October 9, 2013

Response of IBRD to United Kingdom on Approval by mail: India: Development Policy Loan (DPL) to Promote Inclusive Green Growth and Sustainable Development in Himachal Pradesh (HP)

Zhihong,

Attached are our responses to the comments.
Regards,

Gevorg Sargsyan

UK Comments	**Bank response**
We welcome the $100m development policy loan (DPL) to the state of Himachal Pradesh, India, to reform and speed up procedures for site assessment, monitoring and administrative preparation for hydro power capacity. The proposal follows a very clear structure and we are grateful that the TFC member comments have been addressed in a very clear manner.	Agree
The proposal has contradicting information on the expected carbon savings – while the cover page expects 20.72mt CO2e saved over lifetime, the actual proposal speaks of 333mt CO2e. The approach to calculate the CO2e savings is very clearly set out and we highly welcome the dynamic baseline. We appreciate the UK's comments have been partly taken on board, but still have questions around the BAU.	In the Summary Table, expected carbon savings of 20.72 mt CO2e have been calculated only till 2018-19 (5 years horizon), while in the project proposal the expected savings have been calculated till 2032. The discrepancy will be clarified during the revisions.
How has the BAU been calculated (i.e. the 6780 MW until 2032)? As outlined in the responses to the UK the DPL would only result in a frontloading of the installed hydropower capacity. The policy objective of 10381 MW should still be achieved, though potentially with a different time line. When do you expect the installation of 10381 MW of hydro power capacity to be completed in the absence of the DPL?	Under the BAU Scenario, as per targets the projects allotted get commissioned by 2022 (aggregating to capacity of 3883 MW). Beyond 2022, either the same pace of capacity addition continues or due to various inadequacies the pace of capacity addition continues to suffer. Our estimates assume that only 75% of the targeted capacity (3883 MW) would come up after that. This occurs on account of spiraling effect of delays, weak procedures and monitoring. As an example a

	lot of capacity allotted in the recent past is under the pre-feasibility stage only, and some projects have even been cancelled. Thus, the total capacity under BAU works out to be ~6780 MW (3883 MW + 75% of 3883 MW) While in absence of DPL the incremental potential gets achieved (though not fully) under a different time scale, using DPL the existing target not only gets commissioned at accelerated pace but also leads to harnessing of projects under pre-feasibility stage (3721 MW) and unallotted potential (~7109 MW) by 2032. This is a strong difference from the BAU scenario. The total hence works out to be ~10830 MW which is in addition to the capacity proposed
Depending on the way carbon savings are calculated (i.e. the carbon savings that could be brought forward by the DPL), the cost/ton can be calculated. Based on the current information the cost/ton appears to be very low. However we would like to know more about the uncertainties around the total carbon savings as well as the level of public finance involved.	The detailed methodology for the carbon savings has been mentioned in the Annexure – C of the proposal. The cost/ton has been calculated based on the $100 Mn CTF funding to be put into the project for ~333 Mn ton CO2e. **Comments related to level of public finance is answered below**.
The project has as public leverage ratio of 1, and a private leverage ratio of 21 (4157:200). However it is unclear how the private sector leverage has been calculated. It seems to represent the private finance involved in building the individual power plants. Is this private finance above BAU (calculated similarly to the GHG savings)? What is the public finance expected to be involved in the individual projects? The co-finance number presented in the summary table on the cover page does not relate to the co-finance outlined in the project proposal.	In the summary table, the leverage ratio has been calculated based on the amount of investment that would crowd in for development of 10831 MW directly into the project. Further in terms of leverage, as mentioned in table 7 of the proposal, around 56% of the projects are allotted to the state and the central sector units and the funds for development of these projects will be arranged from public sources as mentioned. While 44% of the projects are allotted to private sector who will be deploying their own funds. Hence the public to private investment ratio would be ~1:1.27 (The capital cost assumed for the project is Rs. 8 Cr per MW). The leverage is calculated for the entire cost of program which would happen anyway though with potentially

	some delay. While this is one approach, the alternative would be to calculate divergence of NPVs of BAU and alternative scenario.
The proposal mentions a second DPL financed by the IBRD. How do the two policies differ in their activities?	Both the DPLs are a part of Programmatic Inclusive Green Growth DPL series and hence should be seen in continuum and not separately. DPL I was financed by IBRD and DPL II will be funded by CTF. The overall PDO is the same and the policy and institutional actions are sequentially implemented. There is no double counting since the leverage ratios are presented for the entire program and not just for DPL II. While previous DPLs in the state were mainly supporting fiscal reforms, they also included a number of actions supporting environmental sustainability. The creation of Department of Environment, Science and Technology (DEST) in Himachal Pradesh was a result of fiscal DPL.
How much additional renewable energy capacity is expected to be leveraged by the second DPL – calculated in a way to not double-count the capacity by the CTF co-financed DPL?	When the Board approved the first DPL of this Programmatic DPL series, the understanding was that it will be funded by both IBRD and CTF. Therefore this should be considered as one operation and IBRD resources were accessed by GoI and GoHP in anticipation of available CTF funding. There is therefore no double counting.
While successful reforms can have high replication potential it is not clear how the lessons learned are going to be transferred at regional and national level. Will policy makers from other states/at federal level accompany the process?	The demonstration effects of HP model of inclusive green growth are expected to be substantial. While, it is not possible to link activities with those in other states (as each state in India functions rather independently of each other), GoHP has been playing a leadership role among hill states through hosting conclaves, conferences, workshops and other knowledge sharing events on sustainable development. GoI also is making resources available for other states to replicate the HP model.

While the DPL clearly makes sense for HP, the transformational aspect needs to be strengthened so that this DPL can lead to catalysing progress elsewhere in India. The current proposal even sets out the conceptual steps by which this could happen and states: `The replication potential of this project would be high and would accelerate the hydropower development in other resource rich states like Sikkim, Uttarakhand, and Arunachal Pradesh etc thus encouraging newer investments'. But the actual process by which this might happen is not articulated nor is it explicitly supported. We would like to see some of the steps planned to implement the transformation, for example some specific targeting of Sikkim, Uttarakhand and Arunachal Pradesh through a process of exchange, lessons learning and sharing.	As mentioned above, each state in India functions independently of each other. However, GoHP has been taking the lead in disseminating, sharing and transferring knowledge and experience to other mountain states in a systematic manner. This is being done both at the policy and technical levels. GoI also has particular interest in helping other hill states imbibe the HP model of inclusive green growth.
Perhaps making available a small extra component around lesson learning and sharing with the other Himalayan states would support the transformational potential of this DPL.	Good point and Agree. We will make sure to set aside some resources from the HP DPL to do this.
The absence of adequate power evacuation and transmission infrastructure is cited as one of the barriers to hydro development. The mitigating action to reduce this risk is to ensure that the State Transmission Utility is constituted and will hold regular committee meetings to sort evacuation problems. It would be useful to have more information about the barriers to development of transmission infrastructure as this is fundamental to project success. In the Rajasthan CTF project, public finance was required because of the unattractive IRRs associated with building transmission infrastructure – caused by low load factors, large distances between generation of and demand for electricity and also because of the publicly owned utility foregoing a return on equity in order to lessen pressure on consumer tariffs. Are these issues present in Himachal	One of the main factors holding up early implementation has been the absence of confidence in the timely availability of arrangements for evacuation of the power generated. The State Government is taking number of steps to address this barrier: i) A Transmission Master Plan has been formulated in consultation with the Central Transmission Utility (POWERGRID or PGCIL) and Central Planning Agency (CEA) for evacuating power from each of the five river basins in the State. However, there were critical constraints in financing this Plan since it involved significant investments. ii) The State has negotiated a $ 350 million multi tranche ADB loan as a first step. The first tranche of the loan will take care of

Pradesh? If so, will further public finance be required to invest in transmission infrastructure?	requirement of all major projects with a completion schedule till 2014. Future tranches will ensure strengthening the system for projects with a completion schedule till 2016. iii) For evacuation of power from projects expected from 2017 onwards, the State Government is in discussions with Government of India to address the barriers through systematic planning of high capacity lines. CEA has set up a committee which is currently looking into this issue. iv) A separate State Transmission Utility (STU) has been formed in 2010 which is looking into the planning and execution of evacuation system as per the hydro power harnessing plan of the State.
The local benefit scheme is an innovative product, and one that we support. However, it would be useful to understand how the developers/authorities will engage with the affected communities to ensure that local groups are educated about the developments, as well as being compensated. Will the study to understand social and environmental issues be used to feed into this?	The Poverty and Social Impact Assessment (PSIA) findings will inform the Government's program designed to engage with the affected communities. In addition, the program is also supporting the State government in developing a communication plan to strengthen its outreach state government's program and policies through different media.
The barrier of lacking a regulatory framework to reduce transactions costs is not necessarily addressed by additional online monitoring. To ensure the proposed outcome is achieved, we'd like to understand if there are any plans for development of the regulatory framework – is this something that is being addressed through the IBRD DPL?	The key problem that exists at the moment in number of areas is that while there is a defined regulatory framework the state does not have adequate means to monitor the implementation of the same. So what the program is focusing on is to strengthen the monitoring mechanisms and also helping the government in pushing more information in the public domain that will provide another stakeholder that helps in the monitoring. However, in case, any gaps are identified in the regulatory framework, the same will be discussed during the course of the program with the Government to try and address through appropriate means.

Have the changes in precipitation and glacial melt water due to climate change mentioned in the proposal been factored into the long term productivity/economics of the proposals? The lifetime of the scheme is so long that the climatic impacts become relevant.	The GoHP is aware of the situation and under this Programmatic DPL, a state climate change action plan has been prepared, peer reviewed and is with Central Ministry for clearance. It is available on the state's website. This action plans looks in to vulnerability and is proposing actions with respect to hydro development as well. It should be noted that this has no implications for CTF supported operation since we are only capturing CO2 from early years.