

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
INTERNATIONAL DEVELOPMENT ASSOCIATION

**FIRST PROGRESS REPORT**  
**ON THE IMPLEMENTATION OF MANAGEMENT'S ACTION PLAN IN RESPONSE TO**  
**THE INSPECTION PANEL INVESTIGATION REPORT (INSP/89109-IN) ON THE**

**INDIA**  
**VISHNUGAD PIPALKOTI HYDRO ELECTRIC PROJECT**  
**(LOAN NO. 8078-IN)**

**OCTOBER 28, 2015**

## **ABBREVIATIONS AND ACRONYMS**

BP	Bank Procedures
GRC	Grievance Redress Committee
INR	Indian Rupee
MW	Megawatt
NGO	Nongovernmental Organization
OP	Operational Policy
PIC	Project Information Center
PTCUL	Power Transmission Corporation of Uttarakhand Limited
RAP	Resettlement Action Plan
R&R	Resettlement and Rehabilitation
TBM	Tunnel Boring Machine
THDC	Tehri Hydro Development Corporation Limited
USD	United States Dollar
VPHEP	Vishnugad Pipalkoti Hydro Electric Project

**INDIA**  
**VISHNUGAD PIPALKOTI HYDRO ELECTRIC PROJECT**  
**(LOAN NO. 8078-IN)**  
**Progress Report No.1**

**Implementation of Management Action Plan**

**CONTENTS**

Executive Summary .....	iv
I. Introduction.....	1
II. Management Action Plan.....	4
III. Progress of Management Action Plan Implementation .....	4
IV. Next Steps .....	9



## EXECUTIVE SUMMARY

### Background

1. This is the first Progress Report to the Board of Executive Directors on the implementation of the Management Action Plan in response to the Inspection Panel Investigation Report No. 89109-IN on the India Vishnugad Pipalkoti Hydro Electric Project (VPHEP).
2. On August 3, 2012, the Inspection Panel registered a Request for Inspection concerning the VPHEP. The Request was submitted by residents of Chamoli district in the State of Uttarakhand. Management responded to the claims in the Request on October 24, 2012. In its Report to the Board, the Panel found the Request eligible and recommended that the Executive Directors authorize an investigation. On July 1, 2014, the Panel issued its report outlining the findings of its investigation, and this, along with the Management's Report and Recommendation, including an Action Plan, was discussed at the Board on September 30, 2014.
3. The VPHEP was designed as a 444 MW run-of-river hydropower generation project on the Alaknanda River in Uttarakhand, India. When complete it is expected to generate an estimated 1,665 Gigawatt-hours, (or million kilowatt-hours) of electricity in a typical year. This will represent a valuable addition of peaking power to India's Northern Grid, which faces severe power shortages during periods of high consumption, and will help reduce the need to expand thermal generation in the Northern Grid. The Project will also help reduce India's greenhouse gas emissions by 1.6 million tons each year, compared to a thermal plant of the same capacity.
4. The VPHEP was approved by the Board of Executive Directors on June 30, 2011 and is currently under implementation. The Bank-funded components of the Project are: (i) construction of the dam and hydropower facility (US\$638 million); and (ii) technical assistance for capacity building and institutional strengthening of THDC (Tehri Hydro Development Corporation, now THDC India Ltd.), the Project implementing agency (US\$10 million).
5. The Panel assessed Project issues related to cumulative impacts; water loss; risks related to structures, earthquakes and landslides; risks to aquatic life and ecology; resettlement and livelihood restoration and gender impacts. The Panel observed compliance with Bank policies on all of the above aspects except:
  - (a) **Water Loss.** The Panel found that Management complied with OP/BP 4.01 by undertaking baseline studies to document village water sources along the tunnel alignment routes and by ensuring that THDC committed to provide alternative water sources in the event that an existing source was lost. However, the Panel found the Bank not in compliance with the provision of OP/BP 4.01 that requires that the Project identify detailed and adequate mitigation measures that could be operationalized if a water source were lost.
  - (b) **Resettlement and Livelihood Restoration.** The Panel noted that resettlement and rehabilitation efforts for the Project were underway and almost half of the eligible

families had received their resettlement and rehabilitation (R&R) assistance. However, with respect to the hamlet of Hatsari (where 17 families were deemed affected, even though the Project will not acquire land in Hatsari), the Panel found that the Project Resettlement Action Plan (RAP) did not adequately assess the situation of the Hatsari residents, in non-compliance with Bank Policy OP/BP 4.12 on Involuntary Resettlement. The Panel recognized, however, Management's concern for the Hatsari residents' issues to date and the fact that negotiations were still continuing with a wide range of options on offer to Hatsari residents.

6. This Report outlines progress to date in implementation of Management's Action Plan to address the Panel's findings.

- (a) ***On the issue of water loss, the Panel's findings have been addressed.*** THDC commissioned an independent expert, who submitted a report documenting a range of possible alternative or additional water sources, in case any existing water source in the 15 potentially-impacted villages is negatively impacted. The report gives detailed information by village, including cost estimates for each of these potential alternative sources. The report will serve as a planning tool to immediately develop a water supply scheme if water loss is reported by any village. The report is available in both English and Hindi at the Project Information Center (PIC).
- (b) ***On the issue of resettlement and livelihood restoration for the hamlet of Hatsari, progress towards addressing the Panel's findings has been made.*** THDC continued negotiations with the families of Hatsari, on the various compensation options open to them. THDC also involved the State administration (the office of the District Magistrate, the most senior representative of the State Government in the District) in this arbitration process. The Bank task team has also met with representatives of the Hatsari families to help them arrive at an acceptable resolution.

At the time that the Panel presented its findings to the Board, only two of the 17 Hatsari families had agreed to accept THDC's proposal for relocation. As a result of the subsequent efforts of THDC, six additional families have signed agreements and have been relocated, and one further family will shortly sign these agreements. In order to reach agreement with the remaining eight families, THDC will seek the support of elected local representatives. The Bank task team will also continue to support THDC in its negotiations with the remaining families, through upcoming missions to the site in November 2015, in which it will meet with representatives of the remaining families. THDC has assured the Bank that it will continue to address and monitor the issue of resettlement and restoration of the Hatsari families.

## I. INTRODUCTION

### A. PROJECT

1. The Vishnugad Pipalkoti Hydro Electric Project (VPHEP) has been designed as a 444 Megawatt, run-of-river hydropower scheme which, when completed, will generate an estimated 1,665 Gigawatt-hours, (or million kilowatt-hours) of electricity in a typical year. This will represent a valuable addition of peaking power to India's Northern Grid, which faces severe power shortages during periods of high consumption. The Project will also help reduce India's greenhouse gas emissions by 1.6 million tons each year, compared to a thermal plant of the same capacity.

2. The Project infrastructure includes a 65-meter high diversion dam to create a small reservoir in the Alaknanda River. The river flows through a deep, uninhabited gorge at the dam site, so no fields, houses or any other major infrastructure will be submerged. The proposed reservoir will store 4.9 hours of average river flow in the lean flow season to allow the Project to meet its peaking generation obligations. A 13.4 km headrace tunnel will carry water to an underground powerhouse; all the diverted water will be returned to the river through a 3.07 km tailrace tunnel. To Management's knowledge, the Project has one of the highest minimum flow standards in India; it will maintain a minimum flow of 15.65 m<sup>3</sup>/sec of water in the river at all times to sustain the aquatic health of the river. This is equivalent to approximately 45 percent of the average lean season flow of the river.

3. The objectives of the Project are: (a) to increase the supply of electricity to India's national grid through the addition of renewable, low-carbon energy; and (b) strengthen the institutional capacity of THDC (Tehri Hydro Development Corporation, now THDC India Ltd.), the Project implementing agency, with respect to the preparation and implementation of economically, environmentally and socially sustainable hydropower projects. The Bank-funded components of the Project are: (i) construction of the VPHEP (US\$638 million, Bank-funded portion); and (ii) technical assistance for capacity building and institutional strengthening at THDC (US\$10 million, Bank-funded portion). The Project was approved by the Board of Executive Directors on June 30, 2011; the current closing date is December 31, 2017. About US\$42.5 million have been disbursed to date.

### B. CURRENT STATUS OF PROJECT

4. The VPHEP generating scheme is being constructed primarily through two large EPC (Engineering, Procurement and Construction) contracts, one for civil and hydro-mechanical works, and the other for electro-mechanical works. The contract for the construction of the civil works (which includes the dam, the 13.4 km headrace tunnel, the underground powerhouse and the 3.07 km tailrace tunnel), was awarded to HCC Ltd. in January 2014, and civil works are now well underway. The contract for the electro-mechanical works was awarded to BHEL India Ltd. in November 2014, with the start date contingent upon civil works.

5. Privately-owned land has been acquired from 558 titleholders from seven villages for various components of the Project. All but 53 titleholders have been fully compensated and disbursement to the remaining titleholders is underway. THDC has, to date, paid out INR 75.47 million (approximately USD 1.3 million) towards resettlement and livelihood restoration (R&R) assistance.

6. Provisions of the Environmental Management Plan are being implemented, but the Bank is concerned that this remains at risk of falling into non-compliance if muck and construction debris are not properly deposited at pre-identified muck disposal sites; appropriate camp-site colonies for staff and labor are not finalized; and site safety issues are not adequately addressed. An action plan has been developed to address these issues and the Bank is closely monitoring its implementation. A third-party monitoring agency (to assess the ongoing management of air, water and noise pollution) is also in place and has already completed one assessment.

**C. SUMMARY OF PANEL PROCESS, PANEL FINDINGS AND BOARD CONSIDERATION**

7. On August 3, 2012, the Inspection Panel registered a Request for Inspection concerning the VPHEP. The Request was submitted by residents of Chamoli district in the State of Uttarakhand. Management responded to the claims in the Request on October 24, 2012. In its Report to the Board, the Panel found the Request eligible and recommended that the Executive Directors authorize an investigation, which it did on November 26, 2012. On July 1, 2014, the Panel issued its report outlining the findings of its investigation. That report and Management’s Report and Recommendation, including an Action Plan, were discussed at the Board on September 30, 2014. The summary of key Panel findings are described in Table 1 below:

**Table 1. Key Panel Findings**

Item	Finding
Cumulative Impacts	The Panel found that Management complied with the provisions of OP/BP 4.01 by ensuring the preparation of a cumulative impact assessment for the Project and by incorporating the recommended increased minimum environmental flow (e-flow) into the Project to mitigate cultural, religious and biodiversity impacts.
Water Loss	The Panel found that Management complied with OP/BP 4.01 by undertaking the baseline studies to document village water sources along the tunnel alignment routes and ensuring that THDC committed to provide alternative water sources in the event that an existing source was lost. However, the Panel found that the Bank did not identify detailed and adequate mitigation measures that could be operationalized if a water source were lost, in non-compliance with OP/BP 4.01.
Risk relating to Structures, Landslides and Earthquakes	The Panel noted the steps taken to use Tunnel Boring Machine (TBM) technology to reduce potential harms from vibrations. The Panel found that this complied with Bank Policy OP/BP 4.01 as a step to reduce or mitigate potential harm.  The Panel found that, in compliance with OP/BP 4.37, Management took adequate measures to ensure the preparation of relevant studies by THDC during Project design, appraisal and implementation stages to mitigate the risks raised in the Request.
Risk to Aquatic Life and Ecology	The Panel found the Project in compliance with OP/BP 4.01 with respect to the Requesters’ claim about the Project’s impacts on fish and aquatic fauna.



Item	Finding
Resettlement and Livelihood Restoration	The Panel understood that resettlement and rehabilitation efforts were underway and almost half of the eligible families had already received their resettlement and rehabilitation (R&R) assistance. However, with respect to Hatsari (where seventeen families were affected), the Panel found that the Project Resettlement Action Plan (RAP) did not adequately assess the specific situation of Hatsari residents, in non-compliance with Bank Policy OP/BP 4.12 on Involuntary Resettlement. The Panel recognized, however, Management's concern for the Hatsari residents' issues and the fact that negotiations were continuing, with a wide range of options on offer to Hatsari residents. <sup>1</sup>
Gender Impacts	<p>The Panel found that the THDC Resettlement and Rehabilitation (R&amp;R) Policy covering access to livelihood sources, i.e., fuel and fodder, complied with the requirements of OP/BP 4.01 and OP/BP 4.12.</p> <p>The Panel acknowledged that the gender analysis that was part of the SIA, as required by OP/BP 4.01, identifies differential impacts on women when a project changes access to resources in fragile ecosystems and which may have unanticipated impacts on women who use those resources.</p>
Local Benefit Sharing	<p>The Panel found that important efforts were being made to restore the livelihoods of displaced people in accordance with the provisions of OP/BP 4.12.</p> <p>The Panel noted, as Project implementation progressed, that Management was responsive to OP 4.12, paragraph 13 (b), which requires that infrastructure and public services be provided as necessary to new resettlement sites and host communities to improve, restore, or maintain accessibility and levels of service for the displaced persons and host communities.</p> <p>On the issue relating to community conflicts and the Grievance Redress Mechanism, the Panel found that the requirement of OP/BP 4.12 to establish an appropriate and accessible grievance mechanism had been met. In accordance with the requirement of OP/BP 4.12, the Panel noted the importance of the Project Grievance Redress Committee (GRC) being accessible to host communities so that their concerns could be heard and resolved when appropriate.</p>

<sup>1</sup> Hatsari is one of the three hamlets comprising Haat village. During the Social Impact Assessment, Hatsari was included in the Project affected area as part of Haat revenue village. The village of Haat is affected by the underground powerhouse, evacuation facility, approach road and surge shaft. Though initially only 17 households were affected, the community demanded the relocation of the entire village given the disproportional impacts of construction likely to fall on them. Since the entire village was to be displaced, THDC offered a special package to Haat (including Hatsari) of INR one million over and above compensation and R&R assistance. However, Hatsari rejected the package. THDC put forward several enhanced relocation and compensation options, but these too were rejected by the Hatsari households (17 families). As a consequence, THDC changed the location of the switchyard, the alignment of the adit to the tail race tunnel, and the approach road to the surge shaft so that the Hatsari land would not be required for the Project. However, concerned about the impacts of construction nearby, THDC has consistently kept open the offer of resettlement (permanent or temporary) and is in continuing dialogue with the families of Hatsari. As a result of THDC's efforts, two households (three families) have already shifted out of Hatsari and three other households (six families) have signed an MOU with the Project authorities agreeing to move out as well. THDC has assured the Bank that it will continue to work closely with the rest of the Hatsari community (eight families in three households) to arrive at a mutually agreed solution.

## II. MANAGEMENT ACTION PLAN

### A. MANAGEMENT ACTION PLAN DESCRIPTION

8. Management carefully reviewed the Panel's constructive findings and observations, and outlined an Action Plan to ensure that the Project achieved and maintained compliance with Bank policies throughout its implementation. Management's Action Plan addressed the two principal concerns of the Panel by: (a) proposing to clarify in greater detail how alternative water sources would be supplied if required as part of the mitigation measures, and (b) ensuring a conclusion of the ongoing negotiations with the seventeen families of the Hatsari hamlet that is compliant with Bank policy. Management also committed to continue to follow up on other issues raised by the Panel, and to ensure that the Project remained in compliance with Bank policies on these issues.

### B. SUMMARY OF PROGRESS TO DATE

9. This is the first progress report since the Board discussed the Inspection Panel findings on September 30, 2014, and covers the first year of implementation of the Management Action Plan.

## III. PROGRESS OF MANAGEMENT ACTION PLAN IMPLEMENTATION

### A. ACTIONS IMPLEMENTED UNDER THE MANAGEMENT ACTION PLAN:

10. ***Water Loss and Alternative Water Sources.*** Action to address the findings of the Panel with respect to Water Loss and Alternative Water Sources is now complete.

11. In response to the Panel's recommendation, THDC hired the consultancy services of a former Executive Engineer in the Department of Rural Water Supply of the Government of Uttarakhand. This expert conducted village surveys of existing and potential water sources in the 15 villages that could be affected by excavation works.

12. In consultation with local communities, the expert developed an inventory of existing water supply infrastructure (source location, water supply reservoir, length of distribution system, service levels, etc.), and also located and documented possible alternative or additional sources along with their estimated costs. The detailed report for each village has been submitted to THDC and will serve as a planning tool to develop an alternative water supply scheme if water loss is reported by any village. The report is available in both English and Hindi at the Project Information Center (PIC).

13. ***Resettlement and Livelihood Restoration.*** Progress has been made in addressing the Panel's concerns regarding the coverage of the hamlet of Hatsari under the Project's RAP. At the time that the Panel presented its findings to the Board, only two of the 17 Hatsari families had agreed to accept THDC's proposal of relocation.

14. THDC has continued negotiations with the families of Hatsari, regarding the various compensation options open to them (permanent relocation or temporary relocation accompanied by the leasing of their lands, etc.). THDC has also involved the State administration (the office of the District Magistrate, the most senior representative of the State Government in the District) in

this negotiation process. The Bank task team has also met with representatives of the Hatsari families to help them arrive at an acceptable resolution with THDC. As a result of these combined efforts, six additional families have signed agreements with THDC to sell their land to the company and relocate, and one family is in the process of signing.

15. The R&R compensation package provided to these families is identical to that provided to the broader Haat village, and includes the equivalent land value, at the rate of INR one hundred thousand per nalli (one nalli is equal to 200 sq. meters) and a financial grant of INR one million (USD 16,667).

16. In order to reach agreement with the remaining 8 families, THDC will seek the support of elected local representatives. The Bank task team will also continue to support THDC in its negotiations with the remaining families, through upcoming missions to the site in November 2015, in which it will meet with representatives of the remaining families. THDC has assured the Bank that it will continue to address the issue of resettlement and livelihood restoration of the Hatsari families.

#### **B. ADDITIONAL ISSUES THAT MANAGEMENT HAS CONTINUED TO TRACK UNDER THE MANAGEMENT ACTION PLAN**

17. Management has continued to follow up on other issues assessed by the Panel. Follow-up actions are described below on each of the issues assessed by the Panel.

18. **Cumulative Impacts.** The Panel found that Management complied with the provisions of OP/BP 4.01 by, inter alia, ensuring the preparation of a cumulative impact assessment for the Project and by incorporating the recommended increased minimum environmental flow (e-flow) into the Project to mitigate cultural, religious and biodiversity impacts. With respect to transmission lines, the Panel noted that Project documents did not sufficiently address the proposed 30 km transmission line, which will evacuate power from the Project to the Kuwari Pass pooling station, and also the wider proposed power transmission system in the area. Given that the routings for the proposed transmission lines were not fully identified at the time that the Project documents were prepared, the Panel did not find Management in non-compliance. Management recognized the need to ensure that the transmission line impacts were adequately mitigated, and that there would be sufficient time during project implementation to address transmission issues.

19. **Status.** The routing of transmission lines to evacuate power from VPHEP has now been defined and design has commenced. THDC is working to ensure that the design and construction of these transmission lines conforms to the Bank's safeguard requirements. The transmission lines from the Project to Srinagar, and then from Srinagar to the state border of Uttarakhand, will be constructed by the Power Transmission Corporation of Uttarakhand (PTCUL). Transmission linkages from the border of Uttarakhand to the national grid are being constructed by Powergrid. Powergrid already follows well-tested environmental and social policies and procedures that meet Bank requirements.<sup>2</sup> The Asian Development Bank (ADB) is funding the construction of the line

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<sup>2</sup> The Safeguard Diagnostic Review (February 2009), undertaken for the India - [Fifth Power System Development Project](#) (P115566), determined that Powergrid's Environmental and Social Policy and Procedures (ESPP) were

from Srinagar to the Uttarakhand border and PTCUL has been requested to apply ADB safeguard policies and procedures to the construction of the entire line. THDC is now reviewing the environmental and social systems of PTCUL, to ensure compliance with the Bank's safeguards requirements. The Bank task team will work with THDC to monitor the safeguard activities of Powergrid and PTCUL, to ensure that the transmission lines are designed and constructed to meet safeguard requirements.

20. **Risk relating to Structures, Landslides and Earthquakes.** The Panel noted the steps taken to use TBM technology to reduce potential harm from vibrations. The Panel found that this action complied with Bank Policy OP/BP 4.01 as a step to reduce or mitigate potential harm. The Panel found that, in compliance with OP/BP 4.37, Management took adequate measures to ensure the preparation of relevant studies by THDC during Project design, appraisal and implementation stages to mitigate the risks raised in the Request. The Panel noted the importance of Management clarifying the issue of slurry disposal.

21. **Status.** The contractor has prepared a Slurry Disposal Plan for the VPHEP, which is currently being reviewed by THDC's design consultants. The finalized Slurry Disposal Plan will be monitored by the Bank task team once TBM operations begin (estimated May 2016).

22. **Risk to Aquatic Life and Ecology.** The Panel found the Project to be in compliance with OP/BP 4.01 with respect to the Requesters' claim about the Project's impacts on fish and aquatic fauna. The Panel commended Management for advising Project authorities of the need to specifically study the issue of bed load, but found that the analysis was lacking.

23. **Status.** THDC has prepared the terms of reference for a bed load movement study at the Basin-level; the contract is likely to be awarded by December 2015.

24. **Gender Impacts.** The Panel found that the R&R Policy covering access to livelihood sources complied with the requirements of OP/BP 4.01 and OP/BP 4.12. The Panel found that insufficient attention had been given to the issue of women's security.

25. **Status.** Since the Board, THDC has taken several steps to address issues related to the livelihood and security of women. In order to augment existing incomes, the Project assisted the formation of self-help groups (SHGs) which included three, all-women SHGs, covering 43 women and one mixed SHG of 16 members, of which eight are women. Skill development in horticulture, backyard poultry farming, dairy-farming, tailoring and knitting, etc., has been provided through training to around 269 local women. THDC has also introduced a monthly assistance scheme for widows among the Project affected people; each widow is entitled to INR 1500 per month for a period of seven years.

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equivalent to the Objectives and Operational Principles of the World Bank's Safeguards under OP 4.00, Piloting the Use of Borrower Systems.



*Pictures 1 and 2. Skill development for tailoring and knitting*

26. In response to concerns voiced by local women regarding their security given the ingress of the Project labor force, guards for women have been stationed at key points on routes frequented by local women. More guards for women will be stationed by June 2016, as part of the contingent of the Central Industrial Security Force, the para-military force that secures major infrastructure facilities in India. THDC has also established a Women's Safety & Facilitation Centre in the village of Haat. The telephone number of this Centre has been widely circulated among community members. The labor camps already set up are segregated from the villages and have cooking gas and toilets, thus reducing the need for labor to move out of the camp.



*Pictures 3 and 4. Guards posted on key points; Women's Safety & Facilitation Centre*

27. In these mountain villages of Uttarakhand, it is women who are primarily responsible for the collection of fuel and fodder from van panchayat (community forest) land. The Social Impact Assessment showed that the transfer of van panchayat land to the Project would have an adverse impact on women as they would have to cover longer distances to reach the residual van panchayat areas. In order to mitigate the impact on women, THDC offers cash compensation for fuel and fodder to those households affected by the acquisition of the community forest lands. To date, 1,500 households from 18 Project area villages are receiving this benefit.

28. **Local Benefit Sharing.** The Panel found that important efforts were being made to restore the livelihoods of displaced people in accordance with the provisions of OP/BP 4.12. The Panel also noted the need for clarity in the use of the royalty payments and the revenue generated so that Project affected villages and others would benefit from these initiatives. The Panel further noted

the importance of assessing the impact of the Project on host communities at the end of RAP implementation.

29. **Status.** The RAP is still under implementation, however, the NGO responsible for RAP implementation has begun an assessment of the impact of resettlement on the host villages near the two resettlement colonies. The draft report is expected by end February 2016.

30. **Community Conflicts and the Grievance Redress Mechanism.** The Panel found that the requirement of OP/BP 4.12 to establish an appropriate and accessible grievance mechanism had been met.

31. **Status.** The GRC continues to meet on a regular basis. To date, 19 GRC meetings have been held, with two meetings since the Panel Report was discussed at the Board. The minutes of all 19 meetings have been documented. The current GRC panel has two women members.

### C. SUMMARY OF OUTSTANDING ISSUES

32. **Resettlement and Livelihood Restoration.** Action is ongoing to fully address the issues of resettlement and livelihood restoration for the families of Hatsari village. In order to reach agreement with the remaining 8 families (out of the original 17), THDC proposes to continue to use the support of the District Magistrate as the most senior State Government representative in the District, and also seek the support of elected local representatives. The Bank team will continue to support THDC in its negotiations with the remaining families, through upcoming missions to site in November 2015, in which it will meet with representatives of the remaining families. THDC has assured the Bank that it will continue to address the issue of resettlement and livelihood restoration of Hatsari families.

**Table 2: Implementation of Management Action Plan**

ACTION	STATUS
<p>1. <b>Water loss and alternative water sources:</b> The Panel found that Management complied with OP/BP 4.01 by undertaking the baseline studies to document village water sources along the tunnel alignment routes and ensuring that THDC committed to provide alternative water sources in the event that an existing source was lost. However, the Panel found that the Bank did not identify detailed and adequate mitigation measures that could be operationalized if a water source were lost, in non-compliance with OP/BP 4.01.</p>	<p><b>Completed.</b> Action to address the findings of the Panel with respect to Water Loss and Alternative Water Sources is now complete. In response to the Panel’s recommendation, THDC hired the consultancy services of a former Executive Engineer in the Department of Rural Water Supply of the State Government of Uttarakhand. This expert conducted village surveys of existing and potential water sources in the 15 villages that could be affected by excavation works. In consultation with local communities, the expert developed an inventory of existing water supply infrastructure (source location, water supply reservoir, length of distribution system, service levels, etc.), and also located and documented possible alternative or additional sources along with their estimated costs. The detailed report for each village has been submitted to THDC and will serve as a planning tool to develop an alternative water supply scheme if water loss is reported by any village. The report is available in both English and Hindi at the PIC.</p>

ACTION	STATUS
<p>2. <b>Resettlement and Livelihood Restoration:</b> The Panel understood that resettlement and rehabilitation efforts were underway and almost half of the eligible families had already received their R&amp;R assistance. However, with respect to Hatsari (where eight families were affected), the Panel found that the Project RAP did not adequately assess the Hatsari reality, in non-compliance with Bank Policy OP/BP 4.12 on Involuntary Resettlement. The Panel recognized, however, Management's concern for the Hatsari issue to date and the fact that negotiations were still continuing with a wide range of options on offer to Hatsari residents.</p>	<p><i>Ongoing.</i> Progress has been made in addressing the Panel's concerns regarding the coverage of the hamlet of Hatsari under the Project's RAP. At the time that the Panel presented its findings to the Board, only two of the 17 Hatsari families had agreed to accept THDC's proposal of relocation. THDC continued negotiations with the families of Hatsari on the various compensation options open to them (permanent relocation or temporary relocation accompanied by the leasing of their lands, etc.). THDC also involved the State administration (the office of the District Magistrate, the most senior representative of the State Government in the District) in this arbitration process. The Bank task team also met with representatives of the Hatsari families to help them arrive at an acceptable resolution with THDC. As a result of these combined efforts, six additional families signed agreements with THDC to sell their land to the company and relocate, and one family is in the process of signing. The R&amp;R compensation package provided to these families is identical to that provided to the broader Haat village, and includes the equivalent land value, at the rate of 1 100,000 Rupees per nalli (one nalli is equal to 200 sq. meters) and a financial grant of INR 1 million (USD 16,667). In order to reach agreement with the remaining 8 families, THDC will seek the support of elected local representatives. The Bank task team will also continue to support THDC in its negotiations with the remaining families, through upcoming missions to the site in November 2015, in which it will meet with representatives of the remaining families. THDC has assured the Bank that it will continue to address the issue of resettlement and restoration of Hatsari families.</p>

#### IV. NEXT STEPS

33. Management will continue to monitor the implementation of the Management Action Plan. Management will also continue to support the ongoing negotiations between THDC and the village of Hatsari until a satisfactory conclusion has been reached on the issue of compensation for resettlement and livelihood restoration.

34. *Next progress report to the Board.* The next progress report on the Management Action Plan will be submitted in 12 months' time.