

## Who should pay for adaptation?

Summary of the on-line discussion on [www.fiacc.net](http://www.fiacc.net) October 2004

On 26 October 2004, an e-mail discussion was initiated at the FIACC platform (Future International Action on Climate Change Network, [www.fiacc.net](http://www.fiacc.net)) on "Who Should Pay for Adaptation". A kick-off discussion paper was prepared and posted prior to discussion to help focusing the exchange of opinions. Over 230 experts and interested subscribers to the newly implemented e-mail distribution list either contributed actively or followed discussion until 9 November 2004. During the discussion period, 56 contributions were posted by 24 active participants, offering views from different perspectives. Some papers and articles relevant to the topic were shared with other subscribers.

The kick-off paper presented three options for financing adaptation: a) voluntary contributions to the existing funds under the UNFCCC b) to allocate the payment responsibilities among countries according to their historic emission or levying a global carbon tax of 1\$/ton CO<sub>2</sub> on current emission and c) to fund adaptation via ODA. Three questions were raised to steer discussion:

- 1) Who should pay for adaptation?
- 2) How should the contributions of the individual countries (or other entities) be determined?
- 3) What would be the appropriate way to make these resources available?

### Summary of discussion points

**What is adaptation:** Before addressing the question "Who should pay for adaptation" the questions was raised "What is adaptation" since the issue of financing adaptation will to some extent depend from what is really understood by adaptation.

It was stressed that the IPCC and the UNFCCC define "climate change" differently and therefore also adaptation to it. Whereas the Third Assessment Report of the IPCC defines adaptation as "adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects or impacts", the UNFCCC definition would be more narrow, focused only on adapting to those impacts resulting from human interference. It was highlighted that further definitions can be found in the scientific literature, among others in Smit et al. (2000).

In the IPCC definition, adaptation could include measures to reduce or avoid damage from climate changes; impact restoration, repair and compensation, including insurance coverage; as well as the general adaptation capacity enhancing through economic development.

Although damage restoration may not be understood as "adaptation", damage prevention and restoration should both be addressed under the question of "who should pay for adaptation". It was mentioned that it would be inappropriate to classify general economic development efforts as an adaptation process because doing so would require large amounts of money and divert the attention from urgent direct adaptation needs.

**Who Should Pay for Adaptation?** It was mentioned that the principles "polluter of the past pays" should be dominant, but the principle "ability to pay" should also be taken into account. It was referred to former communist countries that have been heavy polluters in the past, but may be less in a position to pay for historical pollution today.

With different understanding and emphasis about justice, equity, and efficiency, the following other options were suggested:

- 1) The North and the wealthy classes in the South should pay for adaptation according to their accumulative historic emissions.
- 2) The adaptation payment responsibility should not be on the possession of wealth, but on emissions. People should be required to pay because they cause the impacts, not because they are rich.
- 3) A combination of direct funding and ODA, with existing ODA (fund contribution from countries according to their GNP) for adaptation to natural climate change and the industrialized countries paying for adaptation to human-induced adaptation needs according to their responsibility for climate change.

- 4) Each country has to pay: Since developed countries also face adaptation needs, developing countries can learn from the successful adaptation experiences from developed countries.

There were different viewpoints regarding the last proposed option. It was stressed that successful experiences from developed countries cannot solve the pressing adaptation needs in developing countries and thus developed countries should pay for adaptation because they are largely responsible for climate change.

**Size of the adaptation burden & individual contributions:** Discussion on 'who should pay for adaptation' lead to the questions 'what is the adaptation burden' and 'how much to pay for adaptation by each country'.

To decide on the payment volume per country, the scope and size of the adaptation burden (adaptation support + impact compensation) should be determined first. Such a burden should be assessed on the precondition of long-term climate change control target. It was felt necessary to establish a baseline to judge claims for compensation of damages and losses to guarantees transparency and absence of abuse and corruption.

Contributions of individual countries could be based on past emissions since the existing adaptation needs are caused by past emissions. Future adaptation needs are likely to be caused by future emissions. It was further proposed that current citizens of industrialized countries should also inherit the environment debts of their ancestors and pay for adaptation. Some participants disagreed with such 'historic responsibility' approach and argued that the current generation did not participate in the decision-making of past generations, thus the current generation should not be responsible for something beyond their control.

To define 'historic responsibility', it has to be decided on a starting line for accumulative emission calculation. Several proposals were put forward: a) before industrialization (total accumulative world emission, weighted with GNP level of each country), b) 1950 (after the two world wars), or c) 1990.

There was some debate how the Contraction & Convergence model could accommodate historical responsibility. It was mentioned, that accelerating the rate of convergence would consider this. Advocators: Emission is a public bad and "the right to emit" also harms the emitters. The newly industrializing countries should not be permitted to emit because for a long time they were victims of the emissions from other countries. Oppositions: it neglects historic emission, is too simple and cannot take into account different national circumstances. Moreover, it disadvantages newly industrializing countries that only recently have seen growing emissions and agreeing on a convergence year will be very difficult.

**Linking Adaptation payment to mitigation payment:** The total cost of climate change is that of mitigation *and* adaptation. Mitigation and adaptation contribution of a country could be interchangeable. As a link, one option is a levy on financial transfers for mitigation, which is already partly in the UNFCCC/Kyoto system as the levy on CDM.

Defect: not an implementation of the polluter pays principle and the transfers are only marginal effects of targets of countries. A country with high emissions and a loose target would not need transfers to comply with its target and therefore would not contribute to the efforts to fund adaptation. Advocate: allowing some interchange may be of practical value for achieving global participation in mitigation and adaptation efforts.

Others mentioned that the mitigation costs should be shared according to ability to pay (GDP) and the adaptation costs should be shared according to historical responsibility (cumulative emissions).

How to raise adaptation funds? There are several options on how to raise money for adaptation:

- One option is to use ODA. As most of the necessary adaptation work is so closely linked to ODA, it is naturally to consider funding for adaptation under an extended ODA-Budget. Advocate: spending for adaptation under ODA could transparently be reported on, and additional money would need to be put into ODA for mainstreaming adaptation into general ODA planning and work. Defect: ODA is charity based and means voluntary contributions. Funding for adaptation is

historic debt-based and should be mandatory. In the policy agenda funding for ODA and funding for adaptation should be discussed separately. The question remains: the taxpayer or the past and/or current and future polluter proportionally to his emissions? Indeed, paying from ODA just transforms the question to who should pay the additional ODA-budget.

- To expand the "transaction fee" on CDM to cover all emissions trading transactions as it the fund be both much larger and more fairly distributed;
- Adaptation can be funded with a levy, e.g. imposed by all countries on oil imports or on greenhouse gas emission.
- To reserve a portion of all the global regime's allowances for adaptation funding and these AAU's created in the second commitment period instead of giving them to countries for free.
- To establish a global Climate Impact Relief Fund managed by the UN through using fees, oil tax. As it will take a long time to set up special adaptation funds and adaptation funding is an urgent matter. In the short run, ample public awareness campaigns to get the people vulnerable to climate change take some adaptation measures may be more effective.

Whatever forms the adaptation financing takes, there is always the question of how to get the money needed from the countries that should and are able to pay. It will be extremely difficult to persuade and motivate the polluters to pay – making more ODA contributions or other funds for adaptation. The US, with its reluctance to undertake mitigation commitment, is unlikely to approve such additional payment. Without the US participation, the adaptation financing mechanism cannot be global and effective. Currently, this is not discussed and for the time being, there seems no way out.

**Market Mechanisms in Adaptation:** There is some room for market mechanisms to address adaptation. Such mechanisms may include some interchangeability between mitigation and adaptation and a market mechanism similar to the CDM and even AAUs for "adaptation responsibility".

One problem in designing market-based mechanisms for adaptation will be that there is no universal metric for the effect of adaptation action. The only comparison between different projects is money spent. An approach is to set obligations at national levels that can be deferred to all sectors of the adaptation payer economies. In this way, governments may choose to contribute to obligations 'directly' or through placing obligations on economic actors. Another suggestion is providing a form of 'equity kicker', much as CDM & JI currently functions or creating a long-term and market-based commitment to adaptation, expressed in 'adaptation units' to help effectively contribute long-term equity streams to adaptation projects.

Difficulty: If the question about who should pay has anything to do with who is responsible for the problem then market mechanisms are unlikely to achieve a just distribution of adaptation funding. Markets may be there to achieve efficient outcomes but they cannot -- and hence should not -- be asked to deliver retributive justice.

**Conclusion:** The world is unlikely to go for a single approach to our question and at the end several "solutions" will coexist. The central issue with adaptation funding is that mechanisms that are feasible in the short run are neither fair nor scalable; while mechanisms that are fair are not currently feasible and at the very least difficult to scale. Possible compromises - taxes on flex-mechs transactions or the allocation of some fraction of global permits to an adaptation fund for sale on the global market- are only almost fair, since the costs are only paid by traders or purchasers, not by emitters.

Voluntary contributions on a significantly larger scale is the only short-term solution for both trust building and for "learning by doing". The bigger issue, however, is developing "willingness to pay".

Finally, more efforts need to be made to ensure that any international financial assistance for adaptation in poor countries is directed towards the most vulnerable communities within those countries. Adaptation, in the long term, relies on technology advances, institutional arrangements, the availability of financing, and information change. Financing just represents part of the solution needed.

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