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**Research Report**

## New climate investments must strengthen sustainable development and minimize trade-offs

Briefing Paper, No. 22/2015

**Provided in Cooperation with:**

German Institute of Development and Sustainability (IDOS), Bonn

*Suggested Citation:* Hoch, Stephan; Horstmann, Britta; Michaelowa, Axel; Hein, Jonas (2015) : New climate investments must strengthen sustainable development and minimize trade-offs, Briefing Paper, No. 22/2015, Deutsches Institut für Entwicklungspolitik (DIE), Bonn

This Version is available at:

<https://hdl.handle.net/10419/199763>

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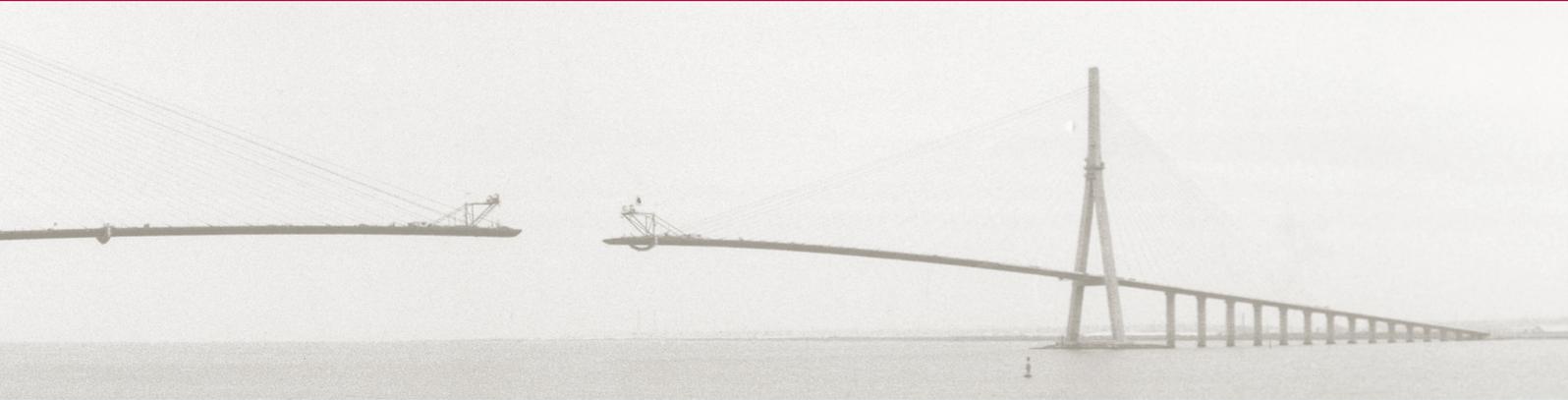
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## New Climate Investments must Strengthen Sustainable Development and Minimize Trade-offs

### Summary

The impacts of global warming threaten to undermine the core objectives of sustainable development: Large-scale investments that aim to reduce greenhouse gases (GHG) are indispensable. A just low-carbon transformation requires that mitigation investments seek to generate sustainable development (SD) benefits while also minimizing their adverse effects.

A central goal of the United Nations Framework Convention on Climate Change (UNFCCC) is alignment of the climate and the sustainable development agendas. Governance and operational structures of policy instruments and funds should attempt to prevent local communities being confronted with the impacts of both climate change and climate protection measures.

Ongoing negotiations of the rules governing post-2020 climate protection measures offer the opportunity to address these issues. This briefing paper begins by analysing how activities under the Clean Development Mechanism (CDM) both positively and negatively impact sustainable development.

It then compares these experiences with emerging climate governance approaches by examining the Warsaw Framework for Reducing Emissions from Deforestation and Forest Degradation (REDD+) and the Green Climate Fund (GCF).

Key conclusions:

- Activities under the CDM have both positively and negatively affected sustainable development, depending on the

type and local circumstances: Community-based activities regarding energy access reap high benefits for sustainable development and large-scale hydropower and reforestation projects can create negative impacts.

- The CDM requires stakeholders to be consulted at the beginning of the project design but does not include international safeguards to prevent ongoing activities harming local communities.
- More recent financing instruments and investment frameworks such as the GCF and REDD+ have begun to formulate additional regulatory frameworks to promote sustainable development and avoid harmful side effects. While these frameworks still must be tested in practice, the GCF stipulates verification of sustainable development impact and mechanisms for independent redress.
- The future of a reformed CDM for financing climate protection and sustainable development depends on political decisions. However, the CDM offers critical insights for designing a new generation of multilateral climate finance mechanisms. Post-2020 mechanisms should create strong and harmonized standards to help align the sustainable development agenda with climate protection.

While sustainable development and climate goals can be mutually reinforcing, there may be trade-offs between these agendas. Future climate finance mechanisms should minimize trade-offs and allow for appeals by vulnerable communities affected by investments in climate protection.

## 1. The UNFCCC must minimize trade-offs in climate protection finance

The 2030 Sustainable Development Agenda of the United Nations states that “climate change is one of the greatest challenges of our time and its adverse impacts undermine the ability of all countries to achieve sustainable development”. Investments in climate protection must be significantly increased. According to the Organisation for Economic Co-operation and Development (OECD), in 2014 international climate finance for developing countries amounted to almost USD 62 billion.

Decision-makers must quickly create robust governance frameworks that effectively generate sustainable development benefits and prevent their adverse effects. Empirical research shows that some climate protection investments have negatively impacted on local development opportunities and livelihoods, with the latter put at risk as a result of the impacts of climate change and also by climate protection policies.

The current negotiations regarding post-2020 climate protection measures provide a chance to address such risks using existing policy instruments and governance approaches.

The CDM was established in 1997 under the Kyoto Protocol with the dual objective of helping to reduce GHG in developing countries and contributing to their sustainable development.

REDD+ provides incentives to reduce emissions in the forest sectors of developing countries. The GCF seeks to support developing countries’ transformation to low-carbon and climate resilient development pathways by reducing their vulnerability to the impacts of climate change. It is expected to become the main financing institution for international climate finance under the UNFCCC whose Parties have repeatedly acknowledged the importance of climate protection and sustainable development. They should align the two agendas in the implementation structures.

Is the climate regime on track to minimize trade-offs between climate protection and sustainable development?

## 2. Sustainable development promotion under the CDM

The CDM has very comprehensive experience in governing the SD impacts of mitigation activities in developing countries. It has generated more than 7500 registered projects in almost 100 developing countries. However, some activities have been criticized for generating too few sustainable development benefits; negative impacts on the local population have also been reported.

Our assessment of more than 200 research articles and in-depth analysis of 30 articles indicates that CDM activities have had both positive and negative effects on sustainable development (see Table 1) – depending on activity type and local context. For instance, rural household energy-access

activities often deliver significant benefits for sustainable development while industrial gas projects do not. The literature on forestry and large-scale hydropower projects is contradictory: Some studies report the provision of ecosystems services and their high benefits for biodiversity, others stress the negative impacts on local communities, for example using exotic tree species in monoculture plantations or projects that restrict local communities’ access to natural resources. Some large-scale CDM hydropower projects have led to local communities being resettled and even to human rights violations.

| Table 1: Sustainable development impacts of selected CDM project types |  |  |
|--|--|--|
| CDM project types  | SD benefits  | Negative SD impacts  |
| Energy access (including PoAs)*  | Reduced air pollution, deforestation and fuel consumption  | Not reported   |
| Forestry   | Increased biodiversity; reduced soil erosion; improved water quality and infiltration; additional income | Local biodiversity threatened by exotic species; lack of participation; restricted access to natural resources |
| Renewable energy (solar, hydropower)                                   | Generated employment; increased energy access and technology transfer; reduced air pollution             | Resettled/displaced local populations (in some large-scale projects)   |
| Source: Hoch et al. (forthcoming).                                     |  |  |

Over time, however, the CDM has increased the possibility of generating sustainable development benefits. In 2005, its portfolio was changed when Parties to the Kyoto Protocol introduced the Programme of Activities (PoA). PoAs facilitate implementation of small-scale household-based CDM projects, which often have strong SD benefits such as the distribution of solar lamps or biomass stoves. Aggregating many small-scale projects has reduced transaction costs and facilitated access to the CDM.

However, the literature is unclear how the CDM might have contributed to sustainable development. There are several reasons for this:

*First*, many studies analyse only the positive or negative effects and thereby show contrasting results in relation to SD impacts, even for the same activity type.

*Second*, the CDM requires consultation of local and global stakeholders and environmental impact assessments only when a project is being designed, with socio-economic impact assessments just required for forestry CDM (CDM A/R) projects. The UNFCCC has no international safeguards to prevent the harmful impacts on local communities that might result from CDM activities and relies on the host country’s laws and regulations.

A *third* factor in the big differences in SD impacts of CDM projects is the variety of national regulations and enforcement capacities. Host countries insist on their sovereign right to determine if a proposed CDM activity contributes to sustainable development – so there has been no specific multilateral guidance about the mandatory SD benefits.

In response, the CDM Executive Board has developed a voluntary tool for project developers to showcase a CDM activity's sustainable development benefits with harmonized indicators regarding the environmental and socio-economic aspects of sustainable development. Other attempts to improve SD contributions have been initiated by the demand side. For example, the European Union Emission Trading System (EU ETS) only accepts CDM credits from large hydropower projects that meet the standards of the World Commission on Dams.

### 3. Governing trade-offs under REDD+ and the GCF

While country circumstances are important, institutional design also matters. In light of the CDM experience and suggestions for governing sustainable development impacts, we use five institutional criteria to analyse and compare institutional aspects of governing positive and negative sustainable development impacts in the CDM, REDD+, and GCF (see Table 2).

In comparison with the CDM, REDD+ includes more elaborated mechanisms to prevent negative impacts on sustainable development. However, although the Warsaw Framework for REDD+ provides some safeguards and refers to the UN Declaration on the Rights of Indigenous Communities, it provides no access to formalized appeals processes. The design and implementation of policies and mechanisms to prevent negative SD impacts, such as stakeholder participation and social and environmental safeguards, are left to the host country. Moreover, the UNFCCC has not established clear guidelines for capturing non-carbon benefits: Barriers to stronger multilateral rules for governing sustainable development impacts may not result from specific mechanisms but rather be due to the principle of national sovereignty.

Despite progress in comparison with the CDM regulations, many non-governmental organizations criticize REDD+ safeguards as too weak and too general, with unclear legal status. While voluntary, the CDM sustainable development tool goes beyond the Warsaw Framework for REDD+.

Whereas the Warsaw Framework for REDD+ is still awaiting implementation, valuable practical experience has been gained with voluntary carbon standards such as the Climate Community and Biodiversity Alliance (CCBA) and Planvivo. Both require free, prior and informed consent (FPIC) from actors affected by a project, and compensation for lost income. FPIC is key because it gives communities the right to withhold their consent to a proposed climate protection initiative.

**Table 2: Institutional comparison of CDM, GCF and REDD+**

| Governance approaches for SD promotion               |   |   |   |
|--|---|---|---|
| Institutional criteria                               | CDM   | GCF   | UNFCCC REDD+  |
| Host-country approval                                | Designated National Authority (DNA): Letter of Approval   | No objection procedure, approval by National Designated Authority (NDA) | National focal point coordinates and reports to UNFCCC        |
| Stakeholder participation                            | Mandatory global and local stakeholder consultations  | NDA consultation processes  | Mandatory, especially indigenous peoples have to be involved. |
| Appeals and redress mechanisms                       | Not provided  | Independent Redress Mechanism   | Not provided  |
| Standardized documentation of SD impacts and results | Voluntary reporting guidelines/ SD tool; no mandatory results framework or ex-post verification | Initial Results Management & Performance Measurement frameworks         | Voluntary reporting on non-carbon benefits                    |
| Social and environmental safeguards                  | Only as required by domestic regulation   | GCF environmental and social safeguards                                 | Reporting about safeguards to UNFCCC                          |
| Source: Authors.                                     |   |   |   |

The Green Climate Fund uses a 'no objection procedure', which must be approved by a national designated authority (NDA) to ensure consistency with national climate strategies and legislation. Accredited entities must comply with a range of social and environmental standards – based on the performance standards for environmental and social sustainability of the International Finance Corporation (IFC) (until its own safeguards have been developed) – in order to access GCF funds. The GCF has a monitoring and accountability framework to control the accredited entities, and is designing mechanisms to encourage the participation of vulnerable communities and civil society. National accredited entities must establish grievance mechanisms for registering complaints about GCF funded projects; for its part, the GCF is going to set up a mechanism for independent redress.

GCF-funded activities need to document impacts based on the initial results and performance measurement framework in order to capture not only mitigation and adaptation impacts, but also the potential for triggering a paradigm shift toward sustainable development.

#### 4. UNFCCC – on track to minimize trade-offs?

The sustainable development and climate agendas must be aligned. National governments must develop strong regulatory frameworks and incentives. In this respect, Parties to the UNFCCC should ensure adequate financial and technical support.

The institutional design and operational rules for post-2020 mechanisms will be decided after COP21. The future relevance of a reformed CDM, REDD+ and the GCF is unclear. While sustainable development and climate goals can be mutually reinforcing, there may be trade-offs between these agendas. We conclude that the UNFCCC process could more effectively help align the climate and development agendas by considering the following issues:

1. **Strong international safeguards and appeals mechanisms** must be developed, and monitoring and verification of sustainable development impacts harmonized. These issues are of general relevance for any mitigation mechanism. REDD+ and the GCF show that negotiating parties develop alternative approaches both for promoting sustainable development benefits and for preventing harm.
2. **Enhanced sustainable development impact criteria and indicators, and reporting:** Any future UNFCCC

mechanism should require harmonized reporting on sustainable development benefits and impacts. Although not all SD benefits may be quantifiable, options for their ex-post verification should be explored. UNFCCC mechanisms and funds should incentivize investments with high SD benefits by reducing transaction costs for financing and stimulating innovative models for allocation, including through subnational or non-state actors.

3. **Stakeholder participation** mechanisms should guarantee the meaningful involvement of a society's worst-off members throughout climate protection activities. Expanding the possibility to comment during monitoring would be a good first step in boosting stakeholder involvement.
4. **Value for Money:** The financial valuation of higher SD benefits should be improved so that high quality activities do not compete in a race to the bottom with low-abatement-cost activities, which also reap lower sustainable development benefits.

The current negotiations for a new climate deal provide a window of opportunity for designing climate investments to support a just transformation to low-carbon development. The new generation of climate instruments should accept the existence of trade-offs and find innovative ways to minimize them.

#### References

- UNEP DTU. (2015): *CDM Pipeline Overview: June 2015, UNEP DTU CDM/JI Pipeline Analysis and Database*. Copenhagen: Danish Technical University. Retrieved from <http://cdmpipeline.org/>
- CDM Policy Dialogue. (2013): *Climate change, carbon markets, and the CDM: A call to action*. Report of the High-Level Panel on the CDM Policy Dialogue, UNFCCC, Bonn. Retrieved from <http://www.cdmpolicydialogue.org>
- Hoch, S., et al. (forthcoming). *Sustainable development impacts of mitigation mechanisms: Lessons learned from the CDM, GCF, and REDD+*. Research report for the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE), Bonn.

**With financial support from the Federal Ministry for Economic Cooperation and Development (BMZ)**

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