How much will it cost to adapt to and mitigate climate change in the coming years—and who will pay for it? As governments and global institutions debate these questions, one thing is clear: climate change will exact a high and uneven price.

While developed countries have contributed most to exacerbating climate change, developing countries face the overwhelming burden of coping with its effects: greater variability of rainfall, intensified and more frequent natural disasters, increased food and economic insecurity and negative health impacts. In many cases, the impact of climate change will be felt most severely by women, the majority of and poorest of the poor.

If developing countries are to cope with climate change, they must have financial resources; how those resources are allocated will determine, in part, how effective their adaptation and mitigation strategies are. Recognizing the differential impact of climate change on women and men is an important part of this.

Population Perspective: Climate Change, Women and Financial Crisis

Historically, financial crises and recessions have affected women most severely. As government revenues and budgets shrink, gender equality, health and infrastructure investments suffer. Family planning, reproductive health services and HIV prevention services are usually cut first. The result: maternal and newborn health complications rise, childhood nutrition declines and HIV/AIDS infections may increase. The reality is that maintaining funding for these services is a better fiscal policy in the long term. In fact, studies have shown that investing in women’s health benefits the whole society. The same rationale is true for climate change, the negative impacts of which will be magnified if already scarce domestic financial resources have to be stretched to cope with its impacts and address health issues while developed countries reduce voluntary contributions to climate funds.
Needed Resources

What Will It Cost?

Coping with climate change will require a large financial commitment from the international community. Cost estimates for adaptation in developing countries range from USD 10–40 billion annually (World Bank) to three times that amount (Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC)—the lead intergovernmental body on this issue).

To finance mitigation, the Stern Review estimates the need to spend between 1-3 per cent of gross world product—which was USD 41 trillion in 2001—just to stabilize greenhouse gas (GHG) emissions at between 500-550 ppm CO2 equivalent.\(^A\) As more scientists agree that the ppm limit should be 350, the need for mitigation resources will increase.

The sums are enormous but represent an essential investment in our future that will benefit people and the environment while also reducing future costs from persistent and greater climate changes. Rajendra Pachauri, head of the Intergovernmental Panel on Climate Change (IPCC), has stated that the benefits to global health, energy security and employment from reducing GHG emissions could pay for the costs.\(^1\)

Who Will Pay?

The UNFCCC acknowledges that many developing countries are both more vulnerable to and have less capacity to deal with climate change than developed countries. For this reason, it expects developed country Parties to the Convention to financially assist developing countries in climate change adaptation and mitigation efforts, including in technology development and deployment and capacity building. Many argue that rich countries should pay most of the costs of adaptation and that this funding should be in addition to the promised official development assistance (ODA) of 0.7 per cent of gross domestic product (GDP).

Cost Estimates for Global Mitigation and Adaptation Measures\(^b\)

<table>
<thead>
<tr>
<th>Adaptation</th>
<th>Source</th>
<th>Annual Cost (billions)</th>
<th>Notes</th>
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<tr>
<td>World Bank (2006)</td>
<td>$10-40</td>
<td>Costs to mainstream adaptation in development aid</td>
<td></td>
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<tr>
<td>Oxfam International (2007)</td>
<td>&gt; $50</td>
<td>Costs in developing counties</td>
<td></td>
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<tr>
<td>UNFCCC Secretariat (2007a;2007b)</td>
<td>$49 - 171</td>
<td>Adaptation costs in 2030 (summarized in Table 65, p.198)</td>
<td></td>
</tr>
<tr>
<td>UNDP (2007)</td>
<td>$86</td>
<td>Adaptation costs in 2015</td>
<td></td>
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<tr>
<th>Mitigation</th>
<th>UNFCCC Secretariat (2007a;2007b)</th>
<th>$380</th>
<th>Costs in 2030 to return emissions to 2007 levels. (summarized in Table 64, p. 196).</th>
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<tr>
<td>IPCC AR4 (2007) (SPM Table 7)</td>
<td>&lt;3%</td>
<td>Costs as percentage of Gross World Product in 2030 for stabilizing in 445 - 535 ppm CO2eq range.</td>
<td></td>
</tr>
<tr>
<td>Stern (2007)</td>
<td>1% (±3%)</td>
<td>Costs as percentage of Gross World Product through the 2050 for stabilization in the 500 - 550 ppm CO2eq</td>
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</tbody>
</table>

\(^A\) ppm = parts per million; CO2 equivalent is a measure of the global warming potential of GHG using carbon as the standard


\(^C\) ODA is official financing to promote the economic development and welfare of developing countries and provided to the countries directly (bilateral) or to multilateral institutions. See <http://stats.oecd.org/glossary/detail.asp?ID=6043>.

Involving Women In the Process

Women’s voices are largely absent from policy discussions regarding climate change.\(^2\) The prevalence of men in decision-making—often most visible in economic spheres—means that special efforts must be made to involve women in climate negotiations. Gender-balanced participation in stakeholder and consultative processes, especially on climate finance issues, is critical to ensuring that funds are responsive to differentiated needs and build on varied capacities.

“Contributions should be seen as restitution, not charity.”

– Bretton Woods Project\(^3\)
How Much Will Each Country Pay?

Without a mechanism in place for determining each country’s contribution, financial commitments are no more than voluntary promises. To overcome this hurdle, Oxfam devised an Adaptation Financing Index based on the tenets of responsibility, equity, capability, and simplicity. This suggests that the United States and European Union should collectively be responsible for providing over 75 per cent of climate change finance, with Australia, Canada, Japan and the Republic of Korea contributing 20 per cent. The proposal builds on “polluter pays” and “common but differentiated” principles, which governments of developed nations have thus far shied away from.

Mobilizing Resources

Various financing mechanisms have recently emerged to help countries cope with climate change. Related funds, however, won’t be enough to cover all the actions that require financing. And although developed countries have pledged close to USD 18 billion to these funds, less than 10 per cent has actually been distributed. The mechanisms involve a range of actors and sectors (public/private and international/domestic) working to finance climate solutions. None of the mechanisms incorporate the gender dimensions of climate change, however, without which the financing is not equitable.

Where Do the Funds Come From?

Public funds mainly flow from developed countries (North-South), through multilateral (e.g., UNFCCC, Global Environmental Facility—GEF, UN organizations, World Bank) and bilateral (e.g., direct donor country funds) channels. But they also sometimes flow through South-South and domestic channels. Governments in developed countries contribute to these international funds on a voluntary basis, without a clear and necessary differentiation from ODA.

Private funds are wide-ranging and rely on the economic market. They flow through a network including carbon funds, exchanges, foundations and venture capital funds. Some are channelled through institutions such as the World Bank. Others may be raised through private investment in mitigation activities.

Market Mechanisms

Carbon Trading: The idea of carbon trading emerged decades ago and was formalized globally in the Kyoto Protocol as a market-based approach to reducing GHG emissions. Countries and corporations can trade with or purchase emissions credits from each other. According to the World Bank, in 2007 carbon markets were projected to generate about USD 64 billion. But this approach has not proven to significantly reduce emissions, and the funds generated are in the control of corporate entities.

UNFCCC Mechanisms: The Clean Development Mechanism (CDM), one of three market mechanisms under the Kyoto Protocol, lets developed countries meet their emissions targets by financing projects that reduce emissions in developing countries. It primarily funds large-scale projects that have—at best—a neutral impact on women and other vulnerable groups. Little effort is made to scale-up or aggregate smaller projects or make CDM more readily accessible to household- or community-level projects, the ones that often most directly affect women. To fully realize its potential, the CDM must be refined so that measurable local economic, social and environmental benefits are assessed before projects are approved.

Allocating Resources

Who Has Access to the Funds?

It is not easy for developing countries—and the women, indigenous peoples and other marginalized groups who live in them—to access financing for climate change projects. Part of the reason is that few people know about all the existing funds (currently about 60 worldwide), and submitting a proposal is usually a lengthy process that requires specialized technical knowledge. In addition, a time lag between the start of a project and the availability of funds is common, preventing poor and vulnerable segments of the population from initiating projects.

In the face of climate change and natural disasters, governments and institutions have the responsibility to mobilize resources and ensure they are allocated to those who need them most—often women. Most international funds do not have allocation guidelines. Countries need to determine priorities and build flexibility into their financing plans so that changing needs can be met.

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E Mitigation receives higher levels of funding than adaptation. One study found a mere USD 600 million (1/34th of OECD expenditures on global climate projects) was spent on adaptation during 2000–2006, most for disaster risk reduction. The remainder of the $71 billion spent in the same period was on mitigation in only a few countries. Source: Schalatek. (2009).
F A schematic can be found at http://www.climatefundupdate.org.
G The other two are Joint Implementation and Emissions Trading.
Case Study: Connecting Policies to Needs

Climate change is already being felt in the Philippines and is expected to intensify. The World Bank calculates that 85 per cent of the country’s gross national product comes from sectors at risk from rising temperatures and weather variability. Agriculture, the primary livelihood for 35 per cent of the labour force, is one of the main economic sectors at risk. Erratic monsoons are disrupting planting seasons and adversely affecting crop yields, devastating livelihoods and economic security.

The consequences for women, who account for 70 per cent of paid and unpaid agricultural labour, are particularly harmful. Women own less land than men and thus have fewer assets to sell when crops collapse or fail. They are also more prone to debt as the main participants in micro-credit programmes. During food shortages they prioritize the food needs of male family members over their own. Women have little access to decision-making arenas that determine climate finance allocation, yet they have been leading their households and communities in developing coping strategies, such as food preservation, crop diversification, water harvesting and irrigation. They have also, in many cases, been forced to adopt less sustainable solutions: take out loans, sell off livestock, seek government financial assistance, reduce food consumption and migrate to find other sources of work and income.

Government response to climate change and its impact on women has been limited. Organizational mechanisms, such as the Presidential Taskforce on Climate Change, have so far proved inadequate in assessing and responding to mitigation and adaptation needs. Climate change policies have a disproportionate focus on mitigation, especially on the promotion of renewable energy. While land use, particularly related to agriculture, is the foremost source of GHG emissions in the country, very little has been done to ensure this is ecologically friendly, something women in particular have been doing for centuries. Adaptation measures are mainly geared towards large-scale infrastructure projects rather than protecting agricultural and coastal livelihoods, building food security and ensuring people’s access to basic needs.

In short, women’s organizations report that there is a broad disconnect between current government policies for climate change adaptation and the priorities and needs articulated by poor rural women. The government will need to take a more active role in climate change adaptation and mitigation by specifically allocating resources to women—a necessary component of any lasting and comprehensive climate change policy in the Philippines.

Recommendations

All Parties to the UNFCCC

- Review all multilateral climate financing mechanisms to assess their ability to mobilize and allocate funds to those most impacted by climate change and disaster.
- Develop innovative, non-debt creating multilateral financing mechanisms, such as a single global Climate Change Fund.
- Negotiate a global North-South deal on climate finance on the basis of “no climate justice without gender justice”.
- Ensure all financial mechanisms and instruments associated with climate change mainstream a gender perspective at all stages including design, implementation, monitoring and evaluation.
- Implement gender budgets and gender accounting for climate change projects and programmes at national and international levels.
- Encourage financing mechanisms with guidelines, targets, capacity building and technology transfer that support sustainable forest practices in developing countries and make provisions for vulnerable populations and participatory decision-making, including for women.
- Situate climate change adaptation and mitigation financing within the broader context of development financing and development goals.
- Collect disaggregated socioeconomic data to ensure funds meet targets.

Developed Countries

- Implement the “polluter pays” and “common but differentiated” principles by providing compensatory and reparative finance to developing countries to fund climate change mitigation and adaptation efforts.
- Commit to strong regulatory emissions-reduction targets rather than voluntary, market-based initiatives that generally exclude the poor.
- Support developing countries in building environmentally friendly and gender-sensitive adaptation and mitigation policies and programmes, and engage in the same at home.
- Cancel the external debts of poor countries to free up resources for mitigation and adaptation.

Developing Countries

- Ensure climate financing policies and resource allocations are responsive to people’s needs.
- Create mechanisms that guarantee women’s equal access to climate change financing, following a participatory approach.
- Direct foreign and domestic investments towards mitigation and adaptation through the provision of subsidies and incentives, especially in areas with strong gender equality and poverty reduction impacts, such as agriculture.

UNFCCC

- Engage in a systematic process of gender mainstreaming and invest in specialized research on gender and climate change.
- Use disaggregated indicators to monitor the impact of adaptation and mitigation funds, and conduct gender audits of all funding mechanisms.
- Ensure mitigation strategies fund new, green technologies and develop and enforce necessary GHG emission regulations.
There can be no fair and equitable global climate agreement without a comprehensive global climate financing understanding. And this understanding can only be fair, equitable and comprehensive when it incorporates gender awareness and strives toward gender equitable financing solutions."

– Liane Schalatek, Heinrich Böll Stiftung, 2009