

2018-19

SUSTAINABILITY REPORT



टीएचडीसी इंडिया लिमिटेड
THDC INDIA LIMITED

SUSTAINABILITY REPORT 2018-19

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1.0 Message from Chairman and Managing Director

Dear Stakeholders,

11th Edition of THDCIL's Sustainability Report for the financial year 2018-19, reflects another feather in the sustainable growth of the Company. The report is compliant with the Global Reporting Initiative (GRI) Standards & based on National Voluntary Guidelines (NVG) on Social, Environmental and Economical Responsibilities. THDCIL aims to showcase our efforts toward enhanced value delivery to our stakeholders, and also our earnest engagement with the planet in making it a better place for the citizens.

The international community's drive to tackle social issues globally has been gaining momentum, as evidenced by the UN Sustainable Development Goals (SDGs), the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, and the Paris Agreement signed at the 21st session of the Conference of the Parties (COP21) to the UN Framework Convention on Climate Change. We set targets that again are tied to business strategies, encompassing telecommunications, global business, regional revitalization, education, finance, as well as to corporate activities, including developing human resources, supporting women's advancement in the workplace, respecting human rights, promoting diversity & inclusion, and conserving the environment. As we strive to attain these targets, the entire company's force shall continue working together over the medium to long term to provide solutions to social issues.



Energy plays an ultimate role in driving India's economic growth and social progress as well. THDCIL, as a pioneer in providing clean energy to nation, is reshaping the Power industry in India and is also striving to establish sustainable practices in every facet of its business verticals. Sustainable efforts towards conservation of Energy, Resource and Environment are some of the key parameters for overall growth and development of an organization and nation as a whole.

Our organization is fully dedicated and focused towards expanding in segments of Renewable Energy. In order to contribute to National Goal of 175 GW by 2022 electricity generation from renewable sources, THDCIL has successfully commissioned 50 MW wind power project at District Patan and 63 MW wind power project at Devbhumi Dwarka in Gujarat. A solar project of 50 MW is expected to be commissioned in 2020-21. In addition, THDCIL is also in the process to establish UMPPs of Solar Power totalling capacity of 1600-2000 MW particularly in the state of U.P through formation of Joint Venture with Uttar Pradesh New & Renewable Energy Development Agency (UPNEDA), a nodal agency for undertaking RE projects in U.P. THDCIL is also exploring for Solar Projects in Rajasthan as well.

At THDCIL, we are cognizant of climate change and sustainable development initiatives taking the centre-stage at the global platform. It is now imperative for the power sector to adopt innovative and newer technologies and solutions to make an impactful presence globally. Through this report, we share our sustainability strategy as well as our performance report on environmental, social and corporate governance. We have achieved a significant improvement in this area through energy saving initiatives at various process plants and also through increased use of renewable energy at our Campus.

THDCIL believes in building trust amongst our stakeholders and assure them transparent, responsive and efficient services. We work towards ensuring our employees' safety, satisfaction and happiness and keep our communication channels open to all our stakeholders. We respect the natural habitats and the local communities in the areas we operate in and work towards nurturing its flora and fauna. THDCIL's CSR projects / activities continue to reshape sustenance and livelihood of over 3 million underprivileged people. In FY 2018-19, under the Corporate Social Responsibility, an expenditure of Rs. 17.52 Cr. is recorded against the target of Rs. 17.35 Cr. (against the mandated norms).

THDCIL has been complying with the requirements of Guidelines issued by Department of Public Enterprises, GoI and all other applicable provisions of Companies Act. It is an immense pleasure to share that our Company has been continuously achieving "Excellent" rating for compliance with DPE guidelines on Corporate Governance. In pursuit to help save environment, our Company has shifted to web based e-office at Corporate Office with the help of NIC. It saves paper usage and has brought accountability and speedy clearances of files.

The foundation of our sustainability activities comprises the THDCIL Philosophy, which has been instilled in top management and entire workforce as a common set of policies and code of conduct since our founding, and our consistent activities to enhance corporate governance, which ensures transparency and fairness. We value all our stakeholders, their voices and working together. Our stakeholders include customers, partner companies, shareholders, local communities, governments and all other people who support us.

With continual & whole heartening support of our employees, I look forward to valuable comments and feedback on our initiatives, so as to enhance the delivery in all our sustainable engagements.

(D.V. Singh)
Chairman and Managing Director

2.0 About the 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. 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 such a way that 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 10th Sustainability Report for the year 2018-19 based on National Voluntary Guidelines (NVG) on Social, Environmental and Economical Responsibilities. However, efforts have also been made to incorporate GRI Guidelines along with NVG. THDCIL is continuously releasing Sustainability Report ever since publication of its first Sustainability Report for the year 2008-09.

Scope of Report and Management Approach:

The scope of this report is to present the performance of THDCIL in the wider context of Sustainability. Sustainability Report 2018-19 addresses activities of THDCIL viz; Business operations, Environment measures, Employee's welfare, CSR works etc. and their impact during the year 2018-19 related to its business areas. Copy of this report is available on THDCIL website (www.thdc.co.in) so as to enable stakeholders to find the desired information without much effort.

Company's Management approach reflects on economic, environmental and social impact that affects the sustainable development and enables stakeholders to access the performance of THDCIL.

Boundary:

Sustainability Report 2018-19 is confined to Corporate Office, Operational Plants and Under Construction Projects of THDCIL.

Data Collection:

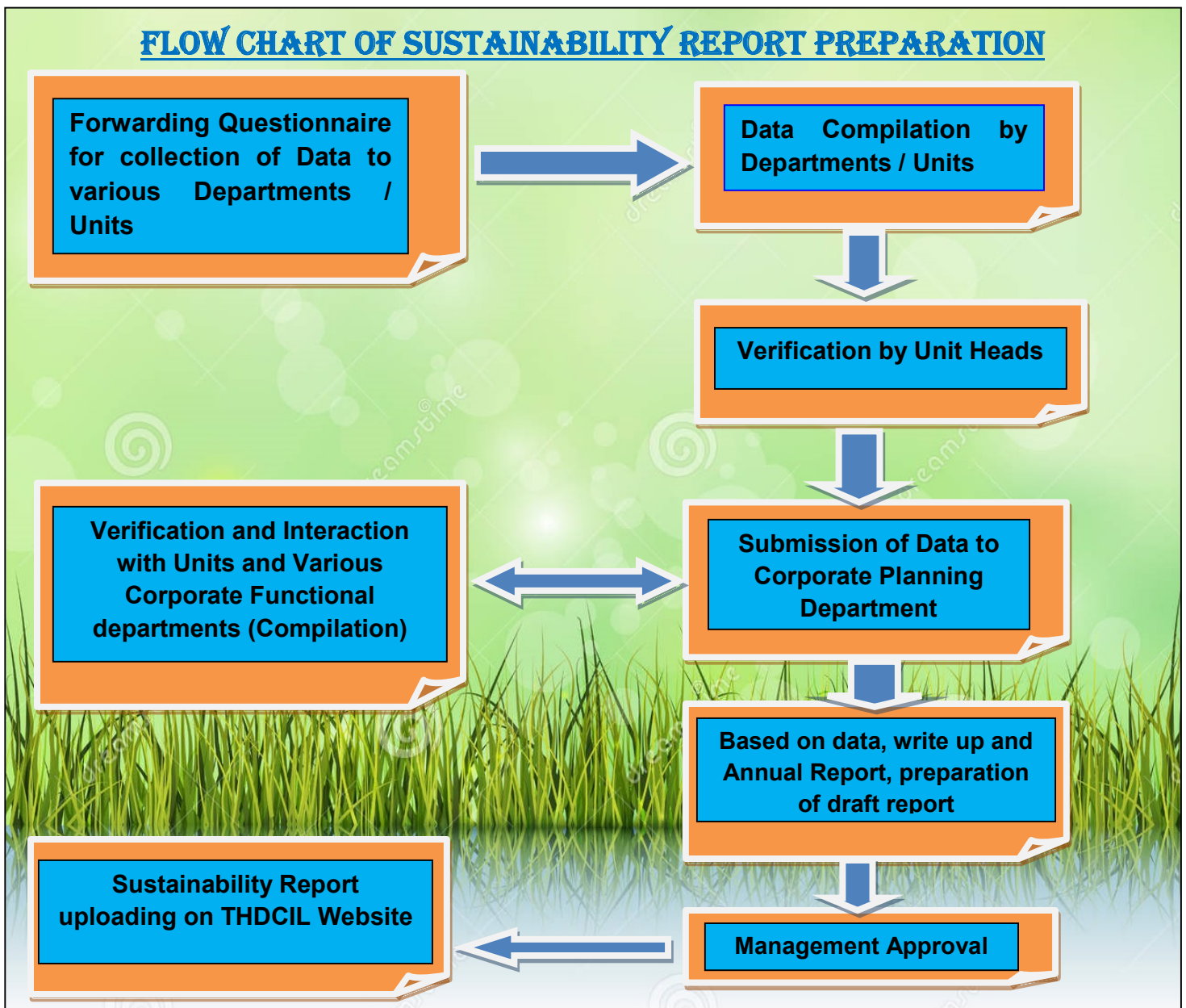
Data has been collected from various departments of Corporate Office, Operational Projects, Construction Project Sites and CSR Units. For collection of data, specific questionnaires were prepared based on National Voluntary Guidelines and GRI Performance indicators. Uniform approach has been adopted 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.

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 2017-18 of THDCIL.(www.thdc.co.in)
- Web site containing details on Corporate Social Responsibility and sustainable development.
- Annual Report 2018-19, presenting F.Y. 2018-19 highlights. www.thdc.co.in
- Business Responsibility Report provided in Annual Report 2018-19.
- THDCIL's Policy on CSR & Sustainability. (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.



- ✓ 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.



- ✓ 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.

3.2 Company's Profile

THDC India Limited, a Joint Venture of Govt. of India and Govt. of Uttar Pradesh, is a Public Sector Enterprise under the administrative control of the Ministry of Power (MoP), Government of India (GoI) and registered as a Public Limited Company in July-88 under the Companies Act, 1956. The Equity of company is shared between GoI and GoUP in the ratio of 75 : 25. THDCIL was conferred 'Mini Ratna–Category-I Status in Oct-09 and up-graded to Schedule 'A' PSU in July-10 by the Govt. of India.

THDCIL was constituted with the sole objective to develop, operate & maintain the 2400 MW Tehri Hydro Power Complex and other Hydro projects. The 2400 MW Tehri Hydro Power Complex comprises of (1) Tehri Dam & HPP (1000 MW), (2) Koteshwar HEP (400 MW) (3) Tehri PSP (1000 MW).

The Memorandum and Articles of Association of the Company has been modified on 31st Aug-2010 to reflect the current business reality of projects outside Bhagirathi valley. The object clause of Company has been amended to incorporate development of Conventional / Non-conventional / Renewable sources of Energy and River Valley Projects.

Presently, THDCIL has a portfolio of 13 projects (Hydro, Thermal, Wind & Solar), totalling to an installed capacity of 5,539 MW, which includes 1513 MW Operational and balance under various stages of development / implementation. In addition, a number of Projects in the country are in the business development stage.

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

The 1000 MW Tehri HPP was commissioned by THDCIL in 2006-07. The Tehri HPP (1000 MW) is a multipurpose project, providing electricity to the Northern Region, Irrigation benefits to Uttar Pradesh, and Drinking Water to NCT of Delhi and Uttar Pradesh. Due to regulated releases from the Tehri storage reservoir, the existing downstream Hydro projects of the State are also benefited by way of augmentation in generation at no additional cost to them.

The 400 MW Koteshwar HEP, downstream of Tehri was commissioned in 2011-12. The 1000 MW Tehri Pumped Storage Plant, which is under construction and scheduled to be commissioned in June-22, would utilize the Tehri and Koteshwar reservoirs as the upper and lower reservoir.

In addition to the 2400 MW Tehri Hydro Complex, THDCIL is implementing the 444 MW Vishnugad Pipalkoti Hydro Electric Project (VPHEP) on the river Alaknanda in Uttarakhand, scheduled to be commissioned in Dec-22. THDCIL is also implementing 24 MW Dhukwan Small Hydro Project on Betwa river in Uttar Pradesh, and is under commissioning to be completed by Dec-19. In addition, there are various Hydro Projects of THDCIL under Survey & Investigation / DPR preparation stage.

Government of UP has allotted Khurja Super Thermal Power Project (2 X 660 MW) in Distt. Bulandshahar to THDCIL for implementation. Govt. of India has accorded investment approval for Khurja STPP for Rs. 11084.42 Cr. and Amelia Coal Mine for Rs. 1587.16 Cr. on 7th March-19. Hon'ble Prime Minister has also laid foundation stone of the Project on 9th March-19.

Towards diversification of the company into Renewable Energy areas, THDCIL has commissioned 50 MW Wind Power Plant at Distt. Patan, Gujarat in June-16 and 63 MW Wind Power Plant at Devbhumi Dwarka, Gujarat in Mar-17. THDCIL has 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 and Power Sales Agreement (PSA) with KSEB for development of 50 MW Solar project in Distt. Kasargod, Kerala, which is scheduled to be commissioned in 2020. Further, THDCIL has also diversified to provide specialised Consultancy services in the Power Sector.

Government of Maharashtra has entrusted Pumped Storage Scheme (PSS) namely; Malshej Ghat (700 MW) to the Joint Venture of THDCIL & NPCIL for updation of DPR and subsequent implementation, if found viable. DPR for Malshej Ghat has been submitted and its Implementation Agreement is to be signed with Govt. of Maharashtra, for which consent of GoMH is awaited.

Under India-Bhutan Co-operation in Hydro Sector development, MoP allotted two Projects namely Sankosh Storage Project (2560 MW) for updation of DPR and Bunakha HEP (180 MW) in Bhutan for up-dation of DPR and subsequent implementation on Inter-governmental Authority Model / JV with Bhutanese PSUs. THDCIL has updated DPR of Sankosh HEP (2585 MW) and Bunakha HEP (180- MW) in Bhutan. Finalisation of Modalities for execution of Sankosh HEP and Bunakha HEP is under process.

The Company has an authorized Share Capital of Rs. 4000 Cr. Paid up Capital of the Company is Rs. 3654.88 Cr. as on 31st March-19.

The Company is consistently profit making since commissioning of Tehri Dam & HPP in the year 2006-07. THDCIL's Net Profit and Dividend paid to the Share holders during last five years is summarized as under:

Year	2014-15	2015-16	2016-17	2017-18	2018-19
Net Profit (Rs in Cr.)	691.15	809.02	711.23	778.74	1251.60
Dividend Paid (Rs in Cr.)	140.00	162.00	221.00	256.10	423.12

THDCIL has obtained following ISO Certification –

- ❖ ISO 9001 : 2015 Certification (Quality Management System)
- ❖ ISO 14001 : 2015 Certification (Environment Management System)
- ❖ OHSAS 18001:2007 Certification (Occupational Health and Safety Management System for Corporate Office, Rishikesh, Tehri HPP, Tehri PSP, Koteshwar HEP, Vishnugad Pipalkoti HEP and Dhukwan SHP).

Looking Ahead:

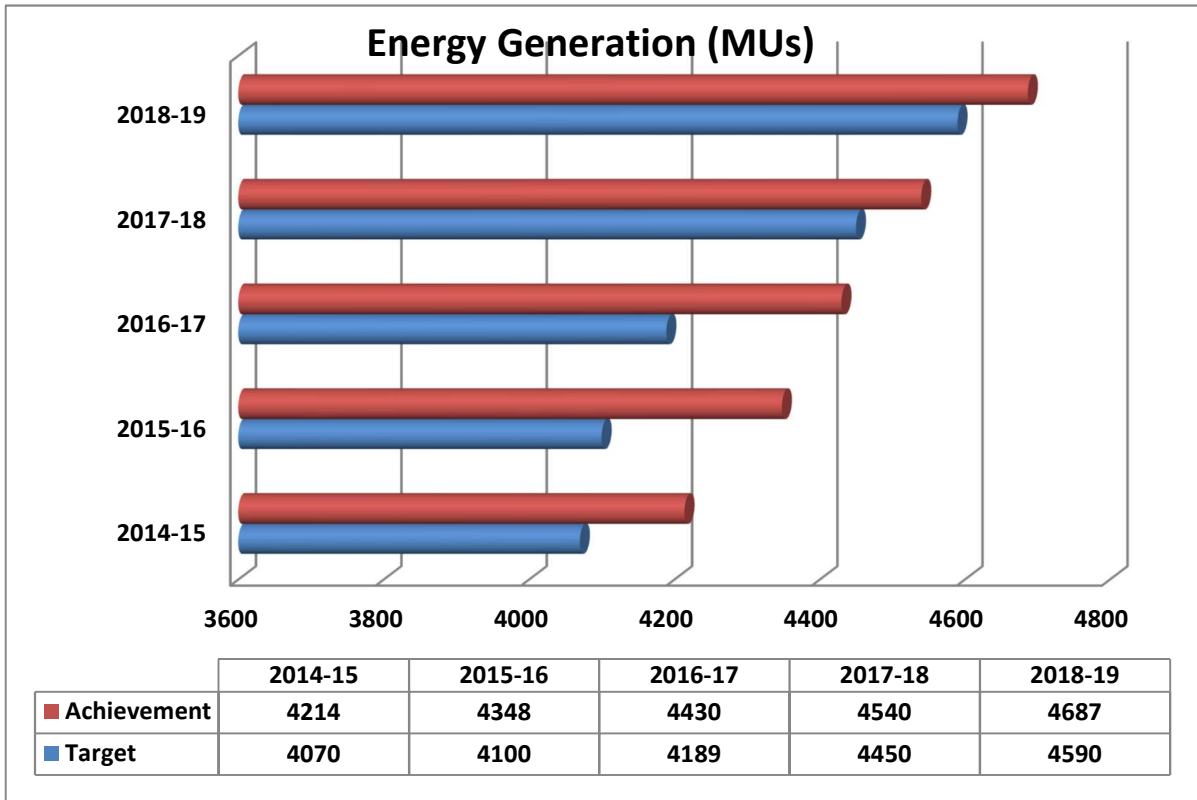
- Further, THDCIL has planned to commission Projects of 3038 MW installed capacity during 2019-24 :

1. Tehri PSP	-	1000 MW
2. Vishnugad Pipalkoti HEP	-	444 MW
3. Dhukwan SHP	-	24 MW
4. Renewable Energy Projects	-	250 MW
5. Khurja STPP	-	1320 MW
TOTAL	-	3038 MW
- THDC envisages to have installed capacity of 4551 MW by 2024.
- Recently, Power Sale Agreement (PSA) for another 5-10 MW Solar Power Plant in the same Solar park in Kasargod, Kerala has been signed with KSEB on 25th Sept-19.
- MNRE on 26th July-19 has assigned the state of Uttar Pradesh to THDCIL for the development of Ultra Mega Power Projects under existing solar Park of MNRE. UMREPPs are to be developed through an SPV in the form of a JV Company between THDCIL and Uttar Pradesh New & Renewable Energy Development Agency (UPNEDA). The capacity of UMREPP is expected to be in the range of 2000 MW. Draft MoU, Memorandum of Association and Articles of Association for the incorporation of JV Company with equity participation of THDCIL and UPNEDA in the ratio of 74:26 is under process by UPNEDA to get Cabinet nod from GoUP. Director (UPNEDA) has requested all DMs of Bundelkhand region to identify suitable land for the development of UMREPPs. In addition, identification of land in Allahabad District is also under process.
- To explore the possibility / viability of Floating Solar Power Plant on THDC's Koteshwar Reservoir, SECI conducted visit of Koteshwar Project in May-18. Further decision shall be taken according to viability report of SECI.
- THDCIL is also exploring possibility of developing solar power projects on the land available with UPID on canal embankments, canal tops and adjacent to barrages etc.
- THDCIL is also exploring possibilities of development of Hydro Electric and Pumped Storage Schemes and Renewable Energy Schemes in other States, as well as neighbouring countries, viz; Bhutan etc.

3.3 Energy Generation Statistics

Operational projects of THDCIL Generated 4687 MU* Energy during 2018-19 against annual target of 4590 MU. This Generation is 3.14% higher than Generated during 2017-18.

Free Energy to the tune of 379.74 MU amounting to Rs. 167.67 Cr. from Tehri HPP (1000 MW) and 145.98 MU amounting to Rs. 57.45 Cr. from Koteshwar HEP (400 MW) was provided to the Home State of Uttarakhand during the 2018-19.



* includes 291 MU Wind Energy.

3.4 Key Business Locations / THDCIL Projects

S.N	Projects / State	Ins. Cap. (MW)	River / Basin	Remarks
Hydro Electric Projects				
A Uttarakhand				
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 Jun-22
4	Vishnugad Pipalkoti HEP	444	Alaknanda	Under implementation. Funding by World Bank. Expected Commissioning Dec-22
5	Jhelam Tamak HEP	108	Dhauliganga	DPR submitted to CEA. CEA on 8 th Aug-19 informed that "In view of the revised e-flow release as notified in the Gazette notification dt. 8 th Oct-18, project is technically not viable for the IC of 108 MW. Further, project is included in the list of 24 HEP's under review by Hon'ble Supreme Court and fate of the project will depend on the decision of the Hon'ble Supreme Court. Thus, DPR of JhelamTamak HEP (3x36 MW) is hereby deemed returned and all the partial clearances issued till date are rescinded. The DPR may be re-submitted with revised IC as per the New guidelines of CEA issued in January 2015 namely "Guidelines for Formulation of DPR for HE schemes, their acceptance for Concurrence."
6	Bokang Bailing HEP	200	Dhauliganga	Preparation of DPR under progress shall be completed by Dec-20.
B Uttar Pradesh				
8	Dhukwan SHP	24	Betwa	Under construction, PPA signed with UPPCL. Project is expected to be commissioned by Dec-19.
C Maharashtra				
9	Malshej Ghat PSS	700	Kalu	DPR Prepared. Signing of Implementation Agreement is pending for approval of Govt. of Maharashtra.
D Bhutan				
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.
Thermal Project- Uttar Pradesh				
11	Khurja STPP	1320		Under implementation. Expected Commissioning Sep-23
Solar Project- Kerala				
12	Solar Power Project	50	-	Power Sale Agreement was signed between KSEB & THDCIL on 16 th Jan-19. Work of 50 MW (AC) Solar PV Power Plant has been awarded on 8 th Aug-19. Project is scheduled to be commissioned in 2020.
Wind Power Project- Gujarat				
13	Patan Wind Power Project	50	-	Commissioned in 2016-17 (under operation)
14	Dwarka Wind Power Project	63	-	Commissioned in 2016-17 (Under operation)
Total		5719		
Coal Mine Project- Madhya Pradesh				
Amelia Coal Mine		-	-	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 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. As per Articles of Association of the Company, 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.

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

The Board of Directors is entrusted with the ultimate responsibility of the management, general affairs, direction and performance of the Company. The Board of Directors function in accordance with the Powers delegated under the Companies Act, 2013, AoA, DPE and other guidelines issued by the Government of India from time to time as may be applicable on the Company.

Systems are in place for Strategic Planning, Risk Management, Financial Plans and Budget, Integrity of internal controls and reporting, Communication Policy with emphasis on transparency and full disclosures on the various facets of the Company's Operation, its functioning, financials and total compliance with all regulatory requirements not only in letter of law but also in the spirit.

The Board of Directors of THDCIL comprises of Chairman and Managing Director, Functional Directors, Govt. Nominee Directors and Non-official Part Time Directors (Independent Directors). The Powers delegated by Board of Directors to CMD are further sub-delegated to various executives with the concept, intent and purpose that it will effectively contribute to the smooth, expeditious and efficient implementation of company's laid down goals and targets within set policy framework. THDCIL has also prepared and implemented standard Policies and Procedures for procurement of goods and services with a view to make procedures more systematic, transparent and easy to administer with major thrust on expeditious and decentralized decision making coupled with accountability and responsibility.

Presently, THDCIL has three Sub Committees of Board as under:

- Audit Committee
- Remuneration Committee
- CSR and Sustainability Committee

Independent Directors, Functional Directors and Govt. Nominee Directors serve on these Committees and one of Independent Director 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 2018-19 of THDCIL. Annual Report 2018-19 is available on THDCIL's website (<http://thdc.co.in>)

Details of Board Meetings during the year 2018-19

SN	Date of Board Meetings	Strength of Board	No of Directors Present
1.	May 15, 2018	8	8
2.	August 10, 2018	9	8
3.	September 28, 2018	8	7
4.	November 13, 2018	8	7
5.	February 27, 2019	8	7
6.	March 15, 2019	8	6

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 J. Behra, Director (Finance)
3. Smt. Rashmi Sharma, Company Secretary

4.3 Governance

Governance involves a set of relationship between Company's Management, its Board, its Shareholders and Stakeholders. THDCIL believes that Corporate Governance should involve empowerment and accountability of the Management, while remaining proactive to the Government Policies.

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 builds an environment of trust and confidence among all the constituents. THDCIL's management is taking all possible steps to fulfill its commitment in a judicious, fair 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.

A clear definition of roles and division of responsibility between the Board and the Management is necessary to enable the Board to effectively perform its role. There are well documented and widely circulated 'Delegation of Powers', which define the powers of the Board and the powers sub-delegated to the Executives in the hierarchy.

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 behaviour 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 for Directors and employees to report to the management concerns about unethical behaviour, actual or suspected fraud or violation of the company's code of conduct or ethics policy. It also provides safeguard against victimization of employees, who avail the mechanism and for direct access to the Chairman of the Audit Committee. No personnel have been denied access to the Audit Committee. The mechanism for prevention of frauds is also included in the policy.

- It provides necessary safeguards for protection of employees from victimization, for whistle blowing in good faith.
- An employee who knowingly makes false allegations shall be subject to Disciplinary Action.
- Facilitate highest possible standards of ethical, moral and legal business conduct in the company.

During the year 2018-19, no complaint has been reported under whistle blower policy. Also, there is no opening outstanding complaint from previous year.

4.3.5 Right to Information

In order to promote transparency and accountability, an appropriate mechanism has been setup across the Company in line with RTI Act, 2005. The Company has taken concrete actions to provide information to the Citizens of the Country by online linking of RTI application, appeals and reply with "RTIMIS Portal" to comply with RTI Act 2005. Nodal Officer (NO) / First Appellate Authority (AA) / Central Information Officer (CPIO) / All Public Information Officers (PIOs) and Assistant Public Information Officers (APIOs) are linked to this portal for receiving application and providing information online. THDCIL's Official website contains information as required, published under Section 4(1)(b) of the Act. Particulars of Nodal Officer (NO) / First Appellate Authority (FAA) / Central Information Officer (CPIO) / All Public Information Officers (PIOs) and Assistant Public Information Officers (APIOs) of the Corporation and all related formats for seeking information, submission of appeal to the First Appellate Authority are available on the THDCIL website- <http://thdc.co.in>

Application / Appeals received manually and online from the information seekers are dealt with as per the provision contained in RTI Act, 2005 and prompt action is taken on their disposal.

Highlights 2018-19 :

- During year 2018-19, 136 applications were received from citizens across the Country seeking information of various natures and information was made available to them on time.

- During 2018-19, 12 appeals have been received by the First Appellate Authority. After examination, all the appeals have been disposed off by the Appellate Authority timely.
- 02 Appeals have been filed before Central Information Commission (CIC), New Delhi and same were disposed off by the Commission.

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.

- The procurement process is done mostly through 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 Central 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 procurement 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 (an on-line marketplace) for procurement of both Products & Services. An on-line marketplace (or e-commerce marketplace) is a type of e-commerce site, where products 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 their own criteria.

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. 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 infrastructure / 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 as per guidelines, such as; waving of tender cost and payment of EMD are also being given.

Utmost 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 pre & post award details on THDCIL website.

In F.Y. 2018-19, Procurement worth Rs. 26.34 Cr. has been done. 100% payment to the service providers has been done through e-payment and cashless transaction was implemented.

4.3.7 PROCUREMENT FROM MICRO & SMALL ENTERPRISES

During the financial year 2018-19 THDC has procured goods and services from MSEs constituting 36.27 % of total annual procurement value after excluding the value of items / equipments / services, which are either Original Equipment Manufacturers (OEMs) proprietary equipments and / or not manufactured / provided by MSEs.

The details of the procurements made Micro and Small Enterprises (MSEs) during the FY 2018-19 as required to be disclosed under Micro, Small and Medium Enterprises Development Act, 2006 is as under:

Sl.	Particulars	Figures (Rupees in .Cr) year 2018-19
I	Total Annual procurement (in value)*	26.34
II	Total value of goods and services procured from MSEs (including MSEs owned by SC/ST entrepreneurs).	9.55%
III	Total value of goods and services procured from only MSEs owned by SC/ST entrepreneurs.	0.05
IV	% of procurement from MSEs (including MSEs owned by SC/ST entrepreneurs) out of total procurement	36.27%
V	% of procurement from MSEs owned by SC/ST entrepreneurs out of total procurement	0.19%
VII	Whether Annual Procurement Plan for purchases from Micro & Small Enterprises are uploaded on the official website.	Yes

**This includes procurement of goods and services only.*

Special vendor development program in coordination with Ministry of Micro, Small and Medium Enterprises has also been organized. Annual procurement plan including items to be procured from Micro & Small Enterprises (MSEs) have been uploaded on THDC Website for benefit of MSMEs. Nodal officer on behalf of THDCIL for co-ordination & implementation of procurement policy has been nominated and conveyed to Ministry of Micro, Small and Medium Enterprises & Ministry of Power.

4.3.8 Integrity Pact & Independent External Monitors (IEMs)

THDCIL values its relationships with all its customers and deals with them in fair and transparent manner. In association with Transparency International, THDCIL has positioned an Integrity Pact, which is signed with prospective bidders to enable them to raise any issues with regard to tenders floated from time to time. The Integrity Pact has been implemented in THDCIL since year 2008. THDCIL has adopted Integrity Pact in all its major procurements for goods, works & services. Considering the nature of works in the context of THDCIL, which includes execution of Power Projects. The present threshold limit has been fixed as Rs. 50.0 Cr. for procurement of goods and services and Rs.100.0 Cr. for procurement of works. People of high repute and integrity are appointed as Independent External Monitors to oversee implementation of the said Integrity Pact with the bidders. Presently, a panel of two Independent External Monitors (IEMS) comprising of Sh. M. Deena Dayalan, Ex-Director General (CAG) and Shri B.P Rao, Ex-CMD (BHEL) have been nominated by the Central Vigilance Commission (CVC) to monitor the implementation of Integrity Pact in all tenders above the aforesaid threshold limit.

Highlights 2018-19:-

During the year 2018-19, four quarterly review meetings of Independent External Monitors (IEMS) with the THDCIL's management were held on 3rd Aug-18, 19th Nov-18, 16th Jan-19 & 14th March-19. During these meetings, brief status of ongoing major tenders and progress of works at various on-going projects including critical issues affecting the progress at projects were apprised to IEMS. IEMS also had discussions with project officials regarding compliance of Integrity Pact during execution of works. The suggestions of IEMS panel are being considered appropriately in implementation of Integrity Pact. No complaints have so far been received by the IEMS on any matter, and they have expressed their satisfaction about the progress made by THDCIL in this regard.

4.3.9 Corruption Mitigation:

Vigilance Division of THDCIL, headed by CVO, has a full-fledged department headed by General Manager at Corporate Office and one Vigilance Officer of DGM / Sr. Manager level posted at major Projects.

THDCIL has adopted Preventive and Pro-active approach to create incorruptibility in the functional areas. The strategy of preventive vigilance is drawn and implemented to draw an environment of integrity and to add values to the system for increasing transparency and accountability in the working. The approach to preventive vigilance includes a

combination of measures like review of rules and policies particularly concerning procurement and recruitment, awareness measures and focusing on specific functional areas.

THDCIL is committed for fostering the ethical and corruption free business environment. THDCIL values its relationship with all its contractors and deals with them in a fair and transparent manner. In order to achieve these goals, THDCIL has implemented Integrity Pact in line with the requirement of Central Vigilance Commission and Transparency International India. It establishes mutual contractual rights and obligations to reduce the high cost and effects of corruption. It contains commitment to the effect that neither side will pay, offer, demand or accept bribes, or collude with competitors. Integrity pact also provides a monitoring system that provides for independent oversight and accountability.

THDCIL in its endeavour to eradicate / mitigate corruption, has adhered to utilize leveraging various IT packages as effective tools in THDCIL administration. For preventive vigilance, systemic improvements were recommended to reduce opportunities for corruption. Some new areas, which have potential of corruption have been identified by vigilance and checks in these areas were conducted & systems are being streamlined in consultation with management to bring transparency and curb possibilities of corruption.

1. Identified Areas prone to Corruption:

A detailed corruption mitigation action plan in respect of potential areas of corruption in THDCIL has been prepared and has been taken up for implementation. Few areas have been identified during procurement cycle of services & goods to be vulnerable in terms of possibility of corruption. Following identified areas are related to risk of corruption w.r.t different stages of the procurement cycle associated with various business units of THDCIL:

- (i) During Pre-tendering Stage: Needs Assessment, Planning & Budgeting and Development of specifications / requirements are the prone areas related to risk of corruption.
- (ii) During Tendering Stage: Request for proposal / bid, Bid submission, Bid evaluation and Award of Contract are the prone areas related to risk of corruption.
- (iii) During Post award Stage: Execution of contract and Payment are the prone areas related to risk of corruption.

2. Action Plan for Preventive Vigilance:

Preventive vigilance is the adoption of a package of measures to improve systems and procedures to reduce / eliminate corruption. Preventive Vigilance is comparatively more important, as these are likely to reduce the number of vigilance cases considerably.

Preventive measure / vigilance calls for constant review of rules, procedures and practices etc. which can meet the scope for eliminating corruption. In THDCIL also, more emphasis is given on Preventive Vigilance for combating corruption as well as to have good (organizational) governance. Therefore, to bring awareness, educate and sensitize employees on vigilance & allied matters, various awareness and training programmes are arranged periodically. Some of the preventive measures implemented / adopted by the Company to eradicate corruption / malpractices are as below:

- (a) Awareness is the basic requirement to contain corruption in an organization. Awareness for vigilance helps the organization in many ways. Firstly, it disciplines the public servants in functioning day to day activities by increasing affinity for rules and regulations of the organization. Secondly, it helps to grow our spirit to tame corrupt officials. Thirdly, it helps to check unscrupulous drain out of funds.
- (b) Vigilance Department also takes concentrated effort to study the existing systems and procedures to detect any loopholes for malpractices and recommends appropriate action towards suitable amendment of the same to make the systems and procedures more robust. In doing so, effort is always given about adopting best practices in the company to make systems and procedures more effective, transparent and corruption free. It has also been our consistent endeavour to introduce new systems and procedures to prevent corruption in THDCIL.
- (c) Through proactive vigilance activities:
 - Simplifying rules & procedures
 - Curtailing discretions
 - Improving Transparency
 - Bringing fairness, competitiveness and accountability in the organization
 - Promoting awareness amongst contractors
 - Educating / sensitizing the officials
 - Monitoring of rotation of officials in sensitive posts
- (d) Good Governance: Good Governance simply means the process of making good decisions and their effective implementation. The key attributes of good governance as identified are Transparency, Responsibility, Accountability, Participation and Responsiveness.

3. Systemic Improvement:

Vigilance department carries Routine / CTE type / surprise inspections regularly. The observations / learning from inspections are shared with the management. Based on these feedbacks, various system improvements are initiated by the management. In addition, various circulars for systemic improvements are issued time to time.

Following Systemic Improvements were issued during the period 2018-19:

- (i) It was observed that sometimes definitions of similar work in respect to qualification of bidder were stringent, thereby restricting the number of interested bidders. A Systemic Improvement in respect of less stringent Definition of similar work in line with requirement of work was issued on 2nd April-18.
- (ii) It was observed that, in respect of keeping definition of similar work in PQ criteria for the quantum of work in respect of minimum quantity as well as depth of drill holes were not mentioned in the definition of similar work and the guidelines as laid down under THDCIL Procurement Policy, 2009 in respect of Press Publication of NITs were not being followed. A Systemic Improvement in respect of keeping definition of similar work and adherence to THDCIL Procurement Policy, 2009 Publication of NITs in News papers was issued on 9th May-18.
- (iii) During Surprise Inspection, it was observed that officials were not maintaining the absolute integrity during official tour. A Systemic Improvement regarding to maintain absolute integrity during official tour was issued on 18th May-18.
- (iv) During Surprise Inspection, it was observed that Policy schedule for employee compensation insurance and Public liability insurance was not obtained by contractor in accordance with relevant clauses of contract. A Systemic Improvement related to compliance of contract clauses regarding insurances of employee compensation and public liability was issued on 23rd Aug-18.
- (v) During investigation of a complaint, it was observed that bidder was not considered and disqualified on commercial and technical grounds. The tender committee was wrong in rejecting the techno-commercial bid on account of minor variation in non-technical criteria. Technical specifications in open tender enquiry were kept of a specific Brand / make. A Systemic Improvement in respect of Technical Specifications for Open tender enquiries was issued on 29th Nov-18.
- (vi) During investigation of a complaint, it was observed that PQ criteria for one project in respect of AMC works of main Generating Hydro Power Plants was not in line with other project despite similar nature of work. A Systemic Improvement in framing the PQ criteria in respect of AMC works of main Generating Hydro Power Plants was issued on 30th Nov-18.
- (vii) During investigation of a complaint, it was observed that Tender committee while evaluating the bids of the bidders, did not pay attention to the specific clause of Special Condition of Contract (SCC) of the tender document and recommended to award the work to one of the bidder, who was not fulfilling the requirement of specific clause of

SCC. A Systemic Improvement in respect of requirement of due diligence of committee members during evaluation of bids and to comply with all laid down requirements of the tender document during evaluation of bids before submitting their recommendations to the competent authority was issued on 12th Feb-19.

(viii) During investigation of various complaints on the same matter, it was observed during examination on similar subjects that there is no uniformity in the criteria and conditions in the tender / bid documents notified by different offices / projects of THDCIL. Two Systemic Improvements in respect to develop uniform and standard criteria to be followed by all offices / projects were issued on 12th Feb-19 & 13th Feb-19.

4 Training Course(s) Conducted in Vigilance awareness:

- Training programme on, “Proactive Leadership in Vigilance Investigation” conducted by Sterling Institute of Corporate Conferences & Events, Kerala from 22nd May-18 to 25th May-18 was attended by 02 Vigilance officials.
 - Training programme on “Preventive Vigilance” conducted by HRD, Rishikesh for executives was held at Tehri Project on 18th June-18 & Koteshwar Project on 1th June-18.
 - Training programme on “Vigilance-An Eagle Eye to Curb Corruption” conducted by Delhi Productivity Council, New Delhi from 24th Sept-18 to 28th Sept-18 was attended by 03 Vigilance officials.
 - Training programme / Workshop on “CTE & CTE Type Inspections” by Sh. Ramesh Chandra (Ex-CTE, CVC) was held for executives at VPHEP from 11th Oct-18 to 12th Oct-18.
 - Training programme on “How can Vigilance help in the Productivity of the Organization” conducted by Delhi Productivity Council, New Delhi from 17th Dec-18 to 21st Dec-18 was attended by 02 Vigilance officials.
5. Agreed List & List of Officers of Doubtful Integrity for the year 2018-19 has been prepared. None of the Executives figuring in these lists have been working in sensitive post. Exercise to identify sensitive post in THDCIL has been conducted by the Vigilance Deptt. in consultation with the Management. Executives from sensitive posts have also been transferred to non-sensitive post. CVC guidelines on rotation of officials from sensitive posts are being implemented in THDCIL.

4.3.10 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 on Quality Assurance
 - On-line Billing System
 - e-Office.
 - On-line Drawing and Document Management System

5.0 Our Stakeholders

Our Mission includes ***'To build 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 endeavours. 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 overall 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 results 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 (EMP) by making these documents public through THDCIL's website display in Public Information Centres & 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 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 company. 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.

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 as a whole. 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 / Beneficiaries,
- 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 relation 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.

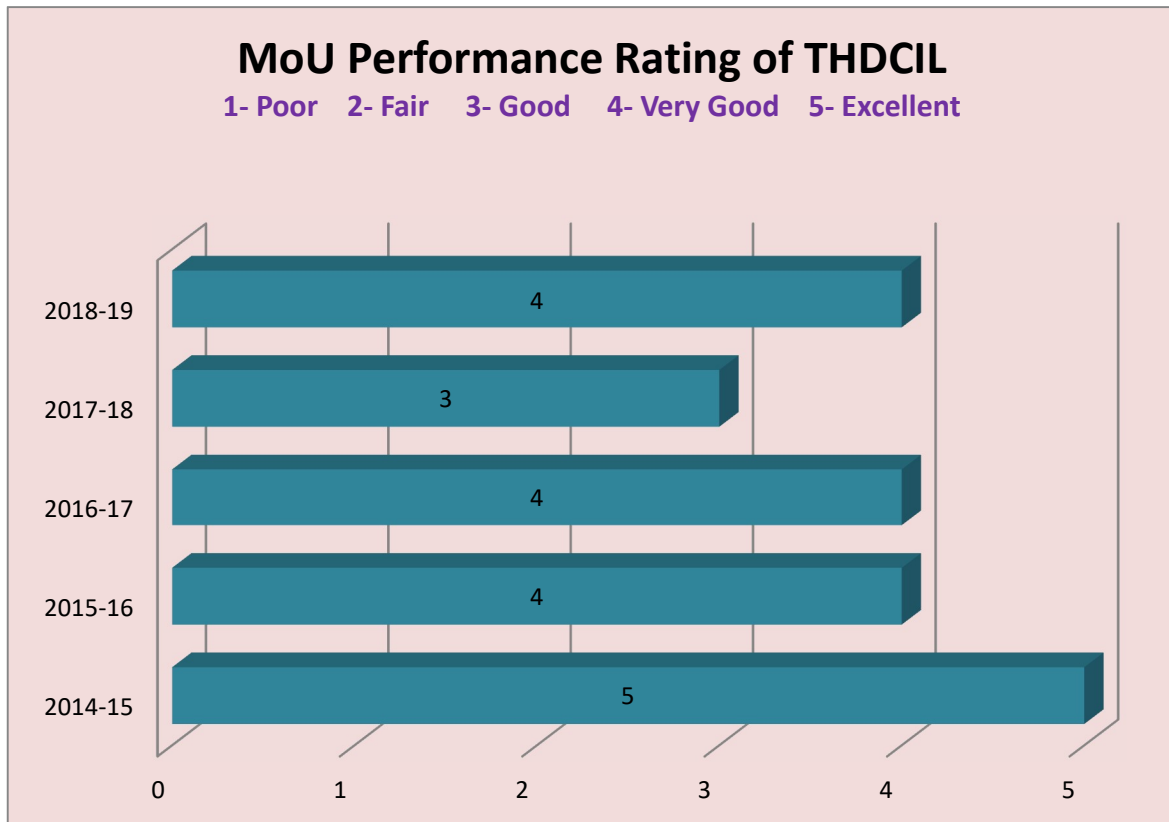
5.2 Stakeholder Engagement Summary

STAKEHOLDERS	MODE OF ENGAGEMENT	REGULARITY
Government and Statutory bodies	<ul style="list-style-type: none"> ✚ Signing of MoU ✚ Correspondence ✚ Annual Report ✚ Meetings ✚ Presentations ✚ Site Visits 	<ul style="list-style-type: none"> ✚ Annually ✚ Round the year ✚ Annually ✚ As and when required ✚ As and when required ✚ As and when required
Employees	<ul style="list-style-type: none"> ✚ Publication of Magazines ✚ Grievance Redressal Mechanism ✚ Circulars and Officer Orders ✚ Communal Programmes 	<ul style="list-style-type: none"> ✚ Quarterly, Annually, Half-yearly ✚ Round the Year ✚ Round the Year ✚ Round the Year

	<ul style="list-style-type: none"> ✚ Feedbacks ✚ Suggestion Mela 	<ul style="list-style-type: none"> ✚ Round the Year ✚ Annually
Customers	<ul style="list-style-type: none"> ✚ Signing of PPAs ✚ Feedback survey ✚ Meetings ✚ Correspondence 	<ul style="list-style-type: none"> ✚ Well before commissioning of any Project ✚ Annually ✚ As and when required ✚ Round the year
Suppliers & Contractors	<ul style="list-style-type: none"> ✚ Tenders ✚ Open Bid Discussions ✚ Policy and Procedures ✚ Meetings ✚ Joint Discussions 	<ul style="list-style-type: none"> ✚ As and when required ✚ With every award ✚ Round the year ✚ Regular basis ✚ Regular basis
Project Affected Persons/ Local and Indigenous communities	<ul style="list-style-type: none"> ✚ CSR Programmes ✚ Meetings ✚ Grievance Redressal ✚ Magazines ✚ Pamphlets / Website Disclosures ✚ Public Information Centres 	<ul style="list-style-type: none"> ✚ Round the Year ✚ As and when required ✚ Round the Year ✚ Quarterly, Annually, Half-yearly ✚ Round the Year ✚ Opened at project sites- Operational Plants
Media	<ul style="list-style-type: none"> ✚ Press Briefings ✚ Invitations to events 	<ul style="list-style-type: none"> ✚ Round the Year ✚ Round the Year
Society at a large	<ul style="list-style-type: none"> ✚ Press News ✚ Notice ✚ Publicity ✚ CSR Programmes ✚ Display on website ✚ Facebook and Twitter Page 	<ul style="list-style-type: none"> ✚ Round the year ✚ Round the year ✚ Round the year ✚ Round the year ✚ Round the year ✚ Round the year

5.2.1 Government and Statutory Bodies: THDCIL is a Joint Venture of Govt. of India and 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.

THDCIL signs MoU with Ministry of Power for Performance Parameters every year, wherein 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 a 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.

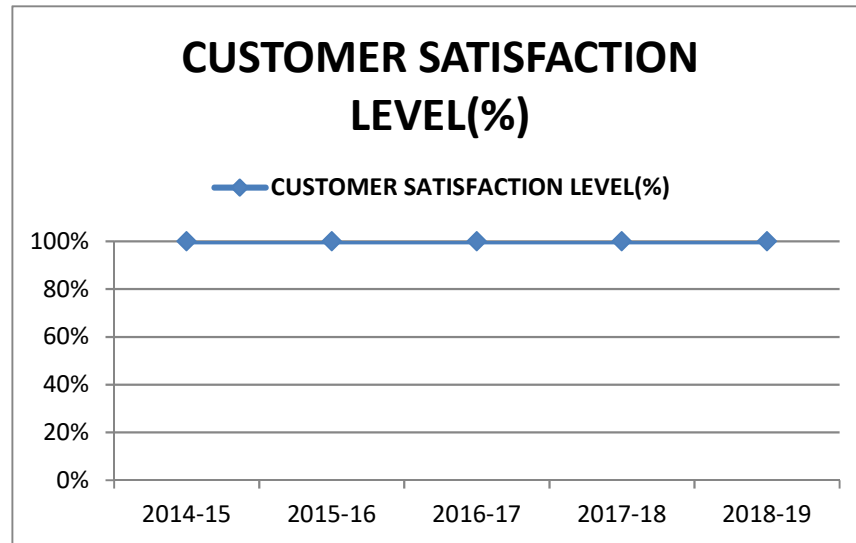
The career growth is through a transparent system with Performance Management Review System in place for the Executives and Annual Confidential Report System for the other employees.

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

5.2.3 Customers: THDCIL provide services to its Customers by supplying Electrical Energy to all the nine States / UTs of the Northern Region, namely; Chandigarh, Delhi, Haryana, Himachal Pradesh, J&K, Punjab, Rajasthan, UP and Uttarakhand. The Hydro Generating Stations of THDCIL provide 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 access to Electricity produced by THDCIL under supervision of Northern Regional Load Dispatch Centre (NRLDC).

To know and understand the expectations of its Customers, survey of 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 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, Consultants and their employees are key Stakeholders in Project Implementation. Concerns of the Contractors are regularly being addressed.

Pre-Bid Conferences are held in all Major Contract Packages, wherein 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 in overall benefit of the Project and the Shareholders.

5.2.5 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.

5.2.6 Project Affected Persons / Local and Indigenous Communities: THDCIL has a mission “**To undertake Rehabilitation and Resettlement of Project Affected Persons with human face**”.

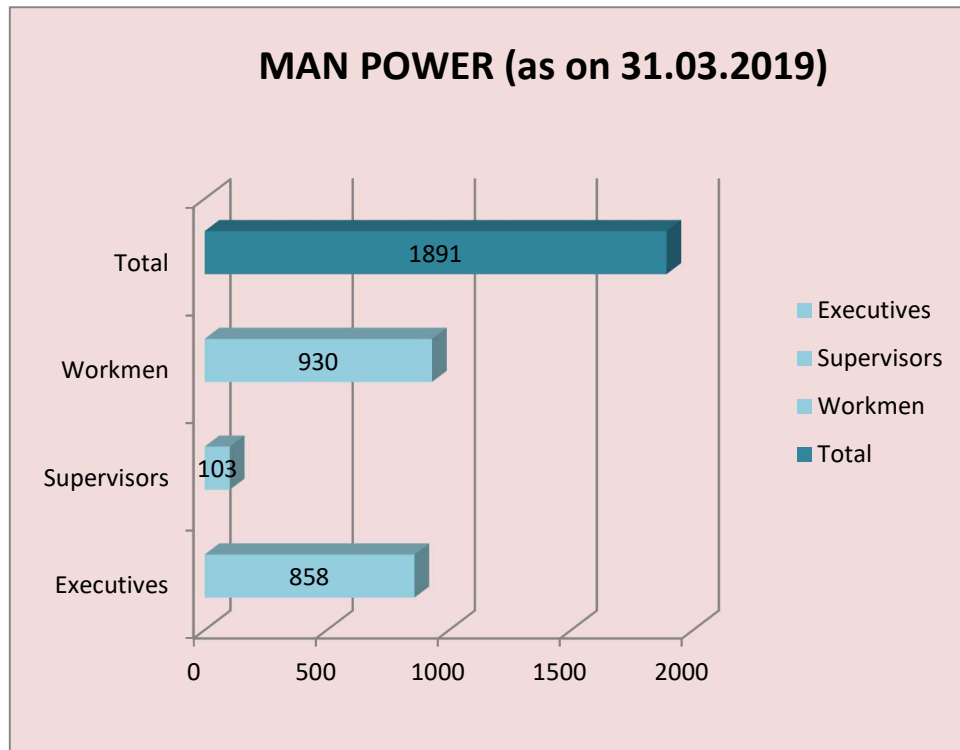
Tehri Project involved huge submergence and consequential large scale displacement. Rehabilitation and Resettlement (R&R) of nearly 15000 families has been carried out with a human face. R&R cost (including land acquisition, compensations, development of facilities etc.) of Tehri HPP is nearly 18% of the total cost of the Tehri Project. This is one of the highest in the Country for such Projects. In addition, THDCIL is committed towards social upliftment of Rehabilitees. THDCIL is spending approx. 90% of its CSR Fund in Project Affected Region.

The Resettlement & Rehabilitation Policy for VPHEP (444 MW) exceeds provisions laid down in the National Policy on Resettlement and Rehabilitation (2007). In VPHEP, 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.

6.0 Our Employees - Human Resource Management

HRM consists of people related functions as hiring, training, and development, performance review, compensation, safety and health, welfare and industrial relation. (HRM includes such opportunities as employee training, employee career development, performance management and development, coaching, mentoring, succession planning, key employee identification and Organizational development) These are typically the functions of Personnel Management, also 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, HR executives formulate and implement business strategies. The very concept of HRM signifies that role of executive is elevated from an administrative level to that of the board.

6.1 Human Resources



THDCIL has a strong work force base of 1891 employees as on 31.03.2019 comprising of 858 Executives, 103 Supervisors and 930 Workmen. The Men-Megawatt Ratio is 1.25 including construction projects. THDCIL has always considered its human capital as its biggest asset, which play a vital role in growth of the Company. Both, Men and Women are treated with equal respect & dignity. It is strictly ensured that all aspects related to human rights are upheld by the Organization.

THDCIL has all along endeavoured to create congenial environment and adopted wage policies at par with other Power Sector Organizations. The Rate of Attrition is negligible in THDCIL.

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.

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, recruits 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 Executive Cadre Recruitments are carried out on All India Basis, whereas Non-Executive Recruitments, viz; Diploma Engineers, ITI holders etc. remains Area / State specific. THDCIL also conduct examinations for filling up Backlog Vacancies in SC, ST, OBC & PWD Category. THDCIL follows 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*
2019-20	68	-
2020-21	86	200
2021-22	80	-
2022-23	90	200
2023-24	87	-

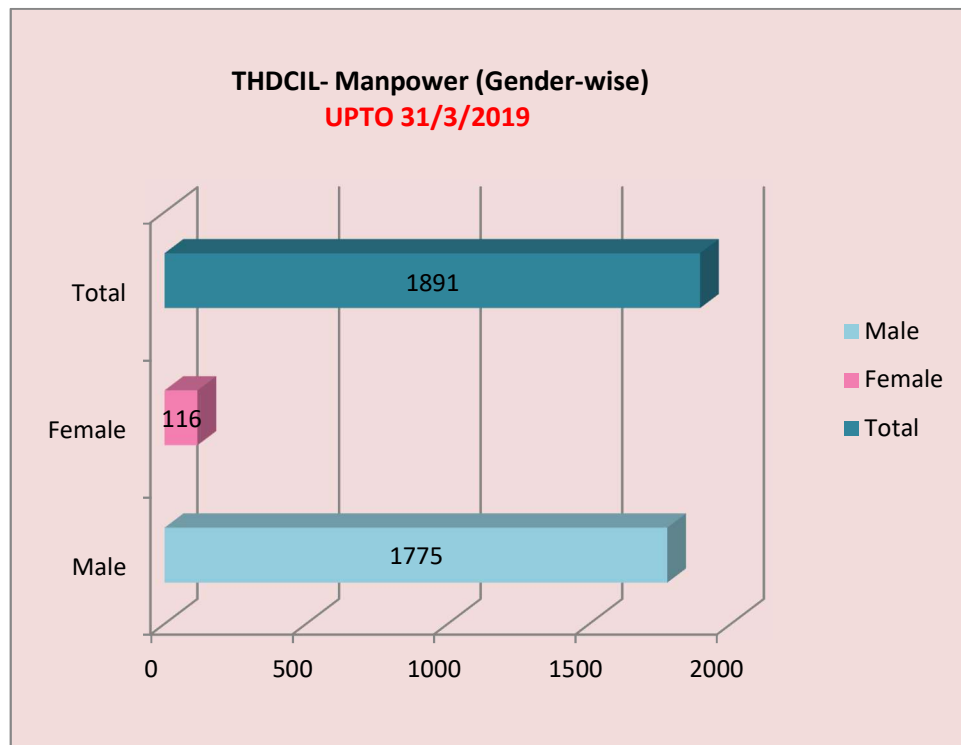
****Proposed Inductions are indicative, depends upon the progress of Construction Projects.***

6.1.2 Gender wise Categorization

THDCIL is an equal opportunity provider and professes gender neutrality. THDCIL follow entire 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 116 women employees as on 31.03.2019 in different categories. They represent 6.13% of the total strength of the Company.

THDCIL has constituted WIPS (Women in Public Sector) and is a member of forum of Women in Public Sector, which is agency under SCOPE. THDCIL has a duly constituted internal complaint committee under Sexual Harassment of Women at Workplaces (Prohibition, Prevention, Redressal) Act 2013.

During the year, no incident of Non-Discrimination has been reported.



6.2 Employee Relations

Cordial Employee Relationship is the driving force behind performance of the Company. The Employee Relation in the Company is founded on mutual trust & respect. Both employees and management complement each other's 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 meetings were organized during the year, wherein issues related 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.

During 2018-19, **Quality Circle Team** from THDCIL bagged the “Par Excellence Award” and two excellence awards, thus proving its mettle in commitment of continuous improvement and content oriented approach.

6.3 WOMEN EMPLOYEE WELFARE:

THDCIL has formed “Internal Complaint Committees” as per Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 reflecting its commitment to provide a safe and caring environment to female employees. The company has also constituted WIPS (Women in Public Sector) committee and is a life time member of WIPS. THDCIL has nominated members of WIPS to attend National conferences. Several training programmes, health and wellness workshops were also organized for women employees.

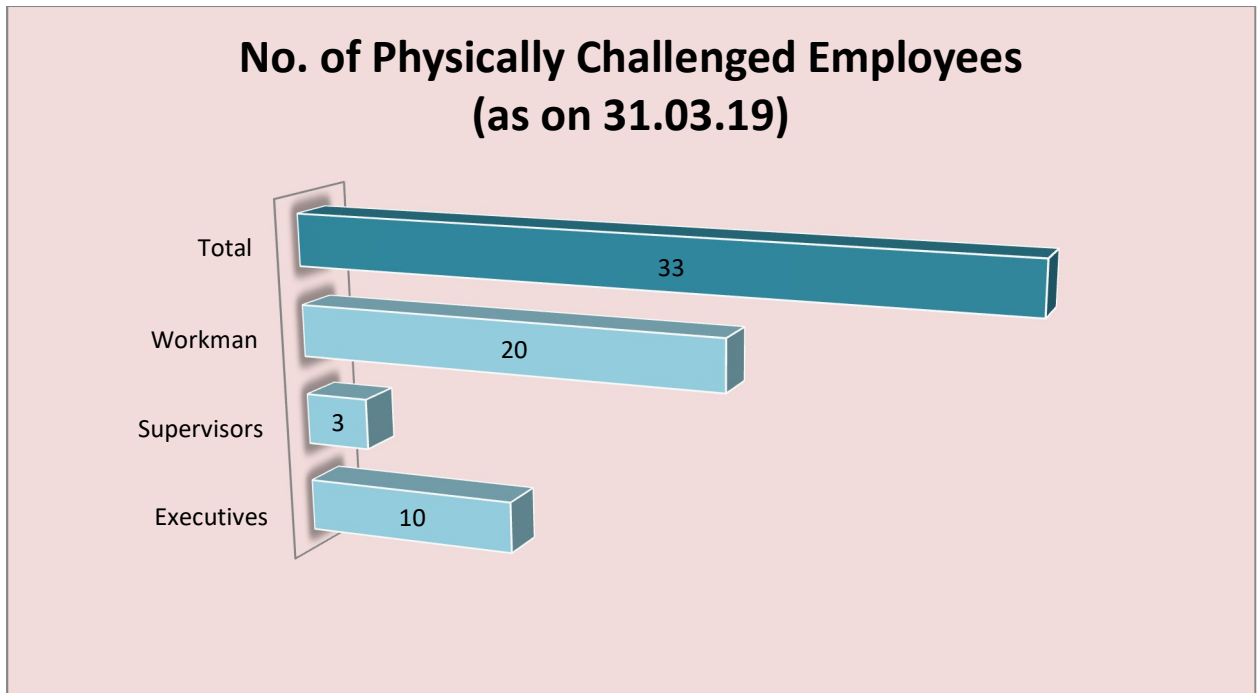
During the financial year 2018-19, the Company did not receive any complaint of Sexual Harassment.

6.4 Persons with Disabilities (different abilities)

With a view to provide equal opportunities in services to the Persons with Disability (PWD), 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 and toilets for physically challenged persons 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, where ever arises. As on 31.03.2019, total strength of the employees in THDCIL 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 its pay packages.

However, present employee benefits include Basic Pay, Dearness Allowance, Perks and Allowances @ 35% of the basic pay under Cafeteria Approach, House Rent Allowance / Lease Accommodation, Provident Fund contribution, Group Saving Linked Insurance, Gratuity etc.

THDCIL provides reimbursement for Medical Treatment of Employees and their dependents. Post retirement medical facility is also available. (Details at Para 6.7.5)

Performance Related Pay (PRP) based on Performance Parameters is 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 Child Care Leave (CCL) for Women Employees

To facilitate women employees for taking care of two eldest surviving children / legally adopted children upto the age of 18 years for rearing or to look after any of their needs like examination, sickness etc. women employees may be granted Child Care Leave (CCL) for a total of 730 days during their entire period of service. CCL will have to be availed in not more than 03 spell in a financial year. One spell should not be of more than 15 days.

6.5.3 Special Child Care Leave on adoption of a Child

This leave is to facilitate employees, having less than two surviving children, to take care of their legally adopted child upto one year of age. Female employees shall be granted Special Child Care Leave on adoption of a child for a period of 180 days from the date of valid legal adoption of child. Male employees shall be granted the Special Child Care Leave on adoption of a child for a period of 15 days, to be availed within a period of 180 days from the date of valid legal adoption. During the period of child care leave, she shall be paid leave salary (Basic+DA) equivalent to the pay drawn immediately before proceeding on leave.

6.5.4 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 month's 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. 4,71,000/-
2. Subject to Maximum of Rs. 14,11,000/-

6.5.5 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 (Executives / Supervisors / Workmen), who dies while in the employment of the Corporation.
- The Scheme covers all employees (Executives / Supervisors / Workmen) 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 employee. The nominated family member(s) of the deceased member employee is paid actual amount so collected from 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 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 THDCIL Employees Defined Contribution 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.

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 / her 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. Service rendered in any other CPSEs prior to joining THDCIL would also be counted for this purpose, provided similar scheme exists 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. 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 Employee's Pension Scheme, 1995:

Employee's Pension is subsidiary scheme of Employee Provident Fund. All Employees are covered under EPS 1995. The contribution of 8.33% of wage (Basic+DA) shall be remitted by the employer to the Employee's pension fund. The maximum wage ceiling under the scheme is Rs. 15000. Employees joined after 01.09.2014 are not covered under this scheme.

6.7.3 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.

6.7.4 Gratuity

For every completed year of service or part thereof in excess of six months, 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. 20 Lakh.

6.7.5 GSLI - Group Saving Linked Insurance Scheme-

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

The brief 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 (Rs.)	Amount payable by LIC in case of accidental death (DAB) (Rs.)	Monthly Premium Payable		
				Risk coverage to be borne by THDCIL (35% + DAB Premium) + Service Tax @12.36% (Rs.)	Saving portion to be borne by individual employees (65%) (Rs.)	Total amount payable to LIC (Rs.)
A	Directors + CMD	8.50 Lakh	17.00 Lakh	390+55.00+55.00	715.00	1215.00
B	Executive E7 to E9	7.50 Lakh	15.00 Lakh	340+50.00+48.00	630.00	1068.00
C	Executive E2 to E6	6.00 Lakh	12.00 Lakh	270+40.00+38.00	510.00	858.00
D	All Employee (Supervisor + Workmen)	5.00 Lakh	10.00 Lakh	230+30.00+32.00	420.00	712.00

Note: Those employees who have joined in the Corporation on or after 31.03.2014 are not covered under this GSLI Scheme. Therefore, to cover all such employees who will be joining thereafter are covered under the offered Group Insurance scheme from LIC and Accidental Insurance from National Insurance Company Ltd.

6.7.6 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.

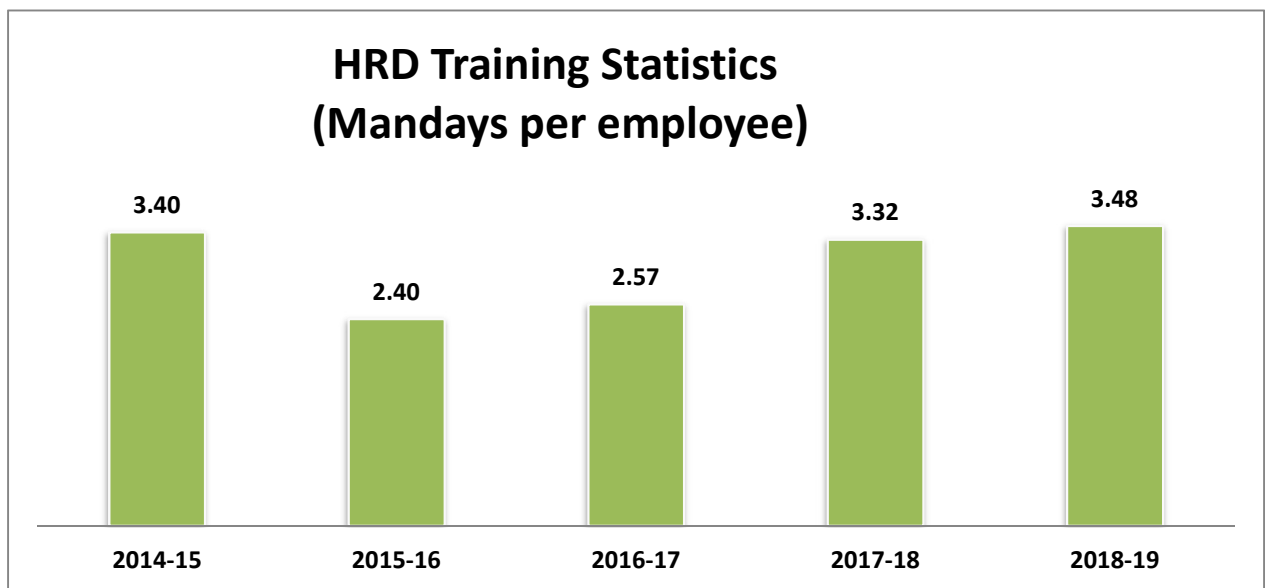
6.8 Trainings and Skill Development of Employees

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 as well, 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 includes classroom training, e-learning, on-the-job training, mentoring etc.

Employee's education and trainings 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 employees are sent to various professional / academic institutes within and outside the country.



Career Development approach adopted by THDCIL - Employees have been broadly 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 requirement is provided to these potential employees converting them into assets. It removes the barriers for Growth. In past, following Career Development Programs were taken up in THDCIL to convert Non- Professionals into Professionals, Unskilled into Semi-Skilled or Skilled Category. Highlights of 2018-19 are as under:

- Upto 2018-19, 10 Employees have successfully completed the one year post diploma in Industrial Safety from RLI, Kanpur.
- Upto 2018-19, 10 Executives were sponsored and pursuing MBA (WX) from IIM Kashipur.

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 identify trainings required to remove the skill gaps, and consequently HR Department organize 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 gap between present competencies and desired competencies.

2018-19 Highlights

During the year 2018-19, a total of 62 dedicated In-house training programmes were conducted for augmentation of Technical, Managerial and Behavioural Competencies, besides floated nomination(s) spanning a total of 6586 Training Man days, against the target of 4000 Training Man days. Average Man days work out to 3.48 for 1891 employees as on 31.03.2019. Besides above, number of executives are nominated for external trainings at reputed institutes / agencies. The program can be categorized as under:

- Executive Development Programme
- Gender Sensitisation programmes / Women empowerment
- 13 weeks O&M Training
- ISO Auditors (lead / internal) Programme.
- Transformational leadership
- Refresher Course on Land acquisition Act
- Vibration analysis and vibration monitoring instruments.
- Experience sharing programme
- Orientation / induction programme of ETs
- Safety Awareness programme
- Programme on CSR, Sustainability and Communication Strategy

Average Mandays of training per year per employees:

Average Mandays of training as per gender and as per employee category in 2018-19				
Category	Male		Female	
	Total Mandays Training	Average per employee	Total Mandays Training	Average per employee
Officers	4170	5.11 (4170/815)	380	8.83 (380/43)
Supervisors	160	1.6 (160/100)	23	7.66 (23/3)
Workmen	1586	1.84 (1586/860)	267	3.81 (267/70)
Total	5916		670	

Programmes on Skill Management and Life Long learning:

Category	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career ending
	Total Mandays (2018-19)
Officers	1180
Supervisors & Workmen	1068

Details of Skill Development/Up-gradation Training Skill Management and Life Long Learning conducted during year 2018-19:

S.N	Name of Program	No. of participants	Duration	Mandays	Type of Training
	Executives				
1	Primavera Training	31	5	155	Skill Development
2	E-Office Training	40	2	80	Skill Development
3	Risk Management at Dhukwan	18	1	18	Skill Up-gradation
4	Risk Management at VPHEP	43	1	43	Skill Up-gradation
5	In DAS	23	2	46	Skill Development
6	Vibration analysis & Vibration Instruments	22	4	88	Skill Up-gradation
7	Mining Technology In India	3	2	6	Skill Up-gradation
8	Boiler water Chemistry & Corrosion Control Techniques	1	2	2	Skill Up-gradation
9	Tunnel Construction In India	2	2	4	Skill Development
10	Tunnelling	3	4	12	Skill Up-gradation
11	Tunnel Engineering	4	3	12	Skill Up-

					gradation
12	Recent Trends on Condition Monitoring In Power Equipments	5	1	5	Skill Up-gradation
13	DAMS INDIA 2108- Storage Dams For Water Security & Sustainable Development	7	2	14	Skill Up-gradation
14	The Observational Approach In Tunnelling Evolvment, Issues & Challenges	2	2	4	Skill Up-gradation
15	Global Energy Transition - Issues & Challenges	2	2	4	Skill Up-gradation
16	Remote Sensing - An Overview for decision Makers	2	4	8	Skill Up-gradation
17	Slope Stabilization Challenges In Infrastructure Projects	2	2	4	Skill Up-gradation
18	Advances & Innovations in Substation Technology Including use of Composite Insulator	2	2	4	Skill Up-gradation
19	Best Practices Study Tour Cum training Program To Kodamparai PSP Plant & Workshop On Grid Stability & Energy Transition Through Pumped Storage Power Plant	2	3	6	Skill Up-gradation
20	Training on GSU Transformer	2	3	6	Skill Development
21	Prospects & Retrospect In Engineering Geology , Geophysics & Instrumentation (EGCON_208)	2	3	6	Skill Up-gradation
22	Power Sector Development - Modern Trends & Innovations	2	2	4	Skill Up-gradation

	At International Level				
23	Wind Power In India	2	2	4	Skill Development
24	Durability of Concrete using Different Cementitious Materials & Quality Control Measures For Hydraulic Structures	2	2	4	Skill Up-gradation
25	Ageing & Life Extension Of Concrete Structure , Corrosion-Water proofing Repairs	1	2	2	Skill Up-gradation
26	Design & construction Hydro Power Projects	4	3	12	Skill Up-gradation
27	Hydro Power Development	4	1	4	Skill Development
28	Protection Of Critical Information Infrastructure In Power Sector	4	1	4	Skill Up-gradation
29	Butter Fly Valve System For Tehri PSP	4	2	8	Skill Up-gradation
30	Latest Investigations , Repair & Rehabilitation Technologies For Dams	2	2	4	Skill Up-gradation
31	Turbine Model Testing	3	3	9	Skill Development
32	Future Of Coal based Power Generation In India	2	2	4	Skill Up-gradation
33	Concrete Construction Materials & quality Control For Hydraulic Structures	2	2	4	Skill Up-gradation
34	Electricals & Mechanicals Aspects Of Hydropower Projects	2	3	6	Skill Up-gradation

35	Geotechnical & Engineering Geology	2	8	16	Skill Up-gradation
36	O & M Experiences in Hydro Power Plant	2	2	4	Skill Up-gradation
37	Laboratory Investigation Of Rock & Geotechnical Instrumentation In Hydroelectric Projects	2	2	4	Skill Up-gradation
38	Accelerating Sustainability Through Hybrid Renewable Energy Development	1	2	2	Skill Up-gradation
39	Protection For Protection System Engineers	2	3	6	Skill Up-gradation
40	GIS - GIB	6	12	72	Skill Development
41	GCB ,RDS , BS	6	12	72	Skill Development
42	Control & SCADA	7	12	84	Skill Development
43	Governing System	6	12	72	Skill Development
44	Generator Motor	8	12	96	Skill Development
45	Turbine	6	12	72	Skill Development
46	Main Inlet Value (MIV) i.e Spherical Value	7	12	84	Skill Development
Total		307		1180	
S.N	Name of Program	No. of participants	Duration	Man days	Type of Training
Non-Executives					
1	Communication & Presentation Skill	28	2	56	Skill Development

2	Saving Power Through Efficient Use Of Modern Technology	20	7.5	138	Skill Up-gradation
3	Excitation & Generators	27	2	54	Skill Up-gradation
4	13 Week O&M Training	12	13 Weeks	780	Skill Development
5	O&M Training	20	2	40	Skill Up-gradation
Total		107		1068	

Training on Policies and Procedures concerning aspects of Human Rights:

Level	Total Employees (2018-19)	Total Man days of Employee training on Policies and Procedures concerning aspects of Human Rights relevant to Corporation	Percentage of Employees Trained (2018-19)
Executives	858	265	30.8%
Supervisors & Workmen	1033	330	31.9%

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

S.N	Name of Program	No. of participants	Duration	Man days
Executives				
1	Safety Awareness Program	42	1	42
2	Electricals Safety	2	1	2
3	Electricals Faults & Arcc Flash Hazards	2	2	4
4	DIA Integration with EIA	2	3	6
5	Electrical Safety At Workplace	2	1	2
6	Earthquake & Dam Safety	1	2	2
7	Modern Trends & Accident Prevention On Distribution & Power Transformers	1	2	2
8	Industrial Electrical Safety With Arc Flash NFPA 70	1	2	2
9	Advanced Electrical Safety For Industrial Installations	1	2	2
10	Underground Facilities For Better Environment & Safety : Issues & challenges	1	2	2

11	Safety Awareness On Site Every yearly Program (Jhansi)	17	1	17
12	Behaviour Based Safety (As a Part Of Orientation)	49	1	49
13	Building Confidence for self Empowerment -Women Empowerment	18	2	36
14	Health & Stress management	23	3	69
15	Women Empowerment	28	1	28
	Total	190		265
Non-Executives				
1	Health Safety & Environment- I program	20	1	20
2	Health Safety & Environment-II Program	21	1	21
3	Road Safety	36	1	36
4	First Aid and Fire Safety	23	1	23
5	Building Confidence for self Empowerment -Women Empowerment	19	2	38
6	Healthy Body Healthy mind- I Program	16	2	32
7	Safety Awareness	16	1	16
8	Healthy Body Healthy mind-II program	30	2	60
9	Women Empowerment	42	1	42
10	Stress Management	42	1	42
	Total	265		330

Training Course conducted for Vigilance Awareness:

Percentage of employees trained in organisation on Anti- Corruption Policies and Procedure = 17.6% (333/1891*100)

Details of programs based on Anti corruption Policies and Procedures are as under:

S N	Name of the Program	Target Group	Duration	No. of participants
1	Vigilance- An Eagle Eye to curb Corruption	Executives	05 days	1
2	Preventive Vigilance	Non-Executives	01 day	32
3	Eradicate Corruption: Build a New India	Executives	Half day	300
			Total	333

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. Suitable arrangements have been made towards this, viz; dispensaries, Empanelment of reputed Hospitals, periodical Health Check-up Camps, periodical Stress relieving Courses etc. THDCIL is an OHSAS 18001:2007

Accident ▶ Period ↓	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
2017-18	NIL	NIL	NIL	NIL
2018-19	01	NIL	NIL	NIL

(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 requirement, viz; 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 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, fulfil necessary requirements to provide healthy and safe working environment, enhance awareness and concern towards 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 Highlights 2018-19

Tehri HPP & PSP:

- Tehri HPP Safety Committee meetings are held on Quarterly basis. While 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 Operating stations by team consisting of engineers from Design Department, OMS Department and Concerned Project unit before and after monsoon. The inspection is carried out on the basis of checklist format prepared by THDCIL itself in line with criteria fixed by Central Water Commission (CWC), New Delhi and SEED Manual of USBR. Besides inspection by THDC engineers, Tehri HPP has been inspected twice by CWC, New Delhi and once by United States Bureau of Reclamation (USBR), USA, whereas Koteshwar HEP once by CWC.

6.10 Health Care

Various programs for First Aid, Stress Management through Yoga, Occupational Health & Safety, Risk Management etc. have been organized through premier Training Agencies / Institutions during the year 2018-19 to create awareness amongst employees and their families.

The trainings 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.

Health Highlights 2018-19

- Number of Doctors in Hospitals at Projects and Corporate Office – **15**
- Total Number of Nurses in Hospitals at Projects and Corporate Office – **15**
- Total number of Consultations provided to employees / contract workers during 2018-19 – **49113**
- Total number of Consultations provided to local people other than employees during 2018-19 – **18349**
- No. of Ambulance – **05**
- No. of cases, in which Ambulance provided to employees – **244**
- No. of cases, in which Ambulance provided to local people – **62**

Health services (in project affected areas) are being provided through establishing Allopathic Hospital, Homeopathic Dispensaries and by organizing multi specialty health camps. Details are as under:

- I. Allopathic Dispensary:** Established a well equipped Allopathic Dispensary in Deen Gaon area, a remotest part of district Tehri Garhwal, with MBBS Doctor and well trained paramedical staff. The dispensary has facilities like basic pathological tests, X-ray, ECG and Minor Operation Theatre with free of cost medicines including on call ambulance with driver. It caters around 15000 population of surrounding approx. 40 villages. Total OPDs registered during FY 2018-19 are 15450 and since inception are 69109.
- II. Homeopathic Dispensaries:** At present five homeopathic dispensaries are operational. Three in district Tehri Garhwal (Galiyakhet, Dhontri, Koteshwar), two in district Dehradun (Sisham Jhari and village Indranagar, Rishikesh) through Swami Narayan Mission Society, Rishikesh with free of cost medicine facility. These dispensaries collectively have done 85221 OPDs during the FY 2018-19 and 6,60,227 OPDs since inception.
- III. Telemedicine Project:** THDCIL and Dist. Admin, Tehri jointly established 20 Telemedicine centre, first of its kind in Uttarakhand, in different remote locations of district Tehri to overcome distance barriers and to improve access to medical services to distant rural communities. Each Telemedicine centre is connected with a video control room established in Govt. Hospital, Tehri. All Telemedicine centres are equipped with a medical kit (briefcase) having Pulse Oxymeter, ECG Machine, Wi-Fi ECG recorder, X-Ray view box, Glucometer and other essential tools and a comprehensive pathological kit along with an android tablet having list of essential medicines & portable hot spot to facilitate diagnosis, data transfer and communication with district hospital. Such centres are run by a qualified pharmacist or nurse, who acts as an interface between the specialist doctor at control room at District Hospital in Baurari, New Tehri and the patient at village health centre. AIIMS, Rishikesh has also been roped in for specialized consultation. Together, these 20 Telemedicine centre are catering the needs of 100 Gram Sabhas and approx. 56900 people. Since, inception (December 2017) to March 2019, total 17288 OPDs have been registered including 15324 OPDs registered during the FY 2018-19. THDCIL along with Tehri District Admin has been conferred with E-Governance Award by Deptt. of Administrative Reform and Public Grievance under Ministry of Public Grievance and Pension, Gol. in March, 2019.
- IV. Multi specialty Medical Camps:** To cater specific health issues, multi specialty health camps are organized at various locations in convergence with expert agencies.

THDCIL Hospital, Bagirathipuram, Tehri Garhwal : Total 12 camps organised in District Tehri. Total OPDs registered are 2268 (Male - 1029, Female - 1239).

AIIMS, Rishikesh: In convergence with AIIMS, Rishikesh, total 06 no. of health camps are organized, viz; Tehri-2, Koteshwar-2 (Nov 18, March 19) and Rishikesh-

2 (Dec 18 & March 19). Total OPDs registered - 1338 (FY 2018-19). One follow up awareness camp was also organized at Rishikesh by AIIMS, Rishikesh with 102 OPDs.

Nirmal Eye Institute: Total six eye specific camps organized in District Tehri up to March 2019 at Chamiyala, Koteshwar, Lamgaon, Nandgaon, Chinyalisaur and Kamand. Total OPDs registered - 1023 (Male - 521, Female - 502, Cataract surgeries- 202).

Health Camp by Deengaon Dispensary:

One camp was organised at village Gorsada in dist. Uttarkashi. Total OPDs registered- 265 (96 Male, 125 Female & 44 Children).

Health Camps at Jolly Grant: Total three camps have been organized till March 2019. Total OPDs registered - 284.

Singrauli: Two medical camps were organized through “Mishra Polyclinic & Nursing Home” in Project affected village till March 2019. Total OPDs registered - 680.

6.11 DISPOSAL METHOD OF GARBAGE FOR SUSTAINABLE DEVELOPMENT

1. Door to Door collection of organic and dry garbage in colony

One tempo carrier runs on all colony and office roads from 07:30 AM to 11:30 AM in all week days for collection of organic and inorganic garbage. A separation / partition space exists for organic garbage, inorganic garbage and mix garbage space in the Tempo carrier.

2. Segregation of dry and organic garbage from mix garbage at Bio-gas plant

After collection of garbage from all houses and offices in THDCIL premises, tempo carrier gets unloaded on the platform of Bio-gas plant where two labours segregate the organic garbage and inorganic garbage from the garbage mix obtained from all sources. Organic garbage is processed in the Bio-gas plant to produce the Bio-cooking gas which is supplied to the local Aahar canteen.

3. Plastic waste disposal at solid waste management plant

A solid waste management plant has been established on 07.07.2019 under the guidance of solid waste management consultant. The segregated inorganic waste collected from all houses, Guest Houses, and offices in THDCIL premises is being utilized by making the Plastic Bales. There are two sheds constructed for this purpose, one for plastic baling machine (compactor) and other for segregation of plastic material from other type of inorganic waste like broken glasses, lather material and Metallic material.

4. Disposal of unused inorganic waste

After segregation of organic waste and usable plastic waste from total garbage collected, the remaining waste material is disposed off in the ground behind old storage area. This waste is buried under the ground so that no bad smell is spread in the nearby area. The pits are covered with earth after complete filling with un-useful garbage.

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

- Crisis and Disaster Management Plan (C&DMP) of Tehri HPP and Koteshwar HEP has 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 has 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 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 reservoirs resulting in flooding of areas downstream of Koteshwar Dam upto Haridwar. A Mock Drill for flood like situation at Tehri and Koteshwar Dam projects was conducted on 27-28 March-2019 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 pre-planned actions to be followed to minimize property damage and loss of life. The EAP specifies actions to be taken to moderate the problems at Dam site as well as in 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 in advance for safety of downstream population.

A real time inflow forecasting system consisting of eleven number Automatic Weather Stations (AWS) and four G&D stations in the Catchment area of Tehri reservoir with its central earth station (control room) already established at Tehri Dam. 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 hours 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 area of Dam. 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 Triveni Ghat at Rishikesh and two control rooms (at Koteshwar Project and at DMMC, Dehradun). The system is presently operational and regular warnings / messages are being issued.

6.15 DAM SAFETY MEASURES IN THDCIL

The Dam safety programme of Tehri HPP and Koteshwar HEP is quite exhaustive. A comprehensive scheme of instrumentation has been provided in the dam body and its appurtenant structures for assessment & monitoring the Dam behaviour. Inspection galleries provided in the dam body is part of the Dam safety programme and are inspected periodically. Dynamic behaviour of Dam during earthquake, and Reservoir induced Seismicity is also assessed through strong motion and micro seismic networks respectively.

To ensure safe functioning of Dams, pre & post monsoon dam safety inspections are mandatorily performed as per the guidelines of Central Water Commission (CWC) and prevailing practices in other organization. Apart from this, inspection through Central Water Commission (CWC) and other international renowned agencies is also carried out from time to time.

6.16 CONDITION MONITORING OF EM-EQUIPMENT OF TEHRI HPP & KOTESHWAR HEP

To improve availability, reliability, life of machines and performance of plant, condition monitoring and Diagnostic testing of Electro-mechanical equipment of Tehri HPP and Koteshwar HEP is being carried out since 2011-12. In F.Y 2018-19, Condition monitoring work of EM-equipment of Tehri HPP and Koteshwar HEP was conducted and test results have confirmed the healthiness of installed equipments.

6.17 SAFETY AUDIT

External and internal safety audit of all projects are being conducted to identify the area for improvement and deviation from standards, i.e; applicable statutory Acts, CEA-2011, B&OCW Act-1996, Factory Act-1948, OSHAS-18011, IS 14489:1998 and THDCIL SHE manual and other applicable Act as per project safety requirements.

6.18 RESERVOIR OPERATION & FLOOD MITIGATION MEASURES IN THDCIL

Tehri reservoir filling, commences from 21st June every year, and is done as per reservoir rule curve. During filling of reservoir, rule curve helps in filling the reservoir at predetermined rate and keeping reasonable storage space for incoming floods during active monsoon period, so that the regulated / controlled discharge is passed downstream of the dam. The real time inflow forecasting system for Tehri reservoir having its control room at Tehri dam is operational since 2016. The forecasting system is helping in better management of the reservoir. An early warning system (EWS) consisting of speakers / sirens at eight locations in the downstream from Koteshwar dam to Rishikesh has also been established in Dec-2017, which is operated from control rooms at Koteshwar dam and State Emergency Operation Centre, Dehradun. EWS helps to alert / warn downstream population along the river through voice messages and sirens.

6.19 ENGINEERING CONSULTANCY

THDC India Limited has extended its professional expertise to Gol, State Govt. & other Government & Statutory bodies by providing complete engineering solutions in the field of hydro, water resource projects & landslide stabilization. THDCIL has entered in to various MoU's in the field of consultancy in Design & Engineering services. THDCIL has also prepared "Detailed Project Reports for two Hydro Electric Projects in Bhutan" and more than "50 DPRs for Landslide protection / treatment works" in India. THDC has successfully completed the stabilization works of Varunavat Parvat landslide, about 20 locations in parts of Uttarakhand and various locations on the tracks of Mata Vaishno Deviji Shrine, Katra (J&K).

Following are the status of various assignments of slope stabilization being done by THDCIL:

1. THDCIL is involved in Design and Engineering measures for stabilization of vulnerable zones between Katra and Shri Mata Vaishno Deviji Shrine. Out of the 33 identified prone locations, twelve (12) locations have already been treated during 1st & 2nd Phase after Topographical, geological investigations and designing of engineering measures. In March-2016, a landslide occurred near Bhawan area and that damaged the approach track of holy cave and Bhawan. Design Deptt. (THDCIL) has visited site and subsequently issued construction drawings for treatment of damaged slope and track. Construction work for this location has also been completed. For the balance 21 site locations, DPR shall be prepared in next two phases.
2. THDCIL is involved in Engineering consultancy for the Stabilization of Chronic Slide Zones on 20 various Road locations in the Uttarakhand. Out of 20 identified chronic slides to be treated, DPRs for all 20 locations have already been submitted. Out of 20 submitted DPRs, protection / treatment works at 11 locations have already been completed, for which construction drawings were issued by Design Deptt. of THDCIL, and work for balance 9 locations are in various stages tendering process.
3. THDCIL is engaged in Engineering consultancy for the Stabilization of Chronic Slip zone on slope adjoining Raj Bhawan, Nainital for immediate measures (Phase-I), and comprehensive scheme (Phase-II). Protection / treatment works for Phase-I has been completed. DPR for comprehensive scheme (Phase-II) has been submitted to PWD, Nainital for approval of State Govt.
4. Detailed Project Report for protection / treatment and Slope Stabilization works Near Holy Cave for Shri Amarnathji Shrine Board, Srinagar, J&K has been prepared. After topographical survey and geotechnical investigations, engineering measures were designed and accordingly DPR submitted in Dec-2017.
5. THDCIL is engaged in Engineering consultancy for Vetting of the Slope Stabilization DPRs for 5 Locations submitted by M/s WAPCOS to the Government of Uttarakhand. Technical Vetting of all 5 DPRs for locations, i.e; KM-32 Kakragarh, Km-8 (Kalimath), KM-2&3, Km-78 (Gaurikund), and Purnagiri Temple were submitted to PIU (Program Implementation Unit) after THDCs comments and necessary compliance from WAPCOS Ltd.
6. Tambakhani Landslide Zone - Design scheme for long term stability measures, tender drawings, technical specifications, Bill of Quantities and cost estimates for Tambakhani Chute treatment were submitted. Various construction drawings have been issued by Design Deptt. of THDCIL. Construction work is also under progress.

6.20 RESEARCH AND DEVELOPMENT

THDCIL has established a full-fledged Research and Development (R&D) Centre at Rishikesh. Presently, various R&D projects, like Earth quake monitoring stations established around Tehri Region, Condition Monitoring of EM equipment of Tehri & KHEP, Expansion & up-gradation of Micro Seismic Network around Tehri region, Comprehensive solutions for slope stability of road between Zero bridge to Koteshwar and Setting up of satellite based real time inflow forecasting system for catchment area of Tehri Reservoir etc are being carried out by R&D Department in association with other reputed institutions.

In addition to above ongoing projects, following R&D projects have been completed during the financial year 2018-19:

1. **“Vibration Data Analysis of Rotary Machines and auxiliaries for Tehri and Koteshwar”** is aimed at to analyze the vibration data, diagnose them to detect the root cause, check the severity in vibration level, determine run-time to failure of these rotating components and finally determine the preventive measure or design the vibration controller for safe operation.

2. An **Early Warning System** consisting of control rooms at Koteshwar dam and State Emergency Operation Centre, Dehra Dun and Warning sirens at 8 locations in the downstream of Koteshwar dam for dissemination of warning, in case of release of water from Tehri / Koteshwar dam, has been established in association with DMMC, Dehra Dun. Early warning System has been commissioned in December-2017 and is operational presently.

3. **“Development of Self compacting concrete (SCC) for various hydro power structures”**, has also been completed. SCC is very useful at locations where compaction through conventional methods is not possible due to unapproachable sites or heavy & dense reinforcement such as in multi storied buildings, machine foundations and in backfill concrete etc.

Technical research papers have also been written and published / presented in different technical journals / conferences during the year. Based on in-house R&D activities, one technical paper **“Numerical Modeling and Reverse Analysis Method for Optimal Design of PAC & BVC of Tehri HPP”** has been published / presented in the international conference Eurock 2018 held at St. Petersburg, Russia. Besides this, based on outcome of R&D projects being executed in collaboration with expert agencies, 02 technical papers have also been published in various Journals and Conferences during the year.

During year 2018-19, an expenditure of Rs 49.63 Million was incurred on various R&D projects, which is 0.56% against the minimum 0.5% of the PAT for the year 2017-18.

6.21 QUALITY ASSURANCE

THDCIL has an established full-fledged centralized Quality Assurance and Inspection (QA&I) wing for achieving better performance of plant equipment. In this regard, a Model Quality Management System is in force to carry out quality assurance and inspection activities of hydro power projects under implementation for ensuring the quality of each and every equipment in regard to all generating units and its auxiliaries including plant auxiliaries being supplied at site of the ongoing projects (Tehri PSP, VPHEP & Dhukwan SHEP) in accordance with the Model Quality Management System. The quality management system has its role at every stage of equipment, i.e; Preparation of QA&I requirement for tender document, Bid evaluation for QA&I aspect, finalization of Quality co-ordination procedure, sub-vendor approvals, approval of Quality assurance plans, conducting stage and final Inspections, recommendation of Material Dispatch Clearance Certificate (MDCC).

Further, QA&I wing also ensures quality of the work being carried out during installation of equipments at site by regular / periodical inspections at different stages of erection and commissioning of the plants.

Till 31.03.2019, project wise details for vendor approval, QAP and inspections are mentioned below:

Project	Sub-vendors	Manufacturing quality plans	Pre-dispatch inspections
Tehri-PSP	661	91	245
VPHEP	1628	36	74
Dhukwan HEP	226	100	54

THDCIL has obtained following management system certifications till the financial year 2018-19:

- Corporate Office, Rishikesh, Tehri HPP, PSP, KHEP Koteshwar, VPHEP Pipalkoti & Dhukwan SHEP, has acquired certification of ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environment Management System) and OHSAS 18001:2007 (Occupational Health and Safety Management System).
- Corporate IT Department, Rishikesh has acquired the certification of ISMS (Information Security Management System) ISO 27001:2013 in October 2015 through STQC (Standardization, Testing and Quality Certification), New Delhi.

6.22 ENVIRONMENT MANAGEMENT

THDCIL has always adopted the appropriate Environment safeguard measures to avoid, minimize and mitigate the negative impacts on Environment due to its activities at various offices and project fronts.

THDCIL is committed to conserve the natural resources, to protect and conserve the flora and fauna, and to implement best practices at all of its projects. THDCIL aims in proper implementation of the Environment Management Plan for each of its projects. Various measures taken in this regard are as follows:

- A five member Environment and Social Panel of internationally recognized experts has been engaged for monitoring and appraisal of Environment and Social issues involved in the development of 444 MW Vishnugad Pipalkoti Hydro Electric Project (VPHEP). The third visit of E&S panel was conducted in April 2017.
- M/s WAPCOS Ltd., Gurugram, and Indian Council of Forestry Research and Education (ICFRE), Dehradun, have been engaged for independent Third party monitoring of implementation of Environment Management Plan (EMP) and Catchment Area Treatment (CAT) Plan of VPHEP respectively.
- Directorate of Cold Water Fisheries Research (DCFR), Bhimtal, has been engaged for development and implementation of Fishery Management Plan at VPHEP.
- For Wildlife Protection at VPHEP, Camera Traps have been provided to the Forest Department for installation and monitoring at appropriate forest locations nearby the project sites.
- Herbal Garden is being developed in the VPHEP colony over an area of 1800 Sq.M. approx., under the consultancy of HRDI, Mandal Gopeshwar.
- The development of Green Belt at VPHEP is being undertaken under the supervision of noted Environmentalist Sh. Jagat Singh Chaudhary alias "Junglee". A total of 5000 plants have been planted in the project area till now.

THDCIL has been provided with three (03) years extension in the validity of the Environmental Clearance of VPHEP, i.e; up to August-2020, by MoEF&CC, Government of India.

THDCIL is implementing the 1320 MW Khurja Super Thermal Power Plant, wherein various Environment Management and Protection activities envisaged under the EIA-EMP report are to be executed pari-passu with the construction activity.

In order to sensitize people, World Environment Day (WED) is celebrated on June, 5th of every year at corporate office as well as at all project locations.

6.23 IMPLEMENTATION OF RISK MANAGEMENT :

As major Hydro projects are in Himalayan region, thus subjected to Geographical location specific risks. The Company has adapted Risk Management Manual duly approved by the Board. The Manual intends to maintain a uniform & structured Risk Management System in the company at various Power Projects at different stages of implementation.

Risk Management Committee is in place, comprising of members from Project Site as Risk Officer, Project Finance and Corporate Design (Civil & HM) Deptt. for each ongoing construction project and nominated an executive as Corporate Risk Management Officer to monitor the Risk Management Plans being implemented at on-going Projects.

6.24 INFORMATION TECHNOLOGY AND COMMUNICATION

In THDCIL Information Technology is used as strategic tool to improve our overall productivity and efficiency. THDCIL has successfully implemented various software solutions to help in optimum utilization of generating assets, accelerated development of construction projects thereby improving quality, productivity and profitability of the organization. THDCIL has latest Information Technology and Communication infrastructure. All key business functions, viz; Finance, HR, Procurement & Contracts, Inventory, Project Management, Power Plant Operation and Maintenance, Energy Sales and Accounting, Quality Assurance etc. have computerized Systems.

These computerized systems are web based and are being accessed over internet from all locations, viz; Corporate Office, Regional offices, Projects, and Power stations. All locations have dual high speed internet lease lines for uninterrupted access of software applications. Further, for transparency of payments, THDCIL has also implemented web based Bill Tracking Software to track the status of bills submitted by vendors / contractors. Grievance Tracking System is also in place for the public to register their complaints and get the status of their grievances. During the recent past, following value additions were achieved;

- New Website has been developed in open source technology & deployed on cloud environment in NIC, New Delhi. It has many improved features, such as, dynamic look, performance reports of power stations, project wise status reports, success stories of projects, CSR portal etc .
- The FMS application Software was already made Indian Accounting Standard (Ind-AS) compliant. Further, software is continuously upgraded with new features.
- Development of application software for online submittal of “Quarterly Vigilance clearance reports of executives of E8 and above”.
- Implementation of Online PMS for executives up to E7 level and also for E8 and E9.
- Development of application & Implementation of online recruitment of Engineer Trainees through Gate 2018.
- In order to move gradually towards paperless office for improving the efficiency, consistency and effectiveness in the responses from individual / section / department in handling the letters, notes and files, THDCIL has successfully implemented e-Office (Developed by NIC). It will reduce the turnaround time / processing delays and shall establish transparency and accountability at work places. The software has been deployed at NIC cloud, and training has also been provided.

- To secure the IT system and software applications, regular audit of software application and IT infrastructure are being done by CERT-In empanelled Security Auditors. Cyber security awareness workshops are conducted regularly to sensitize employees about cyber security. A session on Cyber security has been organized for new graduate engineer trainees to make them aware of the various aspects of Cyber Security.
- The online Annual Property Return (APR) system has been developed in the HRMS software and implemented. The APR for year ending 2018 has been submitted online.
- The Company has well established multi-point Video Conferencing system for conducting VC among the different project offices and Corporate office.
- Most of the employees have been provided the desktops with latest operating system.
- The new software module in HRMS for Talent management and Exit procedure has been developed and implemented.

6.25 AWARDS AND RECOGNITIONS

THDCIL has been recognized and well appreciated by the Govt. of India and other prestigious organizations & institutions in the form of various awards / accolades in various categories from time to time. THDC endeavours for an all-round growth and the same is reflected in the following of awards and achievements.

- THDCIL has received CSR Innovation & Leadership Award 2019 by PHD Chamber, New Delhi on 01.04.2019.
- THDCIL has received an award for implementation of Telemedicine Initiative of SEWA-THDC in Tehri District.
- THDCIL has also been conferred with “Award for Social Media for PR & Branding” by Public Relations Society on India (PRSI) at its 43 All India Public Relations Conference held at Dehradun w.e.f. 08.12.2018 to 10.12.2018. The award was presented by Sh. Trivendra Singh Rawat, Hon’ble Chief Minister of Uttarakhand to Sh. Vijay Goel, Director (Personnel) on 08.12.2018.
- THDC India Limited was awarded with “CBIP Award 2019” for Best Performing Utility in Hydro Power Sector. The award was presented by Sh. R.K. Singh, Hon’ble Minister of State (IC) (Power, New & Renewable Energy) to Sh.H.L Arora, Ex-Director (Technical) on 04.01.2019.
- THDC India Limited (THDCIL) has been conferred with “Rajbhasha Kirti Award (Second)” for its outstanding contribution in the field of promotion of official language (Hindi) in the financial year 2018-19. THDCIL has been conferred with this award in the segment of PSUs and in the category “A” region in terms of Rajbhasha Implementation. Hon’ble Union Minister for Home Affairs, Govt. of India, Sh. Amit Shah conferred this honour to Sh. D.V. Singh, CMD, THDCIL in the presence of MoS (Home), Govt. of India Sh. Nityanand Rai, Secretary (Rajbhasha), GoI Ms. Anuradha Mishra and on behalf of THDCIL Sh. Vijay Goel, Director (Personnel) and other officers were present .

6.26 “THINK GREEN, GO GREEN’ INITIATIVE”

The Companies Act, 2013 permits companies to send documents like Notice of Annual General Meeting, Annual Report and other documents through electronic means to its members at their registered email addresses, besides sending the same in physical form.

As a responsible Corporate Citizen, Company has actively supported the implementation of ‘Green Initiative’ of Ministry of Corporate Affairs (MCA) and effected electronic delivery of Notices and Annual Reports to shareholders. The copy of Annual Report is also being sent electronically to all stakeholders of the company.

THDCIL has also started Paperless Board in organization since 2016. All Agendas of Board and Board Level Committee Meetings are sent through Digital Mode to all the Directors, which reduced the consumption of paper immensely.

Further, in order to start paperless working in the organization in line with Govt. of India Initiatives, ‘e-Office’ is introduced in 2019 for inter communication between departments of THDCIL.

6.27 PR INITIATIVES AND CORPORATE COMMUNICATION

THDCIL firmly believes in constructive communication and follows innovative and diversified means for engagement of various stakeholders. The key areas of productive interventions during FY.2018-19 are:

Company has developed active and diverse Social Media Assets, viz; Verified Facebook Page, You Tube Channel, Instagram Page, Twitter Handle and these social media tools have been linked with Ministry of Power, PMO, & My Gov.(Citizen Engagement Platform) of Govt. of India. THDCIL also has developed Electronic Magazine (THDCIL Communication Charter) for interesting, informative content sharing together and Bulk Messaging Service for speedy real-time communication with employees. THDCIL also started a new initiative of VOICE CALL SERVICE for communicating important information to employees

THDCIL has been conferred with “Award for Social Media for PR & Branding” by Public Relations Society of India (PRSI) at its 43rd All India Public Relations Conference held at Dehradun w.e.f. 08.12.2-18 to 10.12.2018. The award was presented by Sh. Trivendra Singh Rawat Hon’ble Chief Minister of Uttarakhand to Sh.Vijay Goel, Director (Personnel).

THDCIL has engaged M/s Perfect Relations Private Limited, Delhi for Consultancy Services as Media Consultant for Development & Implementation of Communication Strategy. The Contract successfully completed on 02.11.2018 within the stipulated time frame. World Bank appreciated the role of Communication Team of THDCIL for successful execution of this World Bank Mandate.

THDCIL organized various workshops, viz; Media Workshop for CMD and Directors as well as key Executives of the Corporation. CSR and Community Outreach Workshop for CSR & PR Personnel under Capacity Building and Institutional Strengthening (CBIS).

THDCIL convened Media Round Table, wherein achievements of the Corporation were shared with Media Personnel. The Company also played an important role in wider publicity of major flagship programmes of Govt. of India

THDCIL is a true practitioner of innovative & diversified means of engagement for stakeholders outreach. The key areas of productive interventions of Corporate Communication Team during F.Y. 2018-19 are as under:-

1. **Community Outreach:** - Director (Technical) and Director (Personnel) convened a Media Round Table at Rishikesh on 06.12.2018, wherein they shared achievements of Corporation with Media Personnel. Team Corporate Communication @THDCIL also played an important role in wider publicity of major flagship programmes of Govt. of India
2. **Outline Interview series :** Corporate communication department has initiated Outline interview series "Aaj ki mulakat aap ke saath / Let's Talk.
3. **Visual Content :** Team Corporate Communication aims to increase the Visual Content. More than 12 videos on an average of 01 video per month related to THDCIL Achievements, CSR Interventions, Welfare Initiatives etc. has been made in-house and uploaded on THDCIL Official You Tube Channel.
4. **Publications :** Corporate Communication brought out following publications :-
 - 04 Quarterly issues of House Journal 'Gangavataranam',
 - Rehabilitation and Resettlement-Tehri Dam and Other Hydro Projects
 - THDC Hydro-Tech.
 - Bilingual THDC Profile and Brochures.
 - Book on R&R of Tehri Dam and other Hydro Projects

6.28 SYSTEM OF EXIT INTERVIEW FOR EMPLOYEES IN THDCIL

THDCIL firmly believes the real strength of the company is its employees. THDCIL values its employee force and ensures all out effort to retain and groom the talent. However, employees do leave organization for several reasons, but as a progressive and sensitive company, THDCIL cares for its brand image and considers that employees leaving the organization for any reason whatsoever, act as ambassador in creating brand image of the company. THDCIL has been endeavouring in developing organizational climate conducive for employee development and growth based on employee's perceptions and feedback.

Keeping this in mind, a new comprehensive Exit Interview System has been designed to capture the employees perception and feedback, who leave the services on the ground of resignation, retirement.

Objectives:

- Capture employees perception, impressions and views on various organizational aspects, such as; Job satisfaction, nature of work, Personnel policies and systems, communication systems, interpersonal relationship, value actualization, work culture etc.
- Obtain employee's suggestions and ideas on any aspect of organization's working.
- Obtain feedback from the departing employees about the Company's working.
- Assess the reasons of resignation / separation and identify the areas of concern, so as to initiate corrective measures for higher employee satisfaction and retention.

6.29 PEOPLE CAPABILITY MATURITY MODEL (PCMM)

As per MoU mandate for Year 2018-19 under HRM Parameters, THDCIL had to undergo for Assessment of level in line with People Capability Maturity Model or equivalent and placing before the Board for taking a decision whether to go for upgradation in level and if yes, getting the approval for timeline from the Board. If not, justifiable reasons to be recorded in the Board Resolution.

People CMM Gap Assessment study is the comparison of actual status of implementation of HR practices in THDC with that of Practices and Goals defined in the People Capability Maturity Model® (P-CMM®) developed by CMMI Institute (Carnegie Melon University, USA).

People Capability Maturity Model® Framework (People CMM®) is a tool that helps to successfully address the critical people issues in organizations. The People CMM employs the process maturity framework of highly successful Capability Maturity Model® as a foundation. Based on the best current practices in fields, such as, human resources, knowledge management, and organizational development, People CMM guides organizations in improving their processes for managing and developing their workforce.

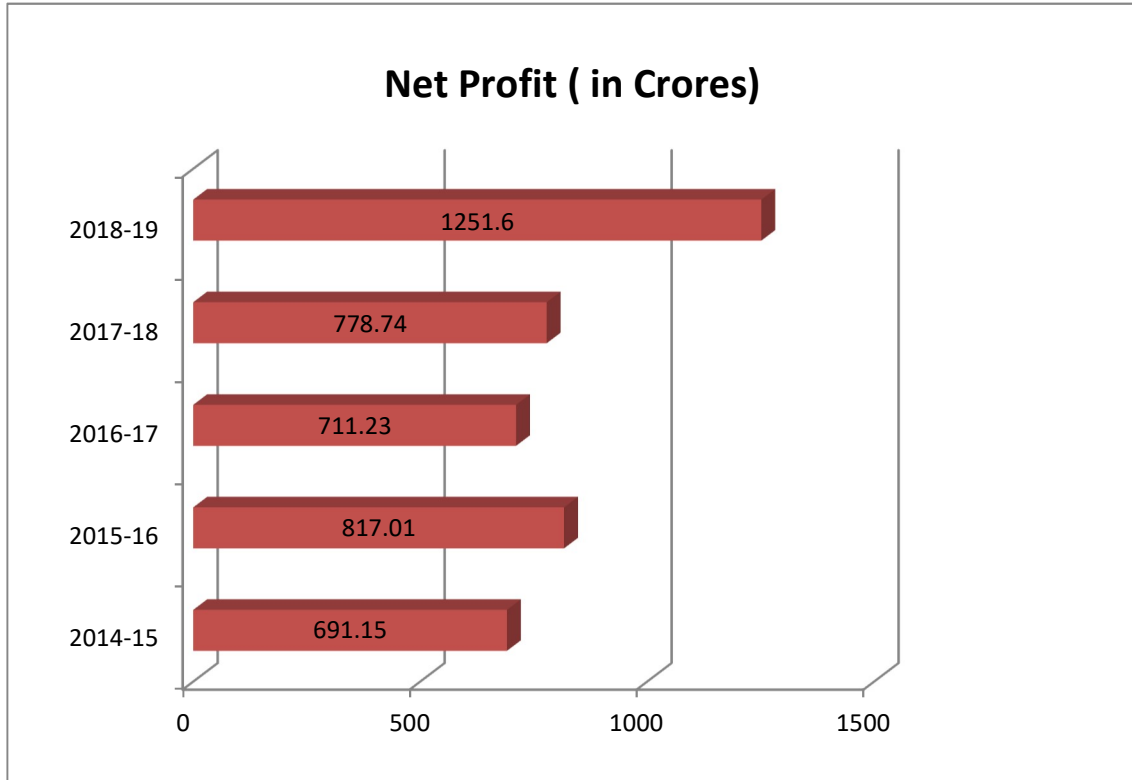
Accordingly, Quality Council of India (QCI), an autonomous organization under Department of Industrial Policy and Promotion, Ministry of Commerce and Industry has conducted the Gap Assessment of THDCIL's HR Practices against the People Capability Maturity Model practices.

On the basis of various parameters, implementation and institutionalization practices, defined in the model, **THDCIL have been declared at Maturity Level 3 (Defined). PCMM Model is having 05 Levels of Maturity; Level-1 being the initial and Level-5 being the Optimizing. Level- 2, 3 & 4 are distinct as Managed, Defined & Predictable respectively.**

Goaded on with the results, THDCIL board has decided for up-gradation to the next higher level of the PCMM in a time frame of 12-15 months. As a part of strengthening the system, M/s Maclead Certifications has been roped in as training partner to strengthen Level 2 & 3 and to prepare for the up-gradation to Level-4. Up-gradation to the **Level-04 (Predictable)** of PCMM is also the part of 2019-20 MoU Target. Assessment for the same is being carried out by QCI, which is likely to be completed by Feb-2020.

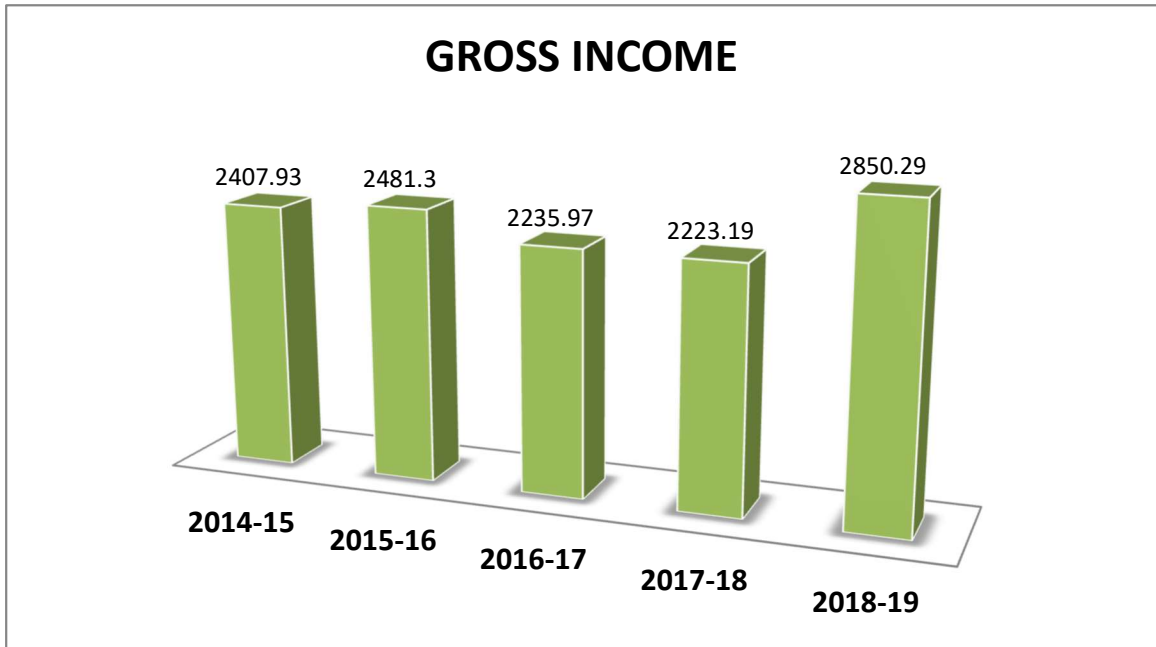
7.0 Sustainable Development Performance: Economic

THDCIL has been contributing in its own small way, towards growth of Economy of 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. having a strong financial base. THDCIL values financial interest of all its Stakeholders 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 profit earned by THDCIL is paid back as dividend to Shareholders. The paid-up Equity capital of THDCIL as on 31.03.2019 is Rs. 3654.88 Cr. 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 tax on purchase of goods and services, creates direct and indirect employment and stimulates the local economy. THDCIL also provides 12% free power to Home State (Uttarakhand) for its Operational Hydro Power Plants.

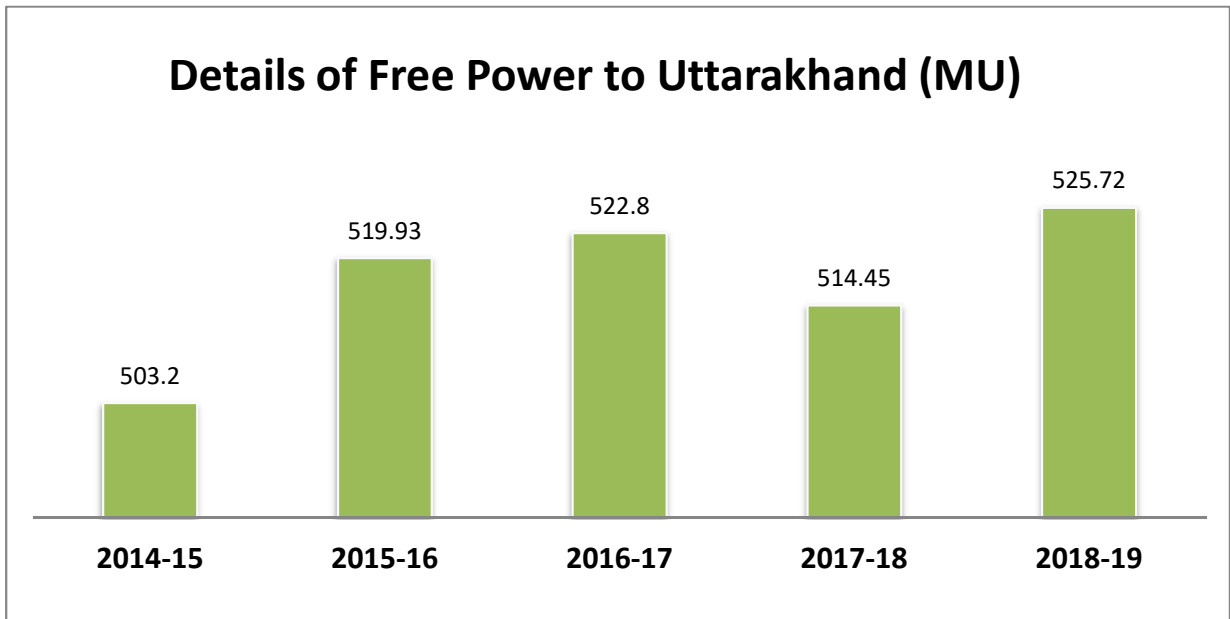


Highlights 2018-19:

- Gross Income generated during 2018-19 is Rs. 2850.29 Cr., which is 28.21 % higher than last years income.
- THDCIL has earned a net profit of Rs. 1255.63 Cr. during 2018-19, which is 62.8% more than last year's profit.
- During 2018-19, expenditure on CSR was Rs. 17.52 Cr.



- During 2018-19, Gross Taxes paid by THDCIL were Rs. 258.80 Cr.
- During 2018-19, Dividend Paid to Govt. of India and GoUP was Rs. 423.12 Cr.
- Free energy to the tune of 379.74 MU amounting to Rs. 167.67 Cr. from Tehri HPP (1000 MW) and 145.98 MU amounting to Rs. 57.45 Cr. from Koteshwar HEP (400 MW) was provided to the Home State of Uttarakhand during 2018-19.



8.0 Sustainable Development Performance: Environment

THDCIL's 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, Bio-diversity protection, integration of facilities with their surroundings, reduction at source, re-use, re-cycling: 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 / re-construct Bio-diversity.

THDCIL counts on sound Environmental Management Systems (EMS). ISO 14001:2015 has been acquired for Corporate Office and Projects namely; Tehri HPP, Tehri PSP, Koteshwar HEP, Vishnugad Pipalkoti HEP and Dhukwan SHP. THDCIL strategy on Environmental Sustainability is to optimize use of Energy and Water, to reduce Carbon footprint and to protect / re-construct Bio-diversity. In addition, impact studies are conducted for Construction Projects that are likely to affect the bio-physical 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, project conducts Environment Impact Assessment (EIA) Study 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 Project and maintaining the existing Environmental quality. EMP covers all aspects of Planning, Construction and Operation of the Project, which are relevant to Environment. Based on 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 EMPs and six monthly compliance reports of these Management Plans are regularly submitted to regional office of Ministry of Environment, Forest and Climate Change (MoEF&CC).

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:

As per stipulations under the Environment Clearance of the Tehri Power Complex granted in 1990, THDCIL conducted a study through Botanical Survey of India (BSI) on the flora going under submergence as well as that affected by related works in the region.

As per recommendations of BSI, a Botanical Garden has been developed in an area of 14.28 ha. near Koti village, located adjacent to the Reservoir. The species of plants, which have submerged into the Dam reservoir, have been conserved in the Botanical Garden. A total of 274 different species of plant including medicinal, ornamental, timber, fuel and fodder have been planted in the garden. The Botanical garden is being maintained & cared by Deptt. of Forest, GoUK since 2011 with funds provided by THDCIL. During financial year 2018-19, Rs. 6.69 Lakh have been spent against maintenance and care of planted saplings, trees etc. at Botanical garden. MoU has also been signed with Forest Deptt., Tehri Dam Division, New Tehri for further period of another 02 years (2019-21) for care & maintenance of Botanical garden.



Botanical Garden at Tehri

b) Green Belt developed in Tehri Project area:

As per recommendations made by Hanumantha Rao Committee (HRC), Green Belt development work along Reservoir Rim is being carried out by State Forest Deptt., GoUK through funds provided by THDCIL. The plan includes development of 200 M wide Green Belt (from 840 MSL to 1040 MSL) with estimated cost of Rs. 820 Lakh (approx.) in 2100 hectare of land, which includes 1138 Ha. forest land and 962 Ha. agriculture land. Out of 2100 hectare, an area of 1138 Ha. of forest land has been developed completely,

while 962 Ha. of agriculture land is yet to be treated. An amount of Rs. 476 lakh has already been released to Forest Deptt., GoUK for development of Green Belt in Agriculture land.

The entire forest land has been treated by planting approx. 40 different plant species, which includes:

- **MEDICINAL PLANTS:** Harad (*Terminalia ghebula*), Bhera (*Terminalia balerica*), Beal (*Aegle marmelos*), Amaltas (*cassia fistula*), Timru (*Xanthoxylem eatum*), Mehal (*Pyrus pashia*), Tejpat (*Cinnamomum tamala*), Satawar (*Asparagus racemosus*), Sharpgandha (*Rauwolfia serpentine*).
- **ORNAMENTAL PLANTS:** Gulmohar, Jakranda, Bottelbrush, Cassia Shamia, Gudhal, Sabni, Kaner, Rohni, Silveroak.
- **FRUIT AND TIMBER PLANT SPECIES:** Selex, Shisam (*Dalbergia sissoo*), Kachnar (*Bauhinia variegata*), Toon (*Toona cilita*), Samel (*Bombax ceiba*), Pipal (*Ficus religiosa*), Bargad (*Ficus bengalensis*), Pilkhan, Jamun (*Sygyzium cuminli*), Chitwan (*Alastonia scholaris*), Gular, Neem (*Azadiratcha indica*), Baken, Khair (*Acacia catechu*), Padam (*prunus cerasoides*), Kanji (*Pongamia pinnata*), Semala (*Bahunia retusa*).
- **Grass Species:** seeds and slips of Grasses like lemon Grass, *Pama rosa*, *citronella* and Ginne Grass also grown in the interspaces

(c) Mahaseer Fish Hatchery :

As per stipulations under the Environment Clearance of the Tehri Power Complex granted in 1990, THDCIL conducted a study through Zoological Survey of India (ZSI) on the Flora & Fauna in the region. As suggested by ZSI, action plan for possible mitigation of Mahaseer fish had been framed through M/s Tropical Fisheries Consultants Ltd. and submitted to MoEF.

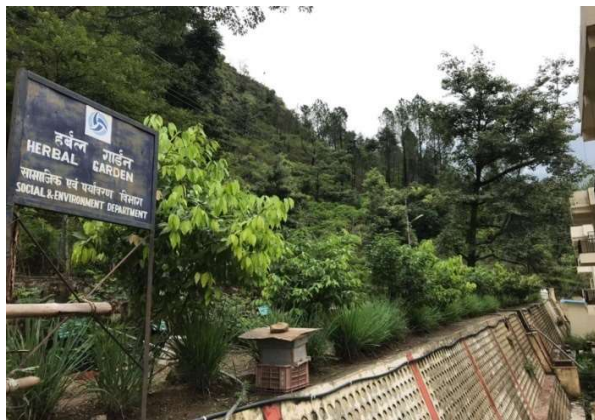
On the recommendations of ZSI, Mahaseer fish hatchery having capacity of 3 lakh seeds per annum was constructed near Jurasi Nala Koteshwar with the consultation of National Research Centre for Cold Water Fisheries (NRCCWF), Bhimtal. An expenditure of Rs. 110 lakh was incurred in development of fish hatchery. The fish hatchery is under operation and has been transferred to state Fisheries department, GoUK on lease for a period of 29 years in November 2015 for production of Mahaseer fish seeds and maintenance of Fish hatchery.



Fish Hatchery at Koteshwar

(d) Herbal garden at VPHEP:

A Herbal garden, based on recommendations of Herbal Research and Development Institute, Mandal, Gopeshwar has been developed over an area of 1800 SqM. approx in the VPHEP colony. Various indigenous medicinal plants have been planted including Amla, Aloe-vera, Harad, lemon grass, Reetha, Sarp Gandha, Ashwagandha, Silpara etc. The Herbal Garden is being maintained by THDCIL.



(e) Slope stabilization works at VPHEP:

The biological measures like plantation of deep rooted Vetivar grass are being undertaken by the project for slope stabilization works at the dump yards of the project. The slope stabilization works at Dump yards has been started during September 2018.

**(f) Green Belt Development at VPHEP:**

As per the Project Environment Management Plan, A Green Belt Development Plan has been prepared for VPHEP for development of Green Belt at the project site. Plantation of Broad Leaf, Fast Growing plant species under Green Belt Development Plan is being executed under the Consultancy of renowned Environmentalist, Sh. Jagat Singh Chaudhary alias 'Jungli Ji'. Approximately 7500 trees have been planted up to FY 2018-19 in VPHEP project area.

**(g) Fish Hatchery at VPHEP:**

In order to mitigate adverse impacts on Fish population in the river Alaknanda and to have viable populations of the native fishes forever, a Fish Hatchery at VPHEP is under construction after the suggestions from ICAR-DCFR.



(h) ACTIVITIES RELATED TO ENVIRONMENT PROTECTION

Awareness programs related to environment protection / Wildlife Protection at

VPHEP: Various awareness programs are being organized by the project for labours / students / villagers etc.

- i. An Environment / Wildlife awareness programme has been organized for school students at Government Inter College, Ghingran, Gopeshwar in Dec' 2018, under the presence of esteemed Environmentalist Sh. Jagat Singh Chaudhary "Jungli Ji". Various competitions like Speech, Slogan and Quiz competition on Environment and Wildlife Conservation were also conducted, in which the students participated with full zeal and enthusiasm.



- ii. To create awareness amongst local public, an awareness programme has also been conducted at the well-known local cultural-trade fair "Bund Vikas Mela" at Pipalkoti in Dec' 2018, wherein information handouts were distributed and posters were displayed in the THDCIL stall.

(i) Other Initiatives

Celebration of World Environment Day:

THDCIL is celebrating World Environment Day at its projects and offices every year. On the occasion of World Environment Day on 05th June 2018, THDCIL Rishikesh Office organized Awareness cum Cultural Programme on the theme “Beat Plastic Pollution” at its Social and Environment Centre, Jolly Grant, Dehradun. The programme was celebrated to sensitize the local community, school children and various officials of the organization. Shri Sacchidanand Bharti (Renowned Environmentalist) participated as “Guest on Environment” and Professor N.P. Todariya (Ex-HoD, Department of Forestry, HNB Garhwal University Srinagar and Ex- Member Forest Advisory Committee) participated as Special Guest during the Programme.



- **Strategies, current actions, and future plans for managing impacts on biodiversity.**

S. N	Project	Strategies, current actions, and future plans for managing impacts on biodiversity to be given project wise	
1	Tehri HPP	Strategies	To develop habitats for wildlife, fodder for cattle and fuel for local inhabitants by developing forest eco-system in the project area.
		Current actions	Habitats for wild life and birds are being developed by dense afforestation activities in area.
		Future plans	<ul style="list-style-type: none"> • To make awareness activities / programs for protection of wild life and forest ecosystems among local villagers / inhabitants. • To make densification of forest in residential and reservoir area.
2	VPHEP	Strategies	Address Impacts & Conserve Environment in accordance to various applicable Acts, Rules &

			guidelines etc.
		Current actions	<p>Implementation of following Environment Management measures are under implementation by Project:</p> <ul style="list-style-type: none"> • Bio-Diversity, CAT Plan, compensatory afforestation, Fish Management, Green Belt Development, Solid Waste management, Public Health Delivery System, Environmental Monitoring, Archaeological management etc. <p>Apart from above, measures viz; Management of labour Camps, Muck management, Public Health & Hygiene etc. is under process of implementation by Contractor & being monitored by Project.</p>
		Future plans	Implement management measures to conserve Environment in broader spectrum.
3	TPSP	Strategies	Ensuring continual improvement in the management of biodiversity on all the land holdings of PSP project, with the goal of being ahead of compliance.
		current actions	Controlled blasting is being done. Muck is being disposed off in the designated dumping yards, as per approved plan. Proper treatment of muck disposal area is also being ensured.
		future plans	Effective continuation of mitigation measures which are being enacted currently.

- **Initiatives to reduce greenhouse gas emissions and reductions achieved.**

- ✓ In order to minimize the emission of green house gases, judicious use of ACs and refrigerators is being promoted in the office premises at projects. Energy efficient (Star rating) equipments have been installed at almost all the offices of THDCIL.
- ✓ **Plantation at KHEP:** During the year 2018-19, certain species of plants, such as Ashoka, Ficus, Gulmohar, Amla, Bargad, Peepal, Bel, Arjun, Juniperus, Areca palm, Raipis palm etc. have been planted in Koteshwar project area. In

this regard, total expenditure of Rs.1, 83,470.00 incurred during the year 2018-19.

- ✓ **Plantation under CSR Works:** Under CSR, 2,60,212 nos. trees have been planted from 2009-10 to 2018-19 at various locations in Tehri and Rishikesh, with 10,056 nos. trees planted during FY 2018-19 only.

- **Total environmental protection expenditures and investments by type.**

Expenditure towards Environment Protection (2018-19) (Rs. Lakh)					
Type of expenditure / Investments	Tehri HPP	Tehri PSP	Koteshwar	VPHEP	Khurja / Amelia
Botanical garden	6.69	NIL	-	-	NIL
Green Belt Development / Greenery Development/ Plantation works	2.30		1.8347	9.94	
Biodiversity Management Plan (including Monitoring of Kedarnath Wildlife Sanctuary)	-		-	7.63	
Fish Management Plan	-		-	100	
Environment Monitoring Plan	-		-	6.72	
TOTAL EXP.(Rs.)	8.99		1.8347	124.29	

8.2 Energy Efficiency and Energy Conservation

The Company is actively 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 within 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 stabilization of irrigation in the Command area in U.P. from regulated flow of river water from Tehri & Koteshwar Dam, there is substantial reduction in use of Energy requirement for pumping water for irrigation. This has helped immensely 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 2018-19:

- (i) Work of replacement of old bulbs including street lights have been completed in almost all Offices / Project units of THDCIL, however, some work are under progress in Projects located in remote and hilly terrain area.
- (ii) Work of replacement of non-energy efficient light fixtures in all Office Complex of THDCIL, Rishikesh has been completed.
- (iii) Work of replacement of non-energy efficient 40W fluorescent tube rod with 20 W LED tube light fixture has been completed in the residential part of THDCIL Complex, Rishikesh.
- (iv) Operation and Maintenance of 500 KW rooftop Solar Power Plant has been done successfully and Energy amounting to Rs. 2.43 lakh has been credited by UPCL in 2018-19 towards export of supply to the Grid of nine months besides own consumption.
- (v) All new non-residential Complexes have provision of LED Lights.
- (vi) Maintenance / renovation work of Electrical Distribution System for non-residential buildings have been taken up with LED lights.
- (vii) In order to reduce consumption of Electricity, Ceiling fans in residential as well as non-residential buildings are provided with five star rating.
- (viii) Non-residential buildings have been provided with star rated Air conditioners and old air conditioners were changed from non-star rated to five star rated.
- (ix) Ensuring maximum use of high efficient rated electrical appliances (4 or 5 star rated) in offices & residential buildings.
- (x) 67 number occupancy mode and vacancy mode lighting management through switch sensors have been provided in the common area of non-residential complex and Guest houses.

Approximately 553 ACs are running in the Office Complexes and Guest Houses, out of which 453 nos. ACs has been changed with the star rated ACs to increase the Energy Efficiency. Balance ACs are also being replaced by Star Rated ACs.

Park area lighting and fencing of office and residential area has been done through Solar system. All 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.

Initiatives to reduce indirect energy consumption and reductions achieved highlights during 2018-19

A. Installation of Solar Water Heating system at CISF Barracks, Bhagirathipuram

The power supply is received at all residential & non-residential buildings through transformers installed at various locations. The transformers are found in enhanced load during winter season due to the use of heaters and geysers by all residents resulting in increase in energy consumption. The CISF Barracks, where hot water consumption is more, solar water heating system for CISF Barracks has been install on Sept.'2018 (in

1st phase). As per MNRE guidelines, provision of 30 litres hot water per day per person, i.e; 150 person of CISF X 30Ltrs = 4500 Ltrs and 1500 Ltrs for washbasin & mess, comes out to total requirement of 6000 litres per day (LPD).



The solar water heating system has proved effective for the CISF person for the daily requirement of hot water. Also about 1,08,000 units of electricity (October-2018 to March-2019) was saved in the FY 2018-19 from above solar water heating system.

B. Replacement of old Street light against LED Street light fitting, Bhagirathipuram

In Bhagirathipuram Township under "Energy Efficiency Energy Saving" the old street light fittings are to be converted into LED street light fittings. Under the phase-manner, 565 nos. LED street light fittings were installed and about 34,000 units of electricity was saved in the FY 2018-19.

Energy Consumption Statistics:

Location	2017-18		2018-19	
	Unit (KWH)	Amount (In Rs.)	Unit (KWH)	Amount (In Rs.)
Corporate Office, Rishikesh	2814239	Rs. 1.34 Cr.	2766977	Rs. 1.52 Cr.
Tehri HPP	14897708	Rs. 8.12 Cr.	14673185	Rs. 7.77 Cr.
Tehri PSP	5626937	Rs. 4.77 Cr.	2069705	Rs. 2.21 Cr.
Koteshwar HEP	4230240	Rs. 4.26 Cr.	5019560	Rs. 4.71 Cr.
VPHEP	3844800	-	9000000	Rs. 4.90 Cr.

Reason for increased / Reduced consumption:**Tehri HPP (Generating Plant, offices and Township)**

The power consumption 224523 KWh decreased due to following reasons:-

1. Replaced 400W / 250W / 150 W street light fitting at B.Puram township against 45W LED street light fitting.
2. Replaced 40W tube light fitting at Administrative building, B.puram against 18 / 22W LED tube light fittings.

Tehri PSP

The power consumption 3557232 KWh decreased due to following reasons:-

1. Due to labour / workmen strike of civil contractor (M/s HCC) from April-2018 to November-2018.
2. EM / HM work could not be taken up due to non-availability of front.

Koteshwar HEP

The power consumption increased due to following reason:-

1. 125 MVAR Reactor installed in KHEP Swichyard on July 20, 2017 was in operation for longer duration in the year 2018-19 as compared to 2017-18.
2. SST was less utilized in year 2018-19 as compared to 2017-18.

VPHEP

The power consumption increased due to construction site load.

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, yearly CSR budget based on guidelines varies between Rs. 15 to 20 Cr. THDCIL's approach to CSR is based on long-term sustainable development. CSR activities are so planned to ensure that benefits should reach upto the smallest unit, i.e; village, panchayat, block or district, depending upon the operational 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 17.03.2009 for implementation of CSR & Sustainable activities of 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 member 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, Society is running two schools under the auspices of TES, one at Bhagirathipuram, Tehri offering education from 6th to 12th standard and another school at Pragatipuram, Rishikesh offering education from 1st to 10th standard.

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 roles & responsibilities defined in the Company's Act / new guidelines issued by Gol 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 / Executive Director (ED), heading the CSR and Sustainability functions, is designated Nodal Officer & is head of Below Board Level Committee (BBLC).
- The other members of 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 would not lapse 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 recommendations 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, is as under:

- THDC Niramaya** (Health) - Nutrition, Health, Sanitation & Drinking Water projects
- THDC Jagriti** (Initiatives for a Bright future) – Education initiatives
- THDC Daksh** (Skill) - Livelihood Generation and Skill development initiatives
- THDC Utthan** (Progress)- Rural Development
- THDC Samarth** (Empowerment)- Empowerment initiatives
- THDC Saksham** (Capable) - Care of the aged and differently abled
- 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) periphery of the Company's Plant / Project / Business activities and (ii) the Broad Geographical area directly impacted by the Company's operations and activities.

9.4 Implementation

The CSR and Sustainability programs are mainly implemented through SEWA-THDC and THDC Education Society (TES), the two Company sponsored / established registered Societies. CSR programs are also be undertaken by the Projects / Units of THDCIL directly.

9.5 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

9.6 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 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 included in the Board's Report on CSR.

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

9.7 Impact Assessment

Impact assessment of all completed CSR & Sustainability programmes above Rs. 5 Lakh is done through specialized external agencies and the report containing the success / failure is also submitted to Board Level CSR Committee.

9.8 Overview of the CSR Projects undertaken during FY 2018-19

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 & Sustainability 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 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.

9.8.1 THDC Jgriti- Educational Development

Considering education and skill development as an important aspect of employment generation, various steps have been taken up and are as below.

9.8.1.1 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 standard and another at Pragatipuram, Rishikesh offering education from 1st to 10th standard under THDC Education Society (TES) for economically weaker sections including backward and SC/ST. Free of cost dress, books & stationary, bus service etc. are being provided to students including **Mid Day Meal under "Naivedyam" Scheme**. Yearly budget for running of these schools is around Rs. 5.50 Cr. The details of students for year 2018-19 are as under:-

Schools	SC Category Students		ST Category Students		General Category Students		OBC Category Students		Total Students		Total Students	BPL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		Male	Female
Rishikesh	34	39	00	00	61	94	77	109	172	242	414	76	61
Tehri	41	53	00	00	00	01	64	54	105	108	213	06	07
Koteshwar	48	36	00	00	02	00	96	68	146	104	250	59	43



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

9.8.1.2 Jr. High School Koteswarpuram

In addition to above, one English Medium Jr. High School runs at Koteswar, Distt-Tehri with grant provided by SEWA-THDC to an NGO i.e.; Omkaranand Saraswati Public School Education Society, to provide quality education to children of Project Affected Families of KHEP. During 2018-19, total 250 number students have got education from this school.

9.8.1.3 Distribution of Logistics to Govt. Schools of Uttarakhand

- During FY 2018-19, total 809 sets (three seater bench) of School furniture were provided to 28 schools of Tehri & Dehradun district to facilitate 2427 students at a cost of Rs. 35.00 Lakh. In addition to this, 11 schools of district Tehri and Dehradun were also provided with 13 no. water filters cum coolers.



- 17 nos. computer centres were also established by SEWA-THDC for skill development of unemployed youth and students at project affected and rehabilitation area in Tehri, Dehradun and Haridwar district. 06 months'



computer training programme was organized in all centres and more than 690 youth and students benefited from this programme in the year 2018-19.

9.8.1.4 Skill Development Trainings

Various vocational trainings, such as, Hotel Management, ANM, ITI, Hospitality, Food Production, Fitter & Plumber, Welder, Electrical & Electronics, Excavator Operator, AC & Refrigeration etc. was provided to youth of weaker sections of Koteshwar and Tehri. Total 516 youths have so far been sponsored for different skill trainings including 145 youth sponsored during FY 2018-19.

9.8.1.5 THDC Niramaya- Health & Sanitation:

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

- An Allopathic Dispensary with a team of MBBS Doctor, Pharmasist, Nurse and Medical Assisntant has been established at Deen Gaon, a very remote area in Tehri District and is in operation since year 2014-15. Average yearly OPDs are more than 12000 from surrounding approx. 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 also provided free of cost.



ALLOPATHIC DISPENSARY- YEAR WISE PATIENT AND EXPENDITURE DETAIL

S. N.	Year	Male	Female	Child	Total	Cost of Operation (Rs. Lakh)
1	2014-15	2094	4176	1958	8228	28.99
2	2015-16	3354	6387	2981	12722	20.30
3	2016-17	3782	6530	3252	13564	33.53
4	2017-18	4892	9189	5064	19145	26.79
5	2018-19	3796	7647	4007	15450	24.13
Total		17918	33929	17262	69109	133.74

- Total 32 Multispeciality Medical Health Camps were organised in the FY 2018-19
- To cater the specific health issues, multi specialty health camps are organized at various locations in convergence with expert agencies.
- By THDCIL, Bagirathipuram Doctors: Total 12 camps in District Tehri. Total OPDs- 2268 (Male - 1029, Female - 1239).
- AIIMS, Rishikesh: In convergence with AIIMS, Rishikesh total 06 no. of health camps are organized in Tehri-2, Koteswar-2 (Nov-18, March-19), Rishikesh-2 (Dec-18 & March-19). Total OPDs - 1338 (FY 2018-19). One follow up awareness camp was also organized by AIIMS, Rishikesh at Rishikesh with 102 OPDs.



- Nirmal Eye Institute: In convergence mode Six eye specific camps are done in District Tehri up to March 2019. Total six camps organized at Chamiyala, Koteswar, Lamgaon, Nandgaon, Chinyalisaur and Kamand. Total OPDs- 1023 (M-521, Female-502, Cataract surgeries - 202).
- Health Camp by Deengaoon Dispensary : One camp was organised at village Gorsada in dist. Uttarkashi. Total OPDs registered were 265 (96 Male, 125 Female & 44 Children).
- Health Camps at Jolly Grant: Total three camps have been organized till March 2019. Total OPDs registered - 284.

- Singrauli, MP: Two medical camps were organized through “Mishra Polyclinic & Nursing Home” in Project affected village till March 2019. Total OPDs were 680.
- Total 32 Multispeciality Medical Health Camps were organised through AIIMS, Rishikesh, Nirmal Eye Institute, Rishikesh and THDCIL’s own Doctors in the Project Affected Villages in Tehri District and Rehabilitation Colonies in Dehradun District attending over 6000 patients with more than 200 Cataract Operations with no cost to patients even for surgeries. Year wise details of Multispeciality medical camps are as follows:

Multispecialty Medical Camps- Year Wise Patient and Expenditure Detail					
S.N	Year	No. of Camps	OPD	Cataract	Expenditure (Rs. Lakh)
1	2011-12	08	1099	-	4.01
2	2012-13	10	3609	161	6.08
3	2013-14	20	3961	419	13.87
4	2014-15	15	4897	664	47.48
5	2015-16	6	1576	200	9.45
6	2016-17	27	5403	205	20.56
7	2017-18	30	7490	276	15.00
8	2018-19	32	6307	202	25.09
Total		148	34342	2127	141.54

- It has been observed that MBBS doctors are not interested to give their services in remote villages in hilly areas. Keeping in view the above and to solve the problems of medical issues of Dam Affected Areas, SEWA-THDC had started homeopathic dispensaries in several areas through Swami Narayan Mission Society, Rishikesh. At present, five homeopathic dispensaries are running, four at Galiyakhet, Dhontri, Koteshwar and Sisham Jhari in district Tehri and one at village Indranagar, Rishikesh, district Dehradun with free of cost medicine facility. These dispensaries collectively have 85221 OPDs during the FY 2018-19 and 6,73,731 OPDs since inception. Details are as below:

HOMEOPATHIC DISPENSARY- YEAR WISE PATIENT AND EXPENDITURE DETAIL				
S. N	Year	No. of Dispensary	OPDs	Cost of Operation (Rs. lakh)
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
9	2017-18	5	69250	21.17
10	2018-19	5	85221	23.71
Total			673731	133.71

- THDCIL and Tehri Distt. Administration jointly established 40 Telemedicine centre, first of its kind in Uttarakhand, in different remote locations of district Tehri to overcome distance barriers and to improve access to medical services in distant rural communities. Each Telemedicine centre is connected with a video control room established in Govt. Hospital, Tehri. All Telemedicine centres are equipped with a medical kit (briefcase) having Pulse Oxymeter, ECG Machine, Wi-Fi ECG recorder, X-Ray view box, Glucometer and other



essential tools and a comprehensive pathological kit along with an android tablet having list of essential medicines & portable hot spot to facilitate diagnosis, data transfer and communication with district hospital. Such centres are run by a qualified pharmacist / nurse who acts as an interface between the specialist doctor at control room at District Hospital in Baurari, New Tehri and the patient at village health centre.



- AIIMS, Rishikesh has also been roped in for specialized consultation and treatment. Together, these 40 Telemedicine centre are catering the needs of approx 150 Gram Sabhas. Since, the inception i.e. December 2017, total 17288 OPDs have been registered till March, 2019 including 15324 OPDs registered during the FY 2018-19.

- THDCIL along with Tehri District Administration has been conferred with E-Governance Award by Deptt. of Administrative Reform and Public Grievance under Ministry of Public Grievance and Pension, Gol. in March, 2019.
- Initiatives under Swachh Bharat Mission:
- Under Swachh Bharat Abhiyan, massive public awareness campaign has been done within THDCIL offices and Colonies at various locations, Schools, Hospitals, work place, streets, roads, markets, railway stations, 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, Muni ki reti & New Tehri.
 - Total toilets constructed - 225 No. (Individual - 179, SAP - 42 & Others - 4) including 79 toilets in 3 villages of district Tehri, Uttarakhand and made them Open Defecation Free (ODF) – i. Village Devri - 43 , ii. Village Lwarkha - 24 Toilets iii. Village Banali- 12
 - Adopted 3 localities for cleanliness near THDC Corporate Office, Rishikesh -
i. Pragati Vihar , ii. Nehru Gram, iii. Indra Nagar
 - Adopted 4 Km Stretch of Bypass Road, Rishikesh (Natraj Chowk to Mansa Devi)
 - Adopted Railway Station for cleanliness
i. Rishikesh ii. Virbhadra
 - Adopted 4 schools in Rishikesh for cleanliness
i. Govt. Primary School, Mansadevi, ii. Govt. Primary & Upper Schools, Bapugram
iii. Govt. Primary School, Bibiwala iv. Govt. Primary School, Indra Nagar

9.8.5 THDC Prakriti- Environment Management

- To achieve Environmental Sustainability and Ecological Balance, following efforts have been taken up:
- “THDC Prakriti” - Environment Focused Initiatives is working with three objectives, Soil & Water Conservation, Green Energy Generation & Technology Promotions and Environment Protection & Promotion.



- To conserve soil and water, THDCIL is working on Stream (Gadhera) Treatment and vegetation regeneration based on the experimental model of Shri Sachidanand Bharti Implemented in Uffrainkhal Pauri (Garhwal). Along with this, Water Harvesting Tanks (capacity 3000 liters each) were installed in the project affected villages for rain water harvesting. Through this activity, we were able to store almost 9 lakh litre of rain water during monsoon.
- THDC under this program have installed more than 732 LED based Solar Street Lights in Sitarguanj in Uttarakhand and Khurja, Unnao & Lucknow in UP and more than 170 LED based Solar High Mast Lights in Unnao and Lucknow in UP and Sitarganj in Uttarakhand.
- To promote plantation of different fruit, fodder, fuel and medicinal plantation, THDC planted 10056 saplings in the year of 2018-19 totalling to 260212 plants till now. Name of some plants are Mango, Guava Awala, Bel, Lemon, Pomegranate, Orange, Kinnu, Litchi, Chullu, Mulberry, Jamun , Jackfruit, Akhrot, Badam, Bamboo, Kachnar, Shisham, Banj, Padam, Anga, Ritha,, Tun, Subabool, Kharik, Daikan, Timla, Neem, Ringal, Moru, Deodar, Dehu, Gulmohar, Majnu, Stevia, Ashwagandha, Har-singar, Putrajeevak, Kadam, Arjun, Allovera, Harad, Bahera, Anwala.
- Three fruit specific villages were also developed, viz; Village Plam and Village Kyari in Block Koteswar as Mango village and Village Jakhani, Block Pratapnagar, Tehri Garhwal as Lemon Village.



9.8.6 THDC Utthan (Rural Development)

- Holistic Development Programme through HNB Garhwal University, SEWA-THDC has framed a holistic development plan for 30 rim area villages of Tehri project and engaged HNB Garhwal University, Srinagar, for its implementation. Whole plan is conceptualized towards endowing sustainable livelihood opportunity to community, empowering women and overall development of society.

- CSR Initiatives for Sustainable Livelihood and Resource Management in Upli Ramoli Patti and other areas of Pratap Nagar Block, Tehri in Uttarakhand through Shaheed Bhagat Singh Collage, University of Delhi.
- In association with Shaheed Bhagat Singh Collage, Delhi University, a programme on CSR Initiatives for Sustainable Livelihood and Resource Management in Upli Ramoli Patti and other areas of Pratap Nagar Block, Tehri in Uttarakhand is being undertaken since 2011. This is a long term programme for Rural Based Holistic Development of 20 remote villages of block Pratapnagar Distt. Tehri. Activities of 2018-19 of the project were Promotion of Poly Houses, Construction of Vermin Compost Pits, Conducting Kissan Gosthies, Exposure visits and demonstration of Agriculture Plots through Experts, Awareness Programmes under “Swachh Bharat Abhiyan” for Cleanliness, distribution of Sanitary Napkins, Carrier Counseling programs, Construction of Rain water harvesting tanks, Mushroom production training for livelihood generation, Establishment of Kissan Clubs, Farm Machinery Banks in convergence with Govt. schemes.



Integrated livelihood improvement programme in Bhilangna Valley, Tehri Garhwal through VARDAN

- With the objective of integrated livelihood improvement programme, different activities to promote 100 Farmers Groups, improve the present agriculture productivity of farmers, cultivation of selected fruit crops and medicinal and aromatic plants provide adequate infrastructure, modernizing the crop cultivation techniques, improving the pre and post harvest management methods were implemented through Society For Voluntary Approach in Rural Development Action (VARDAN) as a pilot project with convergence from different Govt. Organizations from January to March 2019.



- With the objective of Women empowerment & livelihood enhancement project for doubling the income of the farmers, THDC involved Geeta Mahila Samiti (GMS) to implement the project in 20 villages of project location. Major activities of project were Promotion of Poly Houses, Construction of Vermin Compost Pits, Construction of Rain water harvesting tanks, training for livelihood generation, Establishment of Kissan Clubs, Farm Machinery Banks in convergence with Govt. schemes and formation of SHGs.



Convergence activities with other agencies

Convergence project was done in the year 2018-19 for various farmer centric activities with State Agriculture & Horticulture Dept., Uttarakhand through VARDAN, GMS, HNB Garhwal University and SBS Collage DU and other implementing agencies. Costs of the convergence was Rs. 433.20 lakh, cost was shared by THDCIL (Rs. 129.10Lakh), State Agriculture & Horticulture Deptts (Rs. 272.90Lakh) and partly by the beneficiary and implementing agencies (Rs. 31.97 Lakh) benefitting 1500 households inhabiting 5582 beneficiaries.

1. **NABARD, Dehradun:** MoU was signed with NABARD Dehradun for various CSR based activities on cost sharing basis (SEWA- THDC Share 25% or more). Under this MoU, activity of Water Shed Management of Bhilangana Water Shed has been agreed. Around 1000 Hectares of area to be treated in next 4- 5 years, which will include plantation, check dams and various livelihood activities in the villages falling under the Water Shed. In the 1st phase, about 100 hectares water shed to be treated / managed. Later on 900 Hectares area will be treated based on the success of the pilot project.
2. **District Agriculture Deptt., Tehri:** 51 Farm machinery banks are created in different villages of district Tehri through SHGs with cost sharing basis of 4:1 by Agriculture Dept and THDCIL. Each Farm Machinery Bank costs Rs. 5 Lakh, under which 15 to 25 SHG members in each SHG are provided with mechanized tools for various agriculture activities. (Rs 4 lakh supported by State Agriculture Department, 01 lakh by SEWA- THDC & taxes, if any, by farmer's group). Regular monitoring, follow up is done along with govt. deptt. to scale up & sustain such efforts.

9.8.7 THDC Samarth- Women Empowerment

- Various Tailoring & Knitting, beautician and production centers were established for empowering the women, especially from weaker sections, in order to strengthen their

livelihood and uplifting their social status. The centers are run free of cost. Approximately, 710 women have been benefitted from these centres.

- In SC dominated village Darsil, Ghansali (Tehri Garhwal), skill enhancement program is implemented for 30 families engaged in handicraft works from Ringal (Local bamboo).

- Deepa Mai Women Credit Society with 11 members Management Committee in Lumbgoan area of Tehri District was established in October, 2016 to help poor female



farmers getting loan for initiating some commercial activity. THDCIL has initially contributed Rs. 10 lakh, which may further be enhanced on the basis of performance of the society. Any woman can be member of the society with Rs. 100 as membership fee and can have share in the society with minimum contribution of Rs. 1000 & max Rs. 5000. Members are eligible for loan five times to their contribution. So far 91 women are member of the society, 67 have

contributed with their share. Total Rs. 2.12 lakhs have been collected from members and Loan Amount given to 65 Share Holders, Rs 14.45 lakh.

9.8.8 Protection of Natural Heritage, Art and Culture

- Keeping in view the historical and cultural importance of mighty river Ganga and to facilitate millions of National & International pilgrims/ visitors, the Strengthening of lighting arrangements in Ganga Ghat area at Rishikesh is taken up by decorative (Facade) lights of Ram Jhula, Laxman Jhula, Parmarth Niketan & other prominent structures at Triveni Ghat,



installation of 16 High Mast lights on both banks of river Ganga from Ram Jhula to Parmarth Niketan on left bank, from Ram Jhula to Kharasut on Right bank and Triveni Ghat, and replacement / repair of existing halogen street lights / high mast lights (150 nos) with LED on left bank road from Laxman Jhula to Ram Jhula and Triveni Ghat. total project cost was Rs. 567 lakh. Apart from beautician & strengthening of total system, LED lights will contribute to saving of approx. 70000 Units / year (Rs. 4 Lakh / year)

Swachta Pakhwara and other Govt. of India initiatives:

THDCIL has observed Swachhta Pakhwadas twice w.e.f. from 16th to 31st May' 2018 and 16th to 31st August' 2018 w.r.t. DPE guidelines. Above Swachhta Pakhwadas were observed at Corporate Office, Rishikesh as well as at all project locations. Prominent activities were swachhta saphath; mass public awareness; cleanliness drives etc. Awareness was also spread through banners, posters, Prabhat Pheri by involving school students and local residents, Nukkad Nataks (Street Plays), slogan & Vad-Vivad (Debate) competition among students for sustainable community behaviour change. Cleanliness drives were conducted at Rishikesh, Tehri, Koteshwar and Vishnugad Pipalkoti within the office premises as well as nearby areas involving employees as well as adjoining communities. At Rishikesh, cleanliness drives were conducted at three prominent habitations adjoining to THDCIL campus namely, Indira Nagar Colony, Nehrugram, and Irrigation Colony. Above localities are densely populated jointly housing nearly 800 families. During campaign, 300 households were provided with 2 no. dustbins for collection of biodegradable and non-biodegradable wastes in segregated manner. Similar cleanliness drive was conducted for cleaning Mansha Devi locality. For in-house sanitization, cleanliness competitions were organized among various THDCIL offices at Rishikesh.

THDCIL has also adopted some institutions / facilities / localities for maintaining sustained cleanliness, like schools, Railway Stations, habitations and place of Worship. Cleanliness drives were conducted at Virbhadra and Rishikesh Railway stations including providing 4 dustbins, each of 140 litre capacity and one RO water cooler to Virbhadra Railway Station. Cleanliness drive was conducted in Sidhpeeth "Kunjapuri" in Narendra Nagar Block of district Tehri. For source segregation, 08 dustbins with 240 litre capacity were made available and for providing safe drinking water to devotees, a RO water cooler was installed in temple complex. Four schools have been adopted for maintaining cleanliness on permanent basis. RO water cooler was also provided to one of the schools and Homeopathic Dispensary being run at Indrinagar, Rishikesh with SEWA-THDC support.

As per the directions of Ministry of Power, Ganga cleaning campaign was organized on the occasion of Ganga Dussehra on 24.05.2018. This cleaning campaign was organized in presence of Dr. Mahendra Phulwaria, Ministry of Environment, Forests & Climate Change, Government of India. Students of different school students, THDC participated in the cleanliness drive and cleared the entire Triveni Ghat.

During Swachhta Pakhwadas, "World No Tobacco Day (WNTD)" i.e; 31st May-18 was also observed as "No Tobacco use" and International Day for Biological Diversity (or World Biodiversity Day) was also observed on 22nd May-18. During these occasions, message and slogans were widely displayed through banner at different locations

within THDCIL's Corporate Office Campus and Slum area of Rishikesh including organizing a workshop on Biodiversity.

During 2nd Pakhwada, 675 plant saplings of different species were planted at various locations, viz; Tehri, Vishungad Pipalkoti, Kaushambhi, Dhukwan, Rishikesh including Govt. PG collage, Rishikesh and ARTO Office, Rishikesh.

Development and impact of infrastructure investments and services provided primarily for public benefit

(i) Engineering College:

In order to fill major vacuum in the area of higher technical education, THDCIL established "THDC Institute of Hydro Power Engineering & Technology" near its Tehri Project Township Bhagirathipuram in district Tehri in the state of Uttarakhand at a cost of Rs. 60 Cr. It is first Hydropower Development Institute & Engineering College, which imparts engineering education to aspiring students across the country in five disciplines, i.e; Civil, Mechanical, Electrical, Electronics & Communication and Computer Science. The state of the art infrastructure includes Administrative blocks, Academic blocks, Hostels and well equipped Library. The surrounding area is Tehri project affected villages and New Tehri Town. In the institute, 5% seats are reserved for the students from the Project Affected Families.

YEAR	TOTAL STRENGTH		STUDENTS FROM PAFs		STUDENTS (SC/ST/OBC Category)		STUDENTS (THDC EMPLOYEES' WARDS)	
	Male	Female	M	F	M	F	M	F
2015-16	217	54	5	1	78	17	6	2
2016-17	250	80	7	0	88	19	5	0
2017-18	210	32	5	0	97	8	4	0
2018-19	213	27	4	1	79	10	1	0



Holistic View



Administrative Block

(ii) Schools run by TES at RISHIKESH, Koti / Bhagirathipuram and Koteswar:

The company is running three schools, one at Bhagirathi Puram, Tehri in the periphery of Tehri Dam offering education from class 6th to 12th; second at Pragatipuram, Rishikesh, offering education from Class 1st to 10th and third one in Koteswar HEP, Koteswarpuram, Tehri offering education from class 1st to 8th. The schools are being run by THDCIL through its company sponsored societies, namely 'THDC Education Society (TES)' and 'SEWA-THDC' targeting surrounding population of its projects and Corporate Office, especially weaker sections for imparting quality education. Nominal fee is being charged and books, uniform, transportation etc. are being provided to the students free of cost. Extracurricular activities are organized from time to time, like Summer Camps, Excursion Tours etc. The Students are being trained for cultural programs and National Festivals. Total strength in all three schools was 877 students in FY 2018-19.



	BPL Category students		SC/ST/OBC Category students		Physically Challenged Category students		Total Students	
	Male	Female	Male	Female	Male	Female	Male	Female
Rishikesh	76	61	95	133	-	-	172	242
Bhagirathi	06	07	41	117	-	-	105	108
Koteshwar	60	41	50	36	-	-	146	104

(iii) Adopted ITIs:

An ITI located at Chamba in Distt Tehri has been adopted by THDCIL under its CSR programme. In order to strengthen infrastructure, THDCIL has supported the institute with construction of a hostel for trainees, 5 KV Generator Set and necessary furniture. Under intellectual support, library of the institute was also strengthened with necessary books.

With above infrastructural support, THDCIL got privilege to recommend approx. 15 students (of project affected area) for admission in different trades in the institute every year. Academic fee and boarding & lodging expenditure is borne by THDCIL to further strengthen and continued operation of institute.

In FY 2018-19, total 34 nos. youths were recommended to ITI Chamba with academic and boarding & lodging support.

(iv) Drinking water schemes:

In order to meet drinking water requirement of its stakeholders, THDCIL has so far supported 20 drinking water schemes in different areas of district Tehri. The work is being executed through Uttarakhand Jal Sansthan, New Tehri being nodal department of State Govt.

(v) Community Centre:

Community centers meet multipurpose requirements of villagers. It's a place, which facilitates organization of individual functions to community meetings / functions. THDCIL has so far supported 11 different villages in its operational area in district Tehri with the construction of community centres. In addition to above, 02 community centres are under construction at village Jakhni in Pratapnagar area and village Jakholi village (Khola), in Koteshwar area of district Tehri since 2017-18.



Inauguration of Community Centre, Jakhni by Hon'ble MLA, Sh. Vijay Singh Panwar

(vi) Additional Room in School:

Education has always been a priority area of THDCIL under CSR. THDCIL has so far added 54 class rooms in different schools. In addition, 7 additional class rooms are under different stages of construction in various schools of district Tehri.

(vii) Additional Rooms in Health centres:

THDCIL has supported construction of additional rooms in two Public Health centres (PHCs), i.e; Lambgaon and Nandgaon in distt. Tehri. However, no such work has been taken up in the FY 2018-19.

(viii) Activities under Swacchta Abhiyaan during 2018-19

THDCIL actively participates in various swachhta related programmes / activities announced by Govt. of India from time to time. Detail of swachhta activities taken up during the FY 2018-19 is as under:

Under Swachh Bharat Abhiyan, massive public awareness campaign has been done within THDCIL offices and Colonies at various locations, Schools, Hospitals, work place, streets, roads, markets, railway stations, 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, Muni ki reti & New Tehri.

Total toilets constructed - 225 No. (Individual - 179, SAP - 42 & Others - 4) including 79 toilets in 3 villages of district Tehri, Uttarakhand and made them Open Defecation Free (ODF) – i. Village Devri - 43 , ii. Village Lwarkha - 24 Toilets iii. Village Banali – 12.

Adopted 3 localities for cleanliness near THDC Corporate Office, Rishikesh -

- i. Pragati Vihar , ii. Nehru Gram, iii. Indra Nagar

Adopted 4 Km Stretch of Bypass Road, Rishikesh (Natraj Chowk to Mansa Devi)

Adopted Railway Station for cleanliness

- i. Rishikesh, ii. Virbhadra

Adopted 4 schools in Rishikesh for cleanliness

- i. Govt. Primary School, Mansadevi, ii. Govt. Primary & Upper Schools, Bapugram
- iii. Govt. Primary School, Bibiwala & iv. Govt. Primary School, Indra Nagar

Details of stakeholders meetings held during 2018-19 to understand their needs and expectations:

Place	Category of stakeholder	No. of meetings held	No. of participants		Main outcome of the meeting
			From THDC	Outside	
Rishikesh	Executive Supervisor/Workman	08	58	286	Awareness of Staff & Stakeholders
Tehri	Executive Supervisor /Workman	02	43	100	Awareness of Staff & Stakeholders
Koteshwar	Executive Supervisor/Workman	03	54	60	Awareness of Staff & Stakeholders

Sector-wise information of CSR activities undertaken by THDCIL during 2018-19

Details & Expenditure on CSR activities of FY 2018-19 (Amount in Rs. Lakh)						
1	2	3	4	5	6	7
S.N	CSR projects or activities identified	Sector in which the project is covered	Project or Programs (1) Local area or other (2) State and district where project or programs was undertaken	Amount spent on project or programs Sub-head: (1) Direct expenditure on projects or programs (2) Overheads	Cumulative expenditure up to the reporting period.	Amount spent: Direct or through implementing agency (CSR works are being implemented through company sponsored NGOs)
1	Construction of toilets under "Swachh Vidhyalaya Abhiyan", Individual toilets for under privilege people, various works under Swachh Bharat Abhiyan, Running of five homoeopathic & one allopathic dispensaries, Multi Specialty medical camps, Water supply schemes & distribution of water purifiers etc	Item Number (i) of Schedule-VII of the Companies Act, 2013 i.e; Eradicating Hunger, Poverty & Malnutrition, Promoting health care including preventive health Care & Sanitation and making available Safe Drinking Water.	Project affected area	362.60	362.60	SEWA-THDC
2	Running of three schools at Tehri, Koteshwar & Rishikesh, Construction of THDC-Institute of Hydro Engineering & Technology, Providing infrastructure to schools, Computer Training programs, Hotel Management & IT training etc.	Item Number (ii) of Schedule VII of the Companies Act, 2013 Promoting Education, including Special Education and Employment Enhancing vocation Skills etc.		809.99	809.99	SEWA-THDC & THDC Education Society

3	Setting up of Tailoring & Stitching centres for women Empowerment	Item Number (iii) of Schedule VII of the Companies Act, 2013 Promoting Gender Equality, Empowering women etc.		21.64	21.64	SEWA-THDC
4	Plantation & Nursery Development & installation of Solar Lights	Item Number (iv) of Schedule VII of the Companies Act, 2013 Ensuring Environmental Sustainability, Ecological balance, Protection of Flora & Fauna, Animal Welfare, Agro forestry, Conservation of Natural Resources and Maintaining Quality of Soil, Air & Water.		39.63	39.63	SEWA-THDC
5	Promotion and development of traditional Art & Culture	Item Number (v) of Schedule VII of the Companies Act, 2013 Protection of National Heritage, Art & Culture etc.		80.72	80.72	SEWA-THDC
6	Promotion of sports	Item Number (vii) of Schedule VII of the Companies Act, 2013 Training to promote rural sports, nationally recognized sports, and Olympic sports		9.36	9.36	SEWA-THDC
7	Emergency needs for taking up permitted CSR programmes during natural	Item Number (viii) of Schedule VII of the Companies Act, 2013		3.82	3.82	SEWA-THDC

	calamities / disasters (5% of the annual CSR Budget)	Contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government etc.				
8	Construction of Shamshan Ghats, Pathways, Yatri Sheds, Village Community Centres, Livelihood development programs in Project affected area, works, Establishment of custom hiring centre etc.	Item Number (x) of Schedule VII of the Companies Act, 2013 i.e; Rural Development Projects		354.52	354.52	SEWA-THDC
9	Armed force fund	Measures for the benefits of armed forces veterans, war widows and their dependents.		5.00	5.00	
10	Administrative overheads, capacity building, base line / need assessment survey, impact assessment etc. (should not be more than 5% of yearly budget)			65.08	65.08	SEWA-THDC
	Total			1752.36	1752.36	