# The Thin Blue Line: Community-Based Climate Change Adaptation and the Case of RCE Greater Dhaka (Bangladesh)

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**Abstract:** In 2008 astronauts aboard the International Space Station captured an image of sunlight as it passed through the Earth's thin atmosphere, described as the thin blue line of "all that stands between life on Earth and the cold, dark void of space." At the center of sustainability education is a discourse of climate change and life's demise on the planet. In this short article, the contributing role of the United Nations University's Regional Centres of Expertise (RCEs) for sustainability education is explored with respect to community-based climate change adaptation, notably through RCE Dhaka (Bangladesh) as an example of the challenges and opportunities for climate change adaptation in one of the most heavily populated megacities of the Global South.

**Keywords:** Regional Centres of Expertise (RCEs), climate change governance, climate change adaptation, community-based adaptation, Global South megacities, environmental justice

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# Introduction

In 2008 astronauts aboard the International Space Station captured an image of sunlight as it passed through the Earth's thin atmosphere, described as the thin blue line of "all that stands between life on Earth and the cold, dark void of space" (United Nations Educational Scientific and Cultural Organization [UNESCO], n.d.). At the center of sustainability education is a discourse of climate change and its demise for life on the planet. In this short article, I will consider the United Nations University's Regional Centres of Expertise (RCEs) for sustainability education and the potential contributing role of RCEs, particularly RCE Dhaka (Bangladesh) for climate change adaptation as an example of heavily populated megacities of the Global South, representative of poorer nations, and communities within nations, predominantly yet not exclusively found in the southern hemisphere of the planet (Royal Geographical Society, n.d.).



Image 1: UNESCO (n.d.)

Two decades ago the concept of Regional Centres of Expertise was brought forward as a way of bringing together regional interests in sustainability with a mix of formal and informal approaches to learning about issues of sustainability, including climate change. The Global RCE Network (UNU, n.d.) includes descriptions of the respective regions, challenges and opportunities, as well as goals and objectives, activities and programs of over 179 Regional Centres of Expertise, including RCE Dhaka. The inception of Regional Centres of Expertise may be traced back to the Brundtland Report (World Commission on Environment and Development, 1987), which provided the foundation five years later for the first Earth Summit in Rio de Janeiro

in 1992. Among the wide-ranging recommendations of Agenda 21, the Earth Summit's official report, Chapter 36 on the promotion of education, public awareness, and training, pointed to the need for a reorientation of education toward sustainable development: "To be effective, environment and development education should deal with the dynamics of both the physical/ biological and socio-economic environment and human (which may include spiritual) development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication" (United Nations Sustainable Development [UNSD], 1992). A decade later the World Summit for Sustainable Development held in Johannesburg, in 2002, indicated the need for a reorientation of education for sustainable development toward local action, thus marking the formal initiation and conceptual formation of Regional Centres of Expertise as the centerpiece of the United Nations Decade of Education for Sustainable Development (DESD 2005-2014). The distinctively regional character of Regional Centres of Expertise, as Hans van Ginkel (Rector of United Nations University, 1997-2007) once observed, holds promise for RCEs in their role of advancing a highly engaged and action-oriented approach to education for sustainable development (Glasser, 2008).

At the ground level, Regional Centres of Expertise support climate change mitigation and adaptation in the socio-political context of Global South megacities, such as Dhaka, Bangladesh with one third of its population living in slums (Rahman, 2018, p. 48). Presently, there are over 35 megacities in the world, characterized by their size with a population of over 10 million people. Megacities of the Global South, such as Dhaka, the capital of Bangladesh bordering India on the Bay of Bengal (Image 2), are challenged by rising population and massive immigration which bring problems, for example, of healthcare, housing, and education (World Atlas, 2021).

Issues of social and environmental justice through unplanned urbanization are increasingly becoming a common challenge among RCEs in the Global South. Perhaps not as widely known as social justice, environmental justice began in part with the pioneering work of Robert D. Bullard (2005) who introduced the concept in the 1990s with its attention to environmental policies, for example, and their effect on communities notably of color. While attention to the issues of social and environmental justice have evolved with time, problems of inequality with respect to social and environmental injustice continue to surface in connection with increasing urbanization worldwide. RCE Makana (South Africa), for example, points explicitly to the problem of unplanned urbanization through its emergence from apartheid:

With the 1994 demise of apartheid and a recent regional change from a predominance of stock farming to game farming and eco-tourism there has been rapid urban growth. This change has led to many small land holdings being consolidated into larger game park blocks, displacing many farm workers to urban settlements where there are high levels of unemployment. The changes have also shaped a deepening poverty that is now being further exacerbated by the recent slowdown in the global economy and an attendant loss of further jobs as the market economy levels out. (UNU, n.d.)

Further, issues of poverty and unemployment (notably among women) are typically cited as conditions associated with unplanned and rapid urban growth. RCE Khomas-Erongo (Namibia) reports:

Unemployment levels are as high as 51% in urban areas and 36.1% in rural areas. High unemployment levels in urban areas are especially experienced in major cities and towns such as Windhoek, Walvis Bay and Okahandja, since people migrate from rural areas to cities in search for jobs. A relative high percentage of the unemployed are women. The inequality in society results in environmental problems such as the formation of informal settlements around major cities and towns. This is also due to a lack of low cost housing provision. These informal settlements lack proper sanitation systems as well as provision of drinking water and power. (UNU, n.d.)

Relatedly, RCE Chennai (India) offers a description of the combined environmental and social challenges of urbanization:

The lack of water supply dominates the problem of poor water quality in the city thereby ignoring the importance of water, sanitation, health and hygiene (WASH) topics.

Urbanization also makes waste management a huge challenge. Another major problem that the people face is related to safety. Chennai records the highest number of road accidents compared to any other metropolis in India, road safety has become the first priority among safety issues. (UNU, n.d.)

In the case of Dhaka, Bangladesh extreme climatic events such as cyclones, flooding, and land erosion in rural and coastal areas are responsible for much of Dhaka's growth and rising population (Black et al., 2011). Yet, as Araos et al. (2017) have observed, "While the vulnerability of Dhaka and other Global South megacities is well-documented, less attention has been paid to how governments, private actors, and international agencies plan to adapt to climate change and enhance the resilience of the local population" (p. 683). In this sense, climate change is as much a socio-political issue as it is environmental.



### Image 2: Google Maps (2021)

In the context of climate change governance, Regional Centres of Expertise may have a significant contribution to make toward social and environmental justice, particularly with respect to local initiatives in response to the social effects of climate change upon marginalized and vulnerable communities. In common with RCEs worldwide, RCE Greater Dhaka has turned its attention to several sustainability issues, including the destruction of ecosystems found among rivers, lakes, forests, and landscapes; pollution, canal encroachment, as well as indiscriminate use of pesticides and fertilizers; and socially-oriented issues associated with rapid urbanization, such as illiteracy, corruption and bribery, poor human health, and increasing socio-economic gaps between rich and poor. In addition, however, RCE Greater Dhaka is relatively unique with respect to its focused attention on climate change. As many RCEs worldwide list climate change among a variety of interrelated social and environmental issues, RCE Greater Dhaka has maintained climate change as a central part of its organizational vision and mission,

To mitigate the climate change extremes and human induced crises for a sustainable Dhaka megacity and to reduce the sufferings of huge human settlements in and around Dhaka for existence of our future generation ... [and further] to engage all city dwellers as well as the people of the coastal zone of Bangladesh in lifelong learning and effective change of sustainable ways of being, living, working and acting. (UNU – IASS, n.d.) These measures include, for example, the adaptation of global citizenship education in Bangladesh through a one-day workshop titled, *Adaptation of Global Citizenship Education (GCE) in Bangladesh for ESD* (Image 3) held in 2018. Illustrative of the networking capacity of RCEs worldwide, the aim of this workshop was "togather feedback from education experts, academicians, government, and NGOs, on the translation of an adaptive CBE guide into Bengali" (UNU – IASS, n.d.) in the context of the environmental and social challenges face by inhabitants of the Dhaka megacity and "the adjacent low lying vulnerable coastal zone, having a population of 55 million" (Global RCE Network, n.d.).



Image 3: UNU – IASS (n.d.)

# **Climate Change Governance**

In terms of its international governance, the climate change issue found its way to the world stage through the UN Framework on Climate Change (UNFCC), commencing with the Rio Earth Summit in 1992 (the Rio Convention), which set out to stabilize atmospheric concentrations of greenhouse gases (GHGs). Subsequently, the UNFCC was established in March 1994 (Piggott-McKellar et al., 2019). Since that time, it has become clear that anthropogenic climate change is now certain with projections through an intergovernmental panel report on climate change (IPCC) showing global temperature increases of more than 4°C by 2100 from pre-industrial levels (Pachauri & Meyer, 2014). While these increases have global implications, they also present significant challenges at the local level. At the first Conference of the Parties to the United Nations Framework on Climate Change in 1995, the focus was on solving the climate change crisis through mitigation; however, given delays among the Parties in committing to mitigation targets toward carbon reductions, by the early 2000s the notion of climate change adaptation became more realistic as it was recognized that mitigation would not likely prevent all climate change impacts (McNamara & Buggy, 2016).

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Briefly, the focus of mitigation is to lower climate change impacts (e.g., flooding, wildfires, diminished air quality), and possibly to avoid them altogether, while adaptation is more involved with enhancing the resilience of local populations vulnerable to the effects of climate change. Consider a simple analogy of a ship sinking due to a leak:

The first thing you could do is grab a bucket and pour water out as it gushes through the hull. This response is adaptation – addressing the effect (the water in the boat), but not the cause of the problem (the hole) ... If adaptation is pouring water out to stay afloat in the moment, sealing the leak to halt more water coming in is mitigation. (The Climate Reality Project, 2019)

In short, climate change adaptation looks specifically at what can be done to alleviate the immediate problems associated with climate change for local populations, as in Dhaka and the surrounding coastal region, while mitigation is focused on remediating the impacts associated with sources of climate change (e.g., travel and transportation, industrialization, deforestation). Given the interest of this article upon climate change adaptation, adaptation is defined as "the process of adjustment to actual or expected climate and its effects" as in doing what can be done to minimize the destruction and suffering anticipated as a result of climate change (Pachauri & Meyer, 2014, p. 1758); or simply put, adaptation is "managing the unavoidable" (Weir et al., 2017, p. 1020).

Recently in December 2015, the 21st Session of the Conference of the Parties gathered in Paris to adopt the Paris Agreement, with the aim to limit global temperature rise for this century below 2 degrees Celsius, and preferably to limit the temperature rise to 1.5 degrees Celsius above pre-industrial levels as indicated through the United Nations Sustainable Development Goals (SDGs) related to climate change (United Nations Department of Economic and Social Affairs: Sustainable Development, n.d.). While attention to climate change limits is reflective of a continued international commitment to mitigation among the 190 of the 197 Parties to the Paris Agreement as ratified in November 2016 (United Nations Climate Change, 2021), the role of adaptation in both international and regional climate change has been recognized particularly with respect to the local and regional needs of the Global South as found, for example, in the Dhaka megacity. The challenges facing Dhaka and the surrounding region, however, appear to be as much socio-political as environmental given the centralization of climate change governance through the Bangladesh national government with authority over public health, education, and social welfare; while local government in Dhaka is limited to matters of urban development and infrastructure (Panday, 2011). Further, local governance is responsible to respective ministries in the national government, which function independently of one another (Araos et al., 2017). In this respect, Regional Centres of Expertise may play a significant role given their networking capacities to bring together international, national, and local governance toward mitigative and adaptive strategies in response to the impacts of climate change upon the globe yet also local regions and communities.

## **Regional Centres of Expertise (RCEs) for Community-Based Adaptation**

A report of the World Resources Institute (McGray et al., 2007, as cited in Ayers and Dodman, 2010) reviewed over 100 climate change initiatives referred to as "adaptation" specifically in the Global South, and found that adaptation and development are not mutually

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exclusive but rather as part of a continuum from "development oriented" to "climate change oriented" responses to climate change. In the report, development is framed as social development with attention to activities that increase the resilience of local inhabitants to cope with climate change; for example, development might include a focus upon improved livelihoods or women's rights. At the other end, climate change initiatives typically include highly specialized measures to target impacts, often involving funding for infrastructure, for example, along coastal shores at risk. The latter end of the continuum is sometimes referred to as the technocentric "command and control" approach with its dependence upon technology and expertise, and has increasingly come under scrutiny (e.g., Blackman et al., 2018; Cox, 2016; De Roo, 2016). As Adger et al. (2005) have indicated, for instance, mangrove planting in Vietnam has been undertaken to buffer coastal environmental environments, thus reducing the vulnerability of coastal communities; however, "the greatest benefits come from the increased wealth generated from the ecosystem goods and services provided by mangrove forests" (p. 83). In this sense, Barnett and O'Neil (2010) have coined the term "maladaptation" as serving to "increase the vulnerability of other systems, sectors, or groups if they increase emissions of greenhouse gases, disproportionately burden the most vulnerable, have high opportunity costs, reduce incentives to adapt, or set paths that limit the choices available to future generations" (p. 212). These types of concerns with technocentric solutions have encouraged the development of adaptation as an alternative approach to climate change.

As an alternative, the concept of "community-based adaptation" (CBA) appeared in the early 2000s when Regional Centres of Expertise began to take shape. RCEs have been described as a platform for learning, often community-based, yet also focused on social action at a particularly local or regional level. In an interview, Hans van Ginkel (as cited in Glasser, 2008) observed that "People often feel that they belong to their region and they are prepared to work hard to improve its prospects for the future" (p. 111). In this way, RCEs are well positioned to support self-directed developmental processes at the regional level, thus creating a "learning" region ... [with] an underlying environment or infrastructure which facilitates the flow of knowledge, ideas and learning" (Florida, 1995, as cited in Mader et al., 2008, p. 404). Further, Regional Centres of Expertise have been described as networks for learning, and yet Mochizuki and Fadeeva (2008) have indicated that the United Nations University's initial conceptualization of RCEs has changed over time beginning with "the image of an RCE as a hub to promote ESD, a meeting point, a link point, a clearinghouse, a knowledge broker, and a platform for information exchange and sharing," essentially a one-directional system of "knowledge management, transfer, and delivery of ESD to the community" (p. 40). This point of view, however, has evolved into RCEs as a community of practice for social learning; that is, a learning network. This is in contrast to the knowledge transfer model, and its emphasis on a static leadership role for knowledge-related institutions, such as universities or governmental agencies. As an alternative, one might look to social construction theory as a way to understand how RCEs function as learning sites; that is, learning as social, or cultural, process that is relational and not simply about individual learning (Dudley-Marling, 2004). This is a view of learning reflective of Mochizuki and Fadeeva's (2008) reconceptualization of RCEs having evolved to some extent into "sites for learning, presupposing the existence of conflicts of interests and views among different stakeholders and seeing the potential of a network in the

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very fact that each partner contributes differing perspectives to the network" (p. 40). As consistent with this view of RCEs as sites for social learning, Wenger's (2011) communities of practice (CoPs) offer a further dimension into understanding how RCEs function as learning networks; that is,

Communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavor: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope. In a nutshell: Communities of practice are groups of people who share a concern or a passion for

something they do and learn how to do it better as they interact regularly. (p. 2) In this sense, Wade (2013) comments on how communities of practice take social learning and action a step further beyond networks of information-sharing sites; that is, "CoPs look at social networks more from the perspective of action and learning, rather than merely information sharing through interpersonal relationships. While some networks may remain at the level of information sharing, others can develop into CoPs" (p. 93). This is consistent with Mochzuki and Fadeeva's (2008) description of RCEs as sites for social learning with a focus on action, learning, and social change.

One might surmise then that Regional Centres of Expertise offer a suitable venue for the development of community-based adaptation in response to local, or regional, impacts of climate change. The aim of community-based adaptation CBA is two-fold: that is, to address the root causes of climate change for those within local communities as most vulnerable to its effects, as issues of social and environmental justice; and further, to acknowledge and make use of local knowledge and expertise in addressing climate change impacts (Ayers & Forsyth, 2009; Piggott-McKellar et al., 2019). Thus, central to community-based adaption is the issue of vulnerability to the local effects of climate change, in particular marginalized populations within communities. Ayers and Dodman (2010) have put it this way:

Accordingly, technology-based measures can only be partially effective if they do not also address non-climatic factors that are the underlying 'drivers' of vulnerability. ... [for] example, improving a water-supply system where climate change is associated with increased drought, which can only be effective in so far as everyone has equal access to that system; if the unequal distribution of water rights or the price of water excludes

certain users from the system, people will remain vulnerable to drought. (pp. 164-165) In this sense, community-based adaptation looks to vulnerability as a social and humanizing issue beyond conventional technocentric perspectives in response to the effects of climate change. Kelly and Adger (2000) defined vulnerability to climate change as "the ability or inability of individuals and social groupings to respond to, in the sense of cope with, recover from or adapt to, any external stress placed on their livelihoods and well-being" (p. 328); yet also, community-based adaptation to climate change implies adherence to a social process, that is, as McNamara and Buggy (2016) have observed, collective problem-solving processes and social cohesion as key enablers "to enhance adaptive capacity and action and improve information flows within communities … [and] also work towards challenging and transforming underlying political and social structures" (p. 450). The aim of community-based adaptation is at

Vol. 25, June 2021 ISSN: 2151-7452 once reminiscent of RCEs in their pragmatic direction toward collaborative problem-solving processes through the application of knowledge and expertise from various points of reference with a view toward issues of social and environmental justice of the marginalized and vulnerable, those inhabitants without voice and often invisible within local communities.

# **Uncertainty and Opportunity**

The concept of community at the root of community-based approaches to development has been "increasingly pitched as the panacea for climate change adaptation" (Buggy & McNamara, 2015, p. 270) as a cohesive, unified, and homogenous group of people" – a misleading assumption when considering that communities typically include individuals and groups with "different socio-political characteristics including varying levels of access to and control over services (such as education and health care), resources, decision making, and political influence, among others" (Piggott-McKellar et al., 2019, p. 376). On community-based disaster preparedness, for instance, Allen (2016) warned that while community-based initiatives "provide scope for understanding and addressing a much wider variety of forms of local vulnerability" there is potential danger, for instance, in "community-based initiatives [that] may place greater responsibility on the shoulders of local people without necessarily proportionately increasing their capacity to formulate initiatives according to community understandings and priorities" (p. 97). In that sense, community-based adaptation while having the potential to empower can also disempower particularly, as Piggott-McKellar et al. (2019) have indicated, in the case of community-based decisions made by consensus, which normally do not take into consideration imbalances and differences in power and influence among individuals and groups within the community.

In their review of the barriers to community-based climate change adaptation, McNamara and Buggy (2016) have considered the role of "participatory tools" such as vulnerability and risk assessments, as well as community-based participatory research toward more effective adaptation processes. In an example of community-based participatory research in Canada's north, however, Kwiatkowski (2011) maintained that "participation without a redistribution of power is a frustrating process for the powerless" (p. 448); that is, climate change vulnerability while associated with environmental hazards, as in increased flooding and wildfires, may be understood more completely as a matter of inclusivity with respect to decision-making processes involved in community-based climate change adaption. Questions may be raised then with respect to the socio-political nature of community-based climate change adaptation, in particular the relation of local communities with ministries or agencies of national governments responsible for climate change policy, for example, as well as relationships of power within communities between individuals and groups with decision-making authority and others without voice who have been marginalized in the process.

In their review of the literature with respect to the barriers to participation in communitybased adaption processes, yet further, to issues of connection between local, national, and international climate change governance, McNamara and Buggy (2016) offered relevant questions:

- Will "community" continue to only be considered as a romantic (i.e., "greenwashing") notion, thereby repeating the mistakes of the past and adopting community-level as the panacea, ignoring key issues of power and inequality?
- How do we translate lessons garnered at the local level, which are specific to the place and context, and effectively apply these within broader scale policies and processes? See Shiva's (2015) *Earth Democracy* (2015), and Wheatley's (2011) *Walk Out Walk On*.
- Building on the previous point, how can CBA effectively link to processes and institutions at all levels, to help transform political–economic structures, thereby creating a more supported context for long-term adaptation?
- How do we undertake longer term-focused adaptation, despite the pressing urgency for action, and link this more effectively with development outcomes as well as other priority areas including disaster risk reduction, poverty reduction, green growth and so on?

These points, although non-exhaustive, raise the pressing issue of a need to ensure decisionmaking processes in community-based adaptation are inclusive of individuals and groups normally marginalized, yet also to integrate climate change governance at the international and national levels with local or regional needs and initiatives; that is, to bridge top-down directives, normally dependent upon a technocentric perspective with bottom-up initiatives that may arise through local expertise and knowledge, reminiscent of innovative community-based development initiatives of Regional Centres of Expertise (Global RCE Network, n.d.) with respect to issues of social and environmental sustainability.

Common among RCEs of the Global South, for example, one may find reference to sustainable livelihoods to promote local economic production. RCE Central Kenya is a case in point with its "[e]stablishment of alternative livelihood projects such as fish farming, wool spinning and bee keeping for local communities" (UNU, n.d.). Further, RCE Greater Kampala (Uganda) reports on its work to "[d]develop and promote a strategy for improvement of livelihoods of slum dwellers in Kampala; skill development and vocational education; and advanced gender equality" (UNU, n.d.). RCE Greater Phnom Penh (Cambodia) tells of a project involving several partners in the promotion of sustainable agriculture for poverty reduction with the aim, "to promote sustainable agriculture conditions through various forms of education for change agents (agricultural extension officers) and farmers in the province... [and] through education for sustainable development, farming conditions based on sustainable agriculture will set up in the project areas" (UNU, 2014). While local or regional in nature, however, these initiatives toward sustainable livelihoods are part of a global RCE network of knowledge and expertise with its interests in promoting social, economic, and environmental sustainability.

Thus, one might consider the concept of "mainstreaming" community-based adaptation toward the integration of local climate change adaptation concerns into national development planning objectives, thus creating a dialogue between local, national, and international scales of response to climate change. As McNamara and Buggy (2016) have maintained, while the initial development of community-based adaptation 20 years ago indicated a shift from top-down approaches to focus on local activities by communities, a further trend has taken shape with current research emphasizing the significance of "multi-scalar" approaches as an integration of local level activities "supported by and integrated into national, regional, and international efforts" (Conway & Mustelin 2014, as cited in McNamara & Buggy, 2016, p. 451). Integration can help to ensure knowledge flows from the local to national level, perhaps enabling a better understanding of local context from a national and international perspective, and in turn, potentially better planning processes that are responsive to local priorities and needs. The call for the mainstreaming of community-based adaptation initiatives through national and international levels of climate change governance is reflective of the built-in process among RCEs internationally to collaborate and share knowledge and information through annual regional and global RCE conferences. The 12<sup>th</sup> Global RCE Conference, for example, is scheduled for June 2021 to be hosted by RCE Scotland. Similarly, the 13th Asia-Pacific RCE Meeting, including RCE Greater Dhaka, was hosted by RCE Kyrgyzstan and took place remotely in September 2020 (UNU, n.d.). Thus, initiatives undertaken by local Regional Centres of Expertise may be shared and developed at national and international levels, resulting in a more globally integrated and informed approach to the practice of climate change adaptation.

# The Thin Blue Line Revisited

A few years ago at a small annual event organized by RCE Saskatchewan (Canada), and known as the *RCE Sustainability Awards* (RCE Saskatchewan, 2021), in which formal recognition is given to individuals and groups who have undertaken various projects associated with sustainability education, the question was posed to those present at the end of the event as to what is most needed in response to issues of climate change. While many of the responses looked to what could be done, or what needs to be done, for example, in terms of innovation or leadership, a senior colleague and friend added thoughtfully and to the point that regardless of our efforts, "we may not have enough time." Time is perhaps what is needed most, and that is more apparently than ever in short supply.

Given their ad hoc or provisional nature, Regional Centres of Expertise for sustainability education, such as RCE Greater Dhaka with its attention to climate change impacts for megacities of the Global South, are not meant to replace governing structures, such as national governmental ministries or departments, but rather are designed to offer a layer of support to climate change governance already in place. As networks of expertise, RCEs have the capacity to assist in the mainstreaming of community-based climate adaptation to offer a platform or space for problem-solving at the local or regional level, yet also for the sharing and consolidation of climate change adaptation approaches and practices globally, for example, through regional and global meetings and conferences hosted by RCEs annually.

There is little doubt of the need for wide-ranging technical solutions well beyond the resources available at local and regional levels throughout the globe; however, the challenge of climate change is not one exclusively of a technical or scientific nature, but one of a socio-political nature of how to access the knowledge and expertise available locally among communities and regions to share and develop on a global scale. In that sense, Regional Centres of Expertise, such as RCE Greater Dhaka, have much to offer climate change adaptation for a world running out of time.

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