Mapping & Analysis of CDM Projects in India from a Sustainable Development Perspective



OUTLINE

- Context- Sustainable Development in the CDM
- CDM projects landscape- Global, regional, national
- The study findings
- Recommendations



Context

CDM – An opportunity- for developing countries to embrace sustainable and low carbon development pathways.

Assist industrialized countries to achieve compliance of their Kyoto emission reduction commitments



Sustainable development in the CDM

- Article 12 of the Kyoto Protocol prescribes the need for tangible co-benefits to the countries hosting CDM projects.
- Kyoto Protocol does not explicitly define sustainable development, nor does it stipulate how it can be achieved through the CDM.
- The Marrakech Accords affirm that "it is the host Party's prerogative -in achieving sustainable development".
- Each host country establishes a Designated National Authority (DNA) Defining & overviewing the sustainable development claims for different CDM projects from their country.

GLOBALLY....

There are thousands of projects and programmes registered all over the world.





Percentage share of the total number of projects in the CDM

- Demand side EE
- Transport
- Renewables
- Supply side EE

- Afforestation and reforestation
- HFCs, PFCs, SF, and N2O reduction
- CH4 reduction & Cement & Coal mine/bed
- 2% 3% 1% 6% 15% 71%

Fuel Switch

UNEP Risoe CDM/JI Pipeline Analysis and Database, May 1st 2014 available at http://cdmpipeline.org/cdm-projectstype.htm#2





No of CDM projects in Asia by Country

Volume of CERs

INDIA: Distribution of CDM projects in India





Percentage Distribution of Projects and CERs among the States



Ownership Status

STATE	GOVERNMENT	PRIVATE	COMMUNITY	TOTAL
Chhattisgarh	3	42	0	45
Himachal Pradesh	6	52	0	58
Assam and Arunachal Pradesh	6	20	0	26
Jharkhand	0	6	0	6
Gujarat	27	173	0	200
Andhra Pradesh	2	59	0	61
Rajasthan	7	179	0	186
Maharashtra	1	198	3	202
Karnataka	9	143	4	157

Sectorwise Distribution of Approved Projects in India



- Afforestation and Reforestation
- Agriculture
- Chemical Industries
- Energy Demand
- Energy Distribution
- Energy industries(Renewable/Non-renewable sources)
- Fugitive emissions from fuel(Solid, Oil and gas)
- Fugitive emissions from production and consum of halocarbons and sulphur
- Manufacturing Industries
- Metal Production
- Mining/Mineral Production
- Solvent use
- Transport
- Waste handling and disposal

CDM & SD parameters

MoEF lays emphasis on the following aspects of sustainable development for a project activity-

- Social well-being: The CDM project activity should lead to alleviation of poverty by generating additional employment, removal of social disparities and contribution to provision of basic amenities to people leading to improvement in quality of life of people.
- 2. Economic well-being: The CDM project activity should bring in additional investment consistent with the needs of the people.
- 3. Environmental well-being: This should include a discussion of impact of the project activity on resource sustainability and resource degradation, if any, due to proposed activity; bio-diversity friendliness; impact on human health; reduction of levels of pollution in general.
- 4. Technological well-being: The CDM project activity should lead to transfer of environmentally safe and sound technologies that are comparable to best practices in order to assist in upgradation of the technological bas



The study

Objective

Conducting an evidence based analysis of whether CDM projects have truly contributed to putting India and its respective sectors on a sustainable development pathway.

Approach

- Statewise database -compiled on the basis of the scale of the projects, their location, nature of the projects, and presence of local partners etc.
- Field visits were conducted with the intent of understanding the ground reality of the project location from a social, economic, and environmental lens.



- The identified sectors:
 - 1. Wind
 - 2. Biomass
 - 3. Solar
 - 4. Run of the river large hydro
 - 5. Thermal/Supercritical
 - 6. Sponge iron
 - 7. Afforestation/Reforestation
 - 8. Municipal solid waste/cogeneration

• The selected states:

- 1. Andhra Pradesh
- 2. Rajasthan
- 3. Karnataka
- 4. Maharashtra
- 5. Gujarat
- 6. Himachal Pradesh
- 7. Orissa
- 8. Chhattisgarh
- 9. Jharkhand
- 10. Assam



List of indicators used for each dimension for the study on sustainability claims by CDM projects

Dimension	Indicators	
Social	Improvement of health, safety & Education	
	Poverty alleviation & Women empowerment	
Economic	Stimulation of Local employment	
	Improvement to Infrastructure	
	Attracting Investment opportunities /Revenue Generation	
	Improvement of Power scenario/ Contributing to the National energy security	
Environment	Reduction of Pollution	
	Promotion of Reliable & renewable energy	
	Preservation of Natural resources	
Technology	Provision of Environmentally safe & sound technology	
	Contribute to the technological growth of the country	



FINDINGS

- CDM delivering co benefits/ catalyst of development?
- Wide disparity between claims made and reality on the ground benefits -Carbon Markets have largely been restricted to the company with very little actually being passed on to the communities.
- Economic benefits far exceed social benefits across most sectors; IMPACT on indicators such as poverty and employment was found to be insignificant.
- Loose articulation of SD of GoI- sustainable development benefits as outlined in the various PDDs are loosely defined by the companies

Findings

- ✓ CDM vs CSR-
- ✓ Stakeholders- a sham
- ✓ There is no monitoring and evaluation system in place at any stage of the CDM process to determine the progress on sustainable development resulting from the project activity.
- Most sustainable development claims (especially for employment) are ambiguous and open ended. Menial Jobs
- ✓ infrastructure access, this was found to be only around project sites
- Energy projects have not resulted in improved energy access for villages surrounding the projects



Other Major Issues but systemic in nature

While it is not possible to directly attribute it directly to the companies or the CDM project proponents, a number of issues have come out during the field visit and interaction with communities, relating to:

- Land acquisition
- Land pricing
- Rehabilitation and resettlement of displaced communities
- Health
- Equity
- Gender

ISSUES OBSERVED

- Not all of the land identified for projects such as wind and solar are or were particularly barren lands, as has been indicated in most of such Project Documents
- Huge mismatch between the prices that communities got for forgoing their land for projects, as against, what price the Government had notified for land acquisition.
- In many cases, land acquired for projects have led to destruction of community water bodies
- In many cases, where projects, particularly, the Hydro projects, involved rehabilitation of communities, the resettlement and rehabilitation plan has been very poorly implemented
- Rampant destruction of trees and forest cover, with very little done on re-forestation
- LAND USE PLAN A MUST!
- Policy to safeguard farmers' interest when their la is procured for RE installations



Recommendations- UNEB

- 1. Revised institutional framework of the CDM:
- Complex and lengthy procedures should be simplified.
- Smaller scale projects tend to deliver a higher number of sustainable development benefits with higher socio-economic benefits to communities, rather than large scale projects or even bundled projects.



Recommendations

- Focus on projects that are truly in the basket of sustainable development projects and not merely "relatively low carbon projects".
- A universal checklist of sustainable development benefits must be developed, with an in-built flexible mechanism for the countries to add or ignore conditions based on local priorities, thereby making the system more standardized
- Establishment of an effective international process at the CDM executive board level, for ex-ante and ex-post, monitoring of the sustainable development
- Ensure a participatory, bottom-up approach, creating the necessary environment that fosters interaction between and amongst a wide range of stakeholders



Recommendations- India

- MoEF- robust indicators- should emphasize and prioritize on greater clarity of the sustainable development benefits of a CDM project activity
- DNA-to set up effective institutional mechanisms for the approval of CDM projects as well as to assess the contribution of these projects to national priorities for sustainable development.
- Need based assessment from a community perspective
- Peoples' assessment report on the implementation of Projects -treated as a key tool by the CDM project evaluators
- Incentivize projects having a high 'development content'
- Promote a robust funding strategy to enable the CDM have its own funding and project implementation capacity. This would reduce the complex processes of validation of projects and thereby keep the costs of accessing the CDM low. Support Pro poor CDM?



3. Related reflections:

- land and equity rights of communities are not compromised.
- CDM process to facilitate promotion of social entrepreneurs, particularly in the field of energy access solutions.
- Ensure that every CDM project incorporates training and capacity building of community members.



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