptation Research Facility

**Moderator:** Prof. Jean Palutikof, Griffith University, Queensland, Australia

**Session Speakers:**

1. Professor Jean Palutikof, Founding Director, National Climate Adaptation Research Facility and Adjunct Professor, Griffith University, Australia
2. Dr Tania Sharmin, Senior Lecturer (Associate Professor), Sustainable Environment Design in Architecture, Welsh School of Architecture, Cardiff University
3. Professor Ashik Joarder, Professor of Environment and Energy, Department of Architecture BUET
4. Sajal Chowdhury, Assistant Professor at the Chittagong University of Engineering and Technology CUET
5. Dr Fahim Tonmoy, Deloitte, Australia

**Speaker 1: Professor Jean Palutikof**

1. The presentation looked at how passive cooling interventions can cool factory working environments in the context of the ready-made garment industry in Bangladesh.
2. The use of white roofs, green roofs and shading had been explored. All gave reductions in internal temperatures of around 2°C and concomitant reductions in the heat index. The *Shaded Roof* saw the ‘best’ reduction.
3. These building strategies will be insufficient in a future, warmer world. We need to look also at personal interventions, and combinations with existing

cooling methods such as extractor fans, as well as feasibility in terms of costs, how long they last, maintenance etc.

**Speaker 2: Dr Tania Sharmin**

1. Dr. Tania's study provides valuable insights into the urban microclimate of Dhaka by combining field measurements and remote sensing data. It has examined the land surface temperature (LST) and normalized difference vegetation index (NDVI) and their relation to urban heat island effect (UHI) to understand how the urban morphology contribute to temperature variations. The study has discussed urban morphology which refers to the spatial arrangement and characteristics of the urban form, including building density, street layout, and land use patterns, based on local climate zone (LCZ) classification developed by Stewart and Oke, 2012.
2. The findings show that LST and NDVI varied significantly across the LCZ classes. For built-up-LCZs, lower vegetation cover and higher building density showed higher LST. Natural-LCZs had lower LST than built-up-LCZs, except LCZ-16. High-density built-up areas showed more UHI, while LCZ-11 reported none. In addition, the results showed that LST and NDVI are significantly affected by the morphological/surface properties for each LCZ classes.
3. The analysis of LST, NDVI and their relationship to urban morphology as reported in her study can contribute to a better understanding of the urban heat island effect and inform strategies for sustainable urban development and climate resilience in Dhaka.

**Speaker 3: Professor Md. Ashikur Rahman Joarder**

1. Single and multi-objective optimization with daylighting and energy efficiency were done for an airconditioned factory building to achieve thermal comfort of the occupants without using air conditioning (AC) and to see the impact on greenhouse gas emissions.
2. Results showed that optimized options for daylighting and energy efficiency (without AC) could not achieve thermal comfort for the occupants without intervention in changing building materials. Energy optimized with changed

material option complies with both the ASHRAE and Bangladeshi (BNBC, 2020) standards of thermal comfort indices with a Predicted Percentage of Dissatisfaction (PPD) value of 9.1 % (below 10 %) and Percentage of Mean Vote (PMV) value of -0.04 to 0.63.

3. Analysis also showed that the incorporation of optimized design variables for the air-conditioned factory can reduce Energy Use Intensity (EUI) and CO<sub>2</sub> emissions nearly to 56 kWh/(m<sup>2</sup>yr) and 46 kgCO<sub>2</sub>e/(m<sup>2</sup>yr) respectively, and the incorporation of photovoltaic (PV) panels can turn the factory to a Net Zero Energy Buildings (NZEB).

#### **Speaker 4: Sajal Chowdhury**

1. Because of land shortages in metropolitan areas, vertical expansion of high-density housing development in Dhaka has increased exponentially in recent years.
2. In urban buildings, middle- and lower-middle-income families usually live in small domestic dwelling spaces where only physical features such as room sizes and configurations are considered when designing the architectural spaces. Such a limited design approach may not adequately address mental well-being.
3. In architectural design decisions, environmental design solutions may not enhance occupants' well-being without a clear perception of their domestic experiences. It is, therefore, necessary to conduct pragmatic studies of domestic environmental experiences to explore the 'Environmental Experiences Design (EXD)' methodology for middle-income occupants in Bangladesh.

#### **Speaker 5: Dr Fahim Tonmoy**

1. Since 1900 heatwaves have killed more Australian compared to all natural hazards combined. Global warming due to climate change and rapid urbanisation are making things worse in cities. Therefore, managing urban heat is critical.
2. There is no 'silver bullet' of heat management and a suit of options including public awareness, urban greening, smart urban design, and innovative engineering solution should be implemented. To manage urban heat, an 'evidence based' approach was used

by Australian Capital Territory (ACT) Government where a new precinct development needed to demonstrate through a microclimate simulation that ‘no new heat’ will be added if the precinct development goes ahead.

3. To support this new precinct design in ACT, advanced simulation techniques were used in this study to design an optimum arrangement of heat mitigation for the new precinct using a suit of options e.g., tree canopy, cool roof, cool pavement, rain gardens, green roofs etc.

### **Three key takeaways from the end of the session:**

1. Global warming intensifies the need to cool indoor and outdoor environments to maintain thermal comfort, while reducing reliance on energy-intensive strategies that increase greenhouse gas emissions.
2. In the search for effective passive cooling strategies, there is no single ‘silver bullet’. Climate resilience can only be achieved by using a suite of options combining building-level interventions such as shading with individual-level interventions such as personal fans. Highest energy efficiencies are achieved by changing building materials and incorporating photovoltaic panels.
3. In the search for climate resilience, it is important not to ensure that physical and mental well-being are maintained, for example in high-rise, high-density housing developments.

### **Session Summary:**

The session on "Managing heat in the urban environment in a warming world" focused on various aspects of heat management, including passive cooling methods, urban microclimates, energy management, sustainability, and evidence-based approaches to managing urban heat issues. The speakers highlighted the importance of sustainable passive cooling methods that are feasible in terms of cost and durability. They also stressed the need to understand urban microclimates and how the design of cities can impact urban heating. The session also covered energy management and sustainability in RMG factory buildings, with a focus on incorporating passive design to convert them into zero energy buildings. The speakers also discussed the importance of incorporating better design ideas in buildings

to promote better ventilation and air circulation. Another important topic discussed was evidence-based approaches to managing urban heat issues. The speakers highlighted the need to focus on evidence-based terms and use microclimate simulations to understand temperature distribution around the study area. Overall, the session provided valuable insights into managing heat in the urban environment, and the speakers emphasized the need to adopt sustainable and evidence-based approaches to tackle this issue.



## Climate information services for resilient food systems in the Asian Mega Delta



*The panelists of climate information services for resilient food systems in the Asian Mega Delta session*

**Host:** WorldFish-CGIAR, CIMMYT, International Research Institute for Climate and Society (IRI), Solidaridad Network Asia

**Moderator:** Dr. Peerzadi Rumana Hossain, Scientist-Climate Change, WorldFish-CGIAR

### **Session Speakers:**

1. Peerzadi Rumana Hossain PhD, Scientist, WorldFish
2. T.S Amjath Babu, PhD Agricultural Economist (Modelling and Targeting), CIMMYT
3. Drew Resnick (They/ he), Staff Associate I, The Earth Institute, Columbia University
4. Shammunul Islam, Adjunct Faculty, Institute of Remote sensing and GIS, Jahangirnagar University
5. Utpal Kumar PhD, Manager-IWRM for CSA, Solidaridad Network Asia

### **Speaker 1: Peerzadi Rumana Hossain PhD**

1. Talks about climate challenges, risk, food security and livelihood of millions affected in Bangladesh. Shares how building resilience can help achieve sustainable development.
2. Aquatic foods have a naturally low carbon footprint making them a key food solution adding resilience to communities struck by climate change and providing for their sustainable nutrition and livelihood. Bangladesh is exceptionally vulnerable

to climate change due to its low elevation and high population density. It has been estimated by 2050 one in every seven people will be displaced by climate change.

3. Small scaled aquatic food producers can be empowered to adapt, adequately manage climate stresses and offset climate impacts. WorldFish is developing climate smart for fishers and farmers to cope with climate change threats. Research conducted by WorldFish and partners mapped out 7 key sustainable factors in aquaculture that directly benefit from climate information services.

**Speaker 2: T.S Amjath Babu**

1. CIGAR initiative on securing the Food Systems of Asian Mega Deltas for Climate (AMD) and Livelihood Resilience. The goal is promoting resilient, inclusive and productive Asian Deltas. The AMD initiative focuses on three main deltas in Asia, such as Ganges-Brahmaputra Delta in Bangladesh and India.
2. Reduce climate risks among stakeholders (including women and youth) and facilitate investment in deltaic value chains through digital climate advisory and complementary services. Reduce risks in specific delta oriented value chains through support and (co) development of inclusive digital products and services. Support scaling of inclusive DCAS+ (sustainable financing models and partnerships)
3. Identifying potential climate impacts based on frequency and severity.

**Speaker 3: Drew Resnick**

1. There is a need for few available climate information services for adaptation at the farm level available for farmers. There is a need for forecasting tools which work for regions where easily available, high quality weather and climate data may not be available.
2. Three sources of climate information that could be relevant for decision making at the farm level are Seasonal forecasts of the expected frequency of extreme events (hot or cold spells), Subseasonal forecasts of those same extreme events (e.g. likelihood of extreme events in the next 2-4) weeks, Weather forecasts (e.g. likelihood of extreme events in the next 2-7 days).
3. Application of tertile based seasonal technique might prove to be more effective in regions where there is higher variation in the min/max of relevant meteorological parameters.

A person wearing a light-colored shirt and a head covering is bent over in a field, working with rice plants. The background is a soft-focus green field.

#### **Speaker 4: Shammunul Islam**

1. Bangladesh doesn't have historical data on aquaculture loss due to climate variability and extreme climate events. This will foster awareness of an increase in the use of CIS (climate information service), and help in enhancing the value and efficiency in CIS.
2. Available scientific forecasts shared through weekly interactions and social media have led to significant behavioral changes of farmers followed by training and capacity building at the farmer field school.
3. Climate Smart Farming Decisions improved food production through better management of agricultural, aquaculture and livestock.

#### **Three key takeaways from the end of the session:**

1. Small-scale farmers, being the most climate vulnerable group, are especially in need of Climate Information Services (CIS) as it can help them to take early actions and ensure financial benefits.
2. Digital CIS can be a powerful tool for women and youth to lead the change on issues that affect them, therefore, capacity building is similarly crucial. IoT or automated data input systems to advance climate information services and make the developed digital systems sustainable.
3. We need to harmonize the food system relevant policy instruments with recent short-med-long term adaptation and prosperity plans which very precisely have reflected the climate risks for food systems.



## Session Summary:

Using Climate Information Services (CIS) to manage climate risk is essential, especially for small-scale farmers who are the most susceptible population. Farmers can invest in climate-resilient technologies and practices to prepare for climate shocks and can also benefit from access to financial services like finance, insurance, and savings. Bundled business models can enhance the delivery of CIS at scale, by combining different services and tailoring them to the specific needs of farmers. This approach can increase the adoption and sustainability of CIS.

CIS can also be a gender-inclusive innovation, as it can provide women and youth with access to information and resources that can empower them to take action on climate issues. Capacity building is crucial to ensure that all stakeholders, including women and youth, can benefit from CIS, farmers. This approach can increase the adoption and sustainability of CIS. The influence of CIS is shown in the potential annual economic value generation of up to \$14 million. Aquaculture CIS can mitigate up to 10% of the harm brought on by climate threats, demonstrating its potential to promote both economic growth and climate resilience. IoT or automated data entry systems that can gather and analyze climatic data in real-time are required to progress CIS. As a result, CIS may become more accurate and timely, increasing its relevance and applicability to farmers. In order to de-risk food systems and align with medium- to long-term adaptation and prosperity strategies, policy instruments should also be jointly developed. In addition to tackling the climate risks affecting food systems, this can foster shared prosperity and resilience. Overall, promoting CIS and controlling climate risks in agriculture require the use of bundled business models, gender-inclusive methods, IoT, and policy co-creation.

## Climate Change Management in Chattagram Hill Tracts and Scope for LLA



*The panelist of Climate Change Management in Chittagong/Chattagram Hill Tracts (CHT) and Scopes for LLA session*

**Host:** International Centre for Climate Change and Development (ICCCAD)  
Community Resource Development Centre (CRDB)

**Moderator:** Afsara Binte Mirza, Junior Research Officer, International Centre for Climate Change and Development (ICCCAD)

**Session Speakers:**

1. Daw Ki Prue Marma; Assistant coordinator, CRDC: Community Resource Development Center
2. Alpan Chakma; Director of Project and research, CRDC: Community Resource Development Center
3. Hla Thoiaching Marma; Founder and CEO, CRDC: Community Resource Development Center
4. Afsara Binte Mirza; Junior Research Officer, International Centre for Climate Change and Development (ICCCAD)
5. Savio Rousseau Rozario; Programme Coordinator, LLA Programme, International Centre for Climate Change and Development (ICCCAD)

**Speaker 1: Savio Rousseau Rozario**

1. Chittagong hill tract comprises a very unique topography with scenic mountains, enriched with biodiversity and also a major carbon sink for Bangladesh. The topography helps to contain the harmony between nature and people.
2. However, climate change is impacting the lives and livelihood of local communities by accelerating the frequency of rainfall and prolonged drought. This is causing problems in agricultural production and harming the entire ecosystem.
3. Therefore, CRDC has been working locally for a while to improve the local community's capacity on climate change impacts and climate change adaptation.

Recently, the LLA team at ICCCAD had the chance to work with these local communities in CHT and discovered that ‘LLA’ may be a successful project to deal with the problems brought on by climate change.

### **Speaker 2: Daw Ki Prue Marma**

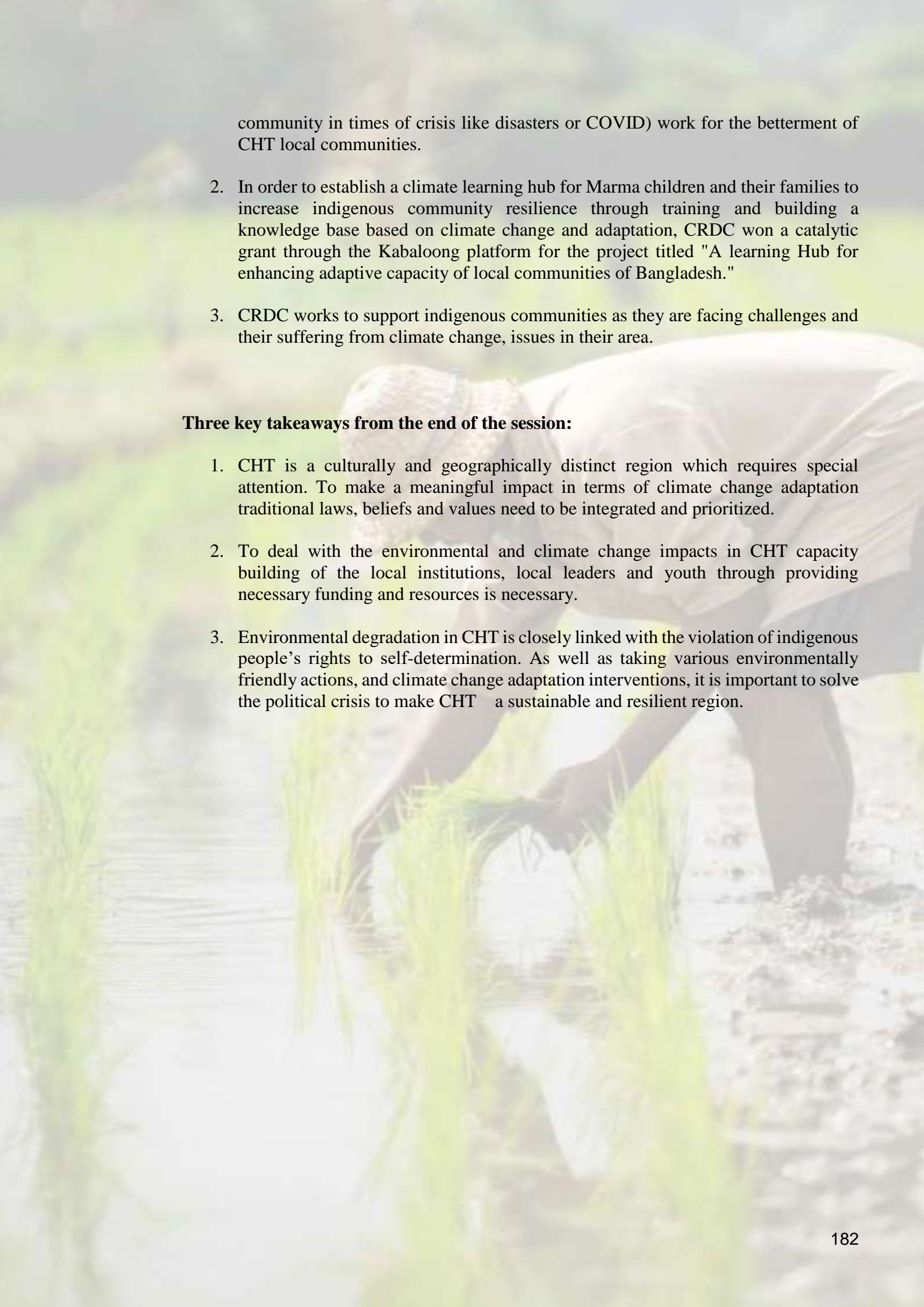
1. Chittagong hill tracts is an area in the southeastern part of Bangladesh consisting of three districts Rangamatia, Bandarban and Khagrachari. Geographically and culturally distinct from the rest of the parts of Bangladesh. CHT is home to the fifteen indigenous communities.
2. Over the past few decades, the ecosystem around CHT has degraded quickly. The climate in CHT has changed substantially, the area is losing biodiversity, the trees there are being destroyed, and the hill streams are drying up.
3. Unplanned development, a lack of integration with development planning, infringement on indigenous people's land rights, illegal stone lifting for brick fields, deforestation, including unrestricted timber extraction, jhum cultivation, etc. are some of the causes of this environmental degradation in CHT. By clearing the natural woods, the companies in charge of the timber plantations violate the rights of indigenous groups and seriously harm biodiversity.

### **Speaker 3: Alpan Chakma**

1. Adaptation Climate change practices in CHT are applied to the food & agricultural and water crises sectors. Locals dig deep tube wells, install water storage tanks, collect rainwater, and other measures that require sufficient funding in order to address the water shortage that primarily affects the summer. Due to climate change, traditional agricultural practices have changed, such as switching from agro-biodiversity to monoculture and switching from rice crops to cash crops. Which is resulting in the extinction of local crop varieties.
2. To protect the locals and the environment in CHT, local indigenous leaders are implementing a variety of climate change adaptation techniques which includes the traditional method of environmental management used in the Mouja Reserve. It is a local effort and is neither supervised nor overseen by the forest department.
3. LLA can be included into CHT in a number of different ways. By enhancing local institutions, such as the traditional management system and grass-roots organizations, investing in local resources like CRDC to ensure implementation, mobilizing funds for adaptation in various sectors (such as water management, conservation, food and agriculture, and knowledge dissemination), and building capacity by involving and energizing the local youth and, of course, various stakeholders while also securing the necessary funds for adaptation.

### **Speaker 4: Hla Thoiaching Marma**

1. There are two platforms for CRDC. Both Kabaloong (which promotes environmental and climate change development) and Helping Hand (which engages in social work by, among other things, educating locals or assisting the indigenous



community in times of crisis like disasters or COVID) work for the betterment of CHT local communities.

2. In order to establish a climate learning hub for Marma children and their families to increase indigenous community resilience through training and building a knowledge base based on climate change and adaptation, CRDC won a catalytic grant through the Kabaloong platform for the project titled "A learning Hub for enhancing adaptive capacity of local communities of Bangladesh."
3. CRDC works to support indigenous communities as they are facing challenges and their suffering from climate change, issues in their area.

**Three key takeaways from the end of the session:**

1. CHT is a culturally and geographically distinct region which requires special attention. To make a meaningful impact in terms of climate change adaptation traditional laws, beliefs and values need to be integrated and prioritized.
2. To deal with the environmental and climate change impacts in CHT capacity building of the local institutions, local leaders and youth through providing necessary funding and resources is necessary.
3. Environmental degradation in CHT is closely linked with the violation of indigenous people's rights to self-determination. As well as taking various environmentally friendly actions, and climate change adaptation interventions, it is important to solve the political crisis to make CHT a sustainable and resilient region.

### **Session Summary:**

The Chittagong Hill Tracts is situated in the Southeastern region of Bangladesh, which is home to more than fifteen different indigenous communities. The CHT is a unique geographical area of Bangladesh with high altitudes enriched with biodiversity and culture. The indigenous communities living in the remote areas of CHT share a close bond with nature to ensure their livelihood. However, the impacts of climate change in forms of erratic precipitation, prolonged drought, excessive heat and arid conditions have impacted their rain-fed agricultural practices, hampering their income, cultural practices, and overall well-being. Considering such a scenario, some development and adaptation initiatives are undertaken by the local government, private sectors and foreign entities. However, oftentimes this initiative is not adequate and fails to address the real threats and challenges. Hence, to understand the local context it becomes important to engage the local communities in the decision making and planning process. Therefore, to enhance the local community's capacity on climate change impacts and climate change adaptation CRDC have been working for some time at the local level. Recently, ICCCAD's LLA team got an opportunity to work with these local communities in CHT and found that 'LLA' could be an effective initiative to address the challenges resulting from climate change. Therefore, ICCCAD's LLA team and CRDC joined hands together to carry the work forward.

## Evidence based loss and damage approach to understand changing climate



*The panelists of the session of evidence based loss and damage approach to understand changing climate session*

**Host:** ICCCAD, Irish Aid, GRP

**Moderator:** Sumaiya Binte Selim, ICCCAD

**Session Speakers:**

1. Shah A. A, Sr. Assistant Professor of Structural Geology, Department of Geosciences, University of Brunei Darussalam
2. Binod Prasad Parajuli
3. Dr. Md Abdur Rakib, Department of Disaster Management, Begum Rokeya University, Rangpur
4. Dr. Saleemul Huq, Director, International Centre for Climate Change and Development

**Speaker 1: Shah A. A**

1. It is important to map loss and damage so that the funds coming into the loss and damage fund can be used for developing countries that cannot afford it. India is a big country with billions of people and it has more challenges. In India there were existing adaptation and mitigation frameworks but not loss and damage because it was all coming from the top, it was not a bottom-up approach.
2. The National Adaptation Fund for Climate Change (NAFCC) is being implemented in India. Disaster risk reduction measures are being taken for adaptation and mitigation. There is the National Disaster Management Authority (NDMA) which aims to ensure a swift and strategic response to disaster management. There are climate risk insurance schemes, examples include the Pradhan Mantri Fasal Bima Yojana (PMFBY) which is given to farmers for their losses due to natural disasters

such as floods and droughts. But farmers are not using this insurance, which we need to worry about.

3. A robust mechanism to estimate losses and damages is non-existent in India, where most sectors are informal. The existing mechanism primarily evaluates the cost of major damages such as crops, cattle, and loss of life without long-term planning of economic, social, and other indicators that would help communities rebound. The studies on losses and damages are also limited and most of them are economic losses and damages associated with cyclones and floods. Slow-onset-disaster events such as droughts, which occur over time, are not usually covered as economic losses and damages but should ideally be part of economic and non-economic losses and damages.

**Speaker 2: Binod Prasad Parajuli**

1. Bhutan, Nepal and Pakistan are South Asian countries for their diverse topography, biological and cultural diversity. These countries are frequently impacted by climate related extreme events, having significant consequences on the people and economy. Floods and landslides are the scantly hazards experienced each year, especially during the monsoon. Pakistan and Nepal were respectively ranked eighth and tenth most affected countries due to extreme weather events between 2000 and 2019. These events have varying societal impacts on different groups of people based on their age, gender, social capital and economic status. Yet, the majority of people live in high-risk regions with poor infrastructure and warning systems, low literacy rates and high levels of poverty.
2. Loss and damage, relatively new concepts for communities; concept is defined from a hazard and disaster risk perspective, emphasizing one-time events only. Risk perception differs by gender, income level, occupation, and spatial and temporal representation of the population. Perception is significantly influenced by historical events and immediate impacts of climate change, such as damage due to flooding, landslides, fires etc. Considerably low awareness regarding slow-onset hazards such as drought which could have a great cultural, environmental, and economic impact.
3. Flood-affected communities have modified and improved the housing structure by raising the height of the structure from the ground. Important documents and foods are stored in relatively high places so that they are comparatively protected during flooding time. Communities take preparedness measures based on the early warning messages received from upstream communities and the government. Construction of embankment, biodykes, and bio-engineering to divert the water and prevent it from entering the villages are also practiced. Some communities have organized themselves in disaster management groups and actively take part in training, mock drills and response exercises.

### **Speaker 3: Dr. Md. Abdur Rakib**

1. In this context, three case studies are presented to showcase the vulnerability of different countries to climate change. The first case study is Bangladesh, which is a deltaic country primarily affected by flooding, cyclones, riverbank erosion, cyclones, and storm surges. Bangladesh has been severely impacted by the cyclones and floods. Stakeholder interviews reveal that climate variability, increased frequency and magnitudes of cyclones, increased salinity intrusions, and health problems among the people are some of the main concerns. Multi-hazards increase vulnerability in several ways, highlighting the need for adaptation measures.
2. The second case study is Sri Lanka, which is an island nation highly vulnerable to flooding, beach erosion, cyclones, droughts, and landslides. Sri Lanka was severely affected by the tsunami. Expert interviews reveal that climate variability, flooding issues, drought, agriculture damage, livelihood loss, and increased migration tendency due to cyclones, flooding, and droughts are some of the significant challenges faced by the country.
3. The third case study is the Maldives, another island nation vulnerable to beach erosion, flooding, strong winds, and storms. The Maldives were severely damaged by the tsunami. Expert interviews reveal that high tide flooding, saltwater intrusions, agricultural damages, livelihood loss, under the risk of inundation problems due to sea level rise, and increased displacement or migration problems (e.g., inter-atolls) are some of the challenges faced by the Maldives. Moreover, the study shows that climate variabilities, uncertainties in knowledge, adaptation failure, and increased losses and damage over time are the main challenges.

### **Speaker 4: Dr. Saleemul Huq**

1. Loss and damage is relevant because as we are reaching the limits of adaptation and impacts are happening, we are moving from adaptation to loss and damage. In the context of locally led adaptation, we are moving to local led loss and damage. So, there is a logic to this progression and connection. Going forward, we will be thinking about how we combine loss and damage into the community on this issue.
2. Creating a forum on loss and damage is to allow individuals who are sharing information and learning at the same time. The journey of tackling loss and damage is just beginning. We are all at an early stage and we need to share and learn from each other.

### **Three key takeaways from the end of the session:**

1. There is a need for a robust mechanism to estimate losses and damages in India, especially for slow-onset-disaster events. Disaster risk reduction measures are being taken for adaptation and mitigation, but farmers are not using climate risk insurance schemes.
2. Loss and damage are relatively new concepts for communities, and perception is significantly influenced by historical events and immediate impacts of climate



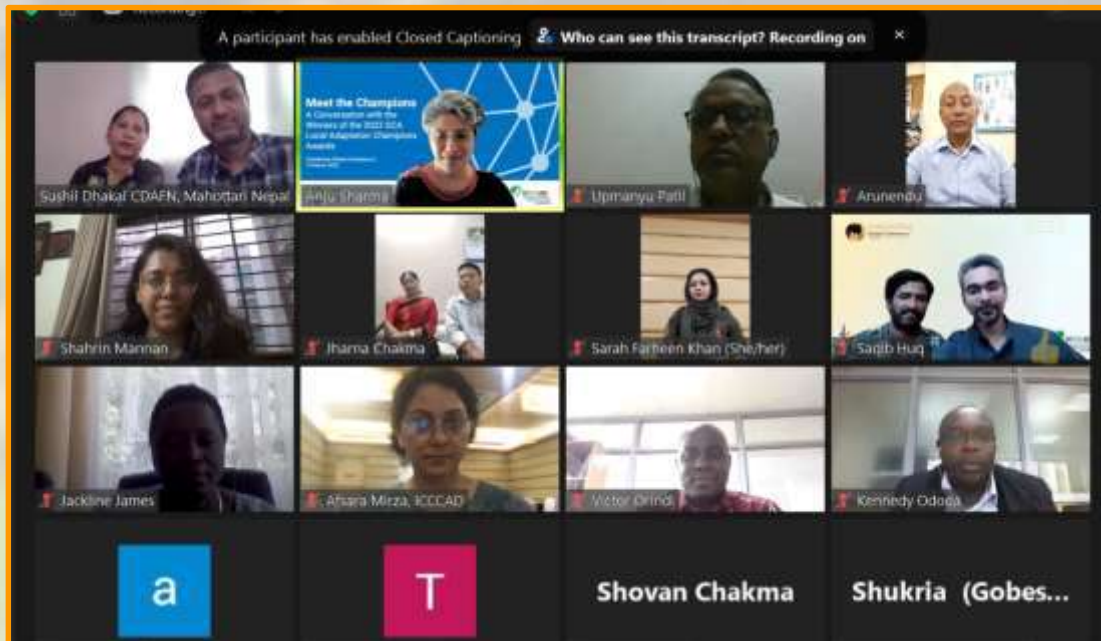
change. Preparedness measures are taken by communities, including modified housing structures, early warning messages, and disaster management groups.

3. The progression from adaptation to loss and damage requires locally led loss and damage. Creating a forum on loss and damage is essential for addressing this issue in the community.

**Session Summary:**

The first speaker discusses India's existing adaptation and mitigation frameworks and how there is a lack of a mechanism to estimate losses and damages. The second speaker talks about the perceptions of loss and damage in Bhutan, Nepal, and Pakistan, and how communities take preparedness measures. The third speaker presents case studies of Bangladesh, Sri Lanka, and the Maldives, highlighting their vulnerabilities to climate change and the need for adaptation measures. The final speaker discusses the relevance of loss and damage in the context of locally led adaptation and the need to create a forum on loss and damage.

## Lessons from Mukuru: Building climate resilience in urban informal settlements



*The panelists of the session of lessons from Mukuru: Building climate resilience in urban informal settlements session*

**Host:** Global Center on Adapt- Lessons from Mukuru

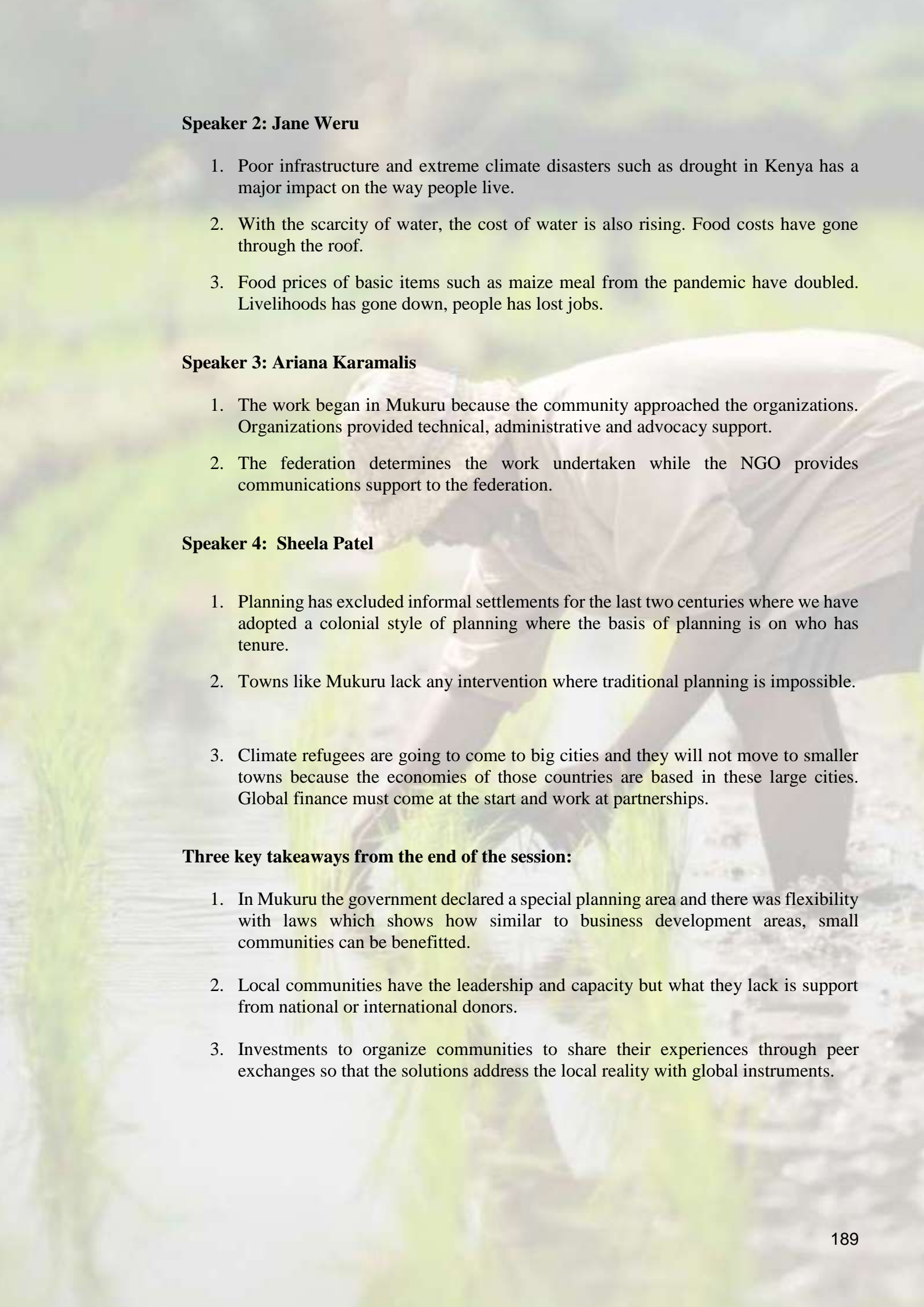
**Moderator:** Anju Sharma, Global Lead, Locally Led Adaptation

**Session Speakers:**

1. Anju Sharma, Global Lead, Locally Led Adaptation
2. Jane Weru, Executive Director, AMT
3. Ariana Karamalis, SDI, South Africa
4. Sheela Patel, Director, SPARC, India

**Speaker 1: Anju Sharma**

1. The locally led adaptation hub was established to find the best practices for climate resilience for cities around the world. Mukuru is a city in Nairobi, Kenya that is vulnerable to climate change. The Mukuru approach has taught us that improving climate resilience in informal settlements requires key strategies.
2. The first strategy is giving local residents the power to make decisions. The second strategy is a genuine partnership between government, residents, civil society and academia. Residents know best what problems they face and their relative priorities and what solutions will best serve them.
3. The third strategy is rethinking conventional planning approaches and legislation to confront the vulnerability and scarcity in informal settlements. The fourth strategy is recognizing the multisectoral challenges faced in informal settlements



**Speaker 2: Jane Weru**

1. Poor infrastructure and extreme climate disasters such as drought in Kenya has a major impact on the way people live.
2. With the scarcity of water, the cost of water is also rising. Food costs have gone through the roof.
3. Food prices of basic items such as maize meal from the pandemic have doubled. Livelihoods has gone down, people has lost jobs.

**Speaker 3: Ariana Karamalis**

1. The work began in Mukuru because the community approached the organizations. Organizations provided technical, administrative and advocacy support.
2. The federation determines the work undertaken while the NGO provides communications support to the federation.

**Speaker 4: Sheela Patel**

1. Planning has excluded informal settlements for the last two centuries where we have adopted a colonial style of planning where the basis of planning is on who has tenure.
2. Towns like Mukuru lack any intervention where traditional planning is impossible.
3. Climate refugees are going to come to big cities and they will not move to smaller towns because the economies of those countries are based in these large cities. Global finance must come at the start and work at partnerships.

**Three key takeaways from the end of the session:**

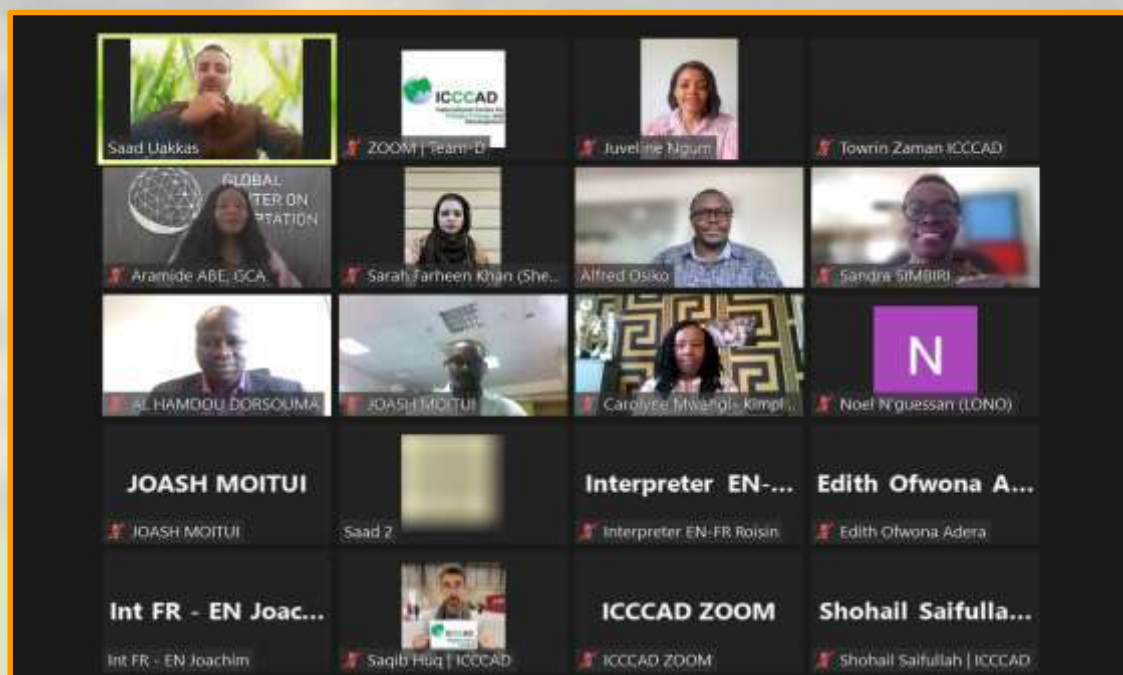
1. In Mukuru the government declared a special planning area and there was flexibility with laws which shows how similar to business development areas, small communities can be benefitted.
2. Local communities have the leadership and capacity but what they lack is support from national or international donors.
3. Investments to organize communities to share their experiences through peer exchanges so that the solutions address the local reality with global instruments.

**Session Summary:**

The city of Mukuru in Nairobi, Kenya is a great example of a community working towards climate resilience. Mukuru had a dense settlement with poor infrastructure. One major challenge of sustainability is clean water and sanitation infrastructure. With the partnership from the government, residents, civil society and academia, Mukuru was able to build itself into a resilient community. In Mukuru, the power was given to the people to make decisions. Priorities need to be given to problems before finding a solution.



## Scaling Up Youth-led Adaptation Technology Solutions in Africa



*The panelists of the session scaling up youth led adaptation technology solutions in Africa session*

**Host:** African Development Bank (AfDB), Global Center on Adaptation (GCA) and International Centre for Climate Change and Development (ICCCAD)

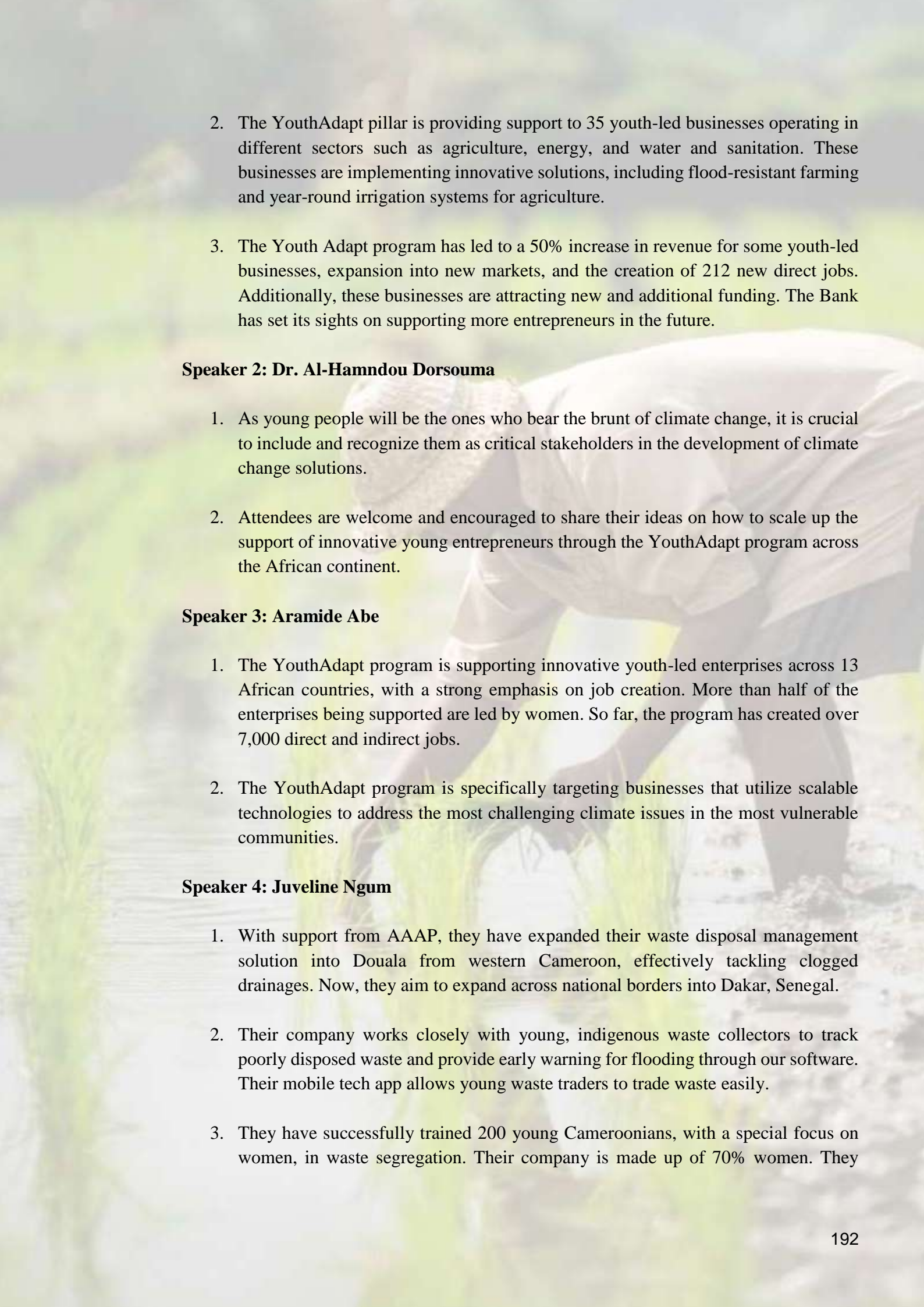
**Moderator:** Joash Moitui, Communications and Knowledge Management Specialist, Africa Adaptation Acceleration Program

### **Session Speakers:**

1. Dr. Kevin Kariuki, Vice President for Power, Energy, Climate & Green Growth, African Development Bank
2. Dr. Al-Hamndou Dorsouma, Manager for Climate and Green Growth Division, African Development Bank
3. Aramide Abe, Program Lead, Youth Jobs and Entrepreneurship, Global center on Adaptation
4. Juveline Ngum, Bleagle Waste Management Limited, Cameroon
5. Carolyn Mukuhi Mwangi, Kimplanter Seedling and Nurseries Limited, Kenya
6. NOËL N'GUESSAN, CEO – LONO Côte D'ivoire
7. SANDRA SIMBIRI, Program Specialist Generation Unlimited, UNICEF, Kenya
8. ALFRED ASIKO, Senior Market Engagement Manager for the ClimateTech Programme, GSMA
9. EDITH OFWONA ADERA, AAAP Coordinator, African Development Bank

### **Speaker 1: Dr. Kevin Kariuki**

1. The African Development Bank has invested more than \$25 billion in 469 projects since adopting its Jobs for Youth in Africa Strategy (2016–2025). These projects aim to equip the youth with skills, entrepreneurship opportunities, and job creation prospects.

- 
2. The YouthAdapt pillar is providing support to 35 youth-led businesses operating in different sectors such as agriculture, energy, and water and sanitation. These businesses are implementing innovative solutions, including flood-resistant farming and year-round irrigation systems for agriculture.
  3. The Youth Adapt program has led to a 50% increase in revenue for some youth-led businesses, expansion into new markets, and the creation of 212 new direct jobs. Additionally, these businesses are attracting new and additional funding. The Bank has set its sights on supporting more entrepreneurs in the future.

**Speaker 2: Dr. Al-Hamndou Dorsouma**

1. As young people will be the ones who bear the brunt of climate change, it is crucial to include and recognize them as critical stakeholders in the development of climate change solutions.
2. Attendees are welcome and encouraged to share their ideas on how to scale up the support of innovative young entrepreneurs through the YouthAdapt program across the African continent.

**Speaker 3: Aramide Abe**

1. The YouthAdapt program is supporting innovative youth-led enterprises across 13 African countries, with a strong emphasis on job creation. More than half of the enterprises being supported are led by women. So far, the program has created over 7,000 direct and indirect jobs.
2. The YouthAdapt program is specifically targeting businesses that utilize scalable technologies to address the most challenging climate issues in the most vulnerable communities.

**Speaker 4: Juveline Ngum**

1. With support from AAAP, they have expanded their waste disposal management solution into Douala from western Cameroon, effectively tackling clogged drainages. Now, they aim to expand across national borders into Dakar, Senegal.
2. Their company works closely with young, indigenous waste collectors to track poorly disposed waste and provide early warning for flooding through our software. Their mobile tech app allows young waste traders to trade waste easily.
3. They have successfully trained 200 young Cameroonians, with a special focus on women, in waste segregation. Their company is made up of 70% women. They

require more international development partners to support AAAP in expanding its support to more youth-led businesses.

4. Their belief is that trash is treasure, and treasure is gold. The most significant challenge we face is accessing financing. They also need regulatory and enabling environment support, especially with the African Continental Free Trade Area (AfCFTA), as expanding into a new country can be challenging.

#### **Speaker 5: Carolyne Mukuhi Mwangi**

1. They are addressing reduced rainfall in Kenya by deploying drought-resistant seedlings. With strengthened research and increased seedling variety, they are increasing food production and creating jobs on the ground. They are also promoting youth participation in agriculture through training, including climate-smart irrigation techniques.
2. They are improving the quality of life of farmers – supporting 100 households to transform from kitchen garden farmers to smallholder farmers. They have expanded our revenue by 36% through new market entry in semi-arid regions with AAAP support in expanding our seedling varieties.
3. Their customer base has grown from 8,000 to 16,000 farmers. They have increased our staff from 17 to 32, all of whom are women or youth, and they are a women-led business. The YouthAdapt needs more collaboration with governments and other private sector entities to support more youth-led enterprises through YouthAdapt. Development partners need to invest in and be patient with youth-led businesses' investments.

#### **Speaker 6: NOËL N'GUESSAN**

1. Their focus is on developing business models that provide farmers with access to organic fertilizers. As part of the new cohort of YouthAdapt winners, they are excited to commence the mentorship and training programme. Successfully turning climate change solutions into profitable business models requires entrepreneurship training.
2. The cost of prototyping hardware equipment can be prohibitively high, resulting in lengthy project development cycles. Access to prototyping labs would be beneficial.
3. Providing financial management training to youth-led businesses is crucial to maximize the use of limited resources currently accessible by the businesses.



### **Speaker 7: Sandra Simbiri**

1. African youth require training on climate nomenclature to improve their participation in the climate space. Capacity-building on climate change frameworks and terminologies can reduce barriers to youth engagement in climate action. Affirmative action is needed to lower regulatory barriers to market entry.
2. Youth-led waste management businesses should be supported with safe working environments, including safety gear and access to safe working spaces.
3. Leveraging government structures to reach young entrepreneurs on the ground can be an effective approach.

### **Speaker 8: Alfred Asiko**

1. Their goal is to empower youth with knowledge of frontier technologies such as IoT, AI, and blockchain, and to help them apply these technologies in innovative ways to tackle climate challenges. By providing entry points for climate action, we reduce barriers for youth engagement in climate solutions.
2. Through their innovation fund, they offer grants to climate startups, with a focus on supporting resilient solutions that utilize frontier technologies. They also provide skills development and training to help entrepreneurs succeed in scaling their innovations.
3. Venture capital firms can play a critical role in supporting early-stage startups with scaling their climate innovations. They need to see more VCs stepping up and taking over from DFIs in providing financing and support to youth-led businesses.
4. Youth-led businesses face significant challenges in accessing finance, due to stringent requirements placed on them. DFIs should create facilities that simplify access to climate finance for youth-led businesses, reducing these barriers and enabling more young entrepreneurs to access the financing they need to make an impact.

### **Speaker 9: Edith Ofwona Adera**

1. The Bank is establishing a USD 500 million green financing facility specifically for small and medium-sized enterprises (SMEs) that will enhance and streamline access to climate finance for youth-led businesses.



2. The Bank is also collaborating with the Global Green Growth Institute (GGGI) to create an African green entrepreneurship index, which will annually evaluate and rank governments based on their enabling environment for green entrepreneurship.

### **Three key takeaways from the end of the session:**

1. Access to financing is crucial: we must create a customized financing facility specifically for innovative youth-led enterprises addressing challenging climate issues in vulnerable African communities. This facility should address the barriers to financing that are typically faced by young African entrepreneurs.
2. We must examine policy and regulatory hurdles to facilitate scaling of businesses at a national and even cross-border level.
3. It is essential to build infrastructure that meets the needs of youth entrepreneurs, such as shared innovation hubs and facilities, prototyping labs, and affordable access to data.

### **Session Summary:**

The "Scaling-up Youth-led Adaptation Technology Solutions in Africa" session at the 2023 Gobeshona Global Conference focused on the need to support youth-led enterprises in Africa that are addressing climate challenges in vulnerable communities. Participants discussed several important factors, including access to financing, creating an enabling environment, and building infrastructure to meet the needs of young entrepreneurs.

The session highlighted the importance of creating a customized financing facility for innovative youth-led enterprises, which would increase and simplify access to climate finance for these businesses. The African Development Bank is leading the way in this regard by developing a green financing facility for SMEs. Additionally, the Bank is in talks with the Global Green Growth Institute to develop an Africa green entrepreneurship index that ranks governments on a yearly basis on their enabling environment for youth-led businesses.

To facilitate the scaling of businesses at a national and cross-border level, it is essential to examine policy and regulatory barriers. The session emphasized the need to create an enabling environment that reduces regulatory barriers to market entry and examines policy hurdles to facilitate scaling of businesses. Lastly, participants discussed the importance of building infrastructure that meets the needs of youth entrepreneurs, such as shared innovation hubs and facilities, prototyping labs, and affordable access to data.

## Low carbon adaptation – solutions from Bangladesh



*The panelists of the session low carbon adaptation solutions from Bangladesh session*

**Host:** German Development Cooperation (GIZ)

**Moderator:** Mr. Florian Höllen, Head of Development Cooperation, Embassy of the Federal Republic of Germany in Dhaka

**Session Speakers:**

1. Dr. Md Saifur Rahman, Deputy Secretary, Ministry of Environment, Forest and Climate Change
2. Mr. Md Rayhan Shiddique, Project Director, Haor Flood Management and Livelihood Improvement Project (HFMLIP), Local Government Engineering Department (LGED), Ministry of Local Government, Rural Development and Cooperatives
3. Dr. Ing. Taibur Rahman, Joint Secretary, Director, Implementation Monitoring and Evaluation Division (IMED), Planning Commission, Ministry of Planning
4. Mr. Nafizur Rahman, Principal Research Officer, House and Building Research Institute (HBRI), Ministry of Public Works
5. Mr. Willem Gees, Managing Director, Eco Home Solutions
6. Ms. Salma Haque Santa, Architect, Studio 6

**Speaker 1: Dr. Md Saifur Rahman**

1. The speaker discusses the environmental issues caused by brick kilns in Bangladesh and the government's efforts to address these problems. Using vast amounts of agricultural soil, pollution from brick kilns is a significant concern. 92% of brick production uses traditional burning methods, contributing to environmental pollution.

2. The speaker highlights the government's efforts to address these issues, mentioning the 2013 Brick Manufacturing and Kiln Establishment Act, which was revised in 2019. This act provides a legal foundation to regulate brick production and reduce pollution. In 2019, the government issued a notification to stop using burning bricks by 2025 and increase energy-efficient brick usage to 100%.
3. However, the speaker acknowledges that progress has been slow due to the impact of COVID-19 on government projects. Various departments and actors are working together to implement these changes, but new targets and a revised roadmap may be necessary. The Ministry of Environment is currently working on an action plan to meet these targets.

**Speaker 2: Mr. Md Rayhan Shiddique**

1. The speaker, who works in the local government engineering department in Bangladesh, presents a solution to reduce carbon emissions and environmental degradation caused by the traditional brick manufacturing process in the country. The government has taken initiatives to replace traditional bricks with eco-friendly alternatives in various construction projects.
2. Bangladesh has a high population density and limited land. The traditional brick manufacturing process has detrimental effects on the environment, accounting for 20% of the country's total carbon emissions. The government introduced the 'Brick Production and Brick Field Establishment (Control) Act in 2013', which was revised in 2018. The act aims to replace traditional bricks with eco-friendly alternatives in construction projects by 2025.
3. The speaker highlights the use of eco-friendly bricks that are made from indigenous materials and have lower carbon emissions. A project called "Village Road Rehabilitation Project (VRRP)" has been initiated, constructing roads using eco-friendly bricks. LGD's Research and Innovation Cell works closely with the Housing and Building Research Institute (HBRI) to include alternative pavement sections and interlocking concrete block pavement in the road design manual.

**Speaker 3: Dr. Ing. Taibur Rahman**

1. The speaker discusses the need for sustainable procurement practices in public investment projects. Currently, the Bangladeshi government spends about \$25 billion on public investments, with procurement policies that prioritize the lowest cost tenders. This can lead to the use of materials that produce higher carbon emissions, as environmentally friendly options are not always considered.
2. The speaker mentions an upcoming sustainable public procurement policy, which will take into account eco-friendly materials and consider the life cycle cost of projects. With support from the World Bank and other organizations, the policy aims to make eco-friendly materials more attractive to private entrepreneurs by giving them additional scores during the tender process. This change could have a significant impact on the country's sustainability efforts and encourage the production of more environmentally friendly materials.

#### **Speaker 4: Mr. Nafizur Rahman**

1. The speaker presents their work at the Housing and Buildings Institute, an autonomous body established in 1975. The institute focuses on developing sustainable building materials and technologies, preparing policies related to housing and buildings, and providing capacity development programs. Their current focus is on eco block development, specifically hollow concrete blocks and autoclaved aerated concrete (AAC) blocks.
2. The speaker mentions the Prime Minister's directive to produce alternative bricks using indigenous materials, targeting a 100% transition to eco-friendly blocks by 2025. They have also been working on developing blocks from waste materials, like plastic and sludge, as well as finding ways to reuse fly ash from rice husks.
3. The institute has observed the performance of various innovative building materials, and their research has found that the new blocks have a long lifespan of up to 100 years. They are working on standardizing block production in all 64 districts of Bangladesh and converting traditional brick kilns to eco-friendly ones, which has a potential market of 700 million USD. Additionally, they have been successful in recycling demolished buildings into new blocks.
4. The speaker also mentions guidelines and policies that have been put in place to encourage the use of eco-friendly blocks in construction and the creation of a platform on their website for users to find relevant services, suppliers, and manufacturers. The institute aims to achieve the government's target of using eco-friendly blocks in all government buildings by 2025 and encourages private entities to adopt these sustainable materials.

#### **Speaker 5: Mr. Willem Gees**

1. The speaker discusses their company, which started in 2013 to build houses for low-income families in Bangladesh. They shifted to an ecological focus, developing Compressed Stabilized Earth Blocks (CSEBs) as an alternative to traditional bricks. They have built around 3,300 houses and imported machines from India and the Netherlands to produce the blocks.
2. The CSEBs have lower pollution and emissions compared to traditional bricks, and they provide better thermal insulation. However, the company faces challenges in convincing people to accept the new product, including the larger size of the blocks and misconceptions about cost and weight.
3. The speaker shares successful constructions using the blocks but highlights the need for government support to help promote the product. He suggests financial incentives, tax waivers on machinery, and carbon credit compensation as possible ways the government can assist. Additionally, getting their blocks accepted in public works projects would help in promoting their use.



**Speaker 6: Ms. Salma Haque Santa**

1. The speaker discusses their experience working with hollow blocks and bamboo in a pilot project focusing on sustainable and eco-friendly materials. They faced challenges, such as skepticism from the funding agency and local people, as well as technical issues with bamboo treatment. The speaker found that pre-planning was essential when working with hollow blocks, especially for electrical and plumbing work.
2. Despite initial resistance, workers eventually became more receptive to the materials after seeing the benefits, such as reduced construction time. However, there is a need for initiatives to make these materials more profitable for workers. The speaker emphasizes the importance of raising awareness by creating positive examples and time for people to accept new materials and techniques.

**Three key takeaways from the end of the session:**

1. We need to include the government procurement policy to use /implement the low Carbon Emission eco-brick and also need to consider eco-friendly products' life cycle cost instead of going for lowest priced products.
2. Policies need to include provisions of sustainable public procurement for all. Procurement channels and supply chains should also provide easy access to green materials.
3. We need to create public awareness among the government agencies, business bodies, mass people, and the media about the benefits and encourage the use of environment friendly materials for infrastructure.

### **Session Summary:**

The discussion revolved on the present and future potential of eco-bricks in Bangladesh and emphasized on inclusion of eco-bricks for public construction as low carbon emission construction materials. The panelists emphasized that ensuring easy access of sustainable construction materials in the procurement channel and supply chain could significantly reduce carbon emissions. They also called for wider awareness campaigns among government agencies, companies, people, and media to promote eco-bricks as a means of reducing carbon emissions and mitigating the adverse effects of climate change. The participants also stressed the importance of considering the life cycle cost of eco-bricks in the procurement process.

The session was moderated by Mr. Florian Höllen, Head of Development Cooperation, Embassy of the Federal Republic of Germany in Dhaka. In concluding remarks he says, “Climate change adaptation needs massive infrastructure investments. But building these infrastructure should not further accelerate climate change by using fired clay bricks. Compressed stabilized earth blocks offer an alternative and bring adaptation and mitigation together”.

## Building preparedness for hydrological extremes



*The panelists of the Building preparedness for hydrological extremes session*

**Host:** IDS- Building preparedness

**Moderator:** Shilpi Srivastava, Research Fellow

**Session Speakers:**

1. Tom Ainsworth, Principal Lecturer
2. Shibaji Bose, Visual Research Methods and Independent Consultant
3. Megha Sheth, Research Officer
4. Vinitha Bachina, Research Officer
5. Lyla Mehta, Professor (Discussant)
6. Mihir R. Bhatt, Director (Discussant)
7. Lars Otto Ness, Resource Politics and Environmental Change Cluster Lead (Discussant)

**Speaker 1: Tom Ainsworth**

1. Maintain the uncertainty and complexity in the field, without watering down the nuances for convenience.
2. There must be a conscious motivation to draw complexity back into research. Consider how we conceive and recognize challenges and the extent to which we have agency.
3. Solutions cannot be predetermined, and it needs active and responsible engagement from researchers.



**Speaker 2: Shibaji Bose & Megha Sheth**

1. 'Letting go' of researcher control, and allowing the community to inform our definitions and reframe the questions we ask.
2. Co-creation of the evidence with other disciplines.
3. Revisiting and reframing traditional data collection methods.

**Speaker 3: Vinitha Bachina & Megha Sheth**

1. Positioning women's perspectives to build preparedness/responses to extreme weather events is absolutely essential as their experiences are often invisible & undocumented.
2. Landless women earn a livelihood through the 'bhaag' system – but this means that they have no claim on the lands they work on and are not eligible for relief measures.
3. Relief measures/preparedness needs to be socially inclusive and center the experiences of local communities and not be triggered by arbitrary rules.

**Three key takeaways from the end of the session:**

1. It is important to target the structural drivers of vulnerability for effective long-term preparedness.
2. Top-down solutions have limitations because they overlook the invisible and daily stressors that compound impacts from hydro climatic extremes.
3. Loss and damage discussions need to go beyond an event-focused lens and look at the daily experiences of erosion, losses, and drudgery that vulnerable communities are exposed to on a continuous basis.

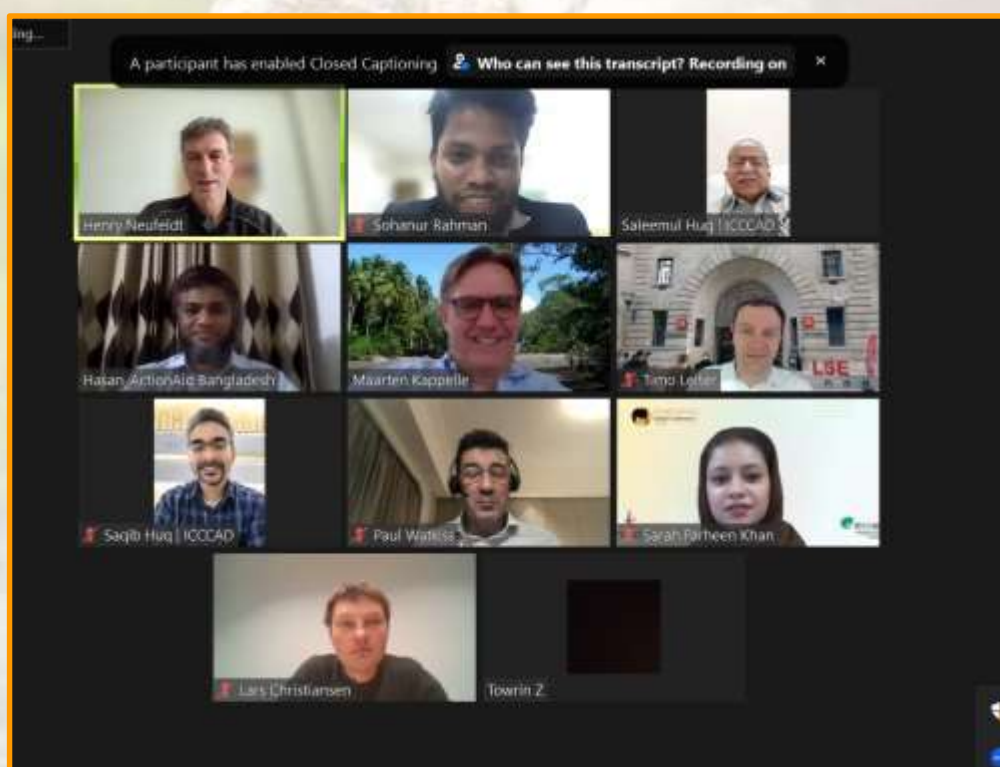


### **Session Summary:**

The Institute of Development Studies hosted a session on "Building Preparedness for Hydro climatic Extremes in India" featuring a panel of experts who emphasized the need for a community-led approach that centers the experiences and perspectives of vulnerable groups, particularly women. The panel agreed that effective long-term preparedness requires targeting the structural drivers of vulnerability, which cannot be achieved through top-down solutions alone. They stressed the need to maintain complexity and uncertainty in the field, revisit traditional data collection methods, and incorporate community perspectives to find innovative solutions. The panel also emphasized the importance of going beyond an event-focused lens and considering the daily experiences of erosion, losses, and drudgery that vulnerable communities face on a continuous basis.



## Adaptation Gap Report 2022 – taking stock of global progress on adaptation planning, financing, implementation and effectiveness



*Panelists of the session Adaptation Gap Report -2022 session*

**Host:** UNEP Copenhagen Climate Centre (UNEP-CCC)

**Moderator:** Henry Neufeldt, Head of Section, Impact Assessment and Adaptation Analysis

**Session Speakers:**

1. Marcus Davies, Climate Policy Radar
2. Paul Watkiss, Paul Watkiss and Associates Ltd.
3. Timo Leiter, Grantham Research Institute, London School of Economics
4. Henry Neufeldt, UNEP Copenhagen Climate Centre
5. Sohanur Rahman, Youthnet for climate justice
6. Dilruba Haider, UN Women Bangladesh
7. Mohammad Mahmodul Hasan, ActionAid Bangladesh



**Speaker 1: Marcus Davies**

1. Number of countries that have at least one national adaptation planning instrument has risen since 2021.
2. Overall, the quality of national adaptation planning instruments has increased across key indicators.
3. Adaptation laws and policies are increasingly considering the needs of marginalized and vulnerable groups.

**Speaker 2: Paul Watkiss**

1. Estimated adaptation costs are expected to be between 160 and 340 billion USD annually by 2030.
2. Adaptation finance is increasing but not fast enough to meet the adaptation dimension of the 100 billion USD goal established at COP15 and far below the rate of increase to meet adaptation needs
3. Despite some promising private sector initiatives for adaptation finance, adaptation finance is much more challenging than for mitigation.

**Speaker 3: Timo Leiter**

1. Amount of funding for adaptation projects through the GEF, GCF and Adaptation Fund has remained quite stable (around 500 million USD per year) since 2017
2. Only around 40% of projects marked as principle adaptation projects (i.e., projects that are primarily focused on adaptation) have a clear link to reducing climate risk.
3. Not every climate action can be expected to deliver substantial co-benefits for adaptation or mitigation. The potential for co-benefits between adaptation and mitigation is higher in some sectors than in others.

**Speaker 4: Henry Neufeldt**

1. Current adaptation practice falls woefully short of what is required, in both nature and extent.
2. Data availability on the effectiveness and adequacy of adaptation is poor.
3. In order to enhance effectiveness, adaptation should correspond to the following principles and best practices like Genuine inclusion of stakeholders, Transparency and accountability, Flexible implementation processes, Invest in building local capacities, Consider future climate risks, Integrate local, traditional and indigenous

knowledge. Tackle inequalities and structural drivers of vulnerability in addition to reducing exposure and/or vulnerabilities to climate hazards to embark on climate-resilient development pathways.

**Speaker 5: Sohanur Rahman**

1. Integration of youth is not always adequately considered in adaptation implementation – this is despite consulting representatives of young people as stakeholders in the planning phase (this has happened in Bangladesh as the country has transitioned from planning the NAP to implementing it).
2. Children are often the victims of household coping strategies to climate exacerbated challenges. For example, in Bangladesh, children can find themselves taken out of school or forced into child marriages.

**Speaker 6: Dilruba Haider**

1. Women's needs are not adequately considered in the implementation process of adaptation, despite its gender considerations featuring in planning processes.
2. Women's leadership is a key enabler of successful adaptation processes.
3. Having women in leadership positions is not enough on its own however. These women require an appropriate enabling environment to enable them to exercise their leadership.

**Speaker 7: Mohammad Mahmudul Hasan**

1. Local, traditional and indigenous knowledge possessed by local people is key to designing feasible adaptation projects.
2. Local ownership is key for locally implemented adaptation projects to be sustainable in the longer-term.
3. Capacity of local stakeholders is a key barrier to effective and sustainable adaptation. Thus, successful adaptation implemented at local levels (often) needs to include a capacity building dimension in order to be effective in the longer-term.

**Three key takeaways from the end of the session:**

1. Steady progress in adaptation is being made on all fronts. However, progress is clearly not at the scale required to adequately reduce climate risks.
2. To be effective in reducing climate risks, the quality of adaptation planning and implementation needs to improve drastically.

3. Inclusion of local communities and – in particular – marginalized groups within these communities, in the planning, implementation and M&E of adaptation is a key for adaptation to achieve the desired results.

### **Session Summary:**

During the session, several speakers and panelists shared insights on the current state of adaptation planning and implementation. Marcus Davies noted that the number of countries with national adaptation planning instruments has increased, and the quality of these instruments has also improved. Paul Watkiss highlighted that the estimated costs of adaptation will be significant, but current finance levels are inadequate to meet these needs. Timo Leiter pointed out that funding for adaptation projects has remained stable, and many projects marked as principal adaptation projects lack clear links to reducing climate risk. Henry Neufeldt emphasized the need for adaptation to be based on best practices such as stakeholder inclusion, transparency, and investment in local capacities. Panelists Sohanur Rahman, Dilruba Haider, and Mohammad Mahmudul Hasan noted that youth, women, and local knowledge are all essential considerations in adaptation planning and implementation. Overall, the session highlighted the importance of inclusive and effective adaptation planning and implementation to reduce climate risks.

## Ecofeminist Responses to Gender Inequality and Climate Change



*The panelists of the Ecofeminist responses to gender inequality and Climate Change session*

**Host:** Greentech for Women

**Moderator:** Hanna Carlson, Member of Swedish Women's Organization

**Session Speaker:**

Arya Manandhar, Founder - Greenetch for Women

**Speaker: Arya Manandhar**

1. Climate change disproportionately affects women and girls due to traditional gender roles. This includes impact on health, unpaid labor, socio-economic status of women and girls. Financial Stability and capacity building through green energy and entrepreneurship will empower women and girls, and provide women and girls to be part of clean energy policies.
2. In comparison to men, who spend 286 hours a year getting fuel for cooking, women spend 374 hours doing so (Global Alliance for Clean Cook stoves). Women and girls who utilize traditional cooking methods regularly cough, have asthma attacks, have excruciating headaches and fevers, eye irritation, weakness, and exhaustion. Due to the time-consuming process of gathering fodder from forests, which is also one of the primary causes of deforestation leading to the climate crisis, many girls have been denied access to a proper education. As per WHO findings, Household Air Pollution (HAP) is responsible for an estimated 3.2 million deaths per year in 2020 that use cooking over coal, firewood, and biomass stoves.
3. By sharing the stories of how gender norms, women's health, and the climate issue are intertwined in Nepalese rural communities, they would like to draw attention to the inequality and prejudices that are all inextricably related to climate change and the health of women and girls. Several Nepalese women who have adopted a biogas plant are passionate about improving their health by adopting affordable and environmentally friendly sanitary products and alternative energy sources.

### **Three key takeaways from the end of the session:**

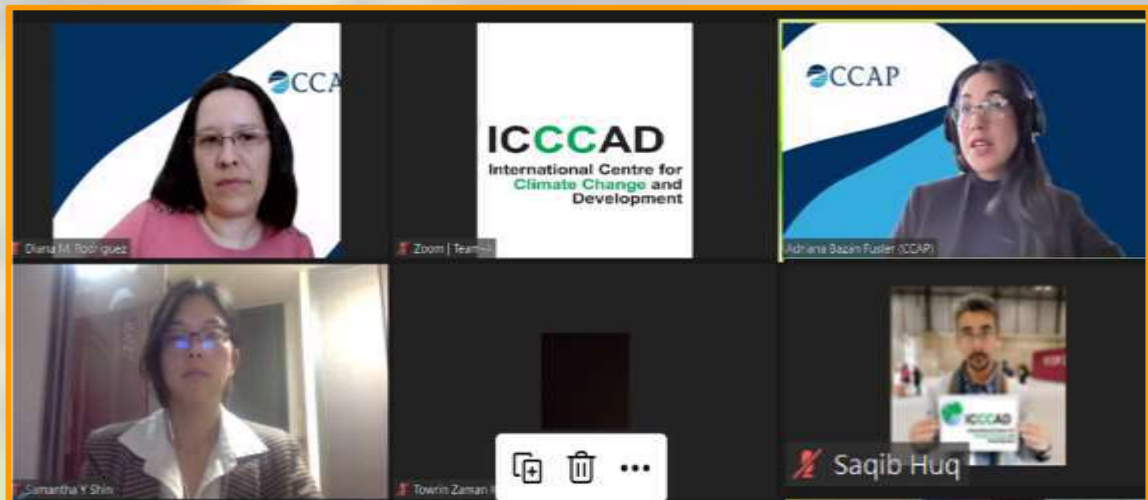
1. Climate change disproportionately affects women and girls due to traditional gender roles.
2. Financial stability and capacity building through green energy and entrepreneurship will empower women and girls, and provide women and girls to be part of clean energy policies.
3. While advocating for a greener world and gender equality, it is crucial to provide people with adaptable alternatives/solutions. An eco-feminist solution to climate change and gender inequality is required in modern world order more than ever before.

### **Session Summary:**

This session explored the interlink between the climate crisis, health, economic empowerment and education through a gendered lens. What would they be overlooking if they only examined the interlink between climate crisis and health without addressing gender inequality? How can eco-friendly sanitation products be introduced into our communities, especially those that have no access to basic sanitation? How may a simple household task such as cooking be harmful to women's health and the environment because of traditional gender roles? They explored these questions, understood new concepts from professionals, and shared relevant data and women's narratives for the betterment of women's health and climate. For the past two years, Greentech for Women has been promoting biogas plants in rural areas of Nepal. Electricity and gas are generated by the plant fed with animal manure, vegetable waste and modern toilets. Plant installation has proven to be beneficial in curbing deforestation, reducing the use of chemical fertilizers, and empowering women and girls. Women's good health and financial independence derived from the saved time and access to capacity-building workshops have helped them explore several entrepreneurship opportunities, including organic agriculture and fish farming, utilizing 'by-products' of the plant - slurry. Here, the reduced burden of household chores (mainly collecting firewood from the forest) and girls' school attendance are interlinked.

They discussed their way forward to facilitating capacity-building programs/workshops which would equip women and girls with essential skill sets and support for their entrepreneurship activities (such as making eco-friendly sanitary items), political participation, SRHR awareness, and climate action. They look forward to not just expanding our understanding of climate change and gender in the session, but also share the experiences, narratives, findings, and solutions adopted by Nepali women in rural communities as a part of the Greentech for Women initiative.

## Climate Finance Ecosystem and Blended Finance for Organic Waste Management Projects in Latin America



*The panelists of the Climate Finance Ecosystem and Blended Finance for Organic Waste Management Projects in Latin America session*

**Host:** Center for Clean Air Policy (CCAP)

**Moderator:** Adriana Bazán Fuster, Sr Climate Finance Associate, CCAP

**Session Speakers:**

1. Samantha Shin, Sr Climate Finance Associate, CCAP
2. Diana Rodríguez, Sr Waste Policy Associate, CCAP

**Speaker 1: Diana Rodríguez**

1. In most countries, solid waste management operations are a local responsibility. Effective waste management is expensive, often comprising 20%–50% of municipal budgets (World Bank, 2022). An estimated 93% of waste in low-income countries is mismanaged (66% in lower-middle income), as compared to 2% in high-income countries.
2. Based on the vast experience on waste policies in developing countries, CCAP has empowered local actors. CCAP has conducted dialogues and webinars to share lessons learned and best practices from our on the ground activities. CCAP has also provided cities with tools and resources to streamline project preparation and facilitated city exchanges to foster peer-to-peer learning and inspire change.
3. Securing climate finance at the municipal level faces several key barriers and challenges. These include a lack of technical capacity and expertise to advice on project formulation, limited municipal experience in showcasing project bankability, a scarcity of investment resources, and a complex process to access public green funds. Furthermore, the absence of sector-specific definitions for



economic activities hampers transparency, while a high risk perception among private sector investors poses obstacles. Additionally, the lack of markets for recyclables and the low revenue foundation from tipping fees hinder the promotion of capital-intensive alternatives to landfills.

**Speaker 2: Samantha Shin**

1. Mobilizing climate finance flows toward organic waste projects is indispensable given the existing financial gaps in the sector. Considering the sectoral characteristics, blended finance instruments can play a key role in increasing the number of bankable projects and attracting private capital.
2. Blended finance mechanisms at the municipal level, such as technical assistance grants for staff of municipalities will allow municipalities to provide appropriate policy instruments for local actors with small ticket sizes and risky borrower profiles.

**Three key takeaways from the end of the session:**

1. Blended finance mechanism is key to leverage private finance at the local level by reducing perceived investment risks.
2. Diverse instruments such as technical assistance (TA) for project preparation grants for municipalities or cities or concessional loans for local banks can improve the bankability of projects and attract private capital.
3. Blended finance mechanism involves an array of different actors (multilevel and multisector); hence, it is important to align objectives at the national and local level while selecting the most suitable instruments considering both development and economic viability of relevant stakeholders for structuring waste project investment pipelines.

### **Session Summary:**

In this session, a moderator and two panelists from CCAP shared key takeaways from previous recycled organic waste management projects in Latin America. A discussion on how to mobilize climate finance at the municipal level and close existing financing gaps in the waste sector was followed. After showcasing international cases, a presenter discussed why blended finance mechanisms are suitable as a financing solution for Organic waste management projects considering the sectoral characteristics and how they can be instrumental to raise private capital at the municipal level.



## Challenges and Opportunities in the Monitoring of Locally-led Adaptation Initiatives



*The panelists of the Challenges and Opportunities in the Monitoring of Locally-led Adaptation Initiatives session*

**Host:** Adaptation Fund

**Moderator:** Martina Dorigo, Climate Change Specialist at Adaptation Fund, World Bank Group

**Session Speakers:**

1. Martina Dorigo, Climate Change Specialist at Adaptation Fund, World Bank Group
2. Ms. Marianella Feoli-Fundecooperación para el Desarrollo Sostenible, Costa Rica
3. Ms. Mandy Barnett - South African National Biodiversity Institute, South Africa
4. Mariam Devidze - AF SCO Network, Georgia

**Speaker 1: Martina Dorigo**

1. The Adaptation Fund provides opportunities for climate change adaptation through three categories - action, innovation, and learning and sharing. These categories are designed to address climate change challenges in different ways, ranging from single-country projects to small grants for innovation and learning. Additionally, the Adaptation Fund has a regional distribution that spans Africa, Asia, Latin America, USA, and Eastern Europe, making it a truly global initiative.

2. The Adaptation Fund uses a results-based management approach to ensure that its projects are effective and have a positive impact on vulnerable communities. This approach has three levels of indicators, including CMP/CMA, portfolio (fund level), and project/program level. The portfolio level aggregates core indicators to measure the overall impact of the fund's projects.
3. The impacts of the Adaptation Fund's projects are threefold. Firstly, the fund aims to reduce the vulnerability and increase the adaptive capacity of communities, ensuring they can cope with the challenges of climate change. Secondly, the Adaptation Fund seeks to strengthen policies that integrate climate resilience strategies into policy and planning, thereby ensuring that climate resilience is at the core of decision-making processes. Lastly, the fund aims to increase ecosystem resilience in response to climate change, recognizing the importance of natural systems in mitigating the effects of climate change.

**Speaker 2: Ms. Mandy Barnett**

1. Direct access entities play a crucial role in bringing climate finance to the community level. The objective is to ensure that climate finance is delivered in packages that directly benefit local communities. This approach helps to enhance resilience and build capacity for climate change adaptation through tangible measures.
2. Best practices and lessons learned in climate finance delivery highlight the importance of critical decision-making, looking at the whole system rather than just the community level, and ensuring that local and national governments are aligned. Indigenous knowledge can also be leveraged to inform decision-making and enhance sustainability. Monitoring, evaluation, and learning throughout the process are key to ensuring long-lasting sustainability.
3. To achieve effective direct access and ensure that climate finance is delivered to the community level, partnerships and collaborations are critical. This includes partnerships between direct access entities, national governments, civil society, and the private sector. By working together and leveraging the best practices and lessons learned, we can enhance resilience and build capacity for climate change adaptation in a way that benefits everyone.

### **Speaker 3: Mariam Devidze**

1. Practical challenges and opportunities exist for the efficient implementation of loss and damage initiatives. These challenges may include a lack of resources, capacity, and political will. However, opportunities exist to build resilient communities through innovative financing mechanisms, such as risk transfer mechanisms and insurance products.
2. Locally led adaptation is a useful approach to building resilience and adapting to the impacts of climate change. In Georgia, adaptation measures have been globally led rather than locally. To address this, it is important to engage local people in adaptation initiatives, empowering them to take the lead in developing and implementing solutions that work for their communities.
3. A holistic approach to communication and management is essential to building resilience and adapting to climate change impacts. This includes defining vulnerability for local communities, focusing on land management and deforestation, and integrating different aspects of climate change management. It is also important to include local communities in decision-making processes, ensuring that their perspectives and needs are incorporated into adaptation initiatives. By doing so, we can create more effective and sustainable solutions to address loss and damage from climate change.

### **Speaker 4: Ms. Marianella Feoli**

1. The project objective in Costa Rica is to focus on tree, food, agro, and coastal management. By working on these key components, we can improve the sustainability and resilience of communities in the region. This will help to address a range of environmental and social challenges, including climate change, food security, and economic development.
2. Strong capacity building is a critical component of the project in Costa Rica. By building capacity across all project components, we can ensure that local communities and stakeholders are able to take ownership of the project and drive its success. This includes capacity building at the individual, organizational, and community levels, and can involve training, technical assistance, and other forms of support.
3. Involving local organizations and stakeholders is essential to the success of the project in Costa Rica. By working closely with local partners, we can ensure that the project is tailored to the specific needs and priorities of the community. This can include engaging local leaders, community-based organizations, and other stakeholders in the design and implementation of the

project. By doing so, we can create a more inclusive and sustainable approach to tree, food, agro, and coastal management in Costa Rica.

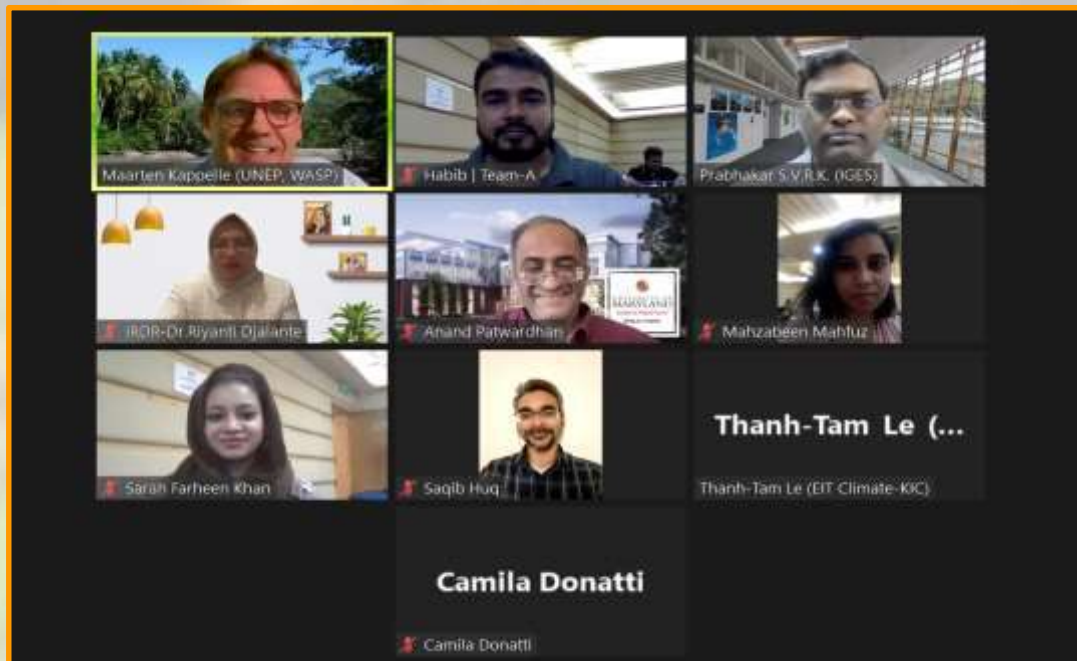
**Three key takeaways from the end of the session:**

1. The Adaptation Fund provides opportunities for climate change adaptation through three categories - action, innovation, and learning and sharing. The fund uses a results-based management approach to ensure the effectiveness of its projects, which aim to reduce vulnerability, strengthen policies, and increase ecosystem resilience.
2. Direct access entities play a crucial role in delivering climate finance directly to local communities to enhance resilience and build capacity for climate change adaptation. Best practices and lessons learned highlight the importance of critical decision-making, partnerships, and collaborations between direct access entities, national governments, civil society, and the private sector.
3. Practical challenges and opportunities exist for efficient implementation of loss and damage initiatives. Locally led adaptation is a useful approach to building resilience and adapting to the impacts of climate change.

**Session Summary:**

During the session, speakers discussed various topics related to climate change adaptation and finance. The Adaptation Fund was highlighted as a global initiative with three categories of action, innovation, and learning and sharing. Results-based management was emphasized to ensure effectiveness and impact on vulnerable communities. Direct access entities were discussed as playing a crucial role in bringing climate finance to the community level. Practical challenges and opportunities for loss and damage initiatives were also mentioned. Finally, the project objective in Costa Rica was introduced, emphasizing the importance of strong capacity building and involving local organizations and stakeholders for success. A holistic approach to communication and management is essential, including defining vulnerability for local communities, focusing on land management and deforestation, integrating different aspects of climate change management, and including local communities in decision-making processes. Strong capacity building and involving local organizations and stakeholders are critical components of the project in Costa Rica, which aims to improve sustainability and resilience of communities in the region through tree, food, agro, and coastal management.

## Global goal on adaptation: How can we operationalize it?



*The panelist of Global goal on adaptation session*

**Host:** The World Adaptation Science Programme, UNEP, Griffith University, University of Washington

**Moderator:** Ying Wang, UNEP and Maarten Kappelle, UNEP

**Session Speakers:**

1. Prof. Dr. Kris Ebi, member of the WASP Science Committee, University of Washington, USA
2. Prof. Dr. Anand Patwardhan, University of Maryland, USA
3. Dr. Prabhankar SVRK, IGES, Japan
4. Dr. Riyanti Djalante, Chair of the Sci. Committee of International Research on Disaster Risks

**Speaker 1: Prof. Dr. Kris Ebi**

1. Monitoring global adaptation progress is critical for understanding whether and how national-level vulnerability, resilience, and adaptive capacity are changing over spatial and temporal scales. The degree to which adaptation interventions influence these changes. The extent to which adaptation options need to be modified as climate and development evolve.
2. There are no agreed frameworks, methods, indicators, or metrics to assess progress towards the Global Goal on Adaptation (GGA). Periodic national vulnerability self-assessments, National Adaptation Plans, and other processes at local to national scales can be synthesized to monitor the extent to which adaptive capacity and resilience are facilitated.

3. Current definition of the GGA does not specify what the GGA means for climate risk and vulnerability reduction now and in the future. A framework is needed to design a robust approach to aggregating results across scales and contexts, assess collective progress to inform the update and enhancement of national-level actions, overcome challenges in evaluating adaptation, navigate divergent views and political sensitivities, improve or establish long-term adaptation and vulnerability datasets, provide more clarity and agreement on what counts as adaptation.

**Speaker 2: Prof. Dr. Anand Patwardhan**

1. Part of the challenge has been navigating the indicators. There is an ongoing conversation in the adaptation community of ‘adaptation as an outcome’ vs ‘adaptation as a process’. If you are thinking about ‘adaptation as a process’ where we are thinking with the view to reduce vulnerability and increase resilience, automatically focus from outcome related targets which are extremely varied to understanding more process outcome.
2. We might have more ability to identify more characteristics and indicators for those characteristics that have a degree of comparability. Whether you are a developed country or developing country, regardless of that there are a few common characteristics which are a part of that. There are issues related to the implementation processes which include stakeholder engagement, user driven locally led adaptation.
3. There is a more structured way to think about adaptation. They think there is a way forward with a focus on process outcome and process indicators. In some ways, one of the main contributions the policy brief makes is to move the conversation to negotiate the goal.

**Speaker 3: Dr. Prabhankar**

1. We have a global goal according to the Paris Agreement but it is not able to reach the ultimate goal of adaptation globally. They have proposed global goals on adaptation almost 80 years ago and until today they do not have the modality of making this more implementable.
2. We can have a better approach to the global goals with the bottom up approach. They have been late to operationalize the global goals.
3. The global goals need to be harmonized across the regions. SDG has helped with harmonizing goals from local to global. They need to make global goals by building up goals built on national goals. Currently National Adaptation Plans are not covering entire climate change adaptation areas that need to be



covered. They are missing out on transboundary climate risks that are beyond the reach of an individual country. That is why they are proposing a regional cooperation and framework to strengthen these gaps.

**Speaker 4: Dr. Riyanti Djalante**

1. Disaster risk reduction is the first line of defense of climate change. Governments have embraced the concept of resilience and vulnerability.
2. Discussion on limits of adaptation is very important. Capacity of governments alone are not possible for the adoption of early warning systems or similar systems.
3. The adaptation process in determining these global goals to look at the current examples countries have gone through and implemented.

**Three key takeaways from the end of the session:**

1. There is a need for a framework to monitor progress towards the Global Goal on Adaptation (GGA), which should be nationally appropriate, nationally driven, and contextually relevant. This framework should be transparent, traceable over time, flexible, and relevant, and focus on country-level indicators of adaptation implementation.
2. The conversation in the adaptation community is shifting towards viewing adaptation as a process, rather than an outcome. Process outcomes and process indicators should be identified, and there are common characteristics that can be measured across countries, regardless of development status. Stakeholder engagement and user-driven locally led adaptation are critical components of the implementation process.
3. The global goals on adaptation need to be harmonized across regions, and national goals should be built upon to create global goals. National Adaptation Plans need to cover all climate change adaptation areas and consider transboundary climate risks.



**Session Summary:**

The speakers discussed the challenges of establishing a framework to assess progress towards the Global Goal on Adaptation (GGA), including the lack of agreed frameworks, methods, indicators, and metrics. They emphasized the importance of a bottom-up approach that reflects national vulnerability and adaptation contexts and proposed a focus on process outcomes and indicators. The speakers also discussed the need for harmonizing global goals across regions and the importance of disaster risk reduction as the first line of defense against climate change. Additionally, they emphasized the importance of learning from current examples of countries' adaptation processes when determining global goals.

## The Scope of Solar Irrigation Pumps in Bangladesh



*The panelist of The Scope of Solar Irrigation Pumps in Bangladesh session*

**Host:** Infrastructure Development Company Limited (IDCOL) & International Water Management Institute

**Moderator:** Archisman Mitra – Researcher (Water resource economics), IWMI

**Session Speakers:**

1. Archisman Mitra – Researcher (Water resource economics), IWMI
2. Mafruda Rahman – AVP, GCF unit , IDCOL
3. Dr. Smaranika Mahapatra - Research Officer - Water Resources Management, IWMI

**Speaker 1: Archisman Mitra**

1. 88% of total food grain production is paddy with boro most important (47%). 1.24 million diesel pumps in irrigating 0.34 million hectares. (2018-2019). Diesel dependency creates energy insecurity and puts a financial burden on the country. NDC target: emission reductions by 6.73% below BAU by 2030 unconditionally and 15.12% conditionally. Either the government has to come in and provide subsidies, or if the energy crisis rises it is important to move away from diesel dependency. Government is moving away from diesel by switching to SIP's which is a better alternative.
2. SIP is still in its nascent stage but has growth potential. IDCOL is the lead organization in providing SIPs. There are different SIP models but most of

them are IDCOL systems. In our research it is looked at how these pumps are working and the challenges we need to overcome.

3. IDCOL SIP pumps are present in 5 divisions, 18 districts, and 63 upazilas and have created 1,655 jobs. The SIP models were gradually improved as per field experience. 300 women beneficiaries were trained on skill development and 306,806 tons of CO<sub>2</sub> emission has been reduced.

### **Speaker 2: Mafruda Rahman**

1. IDCOL is the market leader in renewable energy. Started operation in 1997. Catalyzes private sector participation in infrastructure and renewable energy projects. Largest financier in private sector infrastructure in Bangladesh. IDCOL finances projects normally in which the government would not invest in or is not feasible. Initiatives taken by the government are normally grant based but in case of IDCOL we have a proper business model and get various funding from private concessions to meet the government agenda; IDCOL started with solar home system programs and is expanding its programs to various sectors.
2. IDCOL pumps are capable of extracting 20 lakh liters of water per day. The basic principle of SIP water pumps is simple. Solar panel pumps the submersible pump. The water is stored in the pump house initially and then there's the reservoirs which creates huge pressure of the water to ensure water can go to underground pipes and distribute it through buried pipelines into agricultural areas.
3. IDCOL has installed 1523 pumps, whose beneficiaries are 70,615 farmers and covers 50 acres of area. . The average panel capacity per pump is 42kWp. The average pump capacity is 18.5kW. IDCOL 10,000 installations by 2030 which will help reduce 10 million tons CO<sub>2</sub> emissions to the project life by supporting 400,000 farmers. Group of engineers, and technicians makes sure technical standards are met.

### **Speaker 3: Dr. Smaranika Mahapatra**

1. Few studies have assessed the groundwater sustainability from SIP perspective and the subsequent impacts under future climate change scenarios, especially at a larger scale. Comparison was made using a study of SIP and Diesel use by farmers by selecting 6 SIPs in the North West region and 6 SIPs in the South-west region. Controlled diesel farmers were also selected. The results for Boro season (2021-22) showed that in case of SIP, the number of irrigation is lower compared to diesel because of high flow rates of SIP pumps. As far as depth of water application is concerned, there's

a significant difference in Boro Bochapukur due to different sowing dates but other than that there are no significant differences.

2. The impact of SIP pumps conceptualized for future climate scenarios showed that there will not be any significant changes due to SIP at a regional scale especially if SIP water application limits with  $\pm 10\%$ .
3. Future impact on the groundwater resources is brought about by the combined effect from both SIPs and Climate change. Such studies can help for developing effective management options for mitigating the humans as well as climate-change induced negative effects on groundwater resources.

### **Three key takeaways from the end of the session:**

1. Diesel dependency in irrigation creates energy insecurity and financial burden on Bangladesh. The government has set targets to reduce emissions and is promoting the use of solar irrigation pumps (SIPs) as a better alternative. IDCOL is the market leader in providing SIPs, and they have gradually improved their models based on field experience.
2. IDCOL's SIP pumps are capable of extracting 20 lakh liters of water per day, and they have installed 1,523 pumps, benefiting 70,615 farmers, and covering 50 acres of area. Their goal is to install 10,000 pumps by 2030 and support 400,000 farmers while reducing 10 million tons of CO<sub>2</sub> emissions.
3. Studies on the sustainability of groundwater resources from SIP perspective and the impacts of future climate change scenarios have been limited. The impact of SIP pumps on groundwater resources is expected to be minimal in the short term. However, future studies can help develop effective management options to mitigate the negative effects of both human and climate change on groundwater resources

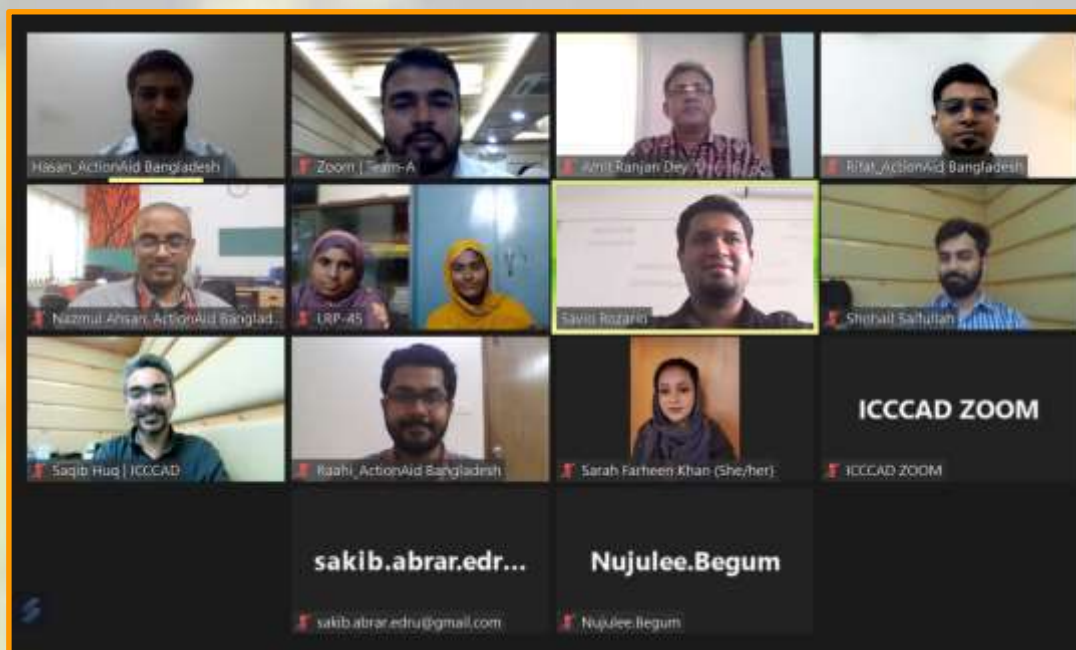
### **Session Summary:**

The session discussed the use of solar irrigation pumps (SIPs) as an alternative to diesel irrigation pumps in Bangladesh, which create energy insecurity and financial burden on the country. The government has set targets to reduce emissions, and IDCOL is the market leader in providing SIPs. IDCOL's SIP pumps are capable of extracting 20 lakh liters of water per day, and they have installed 1,523 pumps, benefiting 70,615 farmers, and covering 50 acres of area. Their goal is to install 10,000 pumps by 2030 and support 400,000 farmers while reducing 10 million tons of CO<sub>2</sub> emissions. Studies on the sustainability of groundwater resources from SIP perspective and the impacts of future climate change scenarios have been limited.

However, future studies can help develop effective management options to mitigate the negative effects of both human and climate change on groundwater resources.



## Women-led solutions to food insecurity and livelihood in the face of climate change



*The panelist of Women-led solutions to food insecurity and livelihood in the face of climate change session*

**Host:** ActionAid Bangladesh (AAB)

**Moderator:** Archisman Mitra – Researcher, Water resource economics, IWMI

**Session Speakers:**

1. Md. Tariqul Hasan Rifat, Associate Programme Officer, Climate Justice, Resilience and Climate Justice, ActionAid Bangladesh (AAB)
2. Dr. Zainul Abedin, Former Country Representative, International Rice Research Institute (IRRI), and President, KHANI (Food Security Network)
3. Dr. Sharmind Neelormi, Professor, Department of Economics, Jahangirnagar University
4. Nazim Uddin, Researcher, Bangladesh Agricultural Research Institute (BARI)

**Speaker 1: Md. Tariqul Hasan Rifat**

1. We faced some constraints to implement the National Agricultural policy at the field level. The issue of sharecroppers is neglected in the government benefits. While the upazila agriculture office has been told to purchase paddy directly from the farmer at a fair price, farmers have to go far to sell their paddy as the number of government paddy purchasing centers is insufficient. It does not have enough warehouses to store food.

2. Women are not able to settle in the market given the lack of a women-friendly environment, security and knowledge (e.g., market linkages to sell fertilizers) about market management. Women are not added to the local committees. They are being included just to fill the quota to keep 30% women in all fields. Plus, they are rarely trained in the use of agricultural technology.
3. The way forward to address the constraints include including women farmers in the updated farmers' list, providing interest- and harassment-free loans, disaster insurance, and necessary on-the-ground training for women and small farmers; recognizing women's role in overall agriculture; eliminating wage disparity, and increasing the allocation of budget.

**Speaker 2: Dr. Zainul Abedin**

1. Women and men are part of one family. So, both are equally responsible, men and women, husband and wife, for the welfare of the family. Both of them should be empowered: educated, fed, clothed, housed. I see common areas of interest here.
2. Unfortunately, in our society, influenced by religion, culture, social values, we do not see women equal to men. These could be overcome by proper education. It's not necessarily that women should be educated more, the overall aspect should be put. I don't think there should be a separate policy for women, if we can recognize their rights. We do not still recognize them as farmers or playing proper roles in the family.
3. Education is not only about reading books, education about nutrition, they should have better knowledge about nutrition. In light of climate change, there are different situations arising, such as drought or flood. The Internet can provide a lot of information, so they should have equal access to land, training and technical knowledge.

**Speaker 3: Dr. Sharmin Neelormi**

1. One statistic from the Labour Force Survey 2017 is clear: our agricultural production did not decrease. So, when women come into this sector in place of men, we say that women are less efficient. You cannot say that production decreased. Women showed that they can, because agricultural production has not lessened.
2. In the name of climate change research, without knowing about the technology fully, we cannot give it to the farmers. It's a basic principle of the no-harm policy that we will give to the women farmers only that which will work better in the context of climate change.



3. In India, when there is excess drought, in drought-prone regions, women's death rate is 40% higher than men. Because, culturally, women have less nutrition than men. The rate worsens if there is food scarcity. There is less research on this and we urgently need research here. Development practitioners and researchers need to shed light on this and attract the much-needed responsiveness from the government.

#### **Speaker 4: Nazim Uddin**

1. We have gender stakeholders, even transgender stakeholders, in agriculture, so we need to know how to address them as well. What we see is women farmers are feeling insecure. If we just consider all farmers as farmers, men and women, we need to make them feel secure. Gender discrimination is very critical.
2. In decision-making, the quantification of whose contribution is how much in the role, it's good. But there is also the opposite scenario. We can ask women, "You work 30%, but where are the indicators of your work?" They are working wholeheartedly, but the socio-political and historical factors especially in our subcontinent do not let us see that.
3. I think there should be a mechanism for effective policy implementation. For example, till now, the implementation of National Agricultural Policy has not had any rules, no adequate standard operating procedure has been developed. An action plan, government department-wise, should be there, to implement in a certain time-frame, to implement the policy.

#### **Three key takeaways from the end of the session:**

1. "While men and women play different roles in agriculture, both men and women are equally important. So, empowerment should be seen from the perspective of common interests in household decision-making. Unfortunately, our social values make women's roles secondary. These can be overcome by proper education and sensitization for both men and women."  
– Dr Zainul Abedin, Former Country Representative, International Rice Research Institute (IRRI) and President of KHANI (Food Security Network)
2. "The 2017 Labour Force Survey shows women's participation in agriculture increased by 117%. However, a social trend is we give the smallest land to our sisters. Moreover, only 8% of agricultural loans are in the names of women farmers, that too jointly with their husbands. Women have no finance and less know-how and we still want them to efficiently contribute to food

security, this is not right.” – Dr Sharmind Neelormi, Professor, Department of Economics, Jahangirnagar University

3. “I would like to stress that a farmer is a farmer, not men or women farmers. Gender discrimination here is very critical. We need to consider all farmers, both men and women, as farmers. We need to make them feel secure. They should get equal opportunities at every level, such as land, finance, and technology.” – Mr Nazim Uddin, Researcher, Bangladesh Agricultural Research Institute (BARI)

### **Session Summary:**

During a panel discussion following a presentation, experts talked about the importance of involving women in agriculture and addressing the inequalities they face. They discussed how women often have limited decision-making power, struggle to access resources like loans and technology, and face challenges regarding food safety. The panel also emphasized the need for research on the nutrition of women farmers in Bangladesh and ensuring that the National Agricultural Policy is effectively implemented at the local level. Two grassroots women farmers shared their experiences of practicing sustainable agriculture in the face of climate change. They mentioned receiving support from the government's Department of Agricultural Extension, but they also highlighted that not everyone in the community, especially women, receives the necessary training and knowledge. Additionally, they faced difficulties in getting fair prices for their products due to a lack of supportive market conditions and knowledge about managing markets. The project findings identified various obstacles faced by farmers and shortcomings in implementing the National Agricultural Policy, including the rights of women farmers and the inefficiency of agricultural input cards. To address these challenges, the panel suggested recognizing and supporting women farmers in agriculture and providing them with interest- and harassment-free loans.

## Exploring Climate Solutions: Catalytic Grant Programme



*The panelist of the Exploring Climate Solutions: Catalytic Grant Programme session*

**Host:** ICCCAD

**Moderator:** Shuchi Vora, Programme Officer, Global Resilience Partnership

**Session Speakers:**

1. Dr Saleemul Huq, Director at ICCCAD
2. Rubina Adhikari, Catalytic Grantee: Mountains of Youth
3. A.S.M. Jiaul Hoque, Catalytic Grantee: Korabam
4. Rukhsar Sultana, Catalytic Grantee: LYLA (Local Youth-led Adaptation)
5. Cinderella Ndlovu, Catalytic Grantee: Community Change Makers Zimbabwe
6. Afsana Afrin Esha, Catalytic Grantee: Team Resilient
7. Adiba Bintey Kamal, Programme Co-ordinator at ICCCAD
8. Heather McGray, Director at Climate Justice Resilience Fund

**Speaker 1: Dr Saleemul Huq**

1. The speaker welcomes the audience to a session where they will celebrate the winners of the last cohort of the Catalytic Brands. The session is an experience-sharing session, and the opening remarks are given by Professor Selimulhok, who talks about how the idea of Catalytic Grants came to be. The grants are offered to small-scale, bottom-up local groups to help them access finance. The grants are in the region of a few thousand dollars, and the group acts as a go-between to offer them.
2. The second batch of grantees is receiving the grants, and they hope to have another round of grantees coming out of the conference. The speaker also mentions that the smaller the grant, the bigger the overhead involved in

sending it to someone, and the group has gone up a steep learning curve to learn grant-making.

**Speaker 2: Rubina Adhikari**

1. Climate education and literacy among young people is crucial for effective locally-led climate change adaptation. Without adequate scientific knowledge, it may be difficult for communities to understand and implement adaptation strategies. It is important to re-educate youth on the impacts of climate change and how they can take action to mitigate its effects.
2. Climate policy awareness and education can help to shape locally-led adaptation plans. Programs such as Local Adaptation Plans for Action (LAPA) and National Adaptation Programme of Action (NAPA) provide frameworks for communities to develop and implement climate change adaptation plans. By increasing awareness and education about these programs, communities can better understand how to access funding and resources for adaptation.
3. In mountainous regions, crop production and cultivation can be particularly vulnerable to the impacts of climate change. Utilizing biogas as an alternative energy source can help to reduce reliance on fossil fuels and mitigate climate change. By focusing on locally-led adaptation strategies in these regions, communities can develop solutions that are tailored to their unique needs and vulnerabilities.

**Speaker 3: A.S.M. Jiaul Hoque**

1. Locally led adaptation strategies can effectively address the challenges of climate change by enhancing community forests and promoting sustainable land use practices. For example, the Chittagong hill tracts in Bangladesh have seen successful adaptation measures through the development of village community forests and bamboo chairs around streams. By planting more trees and promoting sustainable land use practices, these communities have been able to reduce water scarcity and provide for their own meditational needs.
2. Awareness raising and the use of scientific data are critical for effective climate change adaptation. Local communities are often highly dependent on their immediate environment for their livelihoods, and understanding the impact of climate change on their local ecosystems is crucial. Through the use of scientific data and innovative approaches, such as rainwater harvesting systems and building towers, local communities can adapt to the challenges of climate change and reduce their dependence on external resources.

3. Minority communities can provide valuable examples of locally led adaptation to climate change. For example, the Chittagong hill tracts in Bangladesh have seen successful adaptation measures implemented by minority communities who have adapted their lifestyles to the changing environment. By building on these innovative approaches, and working to enhance the capacity of local communities to develop and implement their own adaptation strategies, we can ensure that the impacts of climate change are effectively managed at the local level.

**Speaker 4: Rukhsar Sultana**

1. Limited access to information and resources in areas like Taherpur, Sunamganj highlights the importance of locally led adaptation strategies. Local adaptation efforts, such as LYLA (Local Youth-led Adaptation), can help enhance knowledge and empower vulnerable communities to effectively manage the impacts of climate change. By fostering future leaders and providing 1v1 training and mentoring to people it ensures that these communities are better equipped to adapt to the changing climate.
2. Structural inequality and vulnerability to floods are key challenges in many areas impacted by climate change. LYLA, with its three pillars and five principles of capacity, amplification, and amplifying youth voices, can help address these issues. By enhancing local knowledge and promoting local adaptation efforts, LYLA can empower communities to respond to floods and other climate-related challenges. Additionally, the organization can work as a connector between community people and knowledge to facilitate effective adaptation strategies.
3. Youth leadership is critical to effective climate change adaptation efforts. LYLA's approach to youth-led adaptation can serve as a model for building future leaders who can address climate change challenges in their own communities. Through flood response efforts and adaptation strategies such as "Macha Poddhotite chash," LYLA has helped local communities understand the impacts of climate change and develop effective responses. By continuing to foster youth leadership and promote effective adaptation strategies, we can better equip vulnerable communities to manage the challenges of climate change.

### **Speaker 5: Cinderella Ndlovu**

1. The project on indigenous knowledge systems on LLA (locally led adaptation) in Zimbabwe highlights the importance of integrating local knowledge with meteorological data for effective climate change adaptation. The catalytic grant provided for this project helped to bridge the gap between indigenous knowledge and scientific knowledge, and the use of smartphone apps for weather reports is an example of how technology can support adaptation efforts.
2. Climate change has had a significant impact on agriculture in Zimbabwe, particularly in terms of rainfall patterns and drought. However, by bringing together local communities, institutions, and meteorological services, it is possible to develop effective adaptation strategies. Collaboration between community members and meteorological departments, such as studying wetland behavior in the dry season, can provide valuable insights and help build resilience.
3. In order to extend the climate tolerability of local communities in Zimbabwe and beyond, more funding is needed to support adaptation efforts. This funding could be used to improve access to technology and information, as well as to facilitate collaboration between local knowledge systems and scientific knowledge. Radio, while potentially useful for disseminating information, may not be accessible to all community members, highlighting the need for a range of communication strategies. Overall, building resilience and adapting to the consequences of climate change requires collaboration, awareness-raising, and the integration of local and scientific knowledge.

### **Speaker 6: Afsana Afrin Esha**

1. The seed fund provided for a scoping field visit in the coastal region helped to identify the vulnerability of communities to climate change. It is important to understand what makes these communities vulnerable, including their coping strategies and livelihood patterns. By working with these communities, we can identify ways to build resilience and adapt to climate change.
2. Some communities and minorities are excluded from academia and research, even though they may be the most vulnerable to the impacts of climate change. This highlights the need to work with communities directly, to understand their unique perspectives and knowledge systems, and to integrate this local knowledge with scientific data. By doing so, we can develop more effective adaptation strategies.

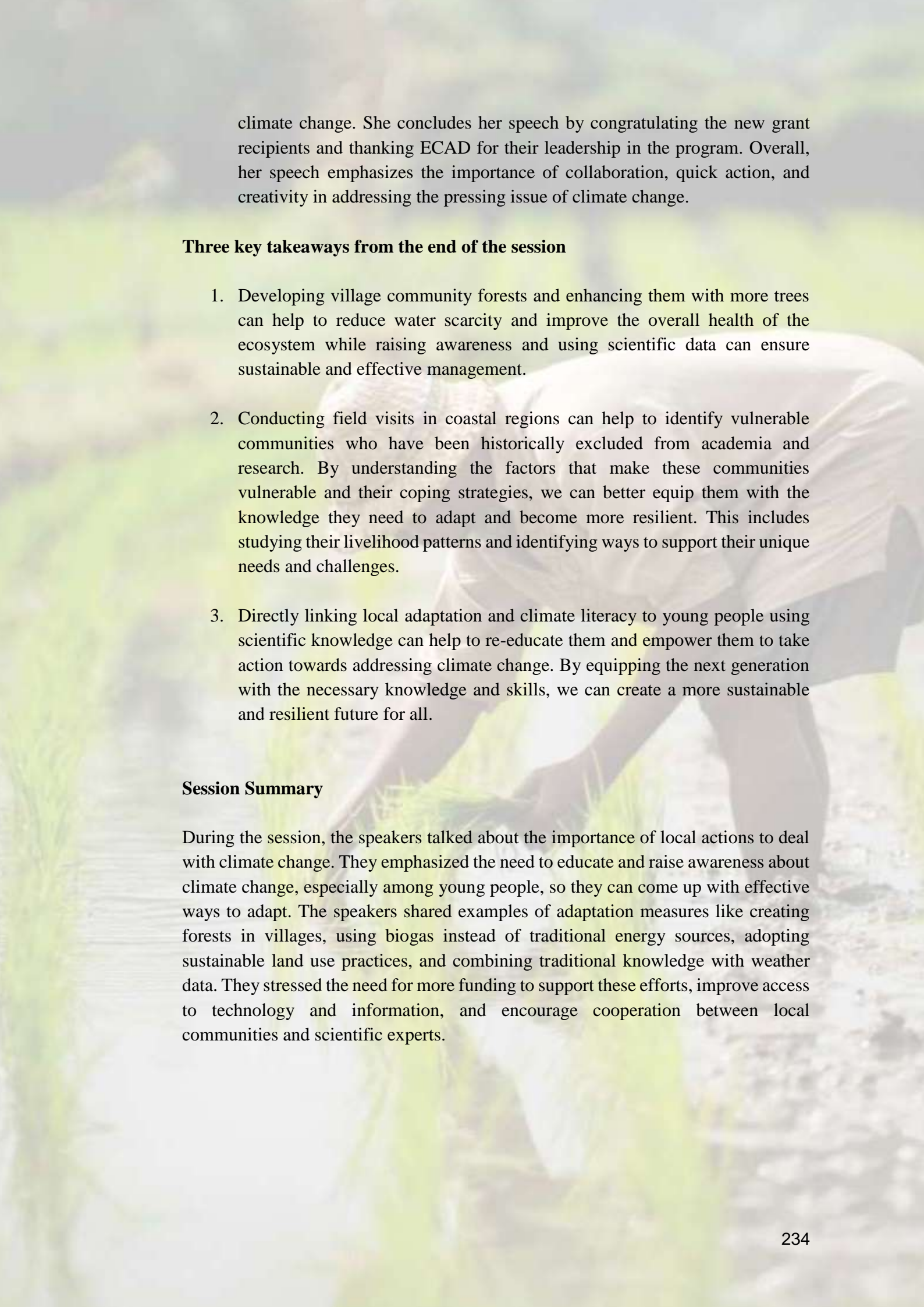
3. In Bangladesh, ethnic and religious communities, such as the Christian diverts, are often socially marginalized and prone to flooding and cyclones. Policies often affect their ability to maintain their livelihoods, and they may receive less payment due to their status. However, policy can also contradict itself, such as in the case of the impact of factories on fisheries and fishermen's ability to catch them. It is important to modify policies to better support vulnerable communities and to ensure that they are not further marginalized by these policies.

**Speaker 7: Adiba Bintey Kamal**

1. The speaker presented a brief overview of the Catalytic Grant Program and its objectives. They shared that the recipients of the grant were mostly youth, grassroots climate activists, indigenous groups, women-led organizations, researchers, academicians, and local level practitioners.
2. The grant aimed to incentivize cross-disciplinary capacity development and ideation, strengthen the global community of practice on locally led adaptation and resilience, and promote South-South and South-North knowledge exchange and collaboration.
3. Their program also focused on building a strong network of networks in the South Asia and African region.

**Speaker 8: Heather McGray**

1. Heather McGray's speech is focused on highlighting the importance and potential of the Catalytic Grant program. McGregor emphasizes that the program's ability to link research and action is essential in addressing climate change. She believes that this program is valuable because it enables a short loop between learning and implementation.
2. In addition, she values collaboration as the key to creativity and innovation. She believes that partnerships and exchange opportunities provided by programs like the Catalytic Grant program can help create initiatives that are more than the sum of their parts. She comments ECAD's approach of setting up a cohort of grant recipients and investing in shared learning and exchange as one of the best features of this program.
3. She also highlights the significance of the grants, which she describes as "small but mighty." She emphasizes that the small grants allow for quick action, creativity, and risk-taking. However, she also notes that some projects may grow beyond their small beginnings, becoming larger and more impactful initiatives that can make a significant difference in the fight against



climate change. She concludes her speech by congratulating the new grant recipients and thanking ECAD for their leadership in the program. Overall, her speech emphasizes the importance of collaboration, quick action, and creativity in addressing the pressing issue of climate change.

### **Three key takeaways from the end of the session**

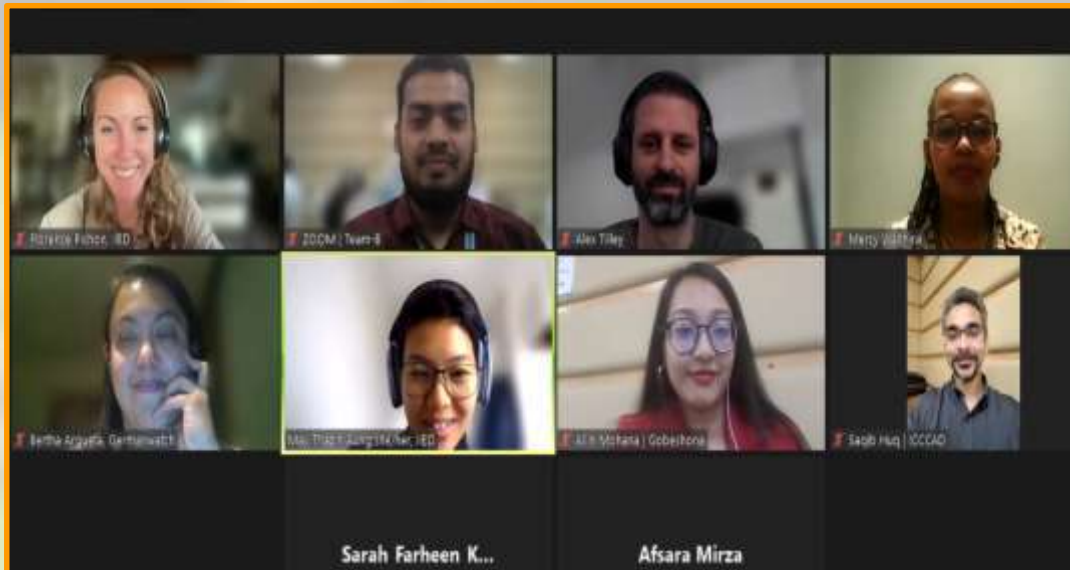
1. Developing village community forests and enhancing them with more trees can help to reduce water scarcity and improve the overall health of the ecosystem while raising awareness and using scientific data can ensure sustainable and effective management.
2. Conducting field visits in coastal regions can help to identify vulnerable communities who have been historically excluded from academia and research. By understanding the factors that make these communities vulnerable and their coping strategies, we can better equip them with the knowledge they need to adapt and become more resilient. This includes studying their livelihood patterns and identifying ways to support their unique needs and challenges.
3. Directly linking local adaptation and climate literacy to young people using scientific knowledge can help to re-educate them and empower them to take action towards addressing climate change. By equipping the next generation with the necessary knowledge and skills, we can create a more sustainable and resilient future for all.

### **Session Summary**

During the session, the speakers talked about the importance of local actions to deal with climate change. They emphasized the need to educate and raise awareness about climate change, especially among young people, so they can come up with effective ways to adapt. The speakers shared examples of adaptation measures like creating forests in villages, using biogas instead of traditional energy sources, adopting sustainable land use practices, and combining traditional knowledge with weather data. They stressed the need for more funding to support these efforts, improve access to technology and information, and encourage cooperation between local communities and scientific experts.



## How do we measure locally led adaptation?



*The panelists of the How do we measure locally led adaptation? Session*

**Host:** International Institute for Environment and Development (IIED)

**Moderator:** May Thazin Aung, Climate Finance Researcher

**Session Speakers:**

1. May Thazin Aung, Climate Finance Researcher, IIED
2. Alex Tiley, Head of Research, Publish What you Fund
3. Florence Pichon, Research Associate, IIED and ODI
4. Mercy Waithira, Independent Conservation Researcher
5. Bertha Argueta, Senior Policy Advisor Climate Finance and Development GermanWatch

**Speaker 1: May Thazin Aung**

1. The speaker talks about local adaptation and asks questions to understand the metrics that are used to measure LLA and really understand what identifies as “local” and also talks about what are the aims and objectives in designing metrics and engages in discussion sessions with panelists to explore the adaptive capacities and limitations of metrics.
2. Implementers help to understand what works in locally led adaptation across cross projects which helps identify what specifically can be done.
3. Doing the best that we can will have an impact but being realistic about the metrics of locally led adaptation is very important. If they are done in a way that benefits a community, it is useful but without knowing its limitations can be an obstacle.

### **Speaker 2: Alex Tiley**

1. How USAID counts “local” will have a big impact on funding for local partners. At least 25% of USAID assistance will go directly to local partners by 2025. By 2030 local communities will have a leading role in 50% of USAID assistance.
2. Organizations are identified as local when headquartered and incorporated in the recipient country using the USAID numerator. Using the PWYF (Publish What You Fund Numerator) organizations are identified as local when managed and governed by nationals of the recipient countries or by non-nationals from a specific group. There are different approaches to categorizing organizations as local. They compared different approaches to understand how much funding is going to local organizations across 10 countries. Using USAID’s approach it was found that 11.1% is going to local partners, whereas using PWYF approach 5.7% was going to local organizations across 10 countries.
3. Targets set up by USAID weren’t climate specific. The US gives a lot of its climate finance through multilateral development funds, and it seems that the target for climate finance is a lot higher than for general development.

### **Speaker 3: Florence Pichon**

1. Understand how different locally led programs used different metrics to measure locally led adaptation helped understand resilience capacities. By looking at capacities, we understood how different factors contribute to programs being more resilient. Resilient capacities can be termed as adaptive, absorptive and anticipatory.
2. We looked at projects to see how these different projects enabled us to tackle climate change. Looking at cross projects helps use absorptive capacity and help identify future shocks and stresses.
3. Changing direction mid-course based on identifying particular shortcomings (such as lack of absorptive capacity) would be a relevant but novel way of managing both project activities and also the challenge of keeping donors on board with those course changes

#### **Speaker 4: Mercy Waithira**


1. Talks about how nature based locally led climate adaptation practices can be integrated in conservation projects.
2. It is important to assess success, failures, barriers, and opportunities of LLAs in Climate Adaptation conservation projects.
3. It is important to identify best practices and formulate recommendations on integrating LLAs in conservation projects.

#### **Speaker 5: Bertha Argueta**

1. Our paper examined the extent to which current- GCF funded projects and programmes support adaptation at the sub-national or local level in African States. The assessment was based on the principles for Locally Led Adaptation that IIED and WRI developed in 2021. For this analysis local levels refers to sub national actors whether public, private, civil society or community.
2. The results showed limited consideration of local needs and priorities in adaptation planning and programming by international entities. The study also confirmed a misalignment between the scale of projects, the impact and the implementation seed. The most impactful projects may be relatively small and close to ground.
3. It also showed that grant funding will remain a vital instrument for supporting adaptation actions, especially at a sub national level.

#### **Three key takeaways from the end of the session:**

1. There is a need to understand the metrics used to measure locally led adaptation (LLA) and what identifies as "local" in order to design effective and realistic metrics. Different approaches to categorizing organizations as local can result in different levels of funding going to local partners.
2. Looking at cross projects and assessing the resilience capacities of locally led programs can help identify best practices and enable us to tackle climate change more effectively. Changing direction mid-course based on identifying particular shortcomings can also be a novel way of managing projects and keeping donors on board.
3. Current GCF-funded projects and programs show limited consideration of local needs and priorities in adaptation planning and programming,

A person is shown from the waist down, bent over, planting rice seedlings in a field. The person is wearing a light-colored long-sleeved shirt and dark shorts. They are holding a bundle of green rice seedlings in their hands. The background is a blurred green field with a body of water in the distance. The overall scene is bright and sunny.

highlighting the need for grant funding to remain a vital instrument for supporting adaptation actions, especially at a sub-national level. Nature-based locally led climate adaptation practices can also be integrated into conservation projects.

**Session Summary:**

The session discussed how we can measure the progress of locally led adaptation efforts. The speakers talked about the importance of understanding what "local" means and using appropriate metrics to measure these efforts. They mentioned different ways to categorize local organizations, which can affect how much funding they receive. By analyzing different projects and assessing their resilience, we can learn from successful approaches and improve our response to climate change. They also mentioned the idea of adjusting projects based on identified weaknesses to keep donors involved. The session pointed out that current projects funded by the Green Climate Fund often overlook local needs, emphasizing the importance of grant funding for supporting adaptation at a local level. They also highlighted the integration of nature-based practices into conservation projects. In summary, the session stressed the need to measure and understand locally led adaptation efforts to develop effective metrics, learn from best practices, and support local adaptation actions.

## A conversation with the winners of the 2022 GCA Local Adaptation Champions Awards



*The panelist A conversation with the winners of the 2022 GCA Local Adaptation Champions Awards sessions*

**Host:** Global Center on Adaptation

**Moderator:** Anju Sharma

**Session Speakers:**

1. Arunendu Triputa, Rangamati Hill District Council, Bangladesh/ Community leader
2. Sushil Dhakal, CDAFN, Nepal/ Community leader
3. Kenned ododa, Adaptation Consortium, Kenya
4. Tabassum Momin, Program Manager, SSP

**Speaker 1: Arunendu Triputa**

1. Rangamati Hill District Council won an inclusive leadership award for their efforts to address drought, landslides, flash floods, and safe water supply.
2. The project involved collaboration with various government agencies due to the remote location of the area.
3. Officials from the government of Bangladesh and ambassadors from America, Canada, Switzerland, and Sweden visited the project.



**Speaker 2: Tabassum Momin**

1. Swayan Shikshan Prayog (SSP) is a non-profit organization in India that works to empower rural women and communities through entrepreneurship, sustainable agriculture, and renewable energy.
2. Its entrepreneurship and agriculture programs, SSP also focuses on promoting the use of renewable energy in rural areas.
3. One of SSP's unique features is its emphasis on developing women leaders at the community level.

**Speaker 3: Kenned ododa**


1. The climate fund was created because there was a disagreement between strong national policies and the framework needed to put them into action.
2. Sub-national governments are taking action by mainstreaming climate change into planning and budgeting processes.
3. This involves improving access to climate finance and involving vulnerable communities in decision-making to address climate change.

**Speaker 4: Sushil Dhakal**

1. They work with local communities to identify their vulnerabilities and develop adaptation plans that are specific to their needs and resources.
2. CDAFN follows an integrated approach that involves building the capacity of communities to adapt to climate change, as well as advocating for policies and practices that support adaptation at the local and national level.
3. They work to ensure that women and other marginalized groups are included in decision-making processes and have access to resources and information to help them adapt.

**Three key takeaways from the end of the session:**

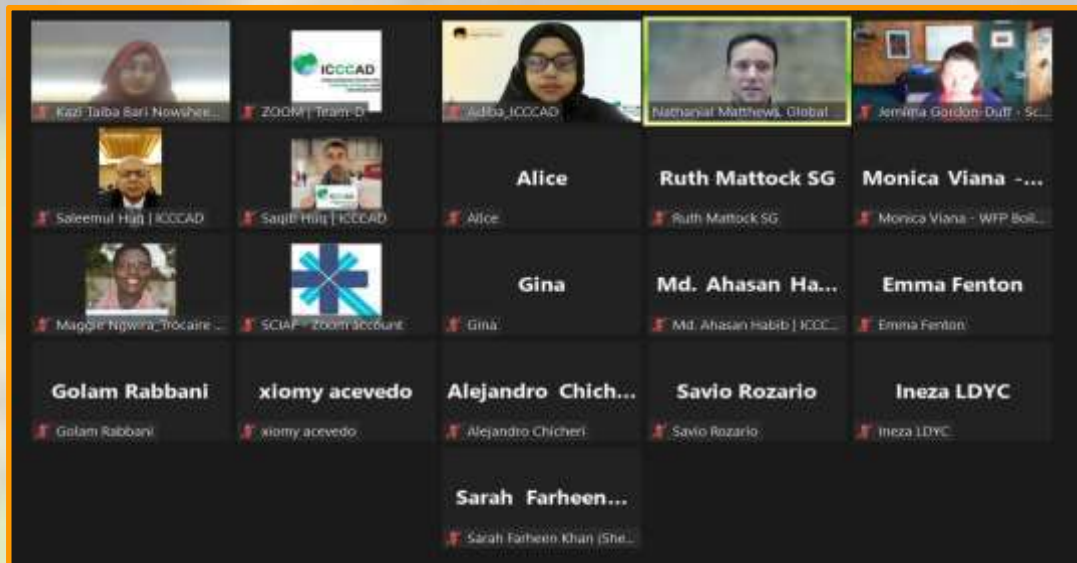
1. CDAFN won an award for working with local communities to develop adaptation plans and advocating for policies that support adaptation.
2. The climate fund was created to address disagreements between national policies and implementation frameworks, and sub-national governments are taking action to address climate change.

- 
- A person is shown from the waist down, bent over, planting rice seedlings in a field. The person is wearing a light-colored shirt and dark shorts. The field is filled with rows of young rice plants. The background is a soft-focus landscape with green hills and a body of water.
3. SSP empowers rural women and communities through entrepreneurship, sustainable agriculture, and renewable energy while also developing women leaders, and the Rangamati Hill District Council won an award for its efforts to address climate-related challenges in a remote area.

**Session Summary:**

Various organizations and initiatives have been recognized for their efforts towards addressing climate change, including the Community Development and Advocacy Forum Nepal (CDAFN), which won the Local Adaptation Champion Award for working with local communities to develop adaptation plans and advocating for policies that support adaptation; the creation of the climate fund to address disagreements between national policies and implementation frameworks; Swayan Shikshan Prayog (SSP), a non-profit organization in India that empowers rural women and communities through entrepreneurship, sustainable agriculture, and renewable energy while also emphasizing the development of women leaders; and the Rangamati Hill District Council, works with various government agencies and efforts to address drought, landslides, flash floods, and safe water supply in a remote area, with officials from several countries visiting the project.

## Practical Action for Addressing Loss and Damage



*The panelist the Practical Action for Addressing Loss and Damage session*

**Host:** Scottish Government, IIED, Global Resilience Partnership

**Moderator:** Nate Matthews, Chief Executive Officer, Global Resilience Partnership

**Session Speakers:**

1. Nate Matthews, Chief Executive Officer, Global Resilience Partnership
2. Nicola Sturgeon, First Minister of Scotland
3. Alice Guinan, Senior Policy Officer, Scottish Government
4. Dr. Md Golam Rabbani, Head of Climate Bridge Fund, BRAC
5. Ciara Commins, International Programme Officer, SCIAF
6. Maggie Ngwira, Programme and Institutional Funding Coordinator, Trocaire
7. Xiomara Acevedo, Latin America Training Coordinator, LDYC
8. Alejandro Lopez-Chicheri, Regional Public Information Officer, World Food Programme
9. Mónica Viaña, Programme Assistant, World Food Programme
10. Jemima Gordon-Duff, Deputy Director at International Climate Change at Scottish Government

**Speaker 1: Nate Matthews**

1. The report synthesizes case studies for funding and action to address loss and damage, and analyzes these in the post-COP27 landscape after the establishment of a UN Loss and Damage Fund was agreed.





**Speaker 2: Nicola Sturgeon**

1. The task of getting the new loss and damage fund operational is just beginning. Much greater finance needs to be mobilized from a broad range of sources. And there is also a need to ensure that resources are deployed effectively – by building a better understanding of what works.
2. The international conference that Scotland hosted – last October – explored these challenges in detail using 30 case studies around the world.
3. Among the most important conclusions highlighted by the case studies presented at Scotland’s loss and damage conference– is the need for interventions to be locally led, and designed in partnership with the communities affected.

**Speaker 3: Alice Guinan**

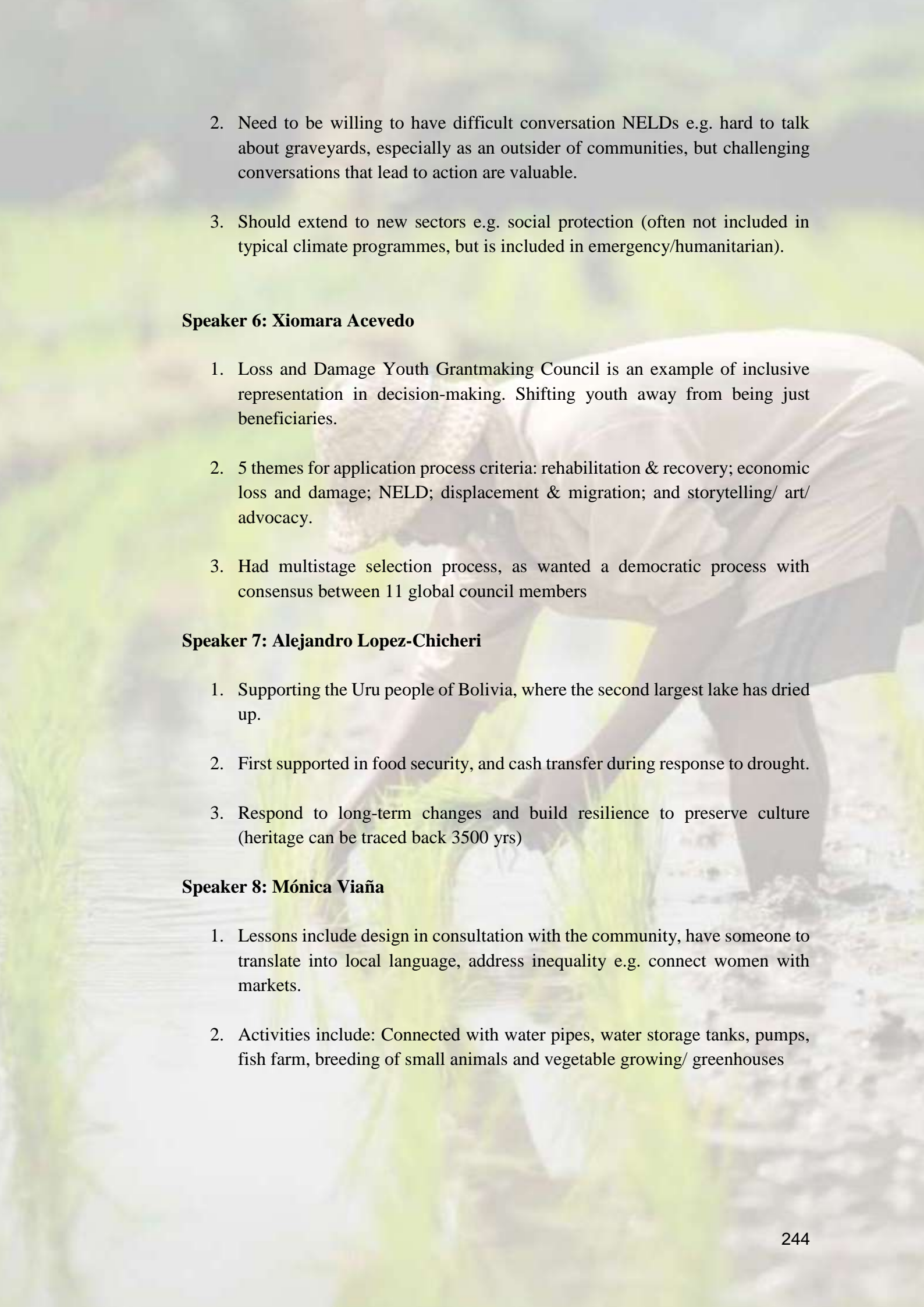
1. Report identifies some of the key challenges involved in mobilizing finance, assessing need, and delivering interventions.
2. The report highlights the current shortfall in funding for non-economic loss and damage – which includes things like biodiversity loss, mental health impacts, and the loss of cultural heritage.
3. It considers the role of communities, governments, the private sector, and donors.

**Speaker 4: Dr. Md Golam Rabbani**

1. Innovative model for blended finance, in which 90% is invested in bonds, with the income invested into L&D projects.
2. 2 application streams, emergency response and a more long-term impact window.
3. 4 out 98 could be supported, indicating how need outstrips finance.

**Speaker 5: Ciara Commins**

1. Loss and damage activities include rehabilitation of schools, graveyards, dyke, safe housing construction, psycho-social first aid and victim support.

- 
2. Need to be willing to have difficult conversation NEDs e.g. hard to talk about graveyards, especially as an outsider of communities, but challenging conversations that lead to action are valuable.
  3. Should extend to new sectors e.g. social protection (often not included in typical climate programmes, but is included in emergency/humanitarian).

**Speaker 6: Xiomara Acevedo**

1. Loss and Damage Youth Grantmaking Council is an example of inclusive representation in decision-making. Shifting youth away from being just beneficiaries.
2. 5 themes for application process criteria: rehabilitation & recovery; economic loss and damage; NED; displacement & migration; and storytelling/ art/ advocacy.
3. Had multistage selection process, as wanted a democratic process with consensus between 11 global council members

**Speaker 7: Alejandro Lopez-Chicheri**

1. Supporting the Uru people of Bolivia, where the second largest lake has dried up.
2. First supported in food security, and cash transfer during response to drought.
3. Respond to long-term changes and build resilience to preserve culture (heritage can be traced back 3500 yrs)

**Speaker 8: Mónica Viaña**

1. Lessons include design in consultation with the community, have someone to translate into local language, address inequality e.g. connect women with markets.
2. Activities include: Connected with water pipes, water storage tanks, pumps, fish farm, breeding of small animals and vegetable growing/ greenhouses

### **Speaker 9: Jemima Gordon-Duff**

1. Scottish Government is committed to continuing to advocate and address L&D, including through our upcoming £5 mill NELD programme

### **Three key takeaways from the end of the session:**

1. Activate the full range of solutions in a mosaic of responses: mobilizing finance from the full mosaic of funding sources, and delivering interventions that respond to the specific socio-economic, political, physical context in the affected area. This must draw on innovative as well as established funding routes and practice, and recognize non-economic as well as economic losses and damages.
2. Empower affected communities in decision making: participation and representation of the communities living with losses and damages is vital to deliver meaningful funding and action.
3. Action is urgent, now and at scale: loss and damage is happening now, and the most vulnerable communities are already paying for it. The processes of funding mobilization and intervention must account for this immediacy.

### **Session Summary:**

This session launched the Scottish Government report, *Addressing Loss and Damage: Practical Action*. The report synthesizes case studies for funding and action to address loss and damage, and analyzes these in the post-COP27 landscape after the establishment of a UN Loss and Damage Fund was agreed. The session introduced key findings from the report and solutions identified, particularly in the areas of mobilizing and innovative finance, assessing needs and delivering actions. The report also focuses on the intersectional and gendered aspects of economic and non-economic loss and damage. The session briefly introduced the 10 ‘Insights’ the report delivered, which suggest baselines for how just, equitable action might be achieved.

## Closing Ceremony



*The panelist the Closing Ceremony session*

**Host:** ICCCAD

**Moderator:** Dr Saleemul Huq, Director, ICCCAD

**Session Speakers:**

1. Nathaniel Matthews, CEO of Global Resilience Partnership
2. Sophie De Coninck, Global Climate Facility Manager, Local Climate Adaptive Living Facility (LoCAL), United Nations Capital Development Fund (UNCDF)
3. Blane Harvey, Assistant Professor, Department of Integrated Studies in Education, McGill University
4. Sam Greene, Executive Senior researcher, Climate Change, IIED
5. Anju Sharma, Lead, Locally Led Adaptation, Global Center on Adaptation

**Speaker 1: Nathaniel Matthews**

1. Increased commitment to adaptation and resilience finance has highlighted the importance of measurement and evidence.
2. Evidence needs of communities as key entry points to arriving at any adaptation or resilience decision and journey of local adaptation and intervention of practitioners which acts as policy innovation and knowledge.
3. Importance of highlighting voices from communities and their needs and also need to show the full picture of loss and damage including economic and non-economic aspects.



**Speaker 2: Sam Greene**

1. Locally Led Adaptation will be explored in depth through 5 themes at CBA17.
2. Marketplace and Skill Shares - learn new tools, approaches, and what works.
3. Dragon's Den to find collaborators and test new ideas in front of a panel of investors and sponsorships are available for community based practitioners.

**Speaker 3: Blane Harvey**

1. To gain valuable insights about adapting to climate change, it is important to learn from the knowledge and experiences of indigenous and local communities.
2. To bring marginalized voices especially from the Global South into the forefront of conversation in order to pursue climate justice, equity, diversity and inclusion.
3. To accelerate momentum towards the global goal adaptation in order to build action and implement effective adaptation.

**Speaker 4: Sophie De Coninck**

1. Advocate for more finance for local response to climate change.
2. The successful Locally led adaptation hub at COP helped raise awareness at the local level, creating a pathway for individuals to advance the agenda from being local actors to negotiators and even ministers, working together towards meaningful progress.
3. By connecting various perspectives and brainstorming solutions, we can adopt systemic approaches to address climate challenges.

**Speaker 5: Anju Sharma**

1. Best practice case studies to establish a global hub on locally led adaptation.
2. Make links with principles, need more learning about creating links with principles.
3. Peer-to-peer learning plays a crucial role in sharing experiences and knowledge among communities, fostering collaborative and effective adaptation efforts.

### **Three key takeaways from the end of the session:**

1. The rising investment in finance for adaptation and resilience highlights the need for measurement and proof. Decisions about adaptation and resilience should start with the evidential needs of the community in mind. This involves being aware of local adaptation initiatives and interventions, which are important sources of knowledge creation and policy innovation.
2. In the processes of adaptation and resilience, it is critical to emphasize the voices of communities and their unique demands. This includes taking into account both economic and non-economic components of the full scope of loss and harm brought on by climate change. Decision-makers can better address the problems communities face and develop suitable solutions by considering varied perspectives.
3. A crucial strategy that will be examined at CBA17 across numerous themes is locally led adaptation. Through markets, skill sharing, and collaborative platforms like Dragon's Den, the event will offer possibilities for learning new technologies, approaches, and best practices. Practitioners and community-based actors can develop their skills and support successful local adaptation efforts by encouraging knowledge exchange and peer-to-peer learning.

### **Session Summary:**

The increased dedication to adaptation and resilience finance emphasizes the significance of measurement and proof. In making adaptation decisions, it is critical to address the communities' evidentiary needs and take their views and needs into account. Recognizing the full extent of loss and harm, both financial and nonfinancial, is part of this. Real progress may be made in solving climate concerns by putting a strong emphasis on community engagement and knowledge sharing. The speakers also stress the value of highlighting the opinions and requirements of communities. Decision-makers can ensure inclusive and equitable climate initiatives that address the unique difficulties encountered by marginalized populations, particularly from the Global South, by embracing a variety of views. The objectives of climate justice, equity, diversity, and inclusion are in line with this strategy.

## List of Contributing Members

Session	Institution
<b>Inaugural</b>	International Centre for Climate Change and Adaptation
<b>Day 1 Session 1</b>	Huairou Commission ,Slum Dwellers International
<b>Day 1 Session 2</b>	International Rice Research Institute , International Maize and Wheat Improvement Centre , Living Deltas Hub, Wageningen University & Research
<b>Day 1 Session 3</b>	Christian Commission for Development in Bangladesh
<b>Day 1 Session 4</b>	Global Resilience Partnership, The United Nations Development Programme, Cyclin-Dependent Kinase Inhibitor, International Centre for Climate Change and Adaptation
<b>Day 1 Session 5</b>	Project Drawdown
<b>Day 2 Session 1</b>	Helvetas Swiss Intercooperation, Shushilan , Development Organization of the Rural Poor
<b>Day 2 Session 2</b>	USAID Climate Adaptation Support Activity (CASA)
<b>Day 3 Session 1</b>	Krishi Gobeshona Foundation, Bangladesh Agricultural Research Institute , Bangladesh Rice Research Institute, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh Agricultural University
<b>Day 3 Session 2</b>	Building Resources Across Communities,BRAC (Climate Change Program and Urban Development Program)
<b>Day 3 Session 3</b>	WaterAid (WA),Institute of Development Study
<b>Day 3 Session 4</b>	Center for Sustainable Development, University of Liberal Arts Bangladesh,Sajida Foundation, Friendship
<b>Day 3 Session 5</b>	ActionAid Bangladesh
<b>Day 3 Session 6</b>	Manusher Jonno Foundation
<b>Day 3 Session 7</b>	International Centre for Climate Change and Adaptation
<b>Day 4 Session 1</b>	Institute for Global Environmental Strategies , Asia-Pacific Network for Global Change Research
<b>Day 4 Session 2</b>	United Nations Women

<b>Day 4 Session 3</b>	FriendShip
<b>Day 4 Session 4</b>	World Resources Institute, Adaptation Action Coalition Secretariat
<b>Day 4 Session 5</b>	Huairou Commission (HC),Slum Dwellers International (SDI)
<b>Day 4 Session 6</b>	Bangladesh Centre for Advanced Studies, International Centre for Climate Change and Adaptation, University of Manitoba, Government of Bangladesh
<b>Day 4 Session 7</b>	Institute of Study and Development Worldwide
<b>Day 4 Session 8</b>	The United Nations Development Programme ,The United Nations Capital Development Fund
<b>Day 4 Session 9</b>	International Finance Corporation
<b>Day 4 Session 10</b>	Adaptation Research Alliance
<b>Day 4 Session 11</b>	Practical Action
<b>Day 4 Session 12</b>	International Centre for Climate Change and Adaptation, Global Resilience Partnership
<b>Day 4 Session 13</b>	United Nations Environment Programme, Educational Partnerships for Innovation in Communities Network
<b>Day 4 Session 14</b>	The United Nations Environment Programme Copenhagen Climate Centre
<b>Day 4 Session 15</b>	International Institute for Environment and Development
<b>Day 4 Session 16</b>	United Nations World Food Programme
<b>Day 4 Session 17</b>	United Species, the Green Climate DAO, Edenia, EcoRegistry, Ethereum Foundation, SEEDS Collaborative DAO
<b>Day 5 Session 1</b>	U.S. Government: National Oceanic and Atmospheric Administration (NOAA), U.S. Embassy - Dhaka
<b>Day 5 Session 2</b>	United Nations Women
<b>Day 5 Session 3</b>	Government of Vanuatu
<b>Day 5 Session 4</b>	Global Resilience Partnership, Cyclin-Dependent Kinase Inhibitor, International Centre for Climate Change and Adaptation
<b>Day 5 Session 5</b>	Scottish Catholic International Aid Fund



<b>Day 5 Session 6</b>	Living Deltas, Newcastle University, Loughborough University
<b>Day 5 Session 7</b>	Centre for Climate Change and Environmental Research (C3ER), BRAC University
<b>Day 5 Session 8</b>	Institute of Development Studies (IDS), University of Sussex, UK
<b>Day 5 Session 9</b>	Centre for Climate Justice – Bangladesh (CCJ-B) ,Climate Litigation Acceleration , International Centre for Climate Change and Development
<b>Day 5 Session 10</b>	Local Climate Adaptive Living Facility, The United Nations Capital Development Fund
<b>Day 5 Session 11</b>	Global Center on Adaptation
<b>Day 5 Session 12</b>	Stockholm Environment Institute, United States ENDA Energie, Senegal Prakriti Resources Centre, Nepal
<b>Day 5 Session 13</b>	African Research and Impact Network (ARIN), Tomorrow' Cities Hub; African Adaptation Research Alliance micrograntees ( SDI-K; Ghana and Siera Loene), Rights and Resilience partners; Arid Lands and Information Network (ALIN); YOUNGO- LLA- ; MECs;
<b>Day 5 Session 14</b>	McGill University, The leadership and learning for sustainability Lab,Adaptation Futures 2023
<b>Day 6 Session 1</b>	National Climate Change Adaptation Research Facility
<b>Day 6 Session 2</b>	WorldFish-CGIAR, International Maize and Wheat Improvement Centre, International Research Institute for Climate and Society (IRI), Solidaridad Network Asia
<b>Day 6 Session 3</b>	International Centre for Climate Change and Development , Community Resource Development Centre
<b>Day 6 Session 4</b>	International Centre for Climate Change and Development, Global Resilience Partnership, Irish Aid
<b>Day 6 Session 5</b>	Global Center on Adaptation
<b>Day 6 Session 6</b>	African Development Bank, Global Center on Adaptation
<b>Day 6 Session 7</b>	German Development Cooperation (GIZ)
<b>Day 6 Session 8</b>	Institute of Development Studies, UK; All India Disaster

	Management Institute, India ;Indian Institute of Technology, Delhi, India; University of Brighton, UK
<b>Day 6 Session 9</b>	UNEP Copenhagen Climate Centre (UNEP-CCC)
<b>Day 6 Session 10</b>	Greentech for Women
<b>Day 6 Session 11</b>	Center for Clean Air Policy
<b>Day 6 Session 12</b>	Adaptation Fund
<b>Day 6 Session 13</b>	The World Adaptation Science Programme, The United Nations Environment Programme, Griffith University , University of Washington
<b>Day 7 Session 1</b>	Infrastructure Development Company Limited , International Water Management Institute
<b>Day 7 Session 2</b>	ActionAid Bangladesh
<b>Day 7 Session 3</b>	International Centre for Climate Change and Adaptation
<b>Day 7 Session 4</b>	International Institute for Environment and Development
<b>Day 7 Session 5</b>	Global Center on Adaptation
<b>Day 7 Session 6</b>	Scottish Government, International Institute for Environment and Development, Global Resilience Partnership
<b>Closing Ceremony Session</b>	International Centre for Climate Change and Adaptation

## Photo Gallery





