

Climate Governance

Working with multiple actors to combat global warming

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In 1988, at one of the first major global warming conferences, scientists declared that “humanity is conducting an unintended, uncontrolled, and globally pervasive experiment” which they said was emitting greenhouse gases and waiting to see the effects.¹ The experiment is supposed to have begun during the Industrial Revolution way back in the 18th century. Global warming is no more an exclusive domain of scientists. In the widely popular *‘Love Song to Earth’*, for example, some of the world’s biggest names in music, including Paul McCartney, have joined voices to inspire actions against global warming. The creators of the song, which will feature prominently in the upcoming climate change conference in Paris, depict the Earth as ‘heaven’s poetry’ to mankind and urge us to keep this ‘diamond in the universe’ safe. There is just one Earth, but we already need more Earths. The Global Footprint Network, an international think

tank which measures humanity’s demand for and supply of natural resources, has warned that nature’s budget for the year 2015 has been used up on 13 August. For the rest of the year, we would have to operate on ecological deficit.² Based on the current consumption level, humanity needs to have 1.6 Earths now; and two Earths in 2050. And, if everyone achieved the American standard of living (which many people aspire to), humanity would need five Earths today!³ That we have only one finite Earth means we must reduce the use of natural resources for our basic survival. Given the seriousness of the subject, religious leaders are joining the climate debate actively. Pope Francis has recently called on rich nations to take concrete steps on climate change, with a strong warning that failure to do so would present an undeniable risk to a “common home” that is beginning to resemble a “pile of filth” (*The Guardian*, 18 June 2015).

The Pope's call for action to save the Earth ("common home") is also being seen as a subtle challenge to the frequently used interpretation of the Bible to justify man's "dominion" of the Earth which would allow humans to exploit its resources for their own needs. Human responsibility for the Earth is a core element in Hinduism and Buddhism.⁴ In the Hindu mythology, the well-known episode of *samudra mathana* (churning of the ocean involving fierce competition between gods and demons for the nectar of immortality) shows that ocean water has both the nectar of immortality and poison. Over exploitation of the ocean for ambrosia will also produce poison! Social thinkers have long warned us not to over-use natural resources. Mahatma Gandhi has famously said, "The Earth provides enough to satisfy everyone's need but not enough for everyone's greed." Writing in the 1950s, a well-known Nepali poet, Laxmi Prasad Devkota, urged people in his philosophical essay titled '*breathe lightly*' (sustari shwas phera) to exercise self-restraint in breathing so that they did not inhale more air than was due to them as a share of the globally available air. Obviously, he was thinking of what we now call 'Ecological Footprint' (a measure of how much of productive land and water is required to produce resources a population consumes and to absorb the waste it generates).

Implications for governance

Governance is defined as the exercise of political and administrative authority to manage a country's affairs.⁵ According to the World Bank, governance is "the way power is exercised through a country's economic, political, and social institutions". Mark Bevir, a leading authority on the concept defines governance as "all processes of governing, whether undertaken by a government, market, or network".⁶ In this sense, governance is a broader concept than 'government' with its three widely recognized branches – legislature, executive, and judiciary. Governance is about managing state affairs with the involvement of multiple actors operating at national, international, or sub-national levels. The most important feature of governance is that it is about a polycentric notion of power, which lends support to what is sometimes referred to as "governance without government". In a governance-focused environment, the formal institutions of government would be expected to recognize the diverse activities of civil society and market institutions. In its operations, the state can also be constrained by international linkages. As a result, the boundary between state and society is becoming increasingly blurred.

The understanding of governance as a shift of power from government hierarchy to social networks and markets, both at national and international levels, is very important for current debates on how to respond to the challenges of climate change. The transboundary nature of climate change calls for global governance involving complex institutional mechanisms and processes that govern the relationships between states, markets, and citizens. Understandably, therefore, polycentric governance receives wide attention in climate change negotiations.⁷ However, achieving effective global governance in climate change, as elsewhere, has been a formidable challenge. Experience shows that several deficiencies characterize global governance. Thomas Weiss, for example, speaks of five types of 'gaps' in: knowledge, norms, policies, institutions, and compliance.⁸

Why climate governance?

At its core, climate governance is about mobilizing national and international efforts towards preventing, mitigating, and adapting to the risks of climate change. Scientists are warning us that global warming is already the major challenge humanity is facing. The Earth's average temperature has risen by 0.85°C since 1880. Two-thirds of the warming has occurred since 1975, at a rate of roughly 0.15–0.20°C per decade. According to the Intergovernmental Panel on Climate Change (IPCC), the three decades from 1983 to 2012 were likely the warmest 30-year period of the last 1400 years⁹. The ever-increasing emissions of greenhouse gases (GHGs) are causing the Earth's temperature to rise further. Ongoing efforts at international level aim at keeping global temperature rise below 2°C against a risk of rising temperatures until around the middle of this century regardless of actions taken now to reduce emissions.¹⁰ The warming of the Earth has led to changes in weather and climate. Unprecedented changes in rainfall as well as frequent and severe heat waves are examples. Our oceans are also warming, glaciers are melting, and sea levels are rising. The IPCC reports that many of these changes observed since 1950s are unprecedented over decades to millennia. Much of this is largely driven by economic and population growth the world has seen since the beginning of the industrial era.¹¹ This makes human influence on global warming vividly clear.¹² Continued emission of GHGs will cause further warming, with more severe consequences.

Climate change has its economic dimension, too. Nicholas Stern, a British economist who has led probably the most comprehensive review of economic

impacts of climate change, warns that ignoring climate change would eventually damage economic growth. If no action is taken, the overall cost of climate change would be equivalent to losing at least 5 percentage of global GDP each year. The estimates of damage would increase to 20 percentage of GDP if wider range of risks and impacts are taken into account. Investment in mitigation is therefore his first advice to policymakers: “the less mitigation we do now, the greater the difficulty of continuing to adapt in future”.¹³

A less publically discussed but equally important issue is national security. For example, the United States intelligence community, and in particular, the Department of Defense, are worried that climate change may incite armed conflict in the future.¹⁴ The scientific community is more reserved in drawing a direct link between climate change and armed conflicts even if one frequently comes across the reference to ‘water wars’.

Global efforts are needed towards sustained reductions of GHGs. There is a long history of international negotiations on tackling climate change, but progress is modest at best.

The evolving global agenda

‘Carrying capacity’ of the Earth has been high on the global agenda for more than four decades. The Stockholm Conference (1970) on the human environment, the first global forum to debate elements of environmental governance, acknowledged that “the capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved”. However, the principles adopted at the Conference were not effective in addressing environmental challenges as they still allowed countries, both rich and poor, to pursue economic development based on growth.

Brundtland Commission

In response to increasing environmental challenges, the UN formed the World Commission on Environment and Development (better known as Brundtland Commission) in 1984 and asked it to propose long-term strategies for achieving sustainable development, including international cooperation needed to achieve it. The Commission’s widely acclaimed definition of sustainable development presents ‘environment’ and ‘development’ as two sides of the same coin. Sustainable development as a process of change is about ensuring consistency between present and future needs in the

exploitation of resources, patterns of investments, technological development, and institutional arrangements. Importantly, therefore, the Commission concludes that “sustainable development must rest on political will”.¹⁵ As we will see later, generating the ‘political will’ has been one of the fundamental challenges of global governance on climate change. The creation of IPCC in 1988 to review and assess scientific, technical, and socio-economic information relevant to climate change reflects perhaps the ‘scientific will’ to address its challenges.

Framework Convention on Climate Change and its Kyoto Protocol

Following up on the Brundtland Report, a Framework Convention on Climate Change (UNFCCC) was agreed in 1992 to promote international cooperation on limiting global warming. Two other sister conventions, one on biodiversity (United Nations Convention on Biological Diversity) and the other on desertification (United Nations Convention to Combat Desertification) - were also signed in the Earth Summit in Rio. The UNFCCC aims at stabilizing GHG concentrations but does not have a legal mandate to enforce its provisions. Also, it does not set mandatory limits on GHG emissions for individual countries. Understandably, therefore, its provisions were seen as inadequate in dealing with the threats of climate change. The legally binding Kyoto Protocol (signed in 1997, effective since 2005) complements the Convention by committing developed countries (except USA which has not ratified the Protocol) to reduce their emissions by an average of 5 percentage by 2012 against 1990 levels. Meanwhile, the Doha amendment to the Protocol has been agreed in 2012, which foresees a second commitment period (2013-20) requiring countries to reduce GHG emissions by at least 18 percent below 1990 levels. In view of the high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Kyoto Protocol expects stronger responses from developed countries under the principle of “common but differentiated responsibilities (CBDR)”. They must first take domestic action against climate change. But the Protocol also allows them to meet their emission reduction commitments through “market-based mechanisms” involving emissions trading, which allows countries with spare emission units to sell this capacity to countries that are over their targets.

In order to achieve its goals, the UNFCCC foresees two sets of activities. They are: mitigation which involves actions to prevent and limit further climate change

by developing, gathering and sharing information on GHG emissions, national policies and best practices; and adaptation which is about protecting and adapting to the impacts of climate change by launching national strategies. Financial and technological support would have to be provided to developing countries in preparing for adaptation to the impacts of climate change.

Conference of Parties

UNFCCC's highest decision-making body is Conference of the Parties (COP) which includes all countries that have signed the Convention. The COP is responsible for keeping international efforts to address climate change on track. It reviews the implementation of the Convention and examines the commitments of individual countries. The COP takes place every year. Twenty COPs have taken place so far, with COP 21 scheduled for December in Paris. Since 2005, the COP is being supplemented by the annual Meeting of the Parties to the Kyoto Protocol (CMP).

Major decisions under the COP process include Kyoto Protocol (COP 3, 1997) which included legally binding emissions targets for developed countries and offered additional means of meeting targets by way of market-based mechanisms, including emissions trading, clean development mechanism, and joint implementation. Detailed rules for implementation of the Kyoto Protocol, which became effective in 2005, were adopted in Marrakesh (COP 7, 2001). In Doha (2012), COP 18 extended the Kyoto Protocol for the period 2013-2020. In Lima (2014), COP 20 elaborated the elements of a new agreement on GHG emissions reduction, including 'intended nationally determined contributions (INDCs)'. The agreement is scheduled to be signed at COP 21 in Paris.

Persisting climate injustice

Despite its clearly stated objectives of preventing "dangerous manmade interference with the climate system", UNFCCC has not been able to ensure that the 'tipping point' for long-term catastrophic outcomes (climate change science identifies a 2°C increase in average global temperature as the tipping point) would not be crossed in this century. Based on current and anticipated trends, experts warn that we face a 3-4°C rise towards the second half of this century, with catastrophic consequences for the planet's life-sustaining systems.¹⁶ Under its principle of 'common but differentiated responsibilities', UNFCCC explicitly

mentions that "developed country parties should take the lead in combating climate and the adverse effects thereof". Clearly, climate change is an issue of social justice. The effects of climate change are being experienced unevenly around the world. Rich countries are primarily responsible for climate change based on both historical and current levels of GHG emissions. They are supposed to be responsible for 7 out of every 10 tonnes of carbon dioxide emitted since the start of the industrial era.¹⁷ On their part, least developed countries collectively account for just 0.5 percent of global emissions. Carbon dioxide emission per person in the USA, for example, is more than 100 times its level in Nepal or 10 times that in India (Figure). In terms of money, *The New Scientist* (7 September 2015) reports that everyone living the USA or Australia between 1990 and 2013 has accumulated an emissions debt of more than US\$12,000. People in the UK are doing a bit better, with about US\$4000 in debt over that time. This is about polluting the Earth more than the global average. The developing countries pollute less than the global average and so end up as creditors. For example, on average each of India's 1.2 billion people has accumulated an emissions credit of US\$2500.¹⁸

But, poor communities that have contributed the least to the problem will often have to bear the brunt of Nature's anger be it in the form of drought/water insecurity, food shortage (and hunger), diseases, or natural disasters. Climate change exacerbates what are already fragile livelihood opportunities for poor people. The ongoing international efforts to address climate change must therefore be based on the principle of equity so that historical imbalances may also be corrected. They should include both mitigation and adaptation measures, including contributions in finance and technology. A number of Funds (e.g., Adaptation Fund, Green Climate Fund) have been set up under UNFCCC to help poor countries implement adaptation measures. A national adaptation programme of action (NAPA) process has been adopted for LDCs to identify priority activities for external support. But these efforts are underfunded. Besides, much of support provided as part of adaptation measures is included in the official development assistance (ODA), which distorts the picture. ODA is for essential development work. Adaptation support should be additional to ODA as it is, in fact, a compensation for damages caused by higher levels of emissions in developed countries. Instead of increasing development assistance, rich countries are spending huge amounts on subsidies (e.g., US\$409 billion in 2010) for fossil fuels at the cost of the environment. Only 8 percent of this reaches the poorest

20 percent of the global population (*Times of India*, 17 November 2015).

The issue of climate (in) justice needs to be examined also at national, local, or societal levels. Conflicts of power and interest influence the agenda of climate governance at the national level. A more just climate governance calls for changes in current legal or institutional arrangements. When these changes threaten the interest of powerful groups, they resist the changes. In response to powerful lobbies, governments tend to delay actions even if at society's cost.¹⁹

Innovative approaches to strengthening climate governance

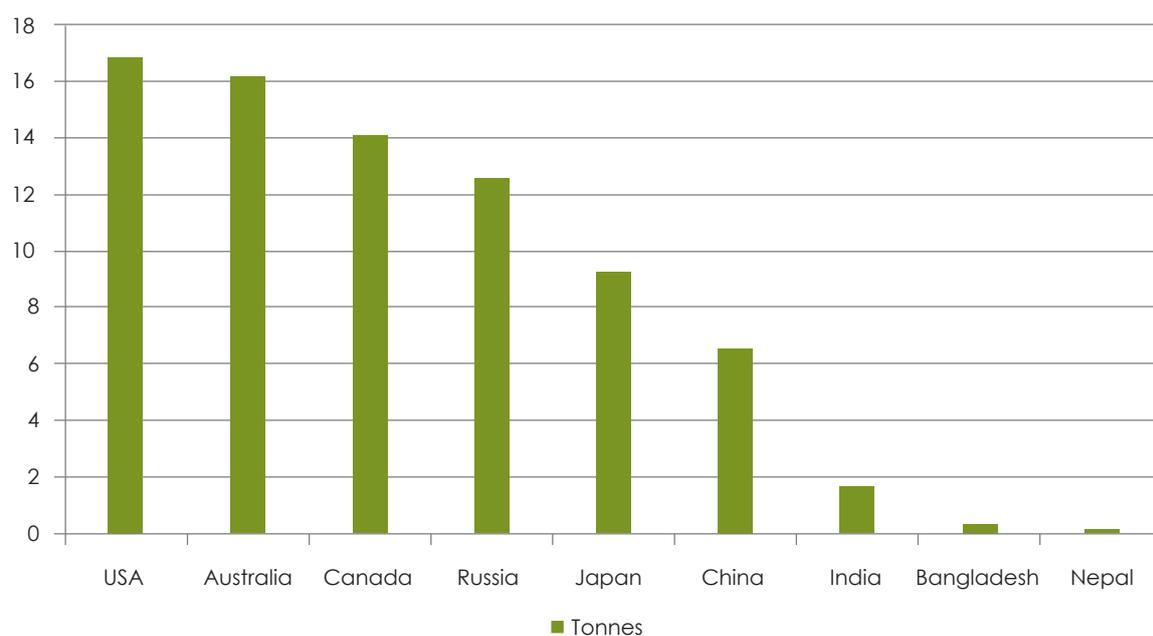
Innovation in climate governance means looking beyond strategies of addressing the challenges of climate change exclusively through interstate negotiations. States should, of course, continue to play an important role, but other stakeholders need to be engaged effectively as well. The exclusive authority of states to create rules and manage climate change based on international conventions is being challenged by a number of new actors, including civil society networks. Experience of ineffective implementation of international conventions in individual countries has lent support to the idea that broader participation of

non-state actors (e.g., scientific community, business leaders, lobbyists and community actors) in climate negotiations needs to be ensured. Their influence is no more latent or indirect.

Governance arrangements on climate change will have to be in place at multiple levels, including international, national, and local/regional levels. Given the rather complex landscape of climate governance, hierarchy-based interpretations of authority are not always effective. Such efforts can be complemented by horizontal networks of local initiatives that grow organically. One example is the C40 Cities Climate Leadership Group, a growing network of big cities taking actions on reducing GHG emissions. The network facilitates knowledge transfer and peer-to-peer exchange. Besides, direct support is available to cities developing local initiatives on climate change (*The Guardian*, 12 February 2013). Such 'governance experiments' can be encouraged in other areas as well.

Innovative policy tools have been developed towards minimizing the cost of reducing GHG emissions. Tools that can be categorized into a 'market-based mechanism' include carbon tax that sets a price on each unit of pollution and emissions trading (also called 'cap and trade') which sets a limit on emissions and allows participants to sell spare emission units (emissions

Figure Per capita CO₂ emissions in selected countries (2011)



Source: <http://mdgs.un.org/unsd/mdg/Default.aspx>

permitted but not used) and generate revenue by protecting the environment. The Clean Development Mechanism under the Kyoto Protocol is an example at the international level.

International climate governance can only be strengthened, if negotiations are based on the principle of equity. “Outcomes seen as equitable can lead to more effective cooperation”, observes the IPCC in its fifth assessment report.²⁰ At most international climate debates, ‘survival emissions’ (which are necessary for basic livelihoods) of developing countries are often contrasted with ‘luxury emissions’ (which are the result of high consumption styles) of developed countries to show that pressures on developing countries to increase their commitment to reduce GHG emissions amount to ‘carbon colonialism’.²¹ Against this background, the Stockholm Environment Institute (SEI) has come up with the idea of ‘fair shares’ of responsibilities²² of countries, both developing and developed. These fair shares can be worked out by calculating the capacity and responsibility of individual countries in different equity settings. Using its ‘climate equity reference calculator’, the SEI concludes that countries with high capacity and responsibility (i.e., wealthier and higher-emitting) have generally fair share that greatly exceed their own domestic mitigation potential. This means they would have to provide financial and technological support to poorer and lower-emitting countries in order to be able to fulfill their fair shares.²³

Speaking of developing countries, there is often a tendency to link concern for GHG emissions with wealth. In other words, developing countries are perceived as less concerned about the reduce emissions. Recent studies reveal that this is not true. For example, a survey by SEI finds that voluntary pledges (or ‘nationally appropriate mitigation actions’) made by developing countries as part of their role in international negotiations were much higher than their ‘fair share’ and amounted to more than the commitments of developed countries whose pledges fell short of their fair share.²⁴ Another survey by the World Bank shows that respondents from developing countries accept a fairly high degree of responsibility for mitigation measures.²⁵ As mentioned earlier, developing countries bear 80 percent of the burden of climate change, which perhaps explains why they are willing to contribute to improved climate governance. Having said that, weak capacity to handle climate change issues remain a major challenge in developing countries. This represents an opportunity for developed countries to support them as part of their obligations to achieve

equity. What is lacking here is willingness. This is evident in cases where developed countries have even declined to face transparency, for example, in the case of an IPCC report in 2014 which included estimates of support poor countries needed to offset the effects of climate change. According to the *New York Times* (31 March 2014), “several rich countries, including the United States asked (IPCC) that an estimate of the amount of money necessary for adaptation measures (US\$100 billion a year) be removed from the report’s summary for policymakers”. The reason was to prevent developing countries from asking for more aid based on the report. Stronger willingness needs therefore to be generated among developed countries in order to strengthen capacity in developing countries.

Climate governance in South Asia

Although South Asia has low levels of GHG emissions, it is seriously affected by climate change. About 70 percent of South Asians live in rural areas relying mainly on agriculture, natural resources, forestry, and fisheries. These sectors are most vulnerable to the risks of climate change, including floods and droughts. International Fund for Agricultural Development (IFAD) estimates that the overall crop yields may decrease up to 30 percentage in the region by the middle of this century. Food shortage is one direct result of this. IPCC’s 2014 report on observed impacts of climate change ranks Asia as the biggest victim of natural disasters in 2013, accounting for nearly 30 percent of the global economic loss ascribed to natural disasters.²⁶

Yet, regional efforts at strengthening climate governance are weak in the SAARC region. However, there is no dearth of resolutions and declaration in support of regional cooperation on climate change. The Thimpu Statement on Climate Change at the 16th SAARC Summit (2010) is an example. The Summit, titled “Towards a Green and Happy South Asia”, expressed a strong resolve to tackle climate change. Even before Thimpu, “Green South Asia” was already conceived in 2007 with the year 2007 itself dubbed as the “Year of Green South Asia”. The Thimpu statement covered four major areas of work, including disaster initiatives, monsoon initiatives, mountain initiatives, and marine initiatives. Each of the initiatives was included in the scope of an existing regional center. But progress on the statement has not been very encouraging.²⁷ Meanwhile, new regional resolves have found ample space in SAARC decisions without any concrete steps towards fulfilling them.

All SAARC countries have instituted national policies on climate change. India, Sri Lanka, and the Maldives are ahead of other countries in the region. They are developing institutional capacity to deliver on policy objectives. SAARC LDCs Nepal, Bangladesh, Bhutan, and Afghanistan have developed their national adaptation programmes (NAPAs), but they remain dependent on international support for finance, technology, and capacity building. The Thimpu Statement spoke of a 'common SAARC position' for international negotiations. This spirit has weakened. One major challenge for a regional position is international aspirations of individual countries. For example, India under increasing pressure to accept targets for GHG emissions would be exploring negotiating positions together with other economies such as China, South Africa or Brazil.²⁸ This is, of course, apart from existing political tensions between some countries in the region.

What can be done?

As indicated earlier, climate governance is all about exercising powers (and energies) of multiple actors operating at different levels for the benefit of our ecosystems so that humanity would not need more than one finite Earth. Institutional actions are therefore required at all levels.

Internationally, all climate negotiations must be based on equity where both historical and annual emissions are reflected. This is also relevant for the ongoing discussion about loss and damage, which should include the important questions of liability and compensation. The global civil society needs to have a stronger voice in these debates. The much-talked about 'Green Climate Fund' should be operational to support developing countries in their quest for finance, technology, and capacity building. Any support in this regard must be additional to ODA. Climate negotiations should take into account the elements of other relevant negotiations at the international level. One example would be the Environmental Goods Agreement under the World Trade Organization, which seeks to promote the trade of environment-friendly goods through easing tariff burden.

Regionally, in South Asia, the current SAARC framework and structure should be challenged, with a stronger role for the SAARC Secretariat, for example, in monitoring progress in agreed course of action. A regional position is still desirable for international negotiations, but SAARC countries should also

acknowledge that there are intra-regional differences not only in terms of institutional capacity but also in relation global ambition of individual countries. This reality should guide the work on defining the common position. Exchange of knowledge and experience, including technological cooperation, within the region is also a possibility.

At the national level, developing countries should first recognize their own responsibilities for better climate governance. In particular, they should no more keep 'hiding behind the poor'. Reducing poverty and inequity within the country is as important as achieving equity at the international level. Self-interest of powerful groups often creates challenges for reform in climate governance. State communication should improve to make people think about 'enlightened self-interest' (which is a philosophy that individuals who act to promote the interests of others would ultimately serve their own self-interest). Much of the scientific community and civil society is generally out of the policy circle in many countries, which needs to be corrected. Policymaking is no more a state monopoly. Much like in other areas of development, women suffer more from climate change than men primarily because of their dependence on natural resources. This gendered vulnerability can and should be addressed by treating women not only as victims, which they often are, but also as agents capable of contributing to solutions.²⁹ Finally, personal responsibilities for climate change should receive a higher profile in the discussion than has been the case so far. As good citizens, people should be educated to reduce consumption and keep track of personal carbon emissions.

Conclusion

Climate change represents a tragedy of the global commons. Addressing it requires a global compact between governments, scientists, civil society, and community leaders. Polycentric governance with a high degree of institutional diversity is perhaps the best approach to tackling climate change. Policies adopted at the global level involving negotiations with governments may not find trust and support from local communities. A polycentric approach allows experimental efforts at multiple levels creating opportunities for learning and sharing.³⁰ While no country would be able to tackle climate change alone, it is not necessary to wait too long for 'global solutions'. Even global solutions are not guaranteed to work well, unless they are backed by a variety of

efforts at national, regional, and local levels.³¹ We must therefore work towards identifying 'glocal' solutions. ■

Notes

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- 3 <http://thehimalayantimes.com/news-archives/latest/mankind-using-earths-resources-at-alarming-rate/>
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- 22 In this context, responsibility is defined in terms of a country's cumulative emissions. Options for setting the initial year for calculating historical emissions include: 1850 (CO2 emissions from fossil fuels have been significant since that year), 1950 (relevant for determining the typical useful lifetimes of major infrastructure), and 1990 (when international climate negotiations began).
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South Asia Watch on Trade, Economics and Environment (SAWTEE) is a regional network that operates through its secretariat in Kathmandu and 11 member institutions from five South Asian countries, namely Bangladesh, India, Nepal, Pakistan and Sri Lanka. The overall objective of SAWTEE is to build the capacity of concerned stakeholders in South Asia in the context of liberalization and globalization.

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