

# Sustainability Report 2016-17

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## 1.0 Message from Chairman and Managing Director

The United Nations General Assembly unanimously declared the decade 2014-2024 as the Decade of Sustainable Energy for All and underscoring the importance of energy issues for sustainable development.

India is the world's third largest producer and fourth largest consumer of electricity. India has surplus power generation capacity but lacks adequate infrastructure for supplying electricity to all needy people. In order to address the lack of adequate electricity supply to all the people in the country by March 2019, the Government of India launched a scheme called "Power for All". This scheme will ensure continuous and uninterrupted electricity supply to all households, industries and commercial establishments by creating and improving necessary infrastructure. Its a joint collaboration of the Government of India with states to share funding and create overall economic growth.



India's electricity sector is dominated by fossil fuels, and in particular coal, which in 2016 produced about two thirds of all electricity. However, the government is pushing for an increased investment in renewable energy and set a target of 1.75 GW upto 2022. Further, the Govt. of India is actively considering several ways and means for the revival of Hydro Sector. Various measures which are under consideration include the provision of Hydro Purchase Obligation (HPO), declaring Hydropower as Renewable Energy ,providing interest subvention @4%,excluding cost of enabling infrastructures from the project cost for keeping the tariff low, rationalization of depreciation rate and O&M expenses to bring down the tariff to a competitive level.

Electricity is a necessity that contributes to quality of life. Meeting the electricity needs of the people today, in a sustainable fashion, is very important. It is also crucial to use energy resources wisely and preserve the quality of environment for future generation.

THDCIL is operating 1513 MW including two hydroelectric projects viz. Tehri HPP (1000 MW) and Koteshwar HEP (400MW) and two wind power projects. In order to contribute to National Goal of 175 GW by 2022 electricity generation from renewable sources, THDCIL has successfully ventured into the wind energy sector with the commissioning of 50MW wind power project at District Patan and 63 MW wind power project at Devbhumi Dwarika in Gujarat 2016-17.

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THDCIL's sustainability vision goes all beyond the environmental issues. Our vision reflects our desire to understand stakeholders concerns and expectations so that we can better take them into account in our choices, decisions and action. The Company remains committed to create value for its Stakeholders through performance excellence.

I am grateful to all our employees for their steadfast and heartfelt commitment to sustainability.

**(D.V. Singh)**  
**Chairman and Managing Director**

## 2.0 About this Report

THDCIL follows Global Reporting Initiative (GRI) guidelines, International Hydropower Association (IHA) Guidelines and National Voluntary Guidelines on Social, Environmental and Economical Responsibilities of Business released by Ministry of Corporate Affairs, Govt. of India. Ministry of Corporate Affairs, Govt. of India in July, 2011 released '**National Voluntary Guidelines on Social, Environmental and Economical Responsibilities of Business**'. These Guidelines draw insights from good practices and international norms and frameworks such as ISO 26000, UNGC, GRI, OECD Guidelines in as much as they help to address Indian particularities as well as national resources like the BIS standard 16000, PSU CSR Guidelines, and other sources. The current Report is the 9<sup>th</sup> Sustainability Report for the year 2016-17 based on National Voluntary Guidelines (NVG) on Social, Environmental and Economical Responsibilities, however efforts are also being made to incorporate GRI Guidelines along with NVG. THDCIL is annually releasing Sustainability Reports since publication of its first Sustainability Report for the year 2008-09.

### **Scope of the Report and Management Approach:**

The scope of this report is to present the performance of THDCIL in the wider context of Sustainability. Sustainability Report 2016-17 addresses activities of THDCIL viz. business operations, Environment measures, employee's welfare, CSR works etc and their impacts during the year 2016-17 related to its business areas. A copy of report is available on THDCIL website ([www.thdc.co.in](http://www.thdc.co.in)) so as to enable stakeholders to find the desired information without much effort.

Company's Management approach reflect on economic, environmental and social impacts that affect the sustainable development and enables stakeholders to access the performance of THDCIL.

### **Boundary:**

Sustainability Report 2016-17 is confined to Corporate Office, Operating Plants and Under Construction Projects of THDCIL.

### **Data Collection:**

Data has been collected from various departments of Corporate Office, Operating Stations, Construction Project Sites and CSR Units. For collection of data, specific questionnaires were prepared based on National Voluntary Guidelines and GRI Performance indicators. Uniform approach has been adopted for measurement, calculation, analysis and suitably incorporation of data in the reporting framework. It is worthwhile to mention that there is no significant change in reporting framework of this report from previous year.

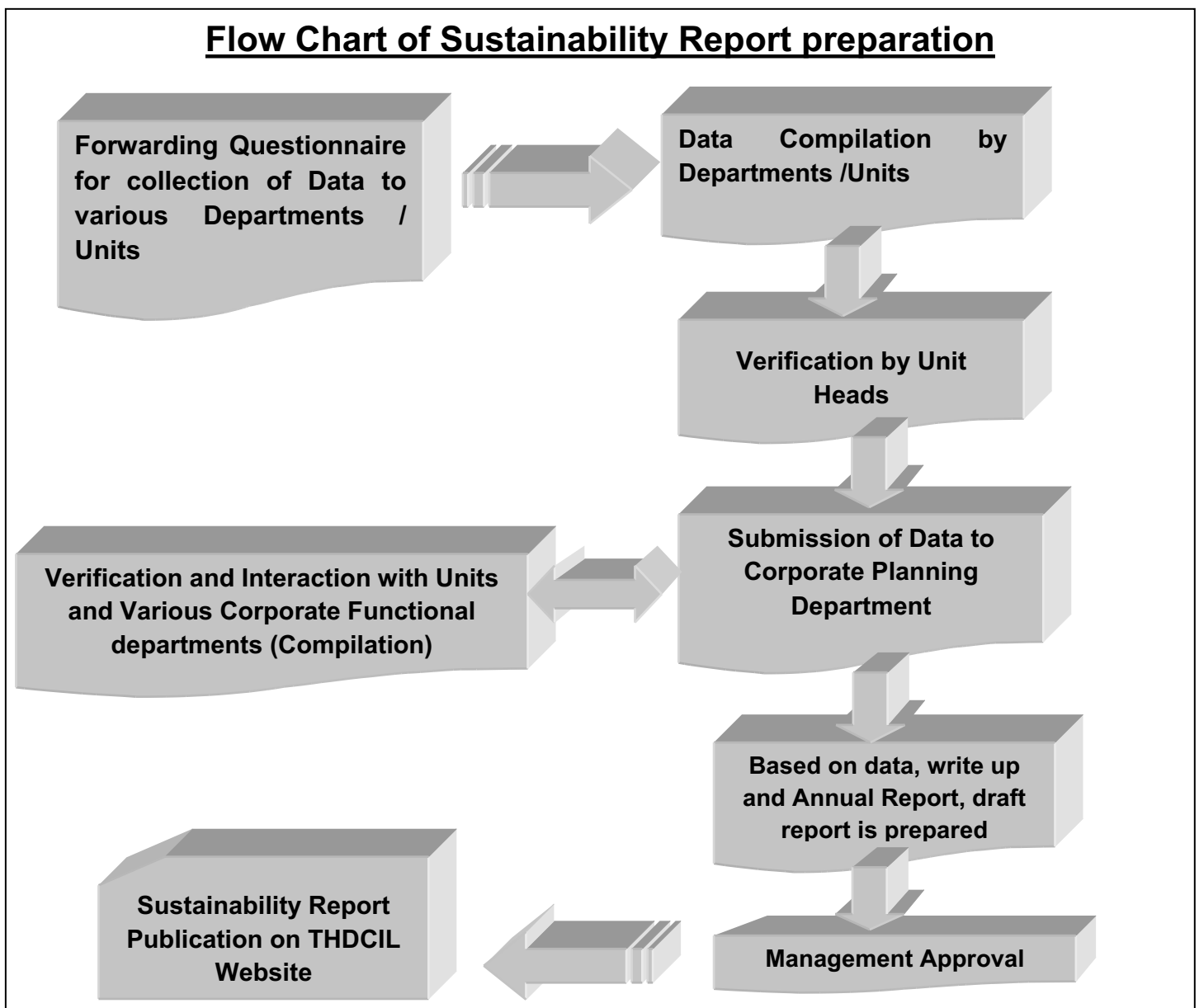
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## COMMUNICATION TOOLS

The main tools used for communicating and reporting on sustainability are:

- GRI Guidelines
- NVG Guidelines
- Ministry of Power directions and guidelines issued from time to time.
- Sustainability Report 2015-16 of THDCIL.( [www.thdc.co.in](http://www.thdc.co.in) )
- Web site containing details on Corporate Social Responsibility and sustainable development.
- Annual Report 2016-17, presenting 2016-17 highlights. [www.thdc.co.in](http://www.thdc.co.in)
- Business Responsibility Report provided in Annual Report 2016-17.
- THDCIL's Policy on CSR & Sustainability. ([www.thdc.co.in](http://www.thdc.co.in))
- THDCIL's CSR Communication Strategy.
- Sustainability Reporting Framework available in CSR Communication Strategy.

## Flow Chart of Sustainability Report preparation



### 3.0 About us

#### 3.1 Vision, Mission and Values:

*A world class energy entity with commitment to environment and social values.*

#### **Vision**

- ✓ *To plan, develop and operate energy resource efficiently.*
- ✓ *To adopt state of the art technologies.*
- ✓ *To achieve performance excellence by fostering work ethos of learning and innovation*
- ✓ *To build sustainable value based relationship with stakeholders through mutual trust*
- ✓ *To undertake Rehabilitation and Resettlement of project affected persons with human face.*

#### **Mission**

- ✓ *Zeal to excel and zest for change.*
- ✓ *Integrity and fairness in all matters.*
- ✓ *Respect for dignity and potential of individuals.*
- ✓ *Ensure speed of response.*
- ✓ *Strict adherence to commitments.*
- ✓ *Foster learning, creativity and team work.*
- ✓ *Loyalty & pride in the organization.*

#### **Values**

### 3.2 Company's Profile

THDC India Limited is a Joint Venture of Govt. of India (GoI) and Govt. of Uttar Pradesh (GoUP). The equity is shared in the ratio of 75:25 between GoI and GoUP. The Company was incorporated in July '88 to develop, operate & maintain the 2400 MW Tehri Hydro Power Complex and other hydro projects. The Company has an authorised share capital of Rs. 4000 Cr. THDCIL is a Mini Ratna Category-I and Schedule 'A' CPSE.

Total installed capacity of THDCIL presently is 1513 MW. THDCIL has two hydro electric generating stations, namely Tehri Stage-I (4X250 MW) and Koteshwar HEP (4X100 MW) and two Wind power generating stations of 50MW at Patan and 63 MW at DevbhumiDwarika, Gujarat. All the generating stations are operating successfully.

The Corporation has grown into a multi-Project Organization, with Projects spread over various States as well as neighboring country, Bhutan.

THDCIL presently has a portfolio of 14 projects totaling to an installed capacity of 5719 MW under various stages of implementation / development. The total operational capacity is 1513 MW.

The 1,000 MW Tehri Power Station was commissioned by THDCIL in 2006-07. The Tehri Project is a multipurpose Project providing peaking energy to the Northern Region, Irrigation benefits to Uttar Pradesh, and Drinking Water to NCT of Delhi and U.P. Due to regulated releases from the Tehri storage reservoir, the existing downstream hydro projects of the State are also getting benefitted by way of augmentation in their generation at no additional cost to them.

The 400 MW Koteshwar HEP, downstream of Tehri was commissioned in 2011-12. The 1,000 MW Tehri Pumped Storage Plant, which is under construction, would utilize the Tehri and Koteshwar reservoirs as upper and lower reservoir respectively.

In addition to the 2,400 MW Tehri Hydro Complex, THDCIL is implementing the 444 MW VishnugadPipalkoti Hydro Electric Project (VPHEP) on the river Alaknanda in Uttarakhand. THDCIL is also implementing 24 MW Dhukwan Small Hydro Project on the Betwa river in Uttar Pradesh. In addition, there are several hydro projects of THDCIL which are under various stages of Survey & Investigation / DPR preparation.

THDCIL is consistently profit making company since commissioning of Tehri Dam & HPP in the year 2006-07.

Government of UP has allotted Khurja Super Thermal Power Plant (2X660 MW) in Bulandshahar Distt to THDCIL for implementation.

Towards diversification of the company into Renewable Energy areas, THDCIL has commissioned 50 MW Wind Power Project at Distt. Patan, Gujarat in June'16 and 63 MW Wind Power Project in Devbhoomi Dwarika, Gujarat in Mar'17. THDCIL has

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signed MoU with Solar Energy Corporation of India (SECI) for setting up Grid Connected Solar Power Projects up to 250 MW capacity in a phased manner. THDCIL has also signed a tripartite agreement with SECI and Kerala State Electricity Board for development of 50 MW Solar project in Distt. Kasaragod, Kerala. Award of project is under progress.

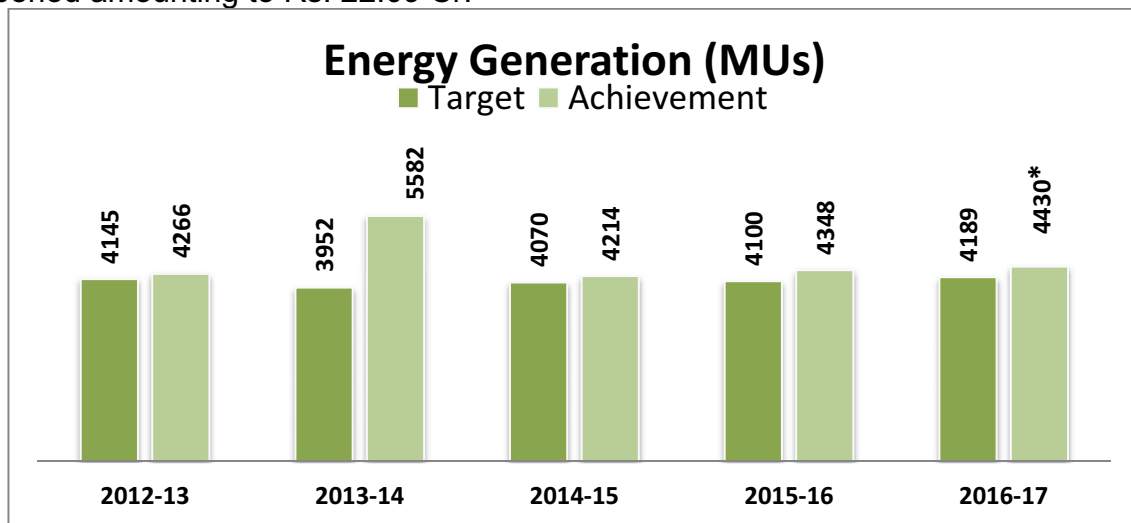
Under India-Bhutan Co-operation in hydro Sector development, THDCIL is involved in implementation of Bunakha HEP (180 MW) as a Joint Venture Project. The Company has also updated DPR of Sankosh HEP (2585 MW) in Bhutan as a consultancy assignment.

THDCIL has obtained ISO 9001:2008 Certificate of Quality Management System, ISO 14001-2004 Certification (Environment Management System) and ISO 18001:2007 (Occupational Health and Safety Management System) Certification for Corporate Office, Rishikesh, Tehri HPP, Tehri PSP, Koteshwar HEP, Vishnugad Pipalkoti HEP and Dhukwan Small HEP. Corporate IT Department, Rishikesh of THDCIL is ISO 27001:2013 (Information Security Management System) certified. The ISO certification has been upgraded to ISO 9001:2015 & ISO 14001:2015 for Corporate Office, Rishikesh, Tehri HPP, Tehri PSP and Vishnugad Pipalkoti HEP in Sep'17.

### 3.3 Energy Generation Statistics

THDCIL generated 4430MU of Energy during 2016-17 against annual target of 4189MU.

Free energy to the tune of 376.44 MU from Tehri HPP(1000 MW) and 146.35 MU from Koteshwar HEP(400 MW) was provided to the Home State of Uttarakhand during the period amounting to Rs. 22.09 Cr.



\* includes 59.1 MU Wind Energy.



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### 3.4 Key Business Locations / THDCIL Projects

Sl. No	Projects / State	Ins. Cap. (MW)	River / Basin	Remarks
<b>Hydro Electric Projects</b>				
<b>A Uttarakhand</b>				
1.	Tehri Dam & HPP	1000	Bhagirathi	Commissioned in 2006-07(Under operation)
2.	Koteshwar HEP	400	Bhagirathi	Commissioned in 2011-12(Under operation)
3.	Tehri PSP	1000	Bhagirathi	Under implementation. Expected Commissioning 2020-21
4.	VishnugadPipalkoti HEP	444	Alaknanda	Under implementation. Funding by World Bank. Expected Commissioning 2020-21
5.	JhelamTamak HEP	108	Dhauliganga	DPR submitted to CEA and pending for want of finalization of e-flow by MoEF&CC.
6.	Bokang Bailing HEP	330	Dhauliganga	Preparation of DPR under progress.
7.	Gohana Tal HEP	50	Birahiganga	GoUK has allotted three small projects in the reach of Gohana Tal HEP. FR for modified Gohana Tal (50 MW) was submitted to GoUK for approval. THDCIL has requested GoUK to cancel two small projects on which no work has been done. Project is also affected due to Supreme Court order dated 13th Aug-2013
<b>B Uttar Pradesh</b>				
8.	Dhukwan SHP	24	Betwa	Under construction, PPA signed with UPPCL. Expected commissioning 2018-19.
<b>C Maharashtra</b>				
9.	MalshejGhat PSS	700	Kalu	DPR submitted to State Govt. of Maharashtra. Signing of Implementation Agreement and PPA with State Govt. of Maharashtra awaited.
<b>D Bhutan</b>				
10.	Bunakha HEP	180	Wangchu	DPR Cleared by CEA. Project envisaged to be implemented by Joint Venture between THDCIL and Druk Green Power Corporation, Bhutan.
<b>Thermal Project- Uttar Pradesh</b>				
11.	Khurja STPP	1320		DPR Prepared. PPA signed. Pre-investment activities under progress. PIB submitted and cost approval is awaited.
<b>Solar Project- Kerala</b>				
12.	Solar Power Project	50	-	Tendering under progress. Award of the work shall be done after signing of the PSA.
<b>Wind Power Project- Gujarat</b>				
13.	Wind Power Project	50	-	Commissioned in 2016-17(under operation)
14.	Wind Power Project	63	-	Commissioned in 2016-17(Under operation)
Total		5719		
<b>Coal Mine Project- Madhya Pradesh</b>				
<b>Amelia Coal Mine</b>		-	-	Allotted for Khurja STPP (1320 MW). Development of Coal Mine under progress.

## 4.0 Corporate Governance and Ethics

### 4.1 THDCIL's Board of Directors:

THDCIL is a Schedule-A, "MINIRATNA (Cat.I) Public Sector Enterprise. Being a Miniratna company, THDCIL has provided increased flexibility in decision making regarding investment and operations of THDCIL.

THDCIL is a Government Company within the meaning of Section 2(45) of Companies Act., 2013 with Equity Share Holding of 75% by President of India and 25% by Governor of Uttar Pradesh. The business of THDCIL is superintended by the Board of Directors. As per the Articles of Association of the Company, the President of India shall from time to time determine the number of Directors of the Company, which shall not be less than seven and not more than fifteen.

The Board of Directors has an ideal combination of executive and non executive Directors and is in conformity with the provisions of Companies Act' 2013 which interalia stipulates that the Board should have an optimum combination of Executive and Non-executive Directors with atleast one Woman Director. Presently, Board of Directors of THDCIL comprises of ten Directors consisting of four Functional Directors including Chairman and Managing Director, one Government of India Nominee Director, two nominee Directors of GoUP (out of which one is women) and three Independent Directors. The Directors bring to the boardwide range of experience and skills. Brief Profile of Directors of THDCIL is placed on THDCIL's Website <http://thdc.co.in>.

The company presently has three Sub Committees of Board as under:

- Audit Committee
- Remuneration Committee
- CSR and Sustainability Committee

All the Independent Directors serve on these Committees and one of them chairs the meeting. The Company Secretary serves as the Secretary to all the Sub Committees of Board.

The terms of reference and details of members of Board of THDCIL is available in Annual Report 2016-17 of THDCIL. Annual Report 2016-17 is available on THDCIL's website (<http://thdc.co.in>)

#### Details of Board Meetings during the year 2016-17

SN	Date of Board Meetings	Strength of Board	No of Directors Present
1.	May 19, 2016	9	6
2.	August 26, 2016	9	7
3.	September 26, 2016	10	7
4.	November 28, 2016	10	9
5.	January 2, 2017	9	7
6.	March 27, 2017	9	8

## 4.2 KMP (Key Managerial Personnel)

As per the Section 203(1) of Companies Act, 2013 and Rule 8 of Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 every company belonging to prescribed class or classes of companies shall have the whole time Key Managerial Personnel (KMP). Accordingly THDCIL has designated following key managerial personnel.

1. Shri D.V. Singh, Chairman & Managing Director
2. Shri Sridhar Patra, Director (Finance)
3. Ms. Rashmi Sharma, Company Secretary

## 4.3 Governance

Governance involves a set of relationships between Company's Management, its Board, its Shareholders and Stakeholders.

THDC India Limited has an established framework of Corporate Governance which emphasizes on commitment towards ethical and efficient conduct of affairs of the Company. It helps in maximizing the value of all its stakeholders at large and build an environment of trust and confidence among all the constituents. At THDC, management is taking all possible steps to fulfill its commitment in a judicious, fair and transparent manner.

In order to maintain good governance, THDCIL has formulated various policies and principles viz. Code of Business Conduct and Ethics, Right to Information, Whistle Blower Policy, Corporate Ethics Policy, Conduct Discipline and Appeal rules for the executives and Supervisors, Standing Orders for the workmen and Procurement Processes.

Corporate Governance Mechanism of THDCIL is based on following parameters:

- Transparency and fairness.
- Timely and Balanced Disclosures
- Role and responsibilities of the Board to Add value.
- Integrity in Financial Reporting.
- Promote ethical and responsible decision making.
- Obligations towards Environment.
- Rights and Interests of stakeholders.
- Compliances.

### 4.3.1 Code of Business Conduct and Ethics:

In THDCIL, there is a Code of Business Conduct & Ethics for Board Members and Senior Management. This helps in enhancing ethical and transparent process in managing the affairs of the company. This Code is in line with Vision and Mission of THDCIL. This code enables strengthening of ethical decision-making and enhancing

transparency in the Company. It may also serve as a basis for judging the merit of a formal complaint pertaining to violation of professional ethical standards.

Code of Business Conduct and Ethics is available on THDCIL's Website (<http://thdc.co.in>).

### **4.3.2 Conduct, Discipline and Appeal Rules and Standing Orders**

THDCIL is committed to maintain the highest standards of ethics, professionalism and business conduct as well as ensure to act in strict compliance with the law at all times. Conduct, Discipline and Appeal Rules and Standing Orders of THDCIL are documented and displayed on the web site.

### **4.3.3 Corporate Ethics Policy**

THDCIL's Corporate Ethics Policy aims to provide the Board of Directors, Officers, employees and other representatives of the Corporation as well as customers, suppliers and general public with a statement of the Company's commitment to ethical business conduct and set the standards of ethical business conduct and compliance required in all facets of business operations. This policy is the Company's declaration of the ideals and values under which it will operate. These are based on a Company's attestation that it will operate with solid moral principles. Corporate Ethics Policy aims to maintain the highest standards of ethical business conduct, because ethical behavior is the only means through which sustainable growth can be achieved. The Company is committed to act as a responsible and ethical entity of Corporate world. Corporate Ethics Policy of THDCIL was approved by Board of THDCIL in Dec'11.

### **4.3.4 Whistle Blower Policy**

In order to achieve the objective of transparency in governance, THDCIL adopted Whistle Blower Policy in April 2011. The Policy provides a detailed system and opportunity to employees to report on the violation of the ethics and suspected or committed fraud. The matter can be referred to the Chairman, Audit Committee in exceptional cases. Due protection is provided to the Whistle Blower keeping his identity secret. The objective of the Policy is to:

- Provide opportunity to employees to access in good faith, to the Management or in exceptional cases, to the Chairman of the Audit Committee, in case they observe unethical and improper practices or any other wrongful conduct in the Company.
- provide necessary safeguards for protection of employees from victimization, for whistle
- Blowing in good faith prohibit managerial personnel from taking any adverse personnel action against those employees.

Nil case of Whistle Blowing reported during 2016-17.

### 4.3.5 Right to Information

The Right to Information Act, 2005 is applicable on THDCIL. THDC India Limited has taken concrete actions to provide information to the citizens of the country in accordance with The Right to Information Act, 2005. THDCIL has designated Appellate Authority, CPIO, PIOs and APIO of the Corporation and their particulars are available on THDCIL's official website. THDCIL's website also contains information as required to be published under section 4 (b) of the Act at a separate RTI link. The annual financial statements of THDCIL are also available at website.

#### Highlights 2016-17:-

During the year 2016-17, 143 applications were received from citizens across the country seeking information of various nature and information was made available to them on time. During the year, 18 appeals have been received by the First Appellate Authority. 06 Appeals were filed at Central Information Centre (CIC), New Delhi.

### 4.3.6 Procurement Processes:

Effective and transparent procurement processes are aimed at selection of competent and experienced contractors, timely award of the contracts, implementation of the projects without time and cost overruns and avoidance of disputes and litigation.

All the procurement processes are carried out as per the procedures and guidelines adopted by the Corporation and complying with the guidelines of government as well as Central Vigilance Commission. The procurement processes adopted are equitable, transparent and accountable. The procurement process is done mostly on open tender basis (i.e. National Competitive Bidding (NCB) or International Competitive Bidding (ICB)) by giving wide publicity both in newspapers as well as publishing on THDC's website and also on Public Procurement Portal to ensure complete access and transparency. Presently, THDCIL is doing its all procurement related to Goods, Services & Works through e-tender using Central Public Procurement Portal of NIC, Ministry of Electronics and Information Technology, Government of India. CPP Portal provides a single point access to the information on all procurements made across various central government organizations across the country. It aims at transparency and non discrimination amongst bidders, by allowing free access to tender documents, clarifications, secure on line bid submission and access to bid opening event.

DGS&D has developed a 'Government e-Marketplace' (GeM) Portal (i.e an on-line marketplace) for procurement of both Products & Services. An online marketplace (or e-commerce marketplace) is a type of e-commerce site where product or services are offered by a number of sellers and all the buyers can select the product/services offered by any one of the seller, based on his own criteria. The procurement process on GeM is end to end procurement process (from placement of supply order to payment to suppliers) for common use Goods and Services. It aims to enhance transparency, efficiency and speed in Public Procurement and to curb the corruption. It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the government users achieve the best value for their money. It will also help in real-

time price discovery and prompt automated payments. THDCIL has also started making procurement through GeM Portal for the items available there.

Human Rights clause has also been incorporated in all major Agreements viz. EPC Contract covering all EM equipment works for the execution of Tehri PSP (1000 MW), Civil & HM works and EM works of VPHEP (444 MW), Civil works, EM & HM works of Dhukwan SHP (24 MW) and balance civil works of Koteshwar HEP (400 MW).

All Procurements of goods/works/services are being carried out through e-tendering process. For wide publicity NIT is also being published in News Papers. All tenders are open for all vendors including local vendors. To encourage local & small vendors/contractors participation, following steps have been taken:

- Local/small vendors are being sensitized to participate in e-tendering. Vendors are assisted through “Suvidha Kendras” opened by THDCIL for registration and uploading of tender through electronic mode.
- Tenders valued upto Rs. 2.0 Cr. are published only in local/regional news papers. The tenders valued more than Rs. 2.0 Cr. in addition to leading national dailies are also published in local news papers so as to enable maximum participation from local and small producers.
- Small works related to infrastructural / maintenance works in townships are awarded to local contractors.
- Services like hiring of vehicle for the Projects / Business Installations, cleaning of office complex, horticulture works are also got done through local vendors/agencies.
- The main works contractors engaged in specialized works are also encouraged to hire services of local contractors/vendors.
- In order to encourage procurements from micro, small and medium enterprises concessions such as waving of tender cost and payment of EMD are also being given.

Transparency and Accountability has been ensured by THDCIL with introduction of various measures such as e-payments, e-billing, e-procurement, e-auction, vendor registration, online-tracking of bill status, uploading of contract documents as well as award details on THDCIL website.

In F.Y. 2016-17, procurement worth Rs. 24.28 Cr. has been done from MSMEs. 100% payment to the service providers has been done through e-payment and cashless transaction was implemented.

#### **4.3.7 Integrity Pact & Independent External Monitors (IEMs)**

THDCIL is implementing the Integrity Pact Program in line with the requirements of Central Vigilance Commission and Transparency International India. The Integrity Pact is a tool developed by Berlin based Transparency International for enhancing the



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degree of fairness and transparency in procurement and contracts, resulting in substantial improvement in systems and reduction in corruption in public dealings.

Integrity Pact essentially envisages an agreement between prospective vendors/bidders, and THDC India Limited (THDCIL), committing the persons/ officials of both sides not to resort to any corrupt practice in any aspect of the contract at any stage. In case of contracts, where provision of Integrity Pact is envisaged, only those vendors / bidders, who commit themselves to IP with THDCIL, would be considered competent to participate in the bid process. Any violation would entail disqualification of the bidders and exclusion from future business dealings. IP, in respect of a particular contract should cover all phases of the contract, from the stage of Notice Inviting Tender (NIT)/ Pre-bid stage, till the conclusion of the contract, i.e., final payment or the warranty/guarantee period. In its commitment to ensure transparency, THDCIL has also entered into an MoU with Transparency International India in Nov, 2012.

THDCIL as a policy has adopted Integrity Pact (IP) in all its major procurements for goods, works & services. Considering the nature of works in the context of THDCIL executing major Hydro Electric Projects, the threshold limit for keeping provision of IP has been fixed on the basis of ABC analysis. The present threshold limit fixed is Rs. 50.0 Cr. for procurement of goods and services and Rs. 100.0 Cr. for procurement of works. THDC India Ltd., under its Integrity Pact Programme, is implementing the Integrity Pact in various major work contracts viz. EPC contract of 50 MW capacity of Wind Power Project, EPC Contract of Tehri PSP, Dhukwan SHP Civil Works Package and balance works of Koteshwar HEP etc. Integrity Pact has also been incorporated in EPC Contract of Patan Wind Power Project (50 MW) and Devbhumi Dwarika Wind Power Project (63 MW).

THDCIL is making all-out efforts to sensitize the officials concerned to adopt transparency in procurements as well as in their office working to maintain high standards of public probity and ethics.

### **Highlights 2016-17:-**

During 2016-17, implementation of Integrity Pact Program in THDCIL was examined by panel of two Independent External Monitors (IEMs) comprising of Shri Rajan Nair, Ex-Chairman, Brahmaputra Board and Shri M. Deena Dayalan, Ex-Director General (CAG), appointed with the approval of CVC.

During the year 2016-17, three review meetings of Independent External Monitors (IEMs) with THDCIL's management were held on 23.05.2016, 15.09.2016 and 19.01.2017. IEMs have also conducted visit on THDCIL's Wind Power Projects in Gujarat from 6<sup>th</sup> March to 10<sup>th</sup> March' 2017. During the visits to projects, critical issues affecting the progress of work at project were apprised to IEMs. IEMs had discussions with project officials regarding compliance of Integrity Pact during execution of works.

### 4.3.8 Corruption Mitigation:

THDCIL in its endeavor to eradicate/mitigate corruption has adhered to utilize leveraging technology as effective tool in Vigilance administration through Online Complaint Handling System, Online Property returns etc.. Preventive Vigilance has been given utmost priority. Regular Checks/Surprise Inspection are conducted & systems are being streamlined in consultation with respective department to bring transparency and curb possibilities of corruption. Awareness is being created among employees towards company's rules and procedures, submission of property returns and other issues relevant to Preventive Vigilance.

Online complaint system, a major step to extend transparency in organizational working has been developed and deployed on 06.11.2014, after security audit.

During the Year 2016-17, 11 No. of complaints were registered. Reports in all the cases have been submitted. Necessary actions have been taken in all the cases.

Potential Area/Units were analyzed & identified for risk related to corruption. Mainly among them are Construction & Maintenance Activities, Operation & Maintenance of Dam, Power House, Spill Way & Hydro Mechanical, Quality Checks, C&MM, Store, Release of payments to Contractors against Works/Procurement, Recruitment Cell, Promotion Cell, Performance Appraisal Cell, SEWA/THDC, EMB under CSR CD Scheme etc. A Corruption Mitigation Action Plan (CMAP) has been developed which is envisaging Potential Area of Corruption, Causes of corruption, Remedial action taken so far, Impact of actions taken so far & proposed action points. CMAP also incorporates Action points to mitigate corruption, Designation of the person responsible for implementation of these action points and the success indicator. In almost all the Potential areas where risk related to Corruption were analyzed, Surprise & CTE type inspections were carried out.

As part of Preventive Vigilance, Chief Technical Examiner (CTE) / surprise type inspections based on source information are conducted. During the Year 2016-17, 54 Nos of surprise inspections and 8 Nos of CTE type inspections were carried out by Vigilance Department. Reports on Surprise Check/CTE type inspection have been submitted. Necessary action i.e. administrative action /disciplinary action/ closure/ recoveries as per the recommendations of the Competent Authority have been taken. A Total Recovery of **Rs7,38,389.49** was affected against various agreements through surprise and CTE inspections/checks during the Year 2016-17.

### 4.3.9 Leveraging information technology for good governance:

In order to strengthen good governance, various packages using information technology have been developed / being developed as under:

- Bill Tracking System
- Grievance Tracking System and Vigilance MIS
- Commercial module, integration with Financial Management System (FMS)
- Human Resource Management System (HRMS) software
- Financial Management System (FMS) application
- Web based software Quality Assurance
- On-line Billing S



### 5.0 Our Stakeholders

Our Mission includes '***Tobuild sustainable value based relationship with stakeholders through mutual trust***'. Stakeholder engagement takes into account the varying perspectives, priorities, and limitations of different stakeholders.

With the aim to make its citizens aware of THDCIL's Vision, Mission, functioning and its business areas, THDCIL has formulated Citizen's Charter. This also includes information about Grievance Redressal and expectations of the company from its stakeholders for achievement of its future endeavors. Citizen's Charter is available on THDCIL's website.

Stakeholder engagement in decision making and accountability towards its activities is essential for every company for its all round growth. To understand the Stakeholders' needs and expectations, it is essential to have a mechanism in place for effective communication. Stakeholder engagement takes into account the varying perspectives, priorities, and limitations of different stakeholders. A better understanding of stakeholders, result in an easier and more receptive operating environment and is also a major source of innovation.

THDCIL engage stakeholders to provide additional insights, expertise and knowledge on multiple aspects of sustainability, including obtaining feedback on environmental impact assessment (EIA) & Environment Management Plan by making these documents public through THDCIL's website, display in Public Information Centers & circulating the brief to the villagers of Project Affected Areas. A range of insight tools are used to gather stakeholders' feedback on both existing activities and future sustainability priorities of Company.

Due to the diverse interests of each stakeholder group, which varies in each of our area of operation, we adapt our approach, communication channels and engagement activities as appropriate. THDCIL continuously seek to understand its stakeholders' expectations and demands and reflect these in our Sustainability Strategy, Report and overall business activities.

THDCIL has launched its quarterly electronic magazine called "THDCIL Communication Charter" with interesting, informative and imaginative content. The attempt behind this initiative is to promote "User Generated Content" (UGC) and encouragement of employees' participation in the communication process of the Corporation.

THDCIL's official facebook page & twitter handle is disseminating regular information about activities of THDCIL. Both these social Media tools are linked with Ministry of Power, PMO & MyGov (A Platform for Citizen Engagement towards Good Governance) of Govt. of India.

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In order to facilitate internal exchange of knowledge, information, key learning, Success Stories etc, THDCIL has started a Collaborative Knowledge Desk on its web portal.

THDCIL has always been conscious of its responsibilities towards, people community and the nation. The Company has aligned its growth to the needs- economic, social and environmental - of these stakeholders in an equitable and inclusive way.

## 5.1 Stakeholders Identification and Dialogue with the Stakeholders:

To ensure proper identification, Stakeholders Identification is kept as an integral part of THDCIL's CSR Communication Strategy. Communication strengthens trust between the organization and its stakeholders. Communication is critical to keep all the stakeholders well informed, especially the employees so as to ensure that not only all the business processes are in tune with the globally accepted ethical systems and sustainable management practices, but also their engagement with the external stakeholders is based on these values.

List of identified stakeholders of THDCIL include:

- Government and Statutory Bodies,
- Employees,
- Customers,
- Suppliers & Contractors,
- Media,
- Project Affected Persons/ Local and Indigenous communities,
- Non Government Organizations,
- Vulnerable groups within local communities,
- Environment and society at large.

THDCIL has established various collaborative means for gaining insight into its stakeholders' expectations and concerns.

THDCIL maintains close relations and works in partnership with organizations & individuals concerned with its projects and operations. THDCIL regularly survey the expectations and concerns of groups and public affected by its activities in order to improve its practice and management.

## 5.2 Stakeholder Engagement Summary

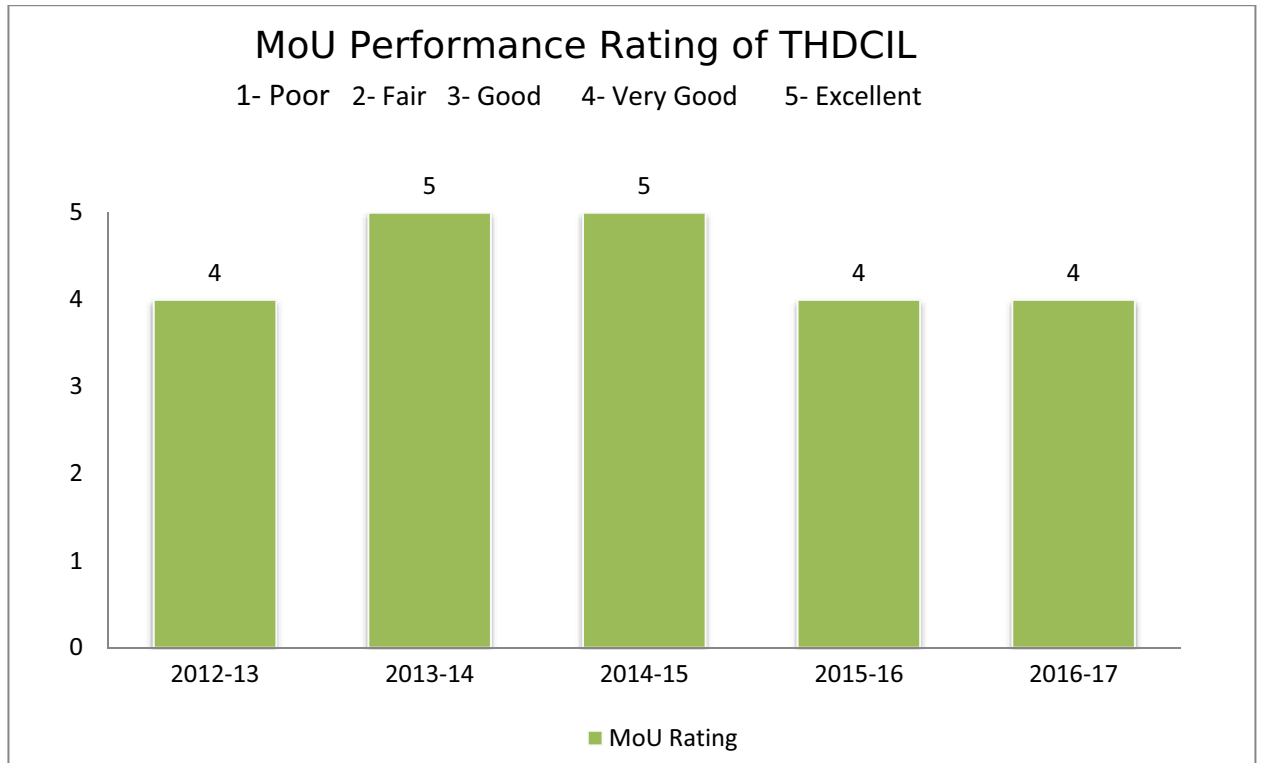
STAKEHOLDERS	MODE OF ENGAGEMENT	REGULARITY
Government and Statutory bodies	<ul style="list-style-type: none"> <li>• Signing of MoU</li> <li>• Correspondence</li> <li>• Annual Report</li> <li>• Meetings</li> <li>• Presentations</li> <li>• Site Visits</li> </ul>	<ul style="list-style-type: none"> <li>• Annually</li> <li>• Round the year</li> <li>• Annually</li> <li>• As and when required</li> <li>• As and when required</li> <li>• As and when required</li> </ul>
Employees	<ul style="list-style-type: none"> <li>• Publication of Magazines</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly, Annually, Half-</li> </ul>

## Sustainability Report 2016-17

	<ul style="list-style-type: none"> <li>• Grievance Redressal Mechanism</li> <li>• Circulars and Officer Orders</li> <li>• Communal Programmes</li> <li>• Feedbacks</li> <li>• Suggestion Mela</li> </ul>	<ul style="list-style-type: none"> <li>yearly</li> <li>• Round the Year</li> <li>• Round the Year</li> <li>• Round the Year</li> <li>• Round the Year</li> <li>• Annually</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Signing of PPAs</li> <li>• Feedback survey</li> <li>• Meetings</li> <li>• Correspondence</li> </ul>	<ul style="list-style-type: none"> <li>• At the start of any project</li> <li>• Annually</li> <li>• As and when required</li> <li>• Round the year</li> </ul>
<b>Suppliers &amp; Contractors</b>	<ul style="list-style-type: none"> <li>• Tenders</li> <li>• Open Bid Discussions</li> <li>• Policy and Procedures</li> <li>• Meetings</li> <li>• Joint Discussions</li> </ul>	<ul style="list-style-type: none"> <li>• As and when demand arises</li> <li>• With every award</li> <li>• Round the year</li> <li>• Regular basis</li> <li>• Regular basis</li> </ul>
<b>Project Affected Persons/ Local and Indigenous communities</b>	<ul style="list-style-type: none"> <li>• CSR Programmes</li> <li>• Meetings</li> <li>• Grievance Redressal</li> <li>• Magazines</li> <li>• Pamphlets / Website Disclosures</li> <li>• Public Information Centers</li> </ul>	<ul style="list-style-type: none"> <li>• Round the Year</li> <li>• As and when required</li> <li>• Round the Year</li> <li>• Quarterly, Annually, Half-yearly</li> <li>• Round the Year</li> <li>• Opened at project sites-operational</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>• Press Briefings</li> <li>• Invitations to events</li> </ul>	<ul style="list-style-type: none"> <li>• Round the Year</li> <li>• Round the Year</li> </ul>
<b>Society at a large</b>	<ul style="list-style-type: none"> <li>• Press News</li> <li>• Notice Boards</li> <li>• Publicity</li> <li>• CSR Programmes</li> <li>• Display on website</li> <li>• Facebook and Twitter Page</li> </ul>	<ul style="list-style-type: none"> <li>• Round the year</li> <li>• Round the year</li> <li>• Round the year</li> <li>• Round the year</li> <li>• Round the year</li> <li>• Round the year</li> </ul>

**5.2.1 Government and Statutory bodies:** THDCIL is a joint venture of Govt. of India Govt. of Uttar Pradesh with shareholding of 75:25. THDCIL is expected to provide various input information to Ministry of Power (MoP) on the issues related to various activities. The response to various queries from MoP is required to be submitted in time bound manner. A system has been evolved for taking feedback from the MoP with suggestions for further improvement on lead time and quality of response. During 2016-17, Excellent Feedback was received from MoP.

THDCIL signs MoU with Ministry of Power for Performance Parameters every year wherein the financial and non-financial targets are fixed for the next financial year. The evaluation of Company's performance is done every year by the Department of Public Enterprises (DPE) and performance rating is assigned on a five point scale; Excellent, Very Good, Good, Fair and Poor.



**5.2.2 Employees:** Employees are engaged in day to day activities and periodical dialogues are held to understand their needs and expectations. Employees' feedback is used to develop action plans to foster motivation. Company also organize various events to stimulate creativity and encourage employees to participate in sustainability activities.

The career growth is through a transparent system with Performance Management Review System in place for the Executives and Annual Confidential Report System for the other employees.

The details on the well being of the employees are briefed in Chapter 6.0

**5.2.3 Customers:** THDCIL provides services to its customers by supplying electrical energy to all the nine States/ UT of the Northern Region namely Chandigarh, Delhi, Haryana, Himachal Pradesh, J&K, Punjab, Rajasthan, UP and Uttarakhand. The Hydro Generating Stations of THDCIL provides the scarce peaking energy to the Northern Grid. State of Western Region (Gujarat) gets entire power generated from its Wind Power Plants.

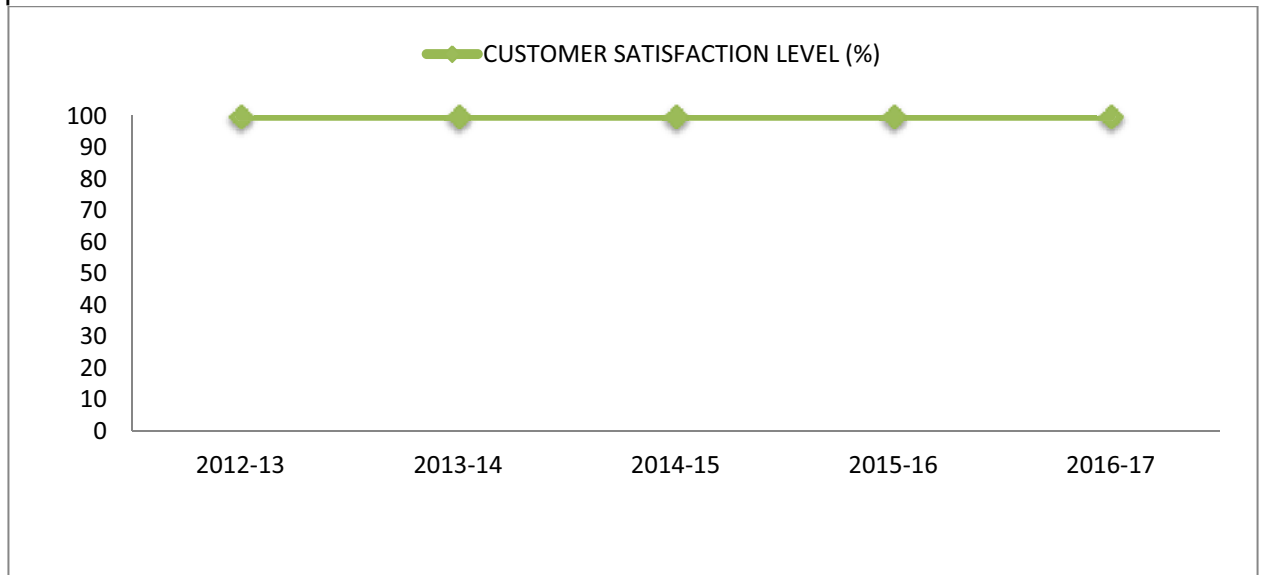
THDCIL takes prompt measures and offers assistance to its valuable customers by synchronising its activities with other concerned organizations/ agencies so that the customers avail of access to quality electricity produced by THDCIL under supervision of Northern Regional Load Dispatch Centre (NRLDC).

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To know and understand the expectations of its customers, survey of the customers is being carried out on regular basis and their satisfaction level is periodically measured. Accordingly, Company's practices and programs are adjusted to improve the services.

Senior officers of THDCIL regularly visit the headquarters of the beneficiaries and meet the concerned officials for resolution of day-to-day techno-commercial issues. Similarly, the officials of beneficiaries also visit THDCIL's Corporate Office. This, in turn, gives the most valuable feedback to THDCIL which adjusts its programs and approach to keep the satisfaction level of the customers very high. The regular mutual interaction ultimately enhances mutual trust, cooperation and goodwill which is the essence for the success of a Commercial Organisation.

Annual feedback on 'five-scale rating' basis is obtained from the customers (beneficiary States/UTs) on availability of Generating Units, timely sending of bills, responsiveness of THDCIL personnel, timely response to queries and support extended in case of problems.



**5.2.4 Suppliers & Contractors:** Procurement Management is one of the most important activities in Project Implementation which involves outsourcing of various construction, erection, supply and consultancy activities to specialized agencies on contract basis. THDCIL believes that contractors, suppliers and consultants and their employees are key stakeholders in project implementation. Concerns of the Contractors are regularly addressed.

Pre-Bid conferences are held in all major contract packages where they can voice their concerns and seek clarifications on the various provisions of contract document. The clarifications are given in a transparent manner.

During contract implementation stage, regular interaction and periodical meetings are held to resolve the issues raised in overall benefit of the project and the shareholders.

**5.2.5 Project Affected Persons/ Local and Indigenous communities:** THDCIL has a mission “**To undertake Rehabilitation and Resettlement of project affected persons with human face**”.

The Tehri Project involved huge submergence and consequential large scale displacement. R&R of nearly 15000 families has been carried out with a human face.

R&R cost (including land acquisition, compensations, development of facilities etc.), is approx. Rs. 15000 Million. i.e. nearly 18% of the total cost of the Tehri Project. This is one of the highest in the country for such Projects.

The Resettlement & Rehabilitation Policy for VPHEP exceeds provisions laid down in the National Policy on Resettlement and Rehabilitation (2007). In VPHEP (444 MW) project, M/s Himalayan Educational and Resource Development Society (HERDS) an NGO has been engaged to act as interface between THDCIL and the Project affected communities. Resettlement of PAFs of Khurja STPP is also being conducted with human face and providing benefits over and above National Policy.

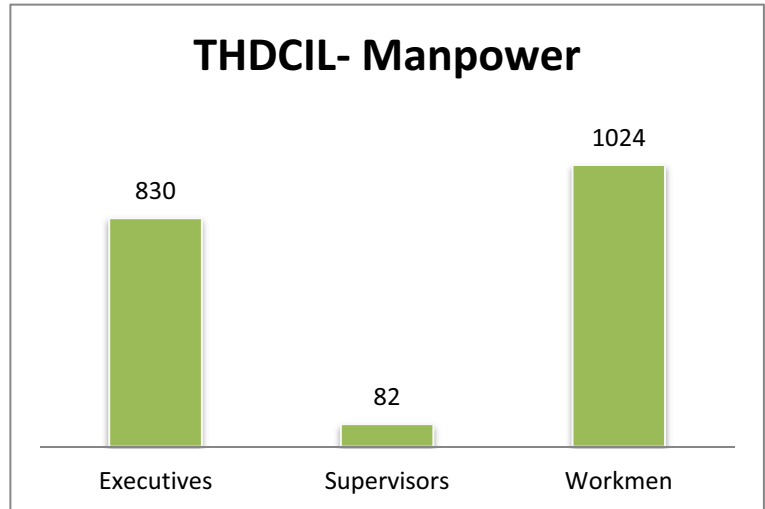
**5.2.6 Media:** THDCIL has formulated structured communications tools and established a separate Communication Department at Corporate Level for interaction with media (both print and electronic media). Press releases of all the activities are issued in time bound manner. Media persons are invited in major events to cover the event.

In order to have effective and constructive engagement of the media, THDCIL has also engaged a Media Consultant and formulated a communication strategy for key stakeholders.

## 6.0 Our Employees- Human Resource Management

### 6.1 Human Resources

THDCIL has a strong human resource base of 1936 employees as on 31.03.2017 comprising of 830 Executives, 82 Supervisors and 1024 Workmen. The Men Megawatt Ratio is 1.28. THDCIL has always considered its human capital as its biggest asset and play a vital role in the growth of the Company. Both, men and women are treated with equal respect and dignity and it is strictly ensured that all aspects related to human rights are upheld by the Organization.



THDCIL has all along endeavored to create congenial environment and adopted wage policies at par with other power sector organizations. The attrition rate is negligible in THDCIL.

HRM consists of people related functions as hiring, training, and development, performance review, compensation, safety and health, welfare and industrial relation. These are typically the functions of "personnel management and are administrative and supportive in nature. HRM necessitates alignment of HR policies and practices with the organizations" strategies- both corporate as well as functional. By meshing HR practices and policies with strategies, the HR executive formulate and implement business strategies. The very concept of HRM signifies that the role of executive is elevated from an administrative level to that of the board.

THDCIL respects the right to freedom of association, participation, collective bargaining and provide access to appropriate grievance redressal mechanism.

THDCIL is strictly against the child labour, forced labour or any form of involuntary labour, paid or unpaid and do not allow contactors or sub- contractors to engage child labour, forced labour or any form of involuntary labour.

THDCIL has systems and practices to ensure a harassment free workplace where employees feel safe and secure in discharging their responsibilities.

Accordingly, particular attention is paid to employees' professional and personal development. The Company uses training, awareness and guidance tools to encourage employees to commit to sustainability.

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THDCIL provides a workplace environment that is safe, hygienic, humane, and which upholds the dignity of the employees. THDCIL values the respect for dignity and potential of individuals, which is communicated to the employees and trains them on a regular basis.

### 6.1.1 Recruitment

THDC India Limited being a premier Power Generator in the Country recruit a Talent Pool of Multi Disciplinary Professionals in the Executive Cadre-Engineers, Geologists, Chartered Accountants, PR Professionals, Law Professionals and HR Professionals by way of All India Written Test or using scores of established competitive examinations such as GATE, UGE-NET, CLAT etc. In Non Executive cadre appointment is done based on written test. The recruitment is carried out on the basis of manpower requirement in a transparent manner. The examinations are conducted as and when required. All the Executive Cadre Recruitments are carried on All India Basis whereas Non Executive Recruitments viz. Diploma Engineers, ITI Holders etc are Area / State specific. THDCIL also conduct examinations for filling up Backlog Vacancies in SC, ST, OBC& PWD Category. THDCIL follow the Presidential Directives as well as constitutional instructions that require us to implement policies accommodating SC/ST, other backward classes or physically handicapped individuals.

**Projected retirement and recruitment during next 05 years is as under:**

Year	Retirement	Proposed Inductions*
2017-18	59	140
2018-19	65	-
2019-20	92	200
2020-21	84	-
2021-22	86	200

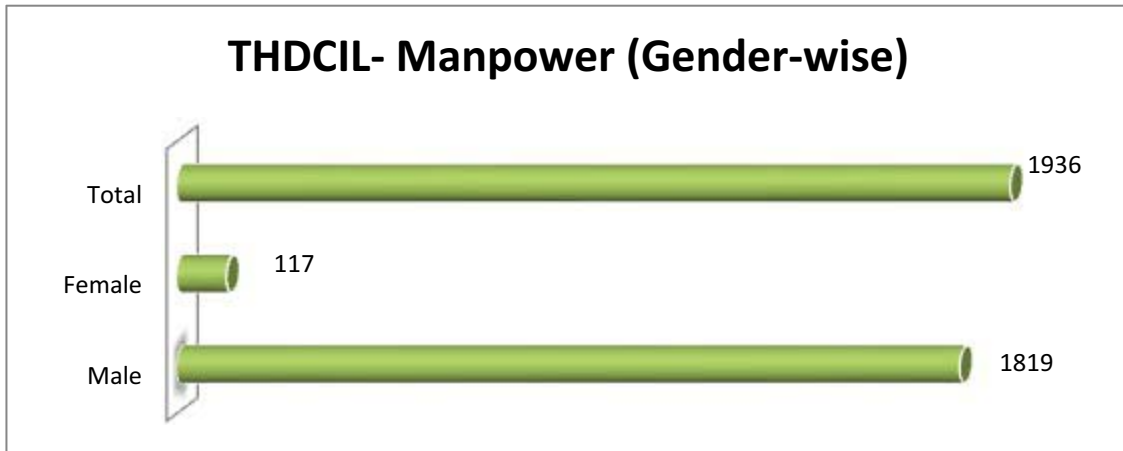
*\*Proposed Inductions are indicative and depend upon the progress of construction projects.*

### 6.1.2 Gender wise Categorization

THDCIL is an equal opportunity provider and professes gender neutrality. THDCIL follows all rules and regulations issued by Govt. of India from time to time in this regard. All employees irrespective of their sex and marital status are given equal opportunity in terms of employment and career growth. There is no discrimination in remuneration on the basis of gender in THDCIL. There are 117 women employees as on 31.03.2017 in different categories. They represent 6.04% of the total strength of the company.

In the year 2016-17 various workshops on “Gender Sensitization and Code of Conduct” were organized at Corporate Office and Project locations.





## 6.2 Employee Relations

Cordial employee relation is the driving force behind performance of the company. The Employee Relation in the company is founded on mutual trust and respect and both employees and management complement each others efforts in furthering the interest of the company as well as its stakeholders.

Employee relations were cordial and harmonious at all THDCIL projects/stations/units during the year. There have been continuous interactions between the management and the apex forum of workmen and executives. Structured meeting were organized during the year wherein issues relating to performance and productivity were extensively discussed. Representatives of workmen were allowed to participate in joint management council where equal number of employees and Management representatives participated in constructive discussion. THDCIL organized several welfare activities during the year ranging from organizing summer sports, winter sports, inter PSU sports etc. A number of other cultural activities were organized to de- stress the employees, as well as to create better relationship among each other. Celebration of Yoga Day, arrangement of workshops on several health related issues, Medical Check –up camps at different Units and blood donation camps etc. were also an additional feature throughout the year.

The **Quality Circle Team** from THDC bagged the Par Excellence Award, and three excellence award, thus proving its mettle in commitment of continuous improvement and content-oriented approach.

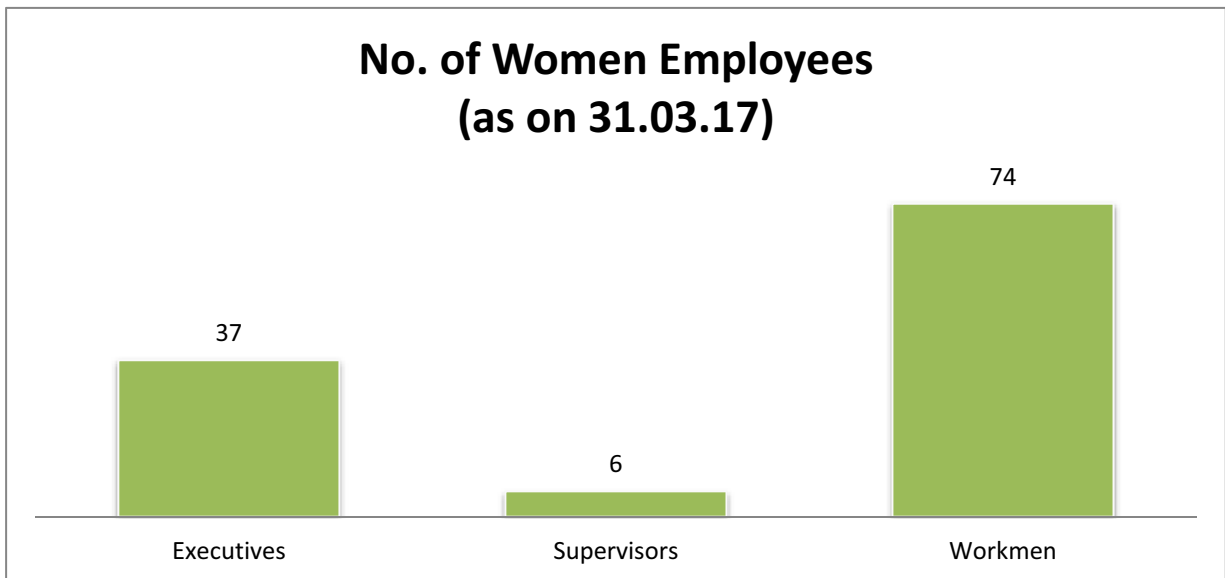


## 6.3 Women Welfare

In compliance with the provisions of “Sexual Harassment of Women at Workplace (Prohibition, Prevention and Redressal) Act, 2013”, an Internal Complaints committee has been set up at Rishikesh and Tehri which deals with issues of sexual harassment at work place. This committee has a specific role of dealing with issues of women harassment at work places any untoward incident of the like nature within the Organization. Awareness/ Sensitization programmes are conducted for both men and women in this regard. This helps in generating a healthy work environment. THDCIL is an active member of the networking platform of Forum of Women in Public Sector (WIPS) which conducts programmes in collaboration with SCOPE for which company nominates women employees. The WIPS committee conducts various awareness programs for women employees of the corporation.

The committee deals with issues related to sexual harassment at work place and other local issues related to women employees. Women are often made members of various committees formed to oversee/ recommend employee related matters and policies.

THDCIL has organized various programmes for its women employees. Some of the topic discussed in these programmes are Female Foeticide, Dowry System, Women Education, Women Safety, Domestic Violence Act, “Beti Bachao-Beti Padhao” etc.



## 6.4 Persons with Disabilities (different abilities)

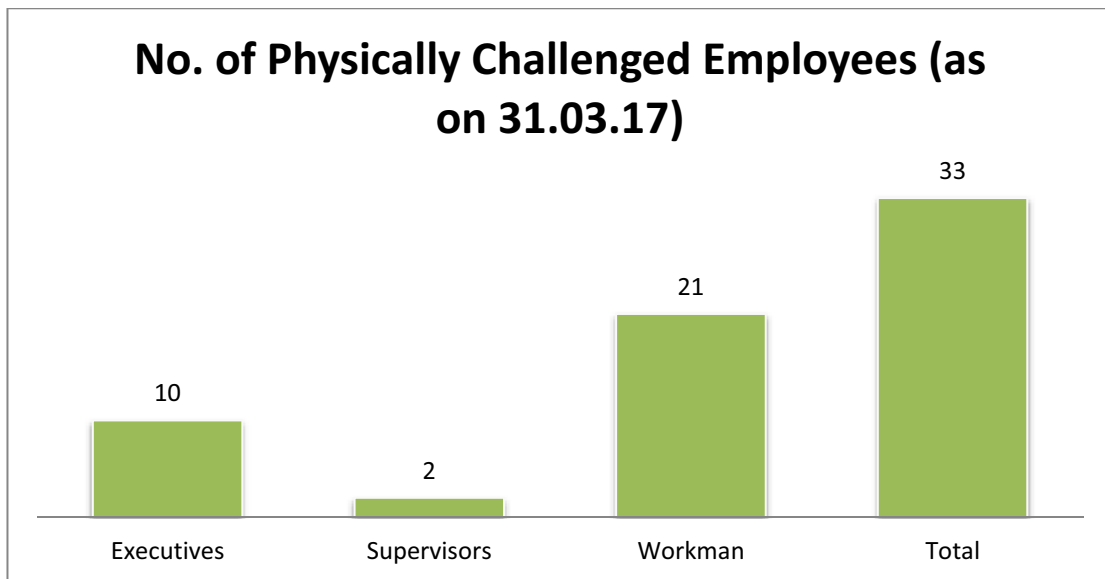
With a view to provide equal opportunities in services to the Persons with Disability (PWD), the Government of India has laid down a number of Presidential Directives. In compliance with directives of Government of India THDCIL has made efforts to encourage the participation of the Physically Challenged Persons in the organization

and thus has always given preference to representatives of this category in the process of recruitment.

In compliance of implementation of United Nations Convention on the Rights of Persons with Disabilities, THDCIL has provided easy accessibility by way of erecting ramps in most buildings of the Corporation. Employees belonging to Physically Handicapped category were also nominated for attending special training programmes as per their special needs.

THDCIL has made efforts to encourage the participation of the Physically Challenged Persons in the organization. There is no discrimination in THDCIL on the basis of disability. All efforts are made to provide favourable working environment for Persons with Disabilities (PWD) by fulfilling their specific need wherever arises.

As on 31.03.2017, the total strength of the persons with disabilities is 33.



### 6.5 Employees Remuneration and Benefits

THDCIL offers one of the attractive pay package / remuneration to its employees at par with the industry. THDCIL follows Industrial Dearness Allowance (IDA) pattern for pay packages. The pay revision is due from 01.01.2017.

However, present employee benefits includes Basic Pay, Dearness Allowance, Perks and Allowances @ 47% of the basic pay under Cafeteria Approach, House Rent Allowance/Lease Accommodation, Provident Fund contribution, Group Saving Linked Insurance, Gratuity etc. are extended.

THDCIL provides reimbursement for Medical Treatment of Employees and their dependents. Post retirement medical facility is also available. (details at Para 6.6)

Performance Related Pay (PRP) based on Performance Parameters are also provided to Employees based on DPE Guidelines.

THDCIL also provides House Building Advance (HBA), Higher Education Loan for wards of employees, Car Loan and other advances at discounted rate of interest.

In order to ensure professional up gradation of Executives "Scheme for facilities of higher education" is also in place.

### **6.5.1 Maternity/ Paternity benefits**

THDCIL provide due care in Maternity/ Paternity benefits/ facilities and leaves to its employees. THDCIL provides maternity leave of 180 days and paternity leave of 15 days on full payment basis.

Maternity leave is also allowed in case of miscarriage/abortion subject to the condition that the leave does not exceed six weeks from the date of miscarriage or abortion as certified by the Authorised Medical Attendant.

### **6.5.2 Scheme of Financial Assistance to dependents of Deceased Employees**

The scheme shall provide monetary assistance to the legal heir(s) in the event of death and total permanent disablement leading to separation of employee as a social security measure.

The financial assistance is made as equivalent to two months salary (Basic+DA) for each completed year of service and part thereof or salary for the months of service-left if any to superannuation/ normal retirement on the date of death, whichever is less.

1. Subject to Minimum of Rs. 3,95,000/-
2. Subject to Maximum of Rs. 11,85,000/-

### **6.5.3 Death Benevolent Fund Scheme**

- THDCIL "Employees Death Benevolent Fund Scheme" is introduced with a view to provide Financial Assistance to the family members of the employee who dies while in the employment of the Corporation.
- The Scheme will cover all employees (Executives/ Supervisors/ Workmen) borne on the regular rolls of the Corporation.
- An amount of Rs. 500/- is deducted from the all employees' salary only in the event of death of the member and the nominated family member(s) of the deceased member employee will be paid actual amount collected from the all employees.

## **6.6 Grievances Redressal Mechanism**

As a responsible corporate citizen, THDCIL undertakes and implements widely accepted initiatives like the Grievance Redressal mechanism, the Whistle Blower's policy. The objective of the Grievance Redressal Procedure is to provide an easily accessible mechanism for expeditious settlement of grievances leading to increased

satisfaction on the job and resulting in improved productivity and efficiency of the organisation.

### **6.7 Post Retirement Benefits**

Every organization needs to provide a proper superannuation plan to its employees in order to facilitate smooth transition from active work life. THDCIL take good care of the employees even when they superannuate. Statutory payments like payment of Gratuity Fund, Statutory Pension etc. is taken care of. Apart from statutory payments, there are provisions of Post Retirement Medical Facility and Pension Scheme for retired employees in the corporation. In line with post retirement benefits plan, Pension Schemes has been implemented in the Company w.e.f. 01.01.2007 after approval of Ministry of Power.

The salient features of the above schemes are given below:-

#### **6.7.1 THDCIL Employees' Defined Contribution Pension Scheme**

Employees on regular rolls of THDCIL on or before 01.01.2007 are covered under the Scheme. The Ordinary monthly mandatory contribution payable by an employee is 1% of his Basic + DA from the date of notification of the Scheme. The employer contribution in respect of each employee is 30% of his Basic Pay and DA minus Employer's contribution towards CPF, Gratuity and Post Retirement Medical Scheme. They have the option to make the voluntary contribution towards Pension Scheme. The minimum service condition for payment of pension in THDCIL is 15 years. Services rendered in any other CPSEs prior to joining THDCIL would also be counted for this purpose provided similar scheme is there. Employee is eligible for pension in case of Superannuation, death while in service, separation on medical grounds i.e. total permanent disablement leading to cessation of service. Employee or beneficiary/nominee(s) as the case may be, may commute 1/3<sup>rd</sup> of accumulated corpus for lump sum payment. Employees superannuated from the Corporation in between 01.01.2007 to 31.12.2007 have the option to withdraw the entire accumulation.

#### **6.7.2 Contribution Provident Fund (CPF)**

Employees are covered under THDC Provident Fund Rules. The contribution payable by employees under these rules is 12% of Basic Pay & DA. Equal contribution is payable by the Company. Out of the contribution payable by the company, 8.33% of the Basic Pay & DA is remitted to Employee's Pension Fund.

#### **6.7.3 Gratuity**

For every completed year of service or part thereof in excess of six months, the employer shall pay Gratuity to an employee at the rate of fifteen days wages based on the rate of wages last drawn by the employee concerned, subject to maximum of Rs. 10 lacs.

### 6.7.4 GSLI- Group Saving Linked Insurance Scheme-

Board of Directors has approved the Introduction of GSLI with Double Accident Benefits (DAB). The GSLI Policy has since been implemented w.ef. 01.04.2007 through LIC.

The brief of the benefits of GSLI Scheme, amount of Coverage and monthly contribution from employees at various levels is as given below:-

Group	Converge of Employee	Revised Insurance coverage under GSLI in case of Normal Death	Amount payable by LIC income of accidental death DAB	Risk coverage 35% Three+ DAB Premium + ST & 15.00% Per Month	Saving portion individual employees 60% per month	Total amount (Rs. in Lakh)
<b>A</b>	Directors + CMD	8.50 Lakh	17.00 Lakh	390+55.00+55.00	715.00	1215.00
<b>B</b>	Executive E7 to E9	7.50 Lakh	15.00 Lakh	340+50.00+48.00	630.00	1068.00
<b>C</b>	Executive E2 to E6	6.00 Lakh	12.00 Lakh	270+40.00+38.00	510.00	858.00
<b>D</b>	All Employee (Supervisor + Workmen)	5.00 Lakh	10.00 Lakh	230+30.00+32.00	420.00	712.00

### 6.7.5 Post Retirement Medical Facility

There is a provision of Post Retirement Medical Facility wherein retired employees are reimbursed for OPD and IPD treatments just like regular employees. The retiring employees are required to become member of the scheme by paying annually or may opt to pay the one time" contribution as membership fee.

## 6.8 Trainings and Skill Development of Employees

THDCIL ensures continuous skill and competence up-gradation of all employees by providing access to necessary learning opportunities, on an equal and non-discriminatory basis. THDCIL promotes employee morale and carrier development through enlightened human resource interventions. THDCIL has a dedicated HRD department and HRD Centre which ensures continuous up-gradation of skill and competence of employees by providing relevant training and learning opportunities.

During the year, THDCIL continued to enhance its learning and development processes to create empowered experiences at the workplace. Through concentrated efforts towards enabling capability and talent development, THDCIL focused on career conversations, skill building and leadership development. Multiple forums for learning include classroom training, e-learning, on-the-job training, mentoring etc.

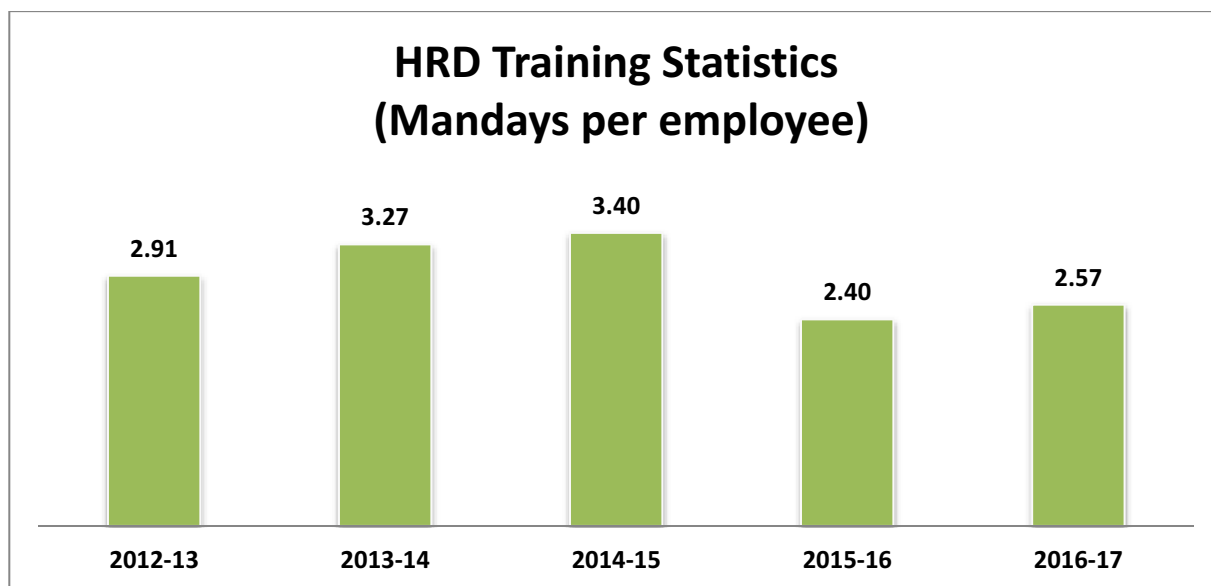
Employees education and training are extended through various programmes/seminars organized in the corporation with faculty drawn from within and outside the organization. Where special up-gradation of skill/knowledge is required, selected

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employees are sent to various professional/academic institutes within and outside the country.

In order to enhance skill of its employees in the field of Operation and Maintenance (O&M) of Hydro Plants, THDCIL is providing long term O&M trainings to its manpower from reputed power institutes. Details of long term O&M trainings provided since 2009-10 are as under:

S. N.	Period		Location	No. of Participants
	From	To		
1	05.10.2009	05.07.2010	NPTI, Nangal	20 Executives
2	09.03.2010	08.12.2010	NHPC, Tanakpur	23 Technicians
3	09.06.2010	08.03.2011	NPTI, Nangal	11 Supervisors
4	15.06.2011	05.03.2012	HPTI, Khairi, Chamera-1	21 Technicians
5	30.06.2014	14.11.2014	NPTI, Nangal	20 Technicians
6	14.12.2015	08.04.2016	NPTI, Nangal	31 ETs
7	07.03.2016	13.05.2016	NPTI, Nangal	14 Technicians
8	15.05.2017	11.08.2017	NPTI, Nangal	08 ETs
9	16.08.2017	18.11.2017	NPTI, Nangal	47 JETs



**Career Development approach adopted by THDCIL-** Broadly, employees have been divided in five categories i.e. Professionals, Non-Professionals, Skilled, Semi – Skilled, and Unskilled. In THDCIL, Career Development Approach identifies the potential employees. Long Term or short term training in the fields related to the Industry requirements is provided to these potential employees converting them into assets. It removes the barriers for Growth. In past, following Career Development



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Programs were taken up in THDCIL to convert Non- Professionals into Professionals, Unskilled into Semi-Skilled or Skilled Category:-

- 38 Diploma Engineers and Supervisors in Technical Discipline completed 4 years degree course in Hydro Power Engineering from UPES. Average age of the group was 42 years. All the candidates were male. There were 07 candidates belonging to SC category.
- 44 Employees completed 4 years Degree course in Hydro Power Engineering from BITS Pilani. Average age of the group was 42 years. All the candidates were male. There were 03 candidates belonging to SC category.
- 28 Executives and Supervisors completed 3 years Post-Graduate Program in Management from IMT Ghaziabad. Average age of the group was 41 years. 27 candidates were male and one female. There were 02 candidates belonging to SC category.
- A batch of 29 semi-skilled employees have obtained the ITI certification and thus are converted into skilled category and will be deployed in core functions.
- A batch of 24 employees were given training on Hindi Typing in order to facilitate them in their day to day work.
- Up to 2016-17, 06 Employees have successfully completed the 01 year post diploma in Industrial Safety from RLI, Kanpur.

***Objective of the above mentioned Career Development Schemes was to remove the barrier of career growth.***

For short term training programs, a form is designed in Performance Management Review (PMR) booklets, where executives after discussion with their reporting officers identifies the trainings required to remove the skill gaps and consequently HR Department organizes such trainings in due course of time. Apart from PMR booklets, time to time Training Need Analysis (TNA) is being done for the executives and competency mapping is also made part of TNA where trainings are planned to fill the gap between present competencies and desired competencies.

### **2016-17 Highlights**

During the year 2016-17, a total of 60 dedicated Inhouse training programmes were conducted for augmentation of Technical, Managerial and behavioral competencies, spanning 5045 training Mandays up by 26% against the target. Average Mandays works out to 2.60 for 1936 employees as on 31.03.2017. The program can be categorized as under:

- Leadership Development programme
- Management Development programme
- Cross Functional Competencies.
- Domain Specific Programmes
- Long Term Certificate Courses
- External Training Programmes (inc. foreign training)



## Sustainability Report 2016-17

Besides external floated nominations the significant training programmes organized during the year are as under:

- Emotional Intelligence for Senior Leaders.
- Dam safety aspects of civil structures and HM Equipments through USBR as a part of Contract Agreement.
- Certificate Course on “Environment Management, Bio diversity and Environmental Monitoring (Air & Water Quality)
- Computer Proficiency
- HR for HR Professionals
- Gender Sensitizations

### Average Mandays of training per year per employees:

Category	Male		Female	
	Total Mandays Training	Average per employee	Total Mandays Training	Average per employee
Officers	2396	3.02 (2396/793)	150	4.05 (150/37)
Supervisors	260	3.42 (260/76)	69	11.5 (69/6)
Workmen	1910	2.01 (1910/ 950)	260	3.51 (260/74)

### Programmes on Skill Management and Life Long learning:

Category	Programs for skills management and life long learning that support the continued employability of employees and assist them in managing career ending
	Total Mandays (2016-17)
Officers	209
Supervisors & Workmen	657

### Details of skill Development Programs conducted during the year 2016-17:

Supervisors & Workmen					
S N	Name of program	Target Group	Duration	No. of Participants	Total Mandays
1	MS Office Awareness	Supervisor & Workmen	24-28 May, 2016	20	100
2	Computer Training- Revisiting MS Office Awareness	Supervisor & Workmen	21-23 July, 2016	16	48
3	O&M Training of Technician	Supervisor & Workmen	01 April- 13 May, 2016	14	434
4	Generator Protection & Operation	Supervisor & Workmen	22-24 March, 2017	25	75
<b>Total</b>					657

## Sustainability Report 2016-17

<b>Executives</b>					
S N	Name of program	Target Group	Duration	No. of Participants	Total Mandays
1	Communication Enhancement Skill	E-4 level	18-23 July, 2016	22	133
2	Primavera Training	E-3 to E-8	10-12 August, 2016	09	27
3	Advanced Method of Drill & Blasting & Modern Shotcrete applications	E-2 to E-5	20-22 September, 2016	18	49
<b>Total</b>					209

In addition, following certificate course was conducted for Executives through reputed Institute:

SI No	Name of programme	No. of participant	No. of Mandays	Agency/Institute
1	Certificate course in Environment Management & Bio diversity	15	204	NEERI, Nagpur
<b>Total Mandays</b>			204	

### **Training on policies and procedures concerning aspects of Human Rights:**

Level	Total Employees (2016-17)	Total Mandays of employee training on policies and procedures concerning aspects of human right relevant to operation
Executives	830	277.5
Supervisors & Workmen	1106	628

Details of training programmes related to Policies and Procedures concerning aspects of Human Rights are as under:

S N	Name of program	Target Group	Duration	No. of participants	Mandays
<b>Workmen &amp; Supervisors</b>					
1	Gender Sensitisation Program	Workmen & Supervisor	25 Jan, 2017	32	32
2	Safety Awareness	Workmen & Supervisor	27-29 April, 2016	29	87
3	Women Health, Wellness & Self defence	Workmen & Supervisor	13-14 September, 2016	30	60
4	First Aid & Safety	Workmen &	04-05 October,	31	62

## Sustainability Report 2016-17

		Supervisor	2016		
5	Occupational Health & General Safety	Workmen & Supervisor	22-23 November, 2016	22	44
6	Employee Health & Wellness	Workmen & Supervisor	20-21 December, 2016	25	50
7	Disaster Management	Workmen & Supervisor	10-11 Jan, 2017	26	52
8	Health & Wellness	Workmen & Supervisor	30-31 Jan, 2017	26	52
9	Safety Awareness	Workmen & Supervisor	7-8 Feb, 2017	30	60
10	Women Health & Wellness	Workmen & Supervisor	16-17 Feb, 2017	27	54
11	Women Empowerment	Supervisor & Workmen	08 March, 2017	75	75
<b>Total</b>					628
<b>Executives</b>					
1	Dam Safety aspects of Civil Structure	E-2 to E-8	06-08 June, 2016	50	157
2	Dam Safety aspects of HM Equipments	E-3 to E-7	08-09 June, 2016	16	33
3	Safety Awareness Programme	E-3 to E-6	20-21 Jan, 2017	35	52.5
4	Gender Sensitisation Program	E-2 to E-5	25 Jan, 2017	35	35
Total					277.5

### Training course conducted for Vigilance awareness:

- Training programme on, “ Risk Mitigation through Forensic Document Examination” conducted by LNJNI National Institute of Criminology and Forensic Science under Ministry of Home Affairs, GOI from 21-11-16 to 25-11-16 was attended by Vigilance officials.
- Training programme on “Role, Functions and Responsibilities of Vigilance and Transforming Negative Image into a Positive Perception with focus on Current CVC Guidelines” was conducted by Industrial Management Academy, New Delhi from 18.07.2016 to 20.07.2016 was attended by 04 Vigilance Officials.

In addition, following programs were conducted in-house:

S N	Name of the program	Target Group	Duration	No. of participants
1	Vigilance Awareness	Executives	21.10.2016	40
2	Lecture on Vigilance Awareness / Anti Corruption	Executives	05.11.2016	300
Total				340

## 6.9 Occupational Health and Safety

THDCIL offers stimulating working conditions and maintains a harmonious working atmosphere. Company also consider employees and their families' health and safety of prime importance and suitable arrangements have been made towards this, like dispensaries, empanelment of reputed hospitals, periodical health check up camps, periodical stress relieving courses etc.

Accident ▶	Work Related		Elect. Related.	
	Fatal	Non Fatal	Fatal	Non Fatal
2012-13	NIL	NIL	NIL	NIL
2013-14	NIL	NIL	NIL	NIL
2014-15	NIL	NIL	NIL	NIL
2015-16	03	NIL	NIL	NIL
2016-17	NIL	NIL	NIL	NIL

THDCIL is an OHSAS 18001:2007 (OH&S Management Systems) Certified company and is committed to ensure health and safety of its employees, contractors, sub contractors and community by strict adherence to the norms of Occupational Health and Safety. THDCIL is committed to comply with applicable legal requirements, laws, regulations and best practices in safety. THDCIL is committed to comply with applicable legal requirements laws, regulations and best practices in safety. The company does its utmost to provide a healthy, stimulating work environment for its employees.

THDCIL has a well defined Occupational Health and Safety Policy which was formulated in 2011. THDCIL has Safety Manual which assigns high importance to safety in all spheres of our business activities This Manual is a compilation of Safety Codes & Standards, Regulations, Legal Aspects of Safety, Safety Precautions, First Aid, Safety at Construction sites, Plant and machinery, Electrical Safety, Drilling and Blasting, Explosive handling and Storage of Material. Safety Manual has been revised and issued.

Further, in order to extend awareness on safety, THDCIL has also published Do's & Don'ts for Safety in Construction Works, which is also available on our website. THDCIL Occupational Health and Safety Policy reminds us to support a culture that raises employee's health and safety awareness, adopt and implement Occupational Health and Safety Management System and strive for continual improvement, fulfill necessary requirements to provide healthy and safe working environment, enhance awareness and concern toward Occupational Health and Safety Management System amongst employees, train employees and relevant stakeholders on health and safety aspects and yearn to achieve excellence in Occupational Health and Safety.

### Safety Highlight 2016-17

#### Tehri HPP & PSP:

- Tehri HPP Safety committee meetings are held on Quarterly basis and for Tehri PSP meetings are held on monthly basis. Safety committee comprises of representatives both from officers and workers.
- OHSAS : 18001 has been implemented at Tehri HPP & PSP.

### **Koteshwar :-**

- Koteshwar HEP Safety committee meetings are held on Quarterly basis. Safety committee comprises of representatives both from officers and workers.
- OHSAS : 18001 has been implemented at Koteshwar HEP.

### **VPHEP :-**

- VPHEP Safety committee meetings are held on monthly basis. Safety committee comprises of representatives both from officers and workers.
- OHSAS : 18001 has been implemented at VPHEP.

### **Annual Dam Safety Inspection:**

Every year annual dam safety inspection is carried out for both the operating stations by team consisting of engineers from Design Department, OMS Department and Concerned Project unit after monsoon during the months of Oct. & Nov. The inspection is carried out on the basis of checklist format prepared by THDC itself in line with Central Water Commission (CWC), New Delhi criteria and SEED manual of USBR. Besides inspection by THDC engineers, Tehri HPP has been inspected by CWC, New Delhi twice and United States Bureau of Reclamation (USBR), USA once whereas Koteshwar HEP by CWC once. The assessment of United States Bureau of Reclamation (USBR), USA is that Tehri Dam was designed and constructed in close conformance with modern practice. The USBR team had shown their satisfaction about the condition of the galleries, total seepage through Dam body and post construction settlement of Dam.

## **6.10HEALTH CARE**

Various programs for First Aid, Stress Management Yoga, Occupational Health & Safety, Risk Management etc. have been organized by Tehri Unit through premier Training Agencies/ Institutions during the year 2016-17 to create awareness amongst employees and their families.

The training were imparted by experts from Training Agencies consisting of Qualified Doctors, Safety Engineers, Army Officials (Retd), Yoga Teachers etc. During the programs health check up, practical exercises, mock drills and live demonstrations etc. were carried out. The participants were trained to prepare themselves for any emergency situation and for taking care of preventive diseases and maintaining good health etc

### **2016-17 HIGHLIGHTS**

- Number of Doctors in Hospitals at Projects and Corp. Office – 16
- Total Number of Nurses in Hospitals at Projects and Corp. Office –18
- Total number of consultations provided to employees/contract workers during 2016-17- 56233

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- Total number of consultations provided to local people other than employees during 2016-17- 14391
- No. of Ambulance – 05
- No. of cases in which Ambulance provided to employees- 167
- No. of cases in which Ambulance provided to local people-36

### **DETAILS OF SPECIALITY CAMPS ORGANISED FOR EMPLOYEES IN RISHIKESH:**

<b>SN</b>	<b>Particulars of Camp</b>	<b>Date</b>	<b>Organised By</b>	<b>No of Patients</b>
1	Computer Vision Syndrome Talk and Eye Camp	23 Apr 2016	Nirmal Ashram Eye Insitute	65 (Talk) 99 (Eye Camp)
2	Pulmonary Function Test Camp (PFT)	05 May 2016	LupinRespira Health Care	47
3	Cancer Screening Camp	20 May 2016	Max Hospital Vaishali, Ghaziabad	57
4	Glycosylated Haemoglobin Check for Diabetics	25 May 2016	Novartis	70
5	Bone Mineral Density (BMD) Check up	07 Jun 2016	KoyePharma , Dehradun	73
6.	Brain Stroke : Lecture cum Camp	10 Jun 2016	Max Hospital , Dehradun	35
7.	Glycosylated Haemoglobin Check for Diabetics	30 Aug 2016	MSD Pharmaceuticals	64

### **6.11 Disaster Management Plan and Emergency Action Plans (Tehri HPP and Koteshwar HEP):**

- Crisis and Disaster Management Plans (C&DMP) of Tehri HPP and Koteshwar HEP have been prepared as per guidelines issued by Central Electricity Authority (CEA), New Delhi for power plants.
- Emergency Action Plans (EAP) of Tehri and Koteshwar dams have been prepared as per “Guidelines for development and implementation of Emergency Action Plans (EAP) for Dams” of CWC, New Delhi.
- These plans are reviewed every year irrespective of occurrence of natural disaster. During the review, problems encountered during the implementation as well as suggestion of implementing officers are also considered.
- Emergency situations envisaged in the EAP’s of dams lead to controlled or un-controlled release of water from Tehri / Koteshwar reservoir resulting in flooding of areas downstream of Koteshwar dam up to Haridwar. In Sep-2016, a mock drill for flooding of low lying areas of Rishikesh was conducted in association with Disaster Mitigation and Management Centre (DMMC), GOUK, Dehradun and National Disaster Response Force.
- Emergency situations are envisaged in C&DMP that can lead to problems in operation of power plants resulting in disruption of power supply to grid. Mock

drills for these situations like fire, flooding of power house, security threats and earth quake etc. are being carried out every year in association with CISF team.

### **6.12 Emergency Action Plan (Vishnugad Pipalkoti HEP):**

In line with the guidelines issued by CWC, EAP for VPHEP has been prepared to identify potential emergency conditions at VPHEP and specified preplanned actions to be followed to minimize property damage and loss of life. The EAP specifies actions to be taken to moderate the problems at the dam site as well as in the areas downstream of the dam. It contains procedures and information to assist THDCIL in issuing early warning and notification messages / request for assistance to responsible emergency management authorities, viz., District Magistrate / Collector, Armed forces, Paramilitary forces, Project Authorities and other Central/ State Agencies. It also contains inundation maps to show the emergency management authorities of the critical areas for necessary relief and rescue actions in case of an emergency.

### **6.13 Real Time Inflow Forecasting System for Tehri Dam**

The catchment area of Tehri Dam is 7511 sq. km. out of which approximately 2323 sq. km. is snow bound. The inflow forecast helps in safety of Dam by giving advance information regarding the inflow into the reservoir from the catchment, which helps in reservoir operation thereby safeguarding the Dam. It also increases the flood warning time which also helps in taking mitigation measures for safety of downstream population.

A real time inflow forecasting system consisting of eleven number automatic weather stations and four number G&D stations in the catchment area of Tehri reservoir with its central earth station (control room) at Tehri dam has been established. The system observe real time meteorological and hydrological data and transmit the same to earth station established at Tehri for further processing of data for forecasting the inflow for Tehri reservoir. Mathematical model for inflow forecasting system has been developed by IIT, Roorkee. The system is presently operational and capable to forecast inflows with 3-4 hrs lead time.

### **6.14 Early Warning System for Tehri / Koteshwar Dam**

Timely dissemination of information about the release of water from dam during floods or any other emergency situation is of prime importance to ensure safety of population in the downstream of dams. In order to disseminate information to the d/s population up to Rishikesh about water releases from Tehri and Koteshwar dams, an advance warning system has been established through Disaster Mitigation and Management Centre (DMMC), GOUK, Dehradun. The system consists of sirens and speakers at eight stations from downstream of Koteshwar dam up to TriveniGhat, Rishikesh and two control rooms, at Koteshwar Project and at DMMC, Dehradun. The system is presently operational and regular warnings / messages are being issued.

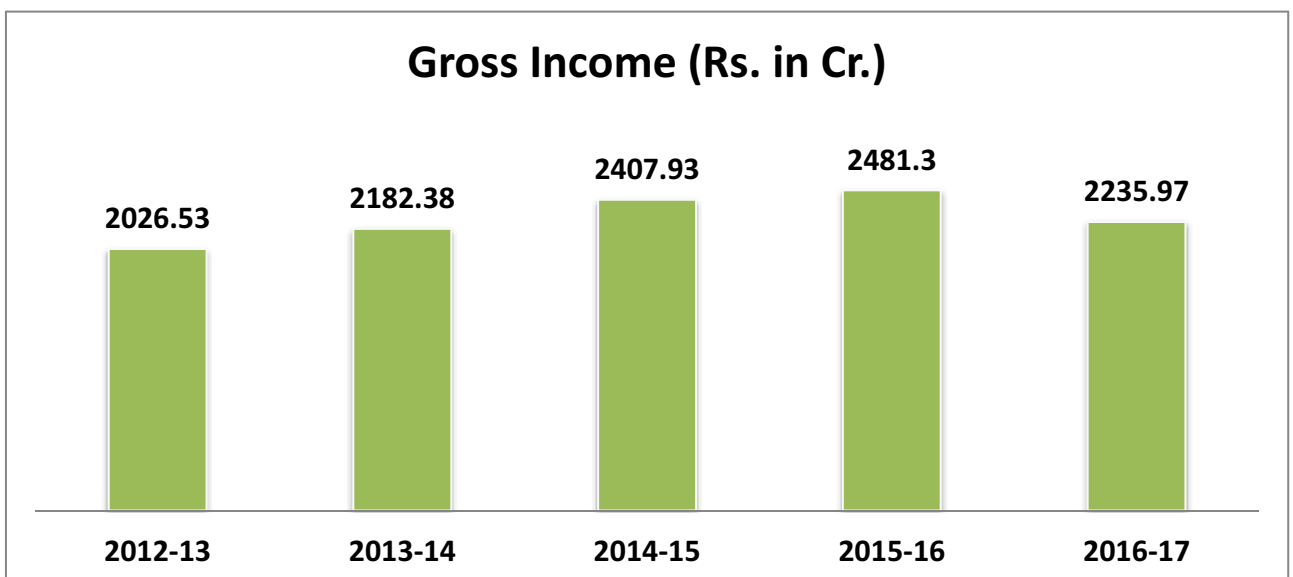
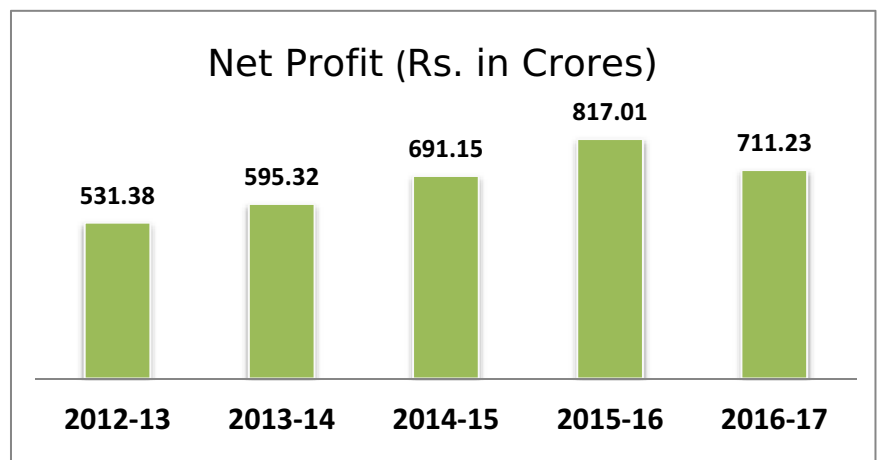


## 7.0 Sustainable Development Performance: Economic

THDCIL has been contributing in its own small way, towards the growth of the economy and the nation. Since its first year of commercial operation, THDCIL is a profit making organization. The Company has an authorised share capital of Rs. 4000 Cr. THDCIL has a strong financial base. THDCIL values financial interest of all its stake holders and always thrives to optimize value addition to its financial capital by earning profit along with discharging its social responsibility not just restricting itself to statutory minimum. The company ensures adherence to the debt equity norm of 70:30 from project inception. A part of the profits earned by THDCIL is paid back as dividend to shareholders. Paid up Equity capital of THDCIL as on 31.03.2017 is Rs. 3598.88Cr. Within the broad regulated parameters, THDCIL try to control cost without compromising on quality to add to our bottom line. With efficient management of financial capital, THDCIL has never incurred loss since its first project went into commercial operation in 2006-07. The company pays taxes on purchase of goods and services, creates direct and indirect employment and stimulates the local economy. THDCIL provides 12% free power to home state (Uttarakhand) for its operational power plants.

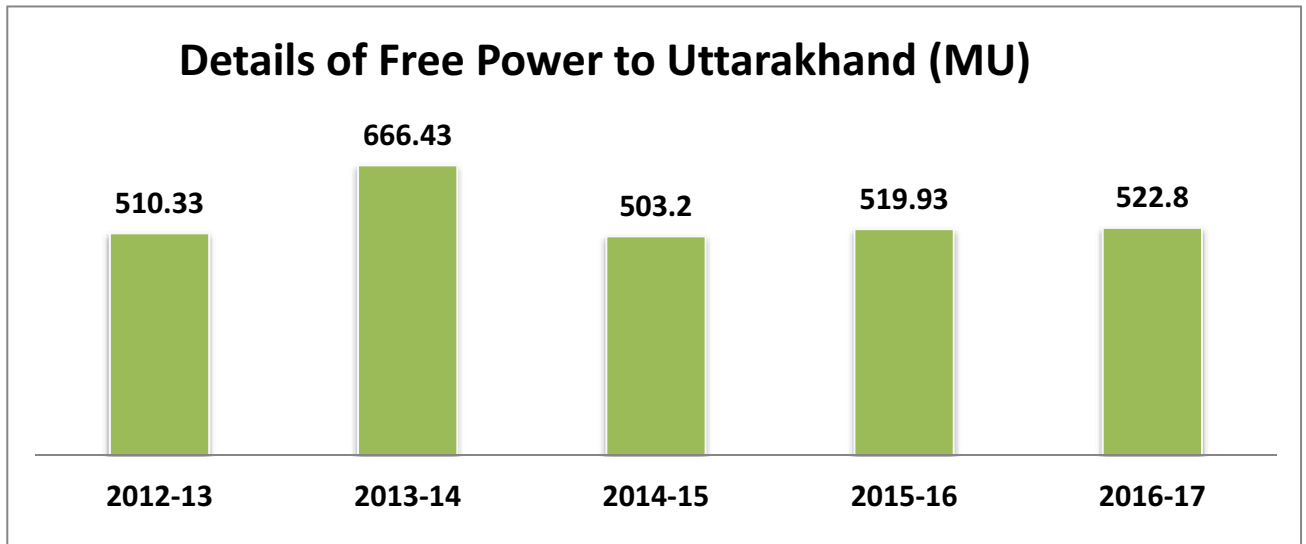
### Highlights 2016-17:

- Gross Income generated during 2016-17 is Rs.2235.97Cr.
- THDCIL has earned a net profit of Rs.711.23 Cr. during 2016-17



## Sustainability Report 2016-17

- During 2016-17, expenditure on CSR was Rs.15.35 Cr.
- During 2016-17, Gross Taxes paid by THDCIL were Rs.171.54 Cr.
- During 2016-17, Dividend Paid to Govt. of India and GoUP was Rs. 221.00 Cr.
- Free energy to the tune of 376.45 MU amounting to Rs. 171.28 Crs. from Tehri HPP(1000 MW) and 146.35 MU amounting to Rs. 49.62 Crs. from Koteshwar HEP(400 MW) was provided to the Home State of Uttarakhand during 2016-17.



### 8.0 Sustainable Development Performance: Environment

THDCIL has a vision – ***A world class energy entity with commitment to environment and social values***. As a responsible corporate citizen, THDCIL strives to control the environmental impact of its activities. Reduction of atmospheric emissions (especially greenhouse gases), measures for soil and water conservation, biodiversity protection, integration of facilities with their surroundings, reduction at source, reuse, recycling: the efforts extend to all aspects of reducing environmental impact.

THDCIL strategy on environmental sustainability is to optimize use of energy and water, to reduce carbon footprint and to protect/reconstruct Biodiversity.

THDCIL counts on sound Environmental Management Systems (EMS). ISO 14001:2004 has been acquired for corporate office and projects namely Tehri HPP, Tehri PSP, Koteshwar HEP and VishnugadPipalkoti HEP. THDCIL strategy on environmental sustainability is to optimize use of energy and water, to reduce carbon footprint and to protect/reconstruct Biodiversity. In addition, impact studies are conducted for construction projects that are likely to affect the biophysical and human environments; mitigation, compensation and follow-up measures are also developed

THDCIL makes all-out efforts to integrate environment protection measures at project planning stage itself. This approach is more cost-effective than establishing environmental controls after the commencement of project.

After site selection the company conducts Environment Impact Assessment (EIA) studies and assess the impacts of construction / operation activities and its vulnerability to cause any damage to the environment. Based on this, an Environment Management Plan (EMP) is prepared. EMP is aimed at mitigating the possible adverse impact of the project and maintaining the existing environmental quality. The EMP covers all aspects of planning, construction and operation of the project, which are relevant to environment. Based on the findings of EIA/EMP studies, environmental clearance for the project is obtained in accordance with EIA Notification 2006 issued by Ministry of Environment, Forest and Climate Change, Government of India.

All environmental concerns, such as, biodiversity conservation, pollution control measures, waste management, soil erosion control measures, muck management etc. are well addressed in these EMP and six monthly compliance reports of these management plan are regularly submitted to Ministry of Environment, Forest and Climate Change (MoEFCC) regional office for information.

THDCIL believes that Company's business should be known not just for the financial results it generates, but for the imprint it leaves on the society as a whole and impact on the environment in particular.

### 8.1 Major Environmental Activities undertaken:

#### a) Botanical garden at Koti (Tehri HPP & PSP Area):

As per recommendations of MoEF, a Botanical Garden has been developed in an area of 14.28 ha. near Koti. The species of plants which has submerged into the Dam reservoir have been conserved in the Botanical Garden. A total of 249 different species of plant including medicinal, ornamental, timber, fuel and fodder have been planted in the garden. All the species include approximately 12500 plants.



Botanical Garden at Koti, Tehri Garhwal

The Botanical garden is being cared by Deptt. of Forest, GoUK since 2011.

During the financial year 2016-17, Rs. 7.95 Lakhs has been spent against maintenance and care of planted saplings, trees etc.

Maintenance and care of Botanical garden is a regular process being looked after by Forest Department, GoUK, while financial expenditure is being paid by THDCIL.

#### b) Green belt developed in Tehri Project area

As per recommendations made by Hannumantha Rao Committee (HRC) development of Green Belt along reservoir rim is being carried out by Deptt. of Forest (GoUK). 200 mtr. wide green belt (from 840 MSL to 1040 MSL) with estimated cost of Rs. 820 lacs in 2100 hect. of land which includes 1138 ha forest land and 962 ha agriculture land is being developed. Out of 2100 hect. an area of 1138 hect. of forest land has been completed while 962 hect. of agriculture land is yet to be treated. An amount of Rs. 476 lacs has been released to Forest Deptt., GoUK upto Mar' 2012. No amount has been released to Forest Department, GoUK in 2016-17 for further development of Green Belt.

#### c) Mahaseer Fish Hatchery:

As per conditions laid down by MoEF, THDCIL has conducted the study of flora and fauna in the region. Zoological Survey of India (ZSI) made extensive study of fauna of concerned rivers and submitted the report to MoEF along with recommendations in 1993.

In compliance of ZSI recommendations, Mahaseer fish hatchery having capacity of 3 lacs seeds per annum has been constructed near JurasinallaKoteshwar under consultancy of National Research Centre for Cold Water Fisheries (NRCCWF), Bhimtal. The expenditure of Rs. 110lac has been incurred in development of fish hatchery. The fish hatchery is under operations, where in 60 number of Mahaseer brooders (male & female) are available weighing approximately 1.5 to 2.3 kg with capacity of 5000 to 12000 eggs per brooder. Artificial breeding operation of fish has been successfully made twice in the hatchery.



**Mahaseer Fish Hatchery**

Wherein 60000 fingerlings introduced into the back waters of Tehri Dam reservoir. Along this, species of common carp including 112 number of brooder and adults are also available in the hatchery tanks. Meanwhile, the hatchery has been transferred to deptt. of fisheries Govt. of Uttarakhand in Nov, 2015.

#### **d) Nursery at Koteshwar/Slope stabilization in Koteshwar**

The slope protection work between Ch.0.0 to 10.0Km., Ch.10.0 to 17.0, of Tehri-Koteshwar Road and Chaaka-Pendars-Ali Halzent Road have been carried out during the year 2014-15 through engineering measures by the B&R department. The total amount of Rs 4,08,35,842.00 (Four Crore Eight Lakh Thirty Five Thousand Eight Hundred Forty Two) has been invested against this work. The slope protection work between 0 to 10 km T-K road during 2016-17 the expenditure incurred Rs. 207.73 lacs. The Protection work of Ali –Harzent road was carried out during 2016-17 . The amount of Rs. 7.18 lacs has been invested against this work.







**Slope stabilization at KHEP**

### **e) Plantation in Koteshwar Project:**

The plantation work near KHEP power house area and colony premises was carried out through Tehri Dam Forest Division I New Tehri for this purpose THDCIL has released an amount of Rs. 22,26000.00 (Twenty Lakh Twenty Six Thousand).

In compliance of FC condition of MoEF the plantation of dwarf plant species around the reservoir of Koteshwar Dam Project is being carried out through Tehri Forest Division New Tehri. A MoU has been signed between DFO Forest Division, New Tehri and THDCIL, Koteshwar on 14/07/2014 of Rs. 1,60,000.00 (One Crore Sixty Lakh). The area has been taken for plantation mainly comprises of civil soyam land stripes of 200 m to 500 m width. The total peripheral land area available for said plantation is 450 ha. The major objectives of this dwarf plant species plantation are to stabilize the area and will form the green belt around dam reservoir which will check the direct siltation into the reservoir, to increase the vegetation cover adjoining to the reservoir which will enhance the habitat of wild animals and increase the aesthetic and ecological value of the dam. During the year 2016-17, Near Zero Bridge area, around 1500 plant saplings, 1500 bunches of Lemongrass herbs and 1000 Rambans have been planted in the designated area. In the first part of chopra dumping point phase – 1, natural disaster affected plantation and wire crates has been reconstructed by State Forest Department by the funds provided by THDCIL. In the year 2016-17 around 500 plant saplings plantation, 500 bunches of Lemongrass herbs plantation and reconstruction work of wire crates has been done.

The greenery development work at various site such as THDC guest house, Administrative Building, CISF fire station and new field hostel of KHEP area is in progress. For this work Rs.1,00,000.00(One Lakh) has been invested.

### **f) Herbal Garden at VishnigadPipalkoti HEP (444 MW)**

In order to increase an aesthetic nature and catalyze growth of Bio-Diversity of the land and in surrounding area of VPHEP, Bio-Diversity Management Plan under Environment Management Plan (EMP), VPHEP stipulates THDCIL to develop Herbal Garden at suitable place in consultation with Forest Department, GoUK. The objective of Development of the Herbal Garden is to propagate vulnerable & other species of Medicinal value & Aesthetic nature.

Herbal Research Development Institute (HRDI), Mandal, Gopeshwar District Chamoli has been engaged for providing consultancy for development of Herbal Garden at VPHEP. The Herbal Research Development Institute (HRDI), Mandal, Gopeshwar, District Chamoli has been assigned the consultancy for the development of Herbal Garden at VPHEP. Based on HRDI recommendations:

- A herbal garden is being developed in the VPHEP colony. Civil activities for development of terraces have been completed.
- Stage I herbal garden has been developed during July 2016 and is being maintained further for stage 2 work of the herbal garden, civil work have been completed during April 2017 and plantation works are under progress.
- Various indigenous medicinal plant have been planted include Amla, Aloe vera, Herb, Lemon Grass, Reetha, sargandha, Ashwagandha, Silpara etc.







**Photo herbal Garden VPHEP**

### **g) Development of green cover:**

Plantation activities at project level and at Corporate Office have been carried out during 2016-17. A total of 13750 saplings have been planted in the year 2016-17 under the CSR at different locations in the Tehri rim areas & Corporate Office, Rishikesh.

## **8.2 Energy Efficiency and Energy Conservation**

The company is involved in Hydro Electric generation and Wind Power Generation which itself is a clean and renewable energy.

THDCIL believes in efficient use of electricity as a way to reduce demand. THDCIL is focusing on energy efficiency programs with in the company.

Energy conservation and demand side management measures can reduce peak and average demand of energy. Conserve energy is important because it helps safeguard the environment and its resources. Investment in energy conservation at the margin provides a better return than investment in energy supply.

With the stabilization of the irrigation in the Command area in U.P. from the regulated flow of river water from Tehri & Koteshwar Dam there is substantial reduction in the use of energy requirement for pumping water for irrigation. This has helped in reduction in consumption of diesel & electricity and reduced carbon emission.

THDCIL believes in efficient use of electricity as a way to reduce demand. THDCIL is focusing on energy efficiency programs, within the company.

The following actions have been taken towards conservation of energy in F.Y 2016-17:-

- (i) 67 nos. occupancy mode and vacancy mode lighting management through Switch sensors have been done in the common area of the Nonresidential complex including Guest Houses.

- (ii) 50 nos. Solar LED lights have been installed in the Township area as well as in non residential complex.
- (iii) Work of replacement of Old bulbs with LED Light including street light has been completed in all THDCIL project units of THDCIL, however 50% work completed in our Tehri and Koteshwar project being located in remote and hilly terrain area.
- (iv) 500 KW roof top solar power plant has been installed on the roof top of non residential buildings which is supplementing internal requirement and also exporting power to grid during non working days.
- (v) All new non-residential complex have provision of LED Lights.
- (vi) Maintenance /renovation work of electrical distribution system for nonresidential buildings have been taken up with LED lights.
- (vii) Ceiling fans in non residential as well as residential building are provided with five star rated.
- (viii) Non residential building have been provided with star rated Air conditioners and 52 nos. air conditioners were changed from non star rated to five star rated.

Approximately 396 ACs are running in the office complex and guest houses out of which 261 nos. ACs has been changed with the star rated ACs to increase the energy efficiency. Balance ACs are also planned to be replaced with star rated ACs within next six months as per guidelines from MOP.

Park area lighting and fencing of office and residential area has been done through Solar system. All the new buildings are equipped with day light provision to use day light properly. Automatic Power factor controller has been installed to improve Power supply system and to reduce the losses.

**Implementation of above measures has caused the Consumption of units reduced to 10-13%.** The company is using and promoting use of LED Lamps and efficient use of energy in all its business Installations.

### **8.2.1 State Level Painting Competition under National Energy Conservation Campaign**

THDC India Limited, as a Nodal Agency, is organizing State Level Painting Competition in the Uttarakhand State under the Energy Conservation Campaign of Bureau of Energy Efficiency, Ministry of Power, Govt. of India since 2005. In the year 2016-17, 295758 students of 3654 schools of Uttarakhand participated in this competition. Out of them 100 students are selected throughout the state, 50 students of Class 4, 5 & 6 for Category-A and 50 students of class 7, 8 & 9 for category-B for participation in Final Round of State Level Painting Competition organised at Corporate Office, Rishikesh. First, Second and Third Prize winners of Category-A represented Uttarakhand State in National Level Painting Competition held in New Delhi.

## 8.3 E-Waste and Muck Management

- **E-waste:** Towards responsible handling of e-waste, THDCIL has empanelled third party e-waste handlers authorized by Central Pollution Control Board (CPCB) for disposal of e-waste.
- **Muck Management:** Dumping of muck is being done at designated / identified area & well above the high flood level. Engineering measures and Biological measures are adopted at sites for muck handling in environment friendly manner.

## 8.4 Sewage Treatment & Disposal

THDCIL has constructed 1 MLD Sewage Treatment Plant for township located at Rishikesh Township. In addition, to ensure efficient water conservation in Rishikesh township, THDCIL has made following arrangements:

- All sewage, kitchen washroom waste water is being collected & treated through various methods/ procedures.
- Treated water is being utilized for horticulture work, use in producing bio-gas etc. Additional water is being use for water conservation through a big soak pit.

Sewage Treatment Plant of 5 MLD capacity is also functional at Bhagirathi Puram, Tehri (Tehri HPP and PSP Complex). The STP Plant was commissioned in 2006. In addition 12KLD (.012 MLD) Plant at Tehri P/H and 8 KLD (.008MLD) Plant at Koteshwar P/H are functioning.

## 8.5 Biogas Plant

THDCIL has taken an initiative to harness the canteen and horticultural waste for productive use at Rishikesh Township. In this regard, THDCIL carried out an assessment study of all the available technologies. THDCIL adopted the TEAM (TERI's Enhanced Acidification and Methanation) process after the preliminary assessment. THDC awarded project to TERI for the setting up of a waste treatment plant based on the TERI's patented technology-TEAM process for the treatment of kitchen and horticultural waste.

The organic waste is utilized to convert into cooking gas after the processing in Biogas Plant and inorganic waste (Non disposable waste) is dumped under the ground behind the old cement store ground. Roughly 100 to 120 Kg of organic waste is daily collected from door to door at residential colony and carried to the biogas plant situated near sewage treatment plant. If any mixed waste is obtained at the plant it is also segregated manually. After segregation it is collected in garbage tanks and organic waste is mixed in 50:50 ratio with water to make solution. So produced solution is pumped in the PVC solution tank by pumping motor. After that soda is added in the solution to achieve desired value of PH which should be close to 7. Now the total solution of PH value 7 is transferred in the bacterial tank and gas is produced in the tank. The biogas generated from the plant of the capacity of 500 kg/day is utilized for

thermal application in the kitchen while the manure is used for in-house horticultural activities.

### 8.6 Water Conservation Measures:

#### Study of Measures taken at Corporate Office, Rishikesh:

- Created soak pit at Rasmanjari lawn area for conservation of rain water.
- Around 300 trees planted in Township premises to have a healthy environment.
- Developed green belts with different type of flowers in the vacant area in Rishikesh township.
- Reduced leakage and wastage of water to all most negligible by deploying dedicated team of Plumbers and supervisors at all possible areas/ fronts.
- Continuous monitoring is being done to check leakage of main water supply line and all roof tanks to minimize the wastage of water.
- Two nos. inflow water meter installed in both the tube well in colony area to know quantity of water lifted into tanks every day.
- Recording of inflow water meter being maintained on fortnightly basis and for quality of drinking water testing is done on six month basis and proper record is kept in township department.
- Separate energy meter for both tube wells are fixed for dedicated record of energy consumption for these work areas.
- In central park water taps which were prone to misuse by children have been changed with gate valve system. Awareness is being generated for use of water in the garden by individuals.
- For judicious use & saving of water in colony area timing for supplying of water reviewed and reduced by 2 hrs to save water.
- Monthly check up of roof water tank and float valve of all buildings tanks and connected pipe line is being done to check any leakage to conserve water.
- Normal taps in public area of colony are replaced by push cocks to avoid water wastage.

Similar exercises are also being carried out each Units / Project Location of THDCIL.

### 8.7 Total energy consumed by the business entity for its operations

Location	Year	Tehri HPP	Tehri PSP	Koteshwar HEP	VPHEP	Rishikesh	Total
Energy Consumed (KWh)	2015-16	15919975	6208188	5812760	912000	2958611	31811534
	2016-17	15823450	5316766	5474160	1140000	3221818	30976194
	%age Change	0.60% reduction	14.36% reduction	5.83% reduction	25.00% Increase	8.9% Increase	2.63% reduction

Amount (Rs. in Cr.)	2016-17	7.69	4.39	4.90	0.85	1.61	19.44
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### **8.8 Study for Green House Gas Emissions from Tehri Reservoir**

During detailed post impoundment water quality study of Tehri reservoir, measurement of the emission of Green house gas (GHG) from Tehri reservoir was conducted in 2008-09 through NEERI, Nagpur. During this period the emission levels of carbon dioxide and methane from the reservoir were 2550 and 24 mg per m<sup>2</sup> per day respectively.

Further, for comprehensive picture of GHG emission and to know the potential of Tehri Reservoir on the production of methane during summer stratification and to quantify the emission rates of methane to the atmosphere a systematic study was carried out by National Institute of Oceanography (NIO), Goa a laboratory of the Council of Scientific & Industrial Research (CSIR).

During this study total 7 field trips were conducted between 1<sup>st</sup> June 2014 and 4<sup>th</sup> June 2015 and NIO, Goa in its report has concluded that the methane concentrations in the water column varied between undetectable levels and 9 nM during most months, except during July and October 2014 and June 2015. The relatively higher methane concentration observed during July and October was probably associated with the monsoonal runoff, whereas the methane observed in June 2015 was probably of sedimentary origin, as the water column was fairly oxic.

The water column remained well stratified during most times of the year, but it was observed oxic at all times. Moreover, there is an absence of anaerobic conditions in the reservoir which is not conducive for methane production and as the water column is oxic throughout the year so if any methane produced in the sediments, it would get oxidized.

Further by direct flux measurement, the surface water of the reservoir was found under saturated with methane and thus there is no emission of methane from the reservoir.

Thus the study confirms that there is no emission of methane from the Tehri reservoir so no measures or activities for long-term or short term aim for reduction of Green house gas emission are required.

### **8.9 Contribution in Economic Development of Country along with Natural Resource Saving**

Power is the prime requirement for any country to develop. Since 2006-07, THDCIL is continuously powering the nation and presently with two hydro power projects and two wind power projects in operation, it has a share of 0.459% in net installed capacity of our country<sup>1</sup>. This share of THDCIL is through hydro and renewable power generations which are clean and green source of power.

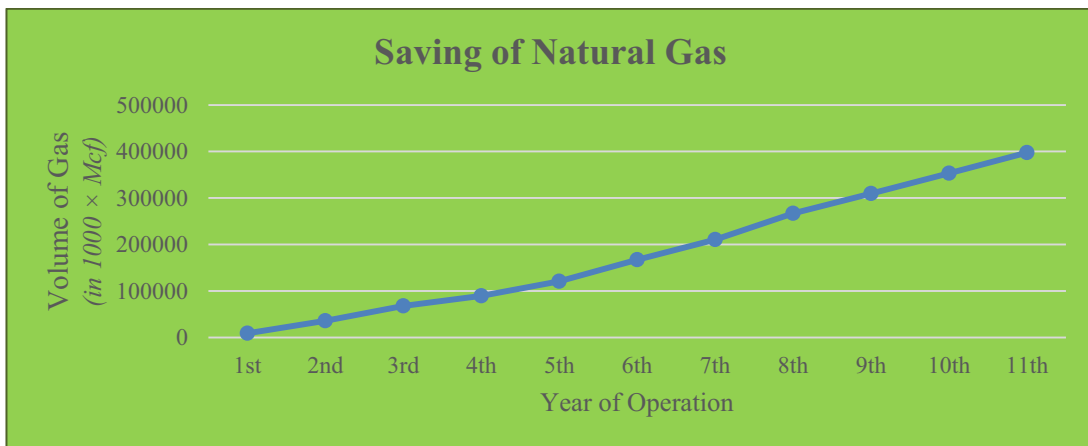
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Since 1<sup>st</sup> year of operation, THDCIL has helps country in saving coal, natural gas and petroleum which could be burnt to produce same amount of electricity. The net saving that have been made by THDCIL by its operation are 18550913Million Tonnes of coal, 397573424Mcf of Natural Gas and 68258297 barrels of petroleum respectively<sup>2</sup>.

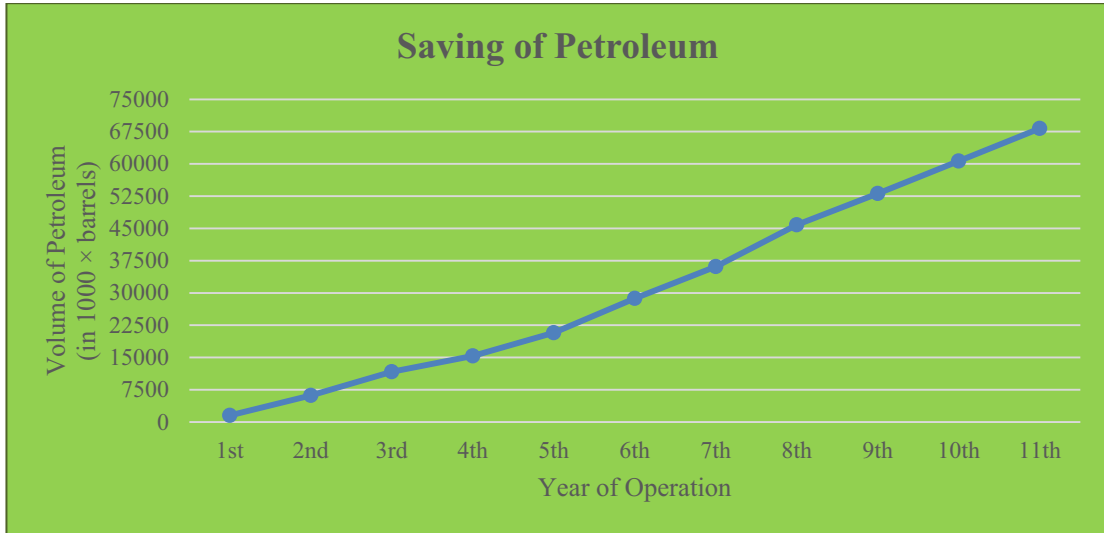


1: [http://www.cea.nic.in/reports/monthly/installedcapacity/2017/installed\\_capacity-04.pdf](http://www.cea.nic.in/reports/monthly/installedcapacity/2017/installed_capacity-04.pdf)

2: As per U.S. Energy Information Administration, amount of fuel used to generate 1 kWh: Coal = 0.00052 short tons or 1.04 pounds or Natural gas = 0.01011 Mcf (an Mcf equals 1,000 cubic feet) or Petroleum = 0.00173 barrels (or 0.07 gallons) (<https://www.eia.gov/tools/faqs/faq.cfm?id=667&t=2>)

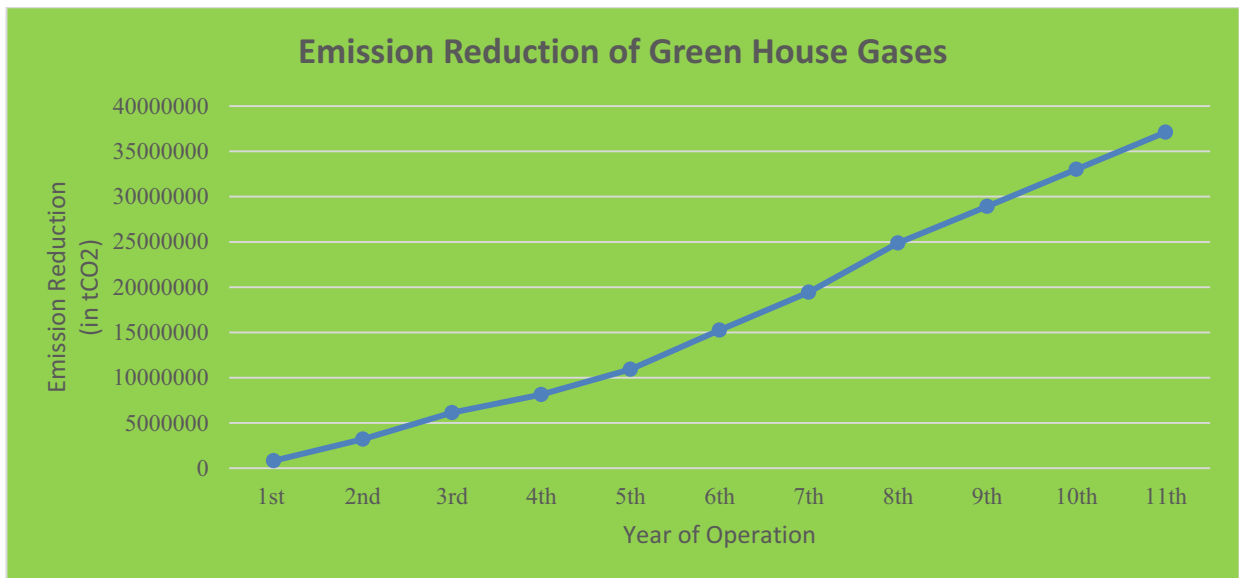






## 8.10 Reduction in Green House Gas Emission

Generation of electricity from hydro and renewable sources not only saved the natural resources for sustainable development but also helps THDCIL in becoming an active member in combat against climate change. By virtue of operation, THDCIL has saved generation of approximately 3.71 Cr tCO<sub>2</sub> of Green House Gases (GHGs) that could be generated by burning coal to produce 39324.77 MU of electricity from 2006-07 to 2016-17<sup>3</sup>.



3: ACM0002: Grid-connected electricity generation from renewable sources, issued by United Nations Framework Convention on Climate Change (UNFCCC).

## 9.0 Sustainable Development Performance: Social

### 9.1 THDCIL'S CSR Policy, 2015

The company has its own Board approved CSR policy-2015 in place as per Companies Act-2013, new rules/ guidelines formulated by Ministry of Corporate Affairs/DPE. However, new rules/ guidelines were followed during the gap period since April-2014.

On an average the yearly CSR budget based on the guidelines varies between Rs. 10 Cr. to Rs. 15 Cr. THDCIL's approach to CSR is based on long-term sustainable development. The CSR activities are planned to ensure that the benefits should reach up to the smallest unit i.e. village, panchayat, block or district depending upon the operation location and resource capabilities of the THDCIL.

CSR works are being implemented through company sponsored NGOs namely "SEWA-THDC" & "THDC Educational Society".

#### **"SEWA-THDC"**

THDC INDIA LTD has formed a Company sponsored Non-Government Organization, "SEWA-THDC" under Society Registration Act, 1860, on dated 17.03.2009; for the implementation of the CSR & Sustainable activities of the Company. SEWA-THDC has started working since 2009-10. Aims and objectives of the society are charitable and non-profitable. The Managing Committee has 07 members designated employees of THDCIL & nominated by THDCIL. CMD THDCIL is the ex-officio Patron of the society.

#### **"THDC EDUCATION SOCIETY (TES)"**

The society is formed in 1992 to impart education to the children of Project affected population as well as marginalized and under privileged society in the backward district of Tehri and Rishikesh. At present, the society is running two schools under the auspices of TES-one at Bhagirathipuram, Tehri offering education from 6th to 12th standards and another school at Pragatipuram, Rishikesh offering education from 1st to 10th standards.

## 9.2 Institutional Mechanism

### **Board Level CSR Committee**

THDCIL have constituted a four member CSR Committee of the Board. An Independent Director is Chairman to the Committee. Company Secretary is the Secretary to the CSR Committee.

The CSR Committee acts as per the roles & responsibilities defined in the company's act/ new guidelines issued by GOI and meets at least once in every three months and four times in a year to review the progress of CSR works & to discuss the related issues.

## **Below Board Level Committee**

An officer of the level of General Manager, heading the CSR and Sustainability functions is the designated Nodal Officer & is head of the Below Board Level Committee (BBLC). The other members of the BBLC are from various functional Departments. Independent Experts in the field of CSR and Sustainable development, from outside the organization are also nominated in the BBLC. The Nodal Officer is permanent Special Invitee to the Board Level CSR Committee.

## **9.3 Planning**

### **9.3.1 Resources**

At least 2% of the average net profit of the Company made during the three immediate preceding financial years is spent in pursuance of its CSR & Sustainability Policy. The unspent amount is not considered as lapsed and will be carried forward to the next financial year.

The Budget and Annual CSR and Sustainability Plan are approved by the Board on the recommendation of the CSR Committee.

### **9.3.2 Selection of CSR Programmes**

CSR programmes / activities are being selected as specified in Schedule VII of the Companies Act 2013. THDCIL CSR initiatives are titled '**THDC Sahridaya**' (Corporate with a Human heart). Focus areas where THDCIL undertakes CSR programmes is titled by the objective they seek to achieve as under:

- i. **THDC Niramaya** (Health) - Nutrition, Health and Sanitation and Drinking Water projects
- ii. **THDC Jagriti** (Initiatives for a Bright future) – Education initiatives
- iii. **THDC Daksh** (Skill) - Livelihood Generation and Skill development initiatives
- iv. **THDC Utthan** (Progress)- Rural Development
- v. **THDC Samarth** (Empowerment)- Empowerment initiatives
- vi. **THDC Saksham** (Capable) - Care of the aged and differently abled
- vii. **THDC Prakriti** (Environment) - Environment protection initiatives

As far as possible, CSR programmes are undertaken in Project mode following 'THDCIL's CSR Communication Strategy'.

### 9.3.3 Selection of location and beneficiaries

Preference of CSR and Sustainability projects is given to the local area i.e. (i) the periphery of the Company's plant / project / business activities and (ii) the Broad Geographical Area directly impacted by the Company's business operations directly impacted by Company's operations and activities.

### 9.4 Monitoring

To ensure transparency and effective implementation of the CSR programmes undertaken, a robust monitoring mechanism is instituted by the Company using the following indicative medium:

- i. Monthly Progress Report
- ii. Quarterly Progress Report
- iii. Video Conferencing
- iv. Site Visits
- v. Documentary evidence including photographs, films and videos
- vi. In – house monitoring mechanisms, as determined by the CSR Committee
- vii. Third Party is also engaged for monitoring

### 9.5 Reporting

Quarterly progress report on CSR and Sustainability is placed before the Board after consideration by the Board Level CSR Committee.

The Annual Report also includes report on CSR & Sustainability containing particulars as specified in the Act/ Policy and the same is displayed on the THDCIL's website. A brief narrative on the action taken for implementation of DPE guidelines on sustainability initiatives is also be included in the Board's Report on CSR.

Annual Sustainability Report is also displayed on Company's web site as per the 'THDCIL's CSR Communication Strategy'.

### 9.6 Impact Assessment

Impact assessment of all completed CSR & Sustainability programmes above Rs 5.00 lakh is done through specialized external agencies and the report containing the success/failure is also submitted to Board Level CSR Committee.

### 9.7 Overview of the CSR Projects undertaken during FY 2016-17

THDCIL integrates its CSR and Sustainability planning with its business plans and strategies. The activities are planned well in advance, targets are fixed at different milestones, with pre-estimation of quantum of resources required within the allocated budget and having a definite time span for achieving desired outcomes. For easy implementation, long-term CSR and Sustainability plans are categorized into medium-term and short-term. The company accords priority for CSR & SD Projects to those stakeholders who are directly impacted by its operations. CSR activities are planned in accordance with the CSR Policy of THDCIL.

To bring positive sustainable changes, THDCIL focuses on holistic development of the targeted communities rather than addressing sporadic needs in piecemeal which result in less or no impact in long run. The areas addressed in holistic development are women empowerment to reduce women drudgery, income generation through intervention in agriculture and horticulture activities, income generation through revolving fund among SHGs, revival/promotion of traditional ecological knowledge by construction/rejuvenation of Chal-Khals (ponds); promotion of water harvesting structures; modernizing traditional water mills for enhanced efficiency, plantation of fuel, fodder & medicinal plants; health services; providing safe drinking water; sanitation facilities; promoting education (among economically weaker section; SC/ST and OBC); skill training in computer & tailoring and generation of employment including assistance to local ITI's; ensuring environmental sustainability; ecological balance, etc.



**Release of "Compendium of Best CSR Practices of THDCIL" on 10<sup>th</sup> March-2017**

### 9.7.1 THDC Jagriti- Educational Development

Considering education and skill development as an important aspect of employment generation, various steps taken up are as follows:

#### 9.7.1.1 Education through Schools at Rishikesh & Tehri being run by







## THDC Education Society:

As a responsible corporate citizen THDCIL strives to contribute and promote education among needy external stakeholders by running two schools, one at Bhagirathipuram, Tehri offering education from 6th to 12th standards and another school at Pragatipuram, Rishikesh offering education from 1st to 10th standards under THDC Education Society (TES) for economically weaker sections including backward and SC/ST.

Free of cost dress, books & stationery, bus service etc. are being provided to students including **Mid Day Meal under “Naivedyam” scheme.**

The details of students for year 2016-17 are as under:-

Schools	SC Category Students		OBC Category Students		General Category Students		Total Students		Total Students	BPL students out of total students	
	Male	Female	Male	Female	Male	Female	Male	Female		Male	Female
<b>Rishikesh</b>	60	87	56	94	71	53	187	234	421	62	70
<b>Tehri</b>	44	49	01	03	64	50	109	102	211	01	03

During the year students participated in different curricular activities i.e. debate, essay writing competition, cultural events and taking part in Swachh Bharat Abhiyan Mission.

### 9.7.1.2 Jr. High School Koteshwarpuram

In addition to above, one English Medium Jr. High School is also being run at Koteshwar, Tehri with grant provided by SEWA-THDC to an NGO i.e.; OmkaranandSaraswati Public School Education Society to provide quality education to children of project affected families of KHEP. Total 140 no students are enrolled for education in this school.





- Different Govts Schools of project affected area were strengthened by constructing additional class rooms, toilets and by providing computers, furniture, study material, school bags, uniforms, water filters, books etc.
- Computer training was provided through 12 centres to educate youths of minorities and weaker sections in project affected areas in district Dehradun, Tehri & Uttarkashi. More than 450 beneficiaries benefitted through this programme. The main objective of this program was to upgrade their computer skills to make them employable.
- Job oriented skill development trainings in various trades viz. Hotel Management, BPO, hospitality etc. were provided through expert agencies/Institutions. More than 100 youths were benefitted through these programmes.
- Various trainings/workshops have been organized for inside and outside stakeholder on "Sensitization on CSR & Sustainability and THDCIL's CSR Communication Strategy".



### 9.7.1.3 Construction of THDC institute of Hydropower Engineering & Technology

An Engineering College in Bhagirathipuram (near Tehri Dam and HPP) Tehri has been established by THDCIL under CSR initiatives to meet out the future requirement of skilled manpower/technical graduates in sustainable manner. The institute has state of art infrastructure facilities such as Administration Block, Academic Blocks, Laboratories, Workshop, Library, Canteen and Hostel for boys and girls etc. Well furnished infrastructure has been provided for students in five disciplines i.e. Civil, Mechanical, Electrical, Electronics & Communication and Computer Science. The Institute is a constitute college of Uttarakhand Technical University (UTU), Dehradun. There are two more constituent colleges run by UTU in Uttarakhand region, i.e. Institute of Technology, Gopeshwar in Chamoli Distt and Simant Institute of

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Technology, Pithoragarh. THDC Institute of Hydro power Engineering & Technology, Tehri can be rated as best amongst other constituent colleges of UTU, because of greater facilities, learned faculties and its infrastructure.



**THDC Institute of Hydropower Engineering and Technology.**

During the year 2014-15, Academic Block for the 4<sup>th</sup> year students was completed. 2<sup>nd</sup> girls Hostel was constructed with CSR contribution from Rural Electrification Corporation Limited. Students of far flung areas of Uttarakhand mainly from tribal belt of the state covering district Pithoragadh, Chamoli, Tehri etc. are being benefitted and getting higher technical education. Moreover, Tehri Dam Project affected families are also being benefitted by opening of the institute close to their homes. 5 % seats are reserved for the students from the Project Affected Families.

Batch	Total Strength		Students SC/ST/OBC/Gen Category						Students From PAF's		Students (THDC Employees Wards)	
	Male	Female		SC	ST	OBC	Gen	Total	Male	Female	Male	Female
2014-15	202	66	<b>Girls</b>	12	2	7	45	<b>66</b>	12	2	3	3
	<b>Total=268</b>		<b>Boys</b>	37	8	27	130	<b>202</b>				
								<b>268</b>				
2015-16	151	67	<b>Girls</b>	11	2	7	47	<b>67</b>	5	1	6	2
	<b>Total=218</b>		<b>Boys</b>	23	6	18	104	<b>151</b>				

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								218				
2016-17	Male	Female		SC	ST	OBC	Gen	Total	Male	Female	Male	Female
	284	69	Girls	8	1	6	54	69	7	0	5	0
	Total=353		Boys	40	6	54	184	284				
								353				

### Employment and business generated

Presence of THDC-IHET has increased the income level of the local community. It has generated direct/ indirect employment. Local Communities/ Vendors engaged in various livelihood activities viz. milk supply, news paper/magazines, Book shops, fruits and vegetables, medical shops etc are largely benefitted. Local agencies are operating hostel canteens, transport facilities etc. Grocery and other local needs of the students and staff are also being managed by local shopkeepers and residents of the area. Local people and labourers of this area are happy with the presence of THDC-IHET.

#### 9.7.1.4 Adoption of ITI

ITI Chamba has been adopted by THDC India Limited to meet the skilled manpower requirement in the state. Considering the requirements of additional manpower for operation and maintenance of the power plants, new trades i.e. Electrical, Fitter, COPA, Electronics (additional unit,) Welder, Draftsman (Civil) and steno (Hindi) have been introduced in ITI Chamba. Additional trades like Turner/ Machinists, Motor mechanic, fashion technologies are also being considered to be introduced shortly.



**Boys hostel in ITI Chamba**

A hostel building has also been constructed to facilitate accommodation to the students of remote locations. The building was handed over in year 2015. Building consists of 10 No Rooms, and 01 mess, Toilets & common room. One D.G. Set has also been provided by SEWA-THDC. Presently 34 No students have been enrolled in ITI Chamba including 15 Sewa-THDC sponsored candidates from Asena, Devri & Chopra.

### 9.7.1.5 SC/ST Hostel in NTT

To promote & facilitate higher education to weaker section of SC/ST community students of the Dam affected areas a need was felt to construct the SC/ST hostel in New Tehri Town. The construction work was started in the year 2010 and completed in year 2012. There are 17 rooms, 1 common hall, 1 office, 1 Kitchen, 1 Manager and a ward room in the hostel. Since year 2016 the hostel is being operated by Dr. Bhimrao Ambedkar SC/ST hostel samiti. In the year 2016, 16 students have got admitted in the hostel. During current financial year; 24 students have taken admission in the hostel.



*Dr. Bhimrao Ambedkar SC/ST hostel in New Tehri.*

### 9.7.1.6 THDC Niramaya- Health & Sanitation

Promoting health care including preventive health care and sanitation, drinking water etc is included in this initiative.

- Allopathic Dispensary with a team of MBBS Doctor, Pharmasist, Nurse and Medical Assisstant has been established at Deen Gaon, a very remote area in Tehri is operational since the year 2013-14. Average yearly OPD is More than 12000 with surrounding 20 beneficiary villages. The dispensary is equipped with minor OT and basic diagnostic facilities i.e. Pathology Lab, X-ray, ECG etc. and also has on call ambulance facility. Medicines are provided free of cost.

Allopathic Dispensary- Year Wise Patient and Expenditure Detail					
Sl. No.	Year	Male	Female	Child	Cost of Operation (in Lac Rs.)
1	2014-15	2043	3661	1820	28.99
2	2015-16	3354	6387	2981	20.30
3	2016-17	3599	6525	3118	33.53
<b>Total</b>		<b>8996</b>	<b>16573</b>	<b>7919</b>	<b>82.82</b>



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- Total 27 Multispeciality Medical Health Camps were organised through Nirmal Eye Institute, Rishikesh and THDCIL's own Doctors in the project affected villages and rehabilitation colonies attending over 5000 patients with more than 200 cataract operations with no cost to patients even for surgeries.

<b>Multispeciality Medical Camps- Year Wise Patient and Expenditure Detail</b>					
Sl. No.	Year	No. of camps	OPD	Cataract	Expenditure
1	2011-12	8	1099	-	4.01
2	2012-13	10	3604	161	6.08
3	2013-14	19	3944	419	13.87
4	2014-15	15	4897	664	47.48
5	2015-16	6	1704	200	9.45
6	2016-17	27	4895	205	20.56
<b>Total</b>		<b>85</b>	<b>20143</b>	<b>1649</b>	<b>101.45</b>

- Four Homeopathic Dispensaries catering around 20 Tehri reservoir rim area villages have been running effectively at Pokhri, Dhontri, Koteshwar and Rishikesh since 2010-11. On an average, 150 patients (OPD) are availing free of cost consultations and medicines per day. More than 60000 OPDs are being done every year.



<b>Homeopathic Dispensary- Year Wise Patient and Expenditure Detail</b>				
Sl. No.	Year	No. of Dispensary	OPD	Cost of operation (in lac Rs.)
1	2009-10	1	14800	0.40
2	2010-11	1	42043	1.74
3	2011-12	3	71697	10.67
4	2012-13	3	79054	9.71
5	2013-14	3	70057	13.54
6	2014-15	4	91274	16.35
7	2015-16	4	84142	15.29
8	2016-17	4	66193	21.13
<b>Total</b>			<b>519260</b>	<b>88.83</b>

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- Construction of individual toilets (Especially for weaker sections) in project affected area of Tehri dam.
- Under Swachh Bharat Abhiyan, massive public awareness campaign is being done within THDCIL offices and Colonies at various locations, Schools, Hospitals, work place, streets, roads, markets, railway station, Bus Stations, Bank area of holy River Ganga, Parks and other Public places. As per need cleaning was done in local areas and dustbins were provided at different locations with consultation of Nagar Palika Rishikesh & New Tehri.



- Provided 5 hydraulic Tippers to Municipal bodies & more than 20 Dust Bins placed at different location in Tehri & Rishikesh under Swachh Bhart Abhiyan.
- 04 Government schools have been adopted for cleaning and maintenance.
- A Generic Medicine shop has been opened near Govt. Hospital New Tehri to provide cheap medicines to public .

### 9.7.1.7 THDC Prakriti- Environment Management

To achieve Environmental Sustainability and Ecological Balance, following efforts have been taken up:

- More than 15000 plants of different fruit, fodder, fuel and medicinal species have





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been planted at various locations in project affected villages.

- Environment day has been celebrated on 5<sup>th</sup> June 2016 at Pashulok rehabilitation area. Independent Director, THDCIL official, Forest department and rehabilitees participated in the programme. Various competitions programs are organised among school childrens in presence of leading achievers of environment field.

An MOU has been signed between SEWA-THDC & EESL to install high mast and street solar lights in three district of UP & Uttarakhand. Approx. 375 solarstreet lights and 170 hight mast light are being fixed in the area which will provide additional illumination for safety of people and also play an important role in energy conservation.



### 9.7.1.8 THDC Utthan (Rural Development)

The company in association with HNB Garhwal University, Kirorimal College (Delhi University), Project Directorate for Farming System Research, Modipuram and Veer Chandra Singh Garhwali Uttarakhand University of Horticulture & Forestry through Ranichauri Campus is working for holistic development of around 60 remote project affected villages on long term basis since 2009.

The main activities carried out are creation of Farmer SHGs, helping these SHGs with seed money to initiate small activities of their own, establishment of computer & stitching centres, vocational trainings, plantation of fruit, fodder & medicinal species, health & hygiene activities, farmer centric agriculture interventions which include technical know-how to the farmers through experts by organizing kissanghoshthies, exposure visits to agriculture Universities/ institutes, demonstration of farm plots, promotion of off seasonal vegetables, promotion of organic farming by constructing vermin compost pits, construction of poly houses and livestock management etc to improve the productivity through crops and mulching animals.





Training of mushroom cultivation has been given to villagers to improve their livelihood.



A drain has been constructed to discharge flood water from Pashulok rehabilitation area which was affecting the crops and houses of the villagers. Yatri shed have been constructed for the villagers. Community centres are provided to villages of the area for conducting meeting and celebrating their social programme.

### **Benefits through these projects:**

- Through agriculture programmes, the confidence among the farmers has increased to take up agriculture as a source of sustainable livelihood.
- The level of income and standard of living has increased over the past years.
- The level of participation of rural community has increased.
- Due to these agriculture development programmes, the capacity of farmers has increased considerably.
- The program is able to merge advance technological innovations along with local wisdom.
- These programmes have helped in checking out migration, resource management and surrounding environment.
- Mitigation from affects of flood during rainy season and protected earth from erosion.
- It can also be viewed that the national objectives of rural development and farming community are met in totality.



### 9.7.1.9 THDC Samarth- Women Empowerment

- Various Tailoring & Knitting, beautician and production centers were established for women, especially from weaker sections, in order to strengthen their livelihood and also provide empowerment to the women to act as a strong channel of growth and development. The centers are run free of cost. Approximately, 240 women have been benefitted from these centers.
- Credit society has been established in memory of famous social reformer “Deepa Mai” and registered as “Deepa Mai Mahila Credit Cooperative Swayatt Society” in October, 2016. More than 65 female members joined and run the society. Training on cultivation of professional agriculture produce has been provided to the member through G.B. Pant Agriculture University.



### 9.8 Comments of Tata Institute of Social Sciences (TISS) , IIT Roorkee & SR Asia after evaluation & impact assessment of major CSR projects:

- THDCIL has proved to be an excellent example in terms of branding.
- The interventions undertaken by THDCIL have the objectives, vision and mission in place
- Projects are implemented effectively
- Most of the beneficiaries were aware of THDCIL implementing the projects along with the Implementing agencies.
- THDCIL official had their presence in all the locations
- Regular site visits were done.
- THDCIL and implementing agency shared a good relationship with the beneficiaries.
- Overall social development of the villagers is positively associated with the infrastructure provided by the company. Infrastructural facilities in respect of Construction of Snan Ghat, Individual Toilets, Community Shouchalaya and the



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creation of other facilities for the school, participation in Swachh Bharat Mission and women empowerment are found to be playing an important role and they are essential for enhancing the level of development in different areas.

### Sector-wise information of CSR activities undertaken by THDCIL during 2016-17 (Rs. in Lakh)

Sector	Name of CSR activities undertaken	Amount spent on CSR activities	Total amount spent on Sector
Sanitation (Item No. (i) of Schedule VII of the Companies Act, 2013)	(i) Construction of Individual / Community toilets for under privileged & weaker sections	17.26	93.02
	(ii) Construction of toilets in schools	19.14	
	(iii) Providing Hydraulic Tipper to Nagar Palika /Nagar Panchayat	56.62	
Health Care (Item No. (i) of Schedule-VII)	(i) Running of 04 Homeopathy Dispensaries in project affected area.	40.63	64.16
	(ii) Multi Specialty medical camps	23.53	
Drinking Water Supply (Item No. (i) of Schedule-VII)	Water supply scheme for villages & distribution of water purifiers to Govt. schools	7.92	7.92
Education (Item No. (ii) of Schedule-VII)	(i) Computer Training programs for youth of project affected area.	43.39	613.74
	(ii) Running of three schools at Rishikesh, Tehri & Koteshwar (strength of students approx 800)	512.02	
	(iii) Providing infrastructure to Govt. schools (Furniture, Books etc.)	12.7	
	(iv) Construction of Engg. College	45.63	
Skill Development & livelihood (Item No. (ii) of Schedule-VII)	Hotel Management & IT Training Etc.	19.64	19.64
Social Welfare (Item No. (iii) of Schedule-VII)	Women Empowerment programmes (cutting- tailoring, beautician & Mekram training etc.)	14.89	14.89
Forest & Environment, animal welfare etc. (Item No. (iv) of Schedule-VII)	(i) Plantation and development of nursery (To prepare the medicinal & fruit plants & seedling for distribution to villagers)	10.83	153.07
	(ii) Installation of solar street lights & high mast solar lights.	142.24	
Art & Culture, public libraries (Item No. (v) of Schedule-VII)	Protection of natural heritage, art and culture etc.	31.00	31.00
Sports (Item No. (vii) of Schedule-VII)	Promotion of Sports (providing sports items & financial assistance for rural sports)	2.05	2.05
Rural Development (Item No. (x) of Schedule-VII)	(i) Construction of Shamshan Ghats, Pathways, Yatri Sheds Solar Lights & Community Centres etc.	314.69	496.42
	(ii) Various activities for Ecological Restoration and Socio-economic Empowerment of Rural Community for Sustainable Livelihood and Resource Management i.e. farmer centric activities, bee keeping, goat rearing, production of off-seasonal vegetables, plantation work, poly house, computer training, tailoring training etc. through three universities	180.49	
	(iii) Flood protection works	1.24	
CSR Administrative Expenditure	Administrative expenditure	38.93	38.93
<b>Total</b>		<b>1534.84</b>	<b>1534.84</b>

