

Objection to Proposed CDM Credits for 24.75 MW Mahan-3 HEP

Upon reading the Project Design Document (PDD) Form version 1.0 dated March 4th, 2012 and visiting 24.75 MW Mahan Hydro Power Project site between May 16th, 2012 and May 23rd, 2012, we, the undersigned group of people concerned with the people and development of the area around the Mahan project and river in particular and the Indian state of Chhattisgarh, feel that CDM credits should not be granted for this project.

The following is the basis of our conclusion:

1. On p. 2 of the PDD, the PP claims that the project in question (Mahan-3) will be “benign” and on p. 24, “since the project activity does not involve any storage of water, there is no submergence of forest and cultivated lands...” These statements are completely wrong. According to the official project map which we viewed in the camp of Venika Hydro Projects Private Ltd (Chikini), the project’s F.R.L. (Full Reservoir Level) is 447 m, the Maximum Water Level is 448 m, and the river bed level is around 429 m. The PDD also says that the project uses a head of 21 m. So the project will require the construction of an 18 m wall above the river bed. Since the river is at a relatively flat gradient, the construction of an 18 meter wall will lead to huge storage and submergence. The PDD should have provided figures of exact submergence area, storage capacity of the reservoir and such other crucial details. Not providing them is a serious lacuna of the PDD and to claim that the project does not involve any storage of water is completely wrong.
2. It was stated to us in two separate occasions, once in a conversation with chief engineer Mr. Bakuni of CREDA (Chhattisgarh Renewable Energy Development Agency, which is the state government body in charge of such projects; Mr. Bakuni works out of the Ambikapur office of CREDA) on May 18, 2012 and another by an unnamed onsite engineer on May 20, 2012, that the project will submerge forest land. In fact, forest clearance has been granted to the PP on February 2nd, 2010 by the Ministry of Environment and Forests (MoEF) for 4.7 ha, but nowhere in the PDD does it mention why this much forest land has been acquired. In fact, the developer does not even mention the amount of forest land required at all in the PDD, nor the compensatory afforestation required by the Guidelines for diversion of forest lands for non-forest purpose under the Forest (Conservation) Act, 1980. Yet, as one can see in Annexure 2, the backdrop of the project site is completely forested and the project must have already deforested a portion of the land for construction. These are serious infirmities of the project in question and the PDD should be rejected for these.
3. On May 21, 2012, when members of SANDRP (South Asia Network on Dams, Rivers & People) met with Arjun Kumar, Chief Manager of the Mahan-3 project, he admitted that

30-40 acres (roughly 12-16 ha) of forest land have been acquired by the PP—whereas they have applied for 4.7 ha from MoEF. He also stated that 30-40 acres of “barren” land have been acquired in an “interior village” from individual owners (recording available). The discrepancies show serious lacunae and prove that the PDD is not giving true picture of the land and forest land required for the project.

4. The project in question requires Reserved Forest land, which according to the Indian Forest Act (1927) is strictly protected by the central government. The forest department must go through a rigorous process to declare a piece of land reserved. The project area is also adjacent to two national wildlife sanctuaries, Temor and Pingla, and the impacts on the wildlife residing in these sanctuaries including elephants, tigers, bears, many types of birds, and deer has not been adequately assessed. Although, Mr. Bakuni (Chief Engineer of CREDA, Ambikapur) mentioned that the PP initially encountered problems obtaining forest clearance from the MoEF due to the impact the project would have on local wildlife. Thus, before being considered for CDM, the developer should be required to re-submit an application to MoEF with the accurate number of reserved forest land required for the project and specify in PDD exactly how much forest land will be used and for what purpose.
5. According to locals of Chikini Village and Langit Village (about 3 km downstream from Chikini) that we met, 10-15 different types of fish including mungli, botchara and baikra can be found in the Mahan River. From Chikini Village, alone, there are about 20 families who rely on the fisheries of Mahan for personal consumption and for livelihood, by selling in local markets. The PDD makes no mention of these crucial facts, showing that no such assessment has been done. The River and the fish in the river will be completely destroyed, and with it the source of fish and livelihoods for these families will be destroyed. As against this reality, the PDD claims that there wont the any impact on the aquatic life of the river which is completely wrong.
6. The project in question is part of a cluster of 6 hydro power projects—Mahan, Mahan-1, Mahan-2, Mahan-3, Mahan-5, Gangotri (totaling 122 MW, see map of these projects at *Annexure 1*). In addition to the project in question (Mahan-3), Venika Hydro Projects Private Ltd is pursuing three other 24.75 MW HEP projects and one other 13 MW HEP project—totaling 112 MW in this cluster. All of these projects will be constructed on the same stretch of the Mahan River, a tributary of the Rehar River, and are located within approximately 15 km of one another. The PP states that the project in question is “run-of-the-river” and therefore “benign”, but this is misleading as it fails to consider the cumulative impacts of the developer’s five HEP projects, in addition to the other projects on the river. UNFCCC should withhold CDM credit from the project until a rigorous Environmental Impact Assessment/Environmental Management Program is undertaken

(of Mahan-3) alongside an independent cumulative impact assessment of the six Mahan projects.

7. The project in question was sanctioned by CREDA on Nov 11, 2007¹. According to Mr. Bakuni at CREDA (Ambikapur) the process of CREDA approval takes 1.5-2 years. The project in question had to have been conceived at least two years prior to the sanction date listed above, thus one can conclude that the project was designed even before CDM came into existence. This should disqualify the project from fulfilling the requirement of additionality. In any case, the project developer has not shown any documentary evidence that they had considered CDM credits when they applied to CREDA for sanction of the project.
8. When our colleagues visited the Mahan site on 20th May 2012, we found the project to be in the advanced stages of construction (see *Annexure 2*). According to Mr. Bakuni and another onsite engineer, 50% of project has been completed, and in June 2013 the project may start functioning. The project would go ahead irrespective of if the CDM credits are granted or not.
9. On p. 7 of the PDD, the PP states that "electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources". This fails to consider the huge potential for additional generation from existing energy sources in India through more optimum use of these projects. For example, around 35-40% of the electricity generated in India and in the NEWNE grid in question is lost in transmission and distribution. Taking measures to reduce this to 10 or 15% is a desirable alternative to the proposed hydropower project. 89% of all hydro power projects in India operate at below design capacity so enhancing the performance of existing hydropower plants before investing in new projects is also attractive. There is also scope to increase energy use efficiency, as in India a miniscule part of the population are effectively using CFL or LED light bulbs or other energy efficient appliances. There are a large number of universally acceptable climate friendly energy options. Chhattisgarh, as most of North India has an enormous potential for solar energy. It could also tap wind, biomass, micro hydro (less than 1 MW capacity projects, generation of power from the flow of the water (without creating any dams or tunnels also called hydrokinetics), among others.
10. According to CREDA² there are already four small hydro power projects (totaling 18 mw) that have been commissioned in the state of Chhattisgarh and are successfully operating. None of these have been granted CDM credits. This is proof that CDM is superfluous to the functioning of projects like the one in question.

¹ http://www.credacg.org/3-Details_of_Sanctioned_SHP_Projects_being_implemented_in_the_State.pdf

² <http://www.credacg.org/CommissionedSHPPProjects.htm>

- 11.** On p. 10, the PP claims that the project's IRR without CDM is expected to be 10.84%, which is roughly 2% lower than the 13% benchmark. However, in order to arrive at this conclusion the PP provides faulty calculations in order to make the Mahan project appear to be less financially viable than it is. For example, in India power purchase agreements for hydro projects determine the tariff on a cost plus basis. Per kWh tariffs are calculated such that the developer will receive a *minimum* return of 14% on equity. This costing places the risk of cost overruns and low hydrological flows on the electricity purchaser rather than on the developer. Thus the returns of the project are all but guaranteed at 14%, without counting additional subsidies granted by the state and central government for small hydro projects, which will be explained below. If we calculate these subsidies, the project will get even greater return on investment than 14% guaranteed by law. The project has manipulated and misrepresented the facts and should not be considered "additional".
- 12.** The calculations provided in the PDD fail to include various government subsidies which are available for the purpose of constructing small hydro power projects. As displayed on the Ministry of New and Renewable Energy's (MNRE) website³, the government has provided a formula to calculate Central Financial Assistance for the construction of small hydro power projects, which is available to all projects:

$$1.50 \text{ crore} \times (C)^{0.646}$$

*C being the capacity of the project in MW

Using this formula, one finds that the total amount of subsidy available to Venika Hydro Projects Private Ltd comes out to be 10.12 crore (approximately 2.3 million USD) for the construction of the Mahan-3 project. This is a significant amount of public funding and have been neglected in the PP's investment analysis in order to understate the profitability and misleadingly prove the additionality of the project.

- 13.** In addition to the Rs. 10.12 Crore available under the aforementioned Grid-interactive Power Programme the central government has recently established a department under the MNRE specifically to deal with small hydro power projects (the Small Hydro Power Division of the MNRE). For the year 2009-2010 the Ministry has revealed a Small Hydro Power Programme to promote SHP projects of 25 MW capacity or less.⁴ In this, the government offers resources to identify SHP project sites, help in upgrading existing SHP stations, financial aid for setting up ventures in the private/cooperative/joint sectors, and support for training, business meets, and further development of SHP. In addition to the benefits offered in the SHP Programme, Small Hydro Power (SHP) projects in both the public and private sectors enjoy complete exemption from: public hearings (the main vehicle for citizens to know about the projects and express dissent to development works where applicable, in India), Environmental Impact Statements, and other standard

³ <http://www.mnre.gov.in/cfa-schemes-programmes.htm>

⁴ http://www.mnre.gov.in/adm-approvals/shp_scheme.pdf

regulations such as environmental clearance and Environmental Management Programme or monitoring and compliance. Thus, contrary to what the PP has stated in the PDD, there are no existing barriers to the execution of the Mahan HEP project. Keeping all of the above considerations in mind, CDM credits are clearly superfluous to the economic viability of the project.

- 14.** On May 21, 2012 members of the SANDRP team spoke to 23 locals of the Village Chikini. Chikini, the correct name of the project site, has been wrongly stated in PDD as Korhapur on p. 2, 3, and again on p. 24 of the PDD. Korhapur is a place unheard of and unknown to locals and even to CREDA engineer, Mr. Bakuni. It does not exist. The PDD has clearly been prepared without any ground truthing exercise.
- 15.** On p. 25 of the PDD a certain “Mr. Dulari”, has been listed thrice as Sarpanch (village head). Soon after arriving in Chikini, we found out that the true Sarpanch’s name is *Mrs.* Dulari. Not only that, but Mrs. Dulari has never given consent to the project, contrary to what is stated in the PDD. All of the Chikini locals with whom we spoke say that they were unaware of any meeting that the PP claims occurred on May 28th 2011—nor were they privy to PP’s application to CDM. We took care to explain the CDM process in depth to the farmers, and none of 23 locals in attendance knew of any related process. We were told that Mrs. Dulari, Sarpanch, never commented in any forum “about the green revolution and its effect on rural areas” as fabricated by the PP. We are left to believe that the entire process laid out in the PDD for “village involvement” via the gram panchayat (village council) is fraudulent.
- 16.** The deceitfulness of Venika’s village level process is particularly consequential as the project in question lies in a Schedule 5 area where the majority of the people are tribal, (specifically of the Gondi tribe) and in a state where 35 percent of the population is tribal. The Government of India recognizes its tribal people under Article 342 (1&2) as “Scheduled Tribes” and identifies their right to self-determination as guaranteed by Part X: The Scheduled and Tribal Areas – Article 244: Administration of Scheduled Areas and Tribal Areas. Further, under Schedule Five, Panchayat Extension to the Scheduled Areas Act of 1996 (PESA) says that “every Gram Sabha (village council) shall approve the plans, programmes and projects for social and economic development before such plans, programmes and projects are taken up for implementation...” and that the gram sabha must be “consulted in matters of land acquisition and resettlement”. Venika Hydro Projects Private Ltd is in blatant violation of Schedule Five as it has both failed to properly consult the Gram Sabha and has ignored the village level opposition to the project.

- 17.** Additionally, the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (2006)” (commonly known as the Forest Rights Act, 2006) recognizes the rights of “Scheduled Tribes and other traditional jungle dwellers” to “hold and live in the forest land under the individual or common occupation for habitation or for self-cultivation for livelihood”. In a notification dated August 3rd, 2009⁵ the Ministry of Environment and Forests has asserted that the state must carry out a complete process for the “identification and settlement” of villagers’ rights under FRA for the entire forest diversion area prior to acquisition. The PP has not shown evidence of that the state has carried out the aforementioned process, and is thereby in violation of FRA (2006).
- 18.** As stated before, the village Sarpanch (head) never signed any form giving permission to the developer, members of the *gram sabha* (village council) say they have never been consulted by the company, and locals are ignorant of the company’s application for CDM. Overall, they are vocally opposed to the construction of the dam—rendering the project in question unconstitutional and illegal according to PESA, Schedule 5 of the Constitution of India, and the Forest Rights Act (2006).
- 19.** The PP’s claims that “the project would mitigate the problem of shortage of electricity in this region” (p. 2) and “the project would increase the availability of electricity in nearby villages” (p. 23) are false. The electricity generated from Mahan-3 HEP project will be sold to the Chhattisgarh state and then be transferred to the National grid, as per the policy of CREDA. Locals from Chikini Village say that only 10% of the homes in Chikini (40 of 400) have source of electricity, but that the company till date has not promised locals any electricity to alleviate their conditions.
- 20.** Additionally it has been estimated by a farmer who attended a meeting with members of Chhattisgarh Bachao Andolan (CBA) on May 21st, 2012 that locals from Chikini and surrounding villages are using the river for lift irrigation during the rainy season. The river has much more potential to provide irrigation, but the company has not specified any plans to allow people to continue to have that benefit. Additionally, the people are afraid that once the company commences operations, they will lose access to the river for the irrigation, fishing, and forestry that they are already engaged in. When the project operates to generate peaking power during non monsoon months, the access to the river would become even dangerous for the people, cattle and wild life in the downstream area.
- 21.** On p.2 the PP claims, “the project activity would also lead to alleviation of poverty by providing some direct and indirect benefits in the form of employment to the skilled and unskilled workers of nearby villages”, yet the locals are not convinced by this claim. They feel that jobs provided to locals will be only during the construction phase.

⁵ <http://moef.nic.in/divisions/forcon/3rdAugust2009.pdf>

Technical jobs, which will also be longer term, will go to trained outsiders. In the PDD rather than giving an approximate number as to how many local jobs will be generated, there are only vague statements on the subject of employment.

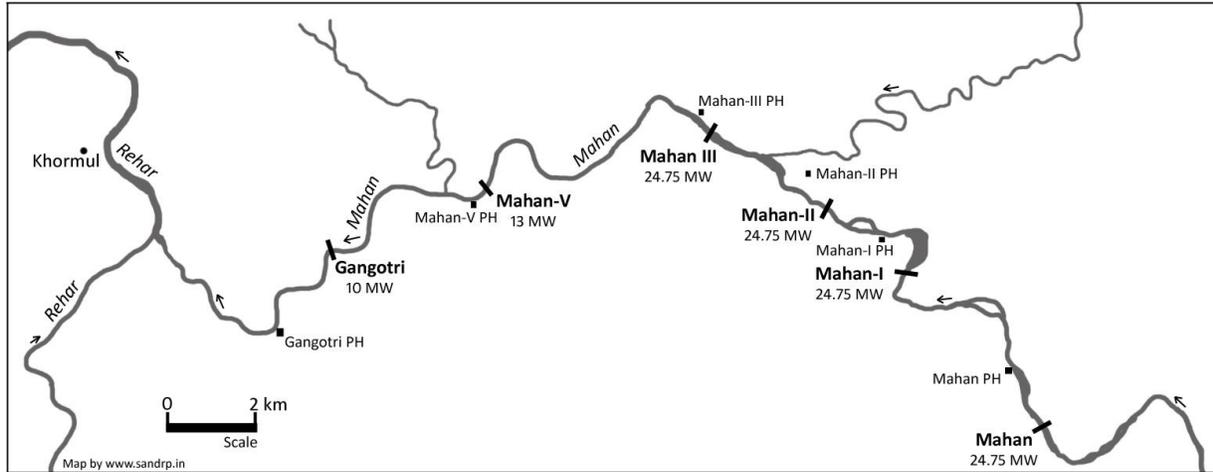
- 22.** Currently at least 20 families from Chikini village alone rely on Mahan River's fisheries for their livelihood and food. Additionally, according to locals, Chikini villagers collect many forest products including mahua, jari buti, tendu leaves, bamboo, and many local medicines to supplement their agrarian income due to the loss of forest land. This is in addition to the social and religious value of the river and the forest that is deeply engrained in the tribal culture. The river, as the people know it, will be completely destroyed in the submergence zone and also in the downstream. None of these losses have been either assessed or mentioned in the PDD.
- 23.** When our colleague asked Venika developer, Arjun Kumar, on May 24, 2012, whether or not people could access the river within reservoir area for fishing and whether the people would be granted irrigation from the scheme, he said that he wouldn't provide any information on the matter. On the following day Managing Director of Venika Hydro Projects Private Ltd (Bangalore), Shri Chandra Sekhar D Reddy, gave us false information (he said that the Minimum draw down level was 50 m, which is an impossibility), cut the line in the middle of the call, and then did not answer or return our calls. This type of secrecy and disregard of local inquiry is contrary to the spirit of CDM and should disqualify the project from consideration. We had also requested them to provide us with a copy of the Detailed Project Report, but they have neglected to even respond to the email.
- 24.** The information Venika has provided to the public (including in the PDD) is misleading and from that it would be exceedingly difficult for the local people to understand the scope of the project or its impacts—as we said before the name of the village given in the PDD for the project site is wrong, the village does not even exist. Not only should they have corrected this but seeing as how the district is over 244 km in length, the proponent should have also listed the name of the panchayat (cluster of villagers) under which Chikini comes and along with a detailed map of the site.
- 25.** We know that the developer has held the stakeholders meeting in a fictitious location, Korhapur. In addition to that the PP has failed to provide documentation of the information that was distributed to the villagers prior to above meeting that would help them assess the nature of the proposed project.

While providing a small and almost negligible amount of energy to the national grid, this project hits the weakest members of Indian society the hardest while violating the rights of the

Chhattisgarhi tribals as enshrined in Schedule Five of the Constitution of India and the Forest Rights Act (2006). Moreover, as described above, the PP has given a lot of misleading, wrong and inadequate information in the PDD. The project is also not additional, nor is it sustainable development. Given the nature of the proposal it would be inappropriate if the project gets validated, registered as CDM activity or gets CERs.

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Annexure 1: Map of the close cluster of Mahan hydro projects



Annexure 2: Photo showing advanced stage of construction of Mahan-3 (taken on May 20, 2012)

