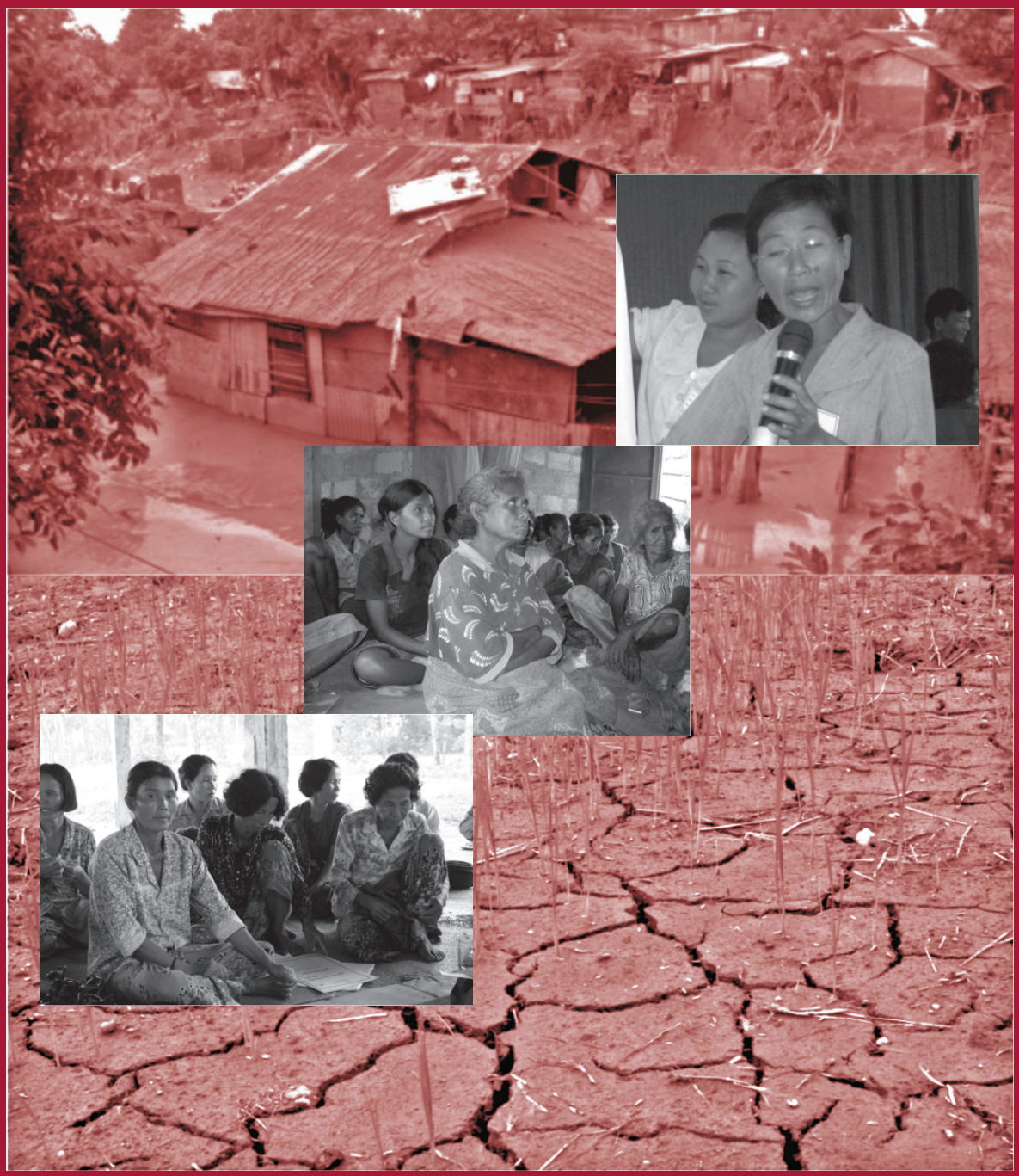
International Climate Change Negotiations:

Ensuring Support for Adaptation and Mitigation Measures in Smallholder Agriculture



ISSUE PAPER

ANALYZE. ADVOCATE. ACT!

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In December 2009, women in Sayphusi, a village in the province of Attapeu in Laos, were busy washing dried mud from their paddy grains. They had very little to eat, and the muddied paddy – the only remnant from their rice crops which were damaged by the storm that struck their village in October – was the only food available. The storm caught them unaware and swept away their homes, crops and livestock.

Laos is a landlocked country and is very rarely visited by typhoons. But lately, farmers have noticed a lot of changes in the season. Like many countries in Southeast Asia, they can no longer rely on the natural flow of the seasons to guide their planting. It rains when it is not supposed to rain, and many times, the dry period stays longer and is much warmer than expected. These have resulted in damaged crops, and hunger for their families.

Meanwhile, in another part of the globe, world leaders have gathered in Copenhagen, Denmark to hold the 15th Conference of Parties (COP 15) of the United Nations Framework Convention on Climate Change (UNFCCC). The conference was envisioned to be a crucial juncture in the drive to address climate change and its impact on the world, especially on developing countries.

What is the UNFCCC?

The issue of climate change was already being discussed in the 1980s as scientists raised alarm over the world's increasing emission of man-made green house gases (GHGs), the main cause of global warming. In 1988, the Intergovernmental Panel on Climate Change (IPCC), began to look into the effects of man-made GHG emissions on climate change. Following the release of the IPCC findings in 1990, the United Nations initiated the process of convening countries with the goal of reducing man-made GHG emissions and helping countries adapt to climate change. It was not until two years later, in May 1992, that the United Nations Framework Convention on Climate Change (UNFCCC) was launched.[1] The UNFCCC is an international treaty, and was opened for signature in the same year. It entered into force in March 1994, and is presently signed by 192 countries.

Countries that signed the UNFCCC committed to develop and implement strategies to reduce GHG emissions, as well as to adapt to climate change. They agreed to establish and regularly share updated information on national GHG inventories as a way of monitoring over-all GHG emissions and monitoring the progress of the UNFCCC. The Convention also recognizes that climate change is already happening and that there is a need to help those who are affected by it, especially the developing countries. At the same time, it requires developed countries to provide financial and technological resources to help developing countries fulfill their commitment under the Convention.

In the main, parties to the Convention agreed to cooperate on climate change mitigation and adaptation. Mitigation refers to actions and interventions that reduce man-made GHG emissions while adaptation focuses on helping people and communities cope with the adverse effects of climate change.

1988	Creation of the Intergovernmental Panel on Climate Change (IPCC) *to study the effects of man-made GHG emissions on climate change*
1990	Release of IPCC findings on climate change: *climate change is happening and man-made GHG emissions is a significant cause*
1992	Launching of the United Nations Framework Convention on Climate Change (UNFCC): *an international treaty wherein governments agree to cooperate on climate change mitigation and adaptation*
1994	Entering into force of UNFCC
1997	Approval of the Kyoto Protocol: *Established binding emission reduction targets for 37 developed countries, the so-called Annex 1 counties*
2005	Entering into force of Kyoto Protocol
2007	Creation of the Ad Hoc Working Group on Long Term Cooperative Action (AWG-LCA) *to undertake the process of helping Parties (governments) reach legally binding agreements on adaptation and mitigation*
2009	COP 15 in Copenhagen: *meeting "failed to deliver a full agreement that the world needs to address climate change"*
2010	COP 16 in Mexico: *Will an agreement be finally reached? Will small farmers be happy about this agreement?*

How is the UNFCCC structured?

The Conference of Parties (COP) is the highest decision making body of the Convention. It is composed of governments who signed the

[1] See "History of the UNFCCC" from the website of the Office of Natural Resources and Environmental Planning of Thailand. http://www2.onep.go.th/CDM/en/unf_history.html

UNFCCC. It meets regularly to discuss how to ensure that the objectives of the Convention are met. Apart from the COP, the Convention also established two other bodies, namely the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI). These permanent bodies are open to participation by all parties to the Convention.

The SBSTA focuses on the scientific and technical aspects of the agreement. It takes the lead in helping parties develop and share technologies related to climate change mitigation and adaptation. It also helps countries gain the technical capability to prepare national communication and GHG emission inventories. Parties to the Convention are expected to submit national communications, which contain, among other things, information on their current GHG inventories, as well as their plans on how to implement the Convention.

The SBI, on the other hand, gives advice on the implementation of the Convention. One of its main tasks is to review the national communication of members with the end in view of determining if their combined initiatives are sufficient to help ensure that the Convention is able to meet its mitigation and adaptation objectives. This body also gives advice to the COP on financial, budgetary, as well as administrative matters related to implementation of the Convention.[2]

What is the Kyoto Protocol?

The UNFCCC does not impose binding targets on the reduction of GHG emissions. Recognizing the magnitude as well as the urgency of the problem of climate change, parties to the Convention started to discuss the possibility of imposing binding targets on countries that contributed greatly to over-all GHG emissions.

In 1997, parties approved the Kyoto Protocol in Kyoto, Japan; this was later ratified by 184 countries. The Protocol established binding emission reduction targets for 37 developed countries, the so-called Annex 1 countries. These countries are the major contributors to GHG emission on account of their long period of industrialization.[3] Table 1 below lists Annex 1 countries.

Table 1: List of Annex 1 Parties to the Convention

Asia: Japan, Turkey**
Europe: Austria, Belarus**, Belgium, Bulgaria, Croatia**, Czech Republic**, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy**, Latvia, Liechtenstein**, Lithuania, Luxembourg, Monaco**, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation **, Slovakia**, Slovenia**, Spain, Sweden, Switzerland, Ukraine**, United Kingdom of Great Britain and Northern Ireland
North America: Canada, United States of America,
Oceania: Australia, New Zealand

* Observer State
** Party for which there is a specific COP and/or CMP decision
SOURCE: http://unfccc.int/parties_and_observers/parties/annex_i/items/2774txt.php

Although the Kyoto Protocol was approved in 1997, it entered into force only in February 2005 as there was resistance among developed countries, particularly the United States, to accept the emission reduction targets prescribed under the Protocol.

The Protocol requires Annex 1 countries to reduce GHG emissions by 5 per cent against 1990 levels from 2008-2012. On the other hand, developing countries are not heavy emitters of GHGs, and as such, are not required to undertake specific and binding emission reduction commitments.

However, although the Kyoto Protocol established binding reduction commitments, it also provided Annex 1 countries the option to meet their commitment through other means, such as the clean development mechanism, joint implementation projects, and emission trading. In essence, a developed country can avoid reducing its GHG emission for as long as it is able to invest in projects in developing countries that reduce or maintain a certain level of GHG emissions in their behalf. Many environmental groups have criticized the existence of these options as these allow Annex 1 countries to escape their commitment to reduce GHG and undermine the Protocol's goal of mitigating climate change.

In the “Clean Development Mechanism (CDM)”, developed countries with emission reduction or limitation commitments are allowed to invest in projects in developing countries that will result to reduction in carbon emission, instead of having to actually reduce their own GHG emission.[4] For instance, in December 2008, Japan invested in

[2] From Convention Bodies, UNFCCC Website
[3] UNFCCC websit
[4] For a more detailed information on CDM please see http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2718.php

the Listrindo Kencana Biomass Power Plant in Indonesia. This project is estimated to result in carbon reduction equivalent to 49,529 metric tons per year. This reduction in emission will be credited as part of Japan's compliance with its national emission reduction commitment.[5]

In "Joint Implementation Projects" countries with emission reduction or limitation commitments implement projects in other countries that also have emission reduction or limitation commitments. For instance, Japan can implement a project in another Annex 1 country like Netherlands. The carbon reduction resulting from this project in the Netherlands will be credited to Japan.

In "Emission trading", the Kyoto Protocol sets limits or caps to developed countries' allowable level of GHG emission. In case they are not able to use up their allowable level of emission, they are free to trade this with other countries that may have exceeded their allowable level of emissions.

What is the Bali Action Plan?

During the COP-13 In Bali, Indonesia last December 2007, the Parties committed to a comprehensive process to develop long-term cooperation action on the following:

1. Shared vision for long-term cooperative action as well as a long-term goal for emission reduction in order to meet the objectives of the Convention. This cooperation should operate on the principle of common responsibilities and respective capabilities, and in consideration of the Parties' social and economic conditions and other relevant factors;

2. Enhanced national and international action on climate change mitigation. This includes negotiations on cooperative sectoral approaches and sector-specific actions, such as in agriculture;

3. Enhanced action on adaptation, which covers international cooperation to help developing countries immediately adapt to the negative effects of climate change, risk management and risk reduction strategies and disaster reduction strategies, among others;

4. Enhanced action on technology development and transfer to support mitigation and adaptation; and,

5. Enhanced action on the provision of financial resources and investments to support mitigation and adaptation.

An Ad Hoc Working Group on Long Term Cooperative Action (AWG-LCA) was created and mandated to undertake the process of helping Parties reach an agreed outcome on the points above, within two years. The date for the presentation of this agreed outcome was on December 2009 in COP 15 in Copenhagen. An Ad Hoc Working on the Kyoto Protocol was also created to discuss a new round of reduction commitments in GHG emissions.

What were the crucial negotiating points in Copenhagen?

There were many important negotiating points in COP 15. The most crucial are those relating to developed countries' over-all GHG emission reduction targets and their commitment to finance climate change mitigation and adaptation mechanisms.

Many were hoping that COP 15 would result to an agreement that legally binds developed countries to offer substantial reduction in GHG emission. In particular, the G77, a group of developing countries formed in the course of the UNFCCC negotiations, is strongly calling for a cut of 40 per cent in developed countries' GHGs from 1990 levels by 2020. The G77 is also pushing that developed countries provide sufficient and publicly sourced funds to finance climate change mitigation and adaptation actions in least developed and developing countries.

However, the GHG emission reduction targets individually offered by developed countries are way below what science declares as necessary to ensure that global warming does not exceed 2 degrees, which is the level where climate change becomes irreversible and catastrophic. The US, for instance, offered to cut emissions by 17 per cent from 2005 levels in 2020. However, the G77 asserts that this offer is misleading because the US is only willing to cut its emissions by 4 per cent by 2020 based on 1990 levels. The EU offered to cut GHG emission by 20 percent also in 2020, based on 1990 levels. Unfortunately, if one adds up all these promised reduction in emission, these will still not be enough to stem the rise in global temperature.

[5] From http://cdm.unfccc.int/Projects/projsearch.html

Indeed, in terms of climate change mitigation, the Copenhagen Accord is nothing but an empty shell. Save from recognizing the scientific community's view that global temperature should be below 2 degrees, the paper does not provide concrete provisions prescribing the level of cuts that developed countries must undertake to ensure that global temperature does not exceed the critical level.

Moreover, the Accord does not address rising concerns about the use of mechanisms that allow developed countries to evade actual cuts in emission, such as carbon trading. Instead, it encourages parties to continue pursuing different approaches, including using markets, to promote climate change mitigation.

The Accord also failed to make developed countries commit to provide sufficient and publicly sourced funds to finance climate change mitigation and adaptation. As part of the Accord, developed countries promised to collectively provide resources approaching US $ 30 billion for 2010 – 2012, and to mobilize US $ 100 billion a year by 2020. However, these will not come from public funds alone but will also include resources from private, bilateral, multilateral and international sources. This enables developed countries to escape their responsibility to provide funds to compensate for their contribution to global warming.

The process of formulating the Accord was also severely criticized by several countries, particularly Sudan and Bolivia, for lack of transparency and participation, as it only involved a few countries. The UNFCCC acknowledge that the Copenhagen meeting "failed to deliver a full agreement that the world needs to address climate change." All eyes are now on Mexico, where the UNFCCC will hold its 16th Conference of Parties.

Where is agriculture in the negotiations?

Agriculture is important in climate change mitigation and adaptation. The sector accounts for 13.5 per cent of global GHG emissions, next only to the energy sector. In fact, the share of the sector to total GHGs can reach up to a third of total GHGs, if we factor in emissions from land use and land use conversion, such as the conversion of forestlands to agricultural uses. Indeed, much of the GHG emissions from the forestry sector, which accounts for 17.4 per cent of total GHG, are driven by the expansion of agricultural activities into forest areas.[6]

Additionally, agriculture, which is the main source of income and livelihood of millions of small-scale men and women farmers in developing countries, is the most vulnerable to climate change. The experience of women farmers in the village of Sayphusi in Laos is only one example of the adverse effects of this global phenomenon - manifested mainly in increasing uncertainty in the changing of the seasons, and in extreme weather conditions - on small farmers.

Although agriculture in developing countries is not a major contributor to global and historical GHG emissions, they are nevertheless highly affected by increasing changes in long term weather patterns. Most developing countries do not have the resources to provide farmers with the necessary support services that can help them cope with the negative effects of climate change. For instance, in many countries in Asia, farmers plant their crops in lands with no irrigation facilities or nearby sources of water. This makes them highly vulnerable to droughts or prolonged dry seasons. Moreover, most farmers in Asia have very little or no agricultural insurance to help them, in case their crops or livestock are damaged by storms, droughts or even pest infestation.[7]

Women farmers, on account of the multidimensional roles they play within the family and within the community, are especially vulnerable to climate change. The effects of climate change on food production pose special challenges for them because they are responsible for producing, gathering and preparing food for their families. Moreover, in many countries in Southeast Asia, women are primarily in charge of gathering water. The increasing incidence of droughts associated with climate change forces most of them to walk longer distances everyday to secure water for their households and their vegetable gardens. At the same time, many women associate extreme weather conditions as well as changes in long term weather pattern with greater incidence of sickness and diseases within the family. This poses additional burden on women, who are primarily and traditionally responsible for taking care of the health of family members.

For a lot of small farmers in developing countries, an ambitious agreement in Copenhagen - one

[6] Data from the presentation of Anne Laure Constantin of the International Agricultural Trade Policy during the AFA Women's Consultation held in Bangkok last October 6 to 8, 2009.

[7] Many farmers across Southeast Asia have come to associate pest infestation with extreme weather conditions.

that drastically reduces GHG emissions in order to mitigate climate change, while providing them with the necessary resources to build their capability to cope with its negative impact - is important for their survival.

Although the over-all outcome of the agreement will definitely have immediate and long term impact on agriculture, there are some aspects of the negotiations that are of special interest to small-scale farmers. These include:

Development of Nationally Appropriate Mitigation Actions

Although developing countries are not required to commit to specific reduction targets, they are nevertheless encouraged to develop and implement nationally appropriate mitigation actions (NAMAs) in the context of sustainable development. Farmers groups must ensure that they are part of the process of formulating and implementing NAMAs. Their participation in this process ensures that the type of mitigation activities implemented by government also have high adaptation potential in the sense that they can also help them adapt or cope with the negative effect of climate change. Moreover, their inputs will help ensure that NAMAs are appropriate to the needs and situation of local communities.

This will also enable farmers to mainstream their advocacies by promoting the use of sustainable farming technologies as possible ways to reduce GHG emission in agriculture.

Cooperative sectoral and sector-specific approaches to mitigation

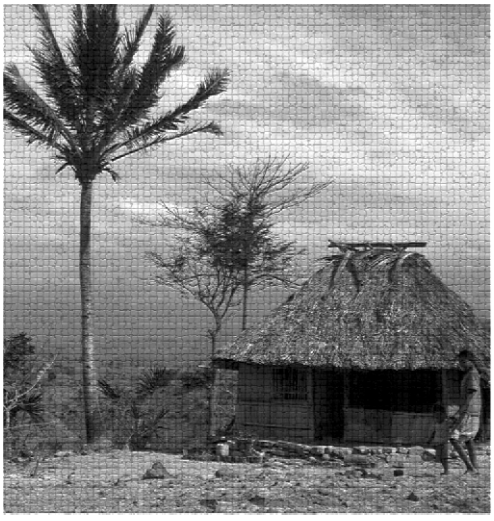
The Bali Action Plan provided for cooperative sectoral and sector-specific approaches in mitigation.[8] Farmers' groups need to ensure that mitigation action in agriculture recognizes the role of the sector in helping developing countries attain food security and livelihood security. Hence, mitigation activities must always be balanced and evaluated vis-à-vis its impact on the farming sector's capability to produce safe and sufficient food for the population, as well as to provide sustainable livelihoods for farmers. Accordingly, mitigation activities that create disincentives for food production, such as plantation type reforestation programs (as opposed to community based and managed reforestation programs), must be discouraged.

Additionally, it is important to underscore the important and almost symbiotic link between mitigation and adaptation actions in agriculture. Hence, approaches to climate change in the sector should include mitigation activities that also increase stakeholders' capability to cope with climate change. For instance, community based reforestation programs do not only help reduce GHG emissions, they also rehabilitate watershed systems that help farmers nurture their crops and protect them from droughts as well as from possible flooding during heavy rains.

Reducing Emission from Deforestation and Forest Degradation (REDD) in developing countries

The Bali Action Plan contains a provision mandating parties to discuss possible policy approaches and develop incentives to encourage developing countries to reduce emissions from deforestation and forest degradation. There are concerns that the creation and availability of incentives for REDD will result to plantation-type reforestation programs that can undermine food production in developing countries. There are also concerns that this will undermine land distribution and agrarian reform particularly in developing countries, such as the Philippines and Indonesia, where landlessness among farmers remains a problem. There are also apprehensions on the possible impact of REDD activities on upland farmers as well as on indigenous people's communities.

However, it is important to point out that many farmers in developing countries, particularly in Southeast Asia, recognize that reforestation, particularly if community based and managed, can provide tremendous support to developing countries' mitigation and adaptation efforts. Hence, it is important that farmers engage their national governments on policy positions related to REDD.



[8] Also referred to as I (b) (iv) of the Bali Action Plan

"The tools given by government are of poor quality and so are not effective in improving our productivity"
--Indonesian farmer

"Our government's extension workers promote chemical based farming. We find it hard to adapt because of high costs of fertilizers"
--Timor Leste farmer

"Families with fewer children are less food insecure when crops fail because of bad weather"
--Cambodian farmer

What can farmers do?

It is important that farmers' groups maximize all opportunities as well as venues to address the problem of climate change.

At the community level

1. Lobby local government units to develop adaptation plans.
2. Identify and lobby for community specific mitigation activities with high adaptation potential.
3. Document adaptation programs that work.

At the national level

1. Push for farmers' participation in the formulation of nationally appropriate mitigation actions (NAMAs). The results of local initiatives to identify community specific mitigation activities with high adaptation potential will serve as invaluable inputs to this process.
2. Engage government on cooperative sectoral and sector-specific approaches; advocate for community based and managed reforestation programs in REDD as opposed to plantation type reforestation.
3. Lobby for the extension of comprehensive crop insurance to help minimize farmers' risks and losses amidst increased uncertainties brought about by climate change.
4. Lobby for and participate in the creation of national climate change adaptation plans and programs.

At the regional and international level

1. Engage ASEAN on its Framework on Climate Change; push for the development of an ASEAN Work Plan on the same.
2. Prepare for COP 16 in Mexico by consolidating farmers' position on the various aspects of the negotiations, especially those that are identified as most relevant to agriculture. Ensure that text on cooperative sectoral and sector-specific approaches recognizes the important link between mitigation and adaptation in agriculture, as well as the latter's importance to the attainment of developing countries' food security and development objectives. Support the concept of community-based reforestation systems in discussions on REDD and LULUCF.
3. Continue pushing for aggressive reduction targets in GHG emission for developed countries. Support the G77's call for a 40 per cent cut in developed countries GHG emission based on 1990 levels by 2020.
4. Push for increased funding commitment for mitigation and adaptation actions by developed countries. Ensure that developed countries' financing commitments are sourced from public funds, and should be over and above funding coming from private sources.

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