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Climate Tribune



POWER TO THE PEOPLE

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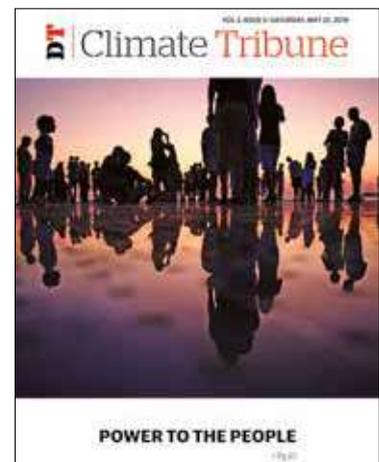
Editor's note

Dear Readers

With the polar ice caps melting, ocean levels on the rise, and changing weather patterns wreaking havoc on agricultural practices, the ongoing climate crisis is a problem we all share, and requires communities around the world to work together to adapt and reverse.

It is imperative that the most vulnerable communities need to be made part of the decision-making process, and a bottom-up strategy may be the best way to effect a positive impact.

This month's Climate Tribune brings notes from the recently concluded CBA13 conference in Addis Ababa and attempts to provide a clearer picture of community-based and locally-led action, arguing for the kind of legal framework and infrastructural support needed to create a viable defense against the observable effects of global heating. We



COVER: MARIO PURISIC

have provided a case study of CBA in action within Bangladesh to illustrate what the future might look like, and how local communities are already coping. ■

MORE THAN ONE WAY TO SAVE THE PLANET

PATHS TO CLIMATE CHANGE ADAPTATION

Ambalika Singh

Adaptation in the context of climate change is, adapting to changes as per the projected impacts and effects on the natural system, with the focus of minimising the harm on human life. Climate change impacts are not limited to any region and more importantly, vulnerable countries are expected to face an unprecedented level of impacts. Considering this, adaptation measures become fundamental for developing and least developed countries, with the vast population of poor people living with minimum facilities, social benefits and education.

Community-based adaptation (CBA) in part is significant as it focuses on the communities as the centre point and Ecosystem-based adaptation (EbA) aims at restoration of natural resources, conservation and ecosystem management. Together, both the approaches include livelihood resilience, conservation and development.

An inclusive plan for climate change adaptation

Community-based adaptation (CBA) supports local communities to become more resilient in adapting to the impacts of climate change. CBA is essential for empowering communities to plan and implement projects and respond to the needs of the communities. The aim of CBA is to reduce vulnerability and increase the adaptive capacity of the local people, who need assistance in tackling the impacts of climate change and adapt gradually.

CBA in the adaptation front plays a major role, as the impacts of climate change are inevitable. Flood, droughts and



other calamities are mostly affecting the poorest people with minimum living conditions and limited services. Whereas the impacts of climate change can be already observed affecting the lives of people, in the future, climate change adversities will pose greater hazards.

Thus, the preparedness of the communities at large is requisite; increasing the adaptive capacity of the local community needs to be enhanced and the role of CBA is central to fulfil these requirements. The national policies and programs emphasise on building resilience through CBA programs and specifically for the most vulnerable countries, where adaptation is vital, such as in the context of Bangladesh. CBA involves small-scale projects to support the communities and enforce practices that would assist in adjusting to the consequences of climate change.

Project implementation under CBA programmes have one focal point—focusing on the communities. Hence, the relationship with the communities should be enriched and develop the understanding of the necessities. As well as ensuring the success of the programmes requires gaining trust and confidence of the affected people for the programmes to be successful and for expanding the scope of the CBA projects.

Strengthening the broader objective

Ecosystems provide a wide range of services that supports nature and provides socio-economic development, on which the communities rely upon for livelihood dependence. Ecosystem-based adaptation (EbA) is an essential measure to conserve and sustain the ecosystem services, to minimise the impacts of climate change and help to adapt to maintain



MAXWELL RIDGEWAY

“Ecosystems provide a wide range of services that supports nature and provides socio-economic development, on which the communities rely upon for livelihood dependence”

the natural system that ultimately supports well being of people. If Ecosystem-based adaptation was implemented alongside Community Based Adaptation programmes on a smaller scale; involving local communities in a particular area, helping them manage and restore the ecosystem as part of the adaptation.

In case of EbA, the use of traditional knowledge and the interdependence between the natural resources and people needs to be considered. Local communities' dependence on ecosystem services has not been the only issue, but the requirement and utilisation have increased with the development processes, which might not include the requirements of the poor people on a broader framework of policy implementation.

Subsequently, development for local communities should promote nature-based solutions with certain economic incentives, as well as managing the resources. Emphasis on understanding the small projects on EbA and more importantly simplifying the whole process for ecosystem management and sustainable use could be considered in a broader capacity building program.

The harmony of two approaches

Community Based Adaptation (CBA) is significant in tackling climate change impacts, as it helps in understanding the impacts on the communities. On the other hand, managing the diverse ecosystem and promoting nature-based solutions through Ecosystem-based adaptation (EbA) add to the adaptation strategies and strengthening the local level resilience efforts.

CBA is comprehensive and it helps in determining the interventions needed for supporting the communities to adapt. Integration of EbA within CBA through various pilot programs could be applied in areas such as the Sundarbans. These sorts of programmes would be beneficial and cost-effective for restoring the natural ecosystem and promoting sustainable use of resources.

Moreover, Knowledge management, capacity building and influencing the policy level transformations are necessary for empowering the communities and enabling them with their rights so they can successfully contribute to decision-making. It could also be understood as mainstreaming climate change adaptation, integrating a variety of components and measures in building capacity of the communities and for all-inclusive development integrating EbA through CBA projects. EbA could also help in assessing social, economic and environmental credibility and effectiveness of CBA programs. In this sense, EbA is an extension of CBA initiatives, which gives effect in achieving the strategic ideas.

A UNDP case study in Nepal, Peru and Uganda shows that CBA programs with the interventions of EbA were cost-effective and reinforced the broader aim of CBA. The cost-effectiveness of EbA programs appears to be more economically viable in the longer term. However, the EbA practices have been applied for mountains program.

Applying EbA within CBA, as a natural based technique for climate change adaptation is more cost-effective in empowering the communities. A better prospect for this could be by establishing synergies between climate change adaptation on community livelihood with dependence and EbA methods, focusing on resilience with economic gain through the projects to align the objectives of both CBA and EbA. Also, identifying the barriers with the implementation of plans and what the interventions need to focus on.

EbA under the broad area of CBA would be beneficial for resilience towards the climate risks at present and in the future. Every CBA project would have a learning experience depending on the success and problems associated with it, which could be utilised in building capacity of the people at a later stage, and for implementation of the projects, as well as influence the policy level changes.

Mainstreaming climate change adaptation would require an all-inclusive CBA approach to help the local people. As well as, national to the regional government level incorporation of strategies and policies, efficient knowledge management, research to accelerate programs and link the institutions with the local communities to fulfil the gaps. ■

Ambalika Singh is a visiting Researcher at ICCAD and holds a LL.M. in Global Environment and Climate Change Law from the University of Edinburgh.

PRACTICAL STRATEGIES

THE CASE OF BURIGOALINI UNION

AN INITIATIVE IN ACTION



BIGSTOCK

Adiba Bintly Kamal

Climate change poses great challenges for the rural poor in developing countries who tend to rely on natural resources for their livelihoods and have limited capacity to adapt to climate change. It has become increasingly clear that even serious efforts to mitigate climate change will be inadequate to prevent devastating climate change impacts.

These impacts threaten to reverse many of the economic gains made in the developing world in recent decades. Therefore individuals, communities, and policymakers adapt Community based Adaptation (CBA) as a process to increase resilience against future climate change.

CBA is particularly important across Asia and Bangladesh in particular, which is especially vulnerable to climate change impacts. Burigoalini Union is Located in the Southwest of Bangladesh and borders with India. The area is mainly situated in the vast coastal plain at the apex of the Bay of Bengal.

Cyclones, salinity intrusion, and floods are common and often extreme events that occur in this part. The cyclones that occur each and every year in the Bay of Bengal regularly produce severe flooding in the Coastal Region, for example, the recent Cyclone Fani in May 2019. Sometimes it works as a push factor for migration which ends up as a different type of threat.

This situation has directly been negatively impacting water, sanitation, overall public health and sustainable livelihood of the Small and landless farmers as most of the People of this union work as Bonojibi (who works in the Forest), Shrimp Farmer, Fisherman, Honey Collector and Crab Farmer. So, in this situation Community Based Adaptation Strategies helps to move toward transformed resilience for the community as it's mainly based on the premise that local communities have the skills, experience, local knowledge and networks to undertake locally appropriate activities. The Following Community Based Adaptation Practices are taken by the Union People.

Crab Farming

Crabs Farming is less susceptible to disease and more resistant to adverse environment conditions, poor water quality and climate change. In Burigoalini Union, Soft-shell crabs are produced by keeping individual crabs in plastic boxes in brackish water ponds, feeding them locally available raw fish and harvesting them right after they molt.

Due to high prices in international markets, crab farming is gaining popularity in the coastal districts of Bangladesh and many shrimp farmers are switching to crabs farming. Khadija Begum, 27, is now working as a crab Farmer and she said that she used to get 6000 at the beginning taka and now she gets 7500 taka monthly. Especially Crabs Farming works as an opportunity for the women of the Cyclone prone area to be empowered and financially interdependent. After shrimp, crabs farming have become the second-most exported crustacean from Bangladesh. They are exported live to Different Countries.

Rain Water Harvesting

The freshwater crisis is a major concern which arises from the salinity intrusion in the coastal region. This Union also faces the same problem. Presently, a freshwater supply source like ponds, groundwater, canals, and rivers in this area is not reliable due to the salinity intrusion and the climate change effect. Failure of this freshwater supply largely affects the financial position of this community people with increasing health costs and reducing income opportunities.

Rainwater Harvesting is seen as a good alternative source of freshwater which is used to collect water during the monsoon, and preserved and used during the freshwater crisis period especially during the dry season in this Community. Rainwater Harvesting (RH) for reducing the freshwater crisis that might lead to socioeconomic development for this community.

Goat Rearing Practice

Goat has been described as a poor man's cow because of its immense contribution to the poor man's economy. It not only supplies nutritious and easily digestible milk but also regular source of additional income for poor and landless or marginal farmers. Being small-sized animals, goats can easily be managed by women and children of this community.

Capital investment and feeding costs are also quite low. In this Union "Goat Rearing" Project is running by the Help of UNDP and GIZ said by the mayor of Sathkhira, Tazkin Ahmed. Moreover, goat rearing is the most useful way of women earning those who stay at home. It provides socio-economic development for the community people of the country.

Home Stead Farming

In rainy season, the people of this Union generally do homestead farming beside their Home. They grow different



FREDERICK TUBIERMONT

“Local communities have the skills, experience, local knowledge and networks to undertake locally appropriate activities”

types of Vegetable, fruits etc. It gives support directly and indirect benefits to them as well as to nature. Sometimes they sell the vegetables and fruits in the local market. The women of this union mainly do homestead farming.

Pickle, Jam, and Jelly Production

In this Community the pickle, jam, and jelly is produced by the "Bonojibi Women development Organization". They use Local Ingredients to produce them and they sell them in 150 taka in the local market.

Community Based Adaptation offers significant advantages in seeking to make adaptation interventions more relevant to vulnerable people by considering the range of social and economic factors that drive vulnerability. As a result, Community based Adaptation strategies may end up by benefiting the vulnerable people economically in the Burigoalini Union. It reflects the priorities and needs of all members of the Community. Due to CBA, the vulnerable people of the union, now can protect their assets and boost their incomes, they become better able to manage climate uncertainties. ■

Adiba Bintey Kamal is a Masters student of Development Studies at Bangladesh University of Professionals. She is currently working with ICCCAD as a youth member from the Youth Mentorship Program.

CONFERENCE REFLECTIONS

COMMUNITY BASED ADAPTATION 13 (CBA13)

A NEW JOURNEY TO COMBAT CLIMATE CHANGE

Md. Ashaduzzaman Asad and Abu Sadat Moniruz-zaman Khan

The 13th International Conference on Community Based Adaptation to Climate Change (CBA13) brought together practitioners, grassroots representatives, local and national government planners, policymakers and donors working at all levels and scales to discuss how we can drive ambition for a climate-resilient future which is led by the community. The conference took place on April 1 to April 4, 2019 in Addis Ababa in Ethiopia and offered four days of discussion and debates, skill sharing and knowledge exchanges.

Themes for this year's CBA were even more interesting and exciting: climate finance, adaptation technology and policy engagement. Apart from these three thematic areas, the conference covered 25 sessions during four days conference, all of them engaging, thought-provoking and based on the practicality of the changing world.

This opportunity was great for BRAC's Climate Change Programme (CCP) to join CBA 13 as there have been an enormous number of takeaways which are essential to plan for a paradigm shift to combat the severity of climate change impacts. A total of 8 members, represented BRAC

Bangladesh and BRAC International countries attended CBA 13. Dr Saleemul Huq, Advisor Climate Change Programme, was among the BRAC team members. Attending with others provided an excellent opportunity for BRAC to have a look at what is being discussed at the international level and at the same time share what the community-based adaptation that BRAC has been doing as best practices.

Climate Change hits the poor hardest. BRAC believes that poor people lack the opportunity to change their lives and BRAC works to link people with opportunity and options appropriate. As a change catalyst, BRAC has a more extensive portfolio and successful track record on facilitating opportunity creations; it has become a real means of reducing poverty by improving both people's standard of living and economic self-sufficiency, as well as offering a pathway to education, health care and equity between men and women and adaptation to the climate change.

Community-based adaptation is a community-led process where communities' are the owner of their choices, priorities, knowledge need and capacities. CBA is an excellent method to eradicate poverty by improving livelihood, communities in order to plan for coping with the impacts of climate change. To do so, strengthening resource mobilisation must seek linkages between climate change finance and countries' long term planning and budgeting by mainstreaming climate change in every aspect.

BRAC finds CBA as an effective platform to participate and be a part of the community-based approach in combating climate change. BRAC, along with the other thousand organisations, want to see a world where all individuals and communities are climate resilient, but how?

Through providing space for the young people as think tanks to find solutions by making them problem solvers; improving the delivery of finance to solve the local problem; achieving transformative adaptation; and enabling girls, women and men as agents of the transformative adaptation.

On this note, BRAC has that capacity to strategies this source of financing for resource mobilisation in order to establish community-based adaptation and can play a vital role to tackle future impacts of climate change. It would be a mutually beneficial approach due to their association with livelihoods, assets and money-generating activities used by households for consumption, coping with uncertainties and responding to new opportunities.

“ Themes for this year's CBA were even more interesting and exciting: climate finance, adaptation technology and policy engagement ”



Attendees at CBA13, Attendees participating in sessions at CBA13.

MD. ASHADUZAMAN ASA

On the other hand, BRAC's Ultra Poor Graduation Programme (UPGP) is driving a large number of beneficiaries towards creating income sources to come out of poverty and graduate to receiving microloans by making them financially capable and socially acceptable in the community. BRAC WASH Programme is providing hard and soft solution for climate change adaptation.

One of the most talked windows for climate financing, which the Green Climate Fund (GCF) is the new hope for vulnerable climate countries. GCF is committed to fighting climate change and must ensure a sufficient flow of at least 50% resource for adaptation that supports resilient activities. What we must do is to ensure the funding to be driven towards the priority actions in favour of communities regarding climate change adaptation.

On the discourse on adaptation technology—it must be obtainable, sustainable and expandable to go further. However, the CBA has extended its discussion on the following technologies which are limited to the level of effectiveness for community-based adaptation to climate change as of now. The approach will only be successful if it reaches the communities where lives and livelihoods are threatened by climate change. More research and piloting is required to make it a game changer.

CBA platform can be useful as a source of identifying community-based funding to take the effort forward in a more meaningful way. Ensuring successful CBA at a larger scale requires integrated funding sources and institutional arrangements within the relevant stakeholders. The characteristics of this kind of collaboration have to be flexible

enough to allow communities to remain in the driving seat of their initiatives, and there is a belief that CBA would be successful in achieving that.

It is yet to be considered that besides Government agencies working wholeheartedly in leveraging policy strategies in the climate change development projects; actions must be coherent and should not be fixed to its terms instead including private sector could be a new route for scaling out the community-based adaptation.

The CBA conference series aims to bring synergies among the practitioners who are collectively seeking to rethink solutions that enable transformative outcomes through the agency of communities driving climate action.

On this regard, BRAC, the largest NGO in the world, has many things to offer as it covers a large number of participants at the community level. The Climate Change Programme has been taking forward an approach in mainstreaming climate change in all the programmes of BRAC to create a footprint as the organisation always does.

There are many more to come as the adaptation process itself follows 'learning by doing' method. The organisations like BRAC via its Climate Change Programme are also doing the same, and the future is bright, as it can offer from a different. ■

Md Ashaduzaman Asad, is the Senior Manager of the Climate Change Programme at BRAC. Abu Sadat Moniruzzaman Khan, is the Programme Head of the Climate Change Programme at BRAC.



POWER TO THE PEOPLE

COMMUNITY AND LOCALLY LED ADAPTATION

Saleemul Huq

The recent events like Cyclone Idai in Mozambique and Fani in India and Bangladesh were of unprecedented magnitude and clearly attributable to human-induced climate change. Thus, all communities, but especially the most vulnerable communities in the countries—most vulnerable to climate change—will need to gear up their efforts to prepare for climate-related disasters and build their adaptive capacity to tackle climate change at the same time.

This idea was the theme of two major international events in recent weeks. The first was the 13th International Conference on Community Based Adaptation (CBA13) held in Addis Ababa, Ethiopia. They were bringing together several hundred grassroots-based organisations, both from civil society as well as local governments in rural and urban locations.

The second was the Global Forum on Disaster Risk Reduction held in Geneva with several hundred

representatives from all the UN Agencies, Red Cross and International and local NGOs to discuss how Disaster Risk Reduction (DRR) by itself is not enough as it now has to be integrated with Adaption to Climate Change (ACC). I had the privilege to attend both these events and will share below some reflections on our state of knowledge and needs going forward.

The first point, is that it is now beyond question that human-induced climate change is real and already happening, meaning that traditional DRR now needs to be integrated into adaptation to climate change going forward—as the events are likely to become more frequent and more intense. While efforts to reduce emission to prevent the global temperature rising above 1.5°C must be pushed forward, the amount of warming already locked into the atmosphere and oceans means that we are now facing severe impacts across the globe, with the poorest countries and communities facing the brunt of the adverse impacts.

The second lesson, that we have learned is that the vulnerable communities are not sitting idle but are already taking actions at the local level all over the world; this is true in both developing countries as well as developed countries. Hence these efforts at the local level need to be supported from higher levels within governments as well as from global levels while they also need to be supported to share their knowledge from experiences horizontally across the different countries in a South-South and South-North manner.

The third lesson, is that while there are indeed global funds, such as the Green Climate Fund (GCF) and Adaptation Fund that have been providing some (albeit inadequate

“ We have learned that the vulnerable communities are not sitting idle but are already taking actions at the local level all over the world ”

amounts) of funding to support adaptation in vulnerable countries, most of those funds fail to make it down to the local level and the most vulnerable communities in those countries. Hence the global funding providers need to find better ways of reaching to the most vulnerable communities as their traditional tools and institutions are no longer fit for purpose.

The fourth and final lesson that I will highlight, is the sense of emergency that has emerged in just the last few months of 2019 with the school children led by Greta Thunberg of Sweden and the Extinction Rebellions groups around the world – driving the need for all politicians to wake up and admit that we are now in an emergency. Primarily because we did not act earlier and as a result, everyone has to raise their levels of ambition considerably going forward. The next big global event will be the Climate Summit in New York called by the UN Secretary-General who has quite rightly made it into an invitation-only event (climate deniers are not invited) and has asked for leaders to come with “Plans not Speeches”.

The Honourable Prime Minister of Bangladesh Sheikh Hasina is one of the leaders invited and has accepted the invitation. It will be an opportunity for her to not just showcase Bangladesh efforts on adaptation to climate change and DRR but also offer to share our knowledge with other Least Developed Countries (LDCs) as well as other developing as well as developed countries.■

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BUILDING RESILIENCE

EMBEDDING AN UNDERSTANDING OF CLIMATE VULNERABILITY

Mostafizur Rahman

Resilience at its heart is about understanding and responding to hazards or threats; these can be both shocks which can cause disaster but also longer terms changes and stresses such as changing environments due to climate change and economic development.

We live in a multi-risk environment, facing slow and rapid onset emergencies, and climate change. Local risk landscapes are changing fast, with frequent and intense weather events, and societal and environmental stresses which are becoming increasingly uncertain and unpredictable. Coupled with this we have the challenge of people who are living in developing countries, where the numbers of vulnerable communities over the coming century will increase dramatically.

Vulnerable communities across the world are already at significant risk and often lack resilience due to their economic and social situation. Without attention and adequate response at the policy and practice levels, the people at vulnerable communities coupled with the increasing multi risk environment will create a vulnerability nexus which could prevent global resilience from improving and put millions of marginalized people, their families and communities at risk.

“We live in a multi-risk environment, facing slow and rapid onset emergencies, and climate change”



A resilience approach includes understanding vulnerability and capacity of people, their families, their communities, and the services they rely upon from government and private sector, and the possible threats and opportunities they face now and if the future. Resilience is about supporting the development of measures to support the management of this and take up opportunities. Alongside this is also about building a level of capacity which allows a flexible response to threats and opportunities which are perhaps unknown.

A resilience approach addresses some of the many challenges we currently have in our community based adaptation work:



KARIM MANJRA

- It breaks down the silos that we work within, taking an objective approach to our work, examining the main risk issues and looking at addressing them at every level through different methods, from policy to direct programming.
- It allows for complexity, not by diluting our strategic approach but by knowing our impact and what additional actions are needed outside of our control to reach our goals, so emphasising the need for collective action and partnerships.
- It focuses on a much more dynamic and detailed analysis of the contexts we are working in through assessment,

“ A resilience approach integrates a different angle into the objectives of our community based adaptation work ”

thus improving the impact and sustainability of our work and the evidence we can draw from it.

- It provides a clear framework for monitoring and evaluation of our projects and the impact of our policy work and evidence as to the impact of our work on building vulnerable people resilience.
- It emphasises the need for community participation, partnering local knowledge with wider research and investigation and supporting the capacity building of national and local organisations and individuals.
- It provides a framework that can be applied to our work on social protection, health, rights and protection, gender, livelihoods, violence and abuse, humanitarian response and DRR work, creating greater strategic and operational tie up between these areas.

A resilience approach integrates a different angle into the objectives of our community based adaptation work. It looks to ensure that the impact of our community based adaptation work is dynamic allowing for change and respond to the various shocks and stresses that are the reality of vulnerable people's lives. ■

Mostafizur Rahman is the Project Manager of Climate Change and Environment at Helvetas Swiss Inter-cooperation in Bangladesh.

THE LEGACY PARTNER

ENGAGING NATIONAL INSTITUTIONS FOR LONG TERM SUSTAINABILITY OF ADAPTATION INTERVENTIONS



■ Riadadh Hossain and M. Feisal Rahman

The 2015 UN Climate Change Conference (COP21) held in Paris, saw the emergence of capacity building, perhaps for the very first time, as a key topic of discourse in international climate change negotiations. Article 11 of the Paris Agreement recognized the critical importance of capacity building and climate education for effective implementation of climate actions. The Paris Committee on Capacity Building (PCCB) was established in the aftermath of COP21 which further emphasized the need for long-term and sustainable capacity building.

It is being increasingly recognized that investing in national systems, as opposed to flying in foreign consultants would be vital for facilitating a paradigm shift towards long-term, locally-driven capacity development. We discuss here about a university based south-south initiative that is intended to deliver such capacity development.

Experts argue that climate change adaptation projects should really be about enhancing resilience of target communities and their partners to withstand shocks of climate change in the long term, probably when the funder and implementers are long gone. Unfortunately, adaptation projects currently lack considerations for long-term sustainability of implemented interventions beyond project period.

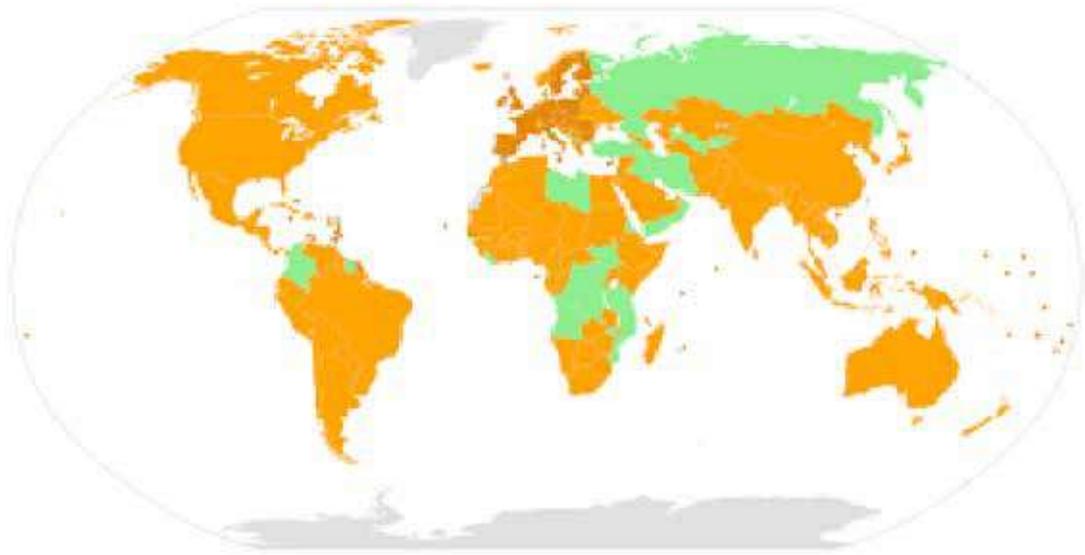
To accomplish long-term sustainability of adaptation interventions, eminent climate scientist Dr. Saleemul Huq has proposed the concept of engaging “legacy partners” into project design, referring to national institutions that would

be responsible implementing a sustainability plan. One of the three tiers of legacy partners would be what he referred to as “knowledge partners”—the role of whom would not only be to generate new knowledge, but also to ensure that knowledge is put into practice and capture learning from implementation, thereby drive a learning-by-doing process for adaptation.

Universities are best suited for this role. Regardless of their location, universities are globally celebrated as hubs of innovation and learning, and they happen to be some of the most sustainable institutions around. University-based researchers, educators as well as students are already actively engaged in the production, communication and learning of climate knowledge and skills. Universities therefore are vital agents for delivering long-term climate capacity building programmes.

In view of the above, the International Centre for Climate Change and Development (ICCCAD) based at Independent University, Bangladesh and the Makerere University, Uganda, took the initiative to establish the LDC Universities’ Consortium on Climate Change (LUCCC)—a South-South collaborative network of 10 Universities from least developed countries (LDC) across Asia and Africa. LUCCC’s vision is to enhance capacity on climate change in all 47 LDCs through education, research and training to enable them to adapt effectively to the adverse impacts of climate change.

Since its inception, LUCCC has established a university-based exchange programme for climate change researchers, and several partners are now jointly implementing cli-



“Regardless of their location, universities are globally celebrated as hubs of innovation and learning, and they happen to be some of the most sustainable institutions around”

mate adaptation research projects. LUCCC is now recognized as one of three long-term initiatives of the LDC Group on climate change- a network of 47 LDC countries who negotiate as a bloc at the intergovernmental negotiations under the UN Framework Convention on Climate Change sessions. LUCCC members are also collaborating with other long-term initiatives of the LDC groups and are contributing to the vision of the LDC group going forward to 2050.

In addition to capacity building, successful adaptation also calls for robust approaches to monitoring, evaluation and adaptation (MEL) of adaptation actions. LDCs would need domestic capacity to develop and implement adaptation MEL systems that are aligned with development policy and programming.

LUCCC members therefore need to position themselves to be recognized as organizations competent in gender responsive adaptation MEL. To spearhead the process, LUCCC has recently initiated a sub-group on adaptation MEL called the LUCCC Adaptation Learning Group (LALG). The overarching aim is to contribute towards establishing national MEL systems, cognizant of global adaptation goals and gender-sensitivity.

The inaugural meeting of the LALG was held in Addis Ababa, Ethiopia this April against the backdrop of the 13th International Conference on Community Based Adaptation (CBA13) which was attended by representatives from eight LUCCC member countries. The meeting established a preliminary work programme for the LALG. Going ahead, the group intends to collaborate on developing a set of training materials and guidebooks on the topic, for different tiers of professionals and academics. The possibility of integrating modules on adaptation MEL into secondary and post-secondary programmes in relevant disciplines would also be explored.

These, in combination, are likely to address existing gaps in capacity and over time help establish national adaptation MEL communities of practice within government agencies, academic institutions as well as community-based organizations.

Capacity building as has been argued throughout this article is a central determinant of how effectively LDCs adapt to climate change. Universities in the LDCs should be a central partner in resolving the wicked challenge of climate change.

By envisioning partnerships among the LDC Universities LUCCC has provided a necessary platform for these universities to share their respective expertise and create a pool of southern experiences and knowledge on adaptation. The initiative being at its infancy certainly will need appropriate support to grow and at same time LUCCC partners must remain dedicated to the long-term vision of ensuring effective adaptation in LDCs. ■

Riadh Hossain is a researcher at the International Centre for Climate Change and Development (ICCCAD), primarily working on climate finance and tracking and measurement of adaptation interventions.

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COMMUNITY BASED ADAPTATION FOR BETTER CLIMATE LAW

ACHIEVING JUSTICE FOR THE MOST VULNERABLE

■ Anne-Laure Pilat

The critical focus on the past year on climate change has put into light, with more and more evidence, its disrupting force in terms of environment, livelihoods and economies. Additionally, and maybe still less explored, climate change is also a legally disrupting force. Each society is composed of a web of relationships, with law playing the role of a guideline as to what is accepted or not, and what justice looks like at a given time.

Climate change and its impacts have a direct effect on changing currently existing social dynamics, social organization, administrative structures, and creating a new legal risk that will have a direct implication on how certain laws will apply. It will also raise a new ethical question in terms of justice and how to adapt the current national legal systems to the overall changing conditions as to leverage law as a powerful tool of change for an equitable and climate friendly society.

So far, most laws that could be related to the climate change concern are dealing with the question of limiting greenhouse gasses emission, leaving the pillars of adaptation and loss and damage underrepresented. We are today in a context of a vast legal “no men lands” when it comes to helping the most vulnerable communities to adapt to climate and reach for justice. Moreover, most debates related to climate justice and research is often located at the international scale, whereas the actual climate change and variables are met at the community level. Indeed, climate justice is a function of vulnerability which itself is due to the lack of capacity to adequately adapt or access “adaptation technology” to cope with affecting climate impact.

Thus, if we want actually to speak about climate justice, it requires legal practitioner and makers (in the broad sense) to reach to the most affected and vulnerable communities, listen to them and understand what they need and what indeed is a climate change impact. As such, coupling legal research with a community-based adaptation (CBA) process



PIXABAY

“We are today in a context of a vast legal “no men lands” when it comes to helping the most vulnerable communities to adapt to climate and reach for justice”

can help in achieving a better climate justice for the most vulnerable litigants.

Community-based adaptation is a relatively new approach that aims to strengthen the adaptive capacities of vulnerable local communities, via a participatory methodology and at the lower scale possible and with concern for sustainability and justice. The bottom-up approach of CBA can also contribute to help legally identify the subject of law that have the right (as well as obligations) for a better help to adapt to

climate (channel financial resources, better access to climate services etc.), the one that need to be protected and helped by the considered adaptation law at the upper level.

Furthermore, the participatory approach of CBA can help define the content of the possible adaptation laws in a way that is adequate to the context and necessity of the communities. Indeed, in the CBA approach, the communities themselves define their own sensitivities and level of vulnerabilities to a given climate stressor.

This approach is also helping to directly include the communities in the adaptive solution design that respond in a better way to their concerns, motivation, goals, cultural context and build upon their knowledge, social networks and expertise in coping with climate change. As such, this approach leads to a better definition of climate justice, one that gives the right to people to decide and choose how they want to adapt, the life they want to lead and receive adequate assistance for realizing it and observe actual positive results and feedbacks.

Additionally, both adaptation laws and CBA are factors of time and space. Indeed, CBA and law both aim to apply to a defined space, the one in which the communities are living. As for the time framework, adaptation laws aim for the future while the laws related to loss and damage investigate past or current events. Legal rules can repair past harm but also forbid or prescribe a specific action for the future.

In terms of adaptation, the law aims to help reorganize the functioning of society to help it cope with imminent climate threat, just like the CBA. Indeed, the overall goal of the future adaptation laws and CBA is to build the global resilience of communities for today and tomorrow, irrespective of whether a given climate impact comes today or in the future.

Another important beneficial outcome of coupling law research with CBA approach lays in need of proof in the litigation processes. Indeed, in each trial, each party must establish the facts by providing proof that can support beyond reasonable doubt the existence of the facts.

In case of adaptation to climate change, this means that the vulnerable communities, who want to go to court to claim their right to receive support for climate adaptation, must prove that it is affected by climate but also that a specific adaptive action is the best possible solution to address it. Therefore, there is a need for empirical evidence that will help support these kinds of claims and which can be found in the CBA research approach.

Finally, CBA can help in the effective monitoring of the effectiveness and impact of the new adaptive legal system on the adaptive capacity of communities. Indeed, this can be achieved by a long-term CBA process in which a regular self-assessment of vulnerabilities can help in evaluating the degree of lessening of a previously identified climate risk and thus evaluate the degree of impact of a given adaptation law or policy.



ARTHUR OGLEZNEV

It is essential to understand what the fragility of a legal system is in responding to the need of the most vulnerable and examine whom climate change impacts those fragilities positively or negatively. Creating a new, more adapted legal system to climate change will also require coordination with other climate change law, to ensure they all fit together and create a closed loop of positive feedback.

CBA is one of the approaches that can help to mainstream into law the voice of the most vulnerable peoples. Of course, it is not without its challenges (ex: ensuring fair and broad community participation, community definition and scale etc.), but can bring some answers as to how to modify our current national legal system to achieve a better climate justice than today. ■

Anne-Laure Pilat, has a background in Public and European environmental law.

SAVE THE RICE

REDUCING GREENHOUSE EMISSIONS IN AGRICULTURE

Rukshar Sultana

Almost half the workforce in Bangladesh is engaged in agriculture, mostly focusing on rice production as it is our staple food (Pearson, Millar, Norton, & Price, 2018). Rice production is therefore essential for both our economic wellbeing and food security. However, Bangladesh faces multiple challenges in rice production, especially dependence on groundwater for irrigation in context to climate change (Islam & Nursey-Bray 2017) which has resulted in aquifer depletion and increase in salinity.

About 62 percent of farmers use only groundwater while 11.3 percent use surface water for irrigation; the rest do not depend on irrigation but rely on rainwater (Ahmed et al., 2013). Dependence on irrigation pump surges during the dry season which stresses the national grid and increases dependence on diesel-powered pumps (Ahmed et al., 2013).

Arsenic is another problem associated with rice production. Due to the presence of Arsenic in groundwater, the use of groundwater in irrigation results in Arsenic exposure on consumption. According to 2007 Intergovernmental Panel on Climate Change (IPCC) report globally, 13.5 percent of anthropogenic Green House Gas (GHG) emission comes from Agriculture, of which rice cultivation results in significant GHG emission, especially methane. It has been estimated that flooded rice systems (comprised of irrigated, rain fed and deep-water rice) accounts for 11 percent for all the anthropogenic greenhouse gases (Smith, 2012).

The technique of Alternate Wetting and Drying (AWD) can significantly decrease the stressors as mentioned above of rice cultivation, especially the dependence on irrigation and arsenic contamination to the existing farming practices in Bangladesh.

AWD is a management practice used to irrigate lowland rice; this is a practice of periodic drying and re-flooding of the rice field. Some of the benefits of AWD have been identified to reduce water use by 30 percent and GHG emissions by 50 percent while maintaining rice yields.

The use of AWD technique first began in China and India in the 1980s and 1990s respectively (Mushtaq, Dawe, Lin, & Moya, 2006), but it was in 2002 when the Philippines first evaluated it as a water-saving practice. Bangladesh Rice Research Institute (BRRI) had its first trial of AWD in



Bangladesh in 2005 (Lampayan, Rejesus, et al., 2015). Even though evidence from AWD trials and demonstrations in Bangladesh has shown significant benefits for the farmers, but unlike farmers in China and the Philippines, Farmers in Bangladesh have been least interested in adopting this technology.

However recently under the project, “Mitigation Options to Reduce Methane Emissions in Paddy Rice” International Rice Research Institute IRRI and its implementing partners BRRI and Rangpur Dinajpur Rural Service (RDRS) has made some significant changes in reintroducing AWD in Northwest Bangladesh. A recent workshop titled, “Large Scale Implementation of Alternate Wetting and Drying (AWD) Technology in Bangladesh” held on 4th May 2019, highlighted how AWD is being promoted in Rangpur and Dinajpur through the Focal Area Network (FAN).

FAN is a rice-based multi-sectored network in Northwest



MAHMUD HOSSAIN OPU

“AWD is a management practice used to irrigate lowland rice; this is a practice of periodic drying and re-flooding of the rice field”

Bangladesh, and this network comprises of farmers, organizations, academia, NGO's and government agencies. Due to multi-stakeholder collaboration, out-scaling the AWD to thousands of farmers has been made possible this time around. Moreover, this project focuses on the collaboration of farmers and pump owners where both parties work together to map out irrigation strategies.

The impact study presented at the workshop highlighted that when combined with climate-smart agriculture options, namely nutrient management, sustainable residue management, benefits from the AWD technique can be maximized. A majority of the farmers under the project had experienced an increase in the yield.

Farmers also claimed that their urea use had decreased by 25 percent. Apart from water saving from AWD technology, arsenic uptake by rice plants are also decreased by reducing the length of time the rice is growing anaerobically, and this

may lower arsenic contamination in rice.

Article 8 of the revised Bangladesh National Agriculture Policy states the importance to promote AWD technology in agriculture, Bangladesh being a Signatory of Paris Climate Agreement, is committed to curbing its GHG emissions. As rice production is a significant contributor to Bangladesh's carbon emissions, AWD presents an opportunity to help address our emission targets.

Moreover this is not only a climate-smart but also a water-smart technology, with more benefits than losses, and tried method of multi-stakeholder collaboration learnt from the IRRI project AWD seems like a win/win situation for us. ■

Rukhsar Sultana is an Intern at ICCCAD, and has an MA in Environmental Studies with a background on wastewater management and plastic pollution.

CHANGE THROUGH STORYTELLING

THE GENDER AND CLIMATE: A TALANOA DIALOGUE IN CBA 13

TURNING AMBITION INTO REALITY

Shaila Shahid

Climate change impacts and exacerbate injustices, and the effects are more pronounced on women, girls and indigenous groups unless they are consciously included in the practices and policies implemented from local to international levels. It is essential for the policymakers and feminist movements to support and advocate for climate justice. Integration of climate and gender justice within programmes, research agendas and human rights movements should be supported to promote climate and gender transformative change at all levels.

Participants from the recently held CBA 13, Community Based Adaptation conference in Addis Ababa expressed their opinion to work for transformative change in the areas of gender-responsive climate regime while attending the Gender and Talanoa dialogue session.

The Talanoa Dialogue is based on the Pacific concept of “talanoa”—storytelling that leads to consensus-building and decision-making. The process is designed to allow for participants to share their stories in an open and inclusive environment, devoid of blame, in the hopes that others can learn and benefit from their ideas and experiences.

This session was built on the Gender and Climate Talanoa dialogue of the previous year, mainly focusing on participants’ experiences and the outcomes of CBA12’s “Gender and Climate Talanoa” session 2018. The interactive discussion focused on reviewing the issues generated and a shared vision of how we want to progress.

“The Talanoa Dialogue is based on the Pacific concept of “talanoa”—storytelling that leads to consensus-building and decision-making”



TALANOA CBA13

Further, the Talanoa style dialogue shared pathways of a theory of change that would lead us to gender transformative climate action at local, national and international levels. The session brought together the insights into how meaningful participation of women and other vulnerable groups can support gender transformative climate action.

The principal objective of the session was to review the progress of gender considerations at local, national and global level, and jointly contribute to a theory of change that can lead to transformative gender responses in climate action at different levels. The sharing in the Talanoa dialogue on gender highlighted the real commitment to rights-based, gender-just solutions to climate change that is imperative for the effective implementation of the Paris Agreement.

Lessons from various gender focused-climate study found that, to date, grassroots and community-based initiatives

are not supported by the current mechanisms—which are centralised and focused on large scale interventions and movements—leaving behind the poorest living at the grassroots. Although narratives around vulnerability recognise that women are the most impacted, they are often not recognised as agents of change and holders or solutions—and so not involved in the policy and decision-making processes for climate change initiatives and solutions.

This, therefore, points to the need for conscious responses to climate change that include poor and marginalised women—and men—with lived experience in the development of solutions. The importance of promoting gender equality and women’s leadership in climate policy has been emphasised, but it is also essential to understand how gender justice in climate action will support achieving transformative climate resilience to build the case.

The dialogue prioritised three critical areas like, how to achieve meaningful participation, representation and engagement of women in policy and decision making on climate change; how to develop and use knowledge, information, skills, and evidence to support gender transformative climate action.

Finally, discussing how climate finance is equitably distributed to ensure that money gets where it matters and supports gender transformative climate responses.

The Talanoa came-up with some influencing messages and recommendations for a more significant commitment to

equity, gender equality and social inclusion for more effective climate action as well enabling a just transition—recognising this is about power, about authority and the reality of decision-making. For this, building a shared vision for socially transformative climate responses need to be driven with identifying priorities led from the bottom up and integrated into top-down processes which can ensure meaningful participation of the intersections of people including women.

To achieve the shared vision, it is critical embracing and strengthening local culture and traditional bodies for active engagement, communication and implementation. It was discussed that at the policy level, gender and climate change action plans should be consistent and coherent with the UNFCCC Gender Action Plan (GAP) adopted at national levels. A just and gender-responsive climate framework can take different forms, but fundamentally it must respect and promote human rights and gender equality, and ensure sustainable development and environmental integrity.

At the end of the Talanoa dialogue, the participants expressed the call for an urgent and prioritised adaptation action and resources that respond to the most vulnerable countries, communities and populations; and, ensure full, inclusive and gender-equitable public participation in decision-making.

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GERD ALTMANN

CONVERSATION

WE'VE DECLARED A CLIMATE EMERGENCY – HERE'S WHAT UNIVERSAL BASIC INCOME COULD DO TO HELP THE PLANET

A STUDY IN NATURE SUSTAINABILITY

Mark Maslin and Simon Lewis

Governments around the world are declaring “climate and environmental emergencies” to highlight the unsustainable ways in which humans, over a few generations, have transformed the planet.

We've made enough concrete to cover the entire surface of the Earth in a layer two millimeters thick. Enough plastic has been manufactured to clingfilm it as well. We annually produce 4.8 billion tonnes of our top five crops and 4.8 billion head of livestock. There are 1.2 billion motor vehicles, 2 billion personal computers, and more mobile phones than the 7.6 billion people on Earth.

Globally, human activities move more soil, rock and sediment each year than is transported by all other natural processes combined. Factories and farming remove as much nitrogen from the atmosphere as all Earth's natural processes and the global climate is warming so fast that we have delayed the next ice age.

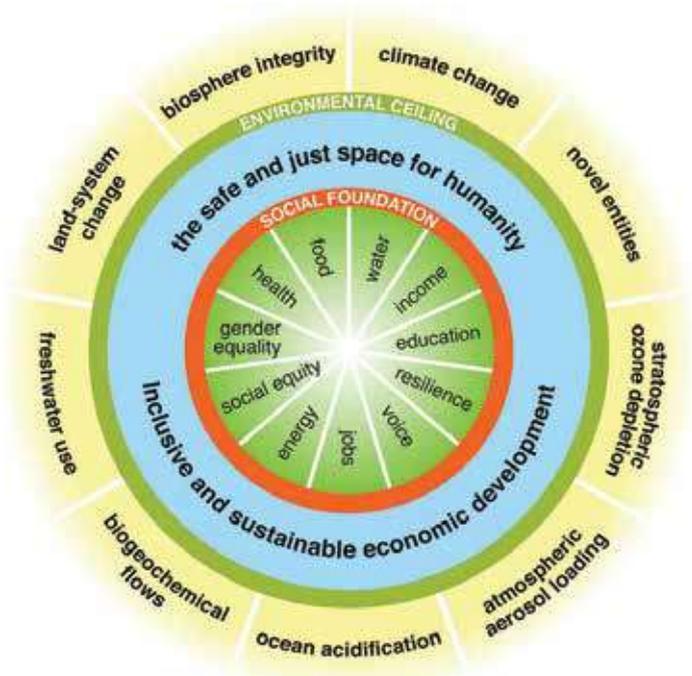
We've entered the Anthropocene and left behind the stable planetary conditions of the past 10,000 years that allowed farming and complex civilizations to develop.

Today's globally interconnected network of cultures relies on a stable global environment. So how do we design national and international policies to deal with this global climate and environmental emergency?

A study in Nature Sustainability recently attempted to summarize and evaluate the different types of policies that could be used to save our environment.

The study is based on the planetary boundaries concept developed by a team of academics led by sustainability researcher Johan Rockström and Earth system scientist Will Steffen. They defined nine physical environmental boundaries that, if exceeded, could result in abrupt changes and serious repercussions for human civilization.

We've already crossed three of these boundaries by changing the climate, destroying biodiversity and disrupting the nitrogen and phosphorus cycles through agriculture.



COURTESY

This study focused purely on physical limits to human life on Earth and didn't deal with the underlying dynamics of consumer capitalism which govern most of human life. In contrast, economist Kate Raworth combines the physical and social needs of humanity by including water, food and health alongside education, employment, and social equality. Between these two sets of needs is a just operating space for humanity.

Living within this space, according to Raworth, demands inclusive and sustainable economic development, which is becoming known as “donut economics”. At a fundamental level, it means we design our economic policies to look after the planet and everyone on it.

The Nature Sustainability study focuses on command and control policies such as taxes, subsidies and fines, instead

of looking at what is driving consumption. Essentially, the authors apply old policies to try and fix the problem of the Anthropocene, which given its scale, needs a whole new set of ideas.

One of these is universal basic income (UBI) - a policy that would guarantee a financial payment to every citizen, unconditionally, without any obligation to work, at a level above their subsistence needs.

Small-scale trials of UBI show that educational attainment is higher, healthcare costs go down, entrepreneurship levels both in numbers of people and success rates go up, as does self-reported happiness. However, UBI does more than this: it could break the link between work and consumption.

Breaking this could, if carefully managed over time, dramatically reduce environmental impacts by slowing the treadmill of producing and consuming things that currently fuels untrammelled economic growth. We could work less and consume less, and still meet our needs. Fear for the future would recede, meaning we wouldn't have to work ever harder for fear of having no work in the future. This is especially important as automation and intelligent machines will increasingly compete with humans for most jobs.

One argued use for UBI would return anything not spent by people to the original pool, meaning the money can't be saved. Wealthy people may not use it at all, but it would guarantee that essentials are affordable for the poorest.

UBI therefore eliminates extreme poverty and reduces dependency. It gives people the agency to say "no" to undesirable work, including much environmentally damaging work, and "yes" to opportunities that often lie out of reach. With UBI we could all think long term, well beyond the next pay day. We could care for ourselves, others, and the wider world, as living in the Anthropocene demands.

“Today's globally interconnected network of cultures relies on a stable global environment”

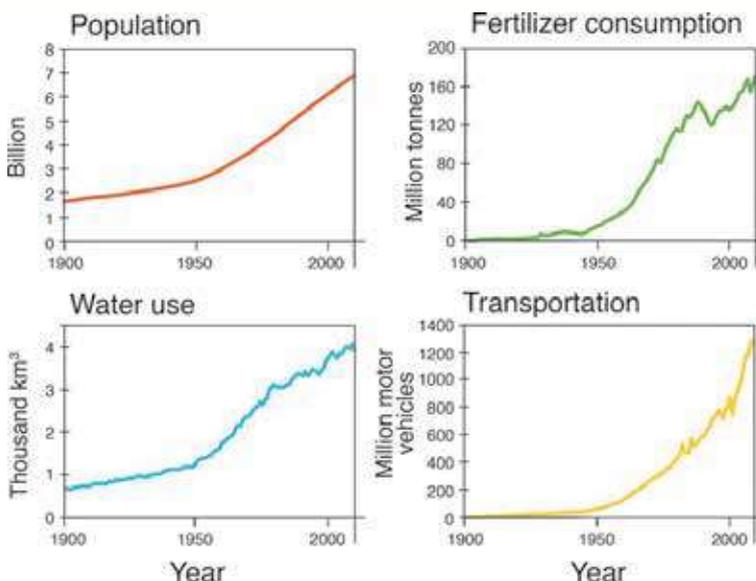
A second radical policy of environmental repair could come from the simple but profound idea that we allocate half the Earth's surface for the benefit of other species. "Half-Earth" is less utopian than it first appears.

By 2050, over two thirds of the world's population will live in cities. We have become an urban species, with the world outside the major cities becoming increasingly wilder. There is an opportunity to return this land to its pre-human wild state through rewilding. Mass-scale forest restoration is already underway, with commitments across 43 countries to restore 292m hectares of degraded land to forest - ten times the area of the UK.

UBI would give people the right to choose when it comes to fulfilling their own basic needs. Rewilding Earth does the same for other species' needs - we would provide the conditions for them to thrive and to manage their own well-being. Instead of relying on 20th-century ideas, we need carefully designed policies that could push society towards a new mode of living in a new epoch.

Surviving the Anthropocene means breaking the cycle of production and consumption undermining the conditions which have allowed our global network of complex civilisations to flourish. Our global climate and environmental emergency will not be solved by modest changes to taxes. Bolder changes would mean we can change the way we live to radically reduce suffering and allow people and wildlife to flourish. ■

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