

IMPACT ASSESSMENT

OF CSR PROJECTS FY2023-24





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LIST OF ABBREVIATIONS

BPL	: Below Poverty Line
CSR	: Corporate Social Responsibility
EMB	: Education Management Board
FGDs	: Focus Group Discussions
Gol	: Government of India
GoUP	: Government of Uttar Pradesh
IA	: Impact Assessment
IKCA	: Indian Kayaking and Canoeing Association
ITBP	: India-Tibetan Border Police
KII	: Key Informant Interviews
MoUs	: Memorandum of Understandings
MIGS	: Minimally Invasive Glaucoma Surgery
NFHS	: National Family Health Survey
OBC	: Other Backward Class
OECD-DAC	: Organization for Economic cooperation- Development Assistance Committee
SR Asia	: Social Responsibility Asia
SC	: Scheduled Caste
SDGs	: Sustainable Development Goals
THDCIL	: THDC India Ltd.
TBP	: Tehri Baandh Pariyojana
TES	: THDC Education Society
UOA	: Uttaranchal Olympic Association
VOP	: Village Outreach Programme



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EXECUTIVE SUMMARY

This Impact Assessment Report, prepared by SR Asia, evaluates the effectiveness of THDCIL CSR initiatives for FY 2023-24, in compliance with the Companies Act 2013 and CSR Rules. The projects address critical needs in underserved communities across sectors like education, healthcare and sports, reflecting THDCIL commitment to sustainable development and social inclusion in regions such as Rishikesh, Tehri Garhwal, Dehradun, and Mount Abu.

The assessment utilizes the OECD-DAC framework to provide a structured analysis across six key criteria: relevance, coherence, effectiveness, efficiency, impact, and sustainability. Each project was evaluated through qualitative and quantitative research methods, including stakeholder consultations, field observations and case study method allowing for an in-depth understanding of the outcomes, challenges, and areas for improvement.

Context and Need for THDCIL CSR Initiatives

The initiatives under THDCIL CSR framework address critical gaps in social infrastructure and services, which are especially significant in rural and semi-urban areas across Uttarakhand and Rajasthan. According to recent statistics, these regions have high poverty rates, low literacy levels, and limited access to advanced healthcare and sporting facilities. In Uttarakhand, many students from marginalized communities lack affordable, quality educational opportunities. The National Family Health Survey (NFHS) highlights Uttarakhand's healthcare challenges, such as high out-of-pocket expenses and limited access to specialized care for preventable and treatable conditions. Moreover, with only a

few centers offering specialized ophthalmic and MRI facilities, medical care remains inaccessible for many rural residents who often need to travel far distances for essential diagnostic services.

By establishing and supporting educational, healthcare, and sports projects, THDIL's CSR initiatives aim to mitigate these disparities and promote community well-being. Through strategic partnerships and careful alignment with national policies, these projects reflect a targeted approach to improving educational, health, and economic outcomes in line with the United Nations Sustainable Development Goals (SDGs).

Key Findings and Impact of CSR Initiatives

- 1. Running of two schools (01 no. at Rishikesh Distt. Dehradun and 01 no. at Bhagirathipuram Distt. Tehri):** THDCIL's support for THDC High School in Rishikesh and T.B.P. Intermediate School in Tehri Garhwal has facilitated access to quality education for 649 students from low-income backgrounds. The initiative provides free educational resources, uniforms, and meals, significantly reducing the financial burden on families and encouraging sustained enrollment. Extracurricular programs, including skill-building and career counselling, have further equipped students with the tools to pursue higher education and improved career prospects.
- 2. Financial Assistance towards procurement of medical equipment (Zeiss Microscope Model: (OPML) Lumera 700 system) for new operation theatre at Vivekanand Netralaya, Dehradun:** The installation of the Zeiss OPML Lumera 700 microscope at Vivekanand Netralaya has revolutionized ophthalmic care for underserved populations. By enabling advanced surgical precision and reducing operation times, the microscope has improved patient outcomes for complex eye conditions, including cataracts and glaucoma. The technology has increased the hospital's capacity to perform complex surgeries, benefiting over 1,200 patients annually. This initiative aligns with THDCIL's goal of bridging healthcare gaps in remote areas through cutting-edge solutions.
- 3. Partial support for establishment of MRI Testing Unit for Global & Research Center at Mount Abu, Rajasthan:** The establishment of the MRI unit at J Watumull Global Hospital has transformed diagnostic healthcare in Mount Abu and surrounding areas. Equipped with AI-powered imaging, the unit has provided timely, affordable, and accurate diagnoses for over 400 patients annually, reducing dependency on distant facilities. The project has significantly decreased diagnostic costs and wait times, improving access to critical healthcare for low-income families. This initiative demonstrates THDCIL's commitment to enhancing rural healthcare infrastructure and

addressing pressing community needs.

4. Hosting Open National Canoe Sprint Senior Men & Women Championship and Qualifier 37th National Games (GOA 2023) at Tehri Lake: The Open National Canoe Sprint Senior Men & Women Championship, organized at Tehri Lake, brought together 444 participants from across India, boosting the local economy by generating demand for lodging, catering, and other services. The event also promoted water sports in the region, fostering a new avenue for tourism and sports-based revenue. This initiative aligns with regional development goals and has created a foundation for Tehri Lake's potential as a sports and recreational hub.

Sustainability

THDCIL's initiatives are designed with sustainability in mind, aiming for long-term benefits and continuity of impact. Educational projects have established a sustainable model by providing equitable learning environments and community engagement, ensuring sustained educational growth. Healthcare projects, supported by maintenance agreements and staff training, are poised for long-term operation. The sports initiative, through infrastructure improvements and community involvement, holds the potential for future sporting events, further supporting local economic development.

Challenges and Recommendations

While THDCIL's CSR projects have successfully addressed various community needs, there remain areas for enhancement. The report suggests expanding infrastructure in schools to accommodate growing enrolments, upgrading medical equipment, and increasing community outreach for greater inclusivity. Additionally, to ensure the scalability of the sports initiative, further investments in training facilities and community engagement programs are recommended.

Conclusion

THDCIL's CSR initiatives in FY 2023-24 have made a substantial impact on local communities by enhancing educational access, healthcare quality, and sports opportunities. Through strategic partnerships and alignment with national and regional goals, these programs have effectively met community needs while laying a foundation for sustainable, long-term growth. This assessment reaffirms THDC's role as a responsible corporate committed to promoting inclusive and sustainable development across its operational areas.

CHAPTER 1

INTRODUCTION

This chapter provides a comprehensive introduction to the concept and importance of impact assessment in CSR, especially for projects implemented under THDCIL. It covers the purpose, process, and methodology behind evaluating the social and environmental effects of CSR initiatives and discusses the alignment of these assessments with both national and global standards.

1.1 Brief Overview of the Impact Assessment

THDCIL commissioned SR Asia to conduct a third-party impact assessment of THDCILs CSR initiatives implemented during FY 2023-24. In compliance with Section 135 of the Companies Act, 2013, and the Companies (CSR Policy) Rules, this assessment focuses on projects with an outlay exceeding ₹1 crore, as mandated by the Ministry of Corporate Affairs' guidelines. This initiative ensures transparency, accountability, and the effective utilization of CSR funds.

The evaluation employs the globally recognized OECD-DAC framework, analyzing the relevance, coherence, effectiveness, efficiency, impact, and sustainability of projects spanning education, healthcare and sports promotion. It also aligns these efforts with community needs, national priorities, and the United Nations Sustainable Development Goals (SDGs).

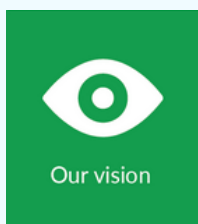
This independent evaluation measures both tangible and intangible outcomes, while identifying areas for improvement and future enhancement. By engaging SR Asia for this task, THDCIL reaffirms its commitment to meaningful community development and sustainable progress in its operational regions.

1.2 About THDC India Limited

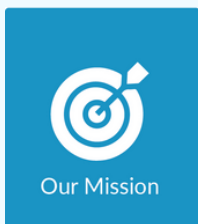
THDC India Limited (THDCIL), a leading public sector power enterprise, was established in July 1988 and earned "Mini Ratna" status in 2009 and Schedule 'A' PSU status in 2010. Initially, its equity was shared between the Government of India (GoI) and the Government of Uttar Pradesh (GoUP) in a 75:25 ratio. However, following a strategic sale in 2020, NTPC Limited now holds a 74.496% share, with the remaining 25.504% held by GoUP. With an authorized share capital of ₹4,000 Cr and a paid-up capital of ₹3,665.88 Cr (as of February 2024), THDCIL has consistently generated profits since 2006-07, beginning with its Tehri HPP project. Originally focused on hydroelectric power with the

2,400 MW Tehri Hydro Power Complex, the corporation has diversified into multi-state and international projects, expanding into thermal, solar, and wind energy. Today, THDCIL oversees a 4,351 MW project portfolio, comprising 1,587 MW in operational capacity across hydro, wind, and solar, and 2,764 MW in projects under construction. Major ongoing developments include a 2,000 MW Ultra Mega Renewable Energy Power Park (UMREPPS) in Uttar Pradesh through a joint venture with UPNEDA, and partnerships for 10,000 MW renewable projects in Rajasthan, hydro projects in Uttarakhand, and a range of solar and hybrid projects totalling 3,270 MW in Karnataka. THDCIL is also developing 6 pumped storage projects (PSPs) with 6,790 MW capacity in Maharashtra.

THDCIL's Mission, Vision & Core Values



An integrated global energy entity delivering sustainable solutions to meet India's net-zero ambitions



- Making available clean and affordable energy from diverse sources.
- Explore emerging energy technologies and deliver sustainable solutions of scale to enable smooth transition.
- Building organizational capabilities to embrace change through enablement and development of people.
- Conforming to the highest ethical standards and integrity in business activities.
- Acting in a socially responsible manner, committed to the cause of environment and people
- Adopting best practices and state-of-the-art technology for higher productivity and efficiency.
- Promoting creativity and innovation for optimal utilization of resources.



A : Accountability

S : Sustainability

P : Passion

I : Innovation

R : Respect

E : Ethics

1.3 THDC India Limited CSR Policy

THDC India Ltd. is a prominent company in Uttarakhand actively engaged in CSR activities since its inception. The company conducts its CSR activities in alignment with Schedule VII of the Companies Act 2013, focusing on areas such as healthcare, rural development, livelihood enhancement, education, environmental conservation, cultural preservation, and sports development.



Socially responsible corporate, continuously enhancing value creation in society and community and promoting sustainable development.

CSR Vision



CSR Mission

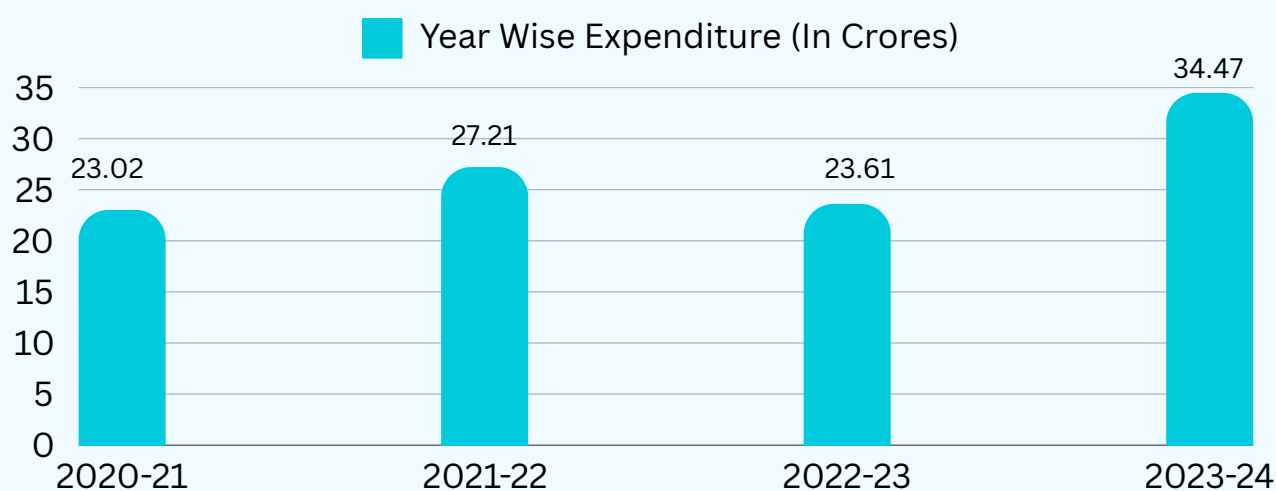
- To build sustainable value-based relationship with the key stakeholders through ongoing two-way communication.
- To undertake CSR programmes with a human face.
- To transparently share the CSR initiatives with the stakeholders
- To ensure increased commitment at all levels in the organization to operate its business in an economically, socially and environmentally sustainable manner.
- To directly or indirectly take up CSR programmes that benefit the communities in and around its work centers and over a time result in enhancing the quality of life and economic well-being of the local populace.
- To promote inclusive growth and address the basic needs of the deprived, underprivileged, neglected and weaker sections of the society.
- To generate through CSR initiatives, goodwill and pride for THDCIL among stakeholders and help reinforce a positive and socially responsible image of THDCIL as corporate entity.



1.4 Expenditure on CSR

Each year, THDC India Ltd. allocates a budget for CSR and Sustainability initiatives with the approval of its Board of Directors. This allocation aligns with the Companies Act 2013, which mandates that a minimum of 2% of the average net profits from the preceding three years be designated for CSR activities.

Fig 1: Year Wise Expenditure in CSR



The financial investment in CSR projects by THDCIL has grown over the years. The scope of CSR initiatives has also expanded, reaching a diverse range of beneficiaries from project families and local communities. These projects align with Schedule VII of the Companies Act as outlined in the THDCIL CSR policy, covering extensive geographic regions in Uttarakhand, Uttar Pradesh, Madhya Pradesh, Rajasthan, Delhi etc.

1.5 Summary

The impact assessment of THDCIL's CSR projects highlights the organization's commitment to meaningful and sustainable community development. By aligning with the OECD framework and focusing on sectors such as health, education, and environmental conservation, THDCIL effectively addresses community needs. This assessment underscores the positive outcomes achieved and suggests that while impacts have been significant, continuous focus on sustainability will further enhance long-term benefits.

CHAPTER 2

APPROACH & METHODOLOGY

This chapter outlines the specific approach and methodology used in conducting the impact assessment of THDCIL's CSR initiatives. It explains the criteria for evaluation, data collection tools, sampling methods, and the comprehensive framework used to ensure accurate and representative results.

2.1 Introduction

THDC India Limited (THDCIL), a joint venture between NTPC and the Government of Uttar Pradesh, plays a crucial role in India's energy development. Its sponsored society, SEWA-THDC, focuses on sustainable community development through interventions in health, sanitation, education, skill development, and livelihood generation. This year SR Asia is entrusted to carry out the Impact Assessment of the CSR projects implemented by THDCIL. The purpose of this report is to outline our approach to evaluating CSR projects undertaken in FY 2023-24, particularly those with an outlay of ₹1 crore or more.

2.1.1 Objective of the Study

- The primary objectives of this impact assessment are:
- To measure the social, economic, environmental, and technical impacts of CSR interventions.
- To evaluate the effectiveness, efficiency, relevance, and sustainability of the projects.
- To assess whether the programs have met their intended objectives and provide recommendations for improving future interventions.
- To identify unintended outcomes, both positive and negative, to better understand the broader impacts of these interventions.

2.1.2 Scope of the Study

- The scope of work is as follows:
- Identifying any changes resulting from programme interventions, establish causal connections between the changes and the programme inputs and measure the magnitude of the change.
- To assess a wide range of broad and key and strategic performance indicators, including project effectiveness, efficiency, relevance, performance, sustainability and coverage.
- Determining how effectively and efficiently the programmes have been implemented and the extent to which the net benefits have been achieved.
- Examining to what extent has the intervention achieved its objectives (outputs and outcomes) or will do so in the future?
- Suggestion (if any) to make programs more effective.
- Quantifying (wherever possible) the intended and unintended, direct or indirect, impacts of the programmes/interventions on people and community?
- Defining how has the intervention affected the overall situation of the target beneficiaries and stakeholders?

2.2 Approach

Our approach combines qualitative and quantitative methodologies to provide a comprehensive view of the CSR programs' impacts. The key components of our methodology are:

Fig 2: SR Asia's Holistic approach to Impact Assessment

Objective, challenged and balanced perspective

Stakeholders' views were considered in a balanced and sensitive manner to reflect the current situation.

Connected thinking

SR Asia leveraged its vast network and best practices from similar sectors within India to share insights and region-specific learnings.



Technical leads will be sector experts

A specialized team with extensive experience in health, education, sanitation, rural development, and impact assessment led the implementation.

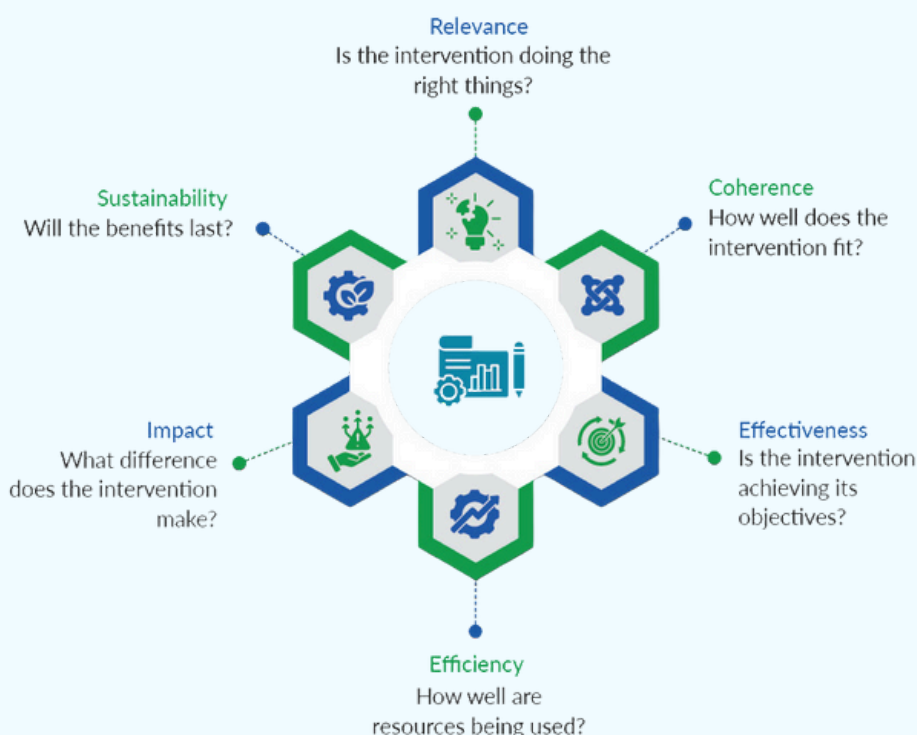
Participatory approach

Stakeholders, including key decision-makers, were involved throughout the process to provide input and validate findings.

2.3 The Assessment Criteria (OECD-DAC)

The OECD Framework and approach serve as the foundation for evaluating the impact of CSR projects. The OECD-DAC Network on Development Evaluation (EvalNet) has defined six assessment criteria: relevance, coherence, effectiveness, efficiency, impact, and sustainability. These criteria offer a normative framework for assessing the value or merit of an intervention, whether it is a policy, strategy, program, project, or activity.

Fig 3: OECD-DAC Framework for Impact Assessment



Relevance: The extent to which the intervention's objectives and design align with the needs of the beneficiaries, considering whether the residents in project areas sought the intervention or if it was imposed upon them.

Effectiveness: The degree to which the intervention has achieved, or is expected to achieve, its objectives and outcomes, including differences across groups. It also considers whether the intervention reached areas where individuals lack access to communal facilities.

Impact: The scale of the intervention's broader positive or negative effects, whether intended or unintended, assessing if it has led to a meaningful change in people's circumstances.

Coherence: The alignment of the intervention with other activities within a country, sector, or institution.

Efficiency: The degree to which the intervention achieves or is expected to achieve results in a cost-effective and timely manner.

Sustainability: The likelihood that the net benefits of the intervention will endure over time, considering whether THDCIL's CSR projects can provide long-term benefits for the community.

The CSR activities of THDCIL have been evaluated using these six parameters, offering a structured framework for assessing performance and recommending any necessary modifications or improvements.

2.4 Research Design and Methodology

The impact assessment research design and methodology were largely exploratory and descriptive in nature. The population of the study consists of people living in the project areas of Dehradun, Tehri and Mount Abu in which the CSR initiatives by THDCIL were implemented.

2.4.1 Universe and Population

The universe of the study consists of all the stakeholders affected directly or indirectly through the CSR initiatives implemented by THDCIL.

2.4.2 Sampling Method & Technique

Probability based purposive sampling method will be used by the assessment team to draw samples for the study to make it a representative of the total universe and population. The detailed sampling plan is followed.

2.4.3 Sampling Plan

A stratified random sampling approach will be used to ensure adequate representation from different geographic areas, beneficiary groups, and project types. This will help us capture variations in impact across different projects and locations.

S.No.	Name of Project	Beneficiaries	Sample Covered	Tool to be Used
1.	Running of two schools (01 no. at Rishikesh Distt. Dehradun and 01 no. at Bhagirathipuram Distt. Tehri)	School Students, Teachers, Parents	Approx. 150	<ul style="list-style-type: none">• Observation method• KII• Case Study
2.	Hosting Open National Canoe Sprint Senior Men & Women Championship and Qualifier 37th National Games (GOA 2023) at Tehri Lake	Championship participants, organisers, local people	30	<ul style="list-style-type: none">• Observation method• Questionnaire• KII• Case Study
3.	Financial Assistance towards procurement of medical equipment (Zeiss Microscope Model: (OPML) Lumera 700 system) for new operation theatre at Vivekanand Netralaya, Dehradun	Patients, Hospital administration, families	10	<ul style="list-style-type: none">• Observation method• KII• Case Study
4.	Partial support for establishment of MRI Testing Unit for Global & Research Center at Mount Abu, Rajasthan	Patients, Hospital, Administration, families	7	<ul style="list-style-type: none">• Observation method• KII• Case Study

2.4.5 Tools for Data Collection

A. Desk Review

We will begin by reviewing available documents and data sources to develop an understanding of the project's scope, objectives, and context. This will include:

- **Project Documents:** Letters of Award (LOA), MoUs, monthly and annual program reports.
- **Policies & Communication:** THDCIL's CSR policies, guidelines, and strategies.
- **Past Evaluations and Reports:** Previous impact assessments, case studies, and beneficiary reports.

B. Field Visits and Data Collection

Field visits are essential for primary data collection. We propose a combination of surveys, focus group discussions (FGDs), and key informant interviews (KIIs). These will be conducted in the target communities to evaluate the programs' impact on direct and indirect beneficiaries.

- **Surveys:** Structured surveys targeting beneficiaries will provide quantitative data on the reach, coverage, and outcomes of the interventions.
- **FGDs:** Discussions with beneficiaries will allow for qualitative insights into their experiences and perceptions of the program's effectiveness.
- **KIIs:** Stakeholders such as THDCIL/SEWA-THDC staff, government officials, and local partners will be interviewed to understand program delivery, challenges, and broader impacts.

C. Case Studies

In-depth case studies will be developed to illustrate the experiences of selected beneficiaries. The case studies will focus on specific program interventions and their impact on individuals and communities.

These case studies will be presented using a mix of narrative and data visualization, highlighting key changes in beneficiaries' lives due to the interventions.

D. Stakeholder Interviews

In addition to field visits, interviews with key stakeholders such as implementing agencies, local authorities, and public representatives will provide insights into the challenges faced during program implementation and their potential long-term effects.

The key stakeholders to interview will include:

- THDCIL staff involved in project management and implementation.
- Beneficiary groups such as community leaders and program participants.
- Government officials and partners involved in the CSR initiatives.

E. Photography/Videography

Geotag Photography and videography was done using visual data collection techniques, particularly for gathering field-based evidence while confirming the implementation of THDCILs CSR projects.

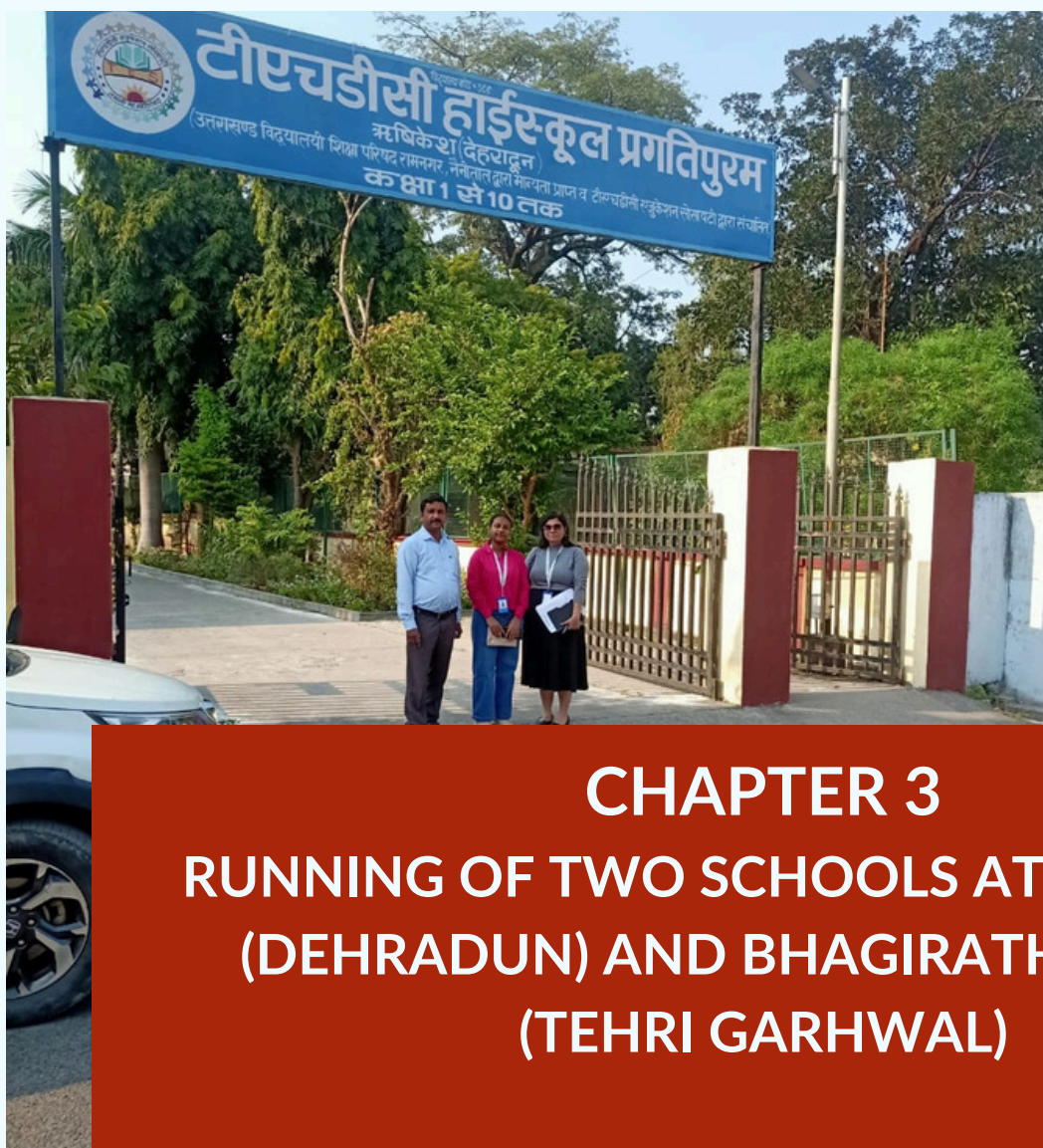
2.5 Timeline of the Study

The study was conducted following a detailed work plan, which included phases such as project kick-off meetings, desk research, team building, data collection, and final report submission. Each step was planned to ensure timely execution of the impact assessment, with careful adherence to the timeline.

S.No.	Key Activities	D1-2	D3-4	D5-6	D7-8	D9-10	D11-12	D13-14	D15-16	D17-18	D19-20
1	Project Kick-off Meeting: Kick-off meeting with THDCIL outlining the impact assessment plan										
2	Team Building: Mobilizing members of core team.										
3	Desk Research: Study of important project-related documents to build contextual understanding.										
4	Inception Report: Preparation of inception report describing the data collection plan and project timeline.										
5	Data Collection: Carrying out field visits, questionnaire survey, case studies, FGDs, and stakeholder consultation.										
6	Data Organization and Transcription: Exporting data to spreadsheets, and transcription of qualitative data										
7	Data Cleaning: Data cleaning to remove the anomalies in the dataset using cross-verification										
8	Data Analysis: Data analysis through spreadsheets, statistical tools, and content analysis.										
9	Draft Report Submission: Preparation of draft report and submission to client.										
10	Feedback from THDCIL: Receiving feedback from THDCIL team on draft report.										
11	Final Report Submission: Preparation and submission of final report considering inputs and feedback from THDCIL										

2.6 Summary

In summary, the assessment approach utilized for THDCIL's CSR initiatives is structured, inclusive, and thorough. By employing both qualitative and quantitative research methods and adhering to OECD-DAC criteria, this methodology provides an in-depth understanding of the projects' impacts. The use of diverse tools and stakeholder engagement techniques strengthens the reliability of findings and offers valuable insights for future CSR strategy and program improvement.



CHAPTER 3

RUNNING OF TWO SCHOOLS AT RISHIKESH (DEHRADUN) AND BHAGIRATHIPURAM (TEHRI GARHWAL)

3.1 Introduction of the Project

THDCIL, as part of its CSR intervention, provided support to THDC High School, Pragati Puram (Rishikesh) and T.B.P Intermediate School, Bhagirathipuram (Tehri Garhwal) since 1992.

Education Management Board (EMB) was rechristened as TES (THDC Education Society) in the year 2010. The aim of TES is to provide a high-quality education to children belonging to low-income families and project affected areas. It undertakes various educational initiatives and programs including scholarships, skill development, and vocational training to empower students and foster academic growth. TES also prioritizes the enhancement and maintenance of educational infrastructure to ensure that students have access to modern facilities and resources. The total cost of the THDC School Education Program amounts to ₹650.00 lakh during the financial year 2023-24.

Category wise detail of both the schools are given below:

Table 1: Social category wise social distribution

Schools	SC Category Students		OBC Category Students		General Category Students		Total Students		Total Student	BPL	
	M	F	M	F	M	F	M	F		M	F
Rishikesh	77	79	55	63	74	91	209	237	446	30	32
Tehri	40	62	3	7	49	37	95	108	203	2	3

3.1.1 School Facilities

THDC Education Society is taking care of all day-to-day activities of both the schools. Both schools at present pursue the “UTTARAKHAND BOARD” Pattern of education. At the end of the academic year 2023-24, there were 649 students studying in both schools from class 1 to class 12. These students were guided by the learned and qualified teachers and supporting staff headed by the principal. THDCIL has provided necessary infrastructure to run the schools. The classrooms are equipped with quality furniture, blackboards, and other learning aids. School has dedicated computer Labs, Science laboratory. The students are provided free of cost several items viz. Textbooks, Note Books, School Shoes, School Bags, Uniform, Stationery etc. by THDC Education Society. School has other amenities like neat and clean drinking water, toilet facilities and playground. Besides all facilities, midday meals (NAIVEDYAM-Meal initiative). A school bus & a bolero/taxi also have been arranged by THDC Education Society for facilitating commutation of

students from their villages to school and back. The school staff is well paid, and have been provided with medical facilities, and residential accommodation.

A detailed analysis of the facilities provided is given in Table.

Table 2: Facilities available at schools FY2023-24		
Expenses & Facilities	THDC High School, Rishikesh	T.B.P Intermediate School, Tehri
Education Fees	✓	✓
Books & Notebooks	✓	✓
Bags & Stationery	✓	✓
School uniforms	✓	✓
Mid-day meal	✓	✓
Sports aids	✓	✗
Curricular Activities	✓	✓
Annual Function	✗	✗
Cultural Events	✓	✓
Educational trips	✓	✗
Block level games	✓	✗
Transportation (Bus & Taxi service)	✗	✓

3.1.2 Key Benefits

The school is providing quality education to the students of the nearby area generally coming from the weaker and poor section of society. The fee charged by the students is just nominal @ Rs 50 to Rs 150 per month from class 1 to class 12. Various extra co-curricular activities are arranged all through- out the year for students. Students also participate in District and State Level sports. Students also actively participate in cultural activities.

Regular monitoring and inspections by the management of TES are carried out in order to check the quality of education being provided to the students. Continuous effort is being put to improve the quality of education and turn these schools into an institution driven by quality and at par with good school in the region.

3.2 Study Methodology and Sampling

To evaluate the project, the following field activities were conducted:

- **Infrastructure Assessment:** A walkthrough of the school premises was carried out to evaluate the existing infrastructure, maintenance, and upkeep. Observations included factors such as hygiene, cleanliness, sanitation, and health and safety measures.
- **Stakeholder Consultations:** Various stakeholders were engaged to gather insights into the teaching and learning environment, staff capacity-building initiatives, challenges faced by students, and future development plans for the school.
 - **Students:** Students were assessed for their reading, writing, and comprehension skills. Their feedback was collected regarding the activities conducted during the year, teaching methodologies, and suggestions for further improvements.
 - **Principal and Teachers:** Discussions with the principal and teachers focused on understanding school activities and gathering their recommendations for school improvement.
 - **Parents:** Parents were consulted to evaluate their satisfaction with the project and its impact on their children.
 - **Mr. A.N. Tripathy** (General Manager, HR&A, and Vice-President, TES): Consultations with Mr. Tripathy provided insights into the future plans and strategic goals for the school.
- **Case Studies and Observations:** Specific case studies of students and overall improvements in the school system were documented during the consultation sessions.
- **Documentation:** Photography and videography were conducted on the school premises for record-keeping and further analysis.

3.3 School Impact Analysis at Rishikesh and Tehri, Uttarakhand

The schools run by TES were assessed on various parameters to understand its impact on the lives of students. The detailed analysis of the same is given in the following.

3.3.1 Social Impact

As a part of the social impact assessment some of the key factors have been evaluated to measure the social inclusion and benefits received by the group of beneficiaries.

A) Social categories of Student

Fig 4: Social Composition- Students

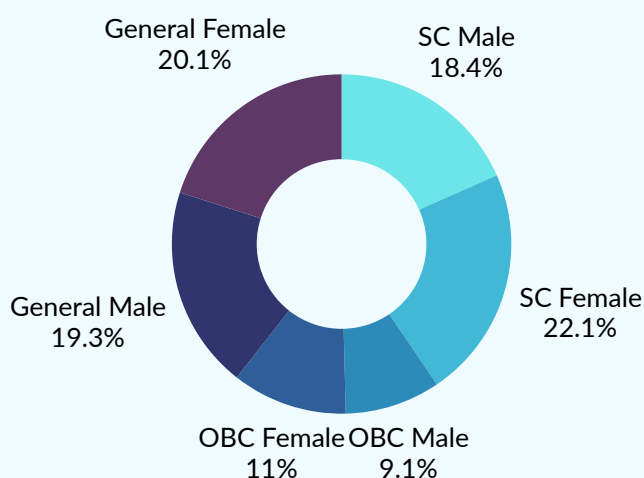
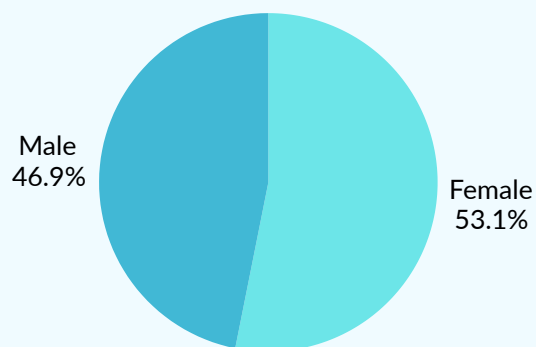


Fig 5: Gender based representation- Rishikesh & Tehri

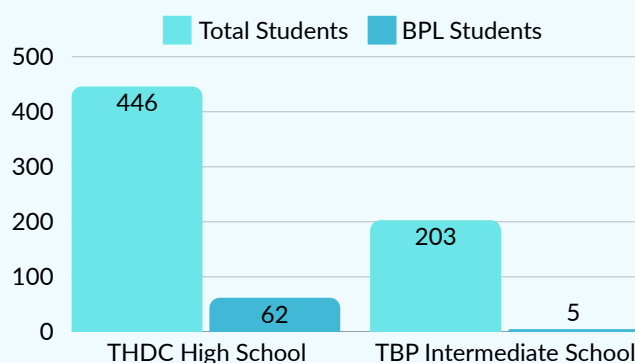


The graph analysis represents the social distribution of the students enrolled in both schools. This shows that all social categories of students got equal opportunity to enroll their ward in school and the distribution has been similar across all sections and classes. The data also indicate that the number of girl students exceeds that of boy students in all categories. This can be further derived that the school provides equal opportunities across the social horizons and also promote girl child education. This balanced representation underscores the schools' dedication to creating an equitable environment for all students.

B) Total Students Vs. BPL Students

This section presents the BPL students enrolled in both the schools.

Fig 6: Total students Vs BPL Students



The graph depicts the relationship between the total student population and the subset of students classified as Below Poverty Line (BPL). This comparison provides insights into the proportion of economically disadvantaged students within the overall student body and indicates that BPL students also form a substantial part of the school.

3.3.2 Quality of Education

A. External Assessment of Students

A test was conducted with students from both schools to assess their reading and speaking skills and confidence. The results of the same are presented in Table 1.

Table 3: External Assessment Results

School	Total Participants	Reading	Speaking	Confidence
THDC High School	25 (Class 7-10)	23 (92%)	23 (92%)	22 (88%)
TBP Intermediate School	30 (Class 6-11)	27 (90%)	27 (90%)	25 (83.3%)

It can be inferred through the results that students are good in reading and speaking, whereas they also displayed confidence while interacting with the Impact Assessment team.

B. Teachers Adequacy

The school has an adequate number of teaching staff members, and it is currently operating at its maximum capacity. The THDC High School has a teacher-student ratio of 1:27 whereas T.B.P. Intermediate School has a ratio 1:10, which is well with the limits of 1:30 as outlined in the New Education Policy, 2021. A lower ratio suggests better quality of education for students, more engagement for students and effective classroom management.

C. Academic Achievement

In FY 2023-24, Almost all the students were able to pass class 10th and 12th. The details of the results are presented in Table.

Table 4: Academic results of students

School	Standard	Pass percentage	Highest percentage
THDC High School	10th	99%	82%
TBP Intermediate School	10th	99%	77%
	12th	99%	79.6%

During year six students won Kamala Nehru Scholarship whereas six students were nominated for Inspire award. The detailed breakup is given in table.

Table 5: Scholarship awardees in both schools

School	Kamala Nehru Scholarship Winner	Inspire Award Nominees
THDC High School	03	03
TBP Intermediate School	01	05

The institution employs high qualified teachers and dedicated towards providing quality education to the children and fostering an enriching learning environment for the students. In FY 2023-24, a total of 16 teachers were teaching at THDC High School while T.B.P. Intermediate School had 20 teachers. Various competitions are organized by the schools to encourage students to actively participate in diverse activities, help them to explore their interests, develop new skills and boost their self-esteem.

3.3.3 Parent Teacher Meeting

Parent teacher meetings are held monthly. The school authorities make sure to have parents/guardians of the students to report their monthly progress. Apart from that the school authorities contact the parents who fail to join the meetings.

3.3.4 Well-equipped/Ventilated classrooms

The classrooms have adequate numbers of benches for students, chair-table for teacher, blackboard, chalks and duster, appropriate luminescence and windows. The classrooms are well equipped for TLM and have windows for ventilation in the classroom.

3.3.5 Sanitation in the schools

The toilets in both the schools are neat and clean, but in some washrooms a bad odour is emanating from them. The girls' toilet is equipped with a sanitary napkin dispensing machine in both schools but not functioning at the time of assessment in T.B.P. Intermediate College. There were two cleaners allotted for cleaning the washrooms. The toilets have a running water supply, and water coolers for drinking water are installed in the school. Dustbins are installed in the schools, including washrooms.

3.3.6 Career Counselling

Career counselling sessions are held for the students by the administration of the school to encourage them to continue their education and to advise them in the selection of educational courses for consecutive grades.

3.3.7 Economic Impact

The social survey revealed that 90% of earning family members whose children are enrolled in the school are engaged in occupations such as helpers, cleaners, painters, masons, security guards, gardeners, cooks, street vendors, and daily wage workers. These families benefit from the provision of free meals, books, and uniforms, which enables parents to send their children to school without financial strain.

During the field survey, parents expressed significant relief, both economically and emotionally, in supporting their children's education. It was observed that the removal of direct economic burdens not only reduced stress levels among parents but also contributed to a decline in domestic conflicts and violence. This, in turn, has fostered a positive and supportive home environment, allowing children to focus on their studies and thrive both at school and at home.



3.4 OECD-DAC Analysis of TES run schools

3.4.1 Relevance: High

The THDC Schools program aligns with the educational needs of economically disadvantaged students in Rishikesh and Tehri Garhwal, providing free access to quality education and resources such as uniforms, books, and meals. By addressing barriers to education in underserved communities of Geeta Nagar, Nehru Gram, Indiranagar, Mansadevi, Shyampur etc. in Rishikesh and Kothi, Dobra, Chopra, Kiyari, Koteshwar, Mehr etc. in Tehri, this initiative is directly relevant to regional and national priorities for inclusive education and literacy improvement. Additionally, it aligns with the Sustainable Development Goals (SDGs) and the Right to Education Act in India, ensuring no child is deprived of educational opportunities due to financial limitations.

3.4.2 Coherence: High

The schools' operations complement existing government educational initiatives, integrating seamlessly with local socio-economic development goals. By adhering to the Uttarakhand Board curriculum and focusing on holistic development through extracurricular and sports activities, TES ensures alignment with regional and national policies. The inclusion of career counselling further enhances the schools' contribution to lifelong learning opportunities for students.

3.4.3 Effectiveness: High

The schools have demonstrated remarkable effectiveness in achieving their objectives. With nearly 100% pass rates in grades 10 and 12, and active participation in cultural and sports events, the students' academic and extracurricular performance highlights the program's success. The high-quality teaching staff and favorable student-teacher ratios (1:27 and 1:10) ensure personalized attention and improved classroom engagement. Parent-teacher meetings and continuous monitoring further reinforce the quality of education provided.

3.4.4 Efficiency: High

The program efficiently utilizes resources, with a total expenditure of INR 6.5 crore and an average cost of INR 1,00,155.00 per student. Facilities like computer labs, science laboratories, transportation services, and midday meals are well-maintained and contribute to the overall efficiency of the schools. The consistent monitoring and active involvement of TES management ensures that funds are allocated effectively, maximizing impact.

3.4.5 Impact: High

The schools have significantly improved access to quality education for economically disadvantaged families, fostering better academic and personal development outcomes for students. The provision of free resources and reduced financial burdens on families has led to decreased 0% dropout rates from both schools, improved gender equity, and enhanced community well-being. Additionally, the initiative has created a supportive home environment by reducing stress and conflict among parents.

3.4.6 Sustainability: Medium

The initiative is fulfilling the stated objective of providing affordable education to students belonging to weak socio-economic backgrounds. The school is charging a user fee from the students that creates inclusiveness among the students towards the school. The initiative is partially sustainable in its approach.



3.5 Discussion with Stakeholders

There are various suggestions and recommendations given by Faculties, Students and TES members during the discussion. The details are given below.

3.5.1 Suggestions given by THDC High School Faculty:

- Teachers have recommended that the management consider delegating the responsibility of handling admission numbers to dedicated team or department.
- Infrastructure should be expanded to accommodate the growing number of students, to ensures that facilities meet the increasing demand for space and resources.

3.5.2 Suggestions given by THDC High School Students:

- Students have recommended to update computer system with latest software, tools and applications.
- Science labs should be regularly upgraded with the latest equipment and technology to enhance learning experiences. Additionally, chemicals and other materials used in experiments should be replaced periodically to ensure safety and accuracy.
- Bus service should be provided to students for transportation as many of them live far from the school, making it difficult for them to commute.
- Projector should be installed in classrooms for grade 9th to 10th as the topics are complex and can be more easily understood through graphical representations and visual aids.
- Students have recommended that school should be expanded to include classes up to 12th grade.
- The National Cadet Corps (NCC) club should be established in the school to promote discipline, leadership and physical fitness.



3.5.3 Suggestions given by T.B.P Intermediate School Faculty:

- Faculty of T.B.P Intermediate School recommends that management should visit the school every six months to assess the problems faced by students and teachers.
- Teachers should be involved in management meeting organised by THDC to provide valuable insights and ensure effective communication between teaching staff and administration.
- Training should provide to teachers to enhance their skills and capabilities, focusing on capacity building to improve teaching effectiveness and overall educational quality.
- Sports equipment should be provided to students to encourage participations in physical activities and promote overall health and well-being.
- The library should be updated regularly to ensure that it includes current resources, new publications and modern technology to meet the evolving needs of students and teachers.
- The sanitary vending machine should be refilled regularly to ensure continuous access to essential hygiene products, promoting the health and well-being of the girls and teachers.
- Smart classrooms should be installed in classes to improve student engagement.

3.5.4 Suggestions given by students of T.B.P Intermediate School:

- Computers are outdated and not working, required latest software, tools and applications.
- Block level games should be organised by school to provide students opportunities to showcase their athletic skills and represent their school at the block level.
- Students should be taken on educational trips to enhance their learning experience and provide real-world exposure.

3.5.5 Consultation with TES members

Consultation process was carried out with Dr. A.N. Tripathy, the Vice-President of TES Society. Discussion was held on few key points and the summation is presented as follows:

- A through planning to install projectors in classes to transform them into smart classes to enhance learning experience of students and improve student engagement.
- Career counselling for students can be planned to provide personalized guidance to students to explore various career paths, understand their strengths and interests, and make informed decisions about their futures.

- Planning to introduce Science Olympiads to encourage students to explore and deepen their understanding of scientific concepts.

3.6 Overall Assessment

The impact assessment of the program reveals its success in providing quality education to students from low-income families in Rishikesh and Tehri Garhwal. By offering free resources such as textbooks, uniforms, and meals, the program has significantly alleviated financial burdens, promoting sustained engagement and lowering dropout rates. The high academic performance, with almost 100% pass rates, underscores the effectiveness of dedicated teachers and enhanced learning methods. Furthermore, the program's commitment to gender equality and inclusivity ensures balanced representation across social categories, fostering an equitable educational environment. The integration of skill-building, extracurricular activities, and career counselling supports students' personal growth and prepares them for further academic and career pursuits. Overall, the program has made a meaningful, sustainable impact on educational access and empowerment in the region.



CASE STUDIES

1. Leading with purpose, inspiring through action

In an initiative to foster leadership and teamwork skills, the teachers at the THDC High School selected a group of students to take on the role of team leaders. These leaders—Hariom, Sahil, Akshay, Shiva, Sachin, Vijay, Nitin, Sumit, Munendra, Vivek, Prince, and Rithik—were entrusted with responsibilities that went beyond their regular academic routine.



Their duties included coordinating group activities, fostering collaboration among peers, maintaining discipline, overseeing the serving of mid-day meals, and ensuring every pupil was engaged and supported in their learning journey.

When interacting with the team leaders, they shared the transformative impact these responsibilities had on their personal and academic lives. They expressed how stepping into leadership roles had encouraged them to develop essential skills, including interpersonal communication, decision-making, and problem-solving. These newfound abilities not only enhanced their confidence and self-esteem but also motivated them to attend school regularly, underscoring the positive influence of their roles on their commitment to education.

The team leaders described how these experiences fostered a deeper sense of responsibility and accountability, encouraging them to approach tasks with greater enthusiasm and a proactive mindset. Navigating challenges as leaders taught them to collaborate effectively with their peers, strengthening their ability to work as cohesive teams. This collaborative effort also created a supportive and inclusive learning environment, benefiting not just the leaders but all students in the school.

Overall, the leadership experience has been a pivotal chapter in their personal growth, equipping these young leaders with skills that will serve them well beyond the classroom. It has fostered a culture of empowerment and collective success, leaving a lasting impact on the students and the school community as a whole.

2. Inspiring Minds, shaping futures

In the academic year 2023-24, the T.B.P.Intermediate School made a significant stride in enhancing its educational environment by recruiting 13 new teachers with specialized skills in various subjects and modern teaching methods. The initiative aimed to create an engaging and supportive learning atmosphere for students, inspiring them to explore new ways of learning and develop a genuine interest in their studies.

The impact of this quickly became evident through discussions with students, who enthusiastically shared their experiences with the new teaching approach. They described the methods as interactive, stimulating, and



highly effective in making learning enjoyable. Techniques such as encouraging students to take notes, using cross-questioning to promote critical thinking, incorporating maps, and providing relatable examples made even the most complex concepts easier to understand. One such inspiring story is of Arushi, a 9th-grade student, who experienced a dramatic improvement in her academic performance. Arushi shared how her new math teacher's unique approach to problem-solving and patient explanation of concepts transformed her outlook on the subject. Previously scoring 55 out of 80 in math, Arushi's confidence soared under the teacher's guidance, and she achieved an impressive 72 out of 80 in her exams this year. This remarkable progress has not only improved her math skills but also ignited her passion for the subject, leading her to decide to pursue math in her 11th grade. The ripple effect of these engaging teaching methods has gone beyond individual achievements. Students have started attending classes regularly and showing a heightened interest in their studies. Teachers have successfully fostered a learning environment where curiosity thrives, and students participate actively in classroom activities. This positive shift has contributed to a noticeable increase in overall attendance and enthusiasm for learning across the school.

By bringing in a dedicated team of teachers who emphasize innovative and interactive teaching, the school has not only enhanced academic outcomes but also created a culture of curiosity and self-confidence among its students. This case underscores the transformative power of effective teaching in shaping young minds and fostering a lifelong love for learning.

3. Swachhata Pakwada: Cleanliness is our responsibility

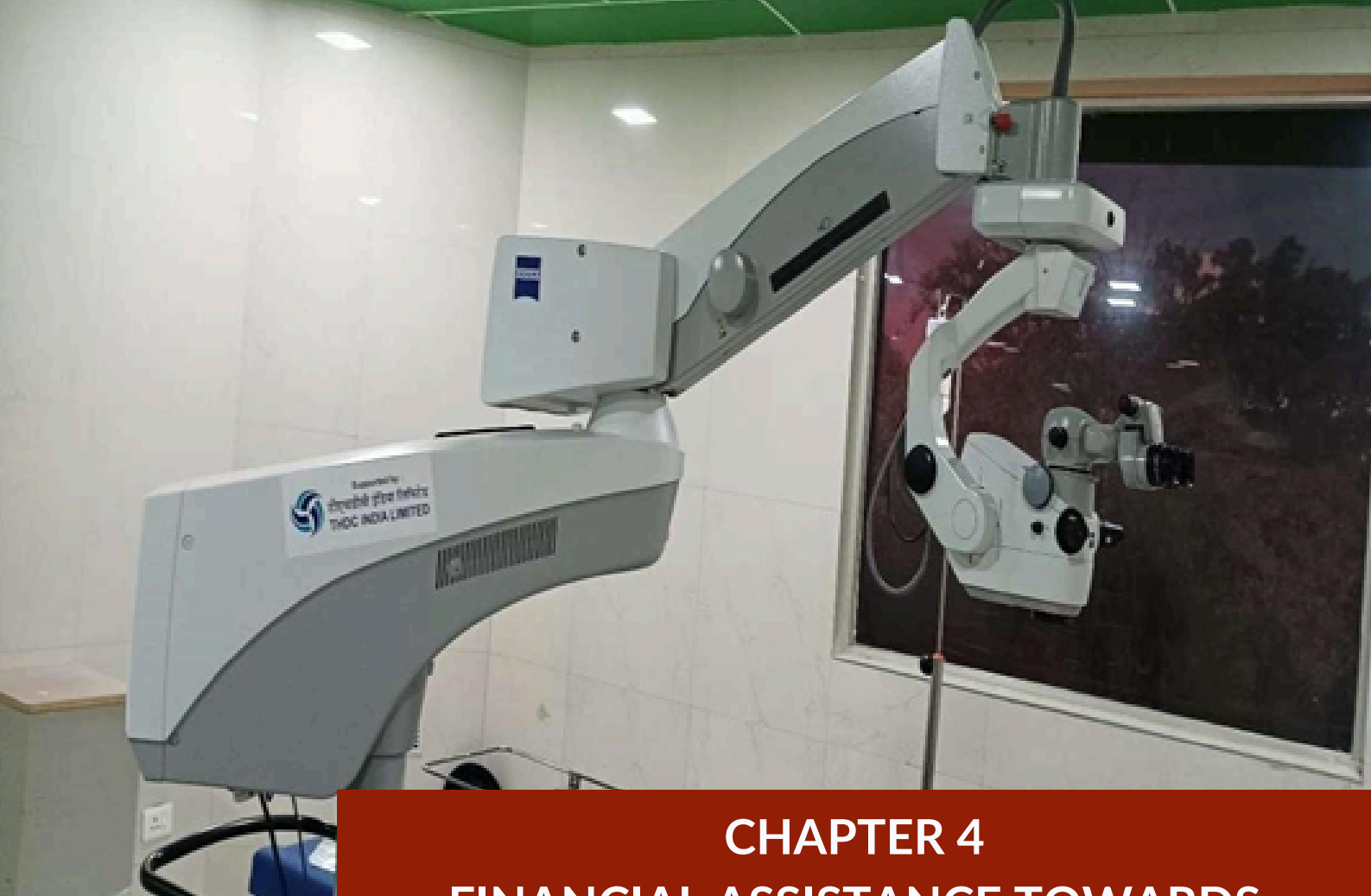
In the academic year 2023-24, the THDC High School embarked on an inspiring journey to promote hygiene and sanitation awareness by organizing Swachhata Pakwada, a 15-day cleanliness campaign. This initiative aimed to instill a sense of responsibility among students for their environment while fostering habits that contribute to a cleaner and healthier society.

Each day of the campaign brought new and engaging activities, including cleanliness drives, workshops on waste management, and educational sessions about the significance of maintaining hygiene. Students, teachers, and staff actively participated in a wide range of competitions, such as poster making, slogan writing, quizzes, debates, essay writing, dance, drawing, antakshari, rangoli making, music, painting, and poem writing. These activities not only encouraged creativity but also emphasized the importance of cleanliness in a dynamic and interactive way.

One of the highlights of the event was the enthusiastic participation of students in creating informative posters and thought-provoking slogans. A large group of students demonstrated exceptional performance, showcasing their talents while contributing to the cleanliness mission. Through hands-on involvement in cleaning drives and competitions, students took ownership of their surroundings, reinforcing the campaign's core message.

By the end of Swachhata Pakwada, students reported a heightened awareness of cleanliness practices and a commitment to maintaining hygiene in their daily lives. This transformation reflected the campaign's success in going beyond improving the school's physical environment—it nurtured a collective sense of pride and responsibility among students for their community.

The initiative stands as a testament to the school's dedication to shaping environmentally conscious individuals who are prepared to contribute to a cleaner, healthier society. Swachhata Pakwada not only enriched the students' learning experiences but also left a lasting impact on their attitudes toward hygiene and environmental stewardship.



CHAPTER 4

FINANCIAL ASSISTANCE TOWARDS PROCUREMENT OF MEDICAL EQUIPMENT (ZEISS MICROSCOPE) FOR NEW OPERATION THEATRE AT VIVEKANAND NETRALAYA, DEHRADUN

4.1 About the Project

Established in 2018 by the Ramakrishna Mission, Vivekanand Netralaya was founded to address the critical need for eye care services in rural Uttarakhand and the bordering villages of Uttar Pradesh, where access to such healthcare is limited or nonexistent. In its first year, the Netralaya restored vision for over 3,600 individuals through its flagship program, *Vivek Jyoti*, which provides free cataract surgeries and specialized treatments for glaucoma, corneal diseases, retinal issues, and pediatric eye conditions to underserved populations. The total cost of the financial assistance amounts to ₹125.00 lakh during the financial year 2023-24.

To enhance its capabilities, THDCIL equipped Vivekanand Netralaya with a state-of-the-art Zeiss Microscope Model OPML Lumera 700 for its operating theatre. This advanced microscope has significantly expanded the hospital's capacity to perform complex ophthalmic procedures, such as surgeries for corneal dystrophy, minimally invasive glaucoma surgery (MIGS), diabetic retinopathy, and macular conditions. Surgeons have undergone specialized training on the microscope, enabling precise surgeries, reducing operation times, and improving patient outcomes.

With an average daily OPD footfall of 250 patients, Vivekanand Netralaya not only delivers high-quality eye care but also offers free healthcare and transportation services. These efforts help patients overcome financial and geographical barriers, ensuring that even the most remote communities receive life-changing ophthalmic treatment.

4.2 Study Methodology and Sampling

To evaluate the project, the following field activities were conducted:

- **Zeiss Microscope Assessment:** A Semi-formal discussion was carried out with hospital staff and doctors present in the OT where the microscope had been installed. Resources were analysed at the OT and case studies were recorded during discussion with doctors.
- **Stakeholder Consultation:** Various people were consulted to gather information on the technical aspects of the microscope, its uses, benefits, longevity, upkeep and maintenance etc as well as the social benefits resulting from the installation of the device in hospital premises. The stakeholders consulted for the study were:
 - **Dr. Gaurav Shah** (Deputy Medical Superintendent & Oculoplasty c. Surgeon) of Vivekanand Netralaya
 - **Dr. Mansi Gusain Pokhriyal** (Director Glaucoma Services & Medical Superintendent) of Vivekanand Netralaya
 - **Mr Prithviraj Chhet** (Operation Manager) of Vivekanand Netralaya
 - **Mr Anchal Koranga** (HR Department) of Vivekanand Netralaya



- **Case studies** were recorded during the observation, consultation and discussion process with various technical and non-technical staff of the hospital.
- **Documentation:** Photography and videography were conducted on the school premises for record-keeping and further analysis.

4.3 Zeiss Microscope: OPMI Lumera 700 analysis

The Zeiss microscope was assessed on various parameters to understand its impact on the lives of patients. The detailed analysis of the same is given in the following section.

4.3.1 Technical Capabilities of the Device

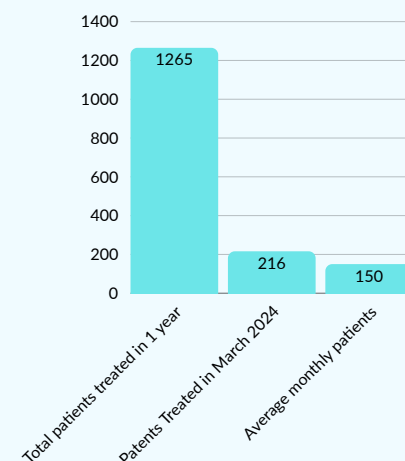
The Zeiss Microscope: OPMI Lumera 700 is a cutting-edge surgical tool designed for high-precision ophthalmic procedures. Its advanced optical technology, ergonomic design, and integrated features enable surgeons to perform complex eye surgeries with exceptional accuracy and efficiency.

- **Advanced Illumination System:** Features the Carl Zeiss Stereo Coaxial Illumination (SCI) for superior red reflex stability, enhancing visibility during intricate procedures.
- **Optical Precision:** Provides high-resolution imaging with excellent depth perception and contrast, essential for delicate ophthalmic surgeries.
- **Integrated Workflow Features:** Equipped with integrated HD Video Recording and display capabilities for real-time monitoring and documentation.
- **Enhanced Surgeon Ergonomics:** Offers customizable viewing angles and motorized focus and zoom control for optimal comfort and precision.
- **Innovative IOL Assistance:** Includes CALLISTO eye technology, an integrated intraoperative assistance system for precise intraocular lens (IOL) alignment and toric IOL implantation.
- **Minimally Invasive Surgery Support:** Designed to facilitate advanced techniques such as Minimally Invasive Glaucoma Surgery (MIGS), reducing tissue damage and recovery time.
- **Flexible Magnification and Lighting Adjustments:** Provides variable magnification and adjustable light intensity to adapt to different surgical scenarios.
- **Durable and Stable Design:** Built with anti-vibration technology and a stable stand system to ensure smooth operation during sensitive procedures.
- **Seamless Integration with Other Devices:** Compatible with external surgical and diagnostic tools, allowing for a cohesive operating room setup.
- **Long-Term Reliability:** Known for durability and precision, with minimal maintenance requirements, ensuring consistent performance over extended periods.

4.3.2 Patients treated through the Microscope

The Zeiss Microscope: OPMI Lumera 700 became operational from March 2024. During the Month a total of 216 surgeries were performed using the device. Till date (27th October 2024) a total of 1265 surgeries had been performed in the OT having an average of about 150 surgeries per month which is an improvement from the previous average of 135 surgeries per month, signifying the positive impact of this technological enhancement on healthcare provision in the area.

Fig 7: Patients treated using Zeiss Microscope



4.3.3 Improvement in Healthcare Accessibility

Vivekanand Netralaya is working towards addressing preventable blindness in underserved areas. Vivekanand Netralaya has established Memorandums of Understanding (MOUs) with the District Magistrates of Chamoli, Rudraprayag, Tehri, Uttarkashi, Haridwar, Dehradun, Muzaffarnagar, Shamli, Saharanpur, and Bijnor, ensuring cohesive support and coordination at the local government level. This has enabled access to state-of-the-art technology (Zeiss Microscope) to needy people free of cost or at a concessional rate. Vivekanand Netralaya is also running an outreach programme for people living in remote hilly areas in Uttarakhand making the healthcare facilities and Zeiss microscope accessible to more than a million people.

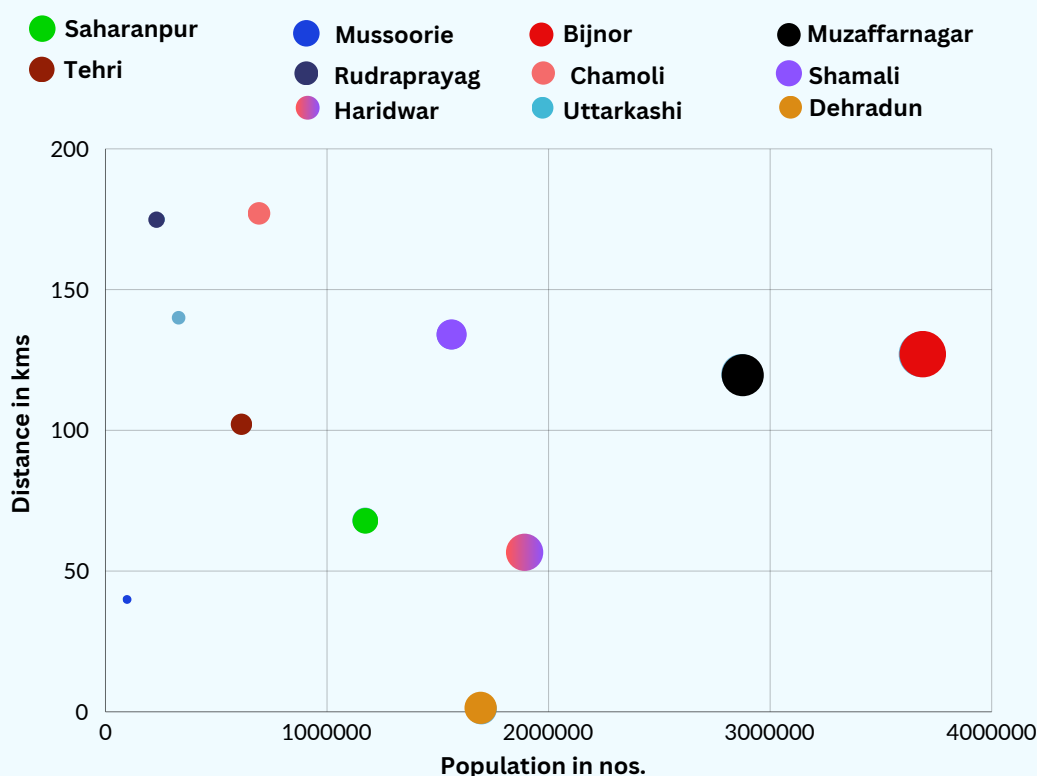


Fig 8: Geographical Impact Matrix

4.3.4 Quality and Operational Efficiency of Zeiss Microscope

The Zeiss microscope is designed for continuous use in operating rooms, functioning effectively for extended hours daily with a consistent power supply and proper maintenance. Its efficiency has significantly enhanced surgical procedures, reducing the average operation time for cataract surgeries from 10 minutes to 6 minutes. This improvement increases patient throughput, allowing more individuals to receive timely surgical care. Additionally, the XY foot control feature introduces a new level of precision, enabling surgeons to reposition the microscope during surgery in response to patient movement—an option previously unavailable. This enhanced control minimizes risks during procedures, improving both surgical accuracy and patient safety.

4.3.5 Capacity Building of staff for usage of device

No specialized training programme was conducted for the hospital staff for the usage of the microscope, given the staff operating the microscope are qualified and experienced doctors. However, a brief session on introduction to technology and its usage was conducted. Apart from that training was also provided to fellow doctors on the usage of the device during surgeries.

4.3.6 Maintenance of the Device

The microscope was maintained during routine OT cleaning and specialized maintenance was conducted by the technology providers every six months. Currently, no additional charges had occurred on the Netralaya for specialized maintenance as the microscope is in a two-year warranty.

4.3.7 Patient Outcome and Satisfaction

The Zeiss OPMI Lumera 700 microscope has greatly improved patient outcomes and satisfaction at Vivekanand Netralaya by enhancing surgical precision and efficiency. Its advanced optics eliminate glare, enabling clearer visualization and reducing follow-up surgeries, particularly for complex cases. The microscope has also increased surgical throughput by an average of 15 additional procedures per month, while cutting cataract surgery times from 10 to 6 minutes, allowing more patients to receive timely care. These advancements have led to consistently high success rates, fewer post-operative complications, and overall elevated patient satisfaction in ophthalmic care.

4.3.8 Sustainability and Long-Term benefit through the Microscope

The Zeiss OPMI Lumera 700 microscope is well-positioned for sustainable, long-term impact due to its advanced features, adaptable design, and regular maintenance protocol.

The device is supported by a two-year warranty, with bi-annual maintenance to keep it in optimal condition, ensuring reliable performance over time. Its modular compatibility with high-tech add-ons, like the RESIGHT 700 for retinal visualization and the Callisto Eye for surgical guidance, allows hospitals to



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DEPUTY MEDICAL SUPERINTENDENT &
OCULOPLASTY C. SURGEON

expand and tailor its functionality to various ophthalmic procedures. This adaptability not only enhances the microscope's versatility but also future proofs it by enabling upgrades as new surgical technologies emerge. These advanced features, combined with the availability of wireless foot controls and HD visualization, increase both efficiency and ergonomics in surgery, promoting sustainable use that aligns with the evolving needs of the hospital and the community it serves. This comprehensive support framework ensures that the Lumera 700 remains a valuable, enduring asset in ophthalmic care.

4.4 OECD-DAC Analysis of Zeiss Microscope

4.4.1 Relevance: High

The Zeiss Microscope project addresses the critical need for advanced ophthalmic care in underserved areas of Uttarakhand and neighboring regions, including Chamoli, Rudraprayag, Tehri, Uttarkashi, Haridwar, Dehradun, Muzaffarnagar, Shamli, Saharanpur, and Bijnor. These regions have limited access to specialized eye care, leaving a large portion of the population vulnerable to preventable blindness and untreated eye conditions. By equipping Vivekanand Netralaya with state-of-the-art technology, the project fulfills an urgent healthcare gap. Its focus on providing free or concessional treatment ensures equitable healthcare access for economically disadvantaged communities, demonstrating the project's strong relevance to regional healthcare priorities.

4.4.2 Coherence: High

The project complements existing healthcare policies and programs aimed at reducing preventable blindness, such as the National Programme for Control of Blindness (NPCB). The integration of the microscope with Vivekanand Netralaya's outreach programs and partnerships with local government through Memorandums of Understanding (MOUs) ensures seamless coordination and maximizes impact in remote areas. This initiative is well-aligned with THDCIL's broader CSR strategy of addressing critical healthcare needs.

4.4.3 Effectiveness: High

- Improved surgical outcomes: The introduction of the microscope has significantly enhanced surgical precision, resulting in fewer complications and reduced follow-up surgeries, particularly for complex procedures.
- Increased surgical throughput: The average number of surgeries performed per month increased from 135 to 150, reflecting improved operational efficiency due to technological enhancement.
- Enhanced patient outcomes: The reduction in cataract surgery time from 10 minutes to 6 minutes, alongside increased surgical accuracy and the ability to perform MIGS, indicates improved clinical outcomes and patient satisfaction.

4.4.4 Efficiency: High

The efficient use of resources, including the installation of the microscope in a high-need operating theatre, has maximized its utility. The increase in surgeries (from 135 to 150 per month) and reduced operation times underscore the efficiency of the device in optimizing surgical schedules. Routine maintenance and a two-year warranty ensure cost-effective operation, with no additional maintenance expenses incurred so far.

4.4.5 Impact: High

The project has delivered significant health outcomes, including improved vision and quality of life for underserved populations. By enhancing surgical precision and reducing complications, the microscope has elevated patient satisfaction and decreased follow-up surgeries. The device's integration has also contributed to the hospital's reputation, enabling it to serve more patients and attract partnerships for expanded healthcare services.

4.4.6 Sustainability: High

The Zeiss OPMI Lumera 700 is a sustainable investment due to its modular design, allowing for upgrades as new technologies emerge. Bi-annual maintenance and a two-year warranty ensure long-term functionality. The training provided to surgeons and fellow doctors further ensures sustained usage of the device. Its adaptability to advanced add-ons like the RESIGHT 700 for retinal visualization enhances its relevance for future ophthalmic needs, making it a durable and scalable solution for the hospital.

4.5 Overall Assessment

The implementation of the Zeiss OPMI Lumera 700 microscope at Vivekanand Netralaya, supported by THDCIL, has proven to be a valuable advancement in ophthalmic care for underserved communities. The equipment has significantly improved surgical precision and efficiency, leading to enhanced patient outcomes, reduced operation times, and increased surgical throughput. With features that address specific needs in complex eye surgeries, the microscope has empowered the hospital to perform intricate procedures, such as MIGS, which is rare in project area. The project aligns well with national healthcare initiatives, ensuring coherence with local government support and sustainable, long-term impact. This impactful addition is a testament to THDCIL's commitment to improving healthcare accessibility and quality in remote regions, setting a strong foundation for future technological advancements in community health.



CASE STUDIES

1. Expanding Eye Care in Remote Regions with State-of-the-Art Technology



THDCIL's initiative to equip Vivekanand Netralaya with the Zeiss OPMI Lumera 700 microscope has introduced state-of-the-art technology to enhance eye care for underserved communities in the remote Himalayan region. This advanced microscope, featuring anti-glare optics and foot-controlled XY navigation, has enabled more efficient and precise surgeries, particularly for complex eye conditions like diabetic retinopathy and cataracts. With reduced surgery times, from 10 to 6 minutes per procedure, the hospital has seen a boost in patient capacity and improved surgical outcomes.

Beyond technical benefits, this initiative reaches patients in remote areas of Uttarakhand and parts of Uttar Pradesh by providing free transportation and care. Partnerships with district administrations and alignment with the National Program for Control of Blindness ensure a strong, sustainable impact on public health goals to reduce preventable blindness. With a two-year warranty, regular maintenance, and potential for further attachments, this investment in advanced technology demonstrates THDCIL's commitment to sustainable, high-quality healthcare access in rural regions.

2. A Glimpse of Hope Through Advanced Technology



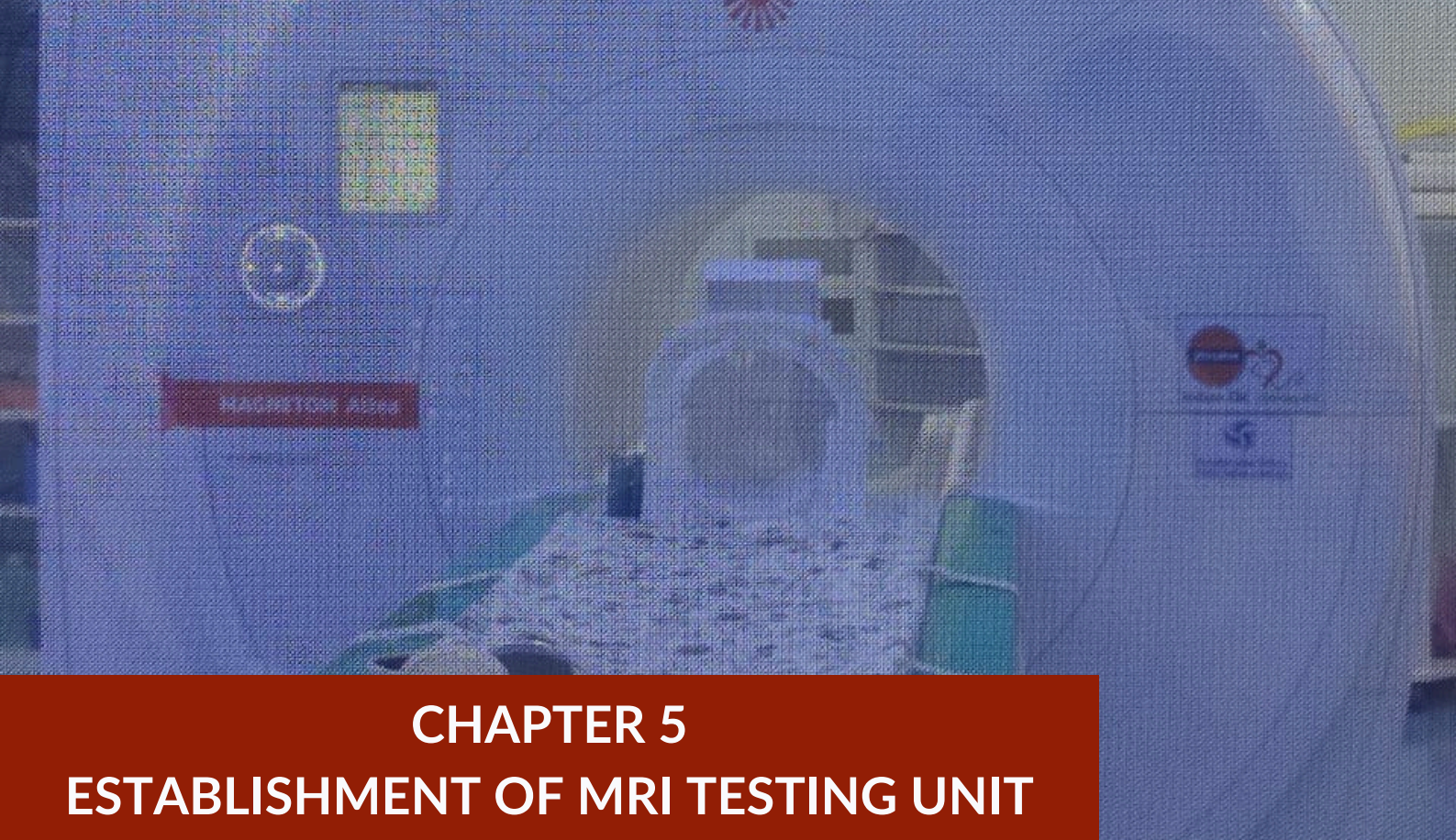
A farmer, working diligently on her fields, was struck by the sharp leaves of a sugarcane plant in her left eye. The impact caused a greyish patch to appear in her pupil, resulting in severe trauma. This injury led to the development of a cataract coupled with corneal abrasion. The pain was excruciating, and the sight in her eye became blurry. Desperate for treatment, she sought help at Vivekanand Netralaya, a renowned eye hospital.

Upon examination, the doctors determined that the surgery would be a complex one. The cataract, combined with the greyish patch in her eye, made the procedure particularly challenging. In normal circumstances, a cataract surgery requires precise lighting, but when the light from a microscope reflects off a patch like this, it causes a glare that can severely limit the surgeon's visibility, making it difficult to perform the surgery.

However, this time, the farmer's case was fortunate. The hospital had recently received a Zeiss Microscope: OPMI Lumera 700, thanks to a generous contribution from THDCIL under their CSR initiative. This state-of-the-art microscope was equipped with advanced technology that allowed surgeons to control the lighting with great precision. The microscope's superior optics ensured that the surgeon could see clearly, even with the greyish patch obstructing the view, and perform the procedure with absolute confidence.

With the Zeiss OPMI Lumera 700, the surgeon was able to adjust the light settings to eliminate the glare and maintain optimal visibility throughout the surgery. This allowed the medical team to safely and successfully perform the cataract operation, restoring the farmer's vision and alleviating her pain.

The contribution of the Zeiss microscope highlights the positive impact of advanced technology in healthcare, especially in rural areas where such resources are often scarce. It is a testament to how collaboration between organizations like THDCIL and healthcare providers like Vivekanand Netralaya can bring life-changing benefits to communities in need.



CHAPTER 5

ESTABLISHMENT OF MRI TESTING UNIT FOR GLOBAL & RESEARCH CENTER AT MOUNT ABU RAJASTHAN

5.1 About the Project

The Global Hospital & Research Centre Trust is a charity registered with the Charity Commissioner of the Greater Mumbai Region. It operates J Watumull Global Hospital & Research Centre at Mt Abu, and the Global Hospital Institute of Ophthalmology and the Radha Mohan Mehrotra Global Hospital Trauma Centre in Abu Road.

THDCIL, as part of its CSR initiative, provided partial support to the J Watumull Global Hospital & Research Centre for the establishment of an MRI Testing Unit in Mount Abu, Rajasthan. The cost of the project was Rs.100.00 lakh. This initiative aims to assist people from low-income families who lack access to advanced medical services in remote areas. The intervention enables the hospital to significantly enhance its diagnostic capabilities by providing access to advanced medical technology and services. This project included the creation of a Magnetic Resonance Imaging (MRI) facility in Sirohi, one of India’s 100 most backward districts, with a population of over one million. Prior to this project, Sirohi had no MRI machine, and residents were required to travel 180-200 km to other cities for diagnostic tests. Many needy patients were unable to undergo MRI tests due to the high cost of travel and accommodation. With a local solution now available, numerous patients in need are benefiting from improved access to diagnostics. This support has also allowed

the hospital to enhance the quality and accuracy of diagnoses, resulting in better patient outcomes and more efficient healthcare delivery. The Global Hospital & Research Centre can now offer a wider range of specialized services by utilizing these advanced resources, thereby strengthening its overall capacity to meet the healthcare needs of the community.

5.2 Study Methodology and Sampling

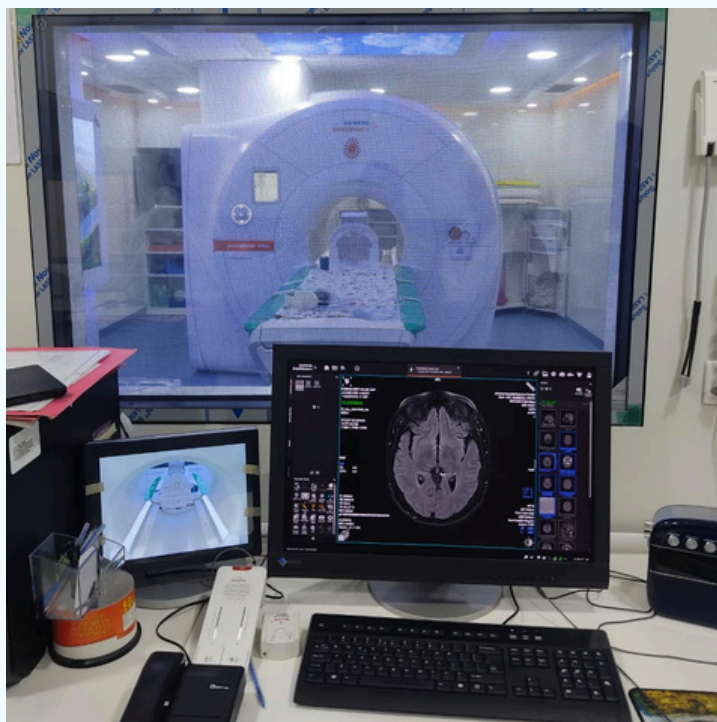
To evaluate the project, the following field activities were conducted:

- **MRI Testing Unit Assessment:** Observations were made for the MRI testing Unit to oversee the condition and maintenance of the unit.
- **Stakeholder Consultation:** Various hospital staff were consulted to gather information on the technical aspects of the MRI unit, its uses, benefits, longevity, upkeep and maintenance etc as well as the social benefits resulting from the installation of the device in hospital premises. The stakeholders consulted for the study were:
 - **Dr Pratap Midha** (Director) of J. Watumull Global Hospital & Research Centre
 - **Dr Anand** (Radiologist) of J. Watumull Global Hospital & Research Centre
 - **Mr Vishal** (Patient care Deptt.) of J. Watumull Global Hospital & Research Centre
- **Case studies** were recorded during the observation, consultation and discussion process with various technical and non-technical staff of the hospital.
- **Documentation:** Photography and videography were conducted on the hospital premises for record-keeping and further analysis.



5.3.1 Technical Capabilities of the MRI Testing Unit

The MRI Testing Unit is Rajasthan's first AI-powered MRI equipped with cutting-edge Deep Resolve Technology, offering unparalleled precision and patient comfort. Designed for advanced diagnostics, it features high-resolution imaging, a pediatric-friendly design, and specialized capabilities for cardiac, breast, and whole-body scans.

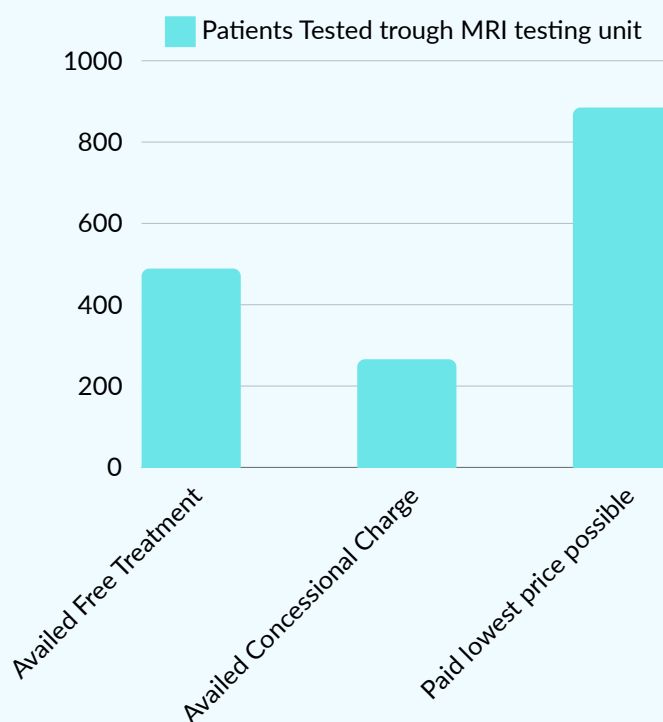


- Rajasthan's First AI Powered MRI with Revolutionary Deep Resolve Technology
- Very High-Resolution Images, especially for Neuroimaging, Spine and joints / ligaments
- Wide Bore MRI - 70 cm – No Claustrophobia (No fear of enclosed chambers)
- First Truly Silent MRI of Western Rajasthan. Very less noise of MRI machine during scanning increases patient's comfort
- High End 32 channels MRI (Improved resolution & scanning of large part of the body)
- Pediatric Friendly MRI machine
- Only MRI in West Rajasthan with CARDIAC Scanning facility (for myocardial viability / function, ischemia evaluation etc.)
- First MRI in West Rajasthan with BREAST Exam facility (high accuracy for detection of breast cancer).
- Faster scan time (patients will spend less time in MRI machine and increase comfort)
- Lightweight patient friendly coils (reduces suffocation and discomfort)
- Only MRI in west Rajasthan with Patient monitoring Feature (Video /HR / SpO2). Patients will have earphones on during scan with continuous soothing music / songs)
- Nice interior of MRI room (warm and friendly ambience for patients)
- Capability for whole body MRI

5.3.2 Patients availing the facility

The MRI testing unit was functioned in the RMM Global Hospital and Trauma Centre on 12th September 2023. Since the installation of the MRI testing Unit, RMM Global Hospital and Trauma Centre, Mount Abu has observed a notable increase in patient intake, signifying the positive impact of this technological enhancement on healthcare provision in the area. Within one operational year of the MRI testing unit a total of 1640 patients had availed the facility. Among them a majority had utilized the facility free of cost or a concessional charge. The segregation of the same is given in Figure 9.

Fig 9: Patients tested through MRI testing Unit



5.3.3 Healthcare outreach

It was revealed that the global hospital & trauma center has a Village outreach programme (VOP) for 20 tribal villages near Mount Abu. And these people belonging to poor and remote areas can avail free treatment through the hospital. Also, the poor people who cannot afford to pay the full bills as per actuals are also getting treatment at a concessional charge including all the diagnostics involved in the same.

Furthermore, it is noteworthy that patients frequently visit the facility solely for scans, opting for treatment elsewhere, showing the machines' reputation for accuracy and reliability. Also, patients from districts like Barmer, Pali, Udaipur, Jalore etc. also visit the hospital for diagnostics and treatment, as well as people from all over world are also availing facilities as it is a renowned center of the Brahma Kumari's and people visiting them are also availing of this facility. Furthermore, the MRI testing machine also saved people travelling somewhere near 180 kms to 200 kms to seek MRI testing in Jodhpur, Palampur etc.

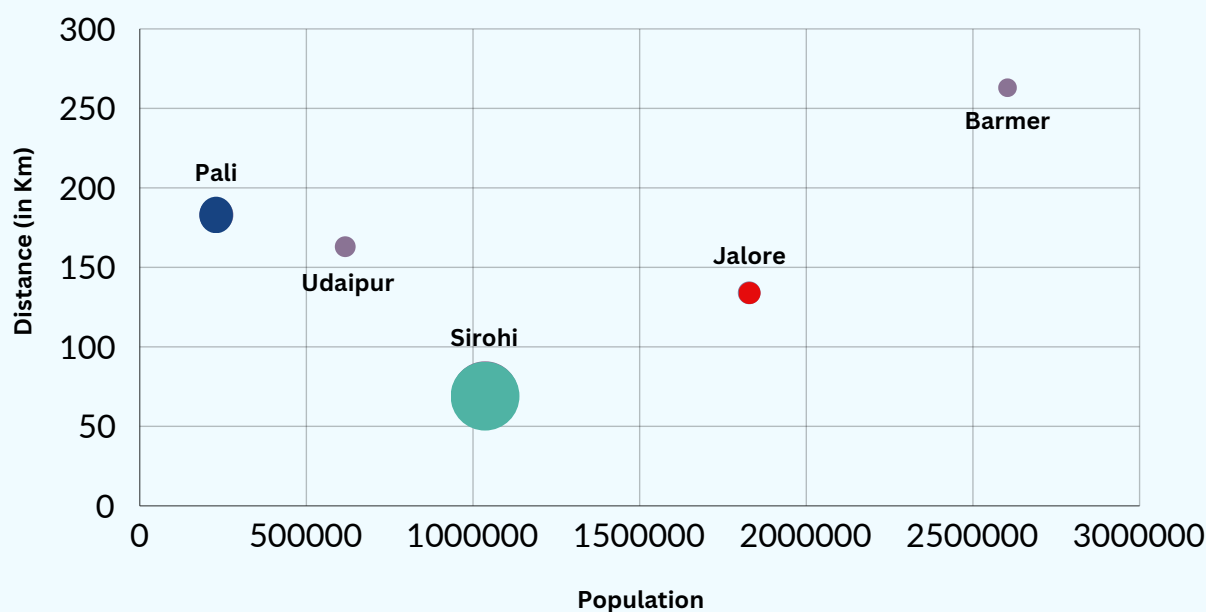


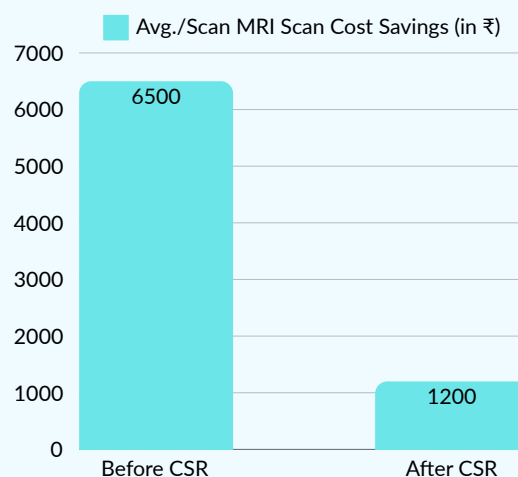
Fig 10: Geographical Impact Matrix

5.3.4 Enhanced accessibility and affordability of Services

The advanced capabilities of the equipment are evident, with the hospital averaging 120-130 MRI Scans per month. Patients express gratitude towards improved medical facility and relief at the significant reduction in costs associated with MRI scans. Previously they incurred expenses of approximately INR 6500/-.

However, with the implementation of the MRI machine in their own town, the average cost has dramatically decreased to just 1200 rupees. This not only alleviates financial burden but also streamlines the process, allowing patients to undergo scans with ease and convenience. Moreover, by eliminating the need for long-distance travel, response and treatment times have significantly reduced, enhancing overall healthcare efficiency. Patients also appreciate the elimination of mental stress typically associated with travel, such as finding nearby accommodation.

Fig 11: Avg. MRI Scan Cost Saving



5.3.5 Capacity Building of staff

Training sessions were organized for five days between November 2023 and January 2024 for the staff related to the MRI testing Unit. The training sessions were conducted for the following staff.

- **Technicians (3):** Responsible for explaining the MRI procedure to patients as well as setting up the MRI unit.
- **Nursing staff and Nursing assistant (2):** Accompanying patient and responsible for assisting them during the scans.
- **Receptionist (1):** Managing administrative and front-desk operations, ensuring a smooth workflow and positive patient experience.
- **Housekeeping Staff (2):** Responsible for daily upkeep of the MRI testing Unit.

Currently all the trained staff are working on the hospital premises only.

5.3.6 Maintenance of the Device

The MRI Testing Unit was maintained through routine cleaning and specialized maintenance was conducted by the technology providers every six months. Currently, no additional charges had occurred on the Hospital for specialized maintenance as the MRI unit is in a two-year warranty.

5.3.7 Extended benefits of the project

Beyond the immediate healthcare benefits, the broader community of the Sirohi district has also experienced positive ripple effects. THDCIL's CSR contribution has not only increased patient traffic to the hospital but has also created opportunities for various service providers such as medical shops, hotel owners, medical assistants, transportation services, and restaurant proprietors, consequently stimulating the local economy. Local businesses, boosted by the surge in patient footfall, have experienced heightened demand, leading to increased revenues and job opportunities. Additionally, the operation of these machines necessitates trained operators, and the surge in patient numbers also translates to increased demand for hospital staff, including nurses, cleaners, and other support personnel, thereby contributing to employment generation within the district.



Fig 12: Benefits of the Project

5.3.8 Sustainability and Long-term Benefits

The MRI Testing Unit's integration of advanced technologies, such as specialized coils for improved signal quality, ZOOMit for enhanced resolution in smaller areas, and AI-based tools like Deep Resolve Gain and Sharp, significantly enhances its diagnostic potential and sustainability. These features ensure faster scans with high-resolution images, increasing efficiency and meeting the future diagnostic needs of patients. The unit is equipped to handle evolving medical standards, offering specialized imaging for neuro, cardiac, and oncology cases, thus expanding its service range. By reducing repeat scans and enhancing patient throughput, the unit supports financial sustainability and accessibility. Additionally, these advanced capabilities provide ongoing opportunities for staff training, fostering skill development and long-term operational excellence.

5.4 OECD-DAC Analysis of the MRI Testing Unit

5.4.1 Relevance: High

The MRI Testing Unit project in Sirohi, Rajasthan, addresses a critical healthcare gap in an underserved area. Previously, residents faced the burden of traveling 180-200 kilometers to access MRI facilities, incurring travel and accommodation costs of INR 6500-7000 per visit. As one of India's 100 most backward districts, Sirohi has a poverty rate of approximately 22%, higher than the state average of 14.71%, making diagnostic access for low-income families particularly challenging. By providing local MRI services and staff training, THDCIL's intervention directly enhances healthcare access and builds local capacity in advanced diagnostics.

5.4.2 Coherence: High

The MRI testing Unit was established through the collaboration of THDCIL, IOCL, The Janki Foundation and RMM Global Hospital. The project complements local healthcare efforts by addressing critical gaps in diagnostic services, aligning well with national health policies aimed at improving healthcare access in rural and underserved regions. Training local staff builds community resilience and creates a sustainable healthcare infrastructure aligned with THDCIL's CSR mission.

5.4.3 Effectiveness: High

The project has been effective in meeting its objective of enhancing local diagnostic capabilities. Since its commissioning on September 12, 2023, the MRI unit handled 1640 cases, with 489 free and 266 concessional cases, reaching those who previously lacked

access. The five-day training course for three technicians, a nurse, an assistant, a receptionist, and two housekeeping staff ensures that all operational aspects of the unit are covered, from technical functions to patient interaction and safety. The training enhances the reliability of MRI services, as staff are better equipped to manage advanced technology, patient comfort, and administrative tasks efficiently.

5.4.4 Efficiency: High

The MRI unit operates with notable efficiency, partly due to the trained staff who ensure smooth operations, from patient preparation to post-scan processes. The monthly electricity expense of INR 2.5 lakhs is a reasonable cost given the high-quality diagnostic service provided. The two-year maintenance warranty also supports cost efficiency by minimizing unforeseen expenses. With trained technicians and supporting staff, the facility maximizes throughput and patient satisfaction, reducing potential delays and optimizing resource use.

5.4.5 Impact: High

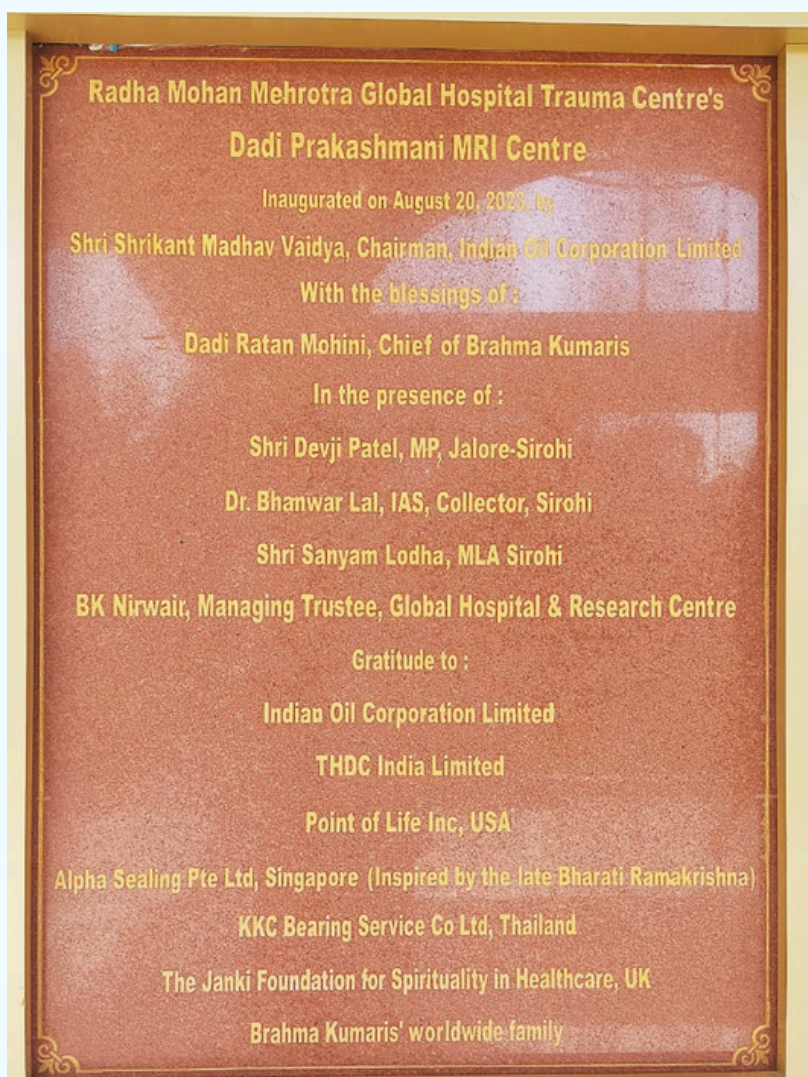
The establishment of the MRI unit has had a transformative impact on the community. It has not only improved access to advanced diagnostics but also contributed to economic benefits, such as increased revenue for local businesses (e.g., medical shops, hotels, and transportation services) due to higher patient traffic. Additionally, it has created employment opportunities for hospital staff and boosted overall healthcare capacity in the region.

5.4.6 Sustainability: High

The MRI unit has a solid foundation for sustainability, supported by trained local staff who can maintain the quality-of-service delivery. The two-year warranty covers maintenance, and staff training reduces dependency on external experts for daily operations, lowering costs over time. Future upgrades, such as functional MRI or diffusion imaging, could further enhance sustainability by enabling the hospital to expand its diagnostic services. Continued investment in periodic staff upskilling and community awareness programs will support long-term use and broaden the facility's impact.

5.5 Overall Assessment

The establishment of the MRI Testing Unit at the J Watumull Global Hospital & Research Centre in Mount Abu has profoundly impacted healthcare access for underserved communities in the Sirohi district and beyond. By offering high-resolution, AI-powered imaging, the unit has addressed a critical diagnostic gap, enabling timely, precise, and affordable care for low-income families who previously had to travel long distances for similar services. The initiative has reduced diagnostic costs significantly and improved healthcare outcomes, as seen in the increased patient footfall and the positive feedback from beneficiaries. The project's success extends beyond healthcare, stimulating local economic growth by generating employment and supporting surrounding businesses. The MRI unit, bolstered by trained local staff and future potential for upgrades, is well-positioned for sustainable, long-term service. This program exemplifies THDCIL's commitment to bridging healthcare disparities and enhancing quality of life in remote regions.



CASE STUDIES

1. Early Diagnosis and Lifesaving Treatment: Ravi's Story

Ravi Kumar Trigdar, a seven-year-old boy from a tribal village Achalgarh in Sirohi district, comes from a low-income family that struggles with daily necessities. Healthcare, especially for minor ailments, is often unaffordable and inaccessible for his family. Over the past year, Ravi had been experiencing persistent itching in his left eye. His family initially took him to a traditional healer, who provided eye drops that offered temporary relief, but the itching persisted.

In March 2024, during a Village Outreach Program by the Global Hospital, Ravi's case was examined more closely. Based on initial symptoms, the staff provided basic medication; however, when the problem continued, the attending doctor recommended an MRI scan. Ravi was brought to the hospital's MRI unit, where advanced imaging revealed that he had a benign tumor pressing against his eye, causing the irritation.

With a clear diagnosis, the doctors outlined treatment options for Ravi's family. He is now receiving treatment at the hospital, with all diagnostic and medical costs covered by the facility. The MRI's high-resolution imaging proved critical, enabling timely and precise intervention that has given Ravi a chance for recovery.

2. A Clearer Diagnosis: Neha's Journey to Relief

Neha, a 42-year-old woman from Sirohi district, had been experiencing persistent breast pain and lumps for over a year. After seeking treatment at local clinics without improvement, she visited the Global Hospital for further evaluation. Initially, she was prescribed medication, but when this did not yield the desired results, a sonography and mammography were conducted. Despite these tests, it remained unclear whether the lumps were benign or cancerous.

To obtain a definitive diagnosis, doctors recommended an MRI scan using the breast coil available at the hospital's MRI testing unit. This advanced imaging capability allowed for high-resolution scans, revealing that the lumps were non-cancerous. This clear diagnosis helped doctors determine an appropriate treatment plan for Neha.

She is now managing her condition with medication and has experienced significant relief from her pain, highlighting the importance of accessible, high-quality diagnostics in rural healthcare.



CHAPTER 6

HOSTING OPEN NATIONAL CANOE SPRINT SENIOR MEN & WOMEN CHAMPIONSHIP AND QUALIFIER 37TH NATIONAL GAMES AT TEHRI

6.1 About the Project

In 2023, THDC India Limited organized the Open National Canoe Sprint Senior Men & Women Championship and Qualifier for the 37th National Games at Tehri Lake. The event was inaugurated by Sh. R. K. Singh, Hon'ble Cabinet Minister of Power and Renewable Energy, Government of India, and Sh. Pushkar Singh Dhami, Hon'ble Chief Minister of Uttarakhand. THDCIL incurred an expenditure of approximately Rs. 146.97 lakh on the program. The event saw participation from 444 individuals.

THDCIL collaborated with the Indo-Tibetan Border Police (ITBP) to provide infrastructure and facilities for participants, trainers, and technical teams. ITBP supported the event by supplying essential equipment such as kayaks and canoes for the participants. ITBP also set up ropes and marked routes at Tehri Lake to facilitate the sports activities. THDCIL arranged accommodation for the guests, including hotels, meals, and provisions of beds and bed sheets for the participants. Additionally, local students from classes 7th to 12th were invited to participate in the opening and closing ceremonies to encourage their interest in water sports.

This event provided significant benefits to the local community by generating income through various avenues. Hotels and restaurants were booked during the event, and shopkeepers experienced high sales as visitors frequented shops to meet their needs. This event not only supported local business growth but also contributed to overall economic development, fostered a sense of community, and encouraged future events.

6.2 Study Methodology and Sampling

To evaluate the project, the following field activities were conducted:

- **Infrastructure Assessment:** Observations were made to assess the sports infrastructure utilized for the event as well as the places utilized for accommodation of participants.
- **Stakeholder Consultation:** Various THDCIL & ITBP staff were consulted to gather information on the role of the organizing agency as well as the representatives. The stakeholders consulted for the study were:
 - **Mr D.P. Patro** (A.G.M.- HR & Admn.) at Tehri HPP
 - **Mr Manoj Rai** (Sr. Manager-HR& Admn.) at Tehri-HPP
 - **Mr. Ashutosh Bisht** (Deputy Commandant) at ITBP Water Sports Adventure Institute
 - **Local hotels/ restaurants** owners and managers
- **Case studies** were recorded during the observation, consultation and discussion process with THDCIL, ITBP staff and hotel owners/ managers.
- **Documentation:** Photography and videography were conducted on the hospital premises for record-keeping and further analysis.

6.3 Analysis of the Canoe sprint Senior Men & Women

THDCIL Hosted Open National Canoe Sprint Senior Men & Women Championship and Qualifier 37th National Games at Tehri Lake in 2023. The games were a national level game held from 14th September 2023 till 17th September 2023. The four-day event saw the participation of players from 24 states of India competing in 200 Mt., 500 Mt. and 1000 Mt. Kayaking and Canoeing event. The event saw participation of 444 individuals including 121 women players, coaches and managers.

6.3.1 Event organization and Collaboration

The games were organized in a collaborative manner with joint efforts of THDC India Limited, Uttaranchal Olympic Association, Indian Kayaking and Canoeing Association (IKCA) and ITBP water sports Adventure Institute. THDCIL organized the whole event. They engaged various local hotels for lodging of participants, arranged caterers to serve meals, engaged with ITBP to renovate their hostel for lodging of female participants. ITBP substantiated their role by providing event equipment like Kayaks, Canoe boats etc. and

they were the ones to place tracks and marks in the water for the events. Apart from that the IKCA and UOA helped in conducting this national level event through promotion of sports at a grassroots level.

6.3.2 Economic Impact on Local Business

Within the duration of the sports event the local hotels and homestays were booked for one week to accommodate the participants and the people accompanying them. Local caterers were also booked for providing services to the attendees of the event. About 30-35 hotels and homestays were booked for the lodging purposes. The hotels and homestays directly earned a collective 75 Lakhs through their booking for the event. Also, the event was heavily covered by media houses which provided publicity to the local hospitality community as well as the tourism industry, eventually gaining tourists from various states of India for doing water sports. The event also led to the development of food hubs/ stalls/ eateries and joints along the Tehri Lake. During the IA team visit on the lake in 2022, there were about 4-5 businesses catering to the tourists for snacks, however, various stalls selling snacks/ foods, merchandise and accessories had opened and operated in the vicinity. Apart from that, the people operating water sports on the lake reported that the average footfall of the people has increased from 250-300 per day to 750-800. They also mentioned that the broadcasting of the games helped them gain popularity and people from other states also come to enjoy the water activities which led to boost in the business and helped them gain popularity.

The IA team also consulted seven local businesses who had been a part of the games in one way or another. A set of questions were asked to everyone and the responses recorded indicated that the organization of the games at Tehri lake had led to increased popularity of the lake among tourists, interest of locals regarding kayaking and canoeing and in turn improved profits for the local businesses. The details of the same are given in the Following table.

Name of Business	Consultation Held with	Description
Hotel Bhagirathi	Manager	<p>Consultation was held with Manager. When enquired about the national games he mentioned that their hotel at the time was booked to full capacity for four days. THDCIL did all the pre-booking with them and they also checked to make sure that all the standards are up to par.</p> <p>Increased tourist footfall because of games: Yes</p> <p>Comments regarding increased awareness regarding games: Locals had become aware of the Canoeing and Kayaking due to the sports held at the lake.</p> <p>Any additional Comments: The national games sparked interest in the locals regarding the games especially among children.</p>
Hotel Shiv Palace	Owner	<p>At the time of the games their hotel was booked to full capacity for a week.</p> <p>Increased tourist footfall because of games: During the games the hotel was fully booked and after that tourist also started coming in to visit the lake.</p> <p>Comments regarding increased awareness regarding games: These water sports held by THDCIL have become popular among the locals.</p> <p>Any additional Comments: The local business owners wait for the whole year for the games to be held as it provides good earning opportunity and gives boost to local flea market. The small businesses earn about their one month's income in just 3-4 days during that period.</p>
Hotel Himalayan Residency	Manager and staff	<p>The manager of the hotel had not joined when the sports were held but mentioned that the lake attracts tourists and recently tourists from all over the country had started visiting.</p> <p>Increased tourist footfall because of games: Staff mentioned that the games had given popularity to Tehri Lake and people are now coming for water sports.</p> <p>Comments regarding increased awareness regarding games: Local people know about the games. There was a lot of media coverage during that time.</p> <p>Any additional Comments: The games were good; we watched in the local channel with family.</p>

Name of Business	Consultation Held with	Description
Hotel Hari Mangalam	Owner	<p>I was contacted through THDCIL officials regarding hotel booking. My hotel was booked to capacity for the duration of the stay. The players along with their family and friends stayed at our hotel.</p> <p>Increased tourist footfall because of games: Can't say for sure. However, tourists from south and east India have also started coming in recently to see the games and for water sports.</p> <p>Comments regarding increased awareness regarding games: Locals are very enthusiastic about the games, especially the children. The games provided an opportunity for locals to earn good profits and water sports had also become popular recently.</p>
Shubham Family Restaurant	Owner	<p>The owner mentioned that they were responsible for catering during the games. This task was a new challenge for them as they usually don't serve in such a big capacity. However, they were able to manage things with guidance and help through THDCIL officials.</p> <p>Increased tourist footfall because of games: Yes, definitely</p> <p>Comments regarding increased awareness regarding games: Awareness has increased, tourists have also started coming in in big numbers and our profits have also increased.</p> <p>Any additional comments: The games organized by THDCIL were good. It garnered a lot of media coverage. Hopefully Tehri will be more famous now.</p>
Pawar Homestay	Owner	<p>The Pawar Homestay was among the ones to be booked during the games. The owner mentioned that they are very happy that the organizer considered their homestay as an apt place for the players to stay when they were booking with hotels.</p> <p>Increased tourist footfall because of games: Yes</p> <p>Comments regarding increased awareness regarding games: People are more aware.</p> <p>Any additional Comments: Homestays had also gained popularity due to the games. People now understand that we provide good services to them and at economic rates, which is a very good thing for us and our business.</p>
Tehri Adventure Water Sports	Staff	<p>The IA Asia team interacted with the staff at the Tehri Lake to understand their views regarding the national games held at the lake. They mentioned that within the duration of the games, their business had to close temporarily. However once the games were over the guests visiting for games had all enjoyed the water sports at the lake. Before the games were held there were limited options for fooding around the lake and the footfall of the tourists was low, but now a days the business is picking up at speed. The food hubs have increased and so have the tourists. People had started realizing the beauty of the lake and people had also started to come for pre-wedding shoots and all. And their business profits have also increased.</p>

6.3.3 Community engagement and youth development

During the national games students from various schools were invited to watch the sports. Students from T.B.P. Intermediate College, Saraswati Shishu Mandir, Saraswati Vidya Mandir etc. Students from Narendra Mahila Vidyalaya got to be a part of the programme as they sang welcome song for the dignitaries, participants and audiences.

During the IA students from T.B.P. Intermediate College were consulted. They mentioned that some of them had seen the games at the lake whereas many of them watched the broadcast on T.V. They mentioned that the games had captured their attention and they had also developed interest to participate in water sports. And if granted opportunity they will surely learn Kayaking and Canoeing.

6.3.4 Long term benefits

The organisation of these national level games at Tehri Lake had yield a good result.

A THDCIL-High-Performance Academy for Kayaking and Canoeing at Koteshwar, Tehri-Garhwal was inaugurated on 18th December 2023. With a capacity of about 200 players, this academy will see participation of players from all over India and they will be trained by foreign coaches. A 10% reservation for students from Uttarakhand will be available.

A junior academy associated with ITBP is also proposed where local students from standards 8th to 10th will be enrolled. They will receive free education through THDC schools and sports coaching will be through ITBP. This will help in the promotion and development of these water sports in the state.

6.4 OECD-DAC Analysis of the National Games

6.4.1 Relevance: High

The organization of the Open National Canoe Sprint Senior Men & Women Championship and Qualifier for the 37th National Games at Tehri Lake addresses the growing need for sports promotion and tourism in Uttarakhand. The project aligns with national priorities for sports development under the Khelo India program and supports local economic growth through tourism. It provides youth in remote areas with exposure to water sports, a niche but rapidly developing athletic field.

6.4.2 Coherence: High

The event's design aligned with national and state-level goals to boost sports and tourism in rural areas. THDCIL's collaboration with ITBP, the Uttaranchal Olympic Association, and Indian Kayaking and Canoeing Association facilitated a coordinated approach, effectively

integrating sports development with community economic benefits. This multi-stakeholder model reinforced the program's coherence with broader regional development strategies, contributing to Tehri's socio-economic growth.

6.4.2 Effectiveness: Medium

The event was highly successful, with participation from 444 individuals representing 24 states across India. The games boosted local awareness and interest in water sports, particularly among youth, and led to the establishment of a High-Performance Academy for Kayaking and Canoeing in Tehri. This outcome demonstrates the event's effectiveness in fostering long-term sports development and community engagement.

6.4.3 Efficiency: High

The efficient use of resources is evident in the collaboration with ITBP for infrastructure and equipment, reducing project costs. The engagement of local hotels, homestays, and caterers ensured economic benefits while optimizing logistics. The well-coordinated efforts of stakeholders, including THDCIL, ITBP, and local vendors, highlight the cost-effectiveness of the event's execution.

6.4.5 Impact: High

The games generated significant economic benefits for the local community, with hotels and homestays collectively earning around ₹75 lakh during the event. The increase in tourism and water sports activities has provided sustained benefits, including higher footfall and profits for local businesses. The event also inspired youth participation in water sports, fostering interest and opportunities for future athletes from the region.

6.4.6 Sustainability: Medium

The establishment of the High-Performance Academy for Kayaking and Canoeing and the proposed junior academy ensures the project's long-term sustainability. These initiatives promote structured training and talent development, with reserved opportunities for local students. The event's success also strengthens Tehri Lake's reputation as a sports tourism destination, paving the way for future events and sustained economic growth in the region.



6.5 Overall Assessment

The Open National Canoe Sprint Senior Men & Women Championship, organized by THDC India Limited at Tehri Lake, successfully showcased Tehri as a promising destination for water sports, benefiting the local community economically and socially. This event, which brought together 444 participants from across India, significantly boosted local businesses, with hotels and vendors reporting increased footfall and revenue. Collaboration with ITBP and local stakeholders enhanced event organization, providing essential infrastructure and promoting Tehri's potential as a water sports hub. Additionally, the event sparked youth interest in water sports, with proposed training programs and a high-performance academy offering long-term benefits for local talent development. This championship not only uplifted the community by generating income and job opportunities but also laid a foundation for sustainable tourism and sports development in Tehri.



CASE STUDIES

1. Beyond the Games: Lasting Upgrades at Tehri's ITBP Hostel



When THDCIL organized the Open National Canoe Sprint Senior Men & Women Championship at Tehri Lake in 2023, accommodating the athletes became a crucial aspect of planning, especially for the 121 women participants. THDCIL, in collaboration with the Indo-Tibetan Border Police (ITBP), decided to host the women athletes at the ITBP hostel, a choice that prioritized safety and convenience due to its proximity to the event venue. However, the hostel's infrastructure was not in ideal condition; windowsills were damaged, furniture was worn, and essential fittings needed repair or replacement. Recognizing the importance of creating a comfortable and secure environment, THDCIL provided financial support for a targeted renovation of the hostel, ensuring it met the necessary standards for hosting female athletes.

With THDCIL's support, the ITBP hostel underwent a transformation. Windowsills were repaired, new glass panes were installed, and furniture was either refurbished or replaced, creating a more welcoming and functional space. This upgrade did more than support the immediate needs of the championship; it also left a lasting improvement in the hostel's infrastructure, benefiting future guests, including ITBP personnel and participants in upcoming events. By aligning its efforts with the needs of the community, THDCIL helped elevate local facilities, underscoring how national events can leave a meaningful legacy that enhances regional resources and supports long-term community development.

2. Making Waves: THDCIL's Drive to Promote Water Sports at Tehri Lake

Tehri Lake, with its vast, serene waters and scenic backdrop, presented the ideal setting for introducing a national water sports championship, yet the region had long been overlooked as a competitive sports destination. When THDC India Limited decided to host the Open National Canoe Sprint Senior Men & Women Championship here, it wasn't merely to hold a competition but to unlock the lake's potential as a center for water sports and inspire local youth. THDCIL invited students from nearby schools to witness the event, aiming to ignite a passion for water sports among young people who had never before been exposed to such an opportunity. Many of the students, watching professional athletes glide over the water, expressed newfound interest in learning kayaking and canoeing themselves.

The championship went beyond sparking inspiration; it set the foundation for Tehri Lake's development into a long-term sports hub. THDCIL, along with the Indo-Tibetan Border Police (ITBP), invested in equipment and infrastructure that will serve future events, and plans are underway to establish a high-performance sports academy in the area. Additionally, a junior academy will offer training and free education to local students, bringing structured water sports programs within reach for the community. Through these initiatives, the lake is positioned not only as a venue for competitions but as a resource for sustained athletic training and tourism, promoting water sports in Tehri and providing young locals with tangible pathways into the sporting world.



CHAPTER 7

RECOMMENDATIONS AND CONCLUSIONS

This chapter presents a set of strategic recommendations and a concluding analysis of THDCIL's CSR initiatives based on the impact assessment findings. The recommendations are divided into general suggestions applicable across all projects and specific guidance for each major project area, aiming to enhance program effectiveness, sustainability, and community impact. These insights are intended to guide THDCIL in refining its CSR strategy, fostering long-term benefits, and addressing community needs more comprehensively.

General Recommendations

- 1. Expand Infrastructure and Resources:** THDCIL should enhance infrastructure across all CSR projects to meet increasing demand. Improving facilities in educational institutions, healthcare centers, and sports venues with modern equipment and resources will optimize service quality, safety, and user satisfaction.
- 2. Strengthen Community Engagement:** Robust community engagement is essential for the sustainability of all CSR initiatives. THDCIL should enhance its outreach strategy by conducting awareness programs, collaborating with local leaders, and hosting regular community meetings to ensure inclusivity and gain valuable feedback for continuous improvement.
- 3. Focus on Staff Training and Capacity Building:** Continuous staff training in specialized areas, such as healthcare and educational support, will improve service quality and ensure projects adapt to evolving community needs. Investing in capacity building will foster higher program efficiency and sustainability.
- 4. Incorporate Sustainable Practices:** Integrating sustainable practices, such as resource-efficient infrastructure, waste management, and renewable energy, into each project will minimize environmental impact and operational costs, contributing to long-term project viability.
- 5. Implement Regular Monitoring and Evaluation (M&E):** Establishing a structured M&E framework will enable THDCIL to monitor progress, resolve challenges in real-time, and measure outcomes against defined objectives. This feedback mechanism is crucial for scaling projects and supporting data-driven decision-making.

Project-Specific Recommendations

1. Educational Support – THDC High School and T.B.P. Intermediate School

- **Enhance Career Counselling and Skill Development:** Expand career counselling sessions and skill-building workshops to bridge the gap between education and employment, helping students make informed career choices.
- **Upgrade Facilities:** Regular updates to computer labs, science labs, and libraries will provide modern learning resources, further improving education quality and student engagement.
- **Implement Smart Classrooms:** Upgrading classrooms with digital tools and interactive learning materials will engage students, cater to diverse learning styles, and simplify complex concepts, aligning education with a technology-driven future.
- **Expand Extracurricular Programs:** Introduce sports clubs, cultural activities, and an NCC (National Cadet Corps) program to foster leadership, teamwork, and holistic development in students.

2. Healthcare Initiatives – Zeiss Microscope at Vivekanand Netralaya and MRI Unit at J Watumull Global Hospital

- **Train and Upskill Medical Staff:** Provide ongoing specialized training for medical staff to optimize the use of advanced diagnostic equipment, enhancing surgical precision and diagnostic accuracy.
- **Strengthen Outreach Programs:** Expanding medical outreach to remote areas will increase healthcare accessibility, allowing underserved populations to benefit from diagnostic and surgical capabilities.
- **Implement Preventative Maintenance Programs:** Establish routine maintenance schedules for medical equipment to ensure longevity and minimize downtime, maintaining service reliability.

3. Sports Promotion – National Canoe Sprint Championship at Tehri Lake

- **Develop Training Facilities:** Establish a sports academy at Tehri Lake to train local talent in water sports, supporting regional sports development and opening new avenues for youth engagement.
- **Promote Tourism Synergies:** Collaborate with local tourism bodies to promote Tehri Lake as a sports and tourism destination, creating economic benefits through visitor engagement and seasonal events.

- **Invest in Sports Equipment and Safety Infrastructure:** Improve sports infrastructure with updated equipment, safety gear, and spectator facilities to ensure safety and enhance the event experience, encouraging broader participation.

4. MRI Unit at J Watumull Global Hospital, Mount Abu

- **Staff Training and Certification:** Provide comprehensive MRI safety training for all involved personnel and offer ongoing education to maintain high standards in MRI technology and safety.
- **Preventive Maintenance and Quality Assurance:** Establish a preventive maintenance schedule and quality assurance protocols to ensure consistent performance and diagnostic accuracy of the MRI unit.
- **Patient Safety and Comfort:** Improve patient screening processes and provide clear instructions to reduce anxiety, enhance safety, and optimize the patient experience.
- **Environmental Controls:** Implement controlled access zones within the MRI suite and regularly monitor environmental factors to maintain safe and optimal operational conditions.
- **Community Outreach and Feedback:** Conduct outreach to educate the community about MRI services and implement feedback channels to identify and address areas for service improvement.

Conclusion

The recommendations provided in this chapter aim to maximize the impact and sustainability of THDCIL's CSR initiatives across education, healthcare, and sports sectors. By enhancing infrastructure, fostering community engagement, investing in training, and implementing sustainable practices, THDCIL can ensure long-term benefits and alignment with the evolving needs of the communities it serves. This structured approach will strengthen the organization's CSR footprint, delivering lasting value and empowering local populations through accessible education, quality healthcare, and opportunities in sports and recreation.

CSR IMPACT ASSESSMENT REPORT

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