

# Clean Development Mechanism

EXPLORING THE GENDER  
DIMENSIONS OF CLIMATE  
FINANCE MECHANISMS



## Background

Established by the Kyoto Protocol, the Clean Development Mechanism (CDM) has two concurrent objectives: to reduce emissions and promote sustainable development. A market-based mechanism, the CDM generates funds through investments in emissions-reduction projects in developing countries. Upon successful implementation, these projects are issued credits known as Certified Emission Reductions (CERs). These CERs are tradable on the carbon market and can be bought and sold to help Annex I countries meet their emission-reduction commitments under the Protocol.<sup>1</sup>

By identifying and funding cost-effective opportunities to reduce emissions, the CDM has become a major player in climate change finance. As of November 2010, more than 5,600 projects were in the CDM pipeline<sup>2</sup>, including nearly 2,500 that had been registered with the CDM Executive Board. Combined, primary and secondary CDM market transactions were worth nearly \$33 billion<sup>3</sup> in 2008 and nearly \$21 billion in 2009.<sup>4</sup> The mechanism has been less successful, however, in advancing its second objective and has been criticized for prioritizing emissions reductions over sustainable development.

### Box 1: CDM Governance

There are a number of key actors involved in the governance of the CDM. While the Conference of the Parties acts as the supreme body to the mechanism and has rule-making authority, the Executive Board holds a supervisory role and is responsible for day-to-day CDM governance. At the country level, designated national authorities approve national participation in CDM initiatives and are responsible for ensuring that CDM projects contribute to the host country's sustainable development.

## How Does the CDM Relate to Poor Women's and Men's Livelihoods?

If utilized properly, the CDM can promote sustainable development in host countries by bringing new technologies into communities, which often leads to employment opportunities and environmental benefits (e.g., improved air quality or decreased waste). Even in cases where projects have few intrinsic benefits for the local community, project developers can invest a portion of their profits into development initiatives such as literacy classes or health clinics. Furthermore, the considerable funding mobilized under the CDM provides new sources of financing for improved access to energy and the switch to clean energy, both of which have significant implications for local livelihoods.

Though both men and women benefit from increased energy access, women's traditional roles as energy providers, water gatherers and household caretakers mean that the benefits of improved access to energy accrue particularly to women — so long as their needs and perspectives are considered in a project's planning and implementation. Access to modern and

clean forms of energy has the power to lessen the amount of time women spend on unpaid care work, making time for more productive activities, such as education, cottage industries or jobs outside the home. Furthermore, the switch to cleaner energy often has important health benefits, such as alleviating the strenuous work of fuel wood collection and reducing exposure to indoor air pollution, which kills 1.6 million people — mostly women and children — each year.<sup>5</sup>

Unlike emission reductions, however, the carbon market does not monetize development benefits, meaning that it provides few direct incentives for project developers to seek out projects with high impacts on sustainable development and local livelihoods. Thus, rather than beginning with local energy needs assessments and designing projects to meet those demands — an approach that would give local women and men an opportunity to define and have power over their livelihoods — projects have typically been developed in a top-down manner: project developers look first at opportunities for large-scale emissions reductions and only secondarily consider the initiative's impacts on sustainable development and local communities. While this approach has contributed to the CDM's first objective, it has also caused many worthwhile projects to be overlooked.

The primary focus on reducing emissions has also resulted in a number of imbalances in geographical and sectoral distribution. Of projects registered as of November 2010, 63 percent were located in China and India,<sup>6</sup> while the entire African continent hosted less than 2 percent.<sup>7</sup> Furthermore, the majority of these projects have focused on large-scale industrial processes rather than small-scale, community-level initiatives. These large industrial projects typically have few intrinsic benefits for local populations, and many of their project developers have neglected to invest a portion of their proceeds into community development. As such, the CDM has largely failed to deliver the development benefits early observers had hoped for — though positive trends are beginning to emerge: more 'community' or at least 'local' projects are now being developed, as many of the larger projects have already been funded. There is also

a steadily increasing number of countries, including African states, accessing the CDM; a steadily increasing number of methodologies and project types; and improvements to existing methodologies that inherently produce higher MDG and gender-equality benefits (e.g. improved cook-stove methodologies).

Nonetheless, while a small number of projects, such as the Bagepalli CDM Biogas Programme (see Box 2), are making positive contributions to women's livelihoods, in the majority of cases significant challenges to achieving the objective of sustainable development remain. For example, though local communities and grassroots organizations are generally best positioned to identify projects that would meet local needs and women's priorities, these groups often find the technical and financial aspects of CDM project development and approval to be significant barriers to market entry.

Developing a CDM project is a long, complex and expensive process. While the time and cost requirements vary considerably, it takes an average of two years and \$50,000 to \$200,000 to move a project from initial identification to final registration with the Executive Board. Small- and micro-sized projects, on an aggregate scale, have significant potential to contribute to both sustainable development and emissions reductions; however, the high costs involved in planning, implementing and registering such projects have historically made them unattractive to project developers.

Recognizing that the project-based CDM approach included a number of inefficiencies, in June 2007 the Executive Board provided new guidance, which opened the door to Programmes of Activities, or programmatic CDM (pCDM). By allowing project developers to register several distinct project activities under the umbrella of a Programme of Activities, a developer can aggregate many small projects into one large programme. To be eligible, individual project activities must share the same technology and baseline but may take place over a broad geographical area and a longer period of time.

The development of pCDM has strong potential to address



#### **Box 2: A Gender-aware CDM Project in India: Bagepalli CDM Biogas Programme**

Registered with the Executive Board in 2005, the Bagepalli CDM Biogas Programme was designed and implemented through a partnership between the Coolie Sangha, a local grassroots organization, and the Agricultural Development and Training Society, a local non-governmental organization. The initiative has two objectives: "to provide [a] clean and smoke-free cooking environment to 18,000 Coolie women in 500 villages" and "for 18,000 Coolie women to benefit from carbon trading and get a regular and assured income from the sale of CERs."<sup>8</sup> The project, which installed 5,500 biogas units that convert cow dung into cooking fuel in poor and peasant households, includes methodologies to ensure that local communities feel ownership of the project. Women have been directly involved in all stages of the project, and after investors recoup the investment costs, CER revenues will be shared with the 5,500 women who receive biogas units.<sup>9</sup>

The project has already produced significant outcomes. It has reduced the need for fuel-wood collection, improved health and given women more time to engage in income-generating activities, thereby providing economic empowerment. In addition, children's school attendance has improved.<sup>10</sup>

many of the challenges inherent to the CDM's project-based approach, including its low contribution to sustainable development, neglect of small, local-level projects, and uneven geographic and sectoral distribution. By aggregating many small projects, project developers can obtain sufficient scales to overcome the fixed costs inherent to the CDM process, thus opening a range of new possibilities for making small-scale projects commercially viable. However, transaction costs for PoA are substantially higher than those for regular CDM, meaning that without substantial adjustments it may be difficult for gender-responsive, pro-poor energy-access projects to be bundled and registered. Some public funding to increase market uptake may thus be necessary to grow pCDM.

With less than 60 programmes in the CDM pipeline – and only five registered – pCDM is still in its early stages. A preliminary review shows that the majority of pCDM activities under development focus on small-scale technologies such as solar water heaters, compact fluorescent light bulbs and energy-efficient technologies for cooking — all of which have important implications for local women and men. However, it is too early to predict the actual impact.

### Gender and the CDM: Status to Date

Little research has been done on the gendered impacts of the CDM, making it impossible to discern the precise degree to which current projects have impacted women and men differently. Nonetheless, a review of project design documents suggests that the large-scale, industrial projects that have garnered the majority of CERs issued to date have provided few direct benefits to women. This has resulted from a number of contributing factors, many of which are relevant not only to women but also to poor and marginalized communities as a whole.

Carbon markets' failure to monetize sustainable development benefits provides little incentive for developers and investors to pursue projects with high development benefits but low returns on investment. Even when such benefits are included in project design, the lack of requirements for impacts to be monitored or verified makes it less likely that project developers will ensure realization of expected impacts. Without such evaluation tools, there is no way to assess the actual effects on local populations.

At the international level, gender concerns are not currently incorporated into project development guidelines. Some countries do include women's empowerment or gender equality within national sustainable development criteria, which may allow a project with gender equality benefits to gain approval; however, because CDM projects may be approved for having met only one sustainable development criterion, this approach is not an overall strategy for ensuring that women's and men's needs and perspectives are addressed equally. There are currently no requirements that projects undergo a gender analysis, nothing ensuring that gender equality frameworks are followed and no obligation that women and men be consulted on an equal basis

(see Box 3). Through a combination of such gaps, women can easily become marginalized within the CDM process.

Women have also been under-represented in CDM governance. Of the 61 people who have served as Executive Board members and/or alternates to date, only 14 have been women. Women's representation on the board peaked in 2007 during meetings 29-31, when 3 members and 5 alternates were women. However, the representation then declined significantly, with no female members and only 1 alternate for the duration of 2009. Recognizing this shortcoming, in 2009 the CMP encouraged Parties to "give active consideration to the nomination of women as Board members and alternates."<sup>12</sup> However, this resulted in only one woman being nominated to the board as a member and two women being nominated as alternates in 2010.



#### Box 3: Ensuring Women's Involvement in Project Planning

It is crucial that both women's and men's needs and perspectives are heard and taken into account during project planning processes. While CDM rules dictate that project developers must consult with local stakeholders before a project can be registered, there is no guidance regarding stakeholder consultation methodologies. Unfortunately, this means that individuals or groups, including women, can be excluded from such consultations and that projects' gendered implications can easily be overlooked.

While few registered project design documents demonstrate success in incorporating both women and men during project planning or in considering the project's gendered impacts, India's Allain Duhangan Hydroelectric Project provides a positive example. The project developers contracted professional experts to assist with their social impact survey. The investigation included household surveys, interviews with villagers and focus group discussions with women. There was an emphasis on collecting information in four categories, one of which was gender, where the information gathered addressed the "role and status of women in the community, division of labour within the households" and the potential impact of the project on women.<sup>11</sup> This research helped ensure that women's as well as men's needs and concerns were integrated and addressed within the project planning process.

## Suggestions for Moving Forward

There are a number of steps that can be taken to make the CDM more gender-responsive.

### *The CDM Executive Board should:*

**Strengthen stakeholder consultation requirements**, mandating that open and widely publicized meetings are arranged by project developers with local people, with specific requirements on including women and men equally. This may sometimes mean holding separate meetings for men and women.

**Make gender analysis an integral component of the project approval process** at the international level.

**Develop pre-approved methodologies for projects which will contribute to gender equality.** Such methodologies, however, must be created from the bottom up, beginning with an assessment of the different needs of women and men (e.g., energy needs), followed by the design of methodologies to meet those needs. This will ease the process for project developers and civil society organizations that want to pursue such projects.

**Identify strategies to facilitate and increase access to the market for civil society and community-based organizations**, which may be more likely to develop community-based projects.

**Require monitoring and evaluation of projects' contributions to sustainable development** in order to ensure that expected contributions to sustainable development are realized. The Gold Standard<sup>13</sup> could be used as a model for these endeavours.

### *Parties to the Kyoto Protocol should:*

**Ensure equal representation of women and men on the Board.** While the number of female board members does not necessarily predict how well the CDM will respond to the needs of local women and men, having women's voices heard at the senior level remains an important objective.

### *Designated national authorities should:*

**Incorporate gender concerns into sustainable development criteria**, thereby ensuring that projects with positive gendered effects are recognized for their contributions to sustainable development.

**Require that projects hosted within their countries undergo a gender analysis** in order to receive approval.

### *Civil society representatives should:*

**Attend stakeholder consultation meetings**, ensuring that the impacts on both men and women have been considered within the project planning and approval processes.

**Build the capacity of grassroots women's groups and community development organizations.** Increasing the number of projects that respond to the specific and often varied needs of local men and women will require the increased capacities of grassroots organizations, as these types of organizations are best equipped to identify and implement community-based CDM projects.

**Advocate with governments** to ensure that gender is considered during project approval processes at both the national and international levels.

**Perform and publish research on the gendered impacts of CDM projects.** Stakeholders should contribute to the knowledge base on the gendered impacts of the CDM by performing and publishing research that analyses how existing CDM projects have affected women and men differently and in combination.

### *Project developers should:*

**Consider the possible gendered impacts of their projects.**

**Increase the focus on community-based projects that are developed from the bottom up**, thereby ensuring that CDM initiatives contribute to local development and increase the number of projects that address both women's and men's needs.

## References

<sup>1</sup> As of November 2010, nearly 450 million certified emission reductions (CERs) had been issued (<http://cdm.unfccc.int/Statistics/Issuance/CERsIssuedByHostPartyPieChart.html>)

<sup>2</sup> UNEP Risoe CDM/JI Pipeline Analysis and Database, November 1st 2010.

<sup>3</sup> Capoor, K. and P. Amrbosei. 2009. 'State and Trends of the Carbon Market 2009'. Washington, DC: The World Bank.

<sup>4</sup> Kassoy, A. and P. Amrbosei. 2010. 'State and Trends of the Carbon Market 2010'. Washington, DC: The World Bank.

<sup>5</sup> World Health Organization. 2007. 'Indoor Air Pollution and Health. Fact Sheet N°292.' Available at: [www.who.int/mediacentre/factsheets/fs292/en/index.html](http://www.who.int/mediacentre/factsheets/fs292/en/index.html).

<sup>6</sup> United Nations Framework Convention on Climate Change. Registered Projects by Host Party. 4 November 2010. Available <http://cdm.unfccc.int/Statistics/Registration/NumOfRegisteredProjByHostPartiesPieChart.html>

<sup>7</sup> United Nations Framework Convention on Climate Change. Registered Projects by Region. 4 November 2010. Available at: <http://cdm.unfccc.int/Statistics/Registration/RegisteredProjByRegionPieChart.html>.

<sup>8</sup> Tristle Technologies Pvt. Ltd. No date. 'Note on the Biogas CDM Monitoring Solution'.

<sup>9</sup> Agricultural Development and Training Society. 2009. 'Biogas CDM Project of Bagepalli Coolie Sangha'.

<sup>10</sup> Bagepalli CDM Biogas Programme. 2008. 'The Gold Standard Project Design Document for Small-Scale CDM Projects'.

<sup>11</sup> CDM Executive Board. 2007. 'Allain Duhanan Hydroelectric Project'. Project design document.

<sup>12</sup> UNFCCC. 2009. Report of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol on its fifth session, held in Copenhagen from 7 to 19 December 2009. Decision 2/CMP.5.

<sup>13</sup> The Gold Standard is a voluntary, NGO-backed labeling scheme which had developed a strategy for recognizing projects which make certifiable contributions to sustainable development in the host country.