

# Mitigation Talks

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### From Series Editor's Desk

This year there has been an increase in impetus on the issue of enhancing mitigation both for the quantified economy-wide emission reduction targets, mitigation commitments or actions of the developed countries, and the nationally appropriate mitigation actions (NAMAs) by the developing countries. There were a series of informal sessions and workshops in May 2012 in Bonn and September 2012 in Bangkok. The central theme of this issue is to provide a synthesis of current discussions and debates. The issue also highlights views of stakeholders and developments at the national level on NAMAs.

The Diplomacy section of this issue provides an overview of the current discussions in the field of climate change. The first article briefly highlights what the outcome at Durban entails for mitigation and gives a developed country perspective on the key decisions taken in the context of NAMAs including financial support. The article also introduces a new initiative, the Nordic Partnership Initiative on Up-scaled Mitigation Action (NPI) by the Nordic Countries (i.e., Denmark, Finland, Iceland, Norway and Sweden) through the Nordic Council of Ministers, in partnership with Peru and Vietnam to provide readiness to benefit from international climate finance and/or the carbon market for supporting up-scaled host country mitigation actions. The second article synthesises the recent discussions of a registry for NAMAs and provides insights on key issues to watch out. The article points out several elemental questions that still exist, especially in the context of financing NAMAs. The article further argues that it is important to understand the 'appropriateness' of not only actions, but the sources and type of support as well. The third article in this section argues that developed country Parties have a greater onus with respect to emission reductions and synthesises the current discussions to point out political and technical challenges to ascertain their ambition level. The article argues that overcoming these challenges might help build trust amongst the developing countries. The Perspective section highlights some of the ideas that are crucial in defining and designing NAMAs. The first article gives an overview of preliminary results of a pilot survey aiming to guide the conceptual framework that defines 'appropriateness' and the criteria for prioritizing mitigation actions as NAMAs. An important finding is that NAMAs must be consistent with the national development goals. On an operational level, guidance from the international community and from governments is sought to bring further clarity. The second article synthesises a NAMA database to directionally indicate how NAMAs are being developed. The article through a Sector-Activity Matrix maps activities under consideration for ready referencing. The first article in BASIC brief section synthesises the domestic debate in India in the context of mitigation. The article gives three arguments — the security argument, the inequality argument, and the high table argument — behind India's proactive choice to develop mitigation policies. The second article extracts key normative threads from the evolving discourse on mitigation in developing countries among researchers, civil society, and policy makers. The findings indicate that reducing inequality and building capabilities are key criteria of appropriateness.



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## NAMAs WITH INTERNATIONAL FINANCE

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### Durban highlighted the need to enhance ambition

After intense and prolonged negotiations, the Durban Platform was successfully concluded on 11 December 2011. As part of the platform, the Parties decided to launch a work plan on enhancing mitigation ambition. According to the latest estimates, the mitigation gap to a global emission level that is reasonably consistent with the 2 °C target agreed in COP-16 is somewhere between 6 to 11 GtCO<sub>2</sub> equivalent per year<sup>1</sup>. The Parties will now identify and explore options for a range of actions that can close the ambition gap with a view to ensuring the highest possible mitigation efforts by all Parties.

This Durban outcome, therefore, has the following implications: (i) all countries should identify or review their cost-effective emission reduction potential and developing countries should aim at structuring their potential as nationally appropriate mitigation actions (NAMAs); (ii) more international finance is needed for the implementation of these NAMAs; and (iii) it remains of paramount importance that global climate policy remains cost-effective, i.e., there is no room for sub-optimal solutions, where some countries pay—in a global context—remarkably high abatement costs for domestic emission reductions.<sup>2</sup>

### Durban clarified NAMAs

The Durban package of decisions also included other relevant decisions regarding NAMAs, which will help to clarify their characteristics and advance their further development.

First, the character and functioning of the registry for NAMAs was further clarified. The UNFCCC secretariat will start developing the registry through a prototype web-based platform in 2012. The registry will contain information on NAMAs seeking international support as well as other individual NAMAs.

Second, a new market-based mechanism, operating under the guidance and authority of the COP, was defined to enhance the cost-effectiveness of, and to promote, mitigation actions.<sup>3</sup> This mechanism may, subject to conditions to be elaborated, assist developed countries to meet part of their mitigation targets or commitments under the Convention. It must also be guided by the following principles<sup>4</sup>:

- (a) Ensuring voluntary participation of Parties, supported by the promotion of fair and equitable access for all Parties;
- (b) Complementing other means of support for nationally appropriate mitigation actions by developing country Parties;
- (c) Stimulating mitigation across broad segments of the economy;
- (d) Safeguarding environmental integrity;
- (e) Ensuring a net decrease and/or avoidance of global greenhouse gas emissions;
- (f) Assisting developed country Parties to meet part of their mitigation targets, while ensuring that the use of such a mechanism or mechanisms is supplemental to domestic mitigation efforts; and
- (g) Ensuring good governance and robust market functioning and regulation.

Third, the reporting guidelines for non-Annex I countries' biennial update reports make clear that developing country Parties should provide information on international market mechanisms in the context of their mitigation actions.<sup>5</sup>

It is, therefore, clear that NAMAs may take different forms and have various sources of finance in this new UNFCCC architecture. Many studies further indicate that the large financial flows required for climate stabilization—and thereby also NAMAs—should, in the long run, be mainly private in composition due to the dominant scale

<sup>1</sup> UNEP. 2011. "Bridging the Emissions Gap",

<sup>2</sup> See paragraphs 45 to 55 of the Outcome of the work of the AWG-LCA for COP-17.

<sup>3</sup> Paragraph 83 of the Outcome of the work of the AWG-LCA for COP-17.

<sup>4</sup> Paragraph 80 of Decision 1/CP.16.

<sup>5</sup> Paragraphs 12 and 13 of Annex III to the Outcome of the work of the AWG-LCA for COP-17.

of global private capital markets<sup>6</sup> and growing fiscal challenges in many developed economies. At the same time, however, public policy and finance plays a crucial dual role, first, by establishing the incentive frameworks needed to catalyse high levels of private investment in mitigation and adaptation activities, and second, by generating public resources for needs, which private flows may address only imperfectly.<sup>7</sup>

The new market-based mechanism defined in Durban, hence, provides an interesting opportunity to leverage international finance for NAMAs. In practice, the availability of international finance will most likely depend on a number of issues, such as the quality and transparency of the NAMAs, including measurement, reporting and verification (MRV) systems and the related institutional arrangements; as well as the structure, certainty, and duration of the incentives created for the private sector.<sup>8</sup>

### **Nordic countries seek progress on NAMAs with Peru and Vietnam**

The lack of practical insight on implementation of concepts, such as supported NAMAs and the new market-based mechanism, as well as the fact that the existing market mechanisms are not sufficient to help fulfill the ambition gap, prompted the Nordic countries to start a new initiative on NAMAs. The Nordic Partnership Initiative on Up-scaled Mitigation Action (NPI)<sup>9</sup> is an initiative between the Nordic Countries (i.e., Denmark, Finland,

Iceland, Norway, and Sweden) through the Nordic Council of Ministers,<sup>10</sup> in partnership with Peru and Vietnam. The overarching aim of the project is to improve the partner countries' readiness to benefit from international climate finance and/or the carbon market for supporting up-scaled host country mitigation actions. NPI was launched in Durban.

The Nordic Partnership Initiative focuses on the waste sector in Peru, and on the cement production sector in Vietnam. The programmes shall address gaps in data availability and quality and technical and institutional capacity, as well as relevant technical, financial, and other barriers to up-scaled mitigation and private-sector engagement. This includes collection of updated data on emissions and emission reduction potential, identification of barriers to mitigation action, and proposals for addressing them. The programmes should improve the capacity to generate and implement strategies across different levels of government and addressing the private sector as well as to build an MRV system of international standards. An important task is to identify appropriate support instruments for mitigation action, including potential sources of finance, funding requirements, and support criteria.

The two programmes are scheduled to start during 2012. The Nordic countries hope that the initiative serves as a useful input to the international community and as encouragement to others to take similar action.

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<sup>6</sup> See, e.g., UNFCCC. 2007. "Investment and Financial Flows to Address Climate Change", October; UNFCCC Secretary-General's High-level Advisory Group on Climate Change Financing, "Report of the Secretary-General's High-level Advisory Group on Climate Change Financing"; and "Mobilizing Climate Finance", A Paper prepared at the request of G20 Finance Ministers, 6 October 2011.

<sup>7</sup> "Mobilizing Climate Finance", A Paper prepared at the request of G20 Finance Ministers, 6 October 2011.

<sup>8</sup> See, e.g., Sullivan. 2011. "Investment-Grade Climate Change Policy: Financing the Transition to the Low-Carbon Economy" (September), Report commissioned by the Institutional Investors Group on Climate Change (IIGCC), the Investor Network on Climate Risk (INCR), the Investor Group on Climate Change Australia/New Zealand (IGCC), and the United Nations Environment Programme Finance Initiative (UNEP FI). More on supported NAMAs also in Annual Status Report on Nationally Appropriate Mitigation Actions (NAMAs) by Ecofys, the Energy Research Centre of the Netherlands (ECN), and the Centre for Clean Air Policy (CCAP); details available at [http://www.ecofys.com/files/files/namas\\_annualstatusreport\\_2011.pdf](http://www.ecofys.com/files/files/namas_annualstatusreport_2011.pdf)

<sup>9</sup> More information on NPI is available at <http://www.norden.org/en/news-and-events/news/new-nordic-climate-initiative-launched-at-cop17-in-durban>

<sup>10</sup> The Nordic Council of Ministers is the formal body of co-operation between the Nordic governments and among the oldest and most extensive regional cooperations in the world. For details, see [www.norden.org](http://www.norden.org).

# Evolution of the NAMA registry: A precautionary note

Ritika Tewari, Research Associate, TERI

Discussions on NAMAs since its conception in Bali have evolved and revolved around two key issues: (i) measurement, reporting, and verification (MRV) of actions and (ii) recognition of developing country actions and the support for enabling such actions.

A registry with key functions of recording actions and facilitating support for NAMAs was proposed by South Africa and the Republic of Korea in their submissions to AWG-LCA in 2008 (post Bali). The European Union (EU) had supported the proposal, highlighting its significance for arrangement of support.<sup>1</sup> The decisions on the functions and design of a registry came in subsequent COPs (COP 15, 16, and 17). COP 15 at Copenhagen decided that NAMAs, both domestic and supported, will be recorded in a registry along with the relevant technology, finance, and capacity-building support.<sup>2</sup> Parties were invited to submit NAMAs envisaged by them in Cancun and the secretariat was directed to start work on understanding the underlying assumptions of the diversity of mitigation actions submitted by Parties and identifying the support needed for the implementation of the identified actions.<sup>3</sup> The role of the registry was restated as a database of NAMAs (domestic and seeking international support) to act as an interface between the Annex I Parties; climate funds like Global Environment Facility and the Green Climate Fund; multilateral, bilateral, and other

public donors; and private and non-governmental organizations (which will provide support) and Non-Annex I Parties (where these actions will take place).

The past year has seen rapid progress on the design of the registry. In COP 17, Parties agreed that the registry should be a robust, web-based platform, to be developed and managed under the auspices of the UNFCCC secretariat. A prototype of the registry was discussed during SBI 36<sup>4</sup> from 14–25 May 2012 in Bonn, and Parties were invited to provide their views on improving the design of the prototype of the registry and its functionalities.<sup>5</sup> The key issues under debate were as follows:

- *Match-making function of the registry:* The match-making function of the registry was argued by the Parties, with EU and Australia doubting the utility of the ‘automatic query function’ (see box on NAMA registry) of the prototype. They expressed concerns that it might limit the usefulness of the registry by deterring users to try alternative possibilities. The African Group, however, welcomed it and additionally suggested a provision for secretariat’s help-on-demand in the match-making. An automatic matching might serve as a useful tool as many nations have limited technical capabilities and human resources availability. Also, it can act as an easy tracker in future when the registry database has larger number of NAMA and support applications. The criteria for matching and

<sup>1</sup> Developing countries have indicated at different occasions that the registry has to be consistent with Article 12.4, para 4 of the convention, which provides that “Developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reductions of emissions, and increments of removals of greenhouse gases, as well as an estimate of the consequent benefits”.

<sup>2</sup> Copenhagen Accord: Non-Annex I Parties to the Convention will implement mitigation actions, including those to be submitted to the secretariat by non-Annex I Parties in the format given in Appendix II by 31 January 2010, for compilation in an INF document, consistent with Article 4.1 and Article 4.7 and in the context of sustainable development. Least developed countries and small-island developing States may undertake actions voluntarily and on the basis of support.

Source: <http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>

<sup>3</sup> The informal note by Chair of AWG-LCA in the recently concluded session of the AWG-LCA, held in Bangkok, Thailand, from 30 August to 5 September 2012, Ad Hoc Working Group on Long-term Cooperative Action states “to continue the process of understanding of the diversity of NAMAs in the period up to 2014, on the basis of paragraph 34 of decision 2/CP.17, under the SBs.”

<sup>4</sup> SBI 36, Draft Conclusions Proposed by the Chair. Details available at <http://unfccc.int/resource/docs/2012/sbi/eng/110.pdf>

<sup>5</sup> Source: [http://unfccc.int/files/cooperation\\_support/nama/application/pdf/improving\\_the\\_design\\_of\\_the\\_prototype\\_of\\_the\\_registry.pdf](http://unfccc.int/files/cooperation_support/nama/application/pdf/improving_the_design_of_the_prototype_of_the_registry.pdf). Parties were requested to submit their views, in addition to discussions during SBI 36, on further improvement of the design of the prototype of the registry and its functionalities by 8 June 2012. Only Australia, EU, USA, and African Group responded.

the menu options under each criterion, however, need to be carefully stated.

- *Flexibility:* To ensure complete representation of the diversity of the types of actions<sup>6</sup> and support, the prototype being developed has a minimum number of mandatory fields (as of now) (see Box on NAMA registry). However, EU and Australia suggested differentiating the flexibility requirements between NAMAs requiring support for preparation and implementation, respectively.
- *Reliability of information:* The EU and United States of America (USA) raised concerns on ensuring reliability of submitted information on NAMAs and suggested the secretariat to engage in a verification process. This, however, is beyond the secretariat's mandate and would have to be discussed among Parties. Notably, no similar process was suggested for support.
- *Timelines:* Timelines for submission of information as well as support were also discussed with reference to financing models used by multilateral organizations (Australia) as well as for NAMAs already under implementation and/or getting support (EU).

The registry prototype, along with a user manual is set to be released in November 2012 and the final (beta-version) of the registry will be released in COP 18.

Apart from the match-making function, the reporting role of the registry can also serve as a key avenue for effective measurement, reporting, and verification of actions and support. The Copenhagen Accord (COP 15, 2009) provided modest elaboration of the concept of MRV, deciding that voluntary actions by Parties will be subject to their domestic MRV (with a provision of International Consultations and Analysis) while NAMAs undertaken through international support will be subject to international MRV (as decided by Parties). To ensure comparability of MRV done by parties, COP 17 directed SBSTA<sup>7</sup> to develop generic guidelines for domestic MRV of domestically supported NAMAs.<sup>8</sup> However, as the need for support is paramount for enabling actions, MRV concentrating on support is as important as the actions. Hence, guidelines for MRV of support, in

line with guidelines for MRV of NAMAs, would also need to be charted out to ensure adequate fulfillment of Decision 1/ CP13/ II B (ii). The preliminary reporting templates released by the Secretariat seek information on:

- The amount of financial, technological, and capacity-building support provided to Non-Annex I Parties and the type of support (new and additional support) (see Box on NAMA registry).
- Source of funding (public funding, market-linked sources, and private funding) as decided in COP 17.

Several elemental questions still exist on the way NAMA discussions are progressing. These are:

- While the merit of a registry in channeling international financial support is clear, the exact procedural requirements for the same remains unclear at present. Additionally, the level of engagement of the registry in doing 'match-making' between actions and available support is also to be debated and negotiated further.
- Ambiguity exists regarding the varied sources of international funding. While the allocation of funds through Green Climate Fund (GCF) will be based on multilateral agreements, adequate and appropriate allocation of support to be provided by private, non-governmental, and bilateral donors is still debatable.
- Additionally, the exact modalities and procedures of international support channeled through the Global Environmental Facility (GEF) and GCF is still to be decided. Here, linkages between NAMA negotiations and those for the financial mechanism become apparent.
- National circumstances, including those that limit opportunities for certain types of actions (e.g., introduction of renewable energy sources) or those governing priorities for mitigation in certain sectors (e.g., fuel switching), is an important issue for many developing countries. With the flurry of possibilities on the sources of support, to what degree 'national priority and circumstances' would drive 'nationally appropriate' actions, especially in countries where actions are completely reliant on support, is uncertain. The extent up to which

<sup>6</sup> The preliminary templates released by the secretariat define the following types of actions: national/sectoral goal, national/sectoral policy or programme, strategy, project: investment in machinery or investment in infrastructure and a column for any action other than these.

<sup>7</sup> SBSTA stands for Subsidiary Body for Scientific and Technological Advice, and is a permanent subsidiary body under COP/MOP.

<sup>8</sup> Para 37, decision 2/CP 17, IIB

the most ‘easily available’ support could influence action would also be worth understanding.

These highlight the need for an effective understanding of ‘appropriateness’ of not only actions, but the sources and type of support as well. Multiple factors could determine appropriateness. These would cover environmental, social, and economic issues, including

resource availability, environmental and resource economics, developmental issues like poverty, health, resilience, industry, agriculture, etc., along with an understanding of national technical, financial, regulatory, and institutional capacities of the country. A better understanding of appropriateness could also be useful in effective matching of NAMAs with support.

### NAMA REGISTRY: BASIC DESIGN ELEMENTS\*

#### Registry sections:

- (a) NAMAs seeking international support;
- (b) NAMAs submitted for recognition;
- (c) Information on support for the preparation and implementation of NAMAs; and
- (d) Information on supported NAMA and associated support after matching has taken place.

#### Types of support:

Financial support	Loan (sovereign or private), debt swap, equity, grant, guarantees, foreign direct investment (FDI), and others
Technological support	List of renewable energy technologies, energy efficiency, carbon capture and storage, and others
Technical support	As required by the Non-Annex I Party
Capacity-building support	Institutional development, systemic support (policies, legislative, and regulatory), and human capital

#### Users

The prototype of the registry will be operated by three different ‘user roles’, requiring access rights.

NAMA editors	To create, edit, and submit NAMAs for approval	Multiple per country
NAMA approver	In addition to being NAMA editors, approve and upload NAMAs into the registry for her/his country	One per country
Support editors	To create, edit, and upload entries on information for support	Support editors

Users will also be able to edit and update their entries in the database. Also, the registry will allow Parties to make links between NAMAs. For example, a policy NAMA implemented through individual projects.

#### Functions

The registry will provide for following functions:

- (a) **Recording of NAMAs** to be done by the secretariat in the prototype and automatically in the beta version
- (b) **Multiple-level browsing** that is open to all users
- (c) **Searching** based on following queries:
  - NAMAs seeking support (by country);
  - NAMAs for recognition (by country);

\* Compiled from ‘Information note on the registry’ and ‘Improving the design of the prototype of the registry’. Accessed at [http://unfccc.int/files/adaptation/application/pdf/info\\_note\\_on\\_the\\_registry.pdf](http://unfccc.int/files/adaptation/application/pdf/info_note_on_the_registry.pdf) and [http://unfccc.int/files/cooperation\\_support/nama/application/pdf/improving\\_the\\_design\\_of\\_the\\_prototype\\_of\\_the\\_registry.pdf](http://unfccc.int/files/cooperation_support/nama/application/pdf/improving_the_design_of_the_prototype_of_the_registry.pdf)

- Information on support (by country and entity);
- NAMA country pages

(d) **Matching** of selected fields of NAMAs with the support available through either:

- Manual search, or an
- Automated query using a matching algorithm that will automatically search for sources of support that could potentially aid in the preparation or implementation of that NAMA using selected criteria. A list of sources of support matching the criteria will be generated and e-mailed to the proponent of the NAMA. The function will automatically update the matches on receipt of new sources of support.

The matching algorithm will seek matches for the following information:

- (a) The technology or technologies to be used/supported;
- (b) the types of action to be implemented/supported;
- (c) the type of financial support sought/offered;
- (d) the type of technological support sought/offered; and
- (e) the type of capacity-building support sought/offered.

Matches will be classified as 'full' or 'partial'.

### **Flexibility aspects**

The registry will provide the following flexibility features to ensure that the diversity of actions are incorporated and reflected:

- (a) Minimum mandatory fields (only NAMA title, the NAMA description, and contact details are mandatory);
- (b) possibility to select various options (for sectors, types of support, etc.);
- (c) possibility to edit the information on NAMAs or support at the discretion of the user;
- (d) a 'light' version of the registry is available for use with slow Internet connections; and
- (e) possibility of submission through offline templates that can be sent through emails.

# The rhetoric of mitigation by Annex I Parties: ambition or ambiguous reality?

*Neha Pahuja, Associate Fellow, TERI*

The required level of ambition with respect to emissions reduction can be best premised on (i) environmental efficacy, defined as limiting emissions to a level adequate to prevent dangerous interference with climate system and (ii) equity, defined as the common but differentiated responsibilities and respective capabilities (CBDRRC). The analysis (UNEP, 2010; Kartha and Erikson, 2011) of the proposed quantified economy-wide emission reduction targets under the Copenhagen Accord or the Cancun Agreements,<sup>1</sup> referred to as pledges hereafter, indicate that the current state of affairs defy both. The pledges are inconsistent with respect to the 2°C goal agreed in the Cancun Agreements,<sup>2</sup> thereby putting a big question mark on environmental efficacy. Further, the developed country pledges, according to these studies, are far lesser than the voluntary developing country pledges in terms of absolute mitigation suggesting a shift away from the equity paradigm (of CBDRRC)!

The seventeenth Conference of Parties decided<sup>3</sup> to continue the process of clarifying pledges in 2012. Most of the Parties have since then made submissions<sup>4</sup> and presentations as part of a workshop in May 2012.<sup>5</sup> A look at the submissions suggests that pledges are further hedged by assumptions and conditionalities,<sup>6</sup> making it difficult to assess if the pledges would lead to real emissions reduction, or possibly none at all!

For instance, the US only reinstates its earlier pledge without providing the information as per the prescribed template. In any case pledge suggests emissions reduction in the range of 17% by 2020 compared with 2005 levels, conditional to its 'anticipated energy and climate legislation'. Hence, the submission fails to provide any further clarification on the pledge including the status of the anticipated legislation.

Interestingly, Canada, in its submission, refers to a 17% emissions reduction by 2020 compared with 2005, to be aligned with the final economy-wide emissions reduction target of the US in enacted legislation. Hence, Canada will wait for the US legislation even if the US goes ahead with executive action. Also to note is that the Federal Government is eliminating an accountability measure by repealing the KP Implementation Act of 2007. With repealing of this Act, the government will have no obligation and accountability in terms of emission reductions. This is in addition to the fact that Canada had once indicated that it does not intend to participate in the second commitment period of the KP.

Japan — not so surprising after its indication in Cancun that it does not have any intention to be under obligation of the second commitment period of the Kyoto Protocol — retracted from its initial pledge of 25% emission reduction by 2020 compared with 1990 levels which was of course conditional to an international framework in which all major economies participate and agree on ambitious targets. Instead, it referred to its domestic circumstances after the Great East Japan Earthquake and the Fukushima accident, and mentioned that it is developing its strategy for energy and environment on the basis of which it would propose options for climate countermeasures including emission reduction target for 2020. Implicitly, therefore, the 25% target remains suspended and currently Japan has no commitment.

Similarly, the EU, moving a step backward, has confined itself to the unconditional 20% pledge by 2020 compared to 1990 levels. There is no discussion, whatsoever, on the initial conditional offer of the EU to move to a 30% target, which was of course subject to other developed countries committing themselves

<sup>1</sup> FCCC/SB/2011/INF.1/Rev.1

<sup>2</sup> para 4, FCCC/CP/2010/7/Add.1

<sup>3</sup> para 5 of Decision 2/CP.17

<sup>4</sup> FCCC/AWGLCA/2012/MISC.1, FCCC/AWGLCA/2012/MISC.1/Add.1; nd FCCC/AWGLCA/2012/MISC.1/Add.2

<sup>5</sup> FCCC/AWGLCA/2012/INF.1

<sup>6</sup> Only two Parties have single unconditional targets. Four Parties have presented their lower targets as being unconditional (Australia, European Union, Norway, and Switzerland)



to comparable emission reductions and developing countries contributing adequately according to their responsibilities and respective capabilities.<sup>7</sup> The EU pledge, however, is already part of the EU legislation and EU's Climate and Energy package, and includes both the EU Emissions Trading System (EU-ETS) and the Effort Sharing Decision which cover emissions from sectors not included in the EU-ETS such as transport, buildings, services, agriculture, and waste. It is important to note that the EU submission also includes a specific mention of the EU-ETS Scheme (which has been revised to fully include aviation emissions from 1 January 2012) which now includes the regulation of CO<sub>2</sub> emissions falling within the aviation activities, an issue which according to the Article 2.2 of the KP, is required to be handled at fora such as the ICAO and IMO.

Norway, however, has identified two pledges, first a 30% emission reduction by 2020 and second a conditional pledge of 40% reduction by 2020 based on 1990 levels. While the 30% reduction target will take into account flexibility mechanisms, the 40% reduction target is conditional to a global and comprehensive agreement and is expected to take into account a higher usage of the flexibility mechanisms. Though a higher pledge, it is yet not quite clear how much will be achieved through domestic efforts.

Australia, in its submission has identified a 2020 target range of 5–15% or 25% below 2000 levels. It indicates that 5% is unconditional pledge and equates this to an emissions reduction of 23% below reference level projections by 2020. For further increasing the ambition level the conditions include a global agreement with specific targets for advanced economies, verifiable emission reductions for China and India; and clarity on the assumptions for emission accounting and access to markets. Also, it mentions that assumptions of reference level projections cannot be less ambiguous.

New Zealand, in its submission, is prepared to take on a 'responsibility target' for GHG emission reduction of 10–20 % below 1990 levels by 2020, if there is a comprehensive global agreement. The target, however, is subject to a series of conditions, with the noteworthy conditions of other developed countries making comparable efforts to those of New Zealand, and that advanced and major-emitting developing

countries taking action fully commensurate with their respective capabilities.

To sum-up, while the Annex I pledges are inadequate as suggested by different studies, the estimation of emissions reduction could only be uncertain, given the political and technical issues around the pledges. The conditionalities associated with the pledges are nothing but political devices premised upon 'comprehensive global agreement' and 'comparable efforts' by other Parties. A key to unlock the impasse would be to clarify what entails 'comprehensive' and 'comparable'. Technically, the issues include common accounting rules, use of single base year as reference, use of a single target as opposed to a range, amongst others. Besides, none of the pledges clarify the role of offsets vis-à-vis domestic mitigation efforts. These issues together not only add to uncertainty but also act as a deterrent for developing country mitigation efforts for they might feel cheated, a sentiment instilled with the 'dilution' of mitigation obligations of Annex I Parties in the recent COP decisions. Overcoming the political and technical issues, hence, might help build trust amongst the developing countries.

Going forward, higher level of ambition by the Annex I Parties is a requisite. Besides, Parties should also be urged to propose a single target as opposed to a range; remove conditionalities; use a single base year and other common accounting rules; and present clarity on domestic efforts and the role of offsets to enable the establishment of ambitious, transparent, economy-wide emissions reduction commitments for all Annex I Parties. This is of utmost significance given that in Doha the AWG-LCA is expected to be terminated.

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<sup>7</sup> This conditionality is, however, not adequately defined.

# Designing NAMAs: insights from a survey

Swati Agarwal, Research Associate, TERI

As part of an ongoing study by TERI, a preliminary survey was carried out to record the views on the framework and criteria for prioritizing mitigation actions as Nationally Appropriate Mitigation Actions (NAMAs), which would facilitate their appropriate design in a conceptual framework. For this purpose, the views from different stakeholder groups were recorded through a survey that comprise questions for ranking against different indicators and multiple preference-choice questions to which the participants responded. The questions focus on two aspects:

- Designing an appropriate NAMA: It is essential to enumerate the factor or factors considered by the stakeholders to be ‘high on the importance quotient’ while designing a NAMA for a country.
- Facilitating the operationalization of a NAMA mechanism: The aim to promote and scale-up NAMA activities in a country in order to achieve the dual purpose of addressing developmental concerns as well as climate change mitigation potential would require an imperative understanding of the factors facilitating their operation.

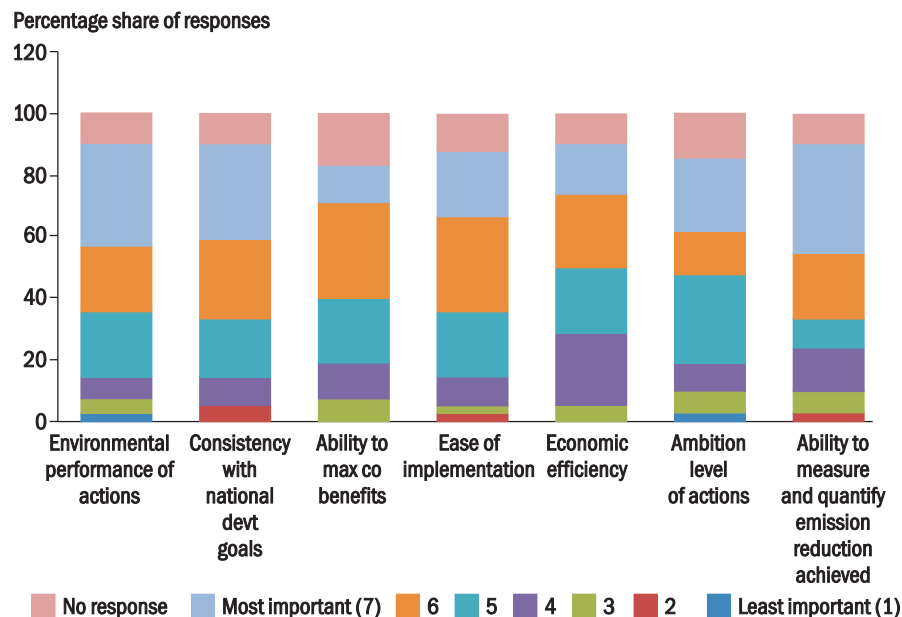
Involving a large group of professionals, the survey was administered twice; first, at the stakeholder

consultation meeting of the NFA-NAMA project held at Delhi in August 2011, where 18 professionals from different professional backgrounds participated; and second, in October 2012, when 24 stakeholders from South Asia participated in the survey.

The respondents comprise researchers/academicians (38%), professionals from not-for-profit organizations (38%), representatives from UN/multilateral agencies/inter-governmental organizations (13%), business and private sector (8%), representatives from national and local government (5%), and others (8%). More than 80% of the respondents indicate possessing basic knowledge of the issues around NAMAs with primary professional interest in mitigation, adaptation, development issues, and future climate regimes.

On the issue of the *importance of criteria while designing NAMAs*, the survey ranking associated with different parameters reveal some very fascinating results. The level of importance associated with each parameter for the design of NAMAs as indicated by the respondents is depicted in the figure below.

‘Consistency with national goals’ was considered the most important criteria while designing NAMAs. This reveals that though the developing countries



Parameters that are important while designing NAMAs

are eager to make an attempt to reduce their GHG emissions, they are not willing to compromise on national development goals. Therefore, mitigation and development must be achieved as complementary objectives. To prioritize development goals is a consistent decision across all stakeholder groups. This is followed by parameters like ‘environmental performance of actions’, ‘ability to quantify and measure reduction achieved’, and the ‘ease of implementation of NAMAs’. However, the choices vary greatly amongst representatives from government and multilateral agencies, the private sector, and academicians.

Consistency with the national development goals and the environmental performance of actions are unquestionably prioritized by all stakeholders.

- Government organizations and multilateral agencies, in addition prefer the ‘level of co-benefits’ and ‘quantification of actual mitigation’. Business and private sector representatives, however, prefer them the least.
- Ease of implementation and economic efficiency remains a priority area for the private sector and not-for-profit organizations.

These results provide important indicators for the study, primarily that different stakeholders prioritize different parameters, which in their view would constitute successful NAMAs. The results, therefore, emphasize on the combination of different factors/parameters that play an important role in the appropriate designing of NAMAs and no parameter can be considered in isolation. Apart from the consistent choice for ‘addressing development goals’, ‘environmental performance’, and ‘quantification of actions’ across all the respondents, the relative weightage for other parameters for different stakeholders vary.

To elaborate the above parameters, and to bring more clarity to the terminologies, the questionnaire asks its respondents to select *the indicators that best describe a particular parameter*. Professionals from different communities responded to the factors they believe best describe:

- Environmental performance,
- ease of implementation, and
- economic efficiency of NAMAs.

From the analysis, the ‘Direct contribution to GHG reduction’ is considered the most important factor in explaining the ‘environmental performance’ with close to 65 per cent of the respondents indicating their

preference in its favour. The unanimous preference by all stakeholder groups further accentuates the finding. While representatives of the government select ‘contribution to other environmental co-benefits’ as equally important, the private sector considers ‘technological reliability and safety’ as essential.

Similar to the above pattern, ‘availability of finance’ is seen as the unanimous choice as a prime indicator explaining the ‘ease of implementation’. This strongly indicates towards NAMAs supported and enabled by international finances, as is also stated in the NAMAs conceptual framework by UNFCCC. ‘Social acceptability’ ranks highest with a share of close to 65%. This is expected to be obtained primarily because the survey respondents mainly comprised the not-for-profit sector and government organizations.

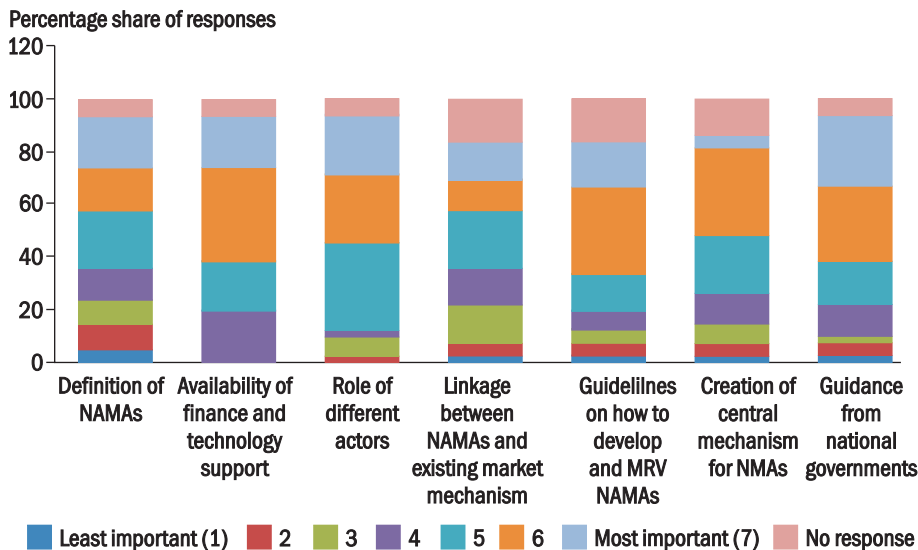
According to the analysis, the private sector response is somewhat unclear, though finance arises as an important factor for them. Contrary to intuition, ‘facilitative legal and regulatory environment’ which is expected to mobilize implementation at a country level, is not ranked high by the respondents as a suitable indicator for ease of implementation.

Results on the third parameter—economic efficiency—suggest that ‘cost efficiency of actions’ and ‘resource efficiency’ are significant determinants while government and private sectors strongly support NAMAs capable of creating markets and bringing technological innovation to the system. This is particularly essential in the ‘buildings and industry sector’ where creation of markets for energy efficient appliances is imperative for promoting and sustaining green industry. In addition, ‘employment generation’ is also significantly associated with economic efficiency, achieved as a co-benefit from the actions.

NAMAs represent a promising mechanism for recognizing, supporting/financing, and delivering climate actions by developing countries. After raising queries regarding the framework for design, the survey asks for ‘factors facilitating the operationalization of NAMAs’. It is realized that delivery of NAMAs can be attained by installing appropriate factors in the design framework, which would facilitate operations. The figure below descriptively summarizes results from the survey.

Some concrete results that arise from the responses to the questions are as below:

- Majority of the responses recommend guidance from national government as imperative for operationalization of NAMAs. Business and private sector representatives strongly indicate in favour of



Level of importance of the role of the following issues plays in facilitating the operationlization of a NAMA mechanism

this factor while government respondents also seem to recognize their role with regard to guidance.

- The second most favourable response pertains to the importance of ‘stakeholder consultation’. The importance of the role of different actors like the role of government or private sector in facilitating a NAMA is recognized by all participating stakeholders. From the analysis, we also assume different stakeholders/actors having different preference parameters. Therefore, an inclusive process and bottom-up designing of the NAMAs would be useful.
- Among others, ‘availability of finance and technology support’ and ‘guidelines on development of MRV’ also feature as important factors. Need for international hand-holding with respect to both the factors is also reflected here.

The preliminary survey and its results can serve as a foundation to frame future surveys on a more expansive scale. Moreover, most of these responses are researchers’ and practitioners’ recommendations, and hence provide robust pointers for design and implementation of an effective NAMA mechanism, and can potentially make significant dents in the policy circle.

### Summary of responses>

- A NAMA must be consistent with the national development goals and be environmentally

sustainable to be able to attain the low-carbon development pathway.

- There is a difference between the preferences selected by the government and private sector respondents. While issues of co-benefits and quantification of reduction potential is important from the government point of view; private sector and not-for-profit organizations prefer ease of implementation and economic efficiency to other factors.
- Private sector associates high importance with ‘technological reliability and safety’.
- ‘Social acceptability’ and ‘availability of finance’ are important to ease the implementation process.
- ‘Facilitative legal and regulatory environment’ is not a priority factor that helps in effective implementation of NAMAs.
- ‘Creation of markets’ to facilitate and sustain a mitigation activity is imperative.
- Stakeholder consultations and the role of different sectors is important for an inclusive process.
- International support is to be incorporated in the conceptual framework.
- Business and the private sector strongly seek guidance from national government for operation of NAMAs. Government sector representatives are also in favour of this.
- More clarity is needed to examine the ‘linkage between NAMAs and existing mechanisms’ and the relevance of a ‘NAMA definition’ in the facilitation process.

# Developing Country NAMAs outlook: framework for conceptual design

Swati Agarwal, Research Associate, TERI

## Introduction

Since the convention in Bali in 2007, several expectations have made their presence felt that revolve around the design and implementation of NAMAs. The issue of implementing an 'appropriate' NAMA epitomizes the challenges for a developing country in resolving the duality of the development imperative and climate change concerns. It is realized that the developing countries would soon be expected to announce a list of activities categorized as 'Nationally Appropriate Mitigation Actions'. This would require the developing nations to not only identify areas where they could undertake mitigation activities, but also to identify specific mitigation actions, which are in tune with national priorities.

In this direction, countries have made an attempt to indicate in a database<sup>1</sup>.

- Actions they are willing to undertake as part of the NAMAs with the detailed list of activities;
- Objectives to be achieved;
- The implementation strategy, along with the proposed MRV mechanism and international support requirements; and,
- The expected outcomes/ benefits in the form of co-benefits and others.

These submissions are reviewed here to assess the 'attempts by developing nations towards creating appropriate mitigation actions'. The evaluation of these actions facilitates the assessment of the kind of criteria that have been used by countries in formulating their NAMA proposals.

From the review, it is observed that the proposed sectors and activities of target for NAMAs are in accordance with the national circumstances of the developing countries, while the underlying criteria used for selecting a NAMA are embedded in the following components.

- Objectives to be achieved by undertaking a NAMA;
- Analysis of the direct benefits and co-benefits;
- Sector-wise GHG mitigation ambitions; and,
- The 'MRV mechanism and implementation scenario'.

This brief attempts to extract and draw conclusions on the chosen criteria for NAMAs from the country submissions and present a synthesis of the same.

## Sector-Activity landscape from the database: reference to national circumstances

The review of the proposed projects till date reveals that although the countries are clear with respect to the sectors in which they would undertake a NAMA, clarity on the detailed list of activities is lacking. To summarize, the Sector-Activity Matrix of the proposed activities submitted to the database by the developing countries is represented below.

The majority of the proposals comprise 'Energy Supply' and 'Transportation Sector' (approximately 60 per cent). This strongly indicates the desperate need of the developing countries to reduce their dependency on fossil fuels and cut down on the cost of imports. Also, the increase in GHG emission due to increasing number of vehicles caused by population and GDP growth is strongly felt by the developing countries. Therefore, the transport sector is seen as the leading target for NAMA actions. In addition, 'Buildings' and 'Industry' are also among the priority sectors for NAMAs.

Most importantly, 'Energy Efficiency' features as the crucial programme across all the sectors of NAMAs. This once again reflects the pressing need of the developing countries to reduce their total energy consumption requirements, thereby making the best use of the existing capacities to improve access to energy.

<sup>1</sup> Source: <http://namadatabase.org/> - Maintained by Ecofys and funded by International Climate Initiative of the German Government. The deployment of the official prototype of the registry for the party submissions on NAMAs to UNFCCC is expected to take place in 'November 2012' and will be available at [http://unfccc.int/cooperation\\_support/nama/items/6945.php](http://unfccc.int/cooperation_support/nama/items/6945.php). Other initiatives like 'NAMA pipeline analysis and database' (<http://namapipeline.org/>) produced by UNEP Risoe Centre also provide a brief overview of NAMA submissions as is cited in Copenhagen Accord in 2010, in addition to the submissions to UNFCCC till October 2012. However, NAMA database- the Portal by Ecofys, contains concrete NAMA activities and proposals that are currently being developed and implemented, synthesized from all the publically available information at various databases including the above two.

Sector	Energy Supply	Buildings	Transport	Industry	Forestry/waste/agriculture
Activity	<b>Development of renewable energy</b> Solar power plants, wind power	<b>Energy efficiency</b> Use of mature technologies, solar water heaters, efficient lightings	<b>Modernization of existing transport system</b>	Programme for energy efficiency	<b>FORESTRY</b> Sustainable management of forests, recovery of native forests, programme for afforestation
	Alternate energy Geothermal energy, biogas plants	<b>Rural energy and efficient stoves</b>	Modal shifts Private to public systems, motorized to non-motorized systems	<b>Use of alternate energy</b>	<b>WASTE</b> Waste collection targets, waste disposal targets, recycling targets, waste-to-energy targets, and waste management enforcement targets
	<b>Energy efficiency measures</b> Improved infrastructure for natural gas, improvement of electricity distribution system	Efficient labelling standards Extended penetration of efficiency standards, upgrade of existing efficiency standards	Transit management measures Development of traffic calming areas, electronic road pricing, parking restraint, bus rapid transit systems	<b>Up-scaled mitigation</b> <b>Energy efficiency, improvement in process</b> <b>emissions</b>	<b>AGRICULTURE</b> Increase of tree coverage, use of smart fertilizers, energy saving technologies, increase of water table
	Clean energy production- Hydro power plants		Programme for energy efficiency		
			Vehicle renovation Electric passenger cars, electric rail		
			Urban planning		

### Sector-wise trends

**Energy supply:** The actions in the energy supply sector aim at achieving **energy security**, simultaneously targeting the **stability and performance of electricity production** in the country. Many countries target renewable energy as the major source of electricity generation, having taken the ‘*incentive structures*’ and ‘*policy changes*’ route towards accelerating the pace of its penetration.

- Gambia, for instance, proposes to put in place a Renewable Energy and Energy Efficiency Act to increase the percentage share of renewable energy in electricity generation, along with raising awareness about the technology and its potential for the country.
- Incentives, such as tax holidays, subsidizing electricity tariffs, and soft loans schemes could be incorporated.
- Reforming regulatory frameworks to fit a larger renewable energy share like guaranteed network access and preferential dispatch are some of the suggested measures.

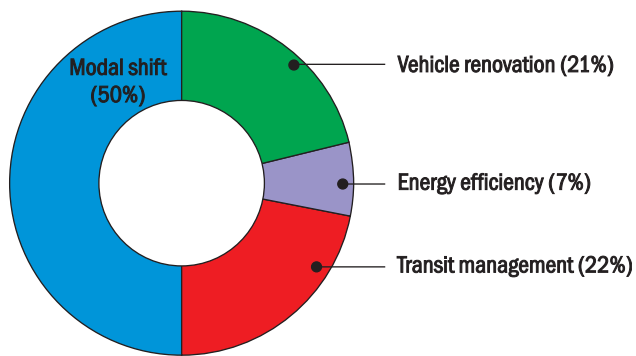
**Buildings and industry:** As stated earlier, the building and the industrial sector mainly comprise projects aimed at increasing the energy efficiency and use of alternate fuels. The measures also call

for **associated support from the government** in the form of policies to encourage the use of energy efficient appliances and techniques. For example, Libya advocates for a **ban on conventional light bulbs**, labels, and minimum efficiency standards for electricity appliances as support activity for their NAMAs.

The review also reveals various innovative incentive schemes, such as the “**20–20**” **initiative, proposed by Morocco for efficient diffusion of EE appliances** where the households that achieve a 20 per cent reduction in energy usage benefit from an additional 20 per cent rebate on their bill.

**Transport sector:** Majority of submissions target this sector. The share of activities proposed under the transport sector is depicted in the graph.

Review indicates that in the bottom line, **sustainable transportation** has been the key thrust of the developing countries. Transport demand management, combined with land-use and parking policies, modal shifts towards non-motorized and public/mass transit system, and vehicle renovation programmes are few of the initiatives. There have also been efforts to modernize infrastructure and move towards efficiency measures to reduce GHG emissions from this sector. This includes:



- Measures for efficient locomotives and grid-electric vehicles
- Capacity building for efficient driving
- Best practices for vehicle maintenance
- Improved fleet management
- South Africa and Colombia have submitted proposals based on penetration of electric vehicles. Colombia also suggests the level of penetration to reach 20 per cent for the passenger sector, 30 per cent for taxi fleets, and 30 per cent for urban freight.

Countries have also proposed to establish an appropriate institutional and regulatory framework needed for the optimization of public transport systems and its efficient implementation.

**Forestry, agricultural, and waste sectors:** Activities in the forestry, agricultural, and waste sectors are quite limited and do not provide much information. Detailed account of the activities is not presently available.

### Nature of support demanded

Review also reveals that nearly all countries seek financial support for NAMAs, while relatively fewer countries listed support requirements for capacity building and technology transfer. Sector-wise analysis indicates that all the developing countries undertaking NAMAs in the energy supply sector have been seeking financial support to facilitate the use of selected technologies. The building and industry sectors also seek support to meet the costs incurred in promotion and scale-up of technology along with capacity building and assistance in the development of MRV. Interestingly, Lebanon demands assistance in ‘defining a NAMA’, reflecting the significance of capacity building.

In order to insure the renewable projects against spot market fluctuations, Chile proposed the

mechanism of ‘revolving funds’. While support for renewable energy and its development has been the key priority areas for countries, South Africa also aims to develop a strategy for affordability. In the sector of forestry, Chile has proposed to provide a forestry subsidy for support, while rotating funds for forestation of marginal lands and the management of native forests for carbon capture are among the other suggestive measures.

The proposed principle source of financing is the multilateral and bilateral channels, while some of the countries are also exploring the option of financing through crediting. The ‘window of grants’ is the popular ‘principle type of financing’. Given that almost all the proposed NAMAs in the database call for international support in the sphere of finance, technology, and capacity building, it is important that the NAMA proposals that seek international support contain sufficient information for them to be evaluated and appraised, while keeping it open and flexible.

### Expected impacts and MRV

Not only does the detailed list lack clarity, the expected impact of NAMAs on the economy is also somewhat vague. This ambiguity is reflected in the information provided on ‘MRV mechanism’ and the ‘cumulative GHG reduction’ to be achieved from the proposals. Some countries have suggested their own measures for MRV, but most of them are at the conceptual stage and not fully developed. In addition, countries also seek assistance to develop an MRV framework for their mitigation actions. ‘MRV based on CDM methodology’ is also highly cited in specific sectors, mainly ‘buildings’ and ‘industry’. For example, India and Jordan have designed their NAMAs in the industry sector based on a ‘Programme of Activities’ (PoA) approach in steel and water pumping systems, where the PoA baseline is set in accordance with CDM method AMS II.D.

In the transport sector, city wide survey is proposed to monitor activity data. The measurement is based on bottom-up modelling, which takes into account vehicle activity and emission factors. The Lao transport NAMA suggests, for example, pre-project reporting in the form of documents, such as CDM-PDD followed by post-project reporting. Verification would contain factors of both validation and verification and it is also desirable to conduct both pre-project and post-project verification. In the forestry and waste sector, no MRV mechanism has been submitted.

On the expected impacts, the ‘cumulative GHG reduction’ from the proposed actions is stressed upon in the submission. However, at present the countries are not clear about the GHG reductions that could be achieved and thereby would require capacity building and support towards this end. Some of the expected co-benefits arising from the NAMA actions that feature in the submissions are listed below.

- Revenue generation
- Employment creation
- Creation of market for energy efficient appliances
- Reduction in deforestation resulting from fuel switch
- Integration of economic communities
- Reduction of local pollution
- Biodiversity protection
- Improvement in health and sanitation
- Reduction in energy imports
- Economic benefits from by-products

In addition, the countries also contemplate the negative localized economic impacts that may arise from competition created amongst amenity users for natural resource supply, for example, water.

#### **Justification of NAMAs by developing countries: conclusions drawn on ‘criterion’ for NAMAs**

The NAMA activities proposed by the countries aim to achieve certain key objectives. While designing a NAMA, these ultimate aims and objectives form the key criteria in developing mitigation actions keeping in mind the national priorities. Several factors also play a role in facilitating and sustaining the NAMAs designed in a country context. Drawing inferences from the country submissions, the following tables list the summary of the ‘key criteria for design’ and ‘the facilitative options’ of NAMAs underlying the developing country proposals.

A NAMA must be designed to achieve:

- Energy security and stability
- Contribute to national climate mitigation plans

- GHG emission reduction
- Energy efficiency (enhance the performance of energy production)
- Technology potential of the country
- Enhance acceptability
- Sustainable in the long-term via policy support
- Proclivity to replication and potential to scale-up
- Generate government support
- Advocate policy changes (such as ban on conventional energy sources)
- Generation of demand for its products
- Demand management (like transport sector)
- Ease of monitoring
- Potential to derive co-benefits (local air pollution reduction, biodiversity conservation)
- Potential to upgrade/modernize infrastructure
- Distributed benefits across different segments of the society
- Reduction in country’s financial burden
- Making best use of existing capacities
- Creating markets for promoting green industries (like EE appliances)

A NAMA could be facilitated through:

- Financial support, capacity building, technology transfer
- Assistance in developing MRV
- Bottom-up approach
- Assistance in defining NAMAs
- ‘Insure’ projects against market fluctuations
- Government support (such as subsidies)
- Incentives to accelerate the pace of penetration (like 20–20 rebate scheme)
- Pre-project MRV analysis (similar to CDM-PDD)

The above listed factors provide an insight into how developing countries are thinking, although in a discrete manner, about appropriateness of mitigation actions. Nonetheless, it provides a firm foundation for further resolving the issues around developing a comprehensive template for designing NAMAs.



# Why and What of Mitigation in India: Arguments from the domestic debate

Kari-Anne Isaksen, MA student in Human Geography at the University of Oslo, Intern at TERI September–October 2012

There is general agreement in India and internationally that India did not contribute to the current problem of climate change, but to what extent India should contribute to the solutions of climate change is an area of debate within India. This article is inspired by discourse theory where policy is seen as the product of discursive struggle.<sup>1</sup> From this angle, I argue that it is important to explore the different arguments for why India should mitigate climate change in order to understand the development of India's current mitigation policy and possible further development of such policy. There are also, of course, arguments that contend that India should not mitigate, but this article does not cover that aspect. Based on literature and interviews carried out during fieldwork in Delhi,<sup>2</sup> I present three ideal typical arguments: the security argument, the inequality argument, and the high table argument.

## The security argument: mitigation for our own good

“More than the international community, we have to show action to our own people—to those living in the Sunderbans, in the North East, in the Himalayas—that the government was serious about tackling climate change.”<sup>3</sup>

This quote illustrates what I call the ‘security argument’. The security argument entails that India is vulnerable to climate change and should, therefore, take action, not because the West or someone else tells India to do so, but because it is in India's own interest. Among my interviewees, there seemed to be

an agreement that economic development should be India's first priority, but when recognizing India's vulnerability to climate change, interviewees tended to argue that India should take action on climate change, which does not hamper India's growth potential. The security argument claims that it is in India's interest to protect its own population against climate change and that mitigation can serve developmental needs like ensuring energy access and energy security. Many of my interviewees highlighted the importance of the poor's access to energy and suggested that the use of renewable energy sources could help in that regard, as well as increase India's energy security and reduce emission growth. Another mitigation measure suggested by many was energy efficiency; interviewees pointed at how this will reduce emissions and at the same be economically beneficial for companies and individuals.

An interesting element of the security argument is the belief that climate mitigation policies can be beneficial to India's development agenda. According to Atteridge,<sup>4</sup> India's traditional stance on climate change has been characterized by a belief that social and environmental priorities, including energy security and energy access, would be compromised by taking on any part of the burden of combating climate change. The government has remained committed to its historic position, “the environment cannot be improved in conditions of poverty”, referring to the statement made by the former Indian Prime Minister Indira Gandhi at the United Nations Conference on the Human Environment in Stockholm in 1972.<sup>5</sup> The security argument redefines the relationship between development and environmental protection, from

<sup>1</sup> For discourse theory used in the context of environmental politics see, e.g., Hajer M A. 1995. *The Politics of Environmental Discourses*, Oxford University Press, Oxford and Dryzek J S. 2005. *The Politics of the Earth*, Oxford University Press, Oxford.

<sup>2</sup> During seven weeks in Delhi August–October 2012, I took 20 interviews with key actors in the debate on climate change policy in India: civil society actors, journalists, researchers, bureaucrats, and business actors. This article is partly based on preliminary findings from this field research.

<sup>3</sup> Jairam Ramesh. 2009. *The Indian Express*, 4 December. Details available at <http://www.indianexpress.com/news/india-2020-2025--cuts-in-carbon-intensity/549811/2>. Jairam Ramesh is the former Indian Minister of Environment and Forests. This quote is from the time when he informed the Parliament about India's intensity target—20%–25% cut in emission intensity of production (GDP) by 2020 over 2005 level.

<sup>4</sup> Atteridge A., Shrivastava M K., Pahuja N. and Upadhyay H. 2012. “Climate Policy in India: what shapes international, national and state policy?”, *Ambio* 41: 68–77.

<sup>5</sup> Billett S. 2010. “Dividing Climate Change: global warming in the Indian mass media”, *Climate Change* 99:1–16.

contradiction to the claim of positive developmental effects with climate mitigation policies, and I argue this has been important for India's choice to develop mitigation policies.

The belief in synergy between climate mitigation and developmental needs can be found institutionalized in, for example, the National Action Plan on Climate Change (NAPCC). The NAPCC states that the eight missions are designed to address the urgent and critical concerns of the country with co-benefits of addressing climate change.<sup>6</sup> There seem to be some sort of consensus on India's vulnerability and on her own interest in taking mitigation actions as the security argument is being widely used both inside and outside the government.

### **The inequality argument: mitigation in order to have a more just development**

“If the upper and middle class [in India] do not manage to check their CO<sub>2</sub> emissions, they will not only contribute to global warming, but will also deny hundreds of millions of poor Indians access to development.”<sup>7</sup>

The above quote is from a report titled *Hiding behind the Poor* which Greenpeace India published in 2007. The report presents data on emission disparity within India and argues that India is hiding behind its poor population when using its low per capita emissions as an argument for not having to initiate mitigation actions. Several of my interviewees pointed towards the disparity of emissions within India and argued that India could do more on the mitigation side if the rich sectors of the society are ‘targeted’. The inequality argument is also used in radical critiques of India's growth strategy. In the book titled *The Politics of Climate Change and the Global Crisis*, Praful Bidwai criticizes India's growth strategy from a climate change and development perspective.<sup>8</sup> He thinks that development should be India's first priority, but argues that the growth model India is pursuing has not worked for India's poor and cannot contribute to low carbon growth. Some of my civil society interviewees

were similarly critical about GDP growth being the guiding principle for India's development and were criticizing the so-called government's belief in wealth trickling down and benefiting the poor.

The inequality argument is, as demonstrated, embedded in a broader discussion of India's growth strategy and hence is not on mitigation target alone. As opposed to the security argument, the inequality argument questions the liberal growth strategy and suggests a radically different development path for India. It is also interesting how the inequality argument challenges India's equity position, by not only addressing inequality between developing and developed countries, but also intra-state. I find that the inequality argument is not as widespread in the Indian debate on mitigation as the security argument, but it is used by some civil society actors and often by people identifying themselves with the left end of the political spectrum.

### **The high table argument: mitigation in order to get a better reputation**

“On one hand we want to be part of the G20 and we want the UN system to be changed so that we have a seat in the Security Council permanently. On the other hand we cannot only be a naysayer in the international discourse, so we have to have a different nuance to our [climate] position.”<sup>9</sup>

While the security argument and the inequality argument is motivated by domestic concerns, what I call the ‘high table argument’, like in the illustrative quote above, is rather motivated by expectations from the international community and ideas about how India should be perceived in the international arena. The core argument is that India as an emerging economy needs to take responsibility for climate mitigation because this is expected by other countries. Furthermore, it is argued that this will help India as she will be seen as a deal-maker and enhance ‘good will’ which will help India achieve other international goals. The high table argument got wide attention in India in December 2009 when a confidential

<sup>4</sup> Atteridge A., Shrivastava M K., Pahuja N. and Upadhyay H. 2012. “Climate Policy in India: what shapes international, national and state policy?”, *Ambio* 41: 68–77.

<sup>5</sup> Billett S. 2010. “Dividing Climate Change: global warming in the Indian mass media”, *Climate Change* 99:1–16.

<sup>6</sup> Government of India. 2008. *National Action Plan on Climate Change (NAPCC)*, New Delhi.

<sup>7</sup> Greenpeace India. 2007. *Hiding Behind the Poor. A report by Greenpeace on Climate Injustice*, Bangalore, p. 2.

<sup>8</sup> Bidwai P. 2012. *The Politics of Climate Change and the Global Crisis: Mortgaging Our Future*, Orient Blackswan, New Delhi.

<sup>9</sup> Quote by one of my interviewees when discussing India's role in the international climate negotiations.

letter from Jairam Ramesh to the Prime Minister leaked to media. In the letter, Ramesh suggested changes in India's climate stance based on concerns on India being seen as a bugbear by the developed countries.<sup>10</sup>Ramesh argued that India should bring itself closer to more powerful countries, G8 and G20 and find itself comfortable around the high table with them. I find that the high table argument is not necessarily combined with concrete suggestions about what kind of mitigation measures India should choose. However, it seems like the argument at times is combined with advocating for, like the security argument, measures that can address both mitigation and developmental needs.

The high table argument can be understood in the context of India's economic development and following new expectations from the international communities regarding actions by India on climate change. Many of my interviewees argued that, in addition to the increased awareness about the effects of climate change and India's vulnerability, pressure from the international community was a crucial driver for the development of the NAPCC. Several of my interviewees also pointed at the fact that India launched its intensity target shortly after China (and actually after all the BASIC countries) had announced an emission intensity target, and implied that the Government of India feared being isolated in the climate talks. The high table argument, like the inequality argument, does not figure as often as the security argument in the public debate and is not reflected in policy documents on climate change. However, it is sometimes used by civil society actors and government officials when arguing for greater mitigation actions by India.

## Concluding discussion

By presenting the three arguments, I have demonstrated that perspectives on the Indian debate for climate mitigation are diverse. The security and the inequality argument are grounded in the domestic developmental context, where the security argument implies compatibility between India's development strategy and climate change mitigation while the inequality argument provides a more radical critique of India's growth strategy. The high table argument is rather grounded in the foreign policy context and ambitions about how India should be perceived by others.

The security argument seems to be widely used and is institutionalized in policy documents while the inequality argument and high table argument seem to be used more rarely. The two latter arguments stem from different spheres of influence, the civil society and political elite, respectively, and can, hence, be assumed to have different degrees of influence. Interestingly, all the three arguments somehow respond to the long-standing position that India did not cause climate change and it is, therefore, not reasonable that India should take mitigation actions; India first and foremost needs to protect its space for growth. The security argument responds thus: Yes, but it is in our own interest to mitigate climate change because we are vulnerable and mitigation can actually have positive effects on our development. The inequality argument states: Wait a second, is our growth actually benefiting the poor? We need a rather different growth path. Lastly, the high table argument holds: Yes, but we need to make sure that we are perceived as a deal-maker and should, therefore, take some mitigation actions.

<sup>10</sup> *The Times of India*, 19 October 2009. Details available at [http://articles.timesofindia.indiatimes.com/2009-10-19/india/28079441\\_1\\_greenhouse-gas-emission-reduction-climate-negotiations-change-negotiations](http://articles.timesofindia.indiatimes.com/2009-10-19/india/28079441_1_greenhouse-gas-emission-reduction-climate-negotiations-change-negotiations)

# Mitigation in Developing Countries: impressions from South Asia and Africa

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Beginning with the establishment of the Intergovernmental Negotiating Committee that drafted the United Nations Framework Convention on Climate Change (UNFCCC) in 1991, till date, mitigation in developing countries has sparked varied reactions, both within and outside developing countries. Over the last two decades of negotiations, while the willingness of developed countries to accept their historical responsibility and duty to take lead thereof has declined, discourse in developing countries regarding mitigation action has been increasingly acknowledging both the importance of and opportunities for mitigation actions in developing countries. With this, the diversity and complexity of reactions have also increased. The various arguments and opinions one hears about why and what of mitigation actions by developing countries within national boundaries, arguably, represents a policy discourse that attempts to translate the abstract principles of climate policy that developing countries have been championing in the negotiations into real and practical actions. With an integral international dimension in ‘supported NAMAs’ and ‘credited NAMAs’, the discourse on NAMAs in developing countries captures this attempt rather encouragingly. It reflects a proactive approach on part of the developing world with a note of caution against the slow progress in negotiations and subtle attempts on part of the developed world to shirk responsibility and dilute the top-down multilateral solution to climate change. In that, the discourse on NAMAs in developing countries also reflects a blueprint, however implicit and faded, of cooperation among countries under future climate regime.

This note is a subjective attempt to distil some of the recurrent normative threads from the evolving discourse on mitigation in developing countries among researchers, civil society, and policy makers. It reflects upon the discussions that took place on mitigation and related issues, such as green economy and access to energy, during the Technical Workshop of CANSAs (Climate Action Network,

South Asia), Colombo, 10–11 October 2012 and the UNCEA’s (United Nations Economic Commission for Africa) Second Conference on Climate Change and Development in Africa (henceforth CCDA), Addis Ababa, 19–20 October 2012.<sup>1</sup> Building on these discussions, it observes that, if connected, the discrete views on mitigation in developing countries constitute a vision for their social, economic, and ecological transformation. It is interesting to note that the participants in the former discussions were predominantly civil society representatives and researchers from South Asian countries, yet, their views found a strong resonance in the discussions in the latter conference where the participants were primarily policy-makers and researchers from African countries. Differences were primarily due to the details of two geographic regions and differences in the specific questions that the two gatherings engaged with.

The arguments from both sets of discussions have been broadly summed up in five sections that follow.

## Principles, formula and politics

Invariably, the discussions on climate policy in developing countries begin with the recognition of climate change being fundamentally a development issue. What development constitutes, however, varies in terms of the ranking that different stakeholders assign to various indicators of development ranging from the top-down ‘deontological’ index of economic growth to bottom-up ‘consequentialist’ parameter of poverty alleviation and eradication of inequality. Nonetheless, the list of indicators remains more or less the same. The CANSAs workshop summed up this complex interplay between common, yet multiple conceptions of development, as a *principled formula plus politics* approach. The principles that are invoked to balance the apparent competing claims to priority by different development indicators are that of equity and survival. This is further elaborated in terms of existence of earth, and international, inter-

<sup>1</sup> For more details on CCDA, see [http://new.uneca.org/ccda2/ccda2\\_Presentations.aspx](http://new.uneca.org/ccda2/ccda2_Presentations.aspx)

generational, intra-national and interspecies equity. Politics, combined with the principle of equity and survival, is expressed in terms of the recognition of dynamic differentiation among the stakeholders and beneficiaries of actions.

### **Purpose and type of action**

The central question that most of the conversations on mitigation actions, particularly with reference to NAMAs, begin with is: what could/should be a NAMA? A number of discrete normative arguments emerge in the context of individual actions.<sup>2</sup> At the aggregate level, however, one finds an explicit emphasis placed on the need for each individual NAMA to contribute towards a long-term economy-wide goal. This long-term goal is often described either in terms of moving towards a low-carbon development trajectory wherein NAMAs in a country should collectively contribute to deviation from BAU emission scenario or promoting a 'techno-economic transition' ensuring equity in social, economic, and ecological spheres. While these two articulations do carry overlapping yet different focuses in approach towards conceptualization of NAMAs, namely emission reduction and innovation respectively, the intent remains the same: transition to a better organization of economic activities through deployment of climate-friendly technologies.

From this understanding of the overall long-term purpose to which mitigation actions in developing countries should contribute emerges the centrality of policy and governance interventions as well as reliance on domestic resource endowments to the mitigation actions that should be deemed nationally fit. The purpose of policy interventions and actions together is to create demand and supply patterns of new products, both in terms of the production process and consumption patterns. This would invariably require sensitivity towards social and cultural dimensions of economic activities, including the functioning of markets. In that, the policy and governance interventions guiding mitigation actions can also become a vehicle for social and cultural progress, and in turn sustainable development. Implicitly, the importance that is assigned to national policy interventions is also rooted in the idea of sovereignty wherein a country (or region, in case of Africa) consciously decides its own trajectory of transition instead of piecemeal disjointed responses to emerging

international policy and economic environment. The emphasis on optimum utilization and enhancement of domestic resources also reflects the same. The common response to questions regarding whether a country should focus on a particular resource, e.g., hydro power potential in African countries or solar in India, is in strong negative. While it is recommended that the abundant resources, be it fossil fuels or a renewable energy option, should be harnessed to meet immediate development priorities such as energy access, a country should judiciously plan optimum utilization of a combination of resources to meet its basic development requirements over a length of time.

### **Capability, infrastructure, and international support**

In general, climate action in developing countries, particularly mitigation, is always stated with a caveat regarding international support. This support, primarily refers to access to technology and finance. The two workshops, however, underplayed flow of technology and finance, and stressed upon the need to build domestic capabilities and infrastructure that would enable countries to embark upon the path of transition. The areas where the need for building capabilities, domestically and with international support, was highlighted include scientific research, technological innovation, economic assessment, and governance institutions. Most importantly, enabling national agencies in these areas to function as a link between global policy and local action was highlighted in African context. For example, in order to address energy access issues in a climate-resilient manner, developing local institutions and technological capabilities for localized power generation and consumption finds strong resonance in the two regions.

Enhancement of domestic capabilities is also recognized as a priority with reference to international technological and financial support. It is noted that developing countries, with some case-specific exceptions, also need to develop adequate absorption capabilities to be able to utilize flow of technology and finance. Particularly, with reference to technology it is suggested that policy interventions alone may not ensure successful transfer of technologies, developing own technology producing capability is also important.

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<sup>2</sup> These arguments resemble broadly those listed in other contributions to this newsletter.

In addition to strengthening absorption capability of imported technologies, it will also help countries to plan their technological transition based on a mix of domestic and internationally transferred technologies. Importantly, proactive regional cooperation is considered extremely important to this end.

It is interesting to observe that the discussion above on capabilities with reference to mitigation may imply that in order for certain mitigation actions to be appropriate, a country might need to undertake activities which may or may not have any mitigation impacts, or at times can actually increase emissions such as infrastructure projects. Keeping the long-term objective of mitigation actions in mind, the question remains to be explored if an emission intensive activity, seen in conjunction with other dependent or associated activities with mitigation benefits, as a part of large policy palate should be considered 'nationally appropriate' over a time horizon.

### **Precautions regarding domestic implications and international support**

Support for proactive action on mitigation in developing countries also comes with a set of precautionary warnings. Broadly, these warnings can be grouped into three types: (i) no freezing of inequality, (ii) protection of people's rights and livelihood, and (iii) watchful of type of support coming from developed countries. While the first two types represent supreme priority to poverty alleviation and continued development opportunities for the poor, the third type cautions and recommends that the 'supported NAMA' route, although extremely important to upscale mitigation in developing countries, must be carefully scrutinized while designing a mitigation action. Both the gatherings expressed strong disappointment regarding the progress on the 'fast-track financing' promised in the Copenhagen Accord. The CANSA workshop noted that the support reported under the 'fast-track financing' has been a disguised export subsidy to developed country companies, whereas the CCDA feared that it might be a precursor to the fact that the 'Green Climate Fund' might be an 'empty shell' in terms of it being 'new and additional'. The need to

develop absorption capability with regard to finance was highlighted during the CCDA with reference to the potential negative impact of FDI on the domestic economic development trajectory. In any circumstances, the underlying argument remains the same that implementing mitigation action, supported internationally or with domestic resources, should not result in a situation where the weaker section of the society or industry in developing countries is negatively impacted.

### **Process of decision making**

A disappointment, and in few cases disenchantment, with the international negotiation process could be sensed in the two gatherings. However, the significance and need to continue with a multilateral and discursive process while simultaneously following a similar approach in domestic decision making through stakeholder consultations and participatory governance was unambiguously underlined. It was argued that in the international context, multilateralism is the best option that developing and poor countries have, as most of them do not have the strength and capacity to protect their interests in a bilateral arrangement. In the domestic context, however, it was considered necessary not only in terms of transparency and accountability but also towards developing capabilities. Arguably, embedded in the emphasis on multilateralism and participatory decision making is the normative belief that given the complexity of issues it is important that any action or decision is sensitive to as many aspects and concerns as possible. In other words, collecting views from all stakeholders is a precursor to applying the *principled formula plus politics* approach.

To sum up, it may be argued that in a very fundamental sense the ideas that drive opinions regarding mitigation in developing countries are that of eradication of poverty and building domestic capabilities. From the perspective of NAMAs, reducing inequality and building hard scientific and technological capabilities as well as political skills at every stage, from the conception to designing and implementation of NAMAs, appears to be the ultimate criteria of appropriateness.

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