

Face to Face with

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The Clean Development Mechanism (CDM) is one of the project-based flexible mechanisms designed to make it easier and cheaper for industrialised countries to meet the greenhouse gas (GHG) emission reduction target that they agreed to accept under the Kyoto Protocol through trading of Certified Emission Reductions (CERs). The CDM is also mandated to assist the developing countries in achieving sustainable development. As per the CDM project cycle, a project proposal should include written approval from the Designated National Authority (DNA) of each country to confirm that the project activities, assist the concern host country in achieving Sustainable Development. India being a party to the United Nations Framework Convention on Climate Change (UNFCCC), here is an interview from an former UNEP / UNESCO Fellow, **Dr. Srikanta K. Panigrahi**, Director (Environment & Forests) of Planning Commission, a member of the National CDM Authority, who was also the Member-Secretary of a prestigious Working Group on CMD at Planning Commission, being constituted at the instances of Indian Prime Minister's Office, who also came up with its historic national report on "**National Action Plan for Operationalised Clean Development Mechanism (CDM) in India**" in December, 2003; which is since then... under implementation.

Q1- As a member of the Designated National Authority (DNA) for Clean Development Mechanism (CDM) projects, could you discuss in brief about the evaluation and approval processes followed by the Indian government for such projects? How do you facilitate this process?

SKP - We have a quite reasonably transparent system of evaluation of projects. We see first if the project is mitigating one of the six green house gas or not, its quantum against the time period, the level of investment, Internal Rate of Return (IRR) with and without CDM benefits and in addition whether the project is promoting Sustainable Development and meeting the *additionality* clauses.

The project proponent has to make available 20 copies of the Project Design Document (PDD), along with its soft copy in CD to the DNA Secretariat. It normally takes 30 to 60 days, to react on the same and issue the "*Host Country Approval*" after a formal presentation to DNA, being invited. There is in fact, no entry fee. Project Proponents can submit the Project Concept Notes (PCNs) prior to submission of the PDD to know, if the Project is CDM-able one.

Q2 - On what basis do you evaluate the CDM project activity, that assists the host country (India) in achieving Sustainable Development?

SKP - For evaluating Sustainable Development to the host country, we generally look into four criteria: Social (*Education*,

Health Parameters) Well Being, Environmental (*reduction of GHGs and others etc*) Well Being, Economical (*financial benefit helping to rise in standard of living or creating better lively-hood options for the people*) Well Being and the Technological (*New and Innovative Technology, which is modern and comparatively more energy efficient*) Well Being that the project is basically bringing to the local population.

Q3 - What are the eligibility criteria for the projects to qualify for consideration as CDM project activity?

SKP - The first is - project should not be a "Business As Usual" case. Second is again, the project should contribute to the sustainable development of the host country. Thirdly the project should result in real, measurable long-term benefits in terms of climate change mitigation and the reductions must be additional to any that would have occurred without the project.

Q4 - How is the response to and level of awareness of the Indian companies to CDM projects? How do you perceive this change in the mind-set of the people those who are willing to trade in carbon credits?

SKP - Although the process started right from December 2003 or even CERUPT and Finland Tenders before, but most of the stakeholders were not taking interest may be because enough awareness level was not there then. Also most of them had an impression that CDM is more international than national. Moreover, some people think CDM is a complex mechanism after all.

However by now, most of the people understand that Certified Emission Reductions (CERs) are the safe commodities, which can provide attractive returns, compared to other type of commodities they are trading with for the years.

Q5 - Why type of Commodities are CERs? How it's trading take place?

SKP - CERs are basically compliance Commodity, whose trading takes place at Registries.

Q6 - Which sectors in India are currently more successful in claiming CDM projects? In future what according to you would be the potential sectors?

SKP - Well, if you consider the number of projects, we have more projects from the power generation sector, particularly *small-scale bio-mass* based projects. In future, potential areas would be for *Coal Bed Methane Projects* and the projects relating to *Methane avoidance from agriculture* and *Solid Waste Management* or *Landfill sites* - are seen as the potential sectors in addition to the normal ones.

Q7 - Where does India currently stand in terms of the Certified Emission Reductions (CERs) or total carbon credits earned? How competitive could China and Brazil turn out in this space?

SKP - Although in terms of approved CDM projects, India stands first, in DNA till now, we have cleared 310 projects, amounting to 285 million CERs by 2012, with an investment of Rs 29,000 Crores. However, many of our projects are in pipe-line and CDM Executive Board has cleared 77 Indian Projects against 58 Brazilian Projects, 20 Mexican and 13 from Chile and only 11 from China. But unfortunately, we are still in the fourth position internationally, next to only to China, Brazil and Korea *in terms of total CERs generation, as on 24th July 2006*, as per the record of Bonn, Germany based UNFCCC web-site.

Q8 - Kindly give us some insight in to the success rate of large, medium and small sized CDM projects developed in India. Which are the most preferred ones in terms of sustainable development, low capital investment and better returns?

SKP - Good question. Bigger the size of the project, more and higher is the return in financial terms. Transaction costs are high, and may not be even feasible for small-scale projects, generating less than 1MW. This is valid not only in India but also anywhere in the world. And there is nothing called medium size. To become competitive and cost effective, we need to bundle up the small scale projects, which would reduce project transaction costs. Although most of our projects are small-scale ones,

large scale projects would be more preferable. Big projects, involving higher investment would yield higher quantum of CERs certainly. Smaller ones can be bundled in particular circumstances; whereas larger ones need not be broken at all.

Q9 - In your view what approved methodologies if followed would give a quicker clearing to the projects?

SKP - The standard approved methodologies, which are already approved, relating to each sector is available at UNFCCC website - www.unfccc.int. If you are going for an approved one, your project cycle period will be less and of course the transaction costs would be comparatively lower than the methodologies, which are to be passed through the methodology (Meth) panel and get finally approved.

Q10 - List the important states in India that are leading in terms of the number of projects approved and CER's earned?

SKP - Gujarat, Maharashtra, Tamil Nadu, Karnataka and Andhra Pradesh are the leading states with sizeable amount of CDM projects and CER's earned as on date.

Q11 - Do you see any drawbacks regarding the CER transactions? What do you consider as the major constraints in the development of CDM mechanism?

SKP - Yes, the whole process is at the preliminary stages. As soon as EU - Emission Trading System started, trading also has already started taking place in the *London Carbon Exchange at London* and *Asian Carbon Exchange at Singapore*. But it is not very effective, due to non-participation of two major GHG contributors - USA and Australia. The major constraints are lack of awareness and complexity of the process itself. However, it is becoming more and more simpler day by day. Kyoto and Emission Trading Experience is certainly an evolving one.

Q12 - At what levels do you estimate the value of the future Indian carbon credit market? What is the range of the probable value of CERs in future, one can expect in India?

SKP - In fact, India is one among the largest carbon emission trading potential nations of the world. India is likely to produce by 2012, i.e. first commitment period for reducing carbon emissions, say about 5 billion CERs. That is the maximum of the market size that we can expect.

It is the most difficult job - to spell out the cost of CERs, since it is determined by the market, based on Demand Supply principle. The present value is 8 to 12 Euros, which is getting changed within this range for last 4 months, since April 06 end. Before that it was 30 Euros. It's value is also likely to appreciate in October-November, may be up to 100 Euro, which may comedown by February-March 2007 as projected by Point Carbon.



Q13 - On one side the Indian government is promoting manufacturing activities that would lead to more carbon emissions, while on the other end, it has the onus of facilitating the Green projects. How would the government balance these two acts?



SKP - India is one of the fastest growing economy - among the developing nations. To a greater extent, it cannot compromise with its objectives of achieving higher GDP for its overall development. Till now emission curtailing is optional and voluntary and not mandatory as per law. But yes, India would certainly have to entertain greener projects as its national policy, even while achieving the objectives of double plus economic growth.

Q14 - Do you foresee a situation wherein the developing nations would also be coerced to join along with developed countries in reducing their Green House Gas emissions? If it is so, how prepared is India for that kind of a situation and how would it transform the world carbon trade in the years to come?

SKP - Yes, but not all the developing nations. As you know, we are the leaders and front runners among the developing countries; hence we may be required to take a target anytime for which, we, the representatives of Government of India, are negotiating these issues with international communities at Conference of Parties (COPs) of Climate Change Convention.

Q15 - What is your personal opinion - should India go for a Carbon Commodity Exchange? Is there anywhere some attempt in this direction taking place?

SKP - yes, infact since India is the world leader in CDM and has the highest no of projects approved by CDM Executive Board, it must have an Exchange at least one. Moreover, especially when, trading is also at the peak and carbon market is maturing day by day and getting stabilized?

Yes, there are some attempts here and there. I know people attempting it Mumbai and Chennai and Gorgon (Delhi).

Q16 - Do we have any arrangement to lend money or extend financial assistance to any small and medium scale industry or initiatives to go CDM way, so that the dream to remain green can be materialised?

SKP - Sorry, No. At present there is no such arrangement either by Government or private initiatives. As you know, I always do view for a " *Green Energy Fund* "; which would support anybody with a lower interest rate, who would land money for going for CDM at his or her risk. For this Fund, Government can go for a kit, by charging 1 or 2 % of Carbon Revenue, that Indian Companies are earning. Grants from UN Bodies and Donors can also supplement the Fund. Other is to be from Private Initiatives and Banks and other financial institutions. This Fund can really help small and medium scale industries certainly at larger extent.

Q17 - How are the CDM benefits are shared? Is there any law to substantiate it in our Country? Is government doing something in this regard?

SKP - As of now, we don't have any law on sharing of CDM benefits. The involved stake holders negotiate among themselves and decide. I do also feel we should have law on this soon. In my knowledge, recently some court cases are also registered asking for the right of CDM benefits. Indian Law Schools at Bangalore and Kolkata are attempting a draft law in this regard, which may take sometime, to be finalized. In Brazil, Indonesia and China; there are laws - but they have many problems and not done adequately, where many provisions are missing; for which probably they have to go for a series of amendments.

Q18 - What is Government of India's "Taxation Policy" on Carbon Revenues earned?

SKP - Good question again. Right now Ministry of Finance desires to introduce a tax called " CRT (Carbon Revenue Tax) and CTT (Carbon Trading Tax) for imposing on total carbon revenue earned and on Carbon Trading Transactions; which we have intervened not to impose immediately at least for next 5 years, i.e. during 11th Plan period or first commitment period of the Kyoto Protocol; so that the raw Carbon Market can mature and stabilize and there would be sufficient no of big players in the market. I hope you are aware the Carbon Revenue is not free from normal income tax rules of the country.

Q19 - Will CDM / Kyoto continue during the second commitment period also? Will USA join at this Game? Would India also have some GHG mitigating targets in future? Is GOI prepared for the same?

SKP - Yes, this is a question everybody keeps asking. My personal opinion is yes, Kyoto will continue; because it has evolved over years and there is no other way in which emission trading is possible. The only change it can go through is that it may have a different name; otherwise USA would simply not accept this and USA and Australia most likely would join and some changes are expected like Nuclear Energy may be considered with in the purview of CDM. The modalities and rules are expected to be more and more stringent day by day. Briefly saying, even if Kyoto closes it's chapter, Emission Trading would continue for years to come; probably because of protecting the earth and because of the basic interest and involvement of such a large no people in this process.

Q20 - What are the international events on CDM or Climate Change? Where do these programmes take place? Did India ever organize such events?

SKP - Yes, Each year in June, International Carbon Trade Fair takes place at Clonge, Germany since 2002 and I have never missed this event since it's inception, which in fact not only provides a good platform for in depth interaction with all types of stakeholders; but also helps and guides to understand the basic developments of emission trading through out the world.

The Other important event coming in November is COP 12 at Nairobi, Kenya. The COP 11 was organized at Montreal, Canada. We also had COP 8 at New Delhi; where more than 6000 international delegates participated. The Conference of Parties (COP) is the supreme authority of UNFCCC to take key decisions those are essential to mitigate GHGs for stabilizing earth's temperature and combat climate change; which we have to attend it each year as a part of the Government of India Delegation and participate in the international negotiations in the interest of the nations.

Q21 - Finally what do you wish to tell our readers about the future of CDM for India?

SKP - Yes, I am very optimistic about the India's present and future role in emission trading. I am equally confident that we would do excellent in these initiatives for years to come. But the most important thing is that we are in a rapidly growing economy and fossil fuel consumption would keep dominating in our fuel mix because of the cost factor. At least, all of us should be committed for a low carbon economy and energy efficiency and above all remain open and positive to the promotion of renewable in all possible way.