



## **Small Scale Projects' in the context of Clean Development Mechanism**

### **Critical overview and suggestions for improvement in the Indian Context**

#### **The importance of the Non Profit Sector for community based small scale projects**

India has the second largest number of CDM projects registered, accounting for 25.77% of the world's total of 1691 projects.<sup>1</sup> In terms of scale of emission reductions, India is also second to China. Except for a handful of projects, they are entirely owned and controlled by the for-profit sector in India. Of these projects the co-benefits in terms of sustainable development are questionable or at best vague. This relates to the process (stake holder approach) and the outcome (in terms of the actual benefits and strategy for sustainable development).

Hence the need for encouraging the non-profit sector to take up projects, which focus on the twin objectives of emission reductions and sustainable development is imminent.

Energy promises to be a potential sector for community based small CDM projects. According to India's National Action Plan on Climate Change (NAPCC), 44% of her population does not have access to energy. Almost 93% of India's energy requirements are met by fossil fuels, predominantly coal followed by petroleum and natural gas.

Mainstreaming renewable technologies from a perspective of Decentralized Energy Options (DEOs) is not only environmentally friendly but also cost effective.

A community based small scale project presents a viable form of developing and deploying renewable technologies. In addition it also facilitates indigenous development of these technologies towards being self reliant in the future. For example most of rural India is dependent on rudimentary cooking stoves built whose efficiency is a mere 5%. In effect the CDM mechanism has the potential to present an opportunity for entrepreneurs to produce innovative technologies which can become increasingly cost effective by the increase in demand from communities for use in remote areas.

Small, relevant community based technologies seem to have little place in today's CDM regime. On the other hand we must recognize that large scale projects have little meaning if they encroach on existing bio-diversity on which people are dependent, or lead to widespread displacement of people, as in the case of large dams or in the final analysis promote the same fossil fuel based development options in the name of 'cleaner technology'.

The basic challenge is to create an opportunity to pursue a low carbon pathway in a way that the development needs of a large majority of the poor are coupled with emissions reductions. This calls for a review of the current CDM processes which exclude the participation of the

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<sup>1</sup> <http://cdm.unfccc.int> dated 26-06-2009



marginalised majority. Currently CDM projects are market driven to a degree by which they militate against the interest of the poor. This must not be allowed to happen. In fact CDM processes must be modified to give equal importance to reduction of emissions and sustainable development objectives.

### **Issues with small scale projects**

The major hindering factors in admitting a small scale project are the following:-

#### **1. Prohibitive transaction costs-Expenses for Registration and Monitoring**

The cost of setting up a small project is primarily related to preparing the Project Development Document (PDD).. It requires the special expertise of consultants, who come at a significant cost. In addition the monitoring process is also very expensive. In effect the process is the same or similar to that of large scale projects. This offers an unfair advantage to big project developers. This is also true at the time of the project verification.

#### **2. Restrictive Project size**

3. The stipulated project size under the UNFCCC for small scale projects is at least 15 MW. Creating a scale of this magnitude is a potential barrier to implementing community-based projects which are actually much smaller (around a few hundred kilowatts). Thus community-based projects located in different regions must be bundled to reach the minimum volume of 15 MW. Unfortunately this significantly increases the costs related to the validation and verification, which is again a barrier to the implementation of small scale projects.

#### **4. Specificity to one technology**

Only one technology may be permitted per CDM according to the existing rules. This is a serious disadvantage for small CDM developers. To ensure a sustainable outcome multiple technologies need to be bundled together to form a package, but this is currently not allowed. The only way to get around this is to have multiple CDMs which are very expensive and extremely inefficient.

#### **5. Lack of transparency in CER trading and sharing of benefits**

There seems to be limited/ no clarity on the financial benefits accrued to the CDM project Proponents. Also apparently there is no instance where companies have shared the CDM benefits with the local communities where the project is based. Apparently from a few project sites that we have visited it appears that the communities that are stakeholders to the project have not been informed about the CDM. This basic reality raises issue of 'inequity' which needs to be addressed.



## 6. Developing sound monitoring mechanism

Developing an accurate monitoring mechanism for a grassroots CDM project remains a challenge. The primary reasons are lack of availability of skilled manpower (mostly illiterate) and limited infrastructure. Hence, a flexible yet accurate system could help in overcoming this limitation.

## 7. Extensive waiting period and bureaucracy involved

Because of the nature of risks involved in small projects and their apparently low emission reduction per project ratio, small projects are delayed by the national approval mechanism. On an average the approval time period for small projects is much longer than for larger projects.

## Recommendations

1. Develop a policy framework in defining a percentage of CDM projects to be aimed at improving energy availability through renewable sources for areas which don't have access to electricity (especially the energy starved tribal or other remote regions). In this context 'small' scale CDM projects comprising Decentralised Energy Options (DEO) should be promoted to improve energy access for such remote areas which are mostly off the grid. This approach would address the twin objectives of the CDM i.e. emission reductions and achieve sustainable development .
2. 'Small' projects under the CDM process refers to projects with a potential of 15 MW. This scale needs to be reviewed if CDM aims to benefit the world's poor majority. Small projects should include 'mini' and 'micro' categories. This would enable very small projects to be taken up by various stakeholders.
3. For the purpose of ensuring energy availability for these regions '*bundling*' of projects should be across a mix of suitable technology options' which will have the potential to power a group of villages ( treated as a '*cluster*'). *For eg a mix of hydro, solar, wind and biomass technologies could be worked out to meet the entire livelihood requirements of " off grid" areas.* This will have implications not only on emission reductions but will also develop a community owned and managed local energy system which would trigger and support other livelihood activities thereby ensuring sustainable development.
4. Among the projects cornered by giant companies, there should be a defined percentage of projects with '*high local development benefits*' (which are presently less attractive for investors due to high transaction costs).
5. Pro active involvement of local communities in sanctioning CDM projects in their areas needs to be strengthened. In most cases this is just a fulfillment of an obligation for the PDD on part of the project proponent. Subsequent follow up meetings with stakeholders are not done. A one time stakeholder meeting before the project has been initiated has little meaning. A defined number of stakeholder meetings should be made mandatory during the



project period. A report of the same with follow up actions should be part of the DOE's validation and monitoring process, In which case the DOE's validation each year must include a meeting with local communities.

6. As a continuation of point 5, the goals and strategy for sustainable development should be defined clearly as a part of the criteria laid out by individual parties in terms of how they define sustainable development. The goals and strategy for sustainable development should be evaluated by competent third party experts every three to five years.
7. A mechanism should be worked out to ensure equitable sharing of benefits between the project developer and the local communities. A monitoring mechanism for the same should be established.
8. Accrediting CERs to companies should be subject to meeting '*verifiable*' sustainable development parameters (which is not done at the moment due to lack of quantified deliverables which can be verified). At the moment CERs are granted solely based on emission reduction targets. Hence, it must be mandatory upon the DNAs (Designated National Authorities) to review and work out specific deliverables under each of its sustainable development goals/indicators.

**For more information, please see:**

INECC - Indian Network on Ethics and Climate Change [www.inecc.net](http://www.inecc.net)

LAYA - Resource Center for Tribals [www.laya.org.in](http://www.laya.org.in)

CDM Watch [www.cdm-watch.org](http://www.cdm-watch.org)

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