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# Climate Tribune

VULNERABILITY TO URBAN HEAT WAVES

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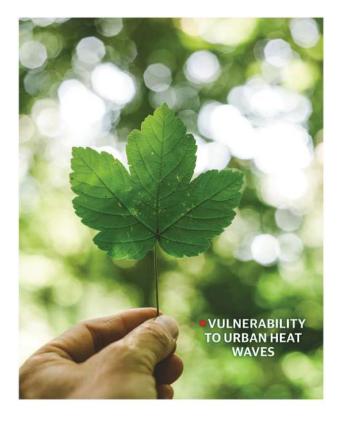
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# Climate Tribune



### FOOD ECONOMY



DHAKA TRIBUNE

# Circular economy for food: A glimpse of Dhaka City

Assessing the readiness of the circular economy for food in Dhaka City

#### Afsara Binte Mirza and Joyee Chakma

s Dhaka's population is rising exponentially, so is the consumption and production of unsustainable food. As urban citizens are earning higher average incomes than rural citizens, consumption of food per person tends to be higher. The increased amount of food that is entering Dhaka city is processed or consumed in a manner that creates organic waste in the form of discarded food, by-products or sewage. When determining if Dhaka City is ready for incorporating the mechanism of circular economy to produce food, it is important to consider how often it sources food grown regeneratively and locally that enhances rather than degrades the environment. In this context, regenerative food production is a technique that attempts to conserve soil and contribute to multiple provisioning, regulating and supporting services of the ecosystem. It also aims to increase the environmental, social and economic sustainability of food production. Some practices that are included in regenerative agriculture are diverse crop rotation, no-till/ direct seeding, cover cropping,

# Another key step of driving circular economy of food is utilizing the most of food, by reducing its waste

compost/ manure application, livestock integration, and agroforestry. This step also encourages to work collaboratively with local peri-urban farmers and harness their local farming techniques to enrich the biodiversity.

Another key step of driving circular economy of food is utilizing the most of food, by reducing its waste. Due to lack of food waste disposal provisions and regulations, food waste management is a major environmental concern in Bangladesh. According to UN research, an average Bangladeshi wastes 65 kg of food annually. Inadequate infrastructure for waste management, lack of awareness and knowledge on the implications of food loss, circular business models, legislation and laws, stakeholder involvement, are some of the major bottlenecks which needs to be fixed. The "food waste hub" from Milan Food Policy guidelines 2015-2020 can be introduced to redistribute food from restaurants, supermarkets, even from the household invitation and gatherings. In Milan, leftover food is frequently collected from homes, businesses, and schools and sent to a facility for anaerobic digestion and composting by municipal vehicles, many of which are biodiesel powered. These organic materials are converted into compost, which is used to fertilize peri-urban farms, and biogas, which is introduced into the neighbourhood gas distribution system, this system can be introduced in our economy too if we modify and redesign our waste management system. Systems for trash collection, segregation, and recycling must be looked at, along with their ability to manage organic waste. It is crucial to assess the scope of food loss and waste and find ways to reduce it via supply chain upgrades and awareness efforts. To close the loop, it is important to assess recycling facilities and investigate the possibility of utilizing food waste. Evaluations of available technologies, stakeholder participation, legislative frameworks, and circular business models will help to improve preparedness.

A circular economy for food in Dhaka city will also mean designing and marketing healthier food products, which we absolutely lack currently. Having an enriched tradition of food culture initiating from the Mughal culture, Dhaka's city dwellers are often seen to not have a long desire of healthy food. Rather, we consume increased number of unhealthy snacks, increased amount of red meat, and less consumption of greens. In a circular economy, food products are designed to be healthy, starting from production to nutrition. Marketing agencies and televisions can play a vital role in showcasing delicious and healthy products as affordable and accessible choices for people on a daily basis. Food brands, retailers, restaurants, schools, hospitals, and other providers can accommodate food preferences and habits to support regenerative food systems.

Moreover, a locally led approach and collaborative effort is needed to drive this systemic change in food system. Some key stakeholders such as food producers, food brands, retailers, food buyers and traders, restaurants, waste management companies, mayors, city governments, academicians, financial institutions, they all have a role to play in building a circular economy for food in Dhaka city. The UN estimates that by 2030, Dhaka would rank as the fourth-most populated megacity in the world. However, the city is inadequately equipped for this expansion and will have major impact on its food system.

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## HEAT WAVES



UNFLASH

## Safeguarding children in Dhaka amidst urban heat waves: A growing concern in 2023

#### Chowdhury Abrar Zahin and Gausia Islam Keya

hildren's heightened vulnerability to urban heat waves is a growing concern, worsened by the accelerating global warming trend. As with other south-east Asian nations, Bangladesh is suffering greatly from heat stress, which is one of the effects of climate change The National Centres for Environmental Information (NCEI) report reveals a significant rise in Earth's temperature since 1880, with a particularly alarming upward trend since 1981. Urban Heat Islands (UHI), a result of rising global temperatures, contribute to increased air pollution, reduced night time cooling, and high daytime temperatures.

Dhaka experienced an unprecedented heat wave in April 2023, reaching a record temperature of 40.6°C (105.1°F) in 58 years, according to officials from the Bangladesh Meteorological Department (BMD). This prolonged heat wave, caused by global warming, high humidity levels, and low wind speed attributed to an active El Niño, resulted in a cloudless sky and increased water vapor, intensifying the unbearable conditions for the city's residents, including children. Heat waves exacerbate these dangers, posing a significant threat to children's health. This occurrence underscores the urgent need to address the implications of extreme heat on the vulnerable urban population

Infants and children in Dhaka face significant challenges due to extreme heat, particularly in the recent months of April and May 2023. Their vulnerability to heat stress is heightened due to their unique physiological characteristics, such as higher heat production per kilogram of weight and limited temperature regulation abilities. These factors have profound effects on their physical and psychological well-being.

The high temperatures hinder children's outdoor activities, impacting their playtime, education, and overall welfare. They are more susceptible to heat-related illnesses, experiencing discomfort, headaches, excessive perspiration, thirst, weakness, dehydration, difficulties in concentration, and sluggishness. Moreover, they encounter additional hardships, including power outages, disrupted studies, and water scarcity, which have long-term implications for their mental health. The confinement indoors and disruption of routines further contribute to the psychological impacts they experience, affecting their overall well-being. Also this high temperature can increase the death rate of children.

To ensure the health and well-being of children during the summer heat, the primary responsibility lies with parents and caregivers. They play a crucial role in providing the necessary food and environmental considerations to protect children from heat-related challenges. Offering nutritious foods like cucumber, melons, green leafy vegetables, yogurt etc, promoting hydration, and ensuring appropriate clothing are essential steps in safeguarding their health. Schools also have a role to play by improving ventilation systems, creating a comfortable environment, and advocating for outdoor shading and the use of suitable clothing materials. Government and local authorities bear the responsibility of implementing policies and regulations that prioritize children's health during periods of high heat. This includes providing guidelines to schools for heat stress prevention and ensuring access to clean drinking water. Additionally, healthcare professionals play a significant role in educating parents, caregivers, and teachers about the risks of heat stress and the appropriate measures to mitigate its effects on children.

Government and local authorities bear the responsibility of implementing policies and regulations that prioritize children's health during periods of high heat

Drawing inspiration from the neighbouring country India, which has implemented various measures to address the impact of heatwaves, valuable lessons can be learned in safeguarding the adolescents. India's National Disaster Management Authority (NDMA) has developed guidelines on heat wave management, and the Ministry of Health and Family Welfare has issued advisories for preparedness. The government has launched the Heat Health Action Plan and recommended rescheduling working hours in different sectors. Additionally, individuals in India are taking proactive actions such as adopting solar-powered appliances, utilizing heat-resistant building materials, increasing tree plantation, and establishing public cooling centres. Some employers are also adjusting work schedules to avoid peak heat times. These comprehensive efforts aim to minimize the health impacts of heatwaves and enhance climate change preparedness.

Moreover, UNICEF'S B.E.A.T. (Be aware of heat stress and protect yourself, Easily identify the symptoms, Act immediately to protect, Take to a healthy facility) framework highlights the significance of a primary healthcare approach to address heat-related challenges. This approach emphasizes the involvement of caregivers, communities, and front-line workers in prevention, early action, diagnosis, care, and treatment. Front-line workers such as community health workers, teachers, caregivers in early child development, midwives, nurses, and doctors play a critical role in implementing the risk communication framework to help communities combat heat-related risks. By connecting these various efforts and stakeholders, a comprehensive and coordinated approach can be established to safeguard the health and well-being of children in the face of extreme heat.

In conclusion, intensified vulnerability of children to urban heat waves and the escalating pace of global warming necessitates urgent action to protect their health and well-being. The impacts of rising temperatures, exacerbated by urban heat islands, pose serious risks to children's respiratory and overall health. Dhaka's recent unprecedented heat wave further underscores the urgency of addressing extreme heat's implications for the city's vulnerable population. Parents, caregivers, schools, and government authorities must collaborate to provide nutritious food, adequate hydration, and appropriate clothing to safeguard children's health. Drawing lessons from neighbouring India's initiatives and embracing UNICEF's B.E.A.T. framework, comprehensive measures can be implemented to minimize the impacts of heat waves on children and foster climate change resilience. By prioritizing children's well-being, we can create a healthier and more sustainable future for generations to come.

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Gausia Islam Keya is working in International Centre for Climate Change and Development (ICCCAD) as a Research Associate. Her research interest lies in Sustainable Development and Resilient livelihood. Can be reached at gausia.islam@icccad.org The impacts of rising temperatures, exacerbated by urban heat islands, pose serious risks to children's respiratory and overall health

## POVERTY



The slums are built against the shoulders of high-rise buildings and are home to most of low-income people, but even in these conditions, they have to pay a high price to get essential services

## Unveiling the silent injustice: The poverty premium for marginalized people in urban areas

#### Md Lutfor Rahman and Md Juel Mahmud

e are burdened with the sky-high cost of BDT 7000-8000 per year only for the drinking water. Meanwhile, those fortunate to hold their water connections pay a minimal BDT 3500-4500. It's an unbearable truth that we are forced to bear nearly twice the financial burden of urban marginalized individuals. The force of this injustice intensifies the hardships we face, leaving us feeling let down and marginalized even further."- - Rasheeda Khatun, one of the slum dwellers, Mongla Municipality, Bagerhat. The above-mentioned financial burden, as highlighted by Rasheeda Khatun, serves as an upsetting example of the multitude of challenges faced by slum dwellers. The provision of essential services, such as housing, water, energy, sanitation, and transportation, imposes additional financial strains on these individuals, exacerbating their already precarious situations. This phenomenon, known as the poverty premium, refers to the higher costs incurred by those living in poverty or marginalized conditions when accessing essential services. In urban settings, the poverty premium results from various factors, including higher expenses, limited accessibility, and inadequate service coverage. These alternative water sources are typically more expensive and can pose health risks

This article examines marginalized urban dwellers' emerging issues when accessing vital services. Shedding light on these challenges emphasizes the urgent need to address them to foster a more inclusive and equitable society.

The concept of the poverty premium was first introduced by American sociologist David Caplovitz in 1963. It refers to the additional costs that low-income households suffer for goods and services compared to those with higher incomes. This financial burden imposed by the poverty premium further complicates the ability of slum dwellers to break free from the cycle of poverty and enhance their living conditions. Within this article, the poverty premium encloses the idea that low-income households often have to forgo certain goods and services due to their inability to afford them, resulting in a situation where they must "go without." This aspect highlights these households' hardships as they are forced to sacrifice due to financial constraints. Recognizing and addressing the poverty premium issue is the most important in promoting social justice and reducing inequality.

The research project on 'Inclusive Urban Infrastructure for Marginalized People' explored the existing condition of basic services such as housing, water, energy, sanitation, transportation, and communication, which they access from the municipality legally or illegally. Please mention the field area of this project here cause it's confusing as you are discussing about balu slum and korail slum. People don't know the field area. The research team has found that marginalized urban slum dwellers often face additional costs and financial burdens when accessing essential services due to socioeconomic circumstances. The other charges they encounter are given below:

#### **Housing rental cost**

Slum dwellers face a shortage of affordable housing options, forcing low-income individuals to pay a more significant proportion of their income on housing expenses. Per square feet of housing space, rent takes BDT 25-35, depending on the house's location in Dhaka. This cost is higher, even something twice the formal settlements. This leaves them with less disposable income to allocate towards other essential needs. They also may be forced to live in overcrowded and substandard conditions, sacrificing their comfort, safety, and privacy.

Water and Sanitation Expenses: Slum dwellers often lack access to clean and piped water sources, leading them to rely on alternative sources such as purchasing water from vendors or using water from contaminated sources. Particularly, at Korail, Dhaka, informal settlers have to pay more to access water from informal vendors. Parvin Akhter, one of the residents from Korail, said that she has to pay BDT 70,000 and 30,000 within two years to access informal water collection from the vendors, but both still need to be fixed. She has to rely on the neighbour's collection and pay every month. These alternative water sources are typically more expensive and can pose health risks. Similarly, access to proper sanitation facilities may be limited, leading to additional costs for using public toilets or paying for private alternatives.

House renters in these areas do not have the option to choose water services from alternative sources or agents. Additionally, house owners shirk responsibility for providing water services as their houses are built in informal settlements that are occupied illegally. The government also does not provide any legal water connection to individual houses in informal settlements. Consequently, illegal water vendors take advantage of this situation to expand their businesses and control the price of water as a commodity. Ultimately, the burden of these higher costs falls on low-income families who rely on their services.

#### **Energy Cos**

Accessing reliable electricity, they face much higher energy costs. They have to pay the informal vendors per bulb BDT 100, per fan BDT 300, per television BDT 200, and per fridge BDT 600. Settlers use gas for cooking and pay per stove from BDT 200-600. But the gas pressure supply is limited to late night to early morning.

One of the critical issues is that informal settlers need legal property documents, which hinders their ability to access legal electricity connections for their households. Exploiting this situation, informal vendors can quickly gain access to their homes and connect the electricity, charging exorbitant bills. This lack of legal documentation and formal access to electricity further perpetuates the financial burden on slum dwellers. They have no choice but to rely on informal vendors who take advantage of the situation to charge inflated prices.

Different strategies and interventions that can help alleviate the burden of the poverty premium on urban slum dwellers:

#### **Affordable Housing**

Develop and implement affordable housing initiatives that provide safe and decent living conditions for slum dwellers, reducing housing-related expenses. As a positive intervention, the Ashrayan project is a Bangladesh government-funded development initiative to ensure affordable housing and improve the living conditions of those in need. The government has been handing over flats in five newly constructed complexes to 533 slum dwellers. Officials from the national housing authority said the government planned to build 16,000 more flats for slum residents gradually.

Access to Essential Services: Improve access to affordable and reliable electricity, clean water, and sanitation facilities in slum areas, reducing the dependence on expensive alternatives. Dushtha Shasthya Kendra (DSK), a non-governmental organization (NGO), is helping residents of Dhaka's slums, like Korail and others, to gain access to public water and sanitation services in collaboration with Dhaka North and South City Corporation, Dhaka Water Supply and Sewerage Authority (DWASA), and Community Based organization (CBO). What about the condition of Balu slum of Mongla? World Vision (INGO) gave a few rainwater harvesting tanks to individuals in Balur Math and Signal Tower Colony. Additionally, residents of Signal Tower Colony have legal electricity connections, and they pay their bills based on their meter readings.

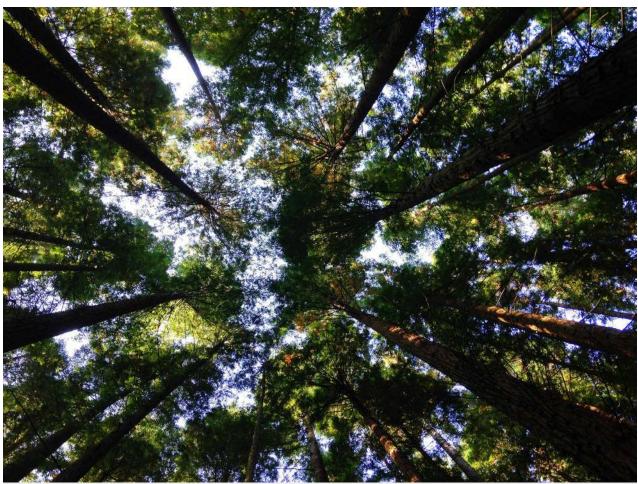
However, it is crucial to recognize that these strategies and interventions must be tailored to the specific context and needs of the slum dwellers. A one-size-fits-all approach will not effectively address marginalized urban communities' complex challenges. Instead, a comprehensive and holistic approach is crucial for sustainable change in slum areas.

In conclusion, the poverty premium extends the cycle of poverty and exacerbates the challenges faced by marginalized individuals in urban areas. Recognizing and addressing the additional costs and financial burdens are crucial for building a more inclusive and equitable society. We can alleviate the poverty premium and create sustainable change for marginalized urban dwellers through affordable housing initiatives, improved access to essential services, comprehensive interventions, and social empowerment. Our collective responsibility is to ensure that no one is left behind and everyone has Recognizing and addressing the additional costs and financial burdens are crucial for building a more inclusive and equitable society

equal opportunities to thrive and prosper. By working together, we can build genuinely inclusive cities where everyone can access the services they need without bearing the unjust burden of the poverty premium.

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## SUPPORTING LDCS



UNFLASH

## Support by ICCCAD to least developed countries in environmental protection

#### Prof Mizan R Khan and S M Saify Iqbal

o ensure the effective participation of the Least Developed Countries (LDCs) in environmental diplomacy, the Swedish Ministry of Environment mandated the Global Green Growth Institute (GGGI) in November 2021 to develop an LDC Engagement Strategy for Stockholm+50, an event to commemorate the first global environmental conference held in 1972. The Strategy has been developed in collaboration with the International Center for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB) and in consultation with a number of LDC governments and other stakeholders. This includes a few regional and national dialogues where the LDC Chair actively participated. LDCs are given a special status because, having made the least contribution to the triple sustainability crises - climate change, biodiversity loss, and solid waste, they are the most vulnerable to their effects. At the same time, LDCs with populations higher than a billion encounter obstacles to influence and participation in processes of global governance that have a significant impact on them. Ensuring that the SDGs are achieved in accordance with planetary boundaries and that everyone has the right to development, LDCs must be a part of the solution.

In light of this, the goal of the LDC Engagement Strategy, developed by ICCCAD and GGGI, was to confirm that LDC governments and academic institutions participated fully and effectively in the Stockholm+50 processes. This calls for participation not only in the June event itself in 2022, but also in the follow-up to the outcomes of the Stockholm+50 conference. Using lessons learned from the LDC group's successful participation in the UNFCCC process, the LDC Chair mobilized the LDCs as a group to start implementing this goal. Over the past 20 years, the LDC Chair's office has the potential to become the most active forum in global diplomacy. The Strategy aimed to assist in the development of a common LDC agenda, the provision of technical advice and research based on evidence, and the removal of obstacles to LDCs' participation in international processes.

The LDC Universities' Consortium on Climate Change (LUCCC) and GGGI's experiences working specifically with LDCs in Africa and Asia served as the foundation for the development of the Strategy. The Stockholm+50 country focal points for several LDCs were consulted during the development of the strategy. The initial national and regional discussions aimed to create a common global vision for how to attain prosperity in a healthy planet, as well as to advance the Sustainable Development Goals (SDGs) and Multilateral Environmental Agreements (MEAs) through an inclusive green recovery. The dialogues also served as a platform for inclusive debates on the topics of the Stockholm+50 Leadership Dialogue.

Based on the outcomes of Stockholm+50 and the COP 27

The goal of the LDC Engagement Strategy, developed by ICCCAD and GGGI, was to confirm that LDC governments and academic institutions participated fully and effectively in the Stockholm+50 processes

and considering the COP 28 of the UNFCCC, the following areas for action are proposed as the way forward for the LDCs to strengthen their global position, the central focus of which is capacity building for implementation of the national plans, such as NDCs, NAPs, Biodiversity Action Plans and Waste Management strategies in an integrated manner. Strengthening implementation of these plans certainly will strengthen the voice of the LDCs in the global arena•

Organizing a dialogue and workshop with officials of focal points and diplomats of foreign ministries of the LDC countries: Global architecture is a challenge that needs to allow adequate space for the LDCs. Some small developed countries like Sweden and Switzerland use this soft power quite effectively. This requires generation of better argumentation in favor of the LDC agendas.

Mainstreaming of Rio conventions in national development strategies and how to achieve synergy in their implementation in the LDCs. These countries are victims of the triple environmental crises plus increasing debt burden, which emits only 1 percent of global emissions, their biodiversity richness is impoverished by external and internal forces, and they generate the least waste. So, mainstreaming these concerns in development planning must be a priority.

Mobilizing climate finance, with a focus on doubling adaptation finance, as agreed at COP27, operationalization of the Loss and Damage Fund, agreed at COP28, blended finance through public-private partnerships. Currently, international support for the LDCs is extremely poor, with loan part of the support occupying an overwhelming share. How to turn this around externally, as well as how to mobilize financing domestically and how to devolve it down, must be considered. Learning best practices in public-private partnerships and how to apply them in LDC contexts should be one area of action.

As climate change impacts happen locally and regionally, the LLA, once a neglected area, is now being given new impetus globally. Another area of action should be how to realize the potential of LLA combining the local/indigenous knowledge and their best practices. Local food production and consumption value chains in LLA should be the focus. The LIFE-AR programme gives importance to implementation of LLA. The LLA is intertwined with nature-based solutions (NbS), where a significant share of community income is derived from natural resources. The LDCs have been at the forefront of implementing NbS into their climate policies -NbS are incorporated in 45 of the 46 NDCs, even though they are not officially labeled as "nature-based solutions," and 32 of the 45 NDCs include nature in both adaptation and miti-

As climate change impacts happen locally and regionally, the LLA, once a neglected area, is now being given new impetus globally gation strategies, whereas 13 of them exclusively include it in adaptation strategies. Nature is included into these plans in a variety of ways, from improved forest management for carbon sequestration to the introduction of climate-resilient crop types, the creation of green belts around major cities, and the restoration of mangrove systems. In the recent UN Biodiversity Summit, the global LDC Chair from Malawi has argued for doubling of financial support to the LDCs by 2030. So, this must be an action area for realizing the Stockholm+50 outcomes, and LDCs can play a lead role in this regard.

Empowerment of women and other marginalized groups as an agenda of the Stockholm+50 outcome must be realized. The women are quite underrepresented in science and technology literacy and this is reflected in their share of authorship in the IPCC reports. On the other hand, women and other marginalized groups proved themselves as better cate taker of natural resources. How to strengthen these roles should be a priority area.

Realizing the potential under Article 6 of the Paris Agreement, specifically actions under paragraphs 2, 4 and 8 which include both market and non-market mechanisms is an rea for exploration by the LDCs. Emissions trading under bilateral and multilateral mechanisms is an extremely complex area to comprehend. Here the LDCs, which were underrepresented in the CDM market, need capacity building to enter into emissions trading to mobilize financing for climate actions at home.

Realizing the LDC Vision of 2050 to achieve net-zero status through promotion of renewable energy at scale. The REEEI as an official programme of the LDCs is targeting to scale the share of renewable energy, as most of the LDCs are not rich in other sources of fuel. In this area, there are a number of good practices in solar and wind power generation even within the LDCs. So, how to scale all sources of renewable energy must be given top priority.

Addressing climate change-induced displacement: This is a great challenge particularly in sub-Saharan Africa and South Asia. Millions of poor communities are being displaced both by rapid and slow onset climate-induced events. Internationally, there is not yet any effective protection scheme to accommodate this uprooted million. Also global adaptation support is extremely poor. Domestically, the LDC governments do not command minimum resources to accommodate these displaces. This process endangers national and global security and peace. So, how to address this intensifying challenge should be a priority in the LDCs.

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### PEER TO PEER SHARING



# Peer To Peer Sharing among the neighboring countries

Peer To Peer Sharing among the neighboring countries

#### Sumaiya Binte Selim and Nazmus Sakib

Women empowerment and gender mainstreaming are two of the most important issues to be addressed when it comes to resilience and adaptation to climatic impact. In the South Asian region, these issues need to be studied and included in the project to programme management. On the other hand, in most cases, South Asian countries share similar socio-political and economic aspects, which makes peer to peer learning more inclusive and prolific.

Collaboratively, the International Centre for Climate Change and Development (ICCCAD) and Prakriti Resources Centre (PRC) are jointly working on various dimensions of climate change response in Bangladesh and Nepal. PRC, a non-governmental organization based in Nepal, is dedicated to sustainable development and environmental justice, strongly emphasizing gender equality, social inclusion, and good governance throughout their initiatives.

Presently, PRC is actively engaging with three women's groups located in different municipalities: Sahayatra Nepal in Ilam Municipality, Srijansheel Mahila Samaj Nepal in Tarkeshwor Municipality, and Mahila Jagaran Samuha in Banepa Municipality. Together, they are striving to localize climate actions and solutions through a gender-just lens. By working closely with these women's groups, PRC aims to enhance their knowledge of climate actions, inspire them to further their involvement in the climate change sector, facilitate cross-country learning, and promote the replication of successful climate actions in Nepal. As part of this endeavor, the women's groups recently embarked on a field visit to Bangladesh. The primary objective of this visit was to provide them with hands-on experience and exposure to climate actions, while also motivating them to continue their climate change work. By facilitating cross-country knowledge sharing and fostering collaboration between women's groups in different countries, the visit aimed to inspire and empower the participants to actively contribute to climate resilience efforts in their respective communities. Furthermore, it sought to encourage the adoption of effective climate actions from Bangladesh in Nepal, ensuring the replication of successful strategies and fostering regional cooperation in tackling climate change challenges.

Prakriti Resources Centre (PRC) collaborated with the International Centre for Climate Change and Development (ICCCAD) to conduct a study on the coastal region of Bangladesh. Their research focused on understanding the different types of scarcity while considering similar conditions, with a specific emphasis on the challenges faced by women. Along the southwestern coastline of Bangladesh, Mongla is confronted with numerous environmental and socio-economic challenges. Rising sea levels, salinity intrusion, intense cyclones, tidal surges, and erosion have significantly impacted the region, posing a severe threat to the local population's livelihoods and well-being. The vulnerable coastal communities in Mongla face scarcity issues related to water resources, arable land, access to healthcare, educational facilities, and employment opportunities. These scarcities profoundly affect women in particular, amplifying their vulnerability and exacerbating gender inequalities. With its unique environmental and socio-economic challenges, Mongla served as a prime location for examining the impacts of climate change on scarcity issues. This collaborative effort aimed to provide valuable insights into climate change adaptation and resilience-building strategies, particularly regarding women's empowerment.

The PRC women's group commenced their journey in Mongla by meeting with the Mayor of the area. During the meeting, a representative from the PRC women's group provided a brief explanation of their purpose for being in Mongla. As the discussion shifted towards women's empowerment, the Mayor acknowledged the importance of empowering women but expressed the challenges faced in implementing such initiatives due to resource limitations and cultural factors prevalent in the area.

The mayor's statement reflects the complex realities of promoting women's empowerment in a context where resources are scarce and cultural norms may pose barriers. It highlights the need for a comprehensive approach that considers both the practical constraints and the cultural dynamics at play. Overcoming these challenges requires collaborative efforts from various stakeholders, including government bodies, civil society organizations, and community members, to develop tailored strategies that address the specific needs and context of Mongla. By recognizing the obstacles faced in empowering women, the mayor's acknowledgment sets the stage for constructive dialogue and joint efforts toward creating meaningful change in the community.

After their meeting with the Mayor, the PRC women's group continued their exploration of Mongla and visited the Local Adaptation Centre (LAC) office under the project of Building Climate Resilient Migrant Friendly Towns through LLA of ICCCAD in partnership with BRAC, GCA and SPARC and funded by FCDO. In discussion with the implementation team of the project, they learned about the vision of rebuilding Mongla as a climate-resilient and migrant-friendly town.

The mayor's statement reflects the complex realities of promoting women's empowerment in a context where resources are scarce and cultural norms may pose barriers

The team shared their strategies and plans, highlighting the importance of considering the needs and vulnerabilities of the community, particularly in the face of climate change.

To experience the local community, the PRC women's group visited Ratarati Colony, a settlement within Mongla. There, they had a heartfelt discussion with the women leaders from the colony. Through this interaction, the PRC women's group discovered the immense challenges the women faced due to climate change. The women leaders shared stories of health-related issues prevalent in their community, such as Water borne diseases, hypernatremia, hypertension, heart diseases, , and skin diseases like genital ulcers resulting from the use of saline water. The empowering discussion transformed the atmosphere, leaving the women leaders feeling heard, empowered, and profoundly happy.

The following day, the PRC women's team returned to Dhaka and held a meeting with the ICCCAD team at ICCCAD office. During the meeting, ICCCAD team shared their ongoing work in areas such as Locally led Adaptation, Loss and Damage, Capacity building, and Displacement. The PRC team, in turn, conveyed their learnings from Mongla regarding the impacts of climate change. This peer-to-peer knowledge-sharing highlighted a powerful story: when women are empowered, positive outcomes follow. The PRC women's

This peer-to-peer knowledge-sharing highlighted a powerful story: when women are empowered, positive outcomes follow

group witnessed firsthand how empowering women in climate-vulnerable areas can lead to transformative change. Their experiences in Mongla exemplified the importance of recognizing and addressing the unique challenges faced by women in the context of climate change. This exchange of knowledge between the PRC women's group and ICCCAD reinforced the notion that empowering women is not only essential for their well-being but also has far-reaching positive implications for building climate resilience and driving sustainable development.

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## DISASTER RISK REDUCTION



Commute by boat during office time during monsoon season at urban area.

DHAKA TRIBUNE

## Assessment of participatory approach over in-silo approach to foster disaster risk reduction within urban discourse

#### Shamrita Zaman, Maliha Masfiqua Malek

he article focuses on the controversial stand for an in-silo approach over the participatory process in advancing disaster risk reduction (DRR) of urban areas and the inclusion of local government in DRR to build resilient cities. The presence of local government in DRR activities is a blessing in two ways. Firstly, local government recognition of the DRR approach to ensure synchronization between local government and the community to coordinate overlapping resources and responsibilities. Secondly, local governments' manifestation regarding the DRR approach could extend the disaster recovery phase amidst the post-disaster period once the external actors leave. However, the community takes DRR-related initiatives to make its built environment and associated essential services (i.e., transportation, sanitation, energy, health, education, etc.) resilient to external damaging hazards.

Further, the inclusion of local government can ensure the effective implementation of policy and actions adopted by that community and its governing institutions (public or private) to strengthen the community's DRR activities, defined as Disaster risk management (DRM) practices. The International Strategy for Disaster Reduction (ISDR), a global framework within the United Nations, has emphasized the role of local governments in mainstreaming DRR into the DRM process. Thus, robust and coordinated local processes and capabilities to integrate full-fledged DRM measures into the formal development process is intrinsic and unavoidable to make the community disaster resilient. This proposition will be further elaborated, showcasing two case studies of malpractice and good practice as lesson learning within the urban prospect.

The first author conducted hazard mapping as part of the Porticus Foundation-funded project titled 'Deep Dive Exercise in Khulna for Fair Urban Transition' in June 2022 at seven wards of Khulna City Corporation (KCC). Khulna is the third largest city in Bangladesh, located at 22° 48' 35.24" N and 89° 33' 51.80" E. The city is going through a complex urbanization process as Khulna is a climate migrant recipient city, mostly coming from the southwestern coastal belt of Bangladesh. Bangladesh's southwestern coastal belt is sea-facing, making the region highly vulnerable to cyclones and flooding that trigger the disaster-affected community to migrate to the nearby Khulna city for income diversification. However, in the field of KCC, it was observed that the level of the roads was constructed above the plinth level of the houses in some parts of the locality, which made the houses to be water-logged for a longer period of time due to fluvial (riverine) and pluvial (rainfall) flooding. In the worst scenario, some roadways are levelled above the existing drainage systems which prompts entering flood water into the drain first and subsequently in the surrounding locality. Such waterlogging impelled an unhygienic environment, particularly for the dwellers in informal urban settlements who struggled with dirt, and mud and were extremely vulnerable to vector-borne diseases, such as Dengue, and Chikungunya. Consultation with local communities revealed that they were not involved in the decision-making process before the local government implemented road construction projects. The community members are still highly frustrated as of getting no practi-

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cal solution to eliminate the housing inundation problems from the local political actors and government. In such circumstances, they could not promote any DRR initiatives to enhance resilience to flooding except waiting when the water went down naturally. This case study shows how the linking of the DRR process to the operational and functional mechanism of development projects is hampered due to the lack of a participatory approach or adoption of an in-silo approach.

Another case study is from the city of Manizales in Colombia, which is reputed for its development and environmental action programmes. With over 400,000 inhabitants, Manizales is located on the western slope of the Central Cordillera (a mountain range in Colombia), at an average altitude of 2100 m. The city and its population were extremely vulnerable to rainfall-induced landslide hazards. So, slope stabilisation and management processes have been started since 1971. Initially, the interventions were more on an engineering approach within the town corporation's entity.

Nevertheless, with the passage of time, the town corporation sensed the necessity to undertake slope maintenance works on some of the earlier civil constructions. Therefore, the corporation officials, in agreement with the municipality, launched a dynamic programme called 'slope watchwomen' (Guardianes de la Ladera 2003). The programme involved around 1230 women who were low-income family heads and lived adjacent to their workplaces. They worked under the supervision of several corporation managers and a civil engineer. Their responsibilities included maintaining the grass-covered slopes, inspecting civil works, and notifying civil authorities about any addition of new settlements on the slopes. Thus, the local governments engage the community and collect daily reports of what is happening in the city's most vulnerable areas (i.e. the slopes of the mountains). The 'slope watch women' have direct access to the Corporation and the Municipality, even though they are well-received by all community tiers. This is a clear example of how a community could be involved in the DRR process through a structural, institutional format with the presence of local government.

The above-mentioned two case studies demonstrate that at some points of action, the DRR process will fail if the in-silo process is adopted rather than a participatory approach. The participatory approach guides achieving census building, social mobilization, and inter-sectoral coordination among the community, political lineup, and local and national government. A participatory process with the presence of local government is always the best pathway to mainstreaming DRR into DRM practice.

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### WOMEN LED CSO



# Exchanging experiences of women-led CSO in Nepal

#### Sumaiya Binte Selim and Rukhsar Sultana

Learnings from a community visit organized by Prakriti Resources Centre (PRC) and Tewa, under the initiative "Learning and Sharing Workshop: Gender in GCF-funded projects in South Asian Countries." During this visit, representatives from Bangladesh, India, Sri Lanka, and Nepal had the opportunity to visit Tarakeshwar municipality in Nepal and learn about the remarkable work of a women-led Civil Society Organization (CSO) "Srijansheel Mahila Samaj".

Nepal a country of breathtaking landscapes and home to the Himalayas is also the country that is facing the challenges of climate change head-on. The combination of a rapidly growing urban population and a changing climate is putting a strain on the country's resources. Kathmandu the capital city of the country in particular in the crisis of freshwater aquifers running dry and increasingly unpredictable monsoons resulting in flash floods (Augustin , 2022). These climate-related challenges have far-reaching consequences o for livelihood, equity and social stability the changing weather, communities are facing different impacts with ripple effects on livelihood, lack of equity and social stability. In response, communities are coming together to find solutions that will help them adapt to the changing climate.

The combination of climate change and a rapidly growing urban population is straining an already overwhelmed municipal system, and amidst this struggle and stresses, communities are collaborating and actively working to change the power dynamics to develop and adapt to the situation, and more importantly through women empowerment One such community women-led Civil Society Organization (CSO) is Srijansheel Mahila Samaj in Tarakeshwar Municipality, Ward 4 of Kathmandu. The organization exemplifies this locally-led approach, addressing climate change, livelihoods, and waste management.

Established in 2017, Srijansheel Mahila Samaj embarked on a mission to empower women and create alternative livelihood options. With the support of TEWA and Prakriti Resources Centre (PRC), the organization has grown to include over a hundred dedicated members. Their collaboration with ward officials, and local government, enables them to actively participate in decision-making processes and contribute to collaborative efforts.

Since 2017, the Nepalese government started initiating the provision of public consultation by the municipalities. Though not all of the municipalities strictly follow this, there are instances where public awareness aligns with CSO interests, prompting municipalities to seek sustainable initiatives proposed by CSOs and the public. In general, the municipalities ask the local CSO and people to propose sustainable initiatives for implementation. Annually, they start this call for suggestions as well as proposals from March/ April and take the decision in June regarding the proposals. However, CSOs must actively engage with municipalities throughout the year, considering political influence and lobbying with the local government, and they are shortlisted. After primary selec-

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tion, municipalities review implementation plans, suggesting edits and checking the feasibility between the plan and the allocated budget. This process underscores the importance of CSO involvement in shaping local initiatives and driving positive change, despite political contexts common in South Asian countries.

Local Solutions and Climate Action: "Srijansheel Mahi-



la Samaj" has been instrumental in initiating and supporting various community activities aimed at climate action. Through rooftop farming, composting initiatives, and recycling cloth waste to create sellable cushions, the CSO actively contributes to environmental sustainability. Additionally, they organize adult education programs focusing on social media and advocate for community blood donation drives and other social causes. One notable success is the CSO's effort to reclaim a community hillside, which was encroached upon and at risk of landslides. Through their lobbying, Tarakeshwar Municipality funded their project, transforming the area into an open park for residents to enjoy.

In addition to their work on climate change, Srijansheel Mahila Samaj has also worked to promote women's empowerment. The organization has provided training on a variety of topics, including financial literacy, leadership, and entrepreneurship. These trainings have helped women to improve their skills and knowledge, and they have also helped to empower them to take on leadership roles in their community.

Learning from Nepal: First and foremost, the importance of a locally-led approach cannot be overstated. By empowering women and involving the community, CSOs can drive sustainable development and climate action effectively. Collaboration between CSOs and municipalities is crucial for leveraging resources and shaping initiatives that address local needs. Public consultation and dialogue can enable greater community participation, ensuring the implementation of projects aligned with community priorities.

The success of "Srijansheel Mahila Samaj" in reclaiming a community space demonstrates the power of collective efforts, and grassroots intervention to produce tangible and long-term results. The community learning visit provided a valuable opportunity for participants from Bangladesh, India, Sri Lanka, and Nepal to exchange experiences and learn from each other's successes. The locally-led approach, women's empowerment, and collaboration between CSOs and municipalities emerged as key lessons to be adopted in their respective countries.

By empowering women and actively involving communities in decision-making processes, South Asian countries can create a stronger and more sustainable response to climate change. Public consultation processes and collaboration between CSOs and municipalities are essential for shaping initiatives that address local needs and drive positive change

Disclaimer: The issue presented, and thoughts expressed in the article are of the authors, it does not necessarily represent any organization's mission and program priorities.

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