

July 2016

The Role of Universities in Capacity Building under the Paris Agreement

Victoria Hoffmeister, Marilyn Averill, and Saleemul Huq

Key Pointers

The Paris Agreement definitively establishes capacity building as a crucial means to enhance climate action and enhances the ability of the UNFCCC to coordinate capacity building initiatives.

In the past, developed countries have typically funded capacity building initiatives on an ad hoc basis, and these initiatives have mostly had little lasting impact in recipient countries.

Capacity building initiatives empowering universities to teach climate change could build local capacity to tackle the climate problem over the long term, by continuously training students.

Building collaborations between universities of the global North and South, perhaps in the form of research partnerships or student exchange programs,

This paper discusses how empowering universities to educate students on climate change could create systems that continue to build countries' capacities to tackle climate-related problems for decades to come.

Although the challenge of climate change is universal, the ability to effectively mitigate climate change and cope with its effects is not. Many of the world's developing countries have seriously limited capacities to plan and implement adequate climate policies and actions, and these countries "cannot mitigate or adapt to climate change without first having the capacity to do so."¹ Implementation of the Paris Agreement will require concerted action in all parts of the world, and Article 11 accordingly provides for enhanced capacity building to ensure that all countries have the necessary skills and knowledge to implement their nationally determined contributions, enhance the ambition of their commitments in coming years, and comply with monitoring and reporting requirements.

Universities are centers of learning and innovation that can play a critical role in building lasting climate-related capacities around the world. Many researchers, educators, and students are already deeply involved in producing, communicating, and learning climate knowledge and skills. Identifying and publicizing effective university programs, networking across institutions, countries and disciplines, designing new research programs, and expanding access to educational resources and opportunities will aid the cause of mitigating climate change and will allow creation of more resilient societies and ecosystems.

A Brief History of Capacity Building under the UNFCCC

Capacity building² has been part of negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) since the inception of the Convention in 1992.³ Article 6 of the Convention is dedicated to "education, training and public

¹ UNFCCC Capacity Building: Background. http://unfccc.int/cooperation_and_support/capacity_building/items/7061.php. Accessed 16 June, 2016.

² More background information is available at "A brief history of capacity building in the UNFCCC process." UNFCCC. http://unfccc.int/cooperation_and_support/capacity_building/items/1033.php. Accessed 16 June 2016.

³ UNFCCC Capacity Building: Background.

awareness.” It states that Parties to the Convention will promote “the development and implementation of education and training programs” at the international level, both by strengthening national institutions and sending personnel to train experts in the field of climate change, particularly in developing countries.⁴

The 2001 Marrakesh Accords list fifteen primary capacity building needs, laying out a framework for capacity building intended to allow developing countries to participate effectively in both the UNFCCC and the Kyoto Protocol.⁵ Capacity building was to be country driven, continuous and tailored to national conditions, and involve the principle of “learning by doing” with a strong emphasis on South-South cooperation. The Subsidiary Body for Implementation (SBI) monitors and reports on progress on the capacity building framework.

In 2012, COP17 created the Durban Forum on Capacity Building, a multi-stakeholder forum for the sharing of information on capacity building.⁶ The Forum meets annually during negotiations to share ideas and best practices relating to climate change. The fifth meeting of the Durban Forum took place in Bonn in May 2016.

At COP18 in Doha, Parties agreed upon the eight-year Doha Work Programme on Article 6 of the Convention, which requested organization of an annual in-session dialogue on Article 6 issues.⁷

In 2014 the secretariat launched a portal that provides information about capacity building activities around the world. The portal includes an interactive map that provides a list of activities in each country, along with a chart showing the percent of activities undertaken according to the priority areas laid out in the Marrakesh Accords.

Also in 2014, at COP20, Parties adopted a ministerial dialogue on climate change awareness and education, which encourages incorporation of

climate issues into national curricula and prioritization of awareness-raising in governments’ development of climate-related policies.⁸

Capacity Building under the Paris Agreement

Although attention to capacity building grew steadily in the COPs preceding Paris, capacity building remained a relatively uncontested issue, evoking minimal disagreement in negotiations to which developed countries assigned their most junior delegates.⁹ However, at COP21, the question of what role the UN should play in capacity building (beyond repeatedly affirming the need for it) emerged as a topic of debate. Delegations from the global North argued that their existing support for capacity building initiatives, mostly consisting of donations made on an ad-hoc basis through their respective development assistance agencies, should be allowed to continue without “interference.” Negotiators from the global South largely asserted that the Convention should play a more proactive role in coordinating and perhaps overseeing capacity building programs and projects.¹⁰

After debating the role of the UNFCCC, the parties reaffirmed the critical importance of capacity building in both the COP21 decision text and the Paris Agreement. The decision document establishes the Paris Committee on Capacity Building (PCCB) and the Capacity Building Initiative for Transparency (CBIT). Article 11 of the Agreement elevates capacity building and climate-related education, definitively establishing them as crucial means to enhance climate action under the Paris Agreement.¹¹

The COP21 decision establishes the Paris Committee on Capacity Building in order “to address gaps and needs...in implementing capacity-building in developing country Parties

⁴ United Nations Framework Convention on Climate Change, Art. 6.

⁵ UNFCCC. 2001. “Framework for capacity building in developing countries.” Decision 2/CP.7, paras. 1-13 plus Annex . A second framework was included for Economies in transition (EITs). Decision 3/CP.7, paras 1-9 plus Annex.

⁶ UNFCCC. 2011. “Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention.” Decision 2/CP.17. Section VI.

⁷ UNFCCC. 2012. “Doha Work Programme on Article 6 of the Convention.” Decision 15/CP.18.

⁸ Dagnet, Waskow, et al. 22.

⁹ Huq, Saleemul. “Why Universities, Not Consultants, Should Benefit from Climate Funds.” *Climate Home*. N.p., 17 May 2016. Web. 18 May 2016

¹⁰ Ibid.

¹¹ Dagnet, Waskow, et al. 22.

and further enhancing capacity-building efforts, including with regard to coherence and coordination in capacity-building activities under the Convention.”¹² The text directs the Subsidiary Body for Implementation (SBI) to organize annual in-session meetings of the PCCB and develop the terms of reference for the PCCB with the goal of recommending a draft decision for adoption at COP22.¹³ Most centrally, the decision instructs the PCCB to oversee a work plan for the period 2016-2020.¹⁴

Since the COP21 decision text was approved under the UNFCCC, provisions may be undertaken without waiting for ratification of the Paris Agreement. Therefore, the PCCB can begin to coordinate countries’ capacity building initiatives along with the many capacity building programs that have been created over the years under the Convention.

Empowering universities in the developing world to continuously build capacities to tackle climate change could transform expenditures on capacity building initiatives into true investments

The Paris decision text also establishes the Capacity Building Initiative for Transparency “in order to build institutional and technical capacity, both pre- and post-2020” to support developing countries’ efforts to meet the “enhanced transparency requirements” laid out in Article 13 of the Agreement.¹⁵ The CBIT will aim to strengthen national institutions for transparency-related activities in line with national priorities, provide relevant tools, training, and assistance for meeting Article 13 provisions, and assist in the improvement of transparency over time.¹⁶

Civil Society Constituencies

The UNFCCC recognizes nine civil society constituencies, including business and industry (BINGOs), environmental NGOs (ENGOs), farmers, local and municipal governments, indigenous peoples organizations (IPOs), trade unions (TUNGOs), research and independent NGOs (RINGOs), women and gender, and youth (YOUNGOs). Organizations select a constituency to join when they apply to become UNFCCC observers. Universities, think tanks, and consulting groups tend to choose the RINGO constituency, which welcomes anyone conducting research on any aspect of climate change.

Climate action and effective capacity building will require collaboration across geographic, political, sectoral, disciplinary, and other boundaries, and will require new perspectives on programs and policies. As researchers, educators, and practitioners, RINGO members have an ongoing interest and role in capacity building. They also have colleagues at their home institutions working on virtually every aspect of climate change with diverse approaches, who could be recruited to participate in capacity building efforts. The RINGOs have also stressed the importance of collaboration across constituencies and are seeking ways to work more effectively with other actors outside of the negotiations process.

The PCCB could benefit from the involvement of civil society constituencies in numerous ways. First, it could invite constituency members to participate as working members of the PCCB. Second, it could co-sponsor various activities with one or more constituencies to ensure that different types of expertise are represented and a wide variety of topics addressed. Third, it could consult with the constituencies to identify experts and other resources appropriate for specific tasks. Fourth, the PCCB could request that the constituencies communicate with their membership about the importance of and need for capacity building, and to solicit materials, suggestions, and other support.

¹² UNFCCC. 2015. Decision 1/CP.21, para. 71.

¹³ UNFCCC. 2015. Decision 1/CP.21, para. 75-76.

¹⁴ UNFCCC. 2015. Decision 1/CP.21, para. 73.

¹⁵ UNFCCC. 2015. Decision 1/CP.21, para. 84.

¹⁶ UNFCCC. 2015. Decision 1/CP.21, par. 85.

Harnessing Universities to Build Capacity

Developed countries typically support capacity building by funding disconnected initiatives through their development assistance agencies on an ad hoc basis.¹⁷ They often hire consultants to conduct training sessions or provide other short-term assistance, but provide little to no continuing support. As efforts to implement the Paris Agreement move forward, it is crucial to consider how this pattern can be changed so that funding earmarked for capacity building constitutes not just disparate expenditures without lasting effect, but *investments* that build local capacities for decades and generations to come.¹⁸

Initiatives that empower universities in the developing world to effectively teach climate change could perform this function of transforming expenditures into true investments by setting up systems that will continue to build capacity for years after funding is dispensed.¹⁹ Universities can enable each successive class of students to engage with the myriad of social and economic issues related to climate change before these students become leaders of government, civil society, and the private sector.

Universities the world over are *already* building local capacities by carrying out research and providing education on climate change. Professors construct opportunities for students to learn skills and knowledge that will be useful in addressing climate change-related problems. Just about every university department has a meaningful contribution to make regarding how best to address climate issues.

However, there still exist barriers that prevent universities from effectively building capacities where most needed. Students from the developing world have few opportunities to attend universities in industrialized countries, and in their own countries often lack access to computers,

databases, professional journals, and other important resources. Language barriers can inhibit access to useful information. Researchers tend to collaborate with others they have met in graduate school or professional conferences held in their home regions, rather than reaching out to those with different backgrounds, perspectives, and resources.

Almost all climate actions require considerable funding, and capacity building efforts will be no different. However, universities have many resources that can be shared now, without new funding. South-South, South-North, and triangulated knowledge sharing among universities will benefit all who participate. Low-cost, high impact activities could include the following:

Global Engagement. Numerous climate researchers, educators, and practitioners are already working in support of efforts to implement the Paris Agreement. Many other universities strive to become similarly engaged, and this aspiration should be linked with climate policy research needs, both under and outside of the Convention. Certain Certain NGOs and negotiating groups are already playing the crucial role of requesting their contacts at universities to conduct research as new needs for information emerge under the UNFCCC (e.g. by inviting a university research group to contribute a response to a UNFCCC body's call for submissions on a particular issue) and apprising them of other areas requiring research support.²⁰ The PCCB, perhaps working with the Climate Technology Centre and Network (CTCN),²¹ can help to match research needs with universities and other experts in order to build capacities in targeted areas.

Research Collaborations. Many professors undertake research in collaboration with colleagues, whether within their departments, universities, academia, or the larger professional

¹⁷ Huq, Saleemul. "Why Universities, Not Consultants, Should Benefit from Climate Funds." *Climate Home*. N.p., 17 May 2016. Web. 18 May 2016

¹⁸ Ibid.

¹⁹ Huq, Saleemul. "Why Universities, Not Consultants, Should Benefit from Climate Funds." *Climate Home*. N.p., 17 May 2016. Web. 18 May 2016

²⁰ An example of an ongoing collaboration between an NGO and a university group already exists between two of the organizations with which the authors are affiliated – the International Centre for Climate Change and Development (ICCCAD) and Brown University's Climate and Development Lab (CDL). Recently, Dr. Saleemul Huq, Director of ICCCAD, alerted the CDL of the Warsaw International Mechanism's call for submissions on financial instruments supporting loss and damage as well as the larger need for research on financing options for loss and damage. The resulting paper authored by CDL with Dr. Saleemul Huq's guidance is available here: https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/browncdl-icccadfinancinglossanddamagepaperdraft.pdf. Such models of collaboration could easily be emulated by other groups.

²¹ CTCN. <https://www.ctc-n.org/>. Accessed 16 June 2016.

world. These relationships often lead to joint publications and new projects.

Researchers in developing countries have fewer opportunities for collaborations with professionals and academics than do those employed in wealthy nations. A robust capacity building program will promote working relationships that transcend existing boundaries in order to develop new competencies and understandings on the parts of all involved.

Several consortia of universities have already been formed to deal with climate-related issues. These have the potential to promote sharing of ideas, methods, data, and materials, and to create long-lasting relationships. Information about opportunities to join these networks should be widely disseminated.

Problem-based Collaboration. Capacity building may be best served when experts from different fields come together to work on complex problems. University researchers and educators can exchange skills and knowledge with practitioners who work with communities and know how to cater programs to local needs.

Access to Information. Some universities have limited access to the internet, and therefore to databases, academic journals, professional development materials, and other resources. Establishing lasting relationships between universities could improve access to many types of information.

- *Scholarly work.* Researchers and educators in developing countries often have limited access to useful information on and analysis of climate-related issues. Access to peer-reviewed journals can be costly. Various environmental and other NGOs also produce valuable materials accessible online. Universities in the global North may be able to ease access for researchers and practitioners from the South. Compiling a list of salient resources would be useful, particularly if entries are accompanied by summaries and reviews.
- *Climate-related data.* Action on climate change should be grounded in sound

science. Therefore, national agencies and local communities alike need access to information about weather conditions, climate projections, environmental degradation such as deforestation, and other issues relevant to their locale. Such information should be provided in a format useful to decision makers and practitioners. Collaborations among researchers from the global North and South can promote discussions about how data can be most effectively leveraged in concert with local knowledge to produce effective mitigation and adaptation activities.

- *Curricular Materials.* Climate-related topics are now taught in almost every university department, both in stand-alone classes and as units within other courses with other focuses. Collecting syllabi and reading lists and making them broadly available would make it easier for instructors unfamiliar with climate change to incorporate relevant materials into their classes. As more experienced instructors can also learn valuable new approaches from their peers, these materials would be of use to educators throughout the world.

Distance Learning. Many universities and private companies offer educational opportunities that do not require on-site participation. For example, edX²² offers courses addressing energy, water management, risk assessment, and many other topics relating to climate change. Many of these courses are free. Compiling a list of massive open online courses (MOOCs) and other online resources relevant to climate change would be helpful to countries lacking their own climate-related courses and the capacity to develop them.

Student Exchanges. Many university students in both the global North and South study abroad for a short period of time. Accordingly, universities often set up student exchange programs that often feed into valuable long-term relationships.

Currently, however, tuition is prohibitive for some students wishing to study abroad. More exchanges could perhaps be accomplished without significant additional financial support if students were to work as interns rather than

²² edX. <https://www.edx.org/>. Accessed 16 June 2016.

taking classes for credit at a foreign school. Internships could be facilitated if students' home schools agreed to award credit for the experience and receiving universities provided students with mentors or supervisors. Living expenses could also be minimized if professors or other students were to provide housing for visiting students. Mentorships could lead to long-term collaborations, and such relationships could expand to include other researchers within the participating institutions. The PCCB could collect information on such programs and suggest ways to facilitate and improve student exchanges.

Proposed Initial Actions

Preliminary Interviews. Preliminary informal interviews with Parties should be carried out to guide planning by gathering information on needs for capacity building and possible roles for universities.

COP22 Workshop. Planning is underway for a full day workshop to focus on involving universities in capacity building to be held at COP22 in Marrakesh this November. Co-sponsors may include the secretariat, the Moroccan government, the RINGO constituency, and other organizations with close ties to universities or interests in capacity building. Participants may include local as well as international university researchers, educators, and students enrolled in climate-related programs. Workshop outcomes may include:

- A draft questionnaire to assess universities' needs, take stock of their available resources, gather suggestions for engagement, and understand barriers to effective capacity building.
- A strategy for identifying, collecting, and making available materials such as syllabi that could be useful to anyone wishing to teach climate-related issues
- A list of possible funding sources to support universities and students in the developing world, as well as to promote sharing of expertise and resources between the global North and South
- A description of current university networks, along with strategies for expanding and making best use of them to promote collaboration, education, and innovation.

Conclusion

As climate change intensifies, relevant skills and knowledge should be shared as widely as possible to enhance the ability of vulnerable nations to mitigate and respond to warming. Universities have a critical role to play in this capacity building to tackle long-term climate change. Every country in the world – especially those that are poor and vulnerable – is home to universities that have not attained their full potential to reach students and train them on climate-related issues. By contrast, a number of universities, in developed and developing nations alike, are already teaching effective courses on various aspects of the climate problem. Investing in building the capacity of universities to teach students about climate change and train them to tackle associated social, economic, and political issues will be a cost-effective means of embedding long-term capacity building systems in every country in the world.

Victoria Hoffmeister

Victoria Hoffmeister is a researcher in Brown University's Climate and Development Lab
victoria_hoffmeister@brown.edu

Marilyn Averill

Marilyn Averill is a Senior Fellow with the Getches-Wilkinson Center at the University of Colorado Law School and is affiliated with the Center for Science and Technology Policy Research at CU.
marilyn.averill@gmail.com

Saleemul Huq

Saleemul Huq is the Director of ICCCAD and a Senior Fellow at IIED
saleemul.huq@gmail.com

ABOUT US

The **International Centre for Climate Change and Development (ICCCAD)** at the Independent University, Bangladesh (IUB) conducts research, builds capacity on climate change and fosters the growth of networks in Bangladesh and globally.

Our vision is to gain and distribute knowledge on climate change, specifically adaptation, helping people to adapt to climate change with a focus on the global South.

Contact Us

www.icccad.net

Level 5, House 27, Road 1, Block A, Bashundhara R/A, Dhaka 1229, Bangladesh.



Brown University's Climate and Development Lab (CDL) is a think tank based at the Institute at Brown for Environment and Society. The CDL brings Brown students together to collaborate with leading actors in government, civil society and the media to fill research gaps in order to inform a more just, effective response to climate change. The CDL produces academic papers, policy briefs, op-eds, and blogs and focuses largely on climate finance and other issues of equity and justice. Over two dozen Brown students have attended UNFCCC negotiations as members of the CDL.

Contact Us

<http://www.climatedevlab.brown.edu>