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CLIMATE CHANGE NEGOTIATIONS AND THEIR IMPLICATIONS FOR INTERNATIONAL DEVELOPMENT COOPERATION

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DIIS REPORT 2011:07

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Cover photo: Ehrbahn Jacob / Polfoto
Layout: Allan Lind Jørgensen
Printed in Denmark by Vesterkopi AS

ISBN 978-87-7605-445-8

Price: DKK 50.00 (VAT included)
DIIS publications can be downloaded
free of charge from www.diis.dk
Hardcopies can be ordered at www.diis.dk

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Abstract

This report discusses possible implications of the international attempts to address climate change for the organisation of development cooperation. The paper concentrates on questions related to institutions and resources and pays less attention to potential consequences for the objectives and contents of development cooperation. The institutional question is limited to the norms, practices and organisations that emerge primarily at the international level in response to climate change. The resource question deals with the capital that needs to be mobilised to mitigate climate change and to finance the costs of adaptation to climate change in developing countries.

The report begins by looking into the history of international climate change cooperation to provide a background for understanding contemporary negotiations. Subsequently, different institutional questions characterising the response to climate change are examined. The report goes on to discuss the issue of resources before it summarises the implications for international development cooperation.

The report concludes that climate change negotiations are often framed as a South-North struggle and given the normative principles, such as 'the polluter pays', 'common but differentiated responsibilities and respective capacities', and 'per capita emission rights', the South has a different and stronger bargaining position vis-à-vis the North in climate change negotiations compared to development cooperation. With a global deal on climate change the implications for how to organise development cooperation could be far-reaching, but as the South is a heterogeneous group of countries, as a variety of initiatives by countries in the North undermine the UNFCCC framework and as a global deal is as far away as ever, the likely consequences for development cooperation are limited in the near future.

Foreword

This study has been funded by the Ministry of Foreign Affairs of Denmark, as it is one of three components of commissioned work on 'Global reforms in light of the economic crisis'. On behalf of DIIS, I thank the Ministry for funding the study, as well as for useful interaction in the course of the project.

The study is based on desk research. I would like to thank Maria Risom Laursen and Adam Moe Fejerskov for their research assistance, as well as several colleagues for very useful comments, including Senior Researcher Mikkel Funder (DIIS), Project Senior Researcher Ian Christoplos (DIIS) and Professor Morten Ougaard (CBS).

Despite the many constructive contributions that I have received during the study, I alone bear the responsibility for both the analysis and the assessments made in the report.

Contents

Introduction

> *As Norway's minister since 2007 for both the environment and development, I meet with both groups of ministers from other countries, and I have to admit it came as a shock to see how the two groups lead such separate lives. Each has its own extremely important agenda, its own analysis of the challenges ahead, its own strategic plans and literally its own language and it is not as if they don't recognise the importance of the other's agenda. But unless they start to talk and act together neither group's goals will be achieved.*
>
> Erik Solheim
> Minister for Development
> and Environment, 2011

Climate change and the various responses to it are of major importance to development and poverty reduction. 'The evidence shows that ignoring climate change will eventually damage economic growth. [Inaction entails] risks of major disruption to economic and social activity, later in this century and in the next, on a scale similar to those associated with the great wars and the economic depression of the first half of the 20th century' (Stern, 2006: ii).

Moreover, developing countries are likely to be hit the hardest by climate change. It is estimated that developing countries 'would bear some 75 to 80 percent of the costs of damages caused by the changing climate' (World Bank, 2009c: xx). Even if global warming is limited to a 2° C increase in average temperature, the costs of adaptation for developing countries are likely to be in the range of $75 billion to $100 billion a year in the period 2010 to 2050 (World Bank, 2009a: 1). Accordingly, the impact of climate change on poverty reduction is likely to be substantial.

This is the broader setting for the present paper, which, however, has a much narrower focus. It discusses the possible implications of international attempts to address climate change for the organisation of development cooperation. The paper concentrates on questions related to institutions and resources and pays less attention to potential consequences for the objectives of development cooperation. In the present context, the institutional question is limited to the norms, practices and organisations that emerge primarily at the international level in response to climate change. In this paper the resource question is a matter of the capital that needs to be mobilised to mitigate climate change and to finance the costs of adaptation to climate change in

developing countries. The two questions cannot be clearly separated, but for purposes of presentation the distinction appears useful. Moreover, the two issues are likely to have significant importance for the organisation of development cooperation, both as a source of inspiration and in terms of direct impact.

There is an extensive literature on how climate change is affecting various aspects of development and creating new development problems. These problems span very different issues, including the disappearance of small island states due to rises in sea level, more frequent occurrences of extreme weather, increasing temperatures changing the conditions for agriculture, new types of health risks, and increased scarcity of water resources. Evidently, these consequences of climate change themselves constitute huge challenges for development cooperation, and they are likely to have a tremendous impact on its organisation and concerns. For instance, one may anticipate greater pressure on natural resources, with an intensification of national and international conflicts. However, this paper does not attempt to identify the development challenges of climate change in the short, medium and long terms.

There is obviously also a huge literature on (proposals for) institutions and resources in relation to the response to climate change. How climate change cooperation affects international development cooperation is, however, less well covered, so this paper is based partly on the literature on institutions and resources in relation to climate change, and partly on the scant ideas found regarding the subject of the paper. International development cooperation is continuously changing, taking in new issues and concerns and being reorganised. It has a history of incremental learning and of fashions that are partly due to the influence of non-development interests (Kanbur et al., 1999). Development policies of individual donor agencies are significantly affected by international changes (e.g., the end of the Cold War) and discussions (e.g., the rise of New Public Management). Moreover, international development cooperation currently faces significant difficulties with respect to coordination, ownership, the focus on poverty, international public goods and the diversity of development – difficulties that development cooperation actors can hardly address themselves (Engberg-Pedersen, 2009). In this context, climate change negotiations may have a profound impact on development cooperation. Climate change negotiations are subject to considerable political interest worldwide, and they have the potential to change international relations. Accordingly, one may expect that they will bring about changes in the organisation of international development cooperation.

The paper is organised into four sections. The first looks into the history of international climate change cooperation to provide a background for understanding contemporary negotiations. The second goes through different institutional questions that characterize the response to climate change. The third looks at the issue of resources. The fourth discusses the implications for international development cooperation.

Aspects of the history of international climate change cooperation

There are evidently many interests at play in international negotiations on climate change. Countries, multilateral institutions, civil society organisations, private companies etc. have different concerns, different mandates, different historical backgrounds, different capacities and strategies, and different groups holding them to account when they engage in climate change negotiations. While the differences are substantial between the different categories of actor, the differences within each of the categories are equally important. As international negotiations continue to be primarily, but far from only, a matter for sovereign states (Peart, 2009: 19-43), the focus here is on country positions in relation to climate change, while the diversity of interests among countries is also considerable.

Yet, it seems reasonable to identify the two heterogeneous groups of the 'North' and the 'South' as distinctive categories with clearly different approaches to international climate change negotiations. This has to do partly with the history of international negotiations, partly with the nature of climate change largely being 'produced' in the North and 'experienced' in the South.

> 'Global environmental debates are very much a subject of 'North-South' politics. While some in the industrialized countries of the 'North' may find the impulse for collective bargaining by the developing countries to be irksome, most developing countries continue to operate, at least in part, under the collective banner of the global 'South' in international environmental negotiations. The insistent choice to use the term 'South' is more than a matter of semantics and reflects a central aspect of their collective identity and their desire to negotiate as a collective.' (Najam, 2005)

Going through three major conferences on the global environment (Stockholm in 1972, Rio de Janeiro in 1992 and Johannesburg in 2002), Adil Najam (2005) argues that the South has gone from contestation over reluctant participation to hesitant engagement in the debate over the environment. Still, this development has continuously taken place within a quest for 'a more legitimate global order' (ibid.: 305), which until recently ensured the relative unity of the South.

In 1972, the developing countries were reluctant to participate in the United Nations Conference on the Human Environment in Stockholm. They were not very

concerned with the environment and saw the matter as a distraction from other matters they regarded as more important. Moreover, environmentalists of the day regarded the most significant concern of developing countries, namely industrialisation and growth, as the very causes of the environmental problems. This was evidently unacceptable to the South, where the anti-growth rhetoric was seen as an attempt to prevent them developing at all.

The contestation of the environmental discourse produced certain results seen from the perspective of the South. The Rio Summit in 1992 was entitled the United Nations Conference on Environment and Development, indicating that environment and development are equally important concerns and that they should be linked. Another achievement was that the headquarters of United Nations Environmental Program (UNEP) was placed in Nairobi when the programme was established after the Stockholm conference. Despite these results and an increasing willingness to participate in environmental discussions, the South and the North clearly differed in their views in Rio. While the North was preoccupied with the effectiveness of environmental institutions and instruments, the South assessed these in terms of their legitimacy. Thus, in discussions on the Global Environmental Facility, the South was concerned about questions of fairness and justice, wanted the facility to include development objectives and was critical of the World Bank's control over it. Moreover, the South sought to promote a number of principles which had much to do with reordering the relationship between the South and the North. These principles had to do with additional resources, the recognition of a common but differentiated responsibility and the polluter pays principle (Najam, 2005).

Ten years later in Johannesburg, the environmental discourse took yet another turn as the conference was now called the World Summit on Sustainable Development. This reflected an even more intimate linkage between environment and development, and in the South the fact that the semantic emphasis was on development was regarded as a victory. While actors from the South continued to be concerned about equity and fairness and to focus on the substance in the context of South-North relations, a growing community of professionals dealing with environmental issues had emerged in many developing countries. Accordingly, there was a stronger wish to participate in Johannesburg, but also increasing frustration at the slow pace of the implementation of internationally agreed initiatives.

The negotiations in the context of the United Nations Framework for Climate Change Convention (UNFCCC) have differed from the three conferences described above.

The overall positions and frontlines have been the same, but the complexities and organisation of the negotiations weakened the influence of the South, at least in the early years of the Convention in the second half of the 1990s. Accordingly, Michael Richards (2001: vii) notes that '[a]nalysis of the outcomes of the UNFCCC indicates that developing countries have generally been losers, and see themselves as being cheated.' In support of this interpretation, one may mention the process by which the 'Clean Development Fund' proposed by Brazil and based on the principle of the polluter pays was turned into the 'Clean Development Mechanism' (CDM) when the Kyoto Protocol was adopted in 1997. The CDM is a market-based instrument which allows developed countries to invest in mitigation projects in developing countries as a contribution to meeting their emission reduction targets. It has been criticised for neither reducing emissions significantly nor mobilising substantial funds (Hayden et al., 2010, Peart, 2009). Accordingly, Richards concluded around 2000 (2001: viii) that '[t]he negotiating position of developing countries is therefore generally reactive, defensive and negative, for example to the "flexible mechanisms" of the Kyoto Protocol.'

The complexities of these negotiations have been highlighted as a particular challenge to developing countries, and certain observers talk about the 'disenfranchisement' of developing countries with respect to the global governance of sustainable development (Fisher and Green, 2004).[1] On the one hand, developing countries have suffered from having too few delegates with insufficient capacity and lacking resources. On the other hand, the demands for information about the negotiating processes and knowledge about the details of the substance have been accelerating. Furthermore, the number and scope of multilateral environmental agreements have grown (ibid.: 70). Another problem has to do with limited domestic political support for delegations from developing countries. Experience from e.g. Bolivia demonstrates that, when a strong national interest lies behind delegations, the chances of influencing negotiations increase (Page, 2003). Until recently, however, climate change has rarely loomed large in domestic political discussions in developing countries.

Broader contextual issues may also influence developing countries' approach to and influence over multilateral negotiations. In a comparison of negotiations on trade, climate change and the EU-ACP agreements, Sheila Page (2003) concludes that de-

[1] Dana R. Fisher and Jessica F. Green (2004: 70) define disenfranchisement as: 'Being deprived of the capability to participate and to influence agenda-setting and decision-making in international regimes for sustainable development.'

veloping countries have increased their impact on the successive trade rounds partly due to the experience with negotiations they have gathered over many years, and partly because these multilateral negotiations require agreement by all parties. Given the large number of countries participating, it is difficult for any one country or a single group of countries to impose particular agreements. Moreover, in the late 1990s, developing countries had developed clear national interests in relation to the trade issue, while this was much less the case with respect to climate change. Interestingly, Page argues (ibid.: 7) that the linking of trade and aid in the EU-ACP talks has seriously undermined the influence of the ACP countries. For instance, these countries failed to build opposition to the EU's proposal for a change from preferential trade agreements to reciprocal free trade from 2000 in the Cotonou agreement. On this basis, one may cautiously propose two hypotheses. First, multilateral negotiations may provide greater possibilities for developing countries than bilateral or regional talks; and secondly, negotiations involving (voluntary) resource transfers from the North to the South weaken the position of the latter.

In addition to the discussion of the balance between environmental and developmental concerns, questions of equity evidently loom large in the climate change negotiations. The UNFCCC Principles actually state that the parties to the convention should take action 'in accordance with their common but differentiated responsibilities and respective capacities' (here quoted from Richards, 2003: 3). How this should be interpreted differs between the North and the South. The North, and not least the US, has argued for 'meaningful participation' by developing countries, given that these countries will account for a growing share of global emissions. The South, on the other hand, takes a longer historical perspective on the matter and wants compensation for past emissions by the North and their negative consequences in the South. Furthermore, developing countries advocate per capita emission rights which in itself significantly challenges Northern ways of living, but which also creates new equity disputes, given the Northern consumption of goods produced in the South.

The different views on equity, which are clearly central to climate change negotiations, have led the South and the G-77 group to adopt positions that some observers regard as weak. Developing countries have been opposed to engaging in 'meaningful participation', although they could easily have met their emission targets without jeopardising their development. This negotiating position has, it is argued, provided an excuse for the North to avoid stronger commitments. Richards (2003: 4) argues: 'A more pro-active negotiation strategy would be to accept targets and put pressure on industrialised countries for meaningful emission reductions.' This indicates that

a narrow emphasis on material costs and benefits is not the exclusive determinant of countries' negotiation strategies when it comes to responses to climate change.

In recent years climate change negotiations have repeatedly been criticised for making very little progress. The COP-15 conference in Copenhagen documented this pessimism according to most observers (e.g., Falkner, 2010). The negotiations have been described as positional bargaining:

> [I]n positional bargaining, each Party tries to improve chances that the settlement reached is favourable to their own concerns by a) starting with an extreme position; b) stubbornly holding to that position and c) making only the smallest concessions needed to keep the negotiations going. [...] the pace of negotiations, as well as the language used by Parties, suggests that the current UNFCCC process is characterised by positional bargaining, reducing the likelihood of a cooperative, coordinated effort to achieve an ambitious and effective Copenhagen deal. (Peart, 2009: 314-15)

Whether this is an accurate description of the negotiations leading up to COP-15 can undoubtedly be discussed, but it indicates that the climate in which such negotiations are conducted is difficult. There are also examples of particular issues being silenced by particular parties, a practice which evidently complicates the process (ibid.).

The evolution of international climate change negotiations is evidently influenced by the changing global economic order. Without going into this question in detail, it is important to acknowledge the move from a bipolar to a multipolar world since the end of the Cold War. The break up of the USSR has been accompanied by a gradual reduction of US global dominance, thus paving the way for a multipolar world, particularly with respect to the global economic order. The US economy is still the world's largest, but three distinct features challenge the economic importance of the OECD countries (Subacchi, 2008). First, trade relations between core and peripheral countries have changed away from the exchange of manufactured goods and commodities. The emerging economies account for an increasing amount of global exports of manufactured goods and are significantly integrated into the world market. Secondly, capital flows are in themselves an important feature of today's world economy, about 90% of them being financial flows unrelated to trade in goods and services. Moreover, the earlier trend in the export of capital from the centre to the periphery has been turned on its head, as the BRIC countries (Brazil, Russia, India, China) now account for around half of the world's foreign exchange reserves, while

the US current account deficit is astronomical. The reserves of the BRIC countries are increasingly being channelled into foreign direct investments, thus strengthening the international influence of these countries. Thirdly, the influence of the emerging economies, and notably China, is perceived to be significant not so much on the basis of the size of their current economies, but due to the speed and sustainability of their growth. Given the size of their populations, the BRIC countries are therefore predicted to have very significant economies in ten to twenty years time, and some of their perceived influence is based on discounting this future. While the move towards multipolarity in the global economic order is contested, uneven and not readily turned into political influence, it is sufficiently strong to put climate change negotiations into a new perspective. This was reflected at COP-15, given that very many observers regarded an agreement between China and the US as the crunch in the negotiations (Falkner, 2010).

The changing global economic order is one reason why it is of decreasing usefulness to regard climate change negotiations purely in terms of a divide between the South and the North. Another reason has to do with the substance of climate change, its causes and its impacts on different countries. Clearly, the Alliance of Small Island States (AOSIS) has different concerns from the Organisation of Petroleum Exporting Countries (OPEC). Moreover, there is a significant difference in the understanding of and approach to climate change in the European countries compared to the US and Australia (Barnett, 2007). All these rather substantial nuances challenge an understanding of climate change negotiations in terms of a South-North divide, but they should not lead to a neglect of this divide because the sense of injustice and marginalisation continues to play a major role in the South's approach to climate change.

Institutional issues in international climate change cooperation

This section addresses six institutional questions related to international cooperation on climate change: (i) the normative framework for climate change cooperation; (ii) the role of policy targets and indicators; (iii) the role of sector approaches; (iv) the relationship between climate change concerns and other policy areas; (v) funds; and (vi) global governance of climate change. Each point will be introduced and then related to development cooperation.

The normative framework

The current practical normative framework for climate change cooperation is one of supposedly equal nation states negotiating in international forums on the basis of national interests, and with a vague reference to some countries being more responsible for climate changes than others, and of some countries being harder hit by these changes than others. This is a framework in which the fact of national interests being only partly related to climate changes is decisive. It is also one that produces negotiations in which historical commonalities and related interests form the basis for alliances confronting each other.

As noted above, the UNFCCC Principles refer to 'common but differentiated responsibilities and respective capacities', but there is no agreement regarding what that means. 'The polluter pays' and global per capita emissions rights and restrictions are also referred to. Another set of principles suggested for a global policy on climate change is constituted by effectiveness, efficiency and equity (Stern, 2008). Greenhouse gas (GHG) emissions should be cut significantly and quickly (effectiveness), this should be done in the most cost-effective manner (efficiency), and a global policy should recognize that climate changes hit poor countries hardest and that rich countries have the major responsibility for past emissions (equity). However, turning such principles into concrete policy action is hugely difficult, even without the interference of national interests unrelated to climate change. The difficulties of assessing past and current emissions, of evaluating their precise implications for current and future climate change, of relating climate change to economic costs, of setting reasonable baseline years, etc. all constitute issues of contention. Attempts to clarify some of these issues have been made, but they remain vague and open to criticism:

> Securing broad-based and sustained co-operation requires an equitable distribution of effort across both developed and developing countries. There is no single formula that captures all dimensions of equity, but calculations based on income, historic responsibility and per capita emissions all point to rich countries taking responsibility for emissions reductions of 60-80% from 1990 levels by 2050. (Stern, 2006: xxiii)

Even if this were accepted by all parties, there is a significant difference between a 60% and an 80% reduction in GHG emissions.

In an attempt to address this normative uncertainty, which is evidently politically motivated, Marco Grasso has tried to develop 'a framework of procedural and distributive justice specifically tailored to the international-level funding of adaptation' (Grasso, 2010). Based on John Rawls' theory of justice and Amartya Sen's capability approach, he argues that procedural justice covers the three aspects of recognition, participation, and ability to take an active part in negotiations. Distributive justice concerns the mobilisation and allocation of resources, the first of which has two elements: taking responsibility for historical GHG emissions, and capacity in terms of the resources, institutions and technologies to undertake adaptation activities. A fair allocation of the mobilised resources, on the other hand, should be determined by the 'lack of human security' in order to favour the most vulnerable.

Two significant points in this work are worth mentioning. First, the framework seeks to avoid placing a moral guilt on any party. It focuses on outcome responsibility, which states that certain actors are responsible for a certain outcome, without specifying whether the actors acted in a morally blameworthy manner. This may be an important contribution, as it is necessary to overcome any 'naming and shaming' if the international negotiations are to succeed. Secondly, Grasso notes that elements of both procedural and distributional justice actually already influence climate change negotiations. For instance, the different aspects of procedural justice are largely recognised in the organisation of the Adaptation Fund, and distributional justice in the sense of favouring the most vulnerable countries is also reflected in many proposals for the international funding of adaptation. This is an achievement that needs to be recognised. Despite the normative uncertainty and the many different interpretations of key principles, international negotiations have already come some way in determining a reasonably fair normative framework for addressing climate change.

Evidently, the current normative framework suffers from the heavy influence of national interests. The organisation of climate change negotiations as an instance of inter-state cooperation has lead to the positional bargaining mentioned above, which weakens the development of a global policy based on procedural and, in particular, distributional justice. Nevertheless, the 'common, but differentiated responsibilities' are generally recognised as an important foundation for the negotiations, and there is little doubt that poor countries and countries that are highly affected by climate change will insist on these points as the basis for any global agreement.

Therefore, the normative framework in climate change cooperation is both different from and stronger than that in development cooperation. While the latter is organised around voluntary assistance, the former is characterised by a struggle around its obligatory content. Moreover, development cooperation can more easily be limited to a bilateral relationship, while the climate change negotiations necessarily entail global cooperation.

It seems too early to say whether the normative framework of development cooperation will be affected by the climate change negotiations, as these are still in a very inconclusive phase. If current indications of significant decisions being taken by large emitters are substantiated (the Major Economies Forum on Energy and Climate, a US-led forum of seventeen major economies launched in March 2009, may increase its growth in importance), procedural justice is likely to be weakened and the spill-over effect on development cooperation is likely to be limited. On the other hand, giving increasing importance to distributional justice in climate change negotiations may have implications for development cooperation. One possible implication is a weakening of the role of development cooperation if substantial private or public resources for adaptation and mitigation are channelled through other, more obligatory and predictable mechanisms than development assistance. In this situation, both recipient countries and tax-payers in rich countries may be less enthusiastic about continuing development cooperation in its existing form. The former are likely to prefer the new channels of resource transfer, while the latter will probably believe that the transfer of significant resources through both obligatory and voluntary mechanisms is beyond their capacity. Ideally, however, there may be a need for strategic development support in areas that are not covered by funds for adaptation and mitigation.

Policy targets and indicators

Different policy targets have been evoked in negotiations on climate change. A maximum increase in global temperatures of 2° Celsius compared to pre-industrial

times is the target that has most agreement, as it it is supposed to prevent irreversible changes to the climate. Sometimes this target has been translated into a reduction of CO_2 emissions by 30% by 2020 compared to 1990 levels for industrialized countries. However, already here the consensus vanishes, as not all countries accept 1990 as the baseline year. The even more disputed ideas about a certain level of CO_2 emissions per person or a particular upper limit to CO_2 concentration in the atmosphere (e.g., 350 ppm) are other targets being suggested.

The targets pertain to a particular desired end result or outcome, and many of them are only relevant in a time-frame of between thirty and fifty years. One problem related to this is that, given the multitude of factors that are likely to influence future atmospheric levels of CO_2 in an unpredictable manner, it is very difficult to deduce the right policy initiative from a desired end result. Moreover, it is widely acknowledged that the value of even the medium-term future is heavily discounted in politics. Sustained action, the results of which can only be realised in a generation, are extremely difficult to mobilise support for. All this calls for more immediate policy targets:

> Up to this point, much of the focus in climate discussions has centred on the role of measured emissions reduction outcomes, either in absolute values or relative to a baseline. There is, however, considerable scope for broadening the discussion to explore intermediate indicators for policy actions with emission mitigation co-benefits. Indicators for the successful implementation of policies offer a range of advantages, [...] such as shorter time horizons for both implementation and feedback for policy design. (Lester and Neuhoff, 2009)

To remedy this deficiency, these authors actually turn to the Millennium Development Goals and the Poverty Reduction Strategy Papers to find comparable international experience where attempts have been made to link input and process targets with intermediate indicators and final ends. Apart from emphasising the need for intermediate indicators, the authors conclude that ownership, partnership and accountability key ingredients in ensuring engaged support from all stakeholders. Accordingly, when it comes to setting overall targets for climate change policies, it seems that an important flow of ideas originates in discourses on development cooperation.

Sector approaches

Given the difficulties in realising a comprehensive global regime regulating GHG in order to limit climate change, proposals for sector-based regimes have emerged,

the argument being that the number of actors and stakeholders in sectors is much more manageable and conducive to establishing agreements. There is a wide range of proposals, but in terms of contents they can be separated into 'targets and timetables' and technology cooperation in specific sectors, and in terms of actors the central distinction is between government-led and industry-led initiatives. Generally, however, sector approaches are characterised by more bottom-up thinking than economy-wide targets and timetables. Actors specific to the sector will typically be involved, and the elaboration of an agreement will start with an assessment of the technologies and organisation of the sector (Meckling and Chung, 2009). Another complexity of these approaches is that there is very little agreement on the definition of a sector. The proposals range from well-defined activities such as steel production to much more diverse areas like power generation and land use (Bradley et al., 2007).

Different potential advantages are often linked to sector approaches (Schmidt et al., 2008, Bradley et al., 2007). First, they are believed to be an instrument for increasing participation in the international regulation of GHG emissions. Under the Kyoto Protocol, significant emitters in both the industrialised and the developing worlds were excluded. The argument is that sector-based agreements may appeal to more countries because they are politically more manageable and likely to be associated with higher cost-certainty, at least in the short and medium terms. Secondly, a significant argument concerns international competitiveness and carbon leakage. Economy-wide regulation in certain countries, but not in others, is likely to distort competition. Some firms within an industry will have to face the costs associated with GHG emissions while others will not, and capital will flow to non-regulated areas, thereby undermining the regulation undertaken in some countries. A sector-based, world-wide regulation could create a more level playing field for all competitors and avoid leakage of emissions. Thirdly, at least in some sectors, data are readily available, making rapid implementation of an agreement easier. Fourthly, sector approaches enable regulation targeted at sectors with significant emissions or with high potential for emission reductions. They may also stimulate technological cooperation and research and development in a more focussed manner.

For these reasons, there is an emerging interest in sector approaches: 'It is becoming increasingly likely that some form of sectoral approach will make its way into the future climate regime' (Meckling and Chung, 2009). There are, however, also disadvantages associated with sector-based agreements. First, negotiations in certain sectors risk

being confronted by actors lobbying strongly against regulation. Energy-intensive industries are often dominated by big, powerful corporations, and in combination with 'a sharp information asymmetry between governments and sector representatives' (Bradley et al., 2007), agreements may do little to curb emissions. Secondly, a sector approach creates asymmetric competition between regulated and non-regulated sectors. If the latter include sectors with high GHG emissions, investment capital may flow to these sectors, thereby creating a cross-sector carbon leakage. Thirdly, sectors are not uniform across the globe: producers and consumers within specific sectors operate under substantially different conditions in terms of political and economic institutions. For instance, land use change, which it is suggested should be regulated and sanctioned, is likely to occur much more in unstable contexts in poor, tropical countries than in rich, temperate countries.

Moreover, sector approaches are not unrelated to the global power politics of climate change negotiations. Though 'sector-based agreements are often discussed as a potential avenue to bridge the North-South divide in international climate politics' (Meckling and Chung, 2009), 'the debate on sectoral approaches runs the risk of ending in a stalemate' (ibid.: 665) given the opposing agendas of developed and developing countries. Japan and other industrialised countries covered by the Kyoto Protocol see sector-based agreements as a way of easing their burden partly by getting other countries involved, and partly by establishing targets in a bottom-up manner based on sector-specific potentials which are likely to be lower than the requirements of tempering climate change. The developing countries, on the other hand, seek to shift the focus from targets and timetables on to technology transfers. They insist on their right to 'development emissions', and they are worried that sector agreements will end up creating standards that their industries cannot live up to. In this way, the sector approach may erect trade barriers for developing country companies that use second-best technologies.

Finally, it is worth noting the implications of sector-based agreements on procedural justice:

> It is plausible that the UNFCCC may introduce recognition for sectoral approaches agreed in other fora. However, this raises questions of equity and inclusiveness for Parties to the UNFCCC that are excluded from these alternative fora. For instance, countries outside the G8 may resent the use of G8 processes as the venue for defining new technology agreements. (Bradley et al., 2007)

In July 2008, Japan's call for sector approaches received support at the G8 meeting (Meckling and Chung, 2009), and it is not unlikely that proposals coming from the Major Economies Forum on Energy and Climate will be recognised by the UNFCCC in the future.

A move towards a future global climate regime partly based on sector-specific agreements is likely to limit the regime's impact on development cooperation. Sector approaches undermine the view that some countries are responsible for climate change, others its victims. Instead, all actors within specific sectors will operate within a framework of emissions reductions, irrespective of the country to which they belong. Furthermore, sector agreements tend to diminish the importance of global agreements. So far, climate change negotiations have essentially been a consensus-based UN process, but sector-specific agreements are likely to reduce the pressure for global deals in other areas, including development cooperation.

Integration of climate concerns in other policy areas

The question of climate policy integration parallels discussions in development cooperation of policy coherence for development (PCD) and whole-of-government approaches. Climate and development are both issues that are heavily influenced by policies in other areas. However, climate policy integration has a number of particular characteristics. First, it is an extremely fragmented policy area:

> There are hundreds of treaties and agencies operating with little formal linkages with each other. Norms and standards are created independently, and most specialized agencies and bodies have initiated their own environmental programmes independently from each other and with little effective policy coordination among themselves or with UNEP. (Biermann et al., 2009: 352)

Accordingly, climate or environmental policy integration has both an internal and an external dimension. Internally, the ambition is to create more consistency and synergy among different international environmental bodies and agreements. Externally, policy integration should put environmental objectives higher on the agenda when deciding on policies in non-environmental areas (Oberthür, 2009). The latter echoes development discussions.

Secondly, climate policies have themselves contributed to policy disintegration by emphasising the distinction between mitigation and adaptation (Ahmad, 2009).

This distinction may be useful in clarifying different dimensions of climate policies, and certain actors, both in the South and in the North, may find it convenient in light of their political interests. However, the distinction exacerbates the internal fragmentation of the policy field and also seems to depoliticise climate policies, with the implications that these policies can be categorised in the environmental sector box. With the focus on mitigation and adaptation, considerable attention has been directed towards technical solutions to GHG emissions and to the consequences of a harsher climate (Schipper, 2007).[2] This corresponds to Imran Habib Ahmad's view that 'most attention over the past two decades has been on the *science* of climate change. In future, climate change *policy* is where the most attention will be needed' (2009: 14). Accordingly, the focus on mitigation and adaptation tends to undermine concerns with the concept of sustainable development which links up with broader economic development policies and could have facilitated external policy integration.

Thirdly, a full recognition of the environmental objectives expressed in notions of sustainable development will transform current economic and social development trajectories. The 'achievement of a lower greenhouse gas (GHG) emission pathway' (Ahmad, 2009) is not just a matter of lowering agricultural subsidies in Europe to avoid undermining agricultural development in Africa, as the PCD agenda would call for. It requires development paths where current and future externalities are integrated in economic decision-making, and this is likely to have significant social implications. The relative prices of goods and services will change fundamentally, as energy-consuming activities are likely to be significantly more expensive. In such a perspective, the external policy integration of environmental objectives is considerably more difficult than PCD. It requires a paradigmatic shift of policies in many fields, while the PCD agenda is typically conceptualised in a less dramatic way where development issues are considered as an additional concern in the policy-making process in non-development policy fields.

Irrespective of these points, neither internal nor external policy integration has progressed much in climate policies. Although policy integration is believed to be

[2] In a discussion of adaptation, E. Lisa and F. Schipper (2007) argue: 'This exclusive discourse appears to be on a self-limiting trajectory in that it portrays adaptation to climate change as a unique and tangible action that can be formalised through discrete adaptation measures, which can be identified and subsequently incorporated into existing development plans. [...] Instead, it is more effective to view adaptation to climate change as a paradigm for development, where adaptation is fostered by a process of sustainable development and vulnerability reduction, rather than through explicit adaptation policies.'

vital for climate policies, there is little agreement on how to achieve it. Regarding the better organisation of international institutions, the proposals range from a clustering of existing organisations to the creation of a new agency: 'a hierarchical intergovernmental organization on environmental issues that would be equipped with majority decision making as well as with enforcement powers – such as trade sanctions – vis-à-vis states that fail to comply with international agreements' (Biermann et al., 2009: 364). Given that there is widespread disappointment with the achievements of UNEP with regard to everything from analysis over norm-setting to implementation, the difficulties of agreeing on the future organisation of international institutions not only impedes internal policy integration, it also significantly postpones external policy integration into the distant future. Thus, it does not seem likely that climate policy integration will have any immediate bearing on the PCD agenda in development cooperation.

Funds

The institutions that deal with financial resources for mitigation and adaptation have proliferated significantly in recent years. Until the mid-2000s, public resources accounting for less than 15% of the financial flows addressing climate change in 2007 were primarily channelled through (i) the financial mechanisms of the Rio Conventions, notably the Global Environmental Facility (GEF), (ii) the multilateral development banks, and (iii) bilateral ODA (Porter et al., 2008: 12).

The GEF seeks to protect the global environment in six areas: climate change (mitigation and adaptation), biodiversity, international waters, persistent organic pollutants, ozone depletion and land degradation (desertification and deforestation). It channels its resources through ten multilateral institutions by cooperating with specific countries concerning specific projects. The GEF is the official financial mechanism for four different conventions, spanning climate change, pollutants, desertification and biodiversity. It has been established as a trust fund administered by the World Bank, and its governance was heavily contested in its early years in the 1990s. However, protracted negotiations led to a compromise between the G77 position of 'one state, one vote' and the donor countries in the North emphasising the link between financial contributions and influence.

The GEF has been instrumental in different respects. It has facilitated coordination between bilateral and multilateral institutions with respect both to specific projects in individual countries and to strategic policy and programming. Meetings in the GEF

Council have also provided a platform for consultation between donor and recipient countries and between official agencies and civil society organisations. Moreover, the GEF has managed to combine grant assistance with concessional lending provided by multilateral banks. Still, the level of funding has been inadequate, and for many years a strategic approach was lacking. Despite the introduction of a Resource Allocation Framework in 2005, which seeks to channel resources into countries with a capacity to implement projects with high benefits for the global environment, the complexities of the GEF 'have made a strategic approach to addressing the challenges associated with climate change at a global level rather difficult' (Porter et al., 2008: 17). In addition, implementation has been extremely slow. In 2006, it took on average 66 months for projects to move from proposal to initiation. Fortunately, this average has been reduced considerably in recent years.

In 2001, two funds were established under the GEF: the Special Climate Change Fund (SCCF) and the Least Developed Country Fund (LDCF). A recent evaluation of the latter points in the same direction as the overall assessment of the GEF. The LDCF was established to support the preparation of National Adaptation Programmes of Action and the implementation of these programmes in the least developed countries. While there has been some success in that field and in creating awareness and adaptation capacity in a number of countries, the problems concern notably the limited and unpredictable resources made available for the fund by donor countries and the complexities of the administrative procedures: 'LDC stakeholders voice considerable frustration about the LDCF in terms of the complexity and tardiness of the processes to obtain funds for adaptation priority actions' (Danish Ministry of Foreign Affairs, 2009: 12). Furthermore, the fund is heavily focused on projects and sectors at the expense of more cross-cutting issues. Finally, the evaluation raises the question of what role the LDCF is supposed to play, given the increasing number of other funds, and notably the Adaptation Fund, with similar objectives.

The World Bank is the multilateral bank that has engaged itself most significantly in climate change activities. It has mobilised important amounts of own and other resources for investments in renewable energy and energy-efficiency,[3] much of which was done in collaboration with the GEF during the 1990s and the early 2000s. The Bank has also facilitated the development of carbon finance in connection with the Clean Development Mechanism (CDM) and now runs some twelve carbon funds.[4]

[3] The World Bank established the Renewable Energy and Energy Efficiency Fund (REEF) in 1997.

[4] See http://go.worldbank.org/51X7CH8VN0

In addition, in 2005 the G8 countries asked the Bank to provide suggestions for how to stimulate clean energy investments in developing countries. This resulted in the Clean Energy Investment Framework (CEIF), which seeks to allocate resources to (i) access to energy, (ii) transition to a low-carbon development trajectory and (iii) adaptation activities. Other multilateral development banks have also stepped up their climate change activities.

Since the mid-2000s, a vast quantity of new funds have been proposed. One report identifies eight new bilateral funds[5] and six multilateral ones[6] (Porter et al., 2008: 19-43). These funds' objectives are very broad and span mitigation, technology, biodiversity and poverty reduction, but the bilateral funds have been criticised for not addressing adaptation sufficiently (Bird and Peskett, 2008). On the one hand, the breadth of the objectives can avoid some duplication of activities, but, on the other hand, this exposes the confusion as to the appropriate response to climate change. Given the scarcity of resources, it is hardly useful to spend the money in a rather haphazard and completely uncoordinated manner.

Most of the bilateral funds are supposed to exist for a brief period in the current transitional phase until the hoped-for post-Kyoto agreement enters into force, but the multilateral funds are not intended to be temporary. The extent to which they will address the three key issues of predictable and large resource flows, clear and effective execution, and transparent governance accessible for low-income countries is not evident. Some of the funds rely on innovative sources, and many of the multilateral funds depend on contributions from donor countries. There is no guarantee that these are any more predictable than earlier contributions. On the other hand, one may suppose that the countries that have suggested specific funds attach sufficient prestige to these proposals in terms of living up to their commitments.

The governance mechanisms of these funds vary considerably. A couple of the bilateral funds attempt to involve developing countries, but in general these funds are the product of processes in the specific donor countries, and it is quite possible that they

[5] The Global Climate Change Alliance of the European Commission; the International Window of the Environmental Transformation Fund of the United Kingdom; the Spanish Millennium Development Goals Fund; the Japanese Cool Earth Partnership; the German International Climate Initiative; the Norwegian Rainforest Initiative; the Australian Global Initiative on Forests and Climate; and the German Life Web Initiative.

[6] The World Bank Forest Carbon Partnership Fund; the GEF Tropical Forest Account; the World Bank Clean Technology Fund; the GEF-IFC Earth Fund; the World Bank Strategic Climate Fund and Pilot Program for Climate Resilience; and the Kyoto Protocol Adaptation Fund.

are rooted in the longstanding donor-recipient tradition within development cooperation, rather than in a more partnership-oriented contractual approach based on the principle of 'common, but differentiated responsibility' (Bird and Peskett, 2008). The three World Bank-related multilateral funds have boards with equal representation of donors and recipients, plus a World Bank representative and a representative of other development banks. The two GEF-associated funds follow the overall GEF governance mechanisms, while the Adaptation Fund is particular because its sixteen-member board consists of two representatives of the five UN regional groups, one representative from the small island development states, one representative from the least developed countries, two representatives from Annex 1 countries and two from non-Annex 1 countries. This creates a clear majority of representatives from developing countries, but the fund is linked to the Kyoto Protocol, which is supposed to expire by 2012, and it is based upon the somewhat uncertain income of a two percent levy on the emission permits generated under the CDM. A recent estimate puts the total amount of available resources for the Adaptation Fund at approximately $0.5 billion for the period 2009-2012.[7]

The overall conclusion regarding this proliferation of climate change funds appears to be twofold. First, the organisation of the international financing of climate change activities has become increasingly confused, uncoordinated and prone to unproductive overlaps and duplications. In particular with respect to adaptation and the mainstreaming of climate concerns into development activities, existing funds under the GEF, the Adaptation Fund, the World Bank's Pilot Program for Climate Resilience and some of the bilateral funds have such similar objectives that it is hard to identify substantive reasons for adding new funds to the architecture. Secondly, it seems that the proliferation of funds marginalises the GEF, which appears to be the most legitimate international financing mechanism due to its laboriously elaborated governance structure, representing a compromise between the South and the North. The anxiety to do something, coupled with vested interests, risks demolishing this embryonic and hard-won institution, with its potential for becoming a global financial mechanism.

> The CTF [the World Bank's Clean Technology Fund] is [...] likely to be doing the same things that the Bank has done in the past as a GEF agency. By creating the CTF, the Bank will have diminished incentive to continue

[7] Adaptation Fund, Financial Status of the Adaptation Fund Trust Fund (as of 31 July 2010), August 13, 2010.

> its engagement with the GEF, because it will be funded directly by bilateral donors rather than through the GEF. Rather than creating synergy, therefore, the new arrangement will likely have the effect of undermining an existing GEF supported program that appears to have been reasonably successful. (Porter et al., 2008: 39)

The Adaptation Fund represents an interesting institutional innovation partly due to the strong representation of developing countries, and partly due to the international levy financing its activities. This could be a source of inspiration for international development cooperation, though the Fund could easily end up becoming just a footnote in history due to its temporary nature and its insignificant resources. Apart from this fund, the proliferation of funds resembles the proliferation of donor agencies in development cooperation. It seems, however, to move in a less coordinated direction in the absence of a normative framework emphasising the influence of developing countries. In development cooperation, the Paris Declaration still constitutes such a framework.

Global governance

There is a strong plea for a global deal on climate change: 'Collective action is needed to effectively tackle climate change and reduce the costs of mitigation' (World Bank, 2009c: 11). 'A shared global perspective on the urgency of the problem and on the long-term goals for climate change policy, and an international approach based on multilateral frameworks and co-ordinated action, are essential to respond to the scale of the challenge' (Stern, 2006: xxii). The scientific documentation and the political pressure have been significant in promoting a global deal which appears to be the only serious response to a problem which has much to do with the provision of a public good. Such a good is an advantage to many, but is difficult for unorganised beneficiaries to create it because the costs of providing the good exceed the benefits from an individual point of view: 'Underprovision and free-riding are thus to be expected in the climate change issue' (Viguier, 2004: 195).

It has been suggested that a global deal should include the following elements:

(i) 'a pathway to achieve the world target of 50 per cent reductions by 2050, where rich countries contribute at least 75 per cent of the reductions;
(ii) global emissions trading to reduce costs;
(iii) reform of the clean development mechanism to scale up emission reductions on a sectoral or benchmark level;

(iv) scaling up of R&D funding for low-carbon energy;
(v) an agreement on deforestation; and
(vi) adaptation finance.' (Hepburn and Stern, 2008: 259)

While this description is based on the ambition to stabilise atmospheric concentrations of GHGs at 500 ppm CO_2e – an ambition which already seems insufficient and outdated – it does identify important elements of a global deal. It is, however, interesting to note that the discussion does not address how such a global deal should be reached. In the World Development Report 2010, with its three messages of the necessity of acting now, acting together and acting differently, there are also remarkably few considerations of how acting together can be realised (World Bank, 2009c). This seems to be a general problem in discussions of climate change, as 'the institutional dimensions of global climate change are some of the least studied and worst understood facets of the challenge' (Evans and Steven, 2009: 2, see also Biermann and Zondervan, 2009). Until recently, at least, it appears that most have pinned their faith on the UNFCCC process:

> Climate policy at the international level is now moving rapidly towards agreeing an emissions pathway, and distributing responsibilities between countries. A feasible framework can be constructed in which each country takes on its own responsibilities and targets, based on a shared understanding of the risks and the need for action and collaboration on climate change. (Hepburn and Stern, 2008: 259)

Today, after the COP-15 conference in Copenhagen, this optimism seems to have vanished. Scientific documentation and political pressure from a large variety of actors have not been able to overcome national interests and the fear of being undermined by others free-riding on one's own efforts. Although efforts continue in the UNFCCC to reach an agreement, alternative pathways are increasingly in demand, in terms of both actions and institutions to bring about action.

A large number of diverse initiatives have been proposed in response to the challenges of climate change. In an attempt to assess the usefulness of some of these proposals, an interesting analysis has been conducted of thirteen ideas focussing on technology development and diffusion or on the involvement of developing countries in mitigation efforts, two essential issues in reducing GHG emissions (Gainza-Carmenates et al., 2010). The study analyses the proposals in relation to four criteria: environmental effectiveness, cost effectiveness, distributional considerations and institutional feasibil-

ity. Two important conclusions stand out. First, there is a contradiction between the first three criteria and the last. It requires elaborate and diverse policy instruments to achieve environmental and cost effectiveness together with the distributional considerations,[8] and that is the basis for poor institutional feasibility.[9] Conversely, it is difficult to achieve a high degree of institutional feasibility and a good score on the three other criteria. This evidently indicates that there is a trade-off between feasibility on the one hand and effectiveness and fairness on the other. Secondly, it is very hard to combine distributional considerations and questions of fairness with institutional feasibility and environmental performance. The study suggests that this has much to do with the role of the US being central to environmental effectiveness but having decided to stand outside the Kyoto Protocol. All in all, the study shows that fairness and feasibility are difficult to align.

There are at least four different ways of approaching global governance on climate change which more or less depart from the current organisation of the UNFCCC negotiations. First, one may take issue with the dominant approach to mitigation based on the allocation of emissions quotas (Michaelowa et al., 2005: 19). Developing countries have for long rejected this because they see it as a way of preventing their development, but projections indicate that 60% of global emissions will come from developing countries in 2030 even with business-as-usual scenarios (Viguier, 2004, Hayden et al., 2010). This is because growth and GHG emissions have been closely linked so far (Funder et al., 2009). Moreover, it is probably in the long-run interests of these countries to take part in less carbon-intensive growth paths in order to profit from the substantial technological development that is likely to take place.[10] It is, accordingly, crucial to develop approaches that can induce developing countries to take part in collective mitigation efforts (Evans and Steven, 2009). Two examples of such approaches inform the 'growth targets' and the 'rent-sharing' proposals. The former suggests linking emissions levels to per capita income, so that emissions targets become more stringent the higher the income levels (Stavins, 2004). This

[8] One proposal makes distributional considerations when it ensures: '(i) meaningful efforts to reduce emissions by the U.S. (either binding or non-binding), (ii) a continued leadership by Industrialized Countries (IC, Annex 1 of the UNFCCC), (iii) some DC [developing countries] reducing their emissions (under binding or not binding commitments), (iv) more help to DC in dealing with climate impacts and adaptation issues and (v) other kinds of help to DC in order to deal with other concerns than climate change' (ibid.: 66).

[9] Poor performance with respect to institutional feasibility is the case 'if negotiations at the current time would be too difficult and long, and/or they require new international institutions or frameworks, or they do not have acceptance by major international players' (ibid.: 66).

[10] The potential benefits for developing countries of engaging in mitigation have been grouped under four headings: (i) efficiency savings, (ii) reduced economic dependency, (iii) new economic opportunities, and (iv) adaptation benefits (Funder et al., 2009: 21).

will exempt poor countries from contributing while providing them with access to technological innovation. The other proposal requires that developing countries should make a domestic effort to reduce emissions if they want to enter the markets for emissions permits (Viguier, 2004). For every permit sold, a less costly effort to reduce emissions should be undertaken. Under the assumption that global emissions permits are sufficiently scarce to drive up their price, the proposal will provide a net profit for participating developing countries and, at the same time, stimulate their own mitigation efforts.

Secondly, based on game theory and its comprehensive work on the provision of common goods, some have suggested restructuring incentives by linking climate negotiations with trade, technology or other issues (Viguier, 2004). The point is that, by bringing other issues of interest to the parties into the negotiations, the incentives to commit oneself are increased, and this may create a potential for overcoming the deadlock (the 'prisoner's dilemma' kind of situation). While this approach is strong in theory, it runs into important obstacles in practice. For instance, trade sanctions against the US for not participating in the Kyoto Protocol do not seem realistic, and different countries have different interests, making the required linking of different issues very complicated. Linking climate change efforts to other policy domains is therefore hardly a way of reaching a global deal.

Thirdly, parallel initiatives to the UNFCCC negotiations could be taken. Regional agreements, bilateral deals and multilateral talks on neighbouring issues, like technological innovation and dissemination, could be undertaken concomitantly with the pursuit of a global deal. Parallel initiatives may move faster than the UNFCCC talks and can help put pressure on them. An increasing concern with climate issues in other policy areas, including development cooperation, can also help in building political leverage. Furthermore, parallel initiatives make a breakdown of the UNFCCC process more bearable (Michaelowa et al., 2005). On the other hand, negotiations outside the UNFCCC complicate the picture and risk efforts being duplicated or even contradicting each other. Moreover, they place an additional strain on poor countries' negotiating capacities.

Fourthly, a heterogeneous group of proposals focuses on laying the foundations for future global governance reform, not least by building trust at many different levels. The lack of trust is seen as a major impediment, and some proposals focus accordingly on ways of building mutual confidence, e.g. by establishing transparency in climate finance or by creating mutual conditionality in climate cooperation (Bird, 2010, Sip-

pel and Neuhoff, 2009). Other proposals are not only related to climate change, but take a broader look at global governance. In the context of current crises, it has been suggested that we should 'initiate a high-level analytical process on global economic reform, with climate change explicitly identified as one of the core pillars' (Evans and Steven, 2009: 36). A Stern-like review of global governance with an explicit focus on long-term challenges and solutions could help enlighten policy-makers about the needs and opportunities for global governance. Another initiative could be to strengthen relations between major countries, increase knowledge on mutual priorities and concerns, and build capacity to prepare comprehensive proposals and not just single initiatives at the summits of the G8, G20 and other forums. A substantially stronger engagement with the public is also suggested, partly to prepare voters for the inevitable future behavioural changes so that they do not defeat agreements when these need national ratification (ibid.). There is also some scepticism as to the realism of banking on global governance of climate change: 'the most coherent institutional framework for both poverty reduction and environmental protection is likely to be one that is relatively decentralised, and based on a modular (networking) structure' (Jones, 2002). The basis for this argument is that actions have to be adapted to local conditions and that a diversity of private, public and civil society actors are needed to confront the challenges.

From the perspective of development cooperation, it is interesting to note that not even a very well-documented need for action against climate change has been able to overcome the barriers to global governance. The prospects for success in the UNFCCC process appear bleak, and there are few signs that major countries are changing their positions. This indicates how difficult it is to improve international cooperation through institutional change. In the field of development cooperation, where the need for change is less acutely felt, significant developments in the organisation of cooperation is probably unlikely in the near future. On the contrary, recent tendencies (the failure of COP15 and the increasingly lukewarm support of the Paris Declaration) may actually point to a declining political interest in institutional change with respect to global governance and a strengthening of the nation state as the central actor in international negotiations. However, the field of climate change possesses the potential to stimulate changes in development cooperation for at least three reasons. First, the need for global governance on climate change is bound to increase, possibly to a level where inaction becomes a significant cost to rich and influential people as well. Secondly, proposals and vocal supporters of a global deal and of a change of the current institutionalisation of global governance exist in climate change. Thirdly, climate change is a young policy field which makes existing norms

and practices less ingrained. Accordingly, global governance reform may take place sooner or later in the field of climate change and is likely to have implications for development cooperation, as it will most probably deeply affect relations between developing and developed countries.

Resource issues in international climate change cooperation

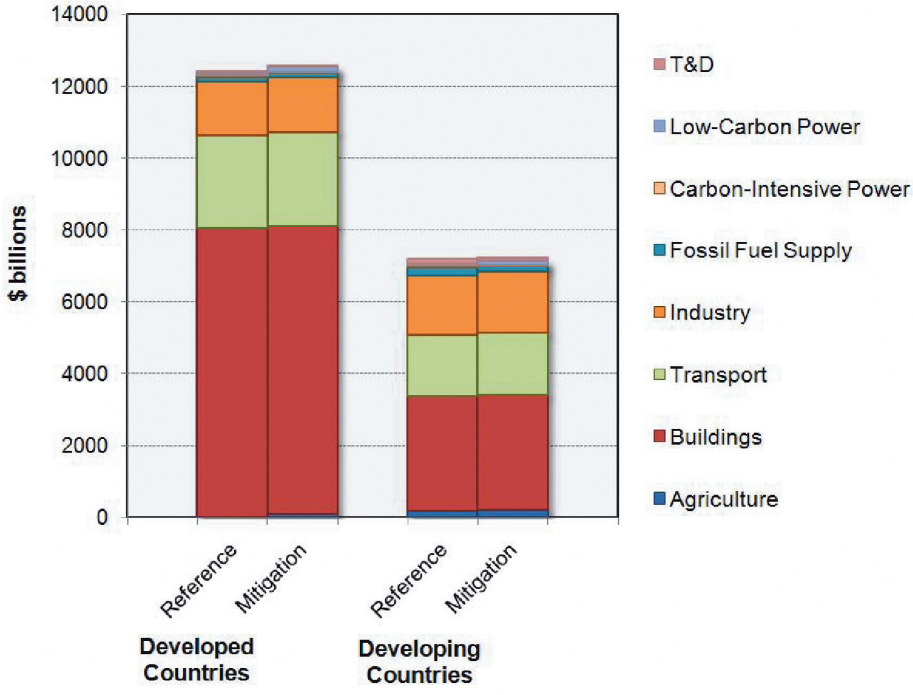
Considerable amounts of money have to be mobilised to address climate change seriously, and 'current levels of climate finance fall far short of foreseeable needs' (World Bank, 2009c: 22). The World Bank estimates that some $140-175 billion a year will be needed by 2030 to cover mitigation costs in developing countries and up to $100 billion annually for adaptation purposes (ibid.). Compared to current funding for both mitigation and adaptation in developing countries of some $9-15 billion a year (Ackerman, 2009, World Bank, 2009c), these figures demonstrate the magnitude of the challenge.

However, it is worth noting that a low-carbon scenario does not entail a considerably larger level of investments compared to the business-as-usual scenario. Figure 1 depicts these scenarios in 2030 for both developed and developing countries. The difference in terms of the levels of investments between the two scenarios is negligible. Accordingly, the challenge is not to increase investments at the expense of consumption, but to restructure the investments. In the energy, transport and building sectors, low-carbon investments will be compensated for by higher energy efficiency. The crucial challenges are, first, to provide the incentives to investors to reorient their investments, and secondly, to make rich countries compensate for the damage of their emissions so that developing countries will not suffer the costs of climate change without having profited from the emissions. It could be argued that these two challenges have been mixed up in climate change negotiations because much of

> the negotiation so far has been framed in terms of additionality to official development aid, which is, in part, misleading: it focuses attention on a new 'climate finance' which could be additional to 'normal finance', whereas the big challenge is a re-allocation of investment flows. (Neuhoff et al., 2010: 7)

The mobilisation of public resources is definitely needed, but directing private investment capital and the market towards low-carbon development appears to be just as important, if not more so.

Figure 1. Developed and developing country investment volumes, in reference and low-carbon scenarios for 2030, as projected by the International Energy Agency



Source: Neuhoff et al., 2010: 4

Finance for mitigation

The largest funding source for mitigation in developing countries is the Clean Development Mechanism (CDM). Within this mechanism, countries that have signed the Kyoto Protocol can buy Certified Emission Reductions in non-Annex 1 countries to comply with their emission limitation targets. Though the number of transactions within the mechanism has grown since its launch in 2001 and reached an annual volume of $8.4 billion in 2007, the mechanism suffers from a range of problems. First, it is not efficient due to its project-based nature (Tirpak and Parry, 2009: 18) and 'the notorious bureaucratic complexity of the CDM process, with lengthy, case-specific analyses required for each transaction' (Ackerman, 2009: 6).

Secondly, the number of developing countries benefiting from the mechanism is very limited. As host countries for CDM projects, China, India, the Republic of Korea and Brazil account for more than 90% of total transactions (ibid.), with less than 1% of the projects in the least developed countries (Funder et al., 2009: 20). Thirdly, the value of primary CDM transactions fell from 2007 to 2008 allegedly due to the financial crisis, but also because of the uncertainties regarding a post-Kyoto climate agreement (World Bank, 2009b: 8). In sum, the CDM as it is currently organised is insufficient to mobilise significant resources to stimulate mitigation activities in developing countries.

There are other market-based initiatives to limit GHG emissions, such as Joint Implementation and Emissions Trading under the Kyoto Protocol and the EU Emissions Trading Scheme. The last of these mechanisms actually accounts for 73% of global carbon markets (ibid.). However, these market-based initiatives only relate to developed countries and do not raise money for mitigation efforts in developing countries. It has been suggested that we move towards sectoral crediting mechanisms as a step towards a truly global carbon market (Hayden et al., 2010, Tirpak and Parry, 2009), but no matter what, the crux of the issue in carbon markets seems to be to create sufficiently scarce emission permits to drive up their price, thereby limiting emissions, inducing investments in low-carbon technologies and providing resources for mitigation efforts in developing countries. This can only be done through political decisions to put a cap on emissions.

With respect to the role of public money, the opportunities are diverse. A central concern, however, is to use public resources to mobilise much more private capital for mitigation purposes (Commission on Climate Change and Development, 2009, Tirpak and Parry, 2009, Baudienville, 2009). Private investors, including sovereign wealth funds, pension funds, private banks, etc., are sensitive to the risk-return ratio of their investments. In the absence of a global deal, which would be most effective in reducing uncertainties and stimulating the profitability of climate investments, public money can help reduce risks and increase returns. Credit guarantees and concessional loans are means to lower risks, while direct subsidies and provision of equity may increase returns. The particularities of risks and returns often depend on the nature of the mitigation efforts and on country-specific conditions. Therefore it is important that public resources can cater to diverse needs. In this light, it is actually useful to have a diversity of sources and funding mechanisms, as 'the choice of financial instruments is also linked to the institution able to provide it' (Neuhoff et al., 2010: 35). This indicates that, as suggested by some (South Centre, 2008), central

mechanisms for channelling public funds for mitigation may not be useful. However, one problem is that developing countries will have a harder time influencing a diversity of sources of public money in developed countries.

Estimates tend to suggest that more than one third of the total global potential for reductions of GHG emissions by 2030 is located in the forestry sector in developing countries (Ackerman, 2009) and that, within the least developed countries, 74% of all emissions are accounted for by deforestation and land use change (Funder, 2009). This is the basis for the strong focus on the Reduction of Emissions from Deforestation and Forest Degradation (REDD). In this field, discussion of market-based initiatives versus financing through a fund is pronounced. The views on the effectiveness of the different solutions differ, but Brazil, which accounts for 46% of global emissions from deforestation, has clearly stated that it does not want to participate in a market mechanism (Isenberg and Potvin, 2010: 227).[11] Part of the controversy is the question of whether REDD should be seen as an opportunity to offset GHG emissions in developed countries or as a significant contribution to mitigation by developing countries which developed countries should pay for. In the first case, some would argue that developed countries may actually continue with a high-carbon growth pattern while preventing developing countries from benefiting from the economic opportunities of logging. This is how the market-based solution and the CDM can be interpreted. A fund, on the other hand, is regarded by some as a way of making developed countries pay for their pollution in a manner that is likely to reduce it.[12] Another aspect of the controversy has to do with how to mobilise sufficient resources to support REDD significantly. One proposal suggests combining the two mechanisms because none of them will necessarily be able to raise sufficient funds (ibid.). No matter what, REDD appears to be a crucial element to address because of its potential in mitigating climate change, but also because of its development potential. Properly addressed, REDD has significant potential for poverty reduction by channelling resources to the local level and making forest management more efficient and accountable to poor people (Funder, 2009). Interestingly, COP16 in Cancun produced important results on

[11] However, Brazil changed its position just before COP16 in Cancun 2010. While remaining critical of the off-setting of industrialized country emissions in poor and middle-income countries, it no longer objects to the market mechanism as the instrument for mobilizing funds in support of REDD

(see http://climatevoices.wordpress.com/2010/11/12/brazil-pulls-u-turn-on-redd-market-role/).

[12] The controversy between market-based and fund-based financing of REDD also seems to have produced a distinction between large countries in the South (Brazil and Indonesia) that may be able to control markets and small countries in need of capacity-building to exploit the benefits of REDD.

REDD, a field that, for several years, has been one of the most promising in the climate change negotiations. However, it remains to be seen whether REDD can be turned into an effective means to reduce poverty.

Finally, more innovative approaches to financing mitigation have been proposed, some of which will be discussed below in the section on finance for adaptation. A global carbon tax is one possibility. Many countries impose taxes on fossil fuels and energy consumption, and a proportion of the revenues could be channelled into an international fund. A global tax could also be imposed across all countries and rely on national authorities for tax collection. Switzerland has proposed a uniform global tax of $\$2/tCO_2$ on fossil fuel emissions with a basic tax exemption of $1.5tCO_2$ per capita, meaning that, e.g., Sub-Saharan Africa would be exempted from the tax (Müller, 2008). Such ideas suffer, however, from the problems associated with channelling nationally collected taxes out of the country,[13] and 'it would be essential to establish a clear and binding (insofar as this would be possible) framework for redistribution' (Spratt, 2009: 6). Another approach is to establish national or preferably international auctioning of emissions allowances (Brown, 2009, CCCD, 2009, Isenberg and Potvin, 2010). Norway has officially suggested such an initiative, which would be based on holding back some of the allowances that would otherwise be distributed for free to private companies. The revenues generated can be used for mitigation, adaptation, capacity-building or other purposes. The proposal could generate $20-30 billion a year (Brown, 2009), but that depends much on the quantity of and demand for the allowances, which again are heavily influenced by political decisions on targets for emission reductions.

The various market-based ideas for generating resources and limiting GHG emissions are unlikely to be replicated within international development cooperation. However, the use of public money to mobilise private capital in development cooperation is an idea that can be stimulated by such initiatives in the field of climate change. Private/public partnerships have received considerable attention in development cooperation in recent years, and private funds increasingly play a central role in, e.g., the health sector. However, aid is basically conceptualised as funds for investments in public goods that the private sector does not want to touch. Evidently, there is an important concern regarding the poverty focus on public resources mobilising private investments in development, as the risk/return

[13] Benito Müller calls this the 'domestic revenue problem': 'money that is raised domestically, particularly through domestic taxation, is regarded to be nationally owned' (Müller, 2008: 8).

ratio is likely to be higher in remote, sparsely populated areas, where the proportion of poor people relative to the population as a whole is likely to be high. Yet, all the worry regarding the debts resulting from concessional and commercial loans may also have impeded the search for innovative use of aid in leveraging much larger resources.

Another field with potential implications for development cooperation is REDD. The scope for significantly improving conditions for poor people while contributing to reductions of GHG emissions appears to be considerable in forest and land use management (Funder et al., 2009, Funder, 2009). As this seems to attract private non-profit funds,[14] the next step is to mobilise private investment capital. The simultaneous impact on development, mitigation and adaptation may turn out to be important.

Finance for adaptation

Public funds constitute the backbone of the thinking on finance for adaptation. The primary way of mobilising public money is envisaged as being through national budgets in developed countries. It could either be a proportion of GDP (the G77 and China have suggested that between 0.5% and 1% of the GDP of Annex 1 countries be set aside for climate change finance) or a formula based on responsibility and capacity (the Mexican government has proposed a Climate Change Fund to which countries contribute on the basis of their emissions, population and income). A key issue in discussions of such public money is whether funds are additional, particularly to ODA. It is evident that many adaptation activities border on conventional development projects and that it would be inappropriate to separate categorically between adaptation and development. However, it is also inappropriate to lump the two together, partly because the adaptation to climate change is an additional burden placed on developing countries by developed countries, and partly because 'finance to address climate change is, compared to traditional aid allocation, more likely to lead to relatively more finance for water in the Middle East, Asia and Latin America, rather than support for education, health or aid for trade in Africa' (Brown et al., 2010: 4). Conventional and important development concerns would, accordingly, lose out if aid were increasingly to cater for adaptation needs.

[14] 'Philanthropic interests for REDD already exist, with some well known champions such as His Royal Highness the Prince of Wales and several foundations, such as the David and Lucile Packard Foundation, the Ford Foundation and the Blue Moon Fund, already being actively involved in supporting a variety of REDD activities' (Isenberg and Potvin, 2010: 225).

On the ground, however, there is reason to integrate adaptation and development activities, although it is by no means simple (Ayers and Dodman, 2010).[15] Some talk about 'climate resilient development' or 'development in a hostile climate', and an attempt has been made to estimate the additional costs of meeting the Millennium Development Goals (MDGs) in Africa, given the constraints created by climate change (Fankhauser and Schmidt-Traub, 2010). Based on 'a rough sector-by-sector analysis of additional adaptation needs', the authors conclude that the cost of 'climate-proofing' the achievement of the MDGs is forty percent higher than current estimates, meaning that altogether some $100 billion will be needed annually to meet the MDGs in Africa (ibid.: 13). This is not far beyond the promises made in the Copenhagen Accord at COP15, but given the poor record of donor countries in terms of fulfilling their pledges, to rely on the mobilisation of public money in developed countries to finance adaptation in developing countries appears to be a risky strategy.

But there are alternatives to public money raised in developed countries. As already mentioned, the Adaptation Fund constitutes an institutional innovation partly because developing country representatives have a majority in its governing structures, and partly because its funds are based on a two percent levy on the emission permits sold by the CDM. The resources stem from private actors and are mobilised by an international body, the CDM Executive Board. Accordingly, they are not affected by the politics associated with transfers of public money from developed to developing countries. The funds generated are, however, minuscule compared to the needs mentioned above. This is why consideration has been given to ways of increasing these revenues. One way of doing so would be to extend the levy to other mechanisms of the Kyoto Protocol, notably the International Emissions Trading (Müller, 2008: 17). The two main objections concern a levy's interference with the market mechanism, possibly encouraging informal trading of allowances to emit GHG (Assigned Amount Units, AAUs), and the national collection of the levy creating the problems mentioned, related to the transfer of resources between countries. However, one Norwegian proposal has tried to deal with these two objections by suggesting withholding a small proportion of the AAUs allocated to different countries according to an international agreement on emission targets. The withheld AAUs could then be auctioned internationally, and it is estimated that the annual revenue from such an arrangement could amount to $14 billion (Spratt, 2009: 39, Müller, 2008: 17-

[15] Jessica Ayers and David Dodman (ibid.) identify three different approaches to adaptation and development: 'Stand-alone' adaptation, 'climate-proofing' development, and adaptation as development.

18). A condition for this is nevertheless an international agreement putting a cap on emissions, and this agreement is still off the cards.

In the search for alternative ways of funding adaptation, different criteria have been suggested. One is that international mobilisation and collection of resources would avoid certain political problems compared to national mobilisation and collection. This is supported by concerns that have been raised in relation to adaptation: developing countries emphasise that funds should be new and additional, and this is much more likely if they are mobilised internationally. Also, in terms of predictability, domestic resources are more uncertain, given the changing nature of national politics. On the other hand, developing countries may be concerned that international mobilisation of resources is unfair, especially if it is to involve them. This depends, of course, on the nature of the sources, and certain proposals ensure the self-selection of relatively wealthy and GHG emitting actors (e.g. an international air travel adaptation levy)(Müller, 2008: 21-25). Another criteria is that funding from diverse sources is politically more feasible than if the funding is concentrated on a few sources (Spratt, 2009).

Based on such criteria and concerns, and adding assessments of efficiency and ease of implementation, the following funding mechanisms for adaptation have been suggested (ibid.):

(i) The Norwegian AAU proposal focusing on the international auctioning of national carbon emission permits. It is estimated that this proposal could mobilise $14 billion a year.
(ii) An international air passenger adaptation levy, applying a levy of $6 to all international economy flights and $62 to business class flights. The Maldives government proposed this idea on behalf of the least developed countries in December 2008, and the proposal is expected to raise $10 billion a year.
(iii) An international maritime emissions reduction scheme in the form of a levy on ships above a certain size from Annex 1 countries. It is estimated that this proposal, which is based on a relatively concentrated mobilisation of resources in the sense that a single industry (not individual passengers) will have to bear the costs, could raise $15 billion.
(iv) A currency transaction tax in the form of a levy on the exchange of currencies. This levy has been suggested because this activity has never been taxed and because there is a very close correlation between countries and regions with many currency transactions and those with a significant carbon

footprint; however, it is not directly linked to GHG emissions. A levy of 0.005% could be expected to mobilise $40 billion a year.

While these proposals may have considerable advantages from a theoretical point of view, and while collectively they are not far off the target of raising $100 billion a year for adaptation in developing countries, their political feasibility is not obvious. They all require international agreement of a kind that has been realised only in very rare cases, one of which may be the 1987 Montreal Protocol on ozone-depleting substances (Ackerman, 2009: 10-11).

Implications for international development cooperation

The characteristics of and trends in climate change negotiations point in quite different directions seen from the perspective of international development cooperation. Let us summarise the most important elements.

Climate change negotiations are often framed as a *South-North struggle*. Countries in the South view the negotiations as a field through which the North should be forced to compensate for many of its historical wrongdoings. While these wrongdoings officially concern large GHG emissions with devastating climatic consequences in the South, they are undoubtedly heavily influenced by the broader historical legacy of domination and exploitation that characterises the relationship between developed and developing countries. The framing of the climate change negotiations in terms of a South-North struggle is also a result of the last forty years of global negotiations, where the South-North divide has been prominent, regardless of the subject.

A significant element strengthening the South-North struggle is the existence of *normative principles*, some of which have been stated in officially recognised documents. 'The polluter pays', 'common but differentiated responsibilities and respective capacities' and 'per capita emission rights' are notions that provide developing countries with ammunition in the normative struggle. There is nothing like this in the area of development cooperation.

On the other hand, while being a discursive truth, the unity of the South is a myth when it comes to reality. The *diversity of political interests* becomes manifest once the South is broken down into the categories of emerging economies, small island states, petroleum-exporting countries and least developed countries. Moreover, many developing countries cannot afford to wait until the South becomes sufficiently strong to pressurize the North into paying. Climate change is already a part of their reality, and there is an increasing *recognition that the South has to participate* in climate change negotiations. These elements mitigate the South-North struggle and create opportunities for cooperation.

Procedural and distributional justice has to some extent been institutionalised in climate change negotiations. The organisation of the UNFCCC, with its annual Conferences

of the Parties and of the GEF, ensures a higher degree of participation and influence for developing countries compared to many other multilateral institutions. In principle, developed countries have also accepted that they should provide financial support for climate change actions in developing countries. An unfortunate consequence of the institutionalisation of climate change cooperation is the emergence of *cumbersome, complex and inefficient procedures and negotiations* with respect to both policy-making and implementation. This inefficiency may actually undermine the system, as it triggers initiatives outside the UNFCCC framework.

Therefore, the fragmentation of funds, the increasing role of the World Bank in the field of climate finance and the climate policy initiatives taken by bodies like the G8 and the Major Economies Forum on Energy and Climate all point to *a certain marginalisation of the institutions favouring the influence of the least developed countries*. If public money for mitigation and adaptation in developing countries is channelled through bilateral funds or multilateral banks, the attempts to make climate money something different from aid money will have failed, and the current organisation of development cooperation is likely to be strengthened.

Another aspect that is likely to weaken the influence of developing countries is the possible integration of *sector-based agreements* as a significant part of the future climate regime. These agreements are technically complicated, open up a space for commercial lobbyism, may be elaborated in forums with unequal representation and disregard concerns regarding distributional justice. However, they may be politically easier to bring about. Sector-based agreements are likely to reduce the implications of climate change negotiations for development cooperation.

With respect to *policy targets and climate policy integration*, climate change negotiations have not come far, and the flow of ideas, if anything, appears to run from development to climate cooperation rather than vice versa. There are conspicuous similarities across the discussions of Climate Policy Integration and Policy Coherence for Development. Given the considerable difficulties these initiatives face, it may be worth linking the two.

A further significant experience from climate change negotiations is the incompatibility of *fairness* and *feasibility*. Feasible proposals, meaning proposals that major emitters are prepared to consider, are often not very cost-effective or environmentally effective, and they rarely include distributional considerations. This indicates the strength of national interests, which is furthermore underlined by the fact that

the well-documented need for action on climate change has not been able to overcome national interests in inaction.

Given these contradictory characteristics of climate change negotiations, the implications for international development cooperation are not evident. Much depends on how the negotiations will unfold in the coming years. However, three overall conclusions can be drawn:

1. Climate change negotiations have the potential to change relations substantially between developed and developing countries. If a breakthrough occurs with the adoption of a global deal on climate change and the emergence of a system of global governance with developing countries having a say, international development cooperation is likely to change comprehensively. It may be expected either to change to accommodate the more equal relationship between developed and developing countries in climate change, or to be dismantled because neither developing countries nor tax-payers in developed countries wish to pursue cooperation. This is all the more likely if the global deal includes internationally mobilised resources (e.g., through taxes, levies or the auctioning of emission allowances) for adaptation and mitigation in developing countries. In that case, the financing of development cooperation may also change.

   Currently, the likelihood of a global deal on climate change appears small. An incremental process of separate agreements seems more likely. If any such process is characterised by sector-based agreements, initiatives outside the UNFCCC framework, bilateral funds and an increasing role for multilateral banks, the implications for development cooperation may be much less dramatic. However, a global deal cannot be ruled out if a climate change-induced natural disaster should hit countries that are major actors in the negotiations. Historically, significant institutional change has taken place during or immediately after major crises, and climate change has precisely the ability to produce such crises.

2. On a number of more specific points, development cooperation may be inspired by approaches and issues in climate change policies. The use of public money to mobilize private capital is one such issue which may be of relevance, particularly in middle-income countries with many poor people. It is estimated that three quarters of the world's poor people now live in middle-income countries (Sumner, 2010) where private capital may have a role to play in service delivery even to poor people. On other points, synergies between climate change initiatives

and development cooperation may be explored. One such point could relate to REDD, which has significant mitigation potential and may support the ability of poor people to live from forests. Where development cooperation is focused on business and energy development, synergies with mitigation efforts may be sought in pursuing low-carbon options and technological development. Moreover, climate change and development cooperation share the feature that they both address a problem that is significantly influenced by other policy fields. Their respective ambitions to create Climate Policy Integration and Policy Coherence for Development may well benefit from closer cooperation.

3. With a heavier emphasis on support for adaptation financed by ODA, important items on the contemporary development agenda may lose out. The pressure on developed countries to finance adaptation in developing countries is likely to mount in the coming years, and given current trends to cover these expenses within the aid budget without boosting it, resources could easily be diverted from important development problems that do not fit an adaptation agenda. Africa and education activities appear to be particularly vulnerable in this context (Brown et al., 2010). Therefore, while the climate change and development agendas have much in common, it would be a major mistake to subsume development cooperation into an adaptation framework. The risk of watering down the poverty reduction focus of development cooperation is real.

A final note: when climate change and development cooperation are compared, the lack of trust stands out as a crucial problem in both fields. However, while the positions appear relatively antagonistic with respect to climate change, in development cooperation attempts have been made to address the deficiency of trust. The most important initiative in this field is the Paris Declaration, with its focus on ownership and mutual accountability. It remains, however, a technocratic device that never has gained political support. If this were to change and the ideas of the Paris Declaration came to permeate development cooperation, a more trusting relationship between developing and developed countries could be created, which could have positive implications for climate change negotiations as well. Such a development would require that aid resources are no longer diverted according to foreign or domestic policy concerns, but focus on development objectives, including poverty reduction.

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