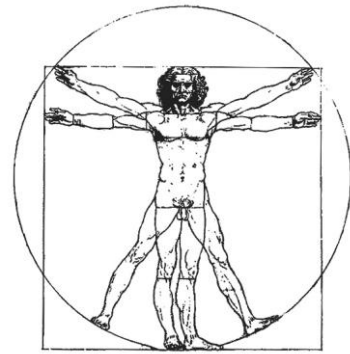


ecbi policy report



Equity issues in the climate change negotiations

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I. Equity in the UNFCCC

While developing countries have done very little to cause climate change they - and in particular the poorer amongst them – are and will be the worst affected by its impacts. These countries are at the same time faced with new sets of global challenges that present additional stressors but lack the resources and technologies that could contribute to building their adaptive capacity. As a result of the disproportionately greater impacts suffered and projected to be suffered by disadvantaged countries, societies and groups questions of equity are receiving increasing attention in the climate change negotiations.

Equity considerations are important in addressing global climate change for several reasons including: (a) moral and ethical concerns, (b) effectiveness, (c) sustainable development, and (d) the provisions and spirit of the United Nations Framework Convention on Climate Change (UNFCCC) itself. Equity is an ethical and people oriented concept with social, economic and environmental dimensions. It focuses on the fairness of both the processes and outcomes of decision making. Equitable decisions carry greater legitimacy and encourage all Parties to cooperate better in carrying out mutually agreed actions.

The UNFCCC has several specific references to equity in its substantive provisions. Article 3 paragraph 1 states that

“The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”

Other equity-related principles emphasised in Article 3 include (a) the need to take into account the specific needs and special circumstances of developing country and vulnerable parties, (b) the precautionary principle, (c) the right to promote sustainable development, and (d) the commitment to promote a supportive and open international economic system.¹ The UNFCCC does not define the concept of equity and related principles. But it is generally recognised that they reflect the developing countries’ right to pursue development with the support of industrialised states due to their primary responsibility for global environmental degradation and the technology and financial resources they command.²

The differentiation of commitments between developed and developing country parties is elaborated under Article 4 of the Convention. While protecting the climate system is a “common concern of humankind”, **developed countries** (included in Annex I of the Convention) **are expected to take the lead in initiating actions and assume a greater share of the burden.** Each of these parties shall make “equitable and appropriate contributions” to the global effort. Finally, equity is also mentioned in the context of

¹ Article 3 paragraphs 2 to 5, respectively

² Principle 7 of the Rio Declaration

financial governance, to emphasise the importance of including procedural elements which guarantee distributive outcomes that are perceived to be equitable. Thus Article 11 paragraph 2 requires the Convention's financial mechanism to *"have an equitable and balanced representation of all Parties within a transparent system of governance"*.

This briefing paper examines the key equity issues in the current climate change negotiations leading to COP 15 in Copenhagen. In this connection the paper focuses on the negotiating text emerging from the **Ad Hoc Working Group on Long-term Cooperative Action** under the Convention (AWG-LCA). Under the *"Bali Action Plan"* the AWG-LCA is tasked to conduct *"a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session"* (in Copenhagen in 2009).³

2. Equity amongst parties

Wealth is one of the most obvious differences between countries. In its 2007 Fourth Assessment Report, the International Panel on Climate Change (IPCC) shows that differences in per capita income, per capita emissions and energy intensities among countries are significant. In 2004, Annex I Parties held 20% of world population, had average emissions of 16.1 tonnes CO₂-eq per capita, produced 57% of the world's Gross Domestic Product (based on purchasing power parity) and accounted for 46% of green house gas (GHG) emissions. In contrast, on average per capita emissions in non-Annex I parties were about a fourth of the Annex I levels. These differences will have direct implications on the agreement on how climate change is to be addressed in the post 2012 period.

The UNFCCC's objective is to achieve the *"stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system"*.⁴ But the equitable assignment of responsibilities between Parties that can result in climate stabilisation reflecting common but differentiated responsibilities, capabilities, historic responsibility and the need for development will determine whether there will be a new deal in Copenhagen in December 2009.

The Intergovernmental Panel on Climate Change (IPCC) has not indicated a specific temperature threshold for **'dangerous' anthropogenic interference with the climate system**. However, in its 2007 Fourth Assessment Report, it noted that some regions will be more affected by climate change than others. These include the Arctic, sub-Saharan Africa, small islands and Asian mega deltas. For Africa for example, it is projected that by 2020, between 75 and 250 million people will be exposed to an increase of water stress due to climate change. The report also underlines that the negative effects of climate change gradually increase with a rise in temperature. A recent report of the Global Humanitarian Forum estimates that at present climate change already causes

³ Decision 1/CP.13 para.1

⁴ Article 2 UNFCCC

300,000 deaths throughout the world and seriously impacts on the lives of 325 million people.⁵

Annex I countries

The Alliance of Small Island States (AOSIS) and the Group of Least Developed Countries (LDCs) demand that a Copenhagen agreement should limit temperature increase to below 1.5 °C. To achieve this goal, they call for global emissions to peak by 2015 and a reduction of developed countries' GHG emissions of at least 45% by 2020, and of 85% by 2050 in comparison to 1990 levels.⁶

The wider international discussion, however, is currently converging around a 2 °C target (corresponding to a concentration of greenhouse gases in the atmosphere of approximately 450 ppm CO₂-eq) compared to pre-industrial times to avoid unmanageable climate risks. The IPCC scenarios suggest that if GHG could be reduced (in relation to 1990 levels and without Land Use, Land-Use Change and Forestry – LULUCF) by 25 to 40% by 2020, and 80 to 95% by 2050 global warming can be stabilised at the 2 °C threshold.

Two recent studies in the journal *Nature* indicate that if CO₂ emissions are halved by 2050 compared to 1990, global warming can be stabilised below two degrees. A meeting of Nobel laureates in London in May 2009 called for a global agreement in Copenhagen to include a peak of global emissions of all greenhouse gases by 2015 and at least a 50% emission reduction by 2050 on a 1990 baseline. This means that developed countries also should aim for a 25-40% reduction by 2020.⁷

To date several Annex I countries have announced possible GHG emission limitations and reductions. At the G8 summit in July the world's richest nations agreed to cut emission by 80% by 2050 but failed to produce targets for 2020. In addition the reference level to calculate these reductions remain unclear. The following table is largely based on party submissions to the AWG-LCA and AWG-KP.⁸ It has been supplemented with information from various informal sources and should therefore only be viewed as reflecting general trends (but not accurate scientific figures). Possible targets indicated for Australia, Norway and Switzerland as well as the higher percentage agreed within the European Community include LULUCF. In some cases this has not been clearly defined.

⁵ Global Humanitarian Forum, *Human Impact Report: Climate Change – The Anatomy of a Silent Crisis*, May 2009

⁶ AOSIS and LDC press release, *Small Islands and Least Developed Countries Join Forces on Climate Change*, Bonn, 14 August 2009

⁷ St James Palace Nobel Laureate Symposium The St James Palace Memorandum, *Action for a Low Carbon and Equitable Future*, London, UK, 26 – 28 May 2009

⁸ Paper No 3, *Information relating to possible quantified emissions limitation and reduction objectives as submitted by Parties*, in FCCC/KP/AWG/2009/MISC.8

Annex I party	Kyoto target	Possible emission reduction targets		2020 emissions relative to 1990
		Mid term	Longer term	
Australia	+8%	Unconditional reduction by 5% on 2000 levels by 2020; reduction by up to 15% by 2020 if global agreement falls short of securing atmospheric stabilisation at 450 ppm CO ₂ -eq; 25% on 2000 levels by 2020 if ambitious global deal stabilising levels of greenhouse gases in the atmosphere at 450 ppm CO ₂ -eq or lower is agreed.		-3 to -24%
Belarus	-8%	Consider target of 90-95% of 1990 level for the period after 2012.		-5 to -10%
Canada	-6%	Reduce total GHG emissions by 20% by 2020 relative to 2006 levels.	Reduce emissions by 80% below 2006 levels by 2050.	+24%
Croatia	-5%	Same as European Community below.		-20 to -30%
European Community	-8%	Legislation to reduce emissions by at least 20% by 2020 compared to 1990 levels and by 30% if other developed countries commit themselves to comparable emission reductions and that economically more advanced developing countries contribute.	80% reduction agreed by member states France, Germany, Italy, UK	-20 to -30%
Iceland	+10%	15% reduction by 2020 from 1990 levels.	50-75% emission cuts as an aspirational goal for 2050.	-15%
Japan	-6%	Options under consideration provide for a reduction between 7-15%.	Agreed to G8 commitment of 80% by 2050.	-7 to -15%
New Zealand	0	Develops a range of possible medium-term targets consistent with a global goal of stabilisation at 450 ppm CO ₂ -eq.	50% reduction in net emissions from 1990 levels by 2050.	
Norway	+1%	Reduce total GHG emissions by 30% by 2020 relative to 1990 levels with the aim to reduce 2/3 of emissions domestically.	In the context of an ambitious global agreement, Norway intends to cut global emissions equivalent to 100% of its own greenhouse gas emissions to become carbon neutral within 2030.	-30%
Russian Federation	0	National mid-term target under consideration		
Switzerland	-8%	Reductions of 20 – 30% from 1990 levels by 2020		-20 to -30%
Ukraine	0	Ready to commit to emission reductions of 20% by 2020.	50% by 2050.	-20%
USA	-7%	Plans 14-20% cuts below 2005 levels by 2020.	80% by 2050.	0 to -7%

Thus not all Annex I parties currently aim for a reduction of emissions between 25 and 40% by 2020. According to some estimates the aggregate reductions for all Annex I parties by 2020 only add up to 10 to 16% in comparison to 1990 levels. Unless deeper emission cuts are agreed and subsequently implemented there will be severe disruptions to the climate system.

Developing country commitments

Under the UNFCCC and its Kyoto Protocol developing countries have no GHG emission reduction targets. This has been one of the main arguments used by the United States and other countries to refrain from its ratification. Although the majority of anthropogenic CO₂ emissions are still attributable to the developed world, emissions from economically advanced developing countries, particularly in Asia, are growing rapidly. Therefore many Annex I countries expect “more developed” developing states to take certain actions that will contribute to emission reductions. Whether this constitutes a departure from the principles of equity and common but differentiated responsibilities is an open question.

Several delegations have underlined that as a result of their historic responsibility only Annex I countries should have the legal obligation to reduce GHG emissions. Some even argue that a post Kyoto regime should not deviate from the principle distinction created by the UNFCCC between parties included and others not included in Annex I to the Convention. Consequently, it is argued, any emission reduction obligations of non-Annex I parties would be inconsistent with the Convention.

The UNFCCC provides a framework that envisages further elaborations and additional agreements of the parties; and also allows for the differentiation between countries on the basis of different situations and needs.⁹ Its preamble explicitly recognises that “*the share of global emissions originating in developing countries will grow to meet their social and development needs*”.¹⁰

The Russian Federation and others therefore suggest a **listing of (firstly) common responsibilities and then differentiated responsibilities** in a document whose final version may be adopted in Copenhagen. Australia and others specifically promote the use of **schedules** to register mitigation commitments and actions that countries can achieve according to their respective capabilities. Such schedules could also distinguish between legally binding and non-legally binding commitments and actions within the same schedule.

At the end of the AWG-LCA’s June meeting in Bonn the US stated that they no longer expected China and other developing countries to adopt binding emission targets. The head of the US delegation at the meeting, suggested that China should have binding actions, not binding outcomes. US expectations are that China and other emerging economies will take domestic actions that can be measured, quantified and reported.¹¹

To stabilise global warming at the 2 degree threshold it will be necessary not only to reduce emissions in Annex I countries radically, but also to also to diverge considerably from a conventional, fossil-intensive and highly GHG emitting development trajectory in developing countries. However, the required global resolve will only materialize if an equitable framework is offered that reflects historic responsibilities and provides new

⁹ Compare for example Article 4 paragraph 8 UNFCCC

¹⁰ Recital 3 of the Preamble to the UNFCCC

¹¹ Arthus Max, *UN climate chief confident of global warming pact*, The Associated Press, 12 June 2009

strategies, tools and resources to incentivise the transfer of environmentally friendly technologies and scientific know-how. Issues of procedural and consequential equity will be important as support for the post 2012 climate change regime and its implementation will depend largely on how equitable it is perceived to be.

Vulnerable countries

There appears to be general agreement in the climate change negotiations that the particular vulnerability of poor countries to the adverse effects of climate change impacts needs to be adequately reflected in a post Kyoto agreement. This group needs special attention based on humanitarian, equity principles and procedures. Thus **vulnerable countries** would not be expected to undertake commitments beyond those already stipulated in the UNFCCC (cooperation, information exchange). Their schedules could register intended actions, including those that should benefit from additional international support.

The current AWG-LCA text does not define vulnerable countries but it includes:

- “(i) poor developing countries;*
- (ii) LDCs and SIDS, and countries in Africa affected by drought, desertification and floods;*
- (iii) Low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, archipelagic countries, and developing countries with fragile mountainous ecosystems;*
- (iv) Countries with unique biodiversity, tropical glaciers and fragile ecosystems.”¹²*

During the 6th meeting of the AWG-LCA in Bonn several delegations criticised the Chair’s text saying that it did not adequately focus on the implementation of adaptation. There is also significant disagreement with regard to the institutional structure, the financial resources to be made available or the binding/non-binding nature of an adaptation framework. Large oil exporting nations are arguing that adaptation action should not only include response measures to the adverse effects of climate change but also encompass **adaptation to the impacts of response measures**.¹³

3. Equity and finance

The UNDP Human Development Report 2007-08 states that at least 86 billion USD would be required by 2015 to accommodate the most pressing adaptation needs of developing countries. The UNFCCC secretariat estimates that financial flows to developing countries should be around USD 100 billion annually in order to meet the costs of mitigations and between USD 28-67 billion for adaptation. During the 6th meeting of the AWG-LCA in Bonn, the Group 77 and China, stressed that the current climate change funding framework did not adequately respond to the magnitude of the financial challenge posed by climate change and was not equitable.

¹² AWG-LCA chair’s negotiating text paragraph 31

¹³ Negotiating text paragraphs 21 and 22

UNFCCC funds:

COP 7 in November 2001 established three funds: a Least Developed Country (LDC) and a Special Climate Change Fund (SCCF) under the Convention and an Adaptation Fund under the Kyoto Protocol. The LDC Fund assists LDCs in, for example, the preparation and implementation of national adaptation programmes of action (NAPAs). The SCCF was established to finance projects relating to adaptation; technology transfer and capacity building; energy, transport, industry, agriculture, forestry and waste management; and economic diversification. The Global Environment Facility (GEF) manages both funds.

The Adaptation Fund is intended to help finance adaptation to climate change in countries particularly vulnerable to the adverse impacts of climate change. It draws resources from a 2% levy on carbon credit sales through the Kyoto Protocol's Clean Development Mechanism (CDM). At COP 13 in 2007 in Bali the Parties to the Kyoto Protocol decided that the World Bank will serve as the Adaptation Fund's trustee and the GEF as the secretariat to the Adaptation Fund Board. These interim institutional arrangements will be reviewed after 3 years. Projections for the Adaptation Fund's growth suggests it could take in up to USD 5 billion per year after 2012.

Many delegations therefore requested that a post-Kyoto agreement should encompass new flexible institutional arrangements, binding financial commitments of Annex I countries and be based on the principles laid down in the UNFCCC. In this connection equity, common but differentiated responsibilities, respective capabilities, the polluter pays principle and historical responsibilities were referred to.

Historic responsibilities

The UNFCCC Preamble notes that *“the largest share of historical and current global emissions of GHG has originated in developed countries”*.¹⁴ Their previous conduct (resulting in global warming) effectively prevents developing countries from increasing their emissions and growing in a similar way. Several developing countries therefore increasingly refer to **per capita emissions** in different parts of the world as an indicator for equity in a post-Kyoto climate regime.

Amongst others, China, India and Bolivia argue that **atmospheric resources** are the common wealth of humankind. But due to the non-equitable use of the existing atmospheric space by a wealthy minority (of Annex I countries) the emission space of developing countries is now limited. By basing future emission allowances on the past levels of emissions this **emission debt** (also referred to as climate debt or ecological debt) would deepen even further. Developed countries are therefore held responsible for compensating developing countries for their contribution to the adverse effects of climate change.

¹⁴ Preamble recital 3

A practical example:¹⁵

If an Annex I country agreed to reduce its emissions by 30%, per capita emissions would go down from 20 to 14 ton per capita. Meanwhile, developing countries limited to a 20% deviation from baseline and a 2 ton per capita emission would have to restrict emission to 2.6 ton, or even less (if population growth is taken into account). In this system, the gross inequality in per capita emission remains.

To reflect the emission debt and the liability for previous emission the G-77 group and China have called for the creation of a new international financing mechanism to support adaptation and mitigation actions in developing countries. Under the proposal, funding would come from a contribution ranging from **0.5 percent to 1 percent of the gross national product** of Annex I Parties to finance the necessary technology transfer (including patents), capacity building, etc.

Other proposals to raise the required funds reflect the historic responsibilities to a lesser extent. They include:

- auctioning of emission allowances;
- a global levy on fossil fuel emissions;
- levies on emissions from international aviation, maritime transport and on air fares;
- a global levy on international monetary transactions;
- an increase in the share of proceeds from market mechanisms; or
- penalties for non-compliance of developed country Parties with their emission reduction and financial resources commitments.

Financing framework

There is a variety of positions related to the structural and institutional framework for the provision of financial resources with separate windows for mitigation and adaptation but also for the loss and damage from climate change impacts including insurance, rehabilitation and compensatory components. Current proposals include the establishment of a 'Convention Adaptation Fund' or a 'Multilateral Technology Acquisition Fund'.

However, many developing country delegations are already concerned by the **proliferation** of funds and repeatedly stressed the need for any financial commitments to be **additional** to the current level of official development assistance. In addition, the majority of existing funding initiatives appear to target a limited number of countries. Another concern expressed during the current negotiations is that that resources could only be provided subject to conditionalities. This would conflict with an understanding that support for adaptation and mitigation is an obligation (of developed country parties) and fundamentally different from voluntary aid or assistance by donor nations.

¹⁵ By Martin Khor, Executive Director, South Centre, *Historical responsibility as a guide to future action in climate change*, Presentation made in Bonn on 4 June 2009, at the Technical Briefing on Historical Responsibility, during the 6th meeting of the AWG-LCA

Since much of the technology spending comes from private sources Annex I countries expect private financing to play a larger role in funding the financial mechanisms of a post-Kyoto regime. Developing countries, however, underline that private investment often only starts flowing when profits are expected. They therefore rather support models that allow for the coverage of incremental costs through public funding, resource transfers or grants.

The following list of climate funds has been compiled by 'Climatefundsupdate' available at <http://www.climatefundsupdate.org>:

Fund	Type	Administration	Focus	Projects	Funds disbursed
Adaptation Fund	Multilateral	Adaptation Fund Board	Adaptation	0	0
Clean Technology Fund	Multilateral	World Bank	Mitigation	0	0
Cool Earth Partnership	Bilateral	Government Japan	Adaptation, mitigation	0	0
Environmental Transformation Fund - International Window	Bilateral	Government UK	Adaptation, mitigation	0	0
Forest Carbon Partnership Facility	Multilateral	World Bank	Mitigation - REDD	0	0
Forest Investment Program	Multilateral	World Bank	Mitigation - REDD	0	0
GEF Trust Fund - Climate Change focal area	Multilateral	The Global Environment Facility (GEF)	Adaptation, mitigation - general	591	USD 2,388 Mill
Global Climate Change Alliance	Bilateral	The European Commission	Adaptation, mitigation - general, REDD	0	0
International Climate Initiative	Bilateral	Government Germany	Adaptation, mitigation	128	USD 347 Mill
International Forest Carbon Initiative	Bilateral	Government Australia	Mitigation - REDD	0	0
Least Developed Countries Fund	Multilateral	GEF	Adaptation	62	USD 47 Mill
MDG Achievement Fund – Environment and Climate Change thematic window	Multilateral	UNDP	Adaptation, mitigation	16	USD 85.5 Mill
Pilot Program for Climate Resilience	Multilateral	World Bank	Adaptation	0	0
Scaling-Up Renewable Energy Program for Low Income Countries	Multilateral	World Bank	Mitigation - general	0	0
Special Climate Change Fund	Multilateral	GEF	Adaptation	14	USD 59.8 Mill
Strategic Climate Fund	Multilateral	World Bank	Adaptation, Mitigation - general, Mitigation - REDD	0	0
Strategic Priority on Adaptation	Multilateral	GEF	Adaptation	22	USD 50 Mill
UN-REDD Programme	Multilateral	UNDP	Mitigation-REDD	0	0

Polluter pays

In their submissions and oral statements countries also occasionally refer to the polluter pays principle as a basis for the equitable allocation of responsibility for climate change damages. The **polluter pays principle** is an established legal tool in jurisdictions all over the world. In the relevant literature and jurisprudence, however, it is rarely viewed as a principle that governs relationships between states.¹⁶ During the negotiations of the UNFCCC developing countries originally wanted to include the polluter pays principle in Article 3 which was (successfully) opposed by most developed countries.

Subsequently, in 1997, Brazil proposed a Clean Development Fund (CDF) on the basis of the polluter pays principle. Through fines paid by countries in non-compliance, the CDF was designed to finance emission mitigation and adaptation measures. During the negotiations, the non-compliance elements were removed from the CDF. Instead the discussion focused on joint implementation which eventually led to the adoption of the Clean Development Mechanism (CDM) as part of the Kyoto Protocol.

States are, however, under the general obligation in international law to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states. This is often referred to as the **no harm rule** and has been recognised in the UNFCCC preamble.¹⁷ It appears to provide a stronger legal basis to argue the liability of major emitting countries for impacts of CO₂ emissions originating from their territories to the environment of other countries.

4. Equity in North-South collaboration and markets

The law and policy instruments adopted at the 1992 Earth Summit in Rio de Janeiro reflect the increased importance the international community attributed to economic instruments as a tool for the accomplishment of environmental objectives (at the national and international level). Under the UNFCCC and its Kyoto Protocol the most elaborate system to date for the use of market mechanisms at the international plane was established.

But more equitable solutions linking climate change and sustainable development issues with trade, market and financial considerations are still being sought across a range of areas. These include, for example, the clean development mechanism (CDM), technology transfer, reduced emissions from deforestation and forest degradation (REDD) and international transport.

Clean development mechanism

Initially the CDM established under the Kyoto Protocol attracted much support due to its dual promise of assisting developed country parties in achieving their emissions targets and creating new opportunities for developing countries. Operational since the beginning of 2006, the CDM has registered over 1500 projects. At present there is a concentration

¹⁶ Patricia Birnie & Allan Boyle, *International Law and the Environment* (2nd ed.), Oxford, 2002

¹⁷ UNFCCC Preamble recital 8

of CDM projects in Asia, with China alone accounting for 62% of the credits on the market. Africa, in contrast, hosts **less than 3% of registered projects**.

Whilst Annex I countries have earned certified emission reduction units, CDM projects have generated only limited benefits for developing countries. Although the host country has to confirm that the project activity assists it in achieving sustainable development there is no guidance on how this should be assessed.¹⁸ Consequently, projects often represent the cheapest emission reduction approach available and have raised concerns about negative social impacts and their lack of additionality.¹⁹

A large variety of proposals to modify the CDM for the post-Kyoto period are under discussion. These comprise:

- extending the scope of eligibility project activities to, for example, reducing deforestation and forest degradation, carbon capture and storage or nuclear energy;
- establishment of emission targets in relation to different industrial sectors;
- introducing crediting on the basis of nationally appropriate mitigation actions (NAMA);
- developing criteria and standards for specific project activity types; as well as
- for the eligibility of Annex I and host countries parties; and
- applying specific incentives to promote co-benefits of projects.

Questions of equity are associated with many of the proposals. Brazil, for example, argues that the inclusion of carbon capture and storage would hinder the participation of developing countries in the market. It would create **perverse incentive** to developing countries to discontinue small scale projects related to renewable energy and energy efficiency. In order to achieve equitable market access Saudi Arabia has suggested the **allocation of project quotas** to host countries based on explicit factors such as poverty or sustainable development needs.²⁰

Technology transfer

The IPCC defines technology transfer as “*a broad set of process covering the flows of know-how, experience and equipment for mitigating and adapting to climate change among different stakeholders such as governments, private sectors entities, financial institutions...*”. In order to address climate change and its impacts many developing countries consider the availability of adequate technology a priority, and have regularly identified the current system of **intellectual property rights** as the main reason for a lack of technology transfer between countries. They generally agree that in order to improve the situation there is a need to integrate new models and innovative mechanism into a post-Kyoto regime.

¹⁸ Decision 3/CMP.1 on modalities and procedures for CDM

¹⁹ For example: the discussion on the *Changuinola I* hydroelectric dam project. AES Corporation, the project proponent, claims a figure of 669,000 tonnes CO₂/year emissions reduction. For further information see <http://www.internationalrivers.org>

²⁰ *Views on possible improvements to emissions trading and the project-based mechanisms*, submissions from parties to the 8th session of the AWG-KP, FCCC/KP/AWG/2009/MISC.9

In the on-going negotiations under the AWG-LCA developing countries have repeatedly emphasised that equitable technology transfer would encompass capacity building activities and focus on technologies that could be adapted to the particular circumstances of developing countries.²¹ They are concerned that a sole focus on access to affordable technology would lead to the dumping of obsolete technologies.

The AWG-LCA chair's negotiating text reflects the demand for a clear worldwide goal on technology transfer, technology and sector specific action plans, and a 'strategic partnerships between the public and private sector'. Many developing countries have been supporting a system based on **compulsory licensing** where governments allow manufacturers to produce patent-protected goods for domestic use without the patent owner's consent (sometimes with payment). This has, for example, improved access to some drugs in developing countries.

REDD

The fourth Assessment Report of the IPCC estimated that deforestation and forest degradation contribute to more than 17% of global anthropogenic GHG emissions.²² Reducing emission from deforestation and forest degradation (REDD) has therefore been listed in the Bali Action Plan among other mitigation initiatives as a potential means to achieve emission reductions.

The core concept of REDD (paying developing countries and landholders for the successful reduction of forest clearance rates) could potentially deliver co-benefits. In addition to mitigating climate change, it may support livelihoods, maintain vital ecosystem services, and preserve globally significant biodiversity if the relevant policy approaches and activities take into account the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (now generally referred to as 'REDD plus').

Although there appears to be a general agreement that (at least) the foundation for a future REDD mechanism should be laid in Copenhagen, there are still significant differences amongst parties as what such mechanism should look like. The main differences are:²³

- whether REDD should focus on forestry or encompass other land use issues,
- the connection to national mitigation actions – NAMAs,
- the sources of funding for REDD,
- the role of markets,
- the legal and institutional nature of a mechanism and related arrangements, and
- the reference level from which emission reductions would be measured.

²¹ Article 4 paragraph 5 UNFCCC

²² IPCC, Climate Change 2007: Synthesis Report of the IPCC's Fourth Assessment Report, 2007 available at <http://www.ipcc.ch/ipccreports/ar4-syr.htm>

²³ As summarised by the Chair of the contact group on REDD at the end of the meeting in Bonn in June 2009

In this connection equity concerns may lead to different possible approaches. Thus the **reference levels** may be determined on the basis of the existing forest cover at some point in time, historical deforestation rates (possibly in relation to average global deforestation) or specific forest areas under threat. Payments may be made to compensate participating countries for **specific efforts** in relation to the opportunity cost; or their impact on the environment – essentially corresponding to the ‘carbon endowment’ represented through the national forests.

The success of REDD will be contingent on the capacity of developing countries to address the national drivers of deforestation. In this connection resources and **assistance provided by developed countries** can be of significant help. Depending on the national needs this may involve support to improve scientific capacities (to collect data on forest cover or estimate emission) and forest governance, as well as the establishment of systems and infrastructures to ensure that REDD benefits reach forest dependent communities.

Emissions from international transport

The Kyoto Protocol does not cover greenhouse gas emissions from international aviation and shipping. Instead the Protocol provides that Annex I parties should pursue the limitation of these emissions through the International Maritime (IMO) and Civil Aviation Organisations (ICAO). However, as a result of the continuous increase in emissions from international transport there is strong demand to include shipping and aviation in a post-Kyoto regime.

This may raise certain equity concerns. With regard to shipping, for example, the majority of vessels involved in international maritime traffic are flagged in non-Annex I countries but often owned by foreign business interests. It is therefore not clear which country should be held accountable for which share of the emissions. Current proposals include targets for the industry as a whole, emission trading and a levy on marine bunker fuels.

5. Equity below the inter-parties level

Traditionally equity is discussed in the international climate change negotiation at the inter-state level. But the disparities among parties are also echoed within the **national context** - even in wealthy countries - where the poorest and weakest sections of society are usually most exposed to the negative impacts of climate change. There are mechanisms within countries to achieve a fairer distribution of resources. Although their capacity may vary, they provide a starting point to address to climate change issues at the national and local level. The international response strategies agreed as part of the post-Kyoto regime will translate into national actions which reflect equity concerns within countries. A lot of work remains to be done at the global level.

The AWG-LCA negotiating text reflects a growing concern for the differences and inequalities within countries and the need for equitable solutions. In relation to adaptation activities it explicitly refers to the interests of **vulnerable populations, groups and communities, women, children, the elderly, minorities, people with disabilities and**

indigenous peoples. In connection with REDD activities, for example, Norway and Switzerland aim to include basic guarantees on the rights of indigenous peoples and local communities. These should be respected “*consistent with the provision established under the respective national legislation or, in absence of the same, in accordance with the UN Declaration on the Rights of Indigenous Peoples*”.²⁴

Whilst there is significant potential for sustainable development through REDD there are also pitfalls such as uncertainties in the land and tenure regimes, the diversion of financial and other benefits or insufficient protection of minority rights. Some developed countries therefore refer to the implementation of consultations and other participatory processes as a precondition for the participation in REDD. This reflects an understanding that **procedural justice** is an important element in efforts to achieve better **distributive justice**.

Outside the UNFCCC negotiation process climate change is increasingly linked to the **human rights** of people who are threatened by hunger, diseases, the loss of livelihoods or access to water and other impacts of climate change. It is argued that the existing human rights framework entitles groups and individuals to claim the protection of these rights. In order to prevent and address issues of global injustice governments are therefore under an obligation to act early.

It also seems questionable whether the current climate change negotiations will lead to new radical approaches that can initiate fundamental changes in lifestyles and consumption patterns in the wealthier societies of the North. Despite the magnitude of the problem and the lack of time, to date governments have shown little leadership in framing and implementing the necessary policies. Do they have the vision and resolve to take the required decisions in Copenhagen to create a global framework that is both equitable and sustainable?

²⁴ Paragraph 109 of the AWG-LCA chair’s negotiating text

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