

ADAPTATION UNDER THE UNFCCC – THE ROAD FROM BONN TO POZNAN 2008

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Sven Harmeling

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Brief Summary

Adaptation has increasingly gained attention in the UNFCCC negotiations. As one of the four building blocks of the Dialogue on Long-term Cooperative Action, specific elements which foster the implementation of adaptation need to be considered in a future climate change framework, while at the same time there is the need to move forward in relevant agenda items under the UNFCCC Subsidiary Bodies of Implementation (SBI) and Scientific and Technological Advice (SBSTA).

Building on the recent UNFCCC negotiating session in Bonn (SB28, June 2008) and submissions made by Parties, this paper analyses key issues in the adaptation debate under the UNFCCC and outlines key elements that emerge as part of a future climate change agreement. It thus also serves as a guide to the upcoming negotiations in Accra (Ghana) in August and Poznan (Poland) in December 2008.

Imprint

Author: Sven Harmeling

With inputs from Christoph Bals, Kit Vaughan, Mozaharul Alam, Heather McGray, Shephard Zvigadza, Kathrin Gutmann, Joanne Linnerooth-Bayer, Reinhard Mechler, Benito Müller.

Editing:

Marisa Beck

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Germanwatch e.V.

Office Bonn

Dr. Werner-Schuster-Haus

Kaiserstr. 201

D-53113 Bonn

Phone +49 (0) 228 60492-0, Fax -19

Internet: <http://www.germanwatch.org>

E-mail: info@germanwatch.org

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For correspondence with the author: harmeling@germanwatch.org

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Contents

Introduction.....	10
1 Adaptation and the big climate picture	10
1.1 Development crisis in times of the climate crisis	10
1.2 No adaptation without mitigation.....	12
1.3 Adaptation and the building blocks	15
2 AWG-LCA: The debate in Bonn.....	16
2.1 Overview of elements for further consideration in a future agreement	19
2.2 Lessons learned and key barriers in adaptation	20
2.2.1 Lessons learned in NAPAs.....	20
2.2.2 Stand alone adaptation versus mainstreaming?	21
2.2.3 Capacity building for technologies.....	22
2.3 Aspects of financing.....	22
2.3.1 Fragmentation of funding structure.....	22
2.3.2 Insufficient level of present funding.....	23
2.3.3 Proposals on how to generate funds	24
2.3.4 Governance of funds	25
2.3.5 Principles of funding	26
3 SBI and SBSTA: What happened in Bonn?	26
3.1 SBI 4: Fourth review of the financial mechanism	27
3.2 SBI 5a: Implementing adaptation (1./CP.10).....	28
3.3 SBI 5b: Matters relating to the LDCs	29
3.4 SBI 6/SBSTA 4: Development and transfer of technologies	30
3.5 SBI 7: Capacity-building for developing countries	30
3.6 SBI 12: Art. 9, Review of the Kyoto Protocol	31
3.7 SBSTA 3: The Nairobi Work Programme on Impacts, Vulnerability and Adaptation.....	32
3.8 2 nd meeting of the Adaptation Fund Board	33
4. Framing future action on adaptation: possible elements of a Copenhagen deal.....	35
4.1 Principles in adaptation under the UNFCCC.....	36
4.2 National plans: From NAPAs to NAPs?	37
4.3 Institutional architecture	42
4.3.1 Is there a need for a permanent adaptation body under UNFCCC?	42
4.3.2 Is there a need for an enhanced technology body?	45
4.3.3 What could be the role of regional centers?	46
4.4 The future financing architecture.....	48
4.4.1 Proposals to generate financing.....	48

4.4.2	Specific fund proposals	53
4.4.3	Strategic spending of the resources	54
4.4.4	An International Insurance Scheme.....	56
5.	From Bonn to Accra to Poznan	58
6.	References	64

List of figures, tables and boxes

Figure 1:	Selected global impacts from warming associated with various reductions in global greenhouse gas emissions	13
Figure 2:	Tipping point thresholds and impacts of different emission reduction scenarios.....	14
Figure 3:	Adaptation and links between the building blocks	15
Figure 4:	Adaptation-related agenda issues under AWG-LCA, SBI and SBSTA	16
Figure 5:	Public interventions in technology development, diffusion and deployment.....	17
Figure 6:	ODA and adaptation cost estimates.....	24
Figure 7:	Indian approach to a global response on adaptation.....	35
Figure 8:	Chinese proposal for an organisational structure on technology under the UNFCCC	45
Figure 9:	Swiss proposal for an international adaptation funding scheme.....	54
Figure 10:	Future UNFCCC adaptation framework.....	58
Table 1:	Implications of different base years for global reduction efforts	14
Table 2:	Presentations at the AWG-LCA workshop.....	18
Table 3:	overview of adaptation-related elements for a future agreement.....	19
Table 4:	Overview of SBI/SBSTA decisions in Bonn and actions in Poznan	26
Table 5:	AFB Work Plan Milestones Table.....	34
Table 6:	A principle-based analysis of proposals to generate adaptation funding	50
Box 1:	Adaptation in the AWG-LCA technology workshop.....	16
Box 2:	Addressing the needs of the most vulnerable groups under the right to adequate food	38
Box 3:	The ‘Domestic Revenue Problem’:	49
Box 4:	Insurance Instruments for Adapting to Climate Risks - A proposal for the Bali Action Plan. Submission by Munich Climate Insurance Initiative, executive summary, 18 August 2008..	56
ANNEX I	Agenda items in Accra and Poznan and desired outcomes.....	62

Executive Summary

KEY MESSAGES

- 1. The Accra session and the following months have to be used by all Parties to advance their understanding of the elements proposed so far and to generate extended negotiation mandates with a view to making substantial progress by Poznan on the way to Copenhagen. Poznan has to deliver an outline of the key elements of the Copenhagen treaty, in order to negotiate the details for an agreement by the end of 2009. This will not be achieved with a business-as-usual negotiation spirit.**
- 2. Adaptation to climate change suffers from an implementation gap. This is also reflected by the way it is dealt with under the UNFCCC, with a focus on scientific assessments and expert workshops but with too little support for wide-spread implementation.**
- 3. A picture of key elements of a future climate change agreement related to adaptation is emerging from the recent negotiations and should serve as the discussion basis. These include the preparation and implementation of National Adaptation Plans, the establishment of regional centers, an international insurance mechanism and a technology-related fund, based on a significantly increased provision of financial resources by those who are most responsible and most capable.**
- 4. Establishing a funding scheme which automatically generates adequate, sustainable, predictable and additional resources, with a transparent and fair governance structure, and which ensures an effective use of the resources targeting the most vulnerable is crucial for future action and will heavily depend on developed countries.**

The UNFCCC process is rapidly approximating its culminating point in Copenhagen 2009. Delegates from over 190 nations, their administrations and last but not least their Heads of Governments will decide over the fate of millions of people. Will they live up to the expectations that are upon them and take climate change as serious as science tells us we should do? To achieve this, business-as-usual in the negotiations will not move us there fast enough. A quantum leap is needed both in mitigation in developed countries and - in a fair and differentiated way - the rest of the world as well as in assisting those most vulnerable to adapt to the adverse impacts of climate change. This will require expanded mandates for negotiators, serious commitments by Heads of Governments, near-term action by Parliaments and strong public action by civil society. Without that, with a refusal to reroute the development paradigm in North and South and change our mindsets, the world is seriously running into trouble, with dangerous tipping points only a couple of years or decades away. And that at a time where billion of people are already suffering from the impacts of the development crisis including poverty, hunger, malnutrition, energy poverty etc.

All analyses show that, while adaptation has gained increasing policy profile in the last years, implementation is still far away from being sufficient to cope with the challenge of climate change experienced already today. Developed countries are responsible for a large share of the adaptation

implementation gap, through delivering too little too slowly on mitigation and through providing very scarce resources to support adaptation in developing countries. In addition, through not meeting their Official Development Assistance (ODA) commitments, which is needed to fight poverty, food insecurity, insufficient water access etc, people's vulnerability is increased. Any further delay on far reaching decisions on mitigation will result in impacts that people are forced to cope with. More often than not they may even be doomed to fail in adaptation. It is certain that the much discussed target of halving emissions by 2050 (without baseyear) strongly promoted by developed countries is not ambitious enough. Whilst developed countries are far from active and ambitious enough, most developing countries are still in their early stages to pay appropriate attention to the challenge of adaptation.

Key issues for adaptation progress under the UNFCCC after Bonn 2008

The most relevant forum for cross-cutting discussions in the wider context of adaptation and climate change under the UNFCCC is the AWG-LCA. In Bonn (June 2008), adaptation was in the focus, and discussions in the three workshops on adaptation, financing and technologies revealed numerous overlaps which need to be recognised. This is the case in terms of political linkages and dynamics of the building blocks, but also in terms of the responses that need to be developed and negotiated for a new climate change agreement.¹ In addition, ongoing work related to adaptation under the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body of Implementation (SBI) is also relevant for advancing action on adaptation under the UNFCCC. These workstreams need to be reconciled and coordinated more strongly.

Adaptation is already taking place, and processes such as that of the National Adaptation Plans of Action (NAPAs) have assisted developing country governments in understanding the problem. These have though only been a first step:

- The scarcity of the available resources compared to the high estimated adaptation costs remains one of the key impediments, and in that regard particular attention should be given to the fact that some of the funding scheme proposals focused on generating resources for adaptation.
- This does not mean that the generation of resources is the only challenge. How these will be governed, for which purposes they will be spent is also of high relevance. Not the least, developing country governments are expected to address the adaptation demands of those most vulnerable to the adverse effects in the first place, in order to keep track with their commitments to safeguard basic economic, social and cultural rights, such as the right to adequate food or water supply. Effective delivery of adaptation will also be a key requirement in order to raise the willingness-to-pay of those that are expected to contribute adequate amounts of funding.
- The discussions also showed that under the roof of the Convention adaptation with its fragmentation is still not adequately settled.
- At the same time, thoughts have to be spent on where and how the UNFCCC can improve its catalytic role, e.g. by also supporting processes outside of the Convention which have a particular expertise in areas that are key to adaptation, such as in the field of disaster risk reduction.

¹ see FCCC/AWGLCA/2008/11 for a summary

Possible elements in a future climate change framework

From the AWG-LCA discussions a number of elements emerged which could constitute key adaptation pillars of a future climate change agreement:

- **National Adaptation Plans:** the preparation and continuous advancement of national adaptation plans with a long-term perspective, building on but going beyond the National Adaptation Programmes of Action (NAPAs). This seems to emerge as a desired next step, with a view to integrating adaptation into planning and policy processes. In designing these as a part of an agreement, it will be important to ensure a focus on the most vulnerable parts of the society, to take into account lessons learned from similar processes and to ensure that provided resources are not limited to the preparation of these plans, but will also be used to support the implementation. Countries most vulnerable to climate change, in particular the Least Developed Countries and the Small Island Developing States (SIDS), should be in the focus of international support.
- **A permanent UNFCCC adaptation body:** Adaptation is currently covered under the Convention in a fragmented way. The SBSTA Nairobi work programme on impacts, vulnerability and adaptation assists scientifically and technically. Several SBI agenda items have links to adaptation, but the discussions under 1/CP.10 show that the implementation of adaptation has benefited too little from SBI. The AWG-LCA also discusses adaptation. The role of such a body is not clear yet, but trying to better coordinate what is happening in the different negotiation streams could be one key function. Distilling the existing information with regard to adaptation implementation and policy relevance, in a kind of expert group, is also desired by many developing country Parties. Whether such a body could also coordinate adaptation work with initiatives outside the UNFCCC, also needs to be discussed.
- **Establishment/enhancement of regional centers/networks** to promote knowledge, exchange and capacity-building for adaptation: Several Parties have addressed the potential that lies in an improved regional cooperation and exchange of information and experience linked to international and national activities. Establishing regional adaptation centers or scaling-up the work of existing ones that integrate expertise on the different aspects of adaptation (gathering climate information, capacity-building, developing adaptation policies etc.) could thus constitute an important element to promote adaptation learning and implementation.
- **Technology-related institutions:** as part of the discussion on technology development and transfer, proposals for specific technology-related funds and an enhancement of the way in which technology issues are currently addressed under the UNFCCC (e.g. through a Subsidiary Body on Diffusion, Deployment and Transfer of Technologies (D&D&T) were made. While the discussions implicitly focus on mitigation, they are also relevant for adaptation technologies.
- **An international insurance mechanism** to support countries in coping with losses and damages caused by extreme events: such an instrument would particularly support those countries that are hardest hit by rare but extreme events in coping with the costs. At the same time it would set incentives and provide support for disaster risk reduction. Regional insurance schemes could be supported by an adaptation funding scheme as part of a future agreement. The AWG-LCA workshop on risk management and risk sharing approaches which is going to be held in Poznan will provide an important opportunity to discuss alternative designs of such a mechanism.

- **Future funding architecture:** there is no doubt that a significant increase of financial resources provided for adaptation in developing countries will be needed. It is important to keep in mind that any agreement related to financing will have to address four different levels:
 - One or more **mechanisms to generate** adequate, predictable, additional and sustainable resources. This could be linked to a burden-sharing mechanism which defines how much or which shares countries should contribute (e.g. based on indicators of responsibility and capability).
 - A **governance structure** which decides how and on which purposes the resources are going to be spend. The fair governance structure of the recently established Adaptation Fund under the Kyoto Protocol may serve as a good orientation for a future scheme.
 - A set of **specific funding purposes**, such as A) to D), but also mechanisms/facilities existing outside the Convention which have proven expertise in areas that are highly relevant to adaptation, such as disaster risk reduction.
 - Approved **approaches and mechanisms that ensure a transparent and effective use of the resources** provided to support adaptation in developing countries, which could include guidelines for preparing National Adaptation Plans, a process to include affected stakeholders, reporting on their implementation etc.

Different proposals on elements of a **funding architecture** have been made in the recent negotiations in Bonn. For example, Norway proposed the auctioning of Assigned Amount Units (AAU) as a means to generate financing, without addressing issues of specific purposes, governance etc. Switzerland's proposal addresses how to generate resources – through a global carbon tax – but it also suggests the purposes the money should be spent for: a Multilateral Adaptation Fund with an insurance and a prevention pillar, and National Climate Change Funds. The Mexican proposal also provides ideas for an international fund, contributing to it and access to its resources. Eventually, a funding scheme has to find solutions on all these levels, and each one entails different questions to be answered. But for the negotiations it is very important that these different levels can be decided on relatively independently. For example, the establishment of an international insurance mechanism may depend on a sufficient level of funding, but for its functioning it does not matter whether these resources come from the auctioning of AAUs, a carbon tax or any other mechanism.

A principle-based analysis undertaken in this paper reveals that mechanisms to generate resources that are independent from national budget decisions have a better “performance” with regard to predictability, adequacy, sustainability and additionality. These include auctioning of AAUs, the extension of the CDM Adaptation Fund levy to Joint Implementation and Emission Trading, and internationally collected adaptation levies on e.g. international aviation and maritime transport. It is important to bear in mind that adaptation will not be the only funding purpose in a future agreement. The guiding principle for disbursement should be to deliver adaptation based on needs identified at the national and sub-national level, in particular addressing the needs but also the capabilities of those people most vulnerable to climate change.

Moving forward in Accra and Poznan

The elements identified here deserve more detailed consideration and discussion by all Parties. Each negotiation from now on has to deliver substantial discussion and substantial progress on the pillars of the future political climate change architecture. As soon as possible, specific textual proposals are needed to provide a sound basis for negotiation.

Accra is the next step where progress in the joint understanding has to be achieved. The chair of the AWG-LCA has proposed to work in three contact groups which address enhanced action on adaptation (including technology and finance), enhanced action on mitigation (including technology and finance) and institutional arrangements.² These offer space for further discussions on the proposed elements. Identifying and answering key questions to evaluate proposals and flesh them out further will be important in the run-up to Poznan and for the work programme 2009 of the AWG-LCA, which is likely being agreed on in Poznan. In case of adaptation many good proposals have been made that taken together could be the basis for a comprehensive adaptation building block for the post-2012 treaty. It is now time to work these out further. A key question will be that of the collective political will related to these different elements, in particular the generation of financial resources. Between Accra and Poznan, Parties have to move forward with defining their positions on these and other elements. Ongoing discussions under the SBI and SBSTA, including the opportunity for making specific submissions, will also add to the overall understanding on how to move forward with adaptation now, up to and beyond 2012.

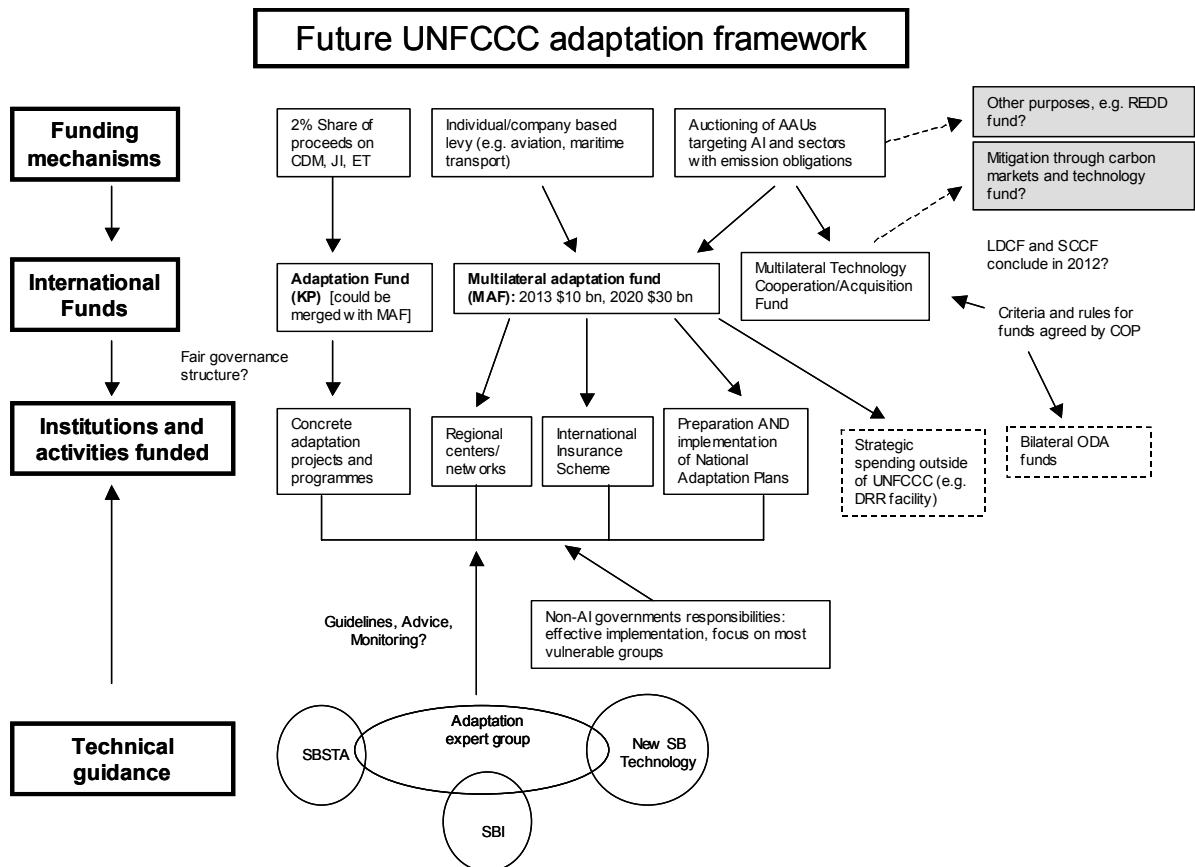


Figure: How the UNFCCC adaptation framework could look like in the future

² FCCC/AWGLCA/2008/10

Introduction

This paper analyses the state of the negotiations under the UNFCCC from a particular adaptation perspective. It thus should provide points for discussion and consideration in the negotiations of the upcoming months. It builds on the previous Germanwatch publication “Adaptation to Climate Change – where do we go from Bali?”.³ Chapter 1 arranges the UNFCCC debate in the wider context of the current development and climate crisis, underlines the urgent need for far reaching mitigation as a necessity for meaningful long-term adaptation and relates the different negotiation “building blocks”. Chapter 2 summarises key discussions under the Ad-hoc Working Group on Long-term Cooperative Action, also known as AWG-LCA, in the Bonn negotiations and outlines a number of elements for a Copenhagen climate deal with regard to adaptation. Chapter 3 analyses the conclusions taken and the discussions led under relevant agenda items in the Subsidiary Body of Implementation (SBI) and the Subsidiary Body of Scientific and Technological Advice (SBSTA). It also outlines areas where this ongoing process could contribute in the next months to the development of a Copenhagen agreement. Chapter 4 looks at elements proposed in the context of such an agreement in greater detail and thus constitutes the key chapter of this paper. Chapter 5 summarises these proposals and outlines how a future UNFCCC adaptation framework could possibly look like. It also concludes with an outlook on the upcoming negotiations in Accra and Poznan.

This paper will be updated in the months before Poznan, based on the negotiation session on Accra, forthcoming submissions and other inputs. Comments to the author are thus highly welcome.

1 Adaptation and the big climate picture

1.1 *Development crisis in times of the climate crisis*

Food crises and soaring oil prices generate additional financial burdens in particular for the poorest developing countries and can eliminate development progress achieved over recent years. At the same time, poverty eradication and sustainable development depend upon tackling climate change and ensuring environmental sustainability; otherwise, any gains will be transitory and inequitable.⁴ The poorest are disproportionately dependent on utilising environmental goods and services for livelihood security. However, climate change is increasingly impacting many crosscutting sectors crucial for sustainable development and poverty elimination, e.g. water, health, food security etc., and further consequences will be unavoidable. Vulnerable and poor countries will be hardest hit, whilst rich countries that have done the most to cause anthropogenic climate change are least affected and have more resources to adapt to climate impacts.

In 1970, developed countries have committed to spend 0.7% of their Gross National Income (GNI) in the future on Official Development Assistance (ODA). Only few of the developed countries have achieved this goal so far. In 2005 at the Gleneagles Summit, the G8, for example, have committed to double their ODA by 2010. However, a present analysis by the OECD shows that

³ Harmeling/Bals 2008

⁴ MEA 2005

most of the donors are “not on track to meet their stated commitments to scale up aid and will need to make unprecedented increases to meet the targets they have set for 2010”.⁵ The USD 103.7 bn of ODA only account for 0.28% of the combined GNI. By not delivering on their ODA commitments, developed countries undermine developing countries’ possibilities to successfully fight poverty, which is in itself an important part of any successful climate change mitigation and adaptation strategy.

But supporting sustainable development as a key strategy to build climate resilient and adapting societies in developing countries takes more than talking about ODA. Internationally, a complex web of economic structures and regulations (especially in trade, intellectual property, finance and investment) has evolved that determines and often limits the development policy space of developing countries.⁶

As adaptation has to be pursued in an integrative manner as part of national development and poverty reduction strategies, aspects such as trade policy, economic diversification, the development of productive capacity, environmental policy, investment policy, intellectual property policy etc. have to be considered, and developing countries need policy space to develop appropriate policies, also with regard to climate friendly development in general. This is the reason why, for example, the *South Centre* states that “the post-2012 framework must protect and promote the right to sustainable development of developing countries through policy parameters for the design of economic and environmental policies that are needed to provide: (i) the development policy space for developing countries in the areas of tariff and non-tariff barriers, intellectual property, investment promotion and regulation, regional integration, industrial policy, and finance regulation; and (ii) the environment and carbon space to increase GHG emissions, to the extent that may be required to enable them to increase the standards of living of their peoples to levels commensurate with a decent and dignified way of life.”⁷

The parallelity of the development crisis and the climate crisis is furthermore the reason why *Baer et al.* put the issue of taking action to respond to climate change in a wider context of development in the greenhouse. They call for an “emergency climate scenario” that is based on “expanding the climate protection agenda to include the protection of developmental equity. To that end, the *Greenhouse Development Rights (GDRs) framework is designed to hold global warming below 2°C while, with equal deliberateness, safeguarding the right of all people everywhere to reach a dignified level of sustainable human development.*”⁸

This is the background against which the UNFCCC negotiations are taking place and are approaching a historic culmination, a crossroads where the international community will either manage to make a quantum leap forward on the climate and development agenda, or where it will fail to deliver an adequate response to these crises by being stuck in its business-as-usual policy-making. The scale of action that will be taken to adapt to the adverse and potentially devastating consequences of climate destabilisation will be a decisive pillar in meeting this challenge.

Since building climate-resilient societies reflects in essence successful adaptive development, a wide range of strategies have to be pursued. This is also acknowledged in the Bali Action Plan, which lists numerous activities contributing to adaptation.⁹ Sustainable poverty reduction in general is a key one. All development activities that are potentially adversely affected by climate change

⁵ http://www.oecd.org/document/8/0,3343,en_2649_34447_40381960_1_1_1_1,00.html, as of 15 July 2008

⁶ SouthCentre 2007: 15

⁷ South Centre 2007: 15

⁸ Baer et al. 2007: 11

⁹ 1/CP.13

have to be “climate-proofed” as much as possible in an efficient and effective manner. This also means that those actors involved in development politics and development cooperation have their role to play and their work to do outside the UNFCCC:

- Developing country governments have to develop strategies for the integration of climate risks, including sectoral and cross-sectoral strategies, with the line ministries taking the lead for their responsibilities; they also have the obligation, based on their own past legally binding commitments, to ensure basic social, economic and cultural rights which are threatened by climate change, such as the right to adequate food and water.¹⁰ This requires the identification of the most vulnerable people, to focus de jure and de facto the available resources on them and to integrate these target groups in the monitoring process.
- Developed countries’ development cooperation agencies have to integrate climate change risks into their project portfolios, which is still very much in its early stages, despite repeated commitments to foster this process;
- Non-governmental and international organisations have to assess the risks arising from climate change with regard to their target groups, objectives etc., and develop effective response strategies which secure development progress.

The UNFCCC and a new climate regime will not be able to completely solve the climate and development crises, but they should support the wide-spread implementation of strategies of adaptive development as much as possible.

1.2 No adaptation without mitigation

Almost every day it becomes clearer that adaptation has been neglected for too long in the climate change debate. Immediately increased efforts are needed in order to safeguard progress on the Millennium Development Goals. However, there is no doubt that further delay in serious mitigation of greenhouse gas emissions increases the risk that global warming levels will be reached that cause catastrophic consequences for hundreds of millions of people. This key nexus has also been reflected in the Chair’s summary of the adaptation workshop under the Ad-hoc Working Group on Long-term cooperative Action, also known as AWG-LCA: *“It was recognized that, in order to limit the global adaptation challenge to a manageable scale, adequate and urgent action on mitigation is needed in accordance with the Convention, as envisaged in the Bali Action Plan.”*¹¹

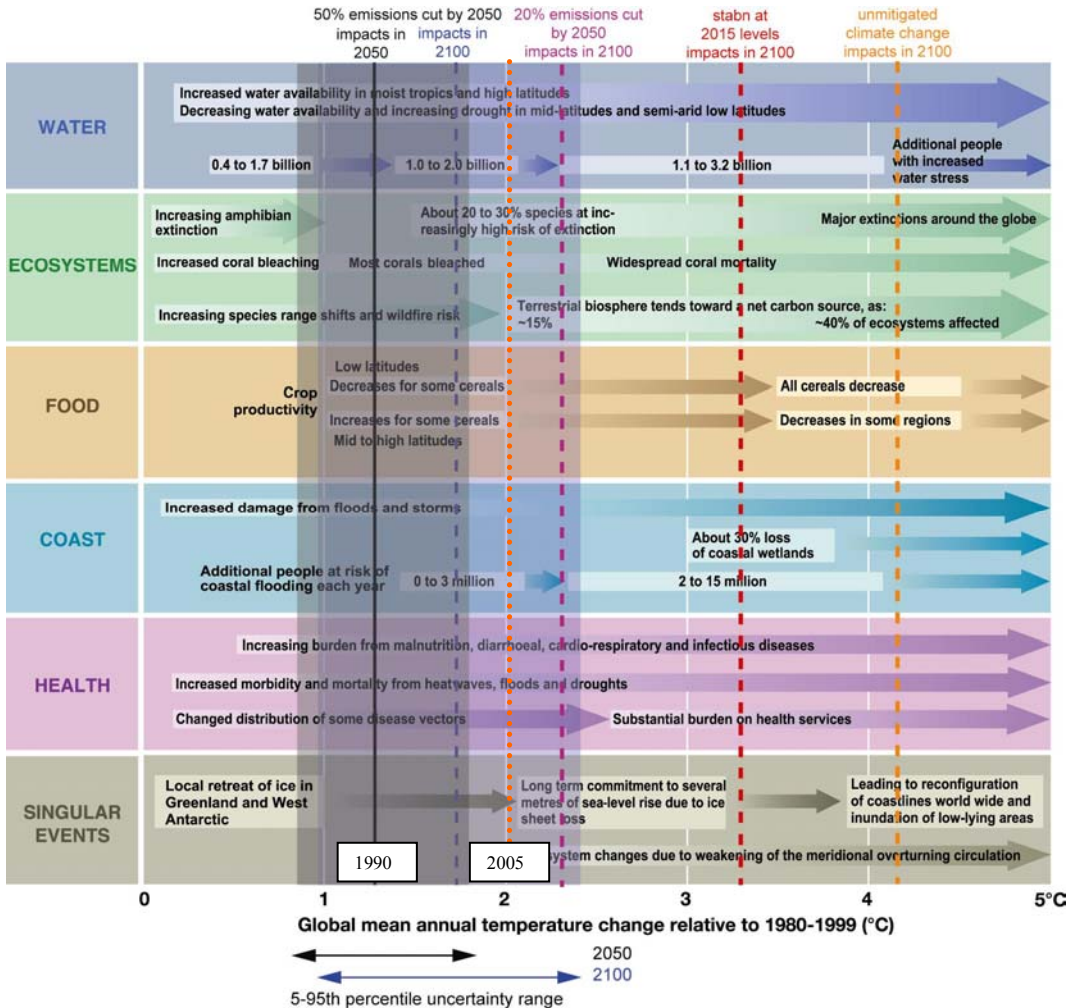
This has direct consequences for a key element in the development of a shared vision of long-term cooperative action, the long-term mitigation goal: it must address climate change in a way that all countries are allowed to develop effective adaptation strategies. Different levels of mitigation will result in different levels of climate change impacts and thus the scale of adaptation needed. This must be carefully considered in all the discussions. For example, this year’s G8 summit concluded with a long-term goal of at least halving emissions by 2050. Taking different base years results in

¹⁰ For example, the International Covenant on Economic, Social and Cultural Rights (ICESCR), which was adopted by the UN General Assembly in 1966 and entered into force in 1976, has been ratified by 158 state Parties around the world.

¹¹ FCCC/AWGLCA/2008/CRP.1

different levels of global warming (Figure 1, Figure 2, Table 1). In most cases this is not ambitious enough to limit global temperature increase below 2°C above pre-industrial levels.

Figure 1: Selected global impacts from warming associated with various reductions in global greenhouse gas emissions



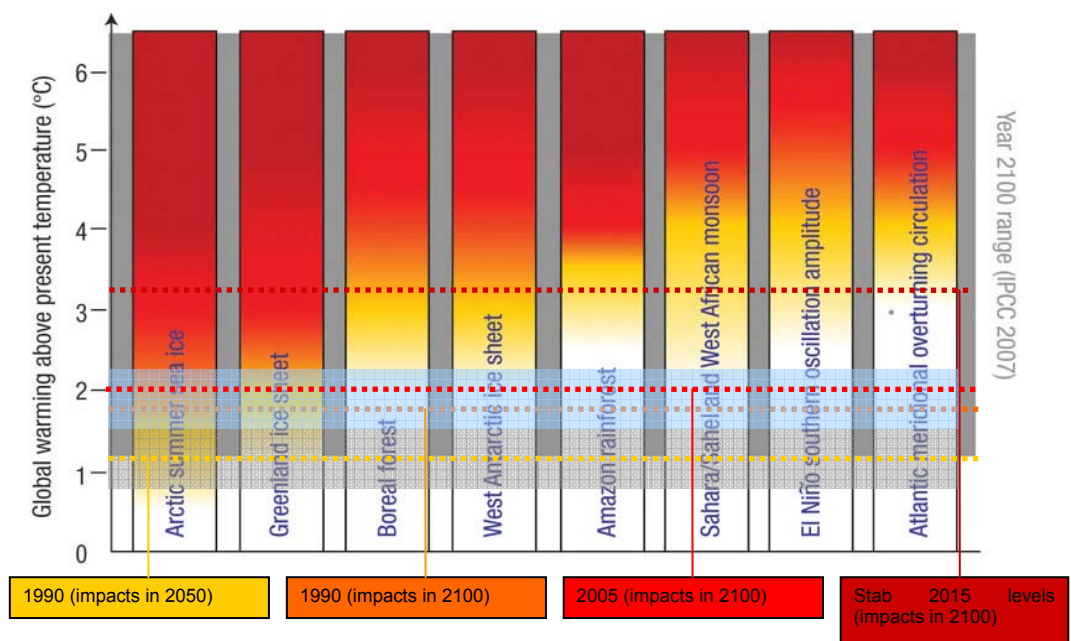
Source: based on Parry et al. 2008; orange line added by the author shows the level of impacts in 2100 if global emissions were to be reduced by 50% by 2050 compared to 2005 levels, while the blue dotted line shows the same compared to 1990 levels. To calculate pre-industrial levels add another 0.5°C. Shaded columns show 5 to 95% uncertainty ranges for impacts of a 50 % cut above 1990 levels.

The closer the world approaches the 2°C limit, the more likely it is that, in addition to serious consequences around the world in different sectors, highly dangerous and irreversible tipping points will be passed (Figure 2).¹² With a reduction of 50% by 2050 compared to 1990 levels, there is increasing likelihood that the tipping point of the Greenland ice sheet destabilisation process will be passed by the end of the century, leading to an irreversible, long-term sea-level rise of about 3 to 6 meters. With 50% reductions by 2050 compared to 2005, the probability that this point would be reached is significantly higher. This will not only doom many of the small island states to extinction in the long run, but it would also be highly disastrous for megadeltas and

¹² see Lenton et al. 2008

coastal cities around the world, which are the economic and political centers and inhibit an increasing number of people.

Figure 2: Tipping point thresholds and impacts of different emission reduction scenarios



Source: own illustration, based on Lenton/Schellhuber 2007 and Parry et al. 2008

The dotted lines indicate a temperature increase above 1980-1999 levels depending on different emission reduction scenarios (50% reduction by 2050 compared to different base years, stabilisation at 2015 levels). To calculate warming above pre-industrial levels add another 0.5°C. Shaded columns show 5 to 95% uncertainty ranges for impacts of a 50 % cut.

Table 1: Implications of different base years for global reduction efforts

Halving emissions by 2050 compared to	Emission reductions by 2050 compared to 2000	Emission reductions by 2050 compared to 1990
2000	50%	43%
2005	45%	36%
2008	39%	31%

Source: own calculations based on IPCC 2007: Climate Change 2007: Mitigation. Summary for Policymakers.

Thus, choosing 2005 as the base year for defining the goal to halve emissions by 2050 would be absolutely inadequate, and even halving compared to 1990 bears a high risk of passing such tipping points. Emission reductions at the upper end of the IPCC scenarios (50 to 85% reduction by 2050 compared to 2000) are needed, with the developed countries taking the lead. Any long-term goal has to be underpinned by near-term action and near-term goals (e.g. 2015, 2020 and 2030). Thus, reductions by industrialised countries in the upper end of the IPCC range of 25 to

40% by 2020 and in the upper end of the IPCC range of 80 to 95% by 2050 are necessary. This fact makes clear the close link between negotiations on adaptation and those about future Annex I commitments, as they take place in the Ad-hoc Working Group on Further Commitments by Annex I Parties under the Kyoto Protocol (AWG-KP).

In addition, substantial deviation from business-as-usual emission pathways in emerging economies is crucial in order to stay below 2°C, a fact which has to be recognized in the Bali Action Plan negotiations, but in particular in the further design and treatment of international carbon markets and how these relate to Annex I commitments. If a large share of Annex I reduction commitments will be fulfilled by carbon credits from the emerging economies, staying on track with the 2°C limit would be highly unrealistic.

1.3 Adaptation and the building blocks

The post-2012 negotiations are arranged with an interplay of the different building blocks in the AWG-LCA. To understand the political dynamics of the negotiations it is important to analyse the linkages between the different building blocks. Financing and technology are in essence facilitating building blocks for progress in mitigation and adaptation (Figure 3).

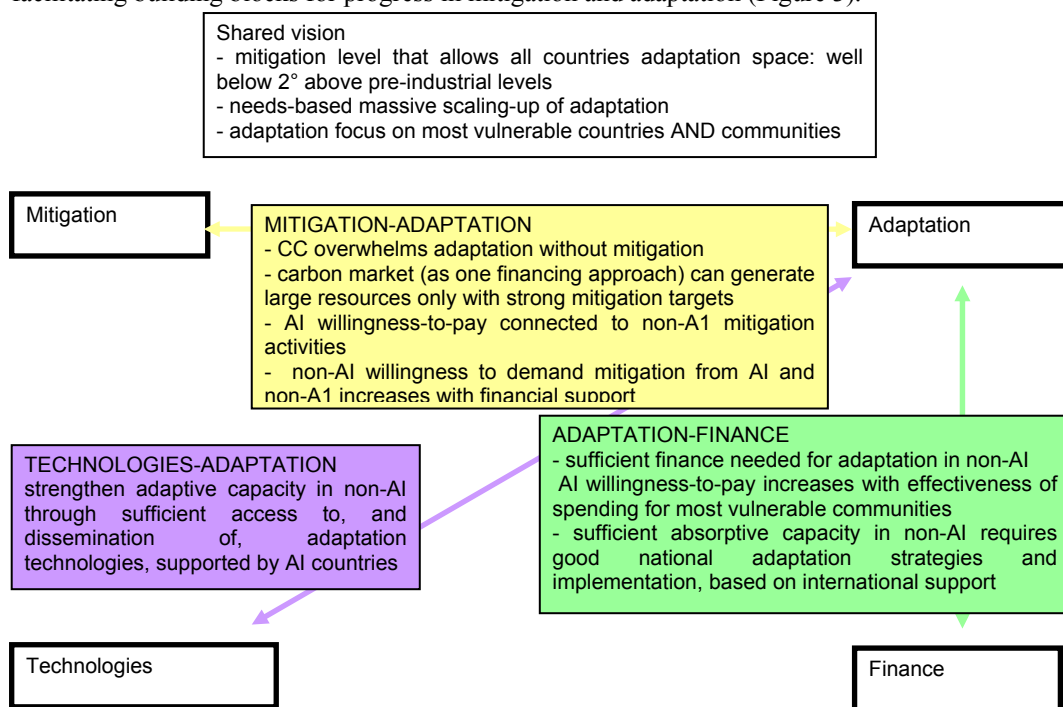


Figure 3: Adaptation and links between the building blocks

Source: own illustration; note that this illustration solely considers the links relevant from an adaptation perspective

At the same time it has to be noted that adaptation has its place under SBI and SBSTA, and progress here is also crucial for the overall success of the negotiations. In order to improve coordination and synergies between the different negotiation streams in the preparation of a Copenhagen agreement, the chairs and co-chairs of the AWG-LCA, SBI and SBSTA should assess how joint strategies could be developed very soon.

<p>AWG-LCA</p> <ul style="list-style-type: none"> • Shared vision • Adaptation • Mitigation • Technologies • Finance 	<p>SBI</p> <ul style="list-style-type: none"> • Financial mechanism • Implementation (1/CP.10) • LDC matters • Capacity building for developing countries • Development and transfer of technologies • Art. 9 review (extension of adaptation fund levy) 	<p>SBSTA</p> <ul style="list-style-type: none"> • development and transfer of technologies • capacity-building for developing countries • Nairobi Work Programme on Impacts, Adaptation and Vulnerability 	<p>AWG-KP Further Annex I reduction commitments</p>
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Figure 4: Adaptation-related agenda issues under AWG-LCA, SBI and SBSTA

Source: own compilation

To achieve an effective global climate change deal, realising and using the positive dynamics between the building blocks and building joint alliances will be a key strategy.

2 AWG-LCA: The debate in Bonn

Under the AWG-LCA in Bonn, there were intense debates about the three building blocks adaptation, financing and technology in the three workshops (and the subsequent contact and informal groups):

- Advancing adaptation through finance and technology, including national adaptation programmes of action;
- Investment and financial flows to address climate change;
- Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, the scaling up of technology development and transfer to developing country Parties in order to promote access to affordable environmentally sound technologies.

Workshop 2 was particularly relevant with regard to adaptation, not the least because some of the specific proposals for an increased generation of funds in the future explicitly focused on adaptation as a funding purpose.

Workshop 3, while implicitly focusing on mitigation technologies, also contained some specific references to technologies for adaptation, and elements of a future framework on climate change that have been proposed there (institutional, financing etc.) would include actions on technologies for both mitigation and adaptation.

Box 1: Adaptation in the AWG-LCA technology workshop

With the increasing attention on technology development, cooperation and transfer issues in the BAP discussions, the technology dimension of adaptation is also being more explicitly addressed by some Parties, although the overall focus of the technology debate remains to be on mitigation technologies.

For example, **Bangladesh** in its presentation **on behalf of the LDCs**, pointed out that “technologies for adaptation will dependent on the level of vulnerability of different countries, the sector-wide vulnerability and existing adaptive capacity. Many technologies for adaption can be built on existing experiences in developing countries, some of these technologies will required to be scaled up.” **Bangladesh** thus explicitly separated it from the mitigation technology debate, where the “scale of technology development and transfer will depend on future reduction commitment target and participation of different parties. Technology transfer from North to South should not promote transfer of old-aged and inefficient technologies.”

Key priorities in technology transfer from the perspective of the LDCs are early warning systems, impact prediction modelling, scaling up and modernizing hydrological and meteorological services, scaling up of new technology development in the priority sectors including human settlement, agriculture, water, health, bio-diversity, coastal zone.

Ghana reminded the plenary of the fact that adaptation technologies have key characteristics that need to be addressed. **Samoa on behalf of AOSIS** underlined that in the case of many adaptation technologies, the return on investment is rather low, which probably makes the creation of enabling environments as such more difficult compared to many mitigation technologies. The **EU** proposed an “*enhanced technology transfer framework*”, including the need for alignment with their proposed “*Framework for Action on Adaptation*”. **China** included in its presentation a table which highlights areas where government interventions are important, including public finance. This is also relevant when assessing instruments that could advance the catalytic role of the Convention to support governments in their own efforts.

This is just to show that there are adaptation specific aspects in the technology debate on the one hand, and on the other there is growing recognition that the technology development and transfer debate also has an adaptation dimension.

Stage of tech dimensions	Invention R&D	Innovation R&D (demo)	Diffusion and Deployment
Stakeholder	Research institutes, Universities, Government	Large company, Research institute, Universities, joint venture, gov't	Companies, Brokers, government
Financial resources	Public finance for R&D	Public finance, Company invest. Venture capital	company investment, Bank, stock, bonds, public finance
Policy instruments	Subsidies, Planning, awareness	Subsidies, planning, norms, permit, standard, directorate,	Taxation, subsidies, pricing, promoting competition, permit, norms, compulsory licensing, patent pool...

Figure 5: Public interventions in technology development, diffusion and deployment

Source: China 2008

Each workshop opened with a presentation of the SBI and SBSTA chair outlining to what extent SBI and SBSTA could contribute to the AWG-LCA, which is quite important for the effectiveness

and consistency of the further discussions on a future framework. Then the workshops evolved around presentations by Parties which can be downloaded on the UNFCCC website and which serve as an important reference for the analyses made here.

Table 2: Presentations at the AWG-LCA workshop

Adaptation (1)	Financing (2)	Technologies (3)
SBI/SBSTA	SBI/SBSTA	SBI/SBSTA
Bangladesh (on behalf of LDCs)	Bangladesh (on behalf of LDCs)	Bangladesh
China	Norway	China
Cook Islands (on behalf of AOSIS)	Barbados (on behalf of AOSIS)	Barbados (on behalf of AOSIS)
Gambia	Switzerland	Ghana
India	India	India
Japan	Japan	Japan
Philippines	Philippines (on behalf of G77/China)	Brazil
Slovenia (on behalf of EU)	Germany (on behalf of EU)	European Community
South Africa	Mexico	South Africa
USA	Republic of Korea	USA

Source: own compilation based on www.unfccc.int

Throughout the upcoming discussions under the AWG-LCA, Parties are invited to submit their views on the issues and also specific textual proposals, which should help to set up a draft negotiation text of a Copenhagen agreement already in Poznan.

In the following, key aspects of the discussion will be analysed. This will not be done separately for each workshop, because there were a number of overlapping discussions, in particular between the adaptation and financing workshop. Since each workshop showed that certain elements deserve particular attention by some Parties and thus qualify for further consideration in the AWG-LCA negotiations, these will be outlined first.

2.1 Overview of elements for further consideration in a future agreement

Before resuming the key debates in the workshops which will have relevance for the further discussions and negotiations, an overview of the elements that emerged from the workshops and which may deserve further consideration is given.

Table 3: overview of adaptation-related elements for a future agreement

	Adaptation (1)	Financing (2)	Technology (3)
National plans	National adaptation plans/climate resilience plans/adaptation action plans	Need for development of economic valuation or assessment tools to enable determination of the actual costs of adaptation.	Technology needs assessments, R&D, development and transfer of technologies
Institutional elements	Permanent adaptation body (expert group, committee, specifically on adaptation technology)		new subsidiary body on development and transfer of technology technology transfer and development board
	(a network of) regional centers		Regional centres for undertaking R&D
Generation of additional financial resources	Increased resources needed	Different proposals, partly linked to specific funds	Increased resources needed, innovative funding mechanisms
Further incentives			Incentives to reward and credit development and transfer of technologies
Specific funds/purposes		<ul style="list-style-type: none"> - World Climate Change Fund (Mexico) - Adaptation funding scheme with national climate change funds and multilateral adaptation fund (Switzerland) - International insurance mechanism, Convention Adaptation Fund (AOSIS) 	A multilateral technology acquisition/cooperation fund

Source: own compilation, based on FCCC/AWGLCA/2008/CRP.1, /CRP.2, /CRP.3

Their possible role in such a future agreement will be assessed in greater detail in chapter 4. Merging the discussion in the three workshops leads to the identification of the following elements, from an adaptation perspective:

- National adaptation plans, including cost assessments of adaptation and technology needs assessments;
- Institutional elements: some kind of adaptation coordination body under the Convention and/or an adaptation expert group; institutional arrangement related to technologies; (a network of) regional centers (including adaptation technologies);
- Mechanism to generate funds;
- Funds for specific purposes, including a risk management/insurance scheme, adaptation technologies.

However, there are also important issues which have not received particular attention in the LCA debates, e.g. the question of governance of funds or ideas for monitoring and evaluating the effectiveness of investments in adaptation. These issues also deserve more detailed consideration (see chapter 4).

2.2 Lessons learned and key barriers in adaptation

2.2.1 Lessons learned in NAPAs

Chair's summary workshop 1: "Gambia shared its positive experience with its national adaptation programme of action (NAPA). With regard to NAPAs in general, it was remarked that 33 out of 48 LDC Parties had completed NAPAs, containing over 300 project ideas, but these had resulted in only 11 project proposals being submitted to the Global Environment Facility. This discrepancy needs to be analysed and rectified. The limited focus of NAPAs on immediate and urgent needs was noted as an inherent feature."¹³

The National Adaptation Plans of Action (NAPAs) serve as a good starting point to assess what has been done under the Convention to facilitate adaptation action in developing countries. Gambia, among numerous other countries, emphasised in its presentation that they benefited from the process to develop NAPAs although it has its inherent shortcomings, including Gambia in its presentation. Parties who are not supported in the development of NAPAs, in particular those Small Island Developing States which are not LDCs, have expressed the demand to receive support to also apply this process. Based on the experience with the NAPAs, the development of National Adaptation Plans or National Adaptation Action Plans were suggested as a logical next step, which would go beyond the focus on short-term priorities that is inherent in the NAPAs. One problem associated with the NAPA process is that sufficient funding has only been secured for the preparation of the NAPAs (USD 200,000 for each LDC). Resources available in the Least Developed Countries Fund at the moment are far from being sufficient to cover all the projects that will be proposed under the NAPAs. At the same time, only a very limited number of concrete project proposals have been submitted to the LDCF so far (11 out of more than 300). The NAPA document alone does not match the application requirements of the LDCF, and preparing applications is an additional step in the process. It is expected that, as soon as more and more

¹³ FCCC/AWGLCA/2008/CRP.1

countries will have finalised their NAPAs, the number of project proposals will increase in the next months. However, there is the need for analysing this discrepancy, which will be part of the Fourth Review of the Financial Mechanism under the Subsidiary Body of Implementation. Parties and observers are invited to submit information on the implementation of NAPAs, including assessment of funds from the LDCF (19 September 2008).¹⁴

2.2.2 Stand alone adaptation versus mainstreaming?

Chair's summary workshop 1: "There was a lively and inconclusive debate enriched by some presenters (India, South Africa and United States of America) on the balance between, on the one hand, adaptation responses that can and should be mainstreamed into national development strategies and into external support for these; and, on the other hand, stand-alone adaptation needs arising from additional burdens and specific vulnerabilities that can be directly attributed to climate change and thus justify new and additional funding from developed countries that are historically responsible for climate change."¹⁵

This debate is directly, but not exclusively linked to the NAPA issue. There seems to be a tendency among Annex I countries (in particular in their role as development aid donors) to increasingly uplift efforts to mainstream and integrate adaptation in development policy and planning in developing countries as a precondition for funding. While there is no doubt that integration of adaptation in itself is a key approach to developing coherent and successful strategies for adaptation on national levels – this is also being perceived by developing country delegates – this point should not be stressed too much because of two reasons:

Mainstreaming or integrating adaptation is not an easy task. It is a long-term process which requires gaining experience, inter-ministerial coordination, sufficient knowledge of what to adapt to etc. Looking at the state of adaptation mainstreaming in developed countries, this problem becomes apparent: To date, none of the OECD development cooperation agencies has already fully mainstreamed adaptation in their work. While some are making good progress, others are still at an early stage, although this objective has been declared more than two years ago.¹⁶ Also in developed countries domestic policies, it is still a long way to go until all relevant ministries will recognise the need for systematic integration of adaptation into their policies, not to mention difficulties in developing inter-ministerial coherent strategies.

While integration is an important objective, there is little doubt that in the near-term specific projects and programmes are needed in order to reduce vulnerability to certain climate change risks. This means, project implementation and further progress on mainstreaming are needed at the same time and have to be developed in parallel. Or to say it differently: *Who would expect Dutch people living in coastal communities to wait to build dykes until all climate risks were mainstreamed into government policies?* Regarding the NAPAs it has to be acknowledged that this whole process has been designed to identify near-term priorities for adaptation, as much coordinated with national development and poverty reduction objectives as possible. This has been agreed on by all Parties. Thus, support for the implementation of NAPAs should not be denied with the argument that these do not sufficiently lead to integration of adaptation in all policies. This point was strongly emphasised by the delegate from Gambia in his presentation.

¹⁴ FCCC/SBI/2007/15

¹⁵ FCCC/AWGLCA/2008/CRP.1

¹⁶ OECD 2007

Finally, there is the concern that under the logo of mainstreaming developed countries try to get rid of, or hide, the additional costs for adaptation that are caused by man-made climate change. Developing countries correctly expect that adaptation is not funded as general Official Development Assistance (ODA), but as a kind of compensation for extra costs that are imposed on them by those who contribute the most to anthropogenic greenhouse gas emissions. So far there has been little convincing response by developed countries to this argument. But there are opportunities for pragmatic handling of this problem: For example, the recently established Pilot Programme for Climate Resilience (PPCR, as part of the Strategic Climate Funds under the World Bank) particularly has the objective of gaining experience with national integration of adaptation. Developed countries could send a strong signal to address this concern by not labelling their contributions to this fund as ODA (or calculating it on top of their ODA commitments). Such an approach could also be applied to bilateral development cooperation programmes.

2.2.3 Capacity building for technologies

Chair's summary workshop 3: "Lack of human and institutional capacity, including the capacity to absorb new technologies, was identified as one of the key barriers for developing countries in better adopting, operating, maintaining and diffusing environmentally sound technologies. Parties proposed that enhanced capacity-building should be a key element of an enhanced technology transfer framework."¹⁷

There is no doubt that capacity building is a key strategy to increase adaptive and absorptive capacities in developing countries, not only with regard to technologies. Experience with planned adaptation is still young, and in particular mainstreaming of adaptation will require capacity-building in many institutions at many different levels. This has to be recognised in the design of future activities, including the scale of financial resources provided through the Convention.

2.3 Aspects of financing

2.3.1 Fragmentation of funding structure

Chair's summary workshop 1: "With regard to external financial support for national adaptation actions, the difficulty of accessing a multiplicity of funding sources was a common theme of presentations and interventions on behalf of developing country Parties, as was the need to understand and remedy this constraint by streamlining funding mechanisms. A preference was expressed for a funding mechanism for adaptation governed within the ambit of the Convention."¹⁸

Chair's summary of workshop 2: "A number of Parties suggested that new funds with specific purposes be established. Other Parties expressed concern over potential fragmentation of the financial resources under the Convention. The establishment of several new funds could create a need for an umbrella mechanism to coordinate the management of all funds under the direction of the COP."¹⁹

¹⁷ FCCC/AWGLCA/2008/CRP.2

¹⁸ FCCC/AWGLCA/2008/CRP.1

¹⁹ FCCC/AWGLCA/2008/CRP.3

In this regard it is important to distinguish between the discussion on financial resources generation and the establishment of institutional structures to govern and disburse the resources. For example, the Norwegian proposal of auctioning Assigned Amount Units (AAU) only addresses the question of the generation of resources. Where this money is transferred to – may it be to one of the existing Convention Funds (LDCF, SCCF), the Adaptation Fund under the Kyoto Protocol or a new Fund – is not being addressed. Mexico and Switzerland, however, proposed a specific fund with different windows in addition to a generation mechanism (see 4.4). Since many Parties are uncomfortable with the fragmentation of funds under the Convention and the Kyoto Protocol even today – not to mention the fragmented structure when initiatives outside the Convention are included in the debate – there is little doubt that a structure which is as little fragmented as possible is desirable. This also holds because each fund would need some kind of governance structure. A less fragmented set-up is also in the particular interest of those countries with very limited capacity to develop e.g. project proposals, such as most of the LDCs.

2.3.2 Insufficient level of present funding

Chair's summary workshop 1: "The bottom-line issue with respect to external support for national adaptation efforts by developing countries was the scale of funding available, which is currently inadequate when compared with estimates of needs for large-scale interventions. Interest was also shown in the example given in the presentation by the Philippines of small-scale, cost-effective and initially self-financed local adaptation action."

Chair's summary workshop 2: "Parties agreed on the need for predictable and sustainable financial resources for mitigation, adaptation and technology cooperation to address climate change. Several Parties noted that, according to estimates, the financial resources required are much greater than those currently available under the Convention."

Initially the SBI chair gave an overview of the current financial flows in support of adaptation under the Convention, in particular through the LDCF and the SCCF, however, referring to the pledged funds and not the already transferred money, which is a significant difference. The scale of actual financing is summarised in the following table. It is also important to note that all of this is usually counted towards the countries' ODA targets (except for the resources generated by the CDM levy and fed into the Adaptation Fund, which are not national contributions), and thus is not providing resources additional to the ODA commitments (see also Figure 6).

Actual financial flows for adaptation in developing countries (excluding private sector)

- Investments through mainstreaming adaptation in Official Development Assistance: approx. 100 million USD²⁰ (since 2003);
- Funds under the Convention: approx. USD 73 million (pledged: 90 million) for the Special Climate Change Fund (SCCF) and USD 92 million for the Least Developed Countries Fund (LDCF) (pledged 172 million)²¹;
- GEF Strategic Priority for Adaptation: 50 Mio. USD²²
- Adaptation Fund under the Kyoto Protocol: ca. 80-300 Mio. USD in 2012²³

²⁰ UNFCCC 2007b

²¹ GEF 2008

²² UNDP 2007

A number of Parties in the workshop referred to one or more of the following estimates of adaptation costs in developing countries. Although all of these have their methodological constraints²⁴, there is little doubt that current flows are far from being adequate in terms of matching the demand. And the magnitude of order – tens of billions – becomes apparent.

Estimated annual adaptation costs for developing countries:²⁵

Oxfam 2007: at least 50 billion USD

UNDP 2007: 86 billion USD by 2015 (including adapting poverty reduction to climate change)

UNFCCC 2007: 28-67 billion USD by 2030

Thus, no Party can seriously claim any longer that they are not aware of the financial scale of the problem. But what needs to be recognised is that estimated adaptation costs are not the same as adaptation needs. Needs identification - focussing on the most vulnerable groups in the country in the first place – has to be the first step and should then be followed by an estimation of the costs. There may be many low-cost or even zero-cost solutions to support adaptation effectively, for example regulatory measures. Many community-based adaptation activities can be relatively low-cost, while serving many people.

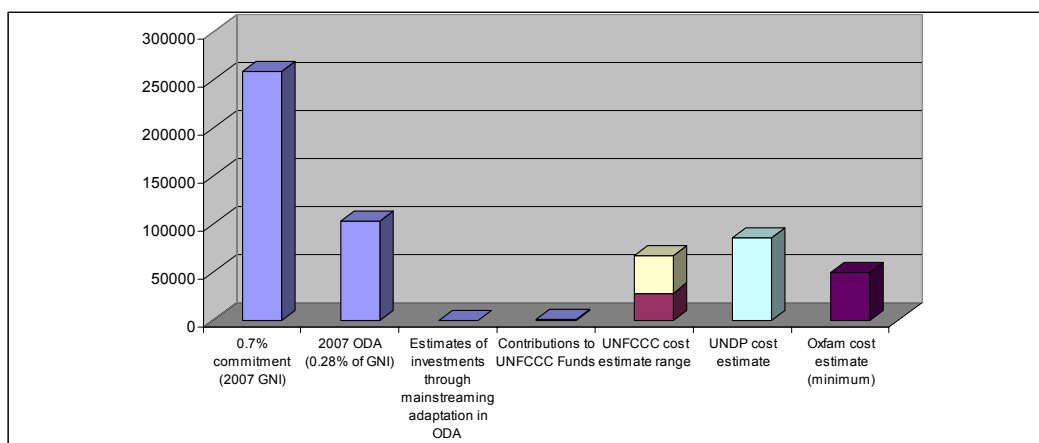


Figure 6: ODA and adaptation cost estimates; Blue bar = ODA

Source: own illustration, based on OECD²⁶, UNFCCC 2007, GEF 2008, UNDP 2007

2.3.3 Proposals on how to generate funds

Chair’s summary workshop 1: “Cook Islands proposed a convention adaptation fund, to complement the Adaptation Fund under the Kyoto Protocol, to which particularly vulnerable developing countries would have access and countries would contribute according to their national greenhouse gas emissions. Japan described its bilateral and multilateral initiatives to increase support for adaptation in vulnerable developing countries. The United States of America

²³ estimates according to UNFCCC 2007, depend on the development of the carbon market

²⁴ OECD 2008b

²⁵ All these estimates differentiate in what aspects of adaptation they assess, and there is still a lot of uncertainty about the near-term costs of adaptation for the next two to three decades (in the long run, the uncertainties are much bigger, of course).

²⁶ http://www.oecd.org/document/8/0,3343,en_2649_34447_40381960_1_1_1_1,00.html, as of 15 July 2008

*referred to a diversity of appropriate bilateral and multilateral funding sources for adaptation actions.*²⁷

Chair's summary workshop 2: "[...] Several of the presentations outlined proposals that appear to have the potential to considerably increase the financial resources available to address climate change."²⁸

*Chair's summary workshop 3: "Parties emphasized the need to enhance mechanisms and means to provide positive incentives for scaling up development and transfer of technology. Parties also stressed the importance of innovative funding mechanisms and incentives to reward development and transfer of technologies. One option proposed was to establish a multilateral fund."*²⁹

A number of Parties introduced concrete proposals on how to generate funds in the future which could reach the order of tens of billions of USD. Norway and Switzerland exclusively focused on adaptation as a funding purpose, while Mexico's proposal on a World Climate Change Fund (previously called Multilateral Climate Change Fund) includes adaptation as a minor funding purpose (primarily mitigation). Switzerland's proposal included two pillars under a Multilateral Adaptation Fund – prevention and insurance – and support to National Climate Change Funds. Cook Islands on behalf of AOSIS called for a Convention Adaptation Fund. These proposals will be discussed in greater detail in chapter 4.4, in particular regarding their consistency with key principles of funding. But two aspects are important to mention here:

1. More concrete proposals have been put on the table which outline how larger funds could be generated under the Convention. Parties who have not made own suggestions now have to make up their minds on these proposals, define a position or introduce additional proposals.
2. That there is a need for sufficient enhancement of funding for adaptation has been underlined by the fact that some of the most concrete proposals, including those by some Annex-I countries, primarily addressed adaptation as a funding purpose in the AWG-LCA financing workshop.

2.3.4 Governance of funds

*Chair's summary workshop 2: "Many Parties commented on issues related to governance of financial resources under the Convention. Governance issues apply both to the funds collected and to the manner in which those funds are disbursed. Governance issues identified include accountability to the Conference of the Parties (COP), balanced representation of all Parties, transparency and ease of access to the funding."*³⁰

The question of governance will arise with any kind of Fund that will be set up, no matter if it is an adaptation fund or a technology fund or whatever. The recent discussions about the World Bank Climate Funds have raised attention to this issue, although this discussion is not even a new one under the Convention. When the governance structure of the Adaptation Fund under the Kyoto Protocol was agreed on in Bali, conclusions were reached only after intense and contentious

²⁷ FCCC/AWGLCA/2008/CRP.1

²⁷ FCCC/AWGLCA/2008/CRP.3

²⁷ FCCC/AWGLCA/2008/CRP.2

²⁸ FCCC/AWGLCA/2008/CRP.3

²⁹ FCCC/AWGLCA/2008/CRP.2

discussions. But the Bali agreement introduced a new type of governance structure, with an overall developing country majority and extra seats for LDCs and SIDS. One discussion point in Bonn was the treatment of those funds that constitute the present financial mechanism of the Convention, which is operated by the Global Environment Facility (GEF), an institution that has been set up by donors and did not evolve under the COP.

2.3.5 Principles of funding

Chair’s summary workshop 1: “Several Parties proposed principles that should apply to financial resources collected or disbursed under the Convention. Principles proposed include equity, common but differentiated responsibility, the polluter-pays principle, adequacy, predictability, sustainability, new and additional funding, grant funding, simplified access and priority access for the most vulnerable countries.”³¹

The principles for funding mentioned here are mostly based on the principles of the UNFCCC that are to a large extent reiterated in the Bali Action Plan. However, even these principles need to be further defined, which becomes clear in the case of “new and additional funding”: does this mean additional to existing adaptation finance, additional to existing ODA related to adaptation or additional to 0.7% ODA commitments?³² Proposals for funding thus have to be analysed with regard to their compliance with these principles, which is being done in chapter 4.

3 SBI and SBSTA: What happened in Bonn?

The following table provides an overview of conclusions adopted in Bonn this June (SB 28) and to what extent are relevant for future negotiations. The following subchapters will provide more insight into the discussion of the specific issues.

Table 4: Overview of SBI/SBSTA decisions in Bonn and actions in Poznan

Agenda item	Action in Bonn	Action envisaged in Poznan
SBI 4, Fourth Review of the Financial mechanism	Draft conclusions on a) the assessment of necessary funding for developing countries and b) the Fourth Review of the Financial Mechanism, but with many brackets	Conclusion on a) and b)
SBI 5a (progress on 1/CP.10)	Agreement on ToR for assessment of implementation of 1/CP.10; vague language on further actions without any specification	Assessment of adaptation implementation (1/CP.10), including round table
SBI 5b (matters relating to LDCs)	Endorsement of work programme 2008-2010 of LDC Expert Group	GEF report on progress being made in NAPA implementation; Progress report of the LDC Expert Group (LEG)

³⁰ FCCC/AWGLCA/2008/CRP.3

³¹ FCCC/AWGLCA/2008/CRP.3

³² See also Harmeling/Bals 2008

SBI 6/SBSTA 4 Development and transfer of technologies	Work programme of EGTT for 2008/2009 approved; ToR for assessment of effectiveness of Art. 4.1 c and Art. 5 approved; GEF could not present proposal for strategic programme on TT	Further consideration based on ToR, with a view to elaborate COP decision
SBI 7 Capacity-building for developing countries	ToR for 2 nd review of capacity-building framework approved	
SBI 12 Art. 9 review of the Kyoto Protocol	Conclusions on preparation of second review approved	Pre-sessional workshops on extending the share of proceeds
SBSTA 3 Nairobi Programme of Work on Impacts, Vulnerability and Adaptation to Climate Change	Work programme for 2008-2010 approved, with a number of workshops, submissions and technical papers	
2 nd Adaptation Fund Board Meeting	Further documents adopted, 3 rd meeting scheduled for September (15 to 18)	CMP Adoption of documents, including operational policies and guidelines; monetization of CERs; 4 th meeting after CMP

Source: own compilation

3.1 SBI 4: Fourth review of the financial mechanism

Envisaged action in Bonn: "The SBI will: (1) work toward a draft decision for adoption at COP 14 on the assessment of the funding necessary to assist developing countries in fulfilling their commitments under the Convention over the next replenishment cycle of the GEF; and (2) continue consideration of the fourth review of the financial mechanism, in order to recommend a draft decision on the review for adoption no later than COP 15."³³

At the moment the financial mechanism, operated by the GEF and consisting of the LDCF and the SCCF, is the key instrument under the Convention for assisting developing countries in fulfilling their commitments under the Convention. As shown before, available funding falls short of the costs arising from the need for effective adaptation alone.

³³ WWF/FIELD: 14

The Bonn session ended with a draft conclusion on part one of the Fourth Review of the Financial Mechanism, for adoption at COP14 in Poznan. The numerous brackets include aspects that explicitly relate to the insufficient level of funding available.³⁴

- *[Expressing serious concern over the findings of the papers that the financial resources currently available under the financial mechanism of the Convention to developing countries for the implementation of their commitments under the Convention, in particular for adaptation, are [grossly] inadequate,];*
- *[Underlining the importance of an effective financial mechanism of the Convention for “enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation under the Bali Action Plan, as contained in decision 1/CP.13, chapeau of paragraph 1 (e),];*
- *(6bis) [Requests developed country Parties to significantly increase contributions to the fifth replenishment to meet the commitments under Article 4.3 of the Convention and to secure a successful fifth replenishment of the Global Environment Facility,].*

Regarding the draft conclusion on the Fourth Review (part two), the state of negotiations does not look much better.

This finding shows that there have been, and continue to be, intense discussions and disagreement on the direction of this review and the clarity of messaging the adaptation financing rift in this debate. Specifically concerning the LDCF, Parties and observers will have the opportunity to submit their views until 19 September 2008.³⁵

3.2 SBI 5a: Implementing adaptation (1./CP.10)

Envisaged action in Bonn: “The SBI will be invited to continue its deliberations on this matter with a view to: (a) considering what further actions may be required by the COP at its fourteenth session to further the implementation of decision 1/CP.10, taking into account the discussions at the informal pre-session meeting and the information contained in document FCCC/SBI/2007/34, paragraph 59, and (b) initiating consideration of terms of reference for the assessment referred to in decision 1/CP.10, paragraph 22.”³⁶

After intense and contentious debates, the plenary adopted conclusions on progress in the implementation of 1/CP.10, which, however, are relatively vague. Many developing countries have called for more specific activities. At the beginning of the sessions a three-year work programme has been proposed by the chair, including a number of expert meetings on issues such as ways and means to enhance access to existing funds under the Convention, identification of best practices and lessons learned in integrating adaptation into cross-sectoral and sector-specific planning etc. However, the final conclusions only contain an agreement on further implementation through different actions. These actions include the improvement on accessing funds for adaptation, enhancing national planning for adaptation through integration adaptation into the planning process building on existing relevant documents, promoting risk management approaches

³⁴ FCCC/SBI/2008/L.11

³⁵ FCCC/SBI/2007/15

³⁶ FCCC/SBI/2008/1

etc.³⁷ However, the conclusions lack a specification of where additional actions are going to be taken compared to past commitments, where additional resources are going to be delivered to increase the level of activities etc.

According to different delegates, the 1/CP.10 negotiations have been very unsatisfying for developing countries which see the need for enhanced action on adaptation under the SBI since almost all evidence shows that the implementation of adaptation actions has moved much too slowly, although a lot is being done on vulnerability assessments and other useful approaches. Some of the developed countries more or less reject a higher policy profile of adaptation under the SBI, arguing that implementation is not the key purpose of the Convention as a catalytic process. Also, there the assumption may be made that enhanced implementation should be discussed under the AWG-LCA. Although this integration is necessary it is not of advantage for the whole process, including the trust-building efforts among Parties, if a substantial increase on adaptation implementation is undermined in this central body under the Convention.

Important in this regard will be the assessment of the implementation status of those decisions under SBI (5/CP.7 and 1/CP.10) and articles under the Convention (4.8) which is going to take place in Poznan. This assessment will consider submissions from Parties, compilation and synthesis reports prepared by the secretariat, reports and submissions by relevant organizations and other relevant documents prepared by the secretariat. In Poznan, a round table will be organised at an early stage of the session, in order to contribute to the further consideration. The round table will take place with the participation of Parties and relevant organisations.³⁸ Since it is expected that the discussions under the AWG-LCA will become more focused in Poznan, the spirit of the discussion in this round table will probably influence progress on the building block adaptation under the AWG-LCA.

3.3 SBI 5b: Matters relating to the LDCs

Envisaged action in Bonn: The SBI will consider and endorse the LEG's proposed work programme.

The work programme 2008-2010 of the Least Developed Countries Expert Group (LEG) was endorsed in Bonn.³⁹ It primarily builds on the mandate of the LEG from Marrakesh⁴⁰ with a particular focus on assisting LDCs in preparation and implementation of the NAPAs. The latter one will be the focus of the next three years, and the LEG will assist LDCs through capacity-building, identification of regional synergies etc. Also, closer collaboration with the GEF and its agencies is envisaged, “because technical and institutional constraints on NAPA preparation and implementation continue to arise”.⁴¹

³⁷ FCCC/SBI/2008/L.12

³⁸ FCCC/SBI/2008/L.12

³⁹ FCCC/SBI/2008/L.2

⁴⁰ 29/CP.7

⁴¹ FCCC/SBI/2008/6: 6

3.4 SBI 6/SBSTA 4: Development and transfer of technologies

Envisaged action in Bonn: SBI will endorse a two-year work programme for the EGTT, (2) consider the GEF report on a strategic programme to scale up the level of investment for technology transfer and determine any further actions arising from this; and (3) agree upon terms of reference for assessing the effectiveness of the implementation of Article 4.1(c) and 5 of the Convention.⁴²

The SBI endorsed the rolling work programme of the Expert Group on Technology Transfer for 2008 and 2009. This does not contain actions specifically focused on adaptation technologies, but more generally on Environmental Sound Technologies (ESTs) related to climate change, which in the language of the Convention covers both mitigation and adaptation technologies. Key activities until Poznan will be inter alia the a) development of a draft set of candidate performance indicators for technology transfer, b) the preparation of an interim report on the identification, analysis and assessment of potential and new financial resources (with recommendations on future financing options to be made by Copenhagen), c) an update of the UNDP handbook on Technology Needs Assessments (TNAs) and d) regional training workshops.⁴³ These could provide helpful information for the AWG-LCA discussions.

Regarding the GEF report on a strategic programme to scale up the level of investment in technology transfer, as requested in the Bali decision 4/CP.13, problems arose when the GEF Council could not agree on a draft programme for consideration in Bonn. Thus the GEF only prepared a report that included a brief summary of its work to date on financing technology transfer and a brief description of current financing options for technology transfer.⁴⁴ Since this request was a key outcome of Bali, G-77/China expressed their disappointment with the situation in the SBI plenary, which will now lead to further delay in progress on technology transfer.

Regarding 3), the Chair of the SBI was requested to prepare a draft for terms of reference for assessing the effectiveness of the implementation of Art. 4.1 (c) and 5 of the Convention for consideration in Poznan, which particularly addresses the issue of technology transfer.⁴⁵

3.5 SBI 7: Capacity-building for developing countries

Envisaged action in Bonn: the SBI will be invited to, inter alia, consider terms of reference for the 2nd comprehensive review of the implementation of the framework for capacity-building in developing countries adopted under decision 2/CP.7 (the capacity-building framework).

Since capacity-building is mentioned as one of the key demands to foster the implementation of adaptation – be it with regard to integration of adaptation in development planning or to adaptation technologies – the 2nd review of the capacity-building framework which is to be concluded by Copenhagen could provide substantial input to the efforts to advance capacity-building under a future regime. In Bonn, the SBI endorsed the terms of reference.⁴⁶

⁴² WWF/FIELD 2008: 12

⁴³ FCCC/SB/2008/INF.1

⁴⁴ FCCC/SBI/2008/5

⁴⁵ FCCC/SBI/2008/L.7

⁴⁶ FCCC/SBI/2008/L.4

The review has the objective to a) take stock of progress in, and assess the effectiveness of, the implementation of capacity-building activities; (b) to examine possible gaps between the provisions of decisions of the COP and the COP/MOP and the implementation of capacity-building activities; and (c) to identify lessons learned and best practices with a view to developing options for enhanced implementation of the capacity-building framework, taking into account additional needs and priorities for capacity-building.⁴⁷ The review should result in a report including issues like a) the identification of needs and gaps and an assessment of factors and constraints in capacity-building activities in developing countries that influence the effectiveness of capacity-building projects and programmes, as well as lessons learned and best practices, future opportunities, challenges and barriers, and possible areas for improvement; b) Information on the size and variety of stakeholder groups within developing countries (governmental and non-governmental organisations, the private sector, community organisations, etc.) involved in and benefiting from capacity-building activities; c) the availability of and access to resources, and the effectiveness of their deployment; and d) recommendations for the further implementation of the capacity-building framework.

3.6 SBI 12: Art. 9, Review of the Kyoto Protocol

Art. 9 of the Kyoto Protocol provides for a review of the Protocol. In Bali, the scope of the second review was discussed, and which aspects of the Kyoto Protocol could be improved or elaborated. In decision 7/CMP.2, the Parties acknowledged “that a number of elements of the Kyoto Protocol, in particular adaptation, could be further elaborated upon as part of the review.”

From an adaptation point of view a key point is the fact that the extension of share of proceeds to Joint Implementation and Emission Trading is on the agenda of the Art. 9 review. This could, similarly to the CDM levy, generate additional resources for the Adaptation Fund. Through the conclusions from Bonn, Parties are now invited to make submissions on the issue of extending the share of proceeds to assist in meeting the costs of adaptation to joint implementation and emissions trading by 19 September.⁴⁸ The Norwegian proposal to auction AAUs to generate resources adaptation builds on this approach. Current discussions on the matter of extending the Adaptation Fund levy reveal that it is unclear if this option will be realised. Opponents argue either on the grounds of possible negative effects on the economic viability of JI projects or they claim that taking revenues from countries involved in JI and giving it to the AF and thereby primarily to the most vulnerable countries would not be fair, since the latter ones are not involved in JI projects. Both arguments are not convincing. Given the complex financing structure that a flexible mechanism project has to deal with it is rather unlikely that a 2% levy on the ERUs would make a big difference. And the most vulnerable also suffer from emissions in countries that take part in JI, so why should not a share of proceeds be used to support their adaptation. In Bonn there were also debates whether the auctioning of AAUs should also be addressed. Some developed countries opposed this suggestion, while developing countries expressed their support.⁴⁹ The 2nd review is supposed to conclude in Copenhagen.

⁴⁷ FCCC/SBI/2008/L.4

⁴⁸ FCCC/SBI/2008/L.14

⁴⁹ ENB coverage, 13 June 2008

3.7 SBSTA 3: The Nairobi Work Programme on Impacts, Vulnerability and Adaptation

Key purpose of the Bonn meeting was to agree on the elements for the second part of the five year duration of the NWP. Parties concluded on further activities until 2010. A number of workshops, technical papers and submissions were agreed on.⁵⁰ In 2008 there will be no more specific workshops, but certain reports and papers will be produced.

The Secretariat was requested to produce two reports and two technical papers before Poznan, reports on a) the progress made in implementing activities under the NWP and b) a summary report on the first phase of NWP. The following technical papers will likely be important for the future negotiations:

- Climate-related risks and extreme events: Technical paper on the implications of physical and socio-economic trends in climate-related risks and extreme events in climate-related risks and extreme events for sustainable development, paying particular attention to the most vulnerable developing countries. The paper should include inputs from experts in the fields of insurance, reinsurance, hazard assessment and financial risk management. This paper will serve as an input to the AWG-LCA workshop on risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance, which will be held in Poznan. However it is important to note that a previous draft, as of 9 June, of the NWP conclusion mentioned a technical paper on mechanisms, including insurance tools, which can be used to manage financial risk from direct impacts of climate change. This would have been much more policy relevant and could have generated concrete substance in support of the call of many developing countries for an international insurance mechanism. But – and this shows the interlinkages between the different negotiation streams – under the AWG-LCA the Secretariat has been requested **to prepare a technical paper on mechanisms, including innovative insurance tools, that can be used to manage financial risks from direct impacts of climate change in developing countries, including consideration of the unique circumstances of the most vulnerable developing countries, especially least developed countries, small island developing States and countries in Africa, and the design of appropriate mechanisms bringing together inputs from technical experts in the fields of insurance, reinsurance, and hazard assessment;**
- Adaptation planning and practices: Technical paper on integrating practices, tools and systems for climate risk assessment and management and disaster risk reduction strategies, such as included in the Hyogo Framework, into national policies and programmes. This will also provide useful input to the AWG-LCA workshop on risk management approaches and also link efforts ongoing under the Convention to relevant frameworks outside of the Convention (Hyogo Framework).
- Socio-economic information: **Technical paper reviewing the existing literature on the potential costs of adaptation options before Copenhagen.** Not in 2008, but at least before Copenhagen Parties will have the opportunity to make submissions on efforts undertaken, including methods used to assess costs of climate change impacts, including direct and indirect impacts on social systems, economies and trade, and the costs and benefits of adaptation options, as well as their views on lessons learned, good practices,

⁵⁰ The full table of the work programme can be found in FCCC/SBSTA/2008/L.13

gaps and needs. No doubt that these issues will be very important for a Copenhagen deal, and its adequacy to meet the challenges imposed by climate change. Unfortunately a synthesis report of the submissions and a workshop are only scheduled for Bonn 2010 (SBSTA 32). However, the information from the submissions can be used to influence discussions in the AWG-LCA in Copenhagen, for example.

Not included in the final draft conclusions is the consideration of the possible need for establishing a group of experts. A previous draft (9 June) mentioned this issue as one activity to be carried out in Poznan. Since this issue has emerged in the AWG-LCA discussions, it would be much more suitable to discuss the issue there or in the SBI, since there is the particular need for an expert group to transform the existing information into policy-relevant knowledge, which has not been the task of the NWP (see 4.3.1).

In 2009, on the road to Copenhagen, there will be a number of workshops, papers and submissions which in one way or the other could be relevant for the Copenhagen deal, including information on experiences with integration and expansion of adaptation planning (including scaling up of local and community-based adaptation), on monitoring and evaluating adaptation efforts, and on assessing costs and benefits of adaptation options.

3.8 2nd meeting of the Adaptation Fund Board

From 16th to 19th June, the second meeting of the Adaptation Fund (AF) Board took place in Bonn. The AF is still in its preparation phase, a number of documents have to be finalised and adopted, some of them by the COP/MOP. It is expected that, after a decision in Poznan, the monetisation of the Certified Emission Reductions can begin and that from 2009 on the AF will have financial resources to support applications. The key purpose of the AF is to finance concrete adaptation projects and programmes.

After intense discussions, a number of documents that are necessary for the further operationalisation of the AF have been adopted in Bonn:⁵¹

- Role and responsibilities of the Adaptation Fund Board;
- Rules of Procedure of the Adaptation Fund Board;
- Work Plan for 2008;
- Draft legal arrangements for the Adaptation Fund;
- Roles and Responsibilities of Implementing and Executing Entities.

As a key document for the further work of the Adaptation Fund an outline of the *Provisional Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund* was agreed on to which Members of the AFB were asked to submit their views. This document will be further debated in the third meeting in September and will have to be reported to the COP/MOP. The AFB will also have to prepare and recommend strategic priorities, policies and guidelines on the work of the AFB to the COP/MOP.

⁵¹ AFB/B.2/16, see www.adaptation-fund.org

Table 5: AFB Work Plan Milestones Table

Milestone/key results	Actions	Deadline
Setting up the Fund	Approval of (documents on) rules of procedures, roles and responsibilities of the Board, Secretariat, Trustee, and legal matters and procedures.	June 2008 2 nd AFB Meeting
Agreement on: strategic priorities, policies and guidelines; specific operational guidelines, programming guidance and administrative and financial guidelines; issues remaining from 2 nd Board meeting	Approval of (documents on) adaptation policies and operational guidelines as well as approval of (documents on) guidance to implementing and executing entities	September 2008 3 rd AFB Meeting
Seek CMP Approval	Submit AFB Report to the CMP	December 2008 (CMP4)
Open AF Pipeline of Project submissions	Disseminate in hard and electronic copy project templates for submission	Early 2009
Receive first significant [50] number of project submissions	Review and approve projects	June 2009

Source: AFB 2008

In general one could say that AFB made good progress in agreeing on several documents, and thus getting closer to full operationalisation. The 2nd meeting has seen a very active role of some AFB members, with overall constructive and only sometimes contentious discussions. It also was decided to hold another meeting before the COP/MOP, from 9 to 12 September in Bonn, in order to finalise some important yet still open questions.

4. Framing future action on adaptation: possible elements of a Copenhagen deal

Copenhagen is approaching fast, less than 16 months and 11 weeks of negotiations are left to agree on a new climate deal, which has to deliver much more than a gradual increase of action. A quantum leap in mitigation actions in both developed and developing countries is needed to reverse the trend of growing emissions by no later than 2015. A quantum leap is also needed in the implementation of adaptation actions, including building climate-resilient societies, in developing countries, in particular in the most vulnerable ones. Both quantum leaps will be impossible without the provision of much greater financial resources and the development, transfer and deployment of technologies. From the discussions under the AWG-LCA, but also from other fora a number of ideas have emerged which could constitute pillars of a Copenhagen agreement. These will be discussed in more detail in the following subchapters.

In the AWG-LCA discussion on adaptation in Bonn, India included in its presentation an outline which helps to frame future action under the UNFCCC as a key element of a global response to adaptation and a catalyzer for national action (Figure 7).

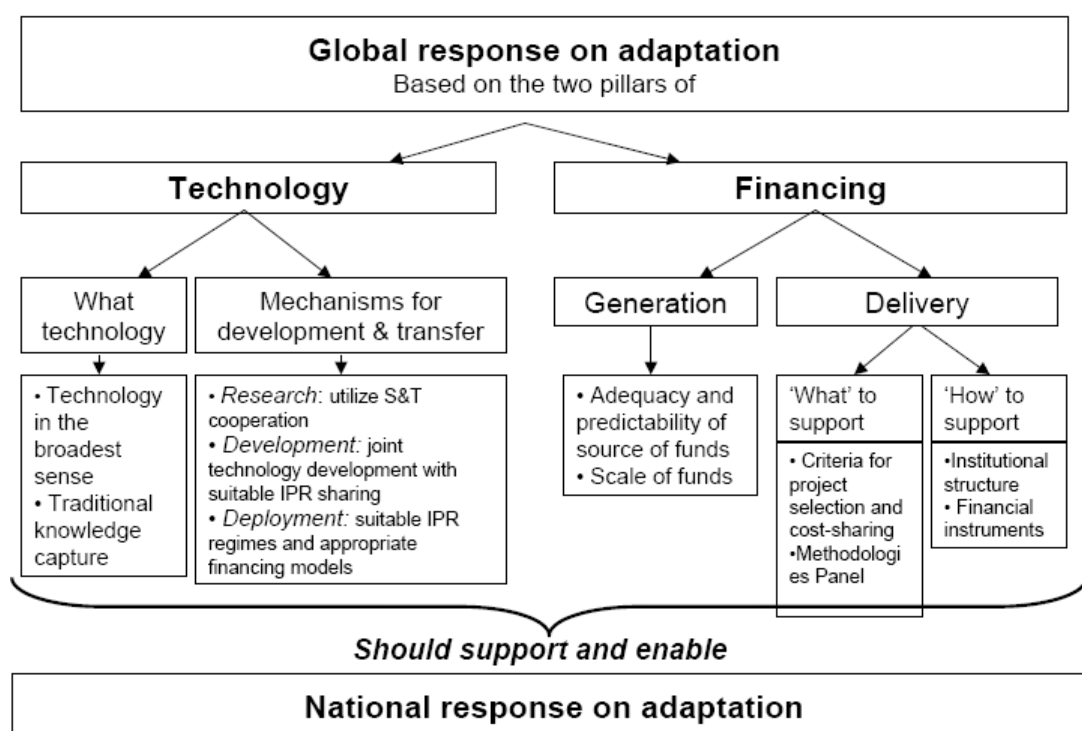


Figure 7: Indian approach to a global response on adaptation

Source: India 2008

Understanding the building blocks of financing and technology as facilitating blocks for adaptation action, this outline points to key elements of future action which need to be addressed and key question which need to be answered. How the elements being agreed on will be arranged remains subject to the further negotiations at this stage. For example, the EU in Bonn introduced a

Framework of Action on Adaptation (FAA). The EU based this proposal on the recognition that effective adaptation is a shared challenge that requires shared solutions, where partnership is essential. The objective of the negotiations should thus be *“an agreement that coherently sets out the responsibilities of all Parties and the possible role of others”*.⁵² While the EU presentation reflected a number of important issues, it was not very concrete in terms of which elements could make up such a framework. Now, where some Parties (primarily from developing countries) have put more concrete (not always new) proposals on the table, it is time to spend more thoughts on these and listen to, and understand the different arguments.

4.1 Principles in adaptation under the UNFCCC

Any framework for future action should be guided by key principles as they emerge from the Convention itself, the Bali Action Plan and other relevant documents. Many of these are particularly relevant with regard to funding, since this will be the key task for the catalytic role of the Convention.

- Financing adaptation by developed countries should be seen as an **obligation originating in harmful actions** being taken, namely fostering global warming by greenhouse gas emissions. Thus, it is the responsibility of highly polluting countries (based on accumulated greenhouse gases, mainly of the developed nations), to provide new resources in addition to the existing commitments for the delivery of Official Development Assistance (ODA); however, this does not mean that ODA channels can not play a role in the implementation of adaptation;
- In order to develop and implement effective adaptation strategies, **timely, adequate, sustainable and predictable delivery of resources**, which overcomes the failure of relying on voluntary contributions, will be needed;
- The **adequacy of support in general and financial resources** in particular has to be judged against the scale of the challenge – how much is needed to cover the expected adaptation costs and impacts of climate change? – and capability/vulnerability of those who receive support;
- the **principles of equity and of common but differentiated responsibilities and capabilities** should be the underlying principles for allocating these funding obligations, in line with the “polluter pays” principle;
- Governance structures have to reflect equal voting rights for each country/country group represented in a governing body and must result in a voting majority of those countries most affected by climate change, the developing countries; extra seats for LDCs and SIDS, like in the Adaptation Fund under the Kyoto Protocol, pay additional attention to the particular vulnerability of specific groups;
- Adaptation funds should respond to the needs identified at the national and regional level;
- Expenditures for adaptation should be focused on increasing the adaptive capacity of those people who are most vulnerable to climate change. Developing country governments are expected to prioritise de iure and de facto vulnerability reduction of the

⁵² EU 2008

most vulnerable people as much as possible. This is part of their obligation to secure the human rights of its people that are threatened by climate change, for example in the fields of food security, the right to health, access to sufficient fresh water etc. Another part of the obligation is to ensure adequate participation of the most vulnerable groups in the monitoring of these activities;

- Transaction costs should be kept to a minimum and coordination between funding mechanisms maximised;
- Transparency of criteria, disbursement and monitoring is needed.

These principles need to be addressed in a future agreement and the elements and tools that this will contain.

4.2 National plans: From NAPAs to NAPs?

The National Adaptation Programmes of Action (NAPAs) have been a useful exercise for many Least Developed Countries to develop a better understanding of climate change, its impacts and possible near-term responses. In one way or the other, Parties have proposed national plans related to adaptation in the recent AWG-LCA debate in Bonn, and since there seems to be some kind of convergence of these ideas as an element for future action, it is useful to consider this.⁵³

Bangladesh on behalf of LDCs suggested that all countries should prepare National Adaptation Action Plans (NAAP), and relevant guidelines could be built on experience from the NAPAs and National Communications. Proposed elements are

- Programmatic (medium and long term)
- Information and awareness
- Planning and designing of adaptation measures
- Implementation (technology, capacity building etc.)
- Monitoring and evaluation.

The **EU**, as part of its Framework for Action on Adaptation, mentioned as a responsibility of developing countries' the production and implementation of climate resilient plans and budgets.⁵⁴ EU Member States themselves are elaborating National Adaptation Plans to cope with the challenge.⁵⁵

Gambia, which according to its own words benefited from the NAPA process, suggested to "establish a formal process for preparing national adaptation plans" as part of an agreed outcome in Copenhagen.

The **USA** identified as one of the roles of the UNFCCC to "provide guidance/support for development of national adaptation programs, including building on NAPAs".⁵⁶

⁵³ FCCC/AWGLCA/2008/CRP.1

⁵⁴ EU 2008

⁵⁵ EC 2008: accompanying document to Adaptation White Paper

⁵⁶ USA 2008

Thus, there seems to be consensus on the idea that a necessary next step to upgrade and widen the scope of the NAPAs could be the formulation of national plans that go beyond short-term priorities, as the NAPAs, and provide a tool for entering into a process to formulate national strategies. If Parties were to agree that national plans of all countries would constitute a reasonable element in future action on adaptation under the UNFCCC, a number of subsequent issues would arise:

- Accounting for the way in which the UNFCCC process works, it would be logical to elaborate and agree on guidelines for preparing such plans; this process should build on lessons learned *inter alia* in other Convention processes, such as the Convention on Biological Diversity (CBD) or the Convention to Combat Desertification (UNCCD);
- A level of funding needs to be ensured which not only provides secure budget for the preparation of the plans but in particular for their implementation, at least in those countries and regions identified as being particularly vulnerable. Otherwise there is the risk that plans will be prepared and then will never be implemented.
- In these guidelines certain criteria, in particular those outlined in chapter 4.2, would have to be addressed. At least three aspects have been identified as being particularly important:
- The need to identify those social groups which are most vulnerable to climate change, and prioritise *de iure* and *de facto* action to reduce their vulnerability, as accepted for example in the “Voluntary guidelines on the implementation of the right to adequate food in the context of national food security”, adopted in 2004 in the FAO context (see Box 2).
- These adaptation plans must reflect the fact that adaptation needs to be integrated/mainstreamed in national development processes, which *inter alia* requires ownership by sectoral ministries whose work is potentially affected by climate change – health, energy, infrastructure, finance etc. The sectoral line ministries have to become key actors in this regard, environment ministries may often only have a facilitating role. This objective is potentially in the mind of the EU when delegates propose climate resilience plans, since the understanding of this term usually leads to a broader development approach than the sometimes narrow understanding of adaptation. However, “pure” adaptation projects will also continue to play their part, mainstreaming alone is not sufficient and is rather a mid-term objective than a goal that can be achieved in the near-term (see 2.2.2).
- An agreement on means for monitoring and evaluating the effective implementation of these plans, without imposing political conditionalities, but supporting each country in advancing their strategies, for the sake of those that are most affected. It is a human rights based obligation to include the most vulnerable groups in this monitoring activities.

Box 2: Addressing the needs of the most vulnerable groups under the right to adequate food

Under the “Voluntary guidelines on the implementation of the right to adequate food in the context of national food security”, governments are requested to develop a national strategy for the

implementation of the right to adequate food, which shall encompass in particular the following five elements⁵⁷:

1. Governments must assess and identify which are the most vulnerable groups concerning the right to adequate food, those which are food insecure, malnourished and hungry. Without proper assessment governments cannot properly focus their policy attention to these groups.
2. They have to make sure that existing legislation is addressing the concerns of these groups and that the legislation is not leading “de jure” to discriminations and violations.
3. The governments have to make sure that their policy response and their choice of instruments (“de facto”) is reasonably focused on those most vulnerable under the right to adequate food. Policies shall respect and protect existing access to productive resources, income and food and governments have to prove that they do their best to implement the right to adequate food and to help people coping with risks.
4. Governments are obliged to monitor the outcome of their policies and
5. must allow for accountability mechanisms including functioning complaint mechanisms and access to recourse procedures.

Given the fact that climate change in many countries will threaten the right to adequate food in terms of adverse impacts on agriculture and water availability, this approach is also relevant for designing adaptation policies.⁵⁸

There have also been some preliminary thoughts from adaptation experts on the role that NAPs could play in a Copenhagen framework. Dickinson and Burton see National Adaptation Plans as a key element of a Copenhagen outcome and suggest five key conclusions on NAPs⁵⁹:

1. All Parties will prepare and regularly update National Adaptation Plans (NAPs).
2. NAPs should address adaptation in terms of sectors, risks, and by region and community.
3. The methodology for NAPs needs to be developed and shared.
4. A sufficient and assured level of funding is required both for plan preparation and implementation in emerging and developing countries.
5. A budget support approach would be more effective.

Key commitments by Parties which are then addressed in the plans could be to:

- *“Enhance proactive adaptation in all relevant component of the national economy, society and environment;*
- *Implement adaptation measures into all development and relevant policy decisions at all levels in both private and public sectors;*

⁵⁷ FAO 2004

⁵⁸ see Bread for the World/Germanwatch 2008

⁵⁹ Dickinson/Burton 2008

- *Promote adaptation through multilateral bodies, the public and private sector and civil society;*
- *Research, encourage, share, develop and increase the use of new and available technology that decreases impacts and increases adaptive capacity;*
- *Provide fiscal incentives, tax and duty exemptions and regulations for adaptation measures and initiatives;*
- *Implement measures to decrease barriers to adaptation by promoting the building of adaptive capacity;*
- *Ensure funding availability to assist adaptation in the most vulnerable developing countries;*
- *Establish international and regional cooperation on adaptation for the management of transboundary and multi-national issues including trade.”⁶⁰*

One important design element of a negotiation outcome will also be which institutional arrangements will be needed on the national level for effective implementation of adaptation, and how these would and should be linked to support from the international level. It is against this background why **Bangladesh on behalf of the LDCs** highlighted the need not only for Adaptation research and technical support centres on the international and regional level, but also on the national level.⁶¹

The question how international financial support could be spend in a coordinated manner on the national level will probably also require some kind of institutional set-up. For example, in the context of the Adaptation Fund under the Kyoto Protocol, it is being proposed that “*Parties eligible to access resources from the Fund establish country coordination mechanisms under the auspices of their respective UNFCCC national focal points. Proposals for funding by the Adaptation Fund shall be endorsed by the respective UNFCCC national focal points.*”⁶²

Given the diverse nature of adaptation, such a coordination mechanism should not just consist of some government representatives, but it seems necessary to constitute a “*multi-stakeholder committee, with broad government, expert and civil society participation*”, as ActionAid proposes in the context of the Adaptation Fund.⁶³ This would also be the place where the focus on the most vulnerable communities and groups of societies would be ensured through the participation of relevant representatives.

For the process of further developing this idea, with regard to purpose, content, guidelines etc., the NWP is going to carry out some useful work in 2008 and 2009. The relevant technical papers have been mentioned in 3.7. In particular the following activities may be helpful and should be considered in this context⁶⁴:

Submissions:

⁶⁰ Dickinson/Burton 2008

⁶¹ Bangladesh 2008b

⁶² AFB 2008b; although the document proposed by the AF secretariat is likely to significantly change in the next draft, due to a exchange process between the SF Board members, it can be expected that such a coordinating body will play a role.

⁶³ ActionAid 2007: 23

⁶⁴ FCCC/SBSTA/2008/L.13

Deadline 20 March 2009:

Views on approaches to and experiences with integrating and expanding adaptation planning and action at national, subnational, community and local levels, including the enhancement of local and community-based adaptation;

Views on lessons learned, good practices, gaps, needs, barriers and constraints to adaptation, including the implementation of adaptation projects.

Deadline 18 September 2009:

Information on efforts undertaken to monitor and evaluate the implementation of adaptation projects, policies and programmes and the costs and effectiveness of completed projects, policies and programmes as well as views on lessons learned, good practices, gaps and needs.

Workshops:

Before Bonn 2009 (SB 30):

Technical workshop on integrating practices, tools and systems for climate risk assessment and management and disaster reduction strategies into national policies and programmes;

Before Copenhagen 2009 (SB 31):

Technical workshop to consider ways to advance the integration of various approaches to adaptation planning, including the enhancement of local and community-based adaptation.

Given the fact that a possible outcome of Copenhagen could also be limited to the decision on preparing these plans, including the clear perspective that sufficient funding is available, it might be the case that guidelines for preparing these plans will be developed after Copenhagen. Thus, it is useful to mention further activities of the NWP. By SBSTA 32 (Bonn 2010), the Secretariat is requested to prepare a synthesis report based on the submissions on monitoring and evaluating the implementation as well as on other relevant sources, *“with a view to facilitating the development of indicators for assessing the implementation of adaptation projects, policies and programmes”*.⁶⁵ Also, a technical workshop on costs and benefits of adaptation options is scheduled to take place before Bonn.

Concluding this issue one can say that some kind of approach of national adaptation/climate resilience plans seems to be a logical next step which is supported by a number of Parties. Thus, this proposal has to be further elaborated in Accra and in Poznan. The more concrete the negotiations become on this the better and it should be kept in mind that agreements on the provision of resources for adaptation have to include resources for both preparation and implementation of these plans. Also, national institutional arrangements to coordinate the implementation, including representation of the most vulnerable, have to be considered.

⁶⁵ FCCC/SBSTA/2008/L.13

4.3 *Institutional architecture*

From the AWG-LCA and other discussions, basically two ideas or concepts with institutional relevance emerged, apart from institutional questions that are related to the generation and governance of funds. These will be discussed in the following.

4.3.1 **Is there a need for a permanent adaptation body under UNFCCC?**

From an institutional perspective, adaptation is relatively fragmented under the UNFCCC. It is dealt with under SBSTA and SBI, the financial mechanism is operated by the GEF, and the Adaptation Fund is a separate body under the Kyoto Protocol. The Least Developed Countries Expert Group (LEG) and the Expert Group on Technology Transfer (EGTT) are also dealing with adaptation. Then there is the AWG-LCA. Many Parties have expressed the need for a less fragmented response under the UNFCCC, apart from discussion on the role of institutions such as the World Bank outside the UNFCCC. **South Africa** expressed the need to “*reorganise and focus the institutional set-up of adaptation to facilitate better implementation.*”⁶⁶

China called in its AWG-LCA presentation for the establishment of a “**climate change adaptation committee**”, with the objective to “*allow the international community to act together as early as possible to adapt to climate change, focusing on providing help to developing countries on their capacity building and practical actions.*”⁶⁷ Key functions should be the planning, organizing, coordinating, monitoring and evaluating of international actions on adaptation to climate change.

Cook Islands on behalf of AOSIS suggested to create an “**adaptation coordinating body**”, as part of its deliberations on adaptation and technology and a wider approach to a coordination mechanism, without specifying its functions.

Australia responded to the Chinese proposal and pointed out conceptual difficulties, given the diverse and broad range of the issues, and procedures to set up such a committee.

To further elaborate on this issue, it is useful to have a look at a similar debate under the NWP. Some Parties proposed to establish an **adaptation expert group to assist the NWP**, submissions of views were made before the Bali summit.⁶⁸ It thus has been on the agenda in Bali. The outcome was to request the secretariat to prepare a report on “*lessons learned in involving experts in the implementation of the Nairobi work programme*” for consideration in Poznan. However, in contrast to a previous version of the NWP conclusions negotiated in Bonn, the final document no longer contains “*consideration of the possible need for a group of experts*”. This may be due to the fact that on the one hand this issue has been brought up in the AWG-LCA discussions, and on the other hand AWG-LCA and/or SBI would be a more suitable place, reflecting suggested purposes of such a body.

Arguments in favor of an expert group to the NWP:

⁶⁶ South Africa 2008

⁶⁷ China 2008

⁶⁸ FCCC/SBSTA/2007/MISC.25

China lists a number of possible functions, inter alia

- to provide technical advice and support, by organizing and conducting workshops, including training workshops at the regional and subregional level, to enhance the application and development of methodologies and tools for impacts, vulnerability and adaptation assessments, adaptation planning, measures, and actions, and integration into sustainable development plans;
- to enhance the collection, management, exchange and access to and use of observational data and other relevant information on current and historical climate variability and change [...];
- to review existing practical adaptation actions and measures and provide advice and support on the development of a mechanism for promoting the development and diffusion of technologies, know-how, and practices for adaptation.

These proposed functions address key obstacles for increased implementation of adaptation, including the integration into development plans, which is so strongly desired by Annex I countries. And effective future action on adaptation under the UNFCCC will have to entail progress on these questions, on a much larger the scale than what can be achieved through a couple of workshops. Comparing these arguments with the proposed functions of the “Climate change adaptation committee” (see above) raises the question whether China means the same, or if the latter one should really work out international strategies for adaptation, facilitate reaching agreements on adaptation under the Convention, rather than addressing elements to catalyse UNFCCC work to national and regional activities. This is not clear at the moment.

Jamaica also sees a task in developing, evaluating and validating criteria for good practice adaptation, which probably would increase the willingness to pay of developed countries. **Mexico** pointed out the need for a clear mandate to “*focus on addressing the actual implementation and up-scaling of adaptation strategies, actions and measures among the Parties, addressing relevant cross-cutting issues such as technology, capacity and financing for adaptation*”.⁶⁹ Russia also supported the idea of an expert group on adaptation in its submission.⁷⁰

Concerns have primarily been raised by Annex I countries:

Japan and also the **EU** raised a number of arguments that question the necessity of such a body. **Japan** inter alia referred to the likely overlap of work with other expert groups (LEG, EGTT, Consultative Group of Experts) and sees “*significant limitations to respond to wide-range of issues of and needs for adapting to climate change*” of such an expert group, given the extensive academic knowledge and practical experiences to formulate and implement adaptation measures.⁷¹ The **EU** in a similar direction questioned that one group could hardly have the comprehensive expertise for all areas of work dealt with under the NWP, and also pointed to the risk of overlaps “*with the tasks already mandated by SBSTA to the secretariat*”.⁷² **Australia** argued in a similar way, but also proposed “*alternative options which may be more efficient and effective. Expert advice on some adaptation matters could be provided, for example, through the existing expert groups mentioned above, and if additional guidance is required, this could be obtained as necessary through ad-hoc expert process on specific issues. Experts could*

⁶⁹ FCCC/SBSTA/2007/MISC.25: 9

⁷⁰ FCCC/SBSTA/2007/MISC.25: 13

⁷¹ FCCC/SBSTA/2007/MISC.25: 8

⁷² FCCC/SBSTA/2007/MISC.25: 11

also be drawn from organisations already identified as active in areas relevant to the NWP, according to their areas of expertise. This process would provide access to expert advice, without the costs associated with maintaining a large and permanent NWP experts group.”⁷³

The USA also argued against an expert group, based on the expected costs and doubts about a reasonable mandate: “Because we do not see a clear and compelling need for an expert group at this stage of NWP implementation, our inclination is that limited funds would be best spent on increasing the effectiveness of implementation.”⁷⁴

The arguments reveal that most of the counter arguments seem to stem from the concern about the costs associated with a new body, which may have overlaps with other existing groups. However, given the fact that the costs for all the expert groups are assumed by the UNFCCC with about USD 4 million for the biennium 2008-2009⁷⁵, this can hardly be taken as a serious argument if the need for a coordinating body on adaptation is expressed by different countries as an element of adaptation action under a future framework. Even less when we reflect that in the overall framework discussion we do not talk about a gradual increase in action on adaptation, but about a quantum leap that is needed and which the Copenhagen agreement has to deliver. The low level of ambition which is reflected by these arguments can not be guiding the future negotiations.

With increased capacities perhaps the Secretariat could fulfill part of the functions outlined, but given the country-driven nature of the whole process and adaptation in specific there are good arguments for a more permanent body on adaptation with coordinating functions. The argument of overlaps has to be addressed, but it is not convincing as a reason to block the concept altogether. Existing expert groups have limitations in their mandates. The LEG only addresses adaptation in the Least Developed Countries, the EGTT only technology and technology transfer issues. The minimisation of doubling work could partly be achieved if members of these expert groups would be part of the adaptation expert group, as proposed by Jamaica. In addition it could be considered to adjust mandates, to limit overlap further.

Finally, as Jamaica correctly argues, “such a body (if formulated) would be able to maintain the focus that adapting to climate change would require under this and any future initiatives” – this will be necessary for future actions anyway - and “experience has shown that in most cases a small dedicated group working for a common good towards a common goal stands a better chance of achieving success.”⁷⁶

Concluding this issue, one can say that the arguments in favor of some kind of a more permanent body – be it an adaptation expert group or committee – are far more convincing than those against it. The key task of such an expert group would be to distill the existing information with regard to implementation and policy relevance, which really supports countries in meeting this challenge and is demanded in particular by those countries with limited capacities. Such a body could constitute a key element to better fill the catalytic role of the UNFCCC with life, although on its own it will not be sufficient to deliver the level of adaptation that is needed.

⁷³ FCCC/SBSTA/2007/MISC.25: 3

⁷⁴ FCCC/SBSTA/2007/MISC.25: 14

⁷⁵ FCCC/SBI/2008/3

⁷⁶ FCCC/SBSTA/2007/MISC.25: 5

4.3.2 Is there a need for an enhanced technology body?

In Bonn, but also in submissions on the AWG-LCA work programme made before Bangkok, several Parties, including the **LDCs**, expressed the need for a stronger institutional background for technology issues under the Convention. The latter ones have proposed to consider a Technology Transfer and Development Board (TTDB), with a clearing house mechanism to facilitate transfer.⁷⁷ Further objectives and aspects have not been specified so far.

China has proposed a new Subsidiary Body on Diffusion, Deployment and Transfer of Technologies (D&D&T) under the Convention, with a number of sub-panels (see). This enhanced mechanism is expected to constitute a more effective and implementation-oriented body with the objectives to

- provide advice, guidance, and recommendations;
- coordinate actions by different international stakeholders and governments' policies;
- guide and supervise utilization of special TT fund based on public finance;
- promote communication and info/knowledge sharing; and
- monitor and assess the performance and progresses.⁷⁸

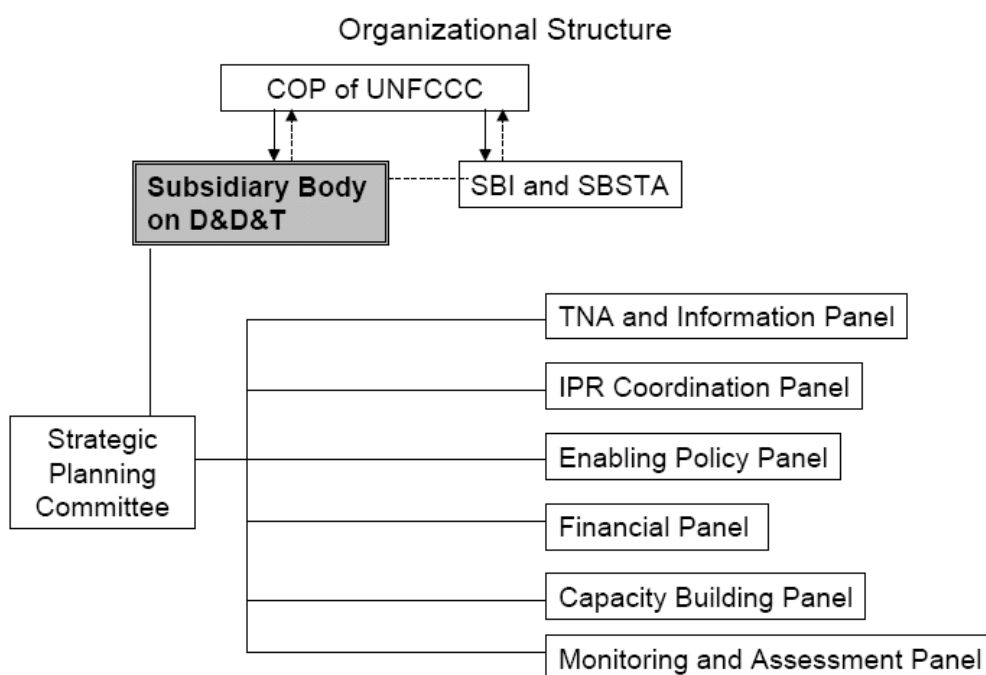


Figure 8: Chinese proposal for an organisational structure on technology under the UNFCCC

Source: China 2008

⁷⁷ FCCC/AWGLCA/2008/MISC.1: 15

⁷⁸ China 2008

According to **China**, priorities should be given to policy dialogues and coordination for better incentives to private sectors and markets; financing basic research and R&D; and direct transfer and diffusion of publicly owned technologies. Other Parties, like **Brazil**, have not proposed a specific new body but also see the need for “*enhanced institutional support under the UNFCCC for the identification of country/regional technology needs.*”⁷⁹ The **EU** stated that, as part of their proposed Enhanced Technology Transfer Framework, “*it will be necessary to consider institutional arrangements for supporting the implementation of an enhanced technology framework.*”⁸⁰ **Ghana** in its presentation also called for an enhanced institutional arrangement and for that suggested a “*technology board with sectoral-technology panels to accredit international action on DTT, endorse country programmes and monitor, report and verify action.*”⁸¹

All these elements could also have relevance for adaptation technologies. However, it must be expected that the discussions will focus on mitigation technologies most of the time. On the other hand, lessons learned from developing enabling frameworks for technology transfer can be relevant for both mitigation and adaptation technologies at the same time, in some cases. This leads to the question if, in the Chinese case, each Panel would have a mitigation as well as an adaptation branch, or if both are being discussed in the same Panel but at different meetings. Or if these discussions would take part under an adaptation expert group/committee.

Summarizing this issue, one can say that given the crucial role that technology development, deployment and transfer will play in dealing with climate change, there is reason to give this issue a stronger institutional position under the Convention, even if other initiatives exist outside the Convention. As important as a convincing technology deployment architecture for mitigation technologies is, Parties also have to make sure, that the adaptation technologies and their transfer become an important part of new technology institutions.

4.3.3 What could be the role of regional centers?

Another proposal which in principle could become an element of a future framework is that of some kind of regional centers that assist countries in their adaptation efforts.

Cook Islands on behalf of AOSIS proposed the idea of “*regional centres of excellence and learning institutions to assist vulnerable communities to identify long term needs*” as part of an adaptation coordination mechanism.⁸² **China** suggested to establish “*Regional Adaptation Network Centers*”.⁸³ Proposed functions would be the

- provision of research, training, education support in specific fields of climate change;
- promotion of knowledge dissemination and technology transfer;
- support of pilot or demonstration projects;
- support of capacity building, including institutional capacity, on preventive measures, planning, preparation of disasters related to climate change; and
- strengthening of early warning systems for extreme weather and/or climate events.

⁷⁹ Brazil 2008

⁸⁰ EU 2008

⁸¹ Ghana 2008

⁸² Samoa 2008

⁸³ China 2008

Bangladesh on behalf of LDCs supported the idea of regional centers as one element of a composition of support centres on different levels⁸⁴:

- establishing an International Adaptation Research and Technical Support Centre,
- establishing Regional Adaptation Research and Technical Support Centres,
- establishing National Adaptation Research and Technical Support Centres.

Uzbekistan, in its submission to the NWP on the expert groups, linked these two issues⁸⁵:
“Regional working groups of experts should act on permanent basis that is why they have to be strengthened institutionally. Further they can become the regional specialized centres. The scope of responsibilities of which should include the following:

- *methodological and practical assistance in implementation of the Nairobi work program,*
- *different consultations,*
- *training of national experts via conduction of training courses and training with taking into account the local conditions,*
- *copying and distribution of practical study aids and scientific and popular literature, especially for decision makers.”*

The **EU** in its recent submission also mentions regional centers and suggests that under its proposed Framework their role would be acknowledged and underscored.⁸⁶

It is important to note that also in the AWG-LCA debate on technologies the idea of regional centers or networks has been mentioned by a number of Parties. An adaptation technology component could for example be part of the mandate for such centers. These ideas do not have to be discussed separately.

These proposals are based on the recognition that, although the NWP provides useful information and exchange on adaptation-relevant aspects, it is far from being sufficient to scale-up the dissemination of knowledge, in particular that of face-to-face training, in the order that is needed. In the AWG-LCA there was no discussion on this issue. Under SBSTA, a workshop will be organised on how regional centres and networks could work together and with other organisations to assist stakeholders in different aspects related to adaptation and vulnerability, including informed decision making.⁸⁷ **However, it is scheduled to take place only before SBSTA 32, which will be in Bonn in June 2010. It will thus not provide relevant inputs for the Copenhagen agreement negotiations. (But it could inform the discussions about the implementation of regional centers if they are part of a Copenhagen agreement.)**

However, while in principle the demand for regional and national level institutions is reasonable in order to increase adaptation efforts, one has to question how the proposal for such institutions is linked to the fact that in many countries institutions exist that deal with adaptation, be it research or planning. But one can argue that the key issue for the negotiations will not be where such an institution will be settled, if it will be a new one or linked to existing ones. The UNFCCC process could generate the financing and guidelines for existing or new institutions. Adaptation will be a

⁸⁴ Bangladesh 2008

⁸⁵ FCCC/SBSTA/2007/MISC.25: 15

⁸⁶ France 2008

⁸⁷ FCCC/SBSTA/2008/L.13

process for decades, also such institutions need to be financed. And given the fact that particularly the LDCs have contributed almost nothing to the problem of climate change, institutions they need for coping with climate change impacts logically have to be funded by those who have contributed most to the problem.

An approach to address this problem in an agreement could be the following:

- the Copenhagen agreement will ensure that financial resources will be provided to finance activities of regional centers/networks at a certain scale [x million USD per annum] throughout the commitment period (e.g. until 2020), with an indicative commitment for support beyond that period;
- the following regions seem plausible: Central America, Southern America, Francophone Africa, Anglophone Africa, Middle East, Asia, Pacific Islands;
- the decision where these centers/networks will be based is up to the countries of the region (not the COP), but they should be placed in a LDC;
- one important role of regional centers should be to identify the most vulnerable groups in the region, to focus on their needs and to involve them in the monitoring of the work.
- the regional centers report on their work to the COP.

Concluding this issue, it seems that there are reasonable arguments that an agreement on future action will have to scale-up regional cooperation on adaptation, including technologies. The establishment of new, or the upgrade of existing, regional centers is an approach desired by a number of Parties. A Copenhagen agreement should not decide on where these centers will be based, but it should provide guidelines, guarantee a sufficient level of resources to effectively and significantly scale-up the work.

4.4 *The future financing architecture*

4.4.1 Proposals to generate financing

As has been outlined before, a number of proposals to generate financial resources has been made by Parties in Bonn, primarily in the AWG-LCA debates. In principle, the discussion on how to generate financing should be separated from how to disburse the money in detail. Some proposals link the generation mechanism to a specific fund idea. The latter ones will be discussed in 4.4.2. According to the Chair's summary, the following proposals were made with regard to adaptation:

- AOSIS proposed that a convention adaptation fund be established under the guidance and authority of the COP.
- Mexico put forward a proposal for a world climate change fund to support mitigation, adaptation and technology cooperation through financial contributions from developed and developing countries based on criteria such as emissions, population and gross domestic product (GDP).

- China proposed scaling up funding from developed countries through a percentage of GDP in addition to existing official development assistance to support an adaptation fund and a multilateral technology acquisition fund.
- Norway proposed that adaptation should be financed through auctioning a share of assigned amount units of all Parties included in Annex I to the Convention (Annex I Parties).
- Switzerland proposed a global carbon tax with an exemption for countries whose annual per capita emissions are less than 1.5 tonnes of carbon dioxide. The resources generated would flow into a multilateral fund for adaptation and insurance along with a national climate change fund.
- In the “Roundtable on the means to reach emission reduction targets” under the AWG-KP in Bonn, Norway proposed to use revenues from auctioning in the maritime sector to fund adaptation activities in developing countries, e.g. through the Adaptation Fund.⁸⁸ Other possible approaches were mentioned in Parties’ presentations, including a levy on international air travel; extension of the share of proceeds to other mechanisms; and a levy on bunker fuels.⁸⁹

A recent paper by Benito Müller analyses the different proposals in greater detail (Müller 2008). It is useful to check the proposals against the principles mentioned in chapter 2.3.5, in order to identify the most desirable options. Since one desired outcome of Poznan is a clearer picture of which proposals should be further discussed, this analysis should contribute to this decision. When analysing the different proposals, it is good to always keep in mind that, in reality, there is limited credibility on the predictability of financial contributions decided on by national governments (see Box 3).

Box 3: The ‘Domestic Revenue Problem’:

However it stands to reason, in light of the historic evidence, and on more general grounds that this or any other sudden significant increase in fiscal (bilateral/multilateral) funding is unlikely to materialise in any of the large DAC members due to a general psychological and political ‘domestic revenue problem’: money that is raised domestically, particularly through domestic taxation, is regarded to be nationally owned. Indeed, in the case of taxation, national tax payers often see themselves as direct owners of the revenue raised - the use of the tax payers money is closely linked with sovereignty considerations. And the sums involved in ODA or any other tax expenditure are generally perceived in absolute terms, which can create problems, particularly if they are in competition with other (domestic) expenditures. This problem is psychological because it is very much a matter of how the sums in question are perceived. It is political because the source of the revenue – particularly in the case of taxation – is also the source of political power (voters, businesses), which means that politicians may be at times less than forthcoming in showing the leadership required to overcome the problem.⁹⁰

Summarising this table, the following lessons can be drawn:

- the amount of resources generated depends on a number of assumptions and influencing factors, some of which will solely depend on political decisions, and others on the market price of emissions;

⁸⁸ Norway 2008

⁸⁹ FCCC/AWGLCA/2008/CRP.3

- given the domestic revenue problem, those approaches which channel the money generated directly to international funds and not through national budgets are most predictable, like aviation levies (IATAL) or maritime transport levies (IMERS), and also the Norwegian proposal to auction AAUs. The share of proceeds on the Certified Emission Reductions (CERs) traded in the CDM is an already existing example, and extending it to Joint Implementation (JI) and Emission Trading thus can also be considered promising approaches. Although the amount is not exactly predictable; these approaches can generate financing that is truly additional to ODA if they are collected internationally and not on a national basis;
- the domestic revenue problem could theoretically be overcome with legally binding commitments to adaptation financing by Parties plus a strong compliance regime; however if this solution is politically feasible is another question. And even under these circumstances time lags have to be taken into account - as it depends on the timing of national budgetary decisions;
- the Norwegian proposal only includes countries with emission reduction obligations (AI) and possibly specific sectors in the future (international transport, certain sectors in emerging economies). It thus underlines the principle of common but differentiated responsibilities;
- IATAL has the advantage that it is linked to actions by individuals and thus indirectly “taxes” their carbon footprint (indirectly if the levy is not related to the emissions caused, but e.g. to each ticket); only those people have to pay who are capable of doing international flights, which even in developing countries are not the poor;

Which one of these mechanisms will be implemented depends on the political will, and at this stage it is not easy to judge which approaches seem realistic. International taxes so far have not been welcomed by many governments, and agreeing on formulas that determine specific financial duties for governments and parliaments could end in a similar result as the ODA commitment.

All in all, one has to conclude that auctioning of AAUs (including international transport), a maritime charge proposal or the International Air Travel Adaptation Levy, and the extension of the share of proceeds best match the key principles for adaptation funding. The failure of other approaches to do so is particularly caused by the domestic revenue problem. And even if governments would provide the resources, in many developed countries this would be factored in their current ODA commitments (at least in those that lag behind their 0.7% quota). But since each instrument has its limitations, a combination would probably be the most desired option, as outlined in chapter 5. The above mentioned preferred options can also be advanced through integrating elements of other proposals. For example, a formula based on responsibility and capability indicators, similar to the AOSIS or the Mexican proposal, could be applied to determine the shares of AAUs which Annex I country have to purchase by auctioning.

Table 6: A principle-based analysis of proposals to generate adaptation funding

⁹⁰ based on Müller 2008

91	Extension of share of proceeds to Joint Implementation and Emission Trading	Norway: Auctioning of AAUs (including international bunkers) ⁹²	Switzerland: CO ₂ tax	Mexico: World Climate Change Fund	AOSIS: Convention Adaptation Fund	Tuvalu Burden Sharing Mechanism (international airfares and maritime transport levy)	Maritime charge proposal (IMERS) (imposed fuel charge)	International Air Travel Adaptation Levy (IATAL) (flat fee or %-levy)
Role of adaptation in proposal	KP Adaptation Fund	Other funding purposes possible	Sole funding purpose	Primarily mitigation, with x% levy for adaptation and x% for technologies	Sole funding purpose	Sole funding purpose	Ca. 40% adaptation, 40% mitigation and 20% technologies	Sole funding purpose
Predictable and sustainable (in size and reliability of flows)	Depends very much on carbon market development (in particular AI targets)	Number of AAUs auctioned can be exactly predicted, revenues depending on price, but fixed target could be applied	Theoretically exactly predictable, since it is a burden sharing mechanism that could be applied to any figure, but domestic revenue problem	Theoretically exactly predictable, since it is a burden sharing mechanism that could be applied to any figure, but domestic revenue problem	Theoretically exactly predictable, since it is a burden sharing mechanism that could be applied to any figure, but domestic revenue problem	Not exactly, but the scale of order predictable	Not exactly, but the scale of order predictable	Not exactly, but the scale of order predictable
Additional (to ODA commitments)	Fully additional, based on carbon market development	Revenues would come from an asset created through the Convention and given out to private sector or countries	Contributions could (and probably would) be counted as ODA by most AI countries	Contributions could (and probably would) be counted as ODA by most AI countries	Contributions could (and probably would) be counted as ODA by most AI countries	Could be counted as ODA, since differentiation is based on national identification	Not imposed on Parties but private entities, fully additional IF collected internationally	Not imposed on Parties but individuals, fully additional IF collected internationally
Adequate⁹³	Depends very much on carbon market development (in particular AI targets)	\$14 bn (2% levy)	\$28 bn	\$0.2-1.92 bn (2% levy)	?	\$1.6 bn	\$ 4-15 bn	\$4 to 10 bn
Party coverage (Differentiation)	Independent from Party level	At present only AI, but could be extended to all sectors/countries with Emission Trading	All Parties but with differentiation (see below)	All Parties with the exclusion of LDCs,	Not specified	All Parties except for LDCs and SIDS	Companies in all countries	Individuals in all countries
Responsibility and capability addressed	Present emission (reduction obligations), no Party contribution but through carbon markets,	Present emissions, those more capable can purchase more AAUs	Present emissions, „Carbon threshold“ of 1.5 t CO ₂ per inhabitant thought to implicitly express capability	Not yet decided if only present or historical emissions, GDP as one indicator	Unclear if present or historic emissions, takes respective levels of development and ability to pay into account	Present emissions, differentiated levies for AI and non-AI, exclusion of LDCs and SIDS	Present emissions	Present emissions, capability to pay for flights necessary

Adaptation under the UNFCCC – the road from Bonn to Poznan 2008 – pre-edit version

Estimates of revenues raised are based on certain assumptions, in principle these are variable, inter alia depending on the political will

Dark green = matches principle very good

Light green = can meet principle, but not necessarily

Gold = probably does not meet it, but not excluded

Red = likely that it does not match with the principles

Own compilation, based on Müller 2008

4.4.2 Specific fund proposals

Some of the Parties who have made specific proposals for the generation of resources have linked this to a certain type of Fund, others not. Where no new funds are being proposed, existing funds, like the Adaptation Fund under the Kyoto Protocol, would be the logical first place to transfer the money to under the Convention (see also 4.4.3). How the AF could play a role in a post-2012 regime probably needs some legal assessment, in order to achieve acceptance by those Parties who have not ratified Kyoto (and probably will not), the US in particular.

Mexico proposed a World Climate Change Fund (WCCF), which would primarily support mitigation. However, on each contribution done by Parties a levy would be applied to finance adaptation and another one to finance a clean technology fund. As one example, a 2% levy was assumed, but Mexican delegates clearly said that this is negotiable. In the Bonn presentation, the delegate did not reveal explicitly if for the adaptation part a new fund should be constituted, or if the money would be transferred to the Adaptation Fund under the Kyoto Protocol. In its recent submission, Mexico proposes that *“this enlarged Adaptation Fund would maintain the scheme of governance agreed by Decision 1/CMP.3.”*⁹⁴

In the technology debate under the AWG-LCA (and in relevant submissions), a multilateral technology acquisition/cooperation fund established under the Convention was proposed by

Brazil, China, Ghana and Mexico: *“The fund could be used to disseminate existing technologies, purchase licences of patented technologies (**Brazil**), provide incentives to the private sector (**China**), support international cooperation on research and development, support venture capital based on a public private partnership and remove barriers. For small island developing States, the fund could be used to fast-track the development of renewable technologies (**Barbados on behalf of AOSIS**)”*.⁹⁵ **India** in addition expressed the need for a global venture capital fund for early-stage technologies.⁹⁶ **China** proposed that this Fund should be based on public finance from developed countries.

In the AWG-LCA debate on financing, **Switzerland** proposed an adaptation funding scheme, consisting of a Multilateral Adaptation Fund (MAF) with the two pillars of a) prevention and b) insurance, and contributions to National Climate Change Funds in all countries. All countries would contribute, but the major share of the MAF would come from high income countries. This example is worth considering independently from the generation mechanism that has been proposed by Switzerland. Developing an international insurance scheme has been called for by a number of countries (see 4.4.4) and thus it is a reasonable pillar for receiving finance from the climate regime. National Climate Change Funds – or National Adaptation Funds, which would make more sense - could become a tool to implement National Adaptation Plans or projects and programmes at the sub-national level. Establishing National Climate Change Funds would also raise the question whether further existence of the Adaptation Fund as a tool to support concrete adaptation programmes and projects would be necessary. Since governments would be provided with a certain budget for their national funds, the responsibility for implementation of projects and programmes would be up to them. However, starting with projects and programmes is useful as long as there are not enough resources provided to establish such funds for a huge number of countries, at least for those 100 that are most vulnerable (LDCs, SIDS, African countries).⁹⁷

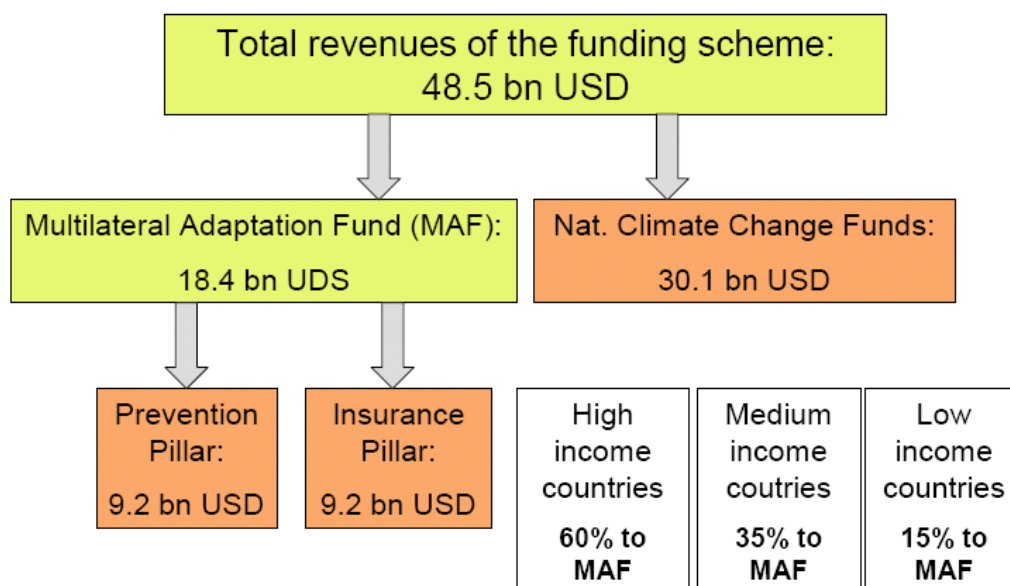


Figure 9: Swiss proposal for an international adaptation funding scheme

Source: Switzerland 2008

Concluding this, a fund on specific issues around technologies is envisaged by many developing countries. There is no clarity on the role of the Adaptation Fund under the Kyoto Protocol in a future framework yet, but given its unique features (such as the governance structure) it deserves to be in the center of the discussions. The Swiss proposal with its combination of a Multilateral Adaptation Fund (prevention and insurance) and national funds is the most detailed one presented by Parties and deserves further consideration.

4.4.3 Strategic spending of the resources

The larger the resources generated the more important becomes the question of how the money should be disbursed, for what purposes and under which governance structures. Müller is principally right arguing that *“internationally, funds for adaptation need to be allocated on a strategic basis and not involve international micro-management at the project level.”*

Strategic disbursements could also mean to provide those bodies/organisation with additional resources that have proven capacity and experience in activities that are crucial for the building of climate-resilient societies and communities: *“The strategic allocation of international adaptation funds should not attempt to re-invent the wheel. It should use the existing international bodies and initiatives to allocate funding streams, and not try to duplicate them under a climate change banner.”*⁹⁸

One particular area of relevance here is that of disaster preparedness.

In 2007, the World Bank and a number of donors have established the Global Facility for Disaster Reduction and Recovery (GFDRR), a partnership of the International Strategy for Disaster Reduction (ISDR) system to support the implementation of the Hyogo Framework for Action (HFA).⁹⁹

This initiative supports activities in three tracks of action:

- global and regional deliverables on inter alia enhancing global and regional advocacy for DRR, standardizing hazard risk management tools, methodologies etc.;
- country level deliverables for middle- and low-income countries with the objective to mainstream disaster risk reduction in strategic planning;
- Standby Recovery Financing Facility (SRFF) for accelerated disaster recovery of high risk countries.

So far, donors have contributed about USD 78 million to this facility for work from 2007-2010. In order to support DRR as a key adaptation strategy, it could be an option to scale up activities of the GFfDRR by contributing resources out of an adaptation funding mechanism under the UNFCCC. However, there are also other organisation which have proven experience with disaster preparedness, in particular on community level, such as the Red Cross/Red Crescent Societies.¹⁰⁰

Other examples for such a strategic disbursement are imaginable, but “atomization” the disbursement should be restricted to what is absolutely necessary.

However, one thing that will be important to address if existing institutions are considered is that of governance and the character of resources. Adaptation funding should be grant based.

The Indian delegate in Bonn during the AWG-LCA financing discussion raised concerns about additional conditionalities and governance issues:

“If the implementing agency develops financial packages that include co-financing by other institutions then the conditionalities imposed by the co-financiers become applicable. If, however, funding is provided directly to cover agreed incremental costs in the form of financial transfers based on COP approved criteria then the borrowers may raise additional funding to their best advantage, thus creating no additional conditionality for funds provided by the UNFCCC. In the case of GEF several Parties have stated that the grants or concessional funds provided by GEF are used by the implementing agencies as the carrot to sell the stick!”¹⁰¹

In conclusion these concerns imply that in an adaptation funding structure strategic spending to existing institutions, on which the COP will have to decide, will probably have to face this discussion. However, all Parties should be reminded of the fact that delivering adaptation action to the people should be the first priority, and there may be cases where this delivery is more likely to be enabled by existing institutions (even if they have unaligned governance structures) than by setting up new ones.

Concluding this issue one can say that, provided that resources in an adequate scale will be generated, the challenge lies in disbursing them in a way that is effective and efficient, that builds on existing experience and at the same time recognises that adaptation when supported by the UNFCCC goes beyond the classical “donor-recipient” relationship, where donors set up a governance system which recipients have to respect. The reason for resource transfer on adaptation is the polluter-pays principle, and this has to be reflected. This notion also refers to the fact that adaptation funding principally has to be grant-based. The UNFCCC discussions are only at the beginning of systematically assessing options for a future funding scheme, and all Parties have to express their opinion on the acceptable options to sort out realistic and unrealistic options, based on key principles.

4.4.4 An International Insurance Scheme

Insurance has gained increasing attention as a means to adapt to the adverse consequences of extreme weather events. AOSIS has repeatedly expressed the demand for some kind of international insurance scheme. In the Bangkok Climate Change Talks this point has been mentioned by a number of Parties as an important element to consider. The Swiss proposal for an adaptation funding scheme also addresses insurance.

AOSIS in its presentation in the AWG-LCA debate outlined its view on key characteristics of an international insurance scheme:

- *“Collective loss sharing mechanism needed to address high impact events; most vulnerable countries cannot afford insurance to address impacts on national economies;*
- *Payouts can use internationally-agreed triggers;*
- *Subsidy element in establishing/maintaining fund could be viewed as compensation for unavoidable impacts;*
- *Mechanism can also fund risk reduction initiatives”.*¹⁰²

The idea of an international insurance scheme is not new, proposals have been made in the past inter alia by AOSIS (1991), Germanwatch (2005) and the International Institute for Applied Systems Analysis (IIASA, 2005).¹⁰³ With the Munich Climate Insurance Initiative (MCII) an expert network has emerged which could provide valuable information and conceptual thinking to this debate.¹⁰⁴ Politically, there now seems to be more political support for assessing what such a regime could look like. In particular to serve for poorer countries, financial contributions out of the climate regime would be needed. However, linking such a scheme with incentives for domestic adaptation initiatives would be important.

In Poznan, a workshop under the AWG-LCA will discuss risk management approaches, including insurance. This will be supported by a number of technical papers by the Secretariat, of which the one on *“mechanisms, including innovative insurance tools, that can be used to manage financial risks from direct impacts of climate change in developing countries, including consideration of the unique circumstances of the most vulnerable developing countries, especially least developed countries, small island developing States and countries in Africa, and the design of appropriate mechanisms bringing together inputs from technical experts in the fields of insurance, reinsurance, and hazard assessment; Internationally-sourced pool of funds to help SIDS manage financial risk from increasingly frequent and severe extreme weather events”*¹⁰⁵ will be particularly important with regard to policy design in a future agreement.

Box 4: Insurance Instruments for Adapting to Climate Risks - A proposal for the Bali Action Plan. Submission by Munich Climate Insurance Initiative, executive summary, 18 August 2008

Risks and losses from climate-related natural hazards are rising, averaging US\$100 billion per annum in the last decade alone. Insurance tools provide financial security against droughts, floods, tropical cyclones and other forms of weather variability and extremes. This suite of financial instruments has emerged as an opportunity for developing countries in their concurrent efforts to reduce poverty and adapt to climate change. Insurance alone will not address all of the risks or adaptation challenges that arise with increasing climate risks, like desertification or sea level rise. But it can be a strong complementary aspect of a wider adaptation framework.

The **Bali Action Plan** (BAP) calls for “consideration of risk sharing and transfer mechanisms, such as insurance” to address loss and damage in developing countries particularly vulnerable to climate change. For the **inclusion of insurance instruments in the post-2012 adaptation regime**, the potential role of risk-pooling and risk-transfer systems must be firmly established.

In helping to meet this challenge, the Munich Climate Insurance Initiative (MCII) proposes a way to include insurance instruments for adapting to climate change in a post-2012 agreement. This insurance component would

- (1) follow the principles set out by the UNFCCC for **financing and disbursing adaptation funds**
- (2) provide **assistance to the most vulnerable**, and
- (3) **include private market** participation.

The first part of the component is a **Prevention Pillar** emphasizing risk reduction. The second part of the component is an **Insurance Pillar** with two tiers. Each tier addresses one portion—or layer—of climate-related risks. The first tier of the Insurance Pillar takes the form of a *Climate Insurance Pool (CIP)* that would absorb a pre-defined proportion of high-level risks of disaster losses, particularly in vulnerable non-Annex 1 countries. The second tier of the Insurance Pillar addresses middle-level risk and facilitates public safety nets and public-private insurance solutions. Low level losses would continue to be borne by exposed communities, and are therefore not addressed in this proposal.

Prevention Pillar

Insurance activities must be viewed as part of a risk management strategy that includes, first and foremost, activities that prevent human and economic losses from climate variability and extremes. The proposed Prevention Pillar links carefully designed insurance instruments to risk reduction efforts. Participation in the Insurance Pillar can include demonstrating progress on a credible risk management strategy. The cost for the Prevention Pillar depends on the the number of countries involved and the scope of prevention and risk reduction activities which participating countries request.

Insurance Pillar Tier 1 would require approximately USD 3.2 bn and USD 5.1 bn to fund, depending on negotiations and participating countries. The key features of Tier 1 include:

- **CIP Premium Paying Entities:** The CIP receives a fixed annual allocation from a multilateral adaptation fund based on the expected climate change related losses. (some recent proposals are based on criteria such as capability (“ability to pay”) and responsibility (“polluter pays”).
- **Beneficiaries of CIP Coverage:** Countries that participate in the insurance program that fall victim to rare but extreme climate-related disasters that go beyond their capacity to respond and recover;
- **Risk Carrier:** CIP operations will be managed by a dedicated professional insurance team that will be responsible for risk pricing, loss evaluation and indemnity payments, as well as placing reinsurance.

Countries considering participation in the CIP might ask “Why spend climate adaptation funds on an insurance premium when we could just invest directly in national adaptation program?” One answer: It costs less for countries to pool their risks, even after paying a premium: Disbursing a portion of climate adaptation funds to the CIP pools the risks of extraordinary losses, costing far

less money or requiring far less reinsurance than if each country created its own fund or made individual insurance arrangements.¹⁰⁶

Insurance Pillar Tier 2 would address middle-layer risks by providing resources to **enable public/private insurance systems for vulnerable communities**. Many examples of programs for these middle-layer risks exist: micro-insurance for agriculture (like in Malawi), re-insurance for aid agencies (as in Ethiopia), and pooled solutions for countries in certain regions (like the Caribbean). Each of these initiatives was made possible with outside technical and financial support. **Tier 2** could directly **enable the poor to participate**, if deemed appropriate, through targeted support and minimally-distorting subsidies that would not crowd out private incentives for wider market segments.

5. From Bonn to Accra to Poznan

When the Bonn negotiations concluded, many participants had the feeling that while there has been some further movement and constructive discussions, the negotiation speed is still too slow to meet the challenge of negotiating a new global agreement until Copenhagen in December 2009. Those concrete proposals for elements of a future agreement, as outlined here, could now serve as a basis for deeper discussions, going beyond the reiteration of principles and past commitments and failures. An optimistic view is that Poznan will come up with a first outline, a draft agreement text (probably with a significant number of brackets). To achieve this, all Parties have to make up their mind very soon about the proposals on the table, or further ideas that they consider necessary.

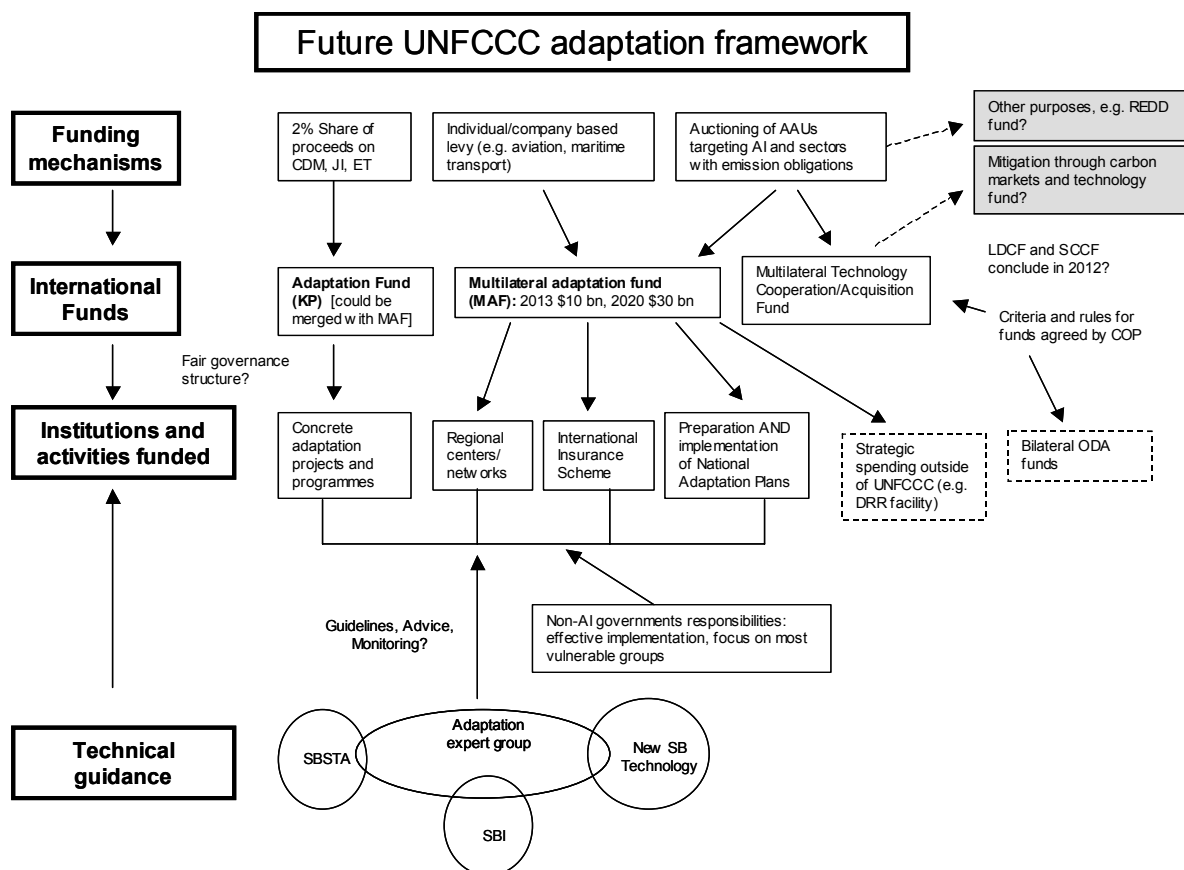


Figure 10: Future UNFCCC adaptation framework

Source: own illustration

The Accra Climate Change Talks (21 to 27 August) will serve as a good opportunity for focused discussions on the AWG-LCA issues, including adaptation although this issue will not dominate the agenda (no specific workshop). In Poznan, SBI and SBSTA again come into play (see Annex I). Arranging the elements identified above could result a structure as shown in Figure 10.

For the process until the end of the year it is useful to reflect the extent to which different negotiation streams and activities could contribute to achieving this or a similar structure and filling it with substance. Parties should use these opportunities to progress on the specific agenda issues, but at the same time seek synergies for developing the long-term picture.

For example, technical papers (2008), workshops and submissions (2009) under the NWP can catalyse useful information for the development of guidelines for National Adaptation Plans (see 3.7 and 4.2). Regarding an international insurance mechanism, the AWG-LCA workshop in Poznan, including technical papers prepared by the Secretariat under the AWG-LCA as well as the NWP, will play a crucial role for moving forward on this issue (see 4.4.4). Other issues, such as the permanent adaptation body or the regional centers have not yet entered the SBI agenda, and will thus probably be particularly discussed in the AWG-LCA context.

Assessing these issues with a business-as-usual speed will not be sufficient, and the world is watching negotiators and governments in terms of their level of ambition. Not the least those people and communities who have to face the adverse consequences and reach the limits of their own capacities to adapt have the right to expect a high level of ambition of all Parties and stakeholders involved. Each session must now bring progress on the way to an equitable, just and effective climate deal.

ANNEX I	What happens in Accra?	What is a desired outcome?	Between Accra and Poznan (Submissions) ¹⁰⁷	What happens in Poznan?	What could be a desired outcome?
AWG-LCA					
AWG-LCA content	No specific plenary, informal discussions	Concretising discussions on those elements put on the table: National Adaptation Plans, permanent adaptation body, mechanisms to generate financing, regional centers; others?	Submission of ideas, proposals and specific textual proposals	Further discussions on all issues; Secretariat technical papers on a) mechanisms, including innovative insurance tools, that can be used to manage financial risks from direct impacts of climate change in developing countries, including design of appropriate mechanisms; b) update of the technical paper on investment and financial flows to address climate change; c) information note on adaptation related activities within the United Nations system; Round table discussion on technologies	Break-down of the elements that deserve further consideration on the way to Copenhagen, draft agreement
Work programme 2009	Further consideration of elements for 2009 work programme			Completion of 2009 work programme, including if additional sessions to the eight weeks agreed on will be needed	A work programme that reflects the urgency and the necessary quantum leap that is needed on adaptation; in particular concretisation of a limited number of elements for a Copenhagen agreement
Workshops	No specific workshop related to adaptation	-	Submission of ideas and proposals	Workshops on a) risk management approaches, including insurance (see also LCA and NWP papers); b) Cooperation on research and development of	Outline of a concrete proposal for an international insurance mechanism to be considered as future element
SBI					
Agenda item 5a: 1/CP.10	No session		Views on the status of implementation (19 September)	Assessment of adaptation implementation (1/CP.10), including round table	Clear recognition that level of implementation is inadequate agreement on specific adaptation activities under SBI to Copenhagen and beyond

Adaptation under the UNFCCC – the road from Bonn to Poznan 2008 – pre-edit version

Agenda item 5b: Matters relating to the LDCs			Information from Parties and intergovernmental organizations on implementation of NAPAs, including on assessing funds from the LDCF (19 September)	GEF report on progress being made in NAPA implementation; Progress report of the LEG	simplified access to LDCF funding for accelerated implementation; additional contributions to LDCF by AI for implementation, including US
4: Review of the Financial Mechanism				Further consideration based on ToR, with a view to elaborate COP decision	Clear recognition that level of funding is inadequate Critical discussion of GEF role (?) additional contributions to LDCF/SCCF by AI, including US
Agenda item 12 (Art. 9 review)			Views on the issue of extending the share of proceeds to assist in meeting the costs of adaptation to joint implementation and emissions trading (19 September); Pre-sessional workshop at least one month before Poznan; Technical paper on i.a. the extension of the levy prior to the pre-sessional WS		Agreement to extend the Adaptation Fund levy to JI/ET Implementation as soon as possible
SBSTA					
NWP	No session		No submissions	Secretariat reports on a) progress made in implementing activities; b) summary report on first phase of NWP; Technical papers on a) implications of physical and socio-economic trends in climate-related risks and extreme events, and b) integrating practices, tools and systems for climate risk assessment and management and disaster risk reduction strategies	

Adaptation Fund					
	No session		3 rd meeting in September: - elaboration of operational policies and guidelines (key document)	CMP Adoption of documents, including operational policies and guidelines	CMP decision on monetisation of share of proceeds needed to start funding projects in 2009; Adoption of well-elaborated operational policies and guidelines

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For further information, please contact one of our offices

Germanwatch - Berlin Office

Voßstraße 1

10117 Berlin, Germany

Ph.: +49 (0) 30 - 28 88 356-0

Fax: +49 (0) 30 - 28 88 356-1

Germanwatch - Bonn Office

Dr. Werner-Schuster-Haus

Kaiserstraße 201

53113 Bonn, Germany

Ph.: +49 (0) 228 - 60492-0

Fax: +49 (0) 228 - 60492-19

E-mail: info@germanwatch.org

or visit our website:

www.germanwatch.org