



MOVING BEYOND BALI 07: How Can Communities Capitalise on Climate Change?

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Summary

Awareness of the challenges presented by long term climate change has never been greater. The issue is receiving unprecedented levels of political and media attention. Stakeholders in both developed and developing countries – from large industries to small businesses, farmers to consumers, bankers to shopkeepers - are starting to reduce carbon emissions, 'neutralise' their environmental impacts and adapt to a warmer future.

The 2007 United Nations Climate Change Conference in Bali has set the roadmap to determine a new and durable regime that will deliver radical and permanent reductions in greenhouse gas emissions. The challenge lies in how local communities in developing countries can capitalise on these new opportunities to improve their welfare and environment.

This FDC Briefing Note highlights a number of innovative strategies related to how communities can capitalise on climate change, including by engaging with the business community, donors, NGOs, brokers and intermediaries.

Introduction

The adverse impacts of climate change on local communities in developing countries are significant and growing. The 2007 United Nations Climate Change Conference in Bali injected renewed vigour to the debate on various issues surrounding climate change, and the welcome addition of Australia to the ranks of Kyoto Protocol signatories gave the process a major boost. This FDC Briefing Note explores ways by which communities can address the key issues and capitalise on the climate change challenge.

Local Community Initiatives

Local communities in developing countries need solutions to address climate change challenges, including how to:

- insulate themselves from the likely impacts of climate change.
- establish cleaner energy and manufacturing technologies to mitigate their own emissions.
- take advantage of existing international mechanisms to attract investment in projects that derive credits in the fledgling carbon markets.
- achieve social and economic benefits from environmental investments.
- make the right connections to unlock innovative sources of financing for community-level carbon reduction projects.

To complement its core objective, which is to drive down emissions and exploit opportunities for sequestering carbon in long term 'sinks', the Kyoto Protocol also serves as a catalyst for broader social and economic development. This is generated through the transfer, by both public and private sectors, of sustainable technologies, investment and know-how into projects at local and regional levels. Understanding the roles and potential of public and private actors will become increasingly important as the market-based mechanisms, pioneered by the Kyoto Protocol, mature into significant sources of investment for development projects that were once the exclusive domain of government-sponsored development and aid programs.

Local communities in developing countries have the potential to innovate in order to reduce greenhouse gas emissions and/or adapt to the impacts of climate change. Some of these innovations may include:

- adapting energy-efficient methods in transport, buildings, appliances and lighting.
- expanding access to renewable energies such as wind, solar, hydro, biomass, geothermal, tidal and wave power, and cleaner transition fuels such as LPG gas.
- growing access to biofuels such as those derived from corn, sugar, and other crops, and next generation biofuels based on woodchips and fibrous plants.
- adapting waste reduction methods such as improved waste disposal and recycling, and changing consumption patterns.
- identifying options for adaptation, e.g. flood defences, sea walls, improved water supplies for drought-prone areas, and training in new agricultural techniques.

Engagement with the Business Community

All sectors of the business community – energy, resources, transport, manufacturing, telecommunications, finance, agriculture, construction – are firmly embracing the need for new technologies, low carbon products, eco-efficient processes, and investment in alternative energy systems. Commercial enterprises of all types are entering the field, and financing institutions are responding to the challenge.

Reaching the poor in rural communities remains a significant challenge. Governments must recognise the vital role of the business sector, both domestic and international, and encourage the deployment of private investment in development through various risk-sharing activities, including targeted subsidies, protection against currency devaluation and seed-funding for research, development and innovation.

In many developing countries, modern, off-grid energy sources such as solar photovoltaic lighting systems, biogas, micro hydro-power, wind and LPG cooking stoves have become important sources of alternative energy, especially in the absence of other reliable forms of rural electrification. There is also an urgent need to avoid the continued use of biomass such as firewood, animal dung, charcoal and kerosene which adversely affect both human health and the environment.

While the focus in developed countries is increasingly directed towards employing cleaner or renewable energies to limit the emission of greenhouse gases, the use of these alternative energy sources in developing countries is first and foremost about access to safer, cleaner, cheaper and more reliable energy. Stimulating this shift requires innovative financing mechanisms and the establishment of partnerships with the private sector.

Commercial and development banks can help to overcome deficits in start-up funding and the meeting of research and development costs by providing guarantees or other credit – such as long term loans, short term bridging finance and cash equity.

In order to identify innovative sources of funding to address climate change, local businesses and enterprises should explore partnerships with multilateral corporation whose operations they host, and organisations such as local and national chambers of commerce.

Opportunities within the United Nations

The official UN Kyoto Protocol, including the 'Clean Development Mechanism' (CDM), which enables developed countries to implement project activities that reduce emissions in developing countries in return for certified emission reductions (CERs), is a rapidly growing channel for investment. The CERs generated can be used by the sponsoring countries to help meet their own emissions targets, and in some cases can be traded with others.

The current modalities and procedures for the CDM focus on activities that reduce emissions. A CDM project activity might involve, for example, a rural electrification project using solar panels or the installation of more energy efficient boilers. Definitions and modalities have been developed to include afforestation and reforestation activities (often referred to as "sinks") in the CDM. However, developed countries are currently limited in how much they may use CERs from such activities towards their targets. Going forward, the CDM is expected to generate investment in developing countries, especially from the private sector, and promote the transfer of environmentally-friendly technologies in that direction.

Understanding the CDM processes and procedures is highly complex, so in an effort to provide a simple reference for practitioners to understand the key principles involved, the UK Department for Environment, Food and Rural Affairs (DEFRA) has developed a new CDM-Guidebook that offers an independent guide to the implementation and interpretation of the CDM methodologies: "Understanding the CDM - Finding the way through the maze of rules".

Gaining access to the new UN Adaptation Funds being developed under the UN climate agreements to help poorer countries invest in protection measures is a complex process. The adaptation funds, generated through a 2% levy on CDM transactions, currently stands at just \$67million which is clearly inadequate for the task that may cost tens of billions of dollars a year. This fund is also intended as a source of compensation for regions and communities adversely affected by catastrophic events.

Engagement with Donors, NGOs, Brokers and Intermediaries

There is no single template or simple set of actions for communities to undertake to address climate change and exploit the opportunities that exist for inward flows of investment, technology and expertise. There are many options available, and much depends on the capacity of local communities to identify and connect with relevant partners and agents. Partnerships with local, regional, national and international institutions and NGOs, which can act as brokers, intermediaries and implementers, are key factors.

This is especially true for the CDM process, which is highly complex and laced with bureaucracy and significant transaction costs. Indeed, none of the Association for Southeast Asian Nations (ASEAN) member countries has yet published a coherent national climate action plan. Policy officials and advisers are available in national governments, however, and they should be able to advise communities on the range of options and partners to be considered and approached. The list of so-called 'Non Annex 1 countries' is included on the United Nations Framework Convention on Climate Change (UNFCCC) website.

There are many NGOs that work directly with communities on the ground. Some NGOs have accumulated a great deal of experience and are active in many countries such as Conservation International and the Climate Action Network of Southeast Asia (CANSEA). These NGOs have taken a lead on efforts to raise public awareness and encourage their own governments to be proactive on climate change.

In view of its renewed domestic and international commitments, it is clear that Australia's international development program will need to be strengthened and broadened. One way to achieve this will be through the integration of climate change objectives and further collaboration and partnerships with the private sector.

Emerging Voluntary Carbon Markets

Opportunities also exist in the emerging voluntary carbon trading market. An increasing number of small and large-scale cleaner and renewable energy projects in developing countries are being directly linked with measured reductions in CO₂ emissions. Market analysts estimate that annual transactions in the voluntary carbon market could reach US\$4 billion in the next five years. While Kyoto credits are regulated, the expanding voluntary market operates largely without formal standards. Banks, airlines, car manufacturers

and individuals have begun to invest in projects over the past two years, seeking 'carbon neutral' status. But in many cases the 'carbon offsets' have been criticised for their complexity and lack of assurance, rigour and transparency. Nevertheless, mechanisms which allow for the trading of carbon emissions have resulted in acceleration in the number of companies and investment funds investing in renewable energy projects by buying carbon credits from suitable carbon offset intermediaries. A fuller analysis of the potential that exists in the voluntary carbon markets is provided in FDC Briefing Note 2 – 'Energy lending: Microfinance and access to modern, alternative energies'.

There are two essential requirements for a greenhouse emission reduction to be certified as a carbon offset: (1) The reduction must be quantified and verified against an emissions baseline; and (2) The reduction must be additional to any "business-as-usual" emission reductions.

The voluntary carbon market generates 'Verified Emissions Reductions' (VERs), and in an effort to establish a standardised approach to measuring, monitoring, auditing and verifying the emissions reductions from such schemes, various international standards are emerging. No doubt there will be further harmonisation and convergence of codes, but no universal standard or oversight body is yet in place.

One of the most respected existing set of rules has been developed is the Swiss non-profit Gold Standard Foundation, which offers standards for both CDM and voluntary credits. The Gold Standard establishes requirements that go beyond CDM disclosures, and a certified carbon credit label is issued after adherence has been assured by third party Designated Operation Entities (DOEs). Gold Standard projects require the use of renewable energy and energy efficiency technologies while explicitly excluding reforestation. Many respected environmental groups support Gold Standard offsets, including Greenpeace, WWF, Friends of the Earth, and the David Suzuki Foundation.

In addition to the Gold Standard, the Voluntary Carbon Standard (VCS) was developed by the Climate Group, the International Emissions Trading Association (IETA) and the World Business Council for Sustainable Development (WBCSD), following extensive consultations with the industry, NGOs and market specialists

A group of major banks and carbon market participants known as the European Carbon Investors and Services (ECIS) has issued its own voluntary code of practice for offsets. The group's participants, including ABN Amro, Barclays Capital, Citigroup, Credit Suisse, Deutsche Bank and Morgan Stanley, cited a need for quick action to quell allegations of abuse in the carbon market.



Conclusion

A new popular culture is evolving from the former climate change jargon of low-carbon technologies, hybrid vehicles, renewable energy generation, carbon footprints, eco-labels, eco-design and eco-tourism. New markets are evolving, building on the market mechanisms which lie at the heart of the Kyoto Protocol, which act as drivers for reducing emissions of greenhouse gases, and channeling resources, investment, technology and expertise to achieve broader sustainable development goals.

The UN Bali conference set a two-year roadmap for negotiations of a post-Kyoto treaty, and there are several positive signs that should encourage communities in developing countries to further explore their own potential to participate and capitalise on the outcomes. Bringing together both adaptation and finance in a decision to operationalise the UN Adaptation Fund for developing countries is considered a significant outcome. Further decisions to negotiate additional funding packages to give developing countries greater access to low carbon technologies is an important step. Meanwhile, governments agreed to kick-start a strategic program to scale-up investment in the transfer of both the mitigation and adaptation technologies needed by developing countries.

A decision on reducing emissions from deforestation in developing countries is also significant, as this will unlock additional finance and incentives for communities to capitalise on the "conservation, sustainable management of forests and enhancement of forest carbon stocks".

The degree to which local communities can capitalise on the new climate change regime, however, largely depends on their ability to identify appropriate private and public partners, and their capacity to formulate and submit project proposals to relevant donors and investors. In this respect, the availability of, and access to, experienced local, regional, national and international organisations and NGOs is critical.