

**A REPORT ON**

**IMPACT ASSESSMENT OF CSR INITIATIVES OF**

**BHARAT HEAVY ELECTRICALS LTD.**

**HARIDWAR, UTTARAKHAND**

**Submitted to:**



**Conducted By:**



**Center for Sustainable Energy**

**Indian Institute of Technology,**

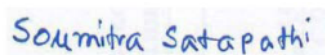
**Roorkee May, 2025**

## ACKNOWLEDGEMENTS

This study has been conducted by IIT Roorkee to evaluate the impact of the CSR initiatives undertaken by BHEL, Haridwar, Uttarakhand. Our team is thankful to the BHEL for choosing us to conduct this study. The impact assessment study was conducted at different places in the vicinity of Haridwar & Rishikesh.

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## **ABSTRACT**

This impact assessment report assesses the various tangible and intangible, positive and negative impacts on society, environment, policy, technology and awareness about the projects completed by BHEL, Haridwar on biodigester toilet. The assessment study is based on the assessment criteria which includes five distinct parameters i.e. Relevance, Efficiency, Effectiveness and Uniqueness, Impact and Sustainability. The report also includes the scope for further optimization in certain area and efforts to serve and benefit the society at large to the maximum possible extent.

## **1. INTRODUCTION**

Over the past few years CSR, as a concept, has been the focus of many deliberations and research. It has grown in importance both academically as well as in the business sense. It captures a spectrum of values and criteria for measuring a company's contribution to social development. As the term "CSR" is used continually, many complementary and overlapping concepts, such as corporate citizenship, business ethics, stakeholder management and sustainability, have emerged. These extensive ranges of synonymously used terms indicate that multiple perspectives and by those in facilitating roles such as the corporate sector, government agencies, academics and the public sector context have been identified by the European Union (EU). It describes CSR as "the concept that an enterprise is accountable for its impact on all relevant stakeholders. It is the continuing commitment by business to behave fairly and responsibly, and contribute to economic development while improving the quality of life of the work force and their families as well as of the local community and society at large..."

### **1.1 Some existing CSR policy initiatives across countries:**

As the importance of being socially responsible is being recognized throughout the world, governments are aware of the national competitive advantages won from a responsible business sector. Large corporations have progressively realized that corporate success to a larger extent depends upon being socially responsible. The Organization for Economic Co-operation and Development (OECD) established a set of guidelines for multinational enterprises in 1976, and was thus a pioneer in developing the concept of CSR.

It is observed that, transparency in reporting enhances the focus on economic, social and environmental factors. It motivates companies to intensify their efforts in becoming socially responsible. Several efforts have been made by various governments, to encourage CSR reporting, such as incentivizing companies who voluntarily report their CSR activities or by taking measures such as mandating CSR reporting. In 2007, the Malaysian government passed a regulation to mandate all publicly listed companies to publish their CSR initiatives in their annual reports on a "comply or explain" basis. Accordingly, all public listed companies (PLCs) in Malaysia have to either publish CSR information or they need to explain why they should be exempted. In another example, in 2009 Denmark mandated CSR reporting, asking all state-owned companies and companies with total assets of more than €19 million, revenues more than €38 million and more than 250 employees, to report their CSR initiatives in financial reports.

## **1.2 Evolution in India:**

In the last decade, CSR has rapidly evolved in India with some companies focusing on strategic CSR initiatives to contribute toward nation building. Gradually, the companies in India started focusing on need-based initiatives aligned with the national priorities such as public health, education, livelihoods, water conservation and natural resource management.

## **1.3 The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business:**

Voluntary CSR guidelines create a common standard for how companies can improve their CSR efforts, especially with regard to sustainability. The adoption of a common set of standards creates an expectation that companies will strive to meet the expectations and create peer and public pressure for companies failing to comply. In this regard, the National Voluntary Guidelines (NVGs) on Social, Environmental and Economic Responsibilities of Business, have been laid down by the Ministry of Corporate Affairs in order to provide companies with guidance in dealing with the expectations of inclusive growth and imperatives of climate change, while working closely within the framework of national aspirations and policies. These are applicable to all businesses irrespective of size, sector or location.

## **1.4 The Nine Principles of National Voluntary Guidelines are:**

1. Businesses should conduct and govern themselves with ethics, transparency and accountability.
2. Businesses should provide goods and services that are safe and contribute to sustainability, throughout their life cycle.
3. Businesses should promote the wellbeing of all employees.
4. Businesses should respect the interests of, and be responsive toward all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.
5. Businesses should respect and promote human rights.
6. Business should respect, protect, and make efforts to restore the environment.
7. Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.
8. Businesses should support inclusive growth and equitable development.
9. Businesses should engage with and provide value to their customers and consumers in a responsible manner.

## **1.5 Companies Act, 2013 and CSR:**

With a view to provide a framework for companies (private and public) to implement need-based CSR activities, the Government of India has included CSR-related provisions in the Companies Act, 2013. The section 135 of the Companies Act 2013 aims at on CSR. Though spending 2% of the PAT is not mandatory but section 135 of the Companies Act casts a duty on the CSR. The section 135 will be applicable to all companies that have either of the following:

- Net worth of INR 500 crores or more
- Turnover of INR 1000 crores or more for calculating the 2% for CSR.

The Act mandates companies to form a board-level CSR Committee comprising three or more directors with at least one independent director. The composition of the CSR Committee has to be disclosed in the annual board of director's report.

The CSR Committee will be responsible for formulating and recommending a CSR policy and implementation plan. The Committee will also be responsible for regular monitoring of CSR activities. Company's board will be responsible for approving and disclosing CSR Policy in the annual Director's Report and on company's website. The Board will also be responsible for ensuring implementation of CSR activities according to the Policy. The annual Director's Report has to specify reasons adequately responsibility for corporate actions.

## **1.6 DPE Guidelines:**

The Department of Public Enterprises being the nodal department for all Central Public Sector Enterprises (CPSEs) formulates policy pertaining to the role of CPSEs in the economy. It lays down policy guidelines for performance improvement and evaluation, autonomy and financial delegation, personnel management and other related areas in respect of CPSEs. The DPE also acts as the interface between the various Parliamentary and Government organization and the CPSEs as a whole. In the last few years, the pioneering initiatives of the Department of Public Enterprises (DPE) in promoting awareness of the concept and philosophy of Corporate Social Responsibility (CSR) in the public sector enterprises in India through issue of guidelines on the subject and regular interface with the management of CPSEs to ensure adherence to the guidelines in letter and spirit has resulted in widespread understanding and acceptability of CSR in the country.

The first guidelines on CSR issued by DPE in April 2010 made it mandatory for public sector enterprises to set aside a fixed percentage of their profits for CSR activities. Subsequently, DPE

explored a new dimension of CSR as a form of responsible business to be adopted voluntarily by the companies. After extensive consultations with all key stakeholders, DPE issued revised guidelines on CSR and Sustainability effective from 1st April 2013, which incorporated the global best practices but retained focus on the domestic socio- economic requirements of our country. As a result, DPE guidelines were very well received by the practitioners, the stakeholders and CSR experts and got wide acclaim at the international forum where DPE was invited to share its views with the international audience.

The thrust of DPE guidelines on CSR and Sustainability has been on inclusive growth, development of backward regions, upliftment of the marginalized, under privileged and weaker sections of the society, empowerment of women, environment sustainability, promotion of green and energy efficiency technologies and sustainability development in all its diverse aspects. The CSR and Sustainability initiatives taken by CPSEs in compliance of DPE guidelines on the subject have made tangible socio-economic and environmental impact for the betterment, though comprehensive studies have not yet been undertaken to accurately measure the impact.

The incorporation of specific provisions on CSR in the Companies Act 2013 was, in a way, a vindication and culmination of the efforts of DPE to mobilize the support of all key stakeholders to propagate the concept and philosophy of CSR and ensure its proper implementation in a developing economy like ours. The Companies Act 2013 makes it mandatory for all companies which fulfil the eligibility criteria based on profitability to spend at least 2% of their average net profits of three preceding years on CSR. India is perhaps the first country to make it mandatory by legislation for companies to discharge their Corporate Social Responsibility in a prescribed manner. Since CSR and Sustainability are dynamic subjects, DPE is constantly exploring new dimensions of these subjects and devising new implementation strategies to make CSR and Sustainability portent tool for achieving national development agenda along with “sustainable” development goals.

(Source: [www.pib.nic.in](http://www.pib.nic.in); Press Information Bureau, GOI and <https://dpe.gov.in/dpe-guidelines/corporate-social-responsibility>).

## 1.7 BHEL Introduction:

BHEL is India's largest engineering and manufacturing enterprise in the energy and infrastructure sectors. Established in 1964, we are a leading power equipment manufacturer globally and one of the earliest and leading contributors towards building an Aatmanirbhar Bharat.

We serve our customers with a comprehensive portfolio of products, systems and services in the areas of power-thermal, hydro, gas, nuclear & solar PV; transmission; transportation; defence & aerospace; oil & gas and new areas like BESS and EV chargers.

Right from developing country's power generation capacity to creating multiple capabilities in country's core industrial & strategic sectors, BHEL is deeply aligned to the vision of a self-reliant India. Consistent expenditure of more than 2.5% of its turnover on R&D and innovation; establishment of world-class manufacturing assets, development and absorption of new technologies; and creating sustainable business solutions and initiatives in skilling youth, promoting health & hygiene, education, cleanliness and environment protection, stand a testimony to our commitment to contribute not just to our business interests, but also to society at large.

### 1.7.1 Awards:

- Bharat Heavy Electricals Limited (BHEL) has been ranked the Ninth Most Innovative Company in the world by the renowned US business magazine Forbes in 2011.

### 1.7.2 BHEL CSR Overview:

BHEL's Mission Statement on CSR is *"Be a Committed Corporate Citizen, alive towards its Corporate Social Responsibility"* and its thrust areas for CSR activities include:

- **Inclusive India:** Mitigation of hunger and poverty through livelihood promotion/ augmenting income generation, imparting vocational Skills.
- **Healthy India :** Promoting health care including preventive health care and sports.
- **Clean India :** Sanitation and making available Safe Drinking Water, Cleaning and preserving the Rivers, Clean surroundings; toilets in schools specially for girls.
- **Educated India :** Promoting education with thrust on informal education to reduce dropouts at primary school level, value education, digital education;
- **Responsible India :** Women Empowerment, Setting up old age homes, day care

center and such other facilities for senior citizens, Rural Development Projects and Slum Development Projects;

- **Green India:** Ensuring environmental sustainability with emphasis on projects based on Solar Energy.
- **Heritage India:** Protection of national heritage, art and culture.

The company shall give preference to the local areas for spending at least 75 % of the amount earmarked for CSR activities. The remaining amount may be utilized beyond local areas.

However, contribution made to the Central Government Schemes, where defining the area as well as the scope is not possible for the company will be excluded while arriving 75:25 ratio.

#### **1.7.2.1 CSR Vision:**

A responsible corporate citizen working towards a better tomorrow.

#### **1.7.2.2 Objectives:**

The objectives of this policy are:

To define CSR projects or programs which BHEL plans to undertake and which fall

- Within the purview of the Companies Act 2013, the Companies (CSR Policy) Rules, 2014 and the prevailing DPE Guidelines; Modalities of execution of such CSR projects or programs.
- Monitoring process of such CSR projects or programs.
- To make the stakeholders aware about CSR practices in BHEL.
- To work keeping in mind the larger objective of sustainable development in conduct of business and in pursuit of CSR agenda.

### **1.7.3 CSR Structure:**

#### **1.7.3.1 Corporate Level CSR Structure:**

There is a 3 tier committee structure at the Corporate Level, viz. Board Level Committee (BLC) for CSR, Level-1 Committee & Level-2 Committee for screening and approval of proposals. The BLC for CSR will consist of Director (HR), Director (Finance) and at least one Independent Director. Chairman of the Committee will be an Independent Director. Decision with regard to change in composition or reconstitution of the BLC will be within the purview of the Board. The Committee will meet at least once in a quarter.

The Board Level Committee (BLC) for CSR shall:

- Formulate and recommend to the Board, a CSR Policy which shall indicate the activities to be undertaken by the company as specified in Schedule VII.
- Recommend the amount of expenditure to be incurred on the activities referred to in clause.
- Monitor the CSR Policy of the company from time to time.

### ***1.7.3.2 Unit Level CSR Structure Nodal Officer:***

The concerned Unit Head will act as Nodal Officer for CSR programs/ activities related to local areas where the Unit operates. All proposals/ annual budget/ any other matter related to CSR to be submitted by Unit to Corporate Office for review will require recommendation of Nodal Officer.

Unit Level Committee for CSR Unit Level Committee for CSR will consist of one member each (not below the rank of E1) from HR, Finance and Administration/ Factory Services Department as permanent members and additionally, depending on the nature/need of the project, members from other departments like Civil, Medical, Law, IT, etc. can also be co-opted in the Committee. Unit's CSR coordinator will be the Convener of the committee.

Constitution/ reconstitution of Unit Level Committee for CSR will be with the approval of the Nodal Officer.

Unit Level Committee shall:

- Review all proposals received at the Unit.
- Monitor the process and study impact of CSR programs/ activities periodically.
- Give suggestions relevant to CSR programs/ activities whenever required.

## 2. IMPACT ANALYSIS

### 2.1 Objectives:

The study aims at conducting the assessment of impact of CSR initiatives of BHEL for installation of 25 sets of community Bio-digester Toilets clusters along with drinking water facility along the bank of River Ganga (Haridwar & Rishikesh region). The main objectives of the impact assessment study are as follows:

- ❖ Whether the Bio-digester toilet has been installed and working as per the requirement.
- ❖ Quality of the bio-digester and sanitation.
- ❖ Social impact on livelihood.

The impact assessment study is based on five functions in every project which are Relevance, Efficiency, Effectiveness and Uniqueness, Impact and Sustainability. It measures the performance of BHEL, Haridwar in each of the above mentioned functions through a survey conducted in the target sites. The survey was designed including all five activities and the project were analyzed on these parameters.

Assessment Criteria	Assessment Questions
Relevance	Did the overall goal match needs of the project outcome?  Did the project's baseline data correctly address needs of the area?
Efficiency	What outputs were achieved and whether they were according to the plan?  Was the implementation schedule as planned?  Was the project cost within planned limit?  Was the fund utilization prudent?

Effectiveness & Uniqueness	<p>Did the outputs help achieve the goal?</p> <p>Did the project have any unique feature?</p> <p>Comparing the inputs to the extent of goals achieved, can project implementation be considered to be effective?</p> <p>Can the project be replicated?</p>
Impact	<p>What were the various tangible and intangible positive and negative impacts (Socio-economic, Environment, Policy, Technology, and Awareness) on different stakeholders of the project?</p>
Sustainability	<p>Would the impacts created by the project sustain?</p> <p>Considering the present course of project, is the project sustainable?</p> <p>If not, what modifications and corrections need to be done with project execution methodology?</p>

## 2.2 Whether objective met. If yes, then to what extent

The comprehensive results represent that project is satisfactory on these measures and work done by BHEL, Haridwar are laudable and found to be in accordance with the requirement of project. Though there are scope of improvements in maintaining these projects and scope in sustainability.

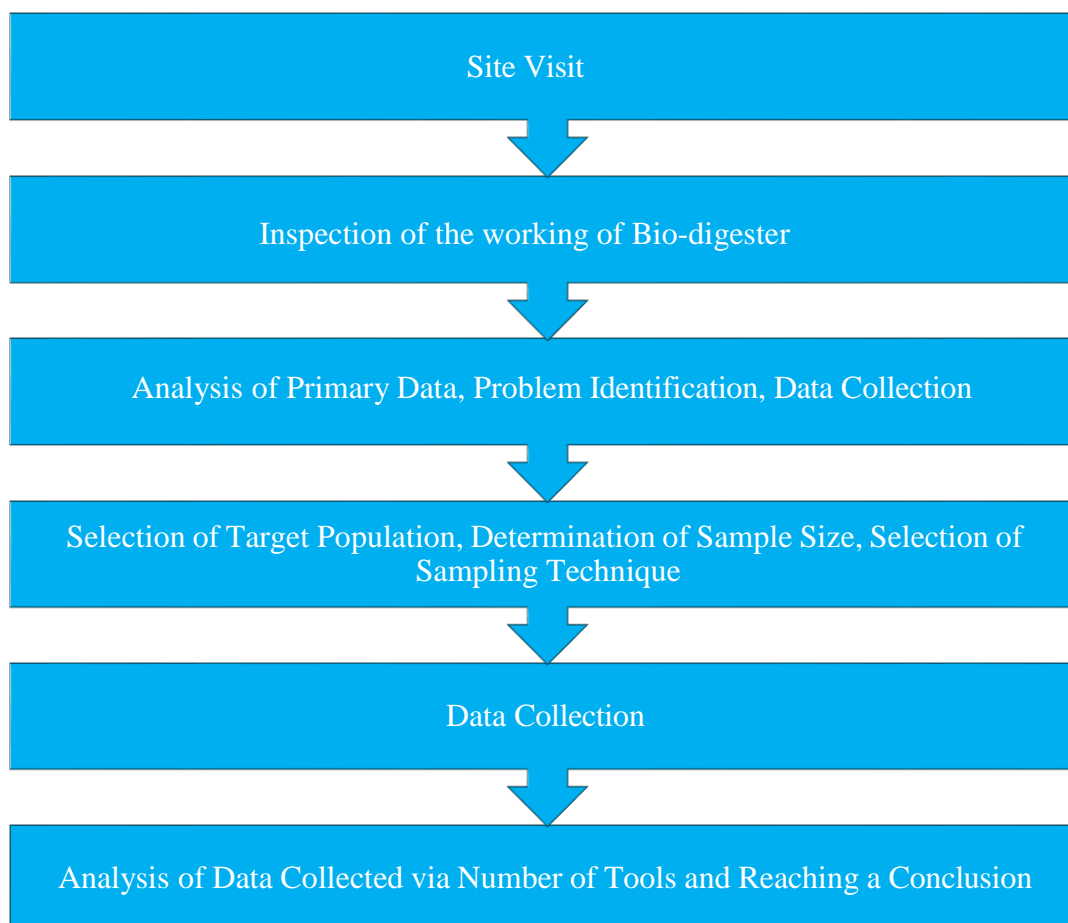
## 2.3 Methodology Used:

The present study was conducted by visiting sites and inspecting the bio-digester primary data associated with the accomplished projects. Selection of target bi-digesters, sanitation of surrounding areas, water dispenser quality, bacteria charging was analyzed. Mainly focused was based upon relevance, efficiency, effectiveness, impact and sustainability of the project followed by analysis of primary data. Analysis of other areas of intervention for CSR initiatives was conducted by detailed discussion with end users.

## 2.4 Bio-Digester:

The purpose of study comprised of site visit and discussion with users. Focused group discussions in the target sites where beneficiaries had already availed services of bio-digester were conducted.

The process is depicted in tabular form as follows:



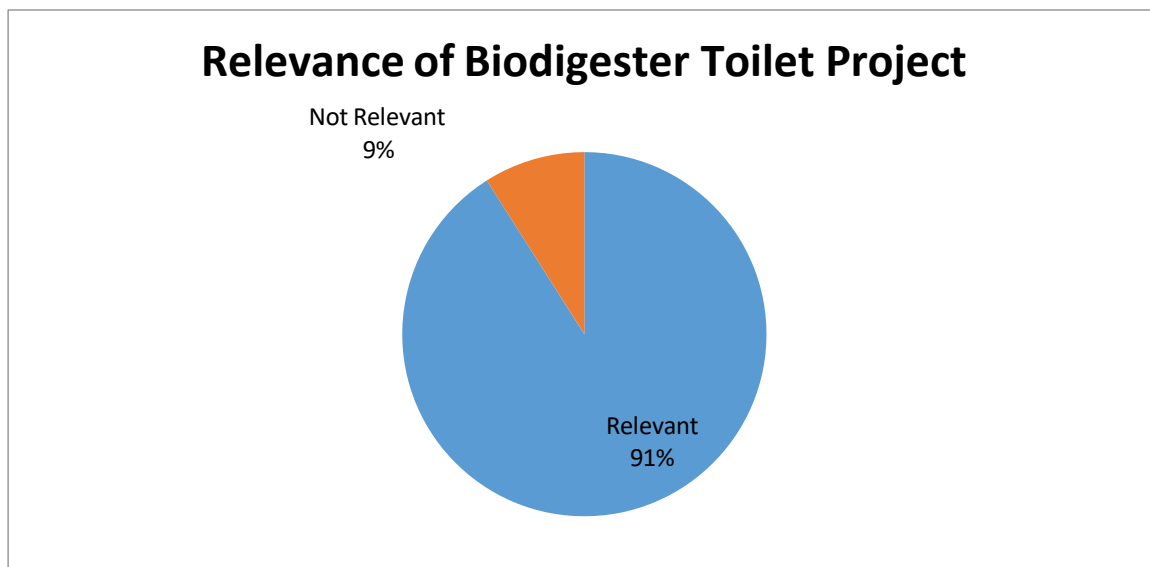
## 2.5 Outcome of the project are based on the conclusion of Baseline Indicators:

The following sites were visited during the course of impact analysis.

Sl. No.	Name of the site	No. of clusters (units)
1.	CCR Haridwar (Har-ki-Pauri)	3
2.	Rain Basera Haridwar (Har-ki-Pauri)	2
3.	Vishnu Ghat Haridwar (Har-ki-Pauri)	2
4.	Nagar Nigam Haridwar	1/2
5.	DM Kothi Haridwar	1/2
6.	Rishikul-I Haridwar (Rishikul Maidan)	2
7.	Rishikul-II Haridwar (Rishikul Maidan)	2
8.	GGIC Rishikesh	1
9.	Bus Stand Rishikesh	2
10.	Sadhubela Haridwar (Bhupatwala)	2
11.	Gandhi Park BHEL Haridwar	1
12.	Railway Station Rishikesh	2
13.	Pawan Dham Haridwar (Har-ki-Pauri)	1
14.	Pantdweep Parking Haridwar	2

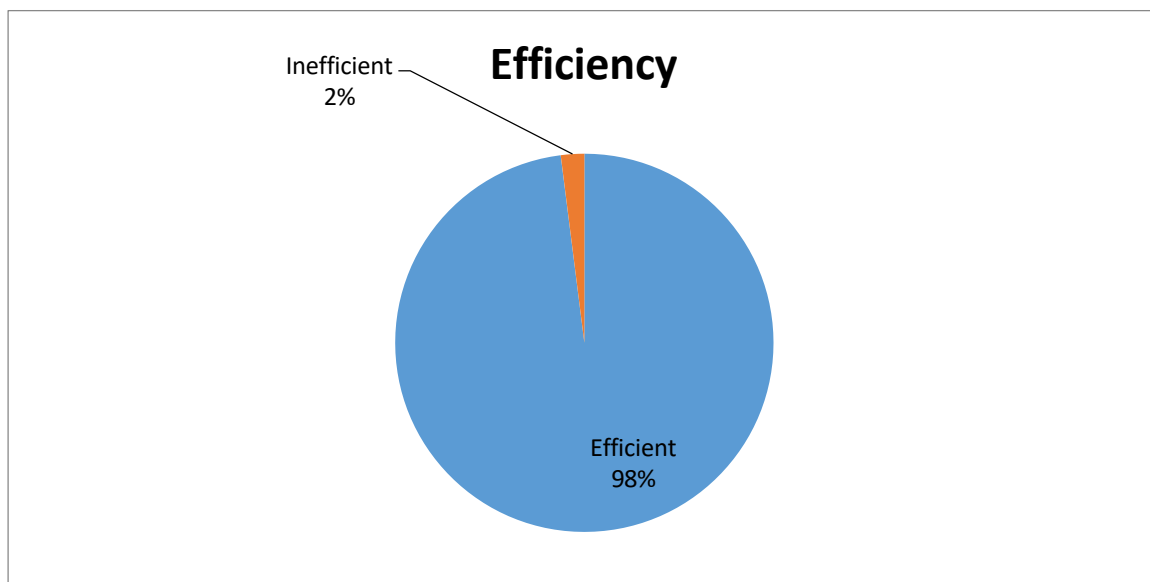
The analysis was done based on baseline parameters. It was observed that the work conducted was satisfactory and up to the mark.

**Relevance:**

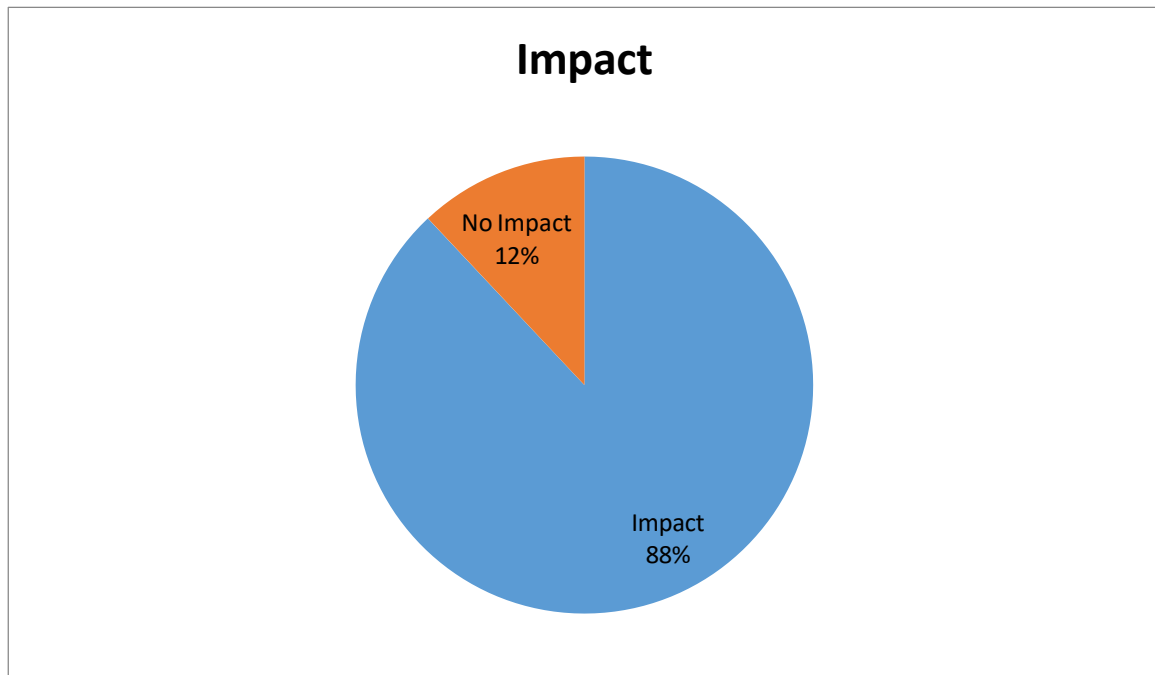


As per the data collected from the end users, 91% people believed that Biodigester Toilet is relevant for the visitors.

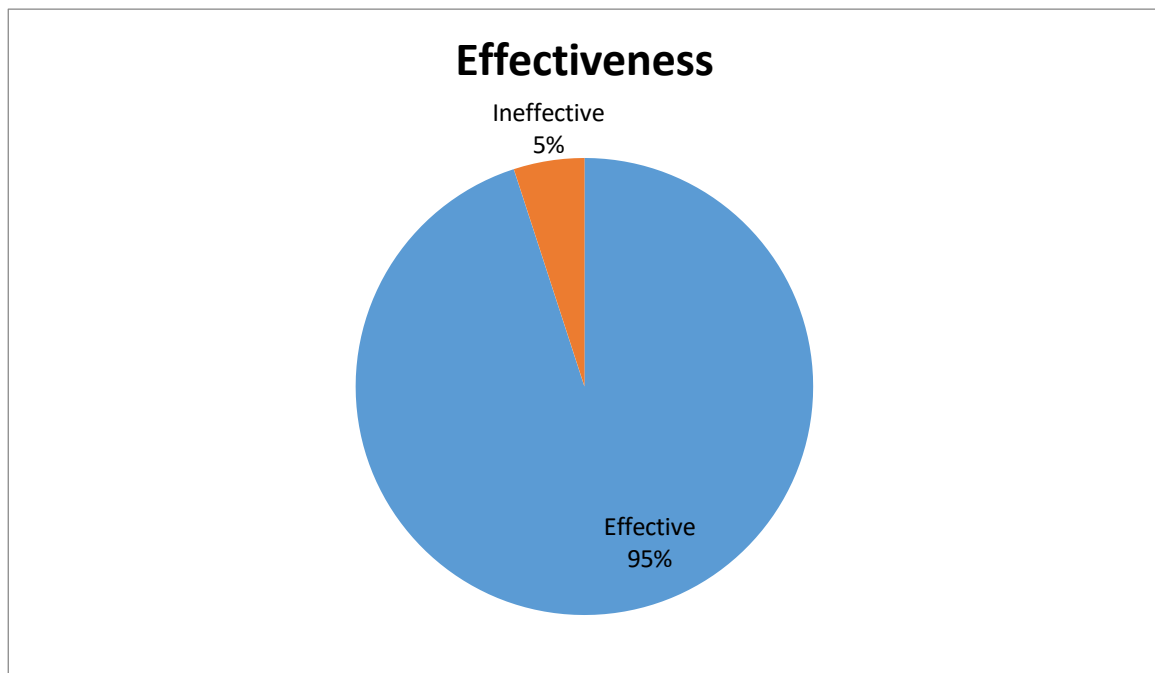
**Efficiency:**



98% of the beneficiaries were satisfied and felt that the Biodigester Toilet facility was efficient as all visitors.

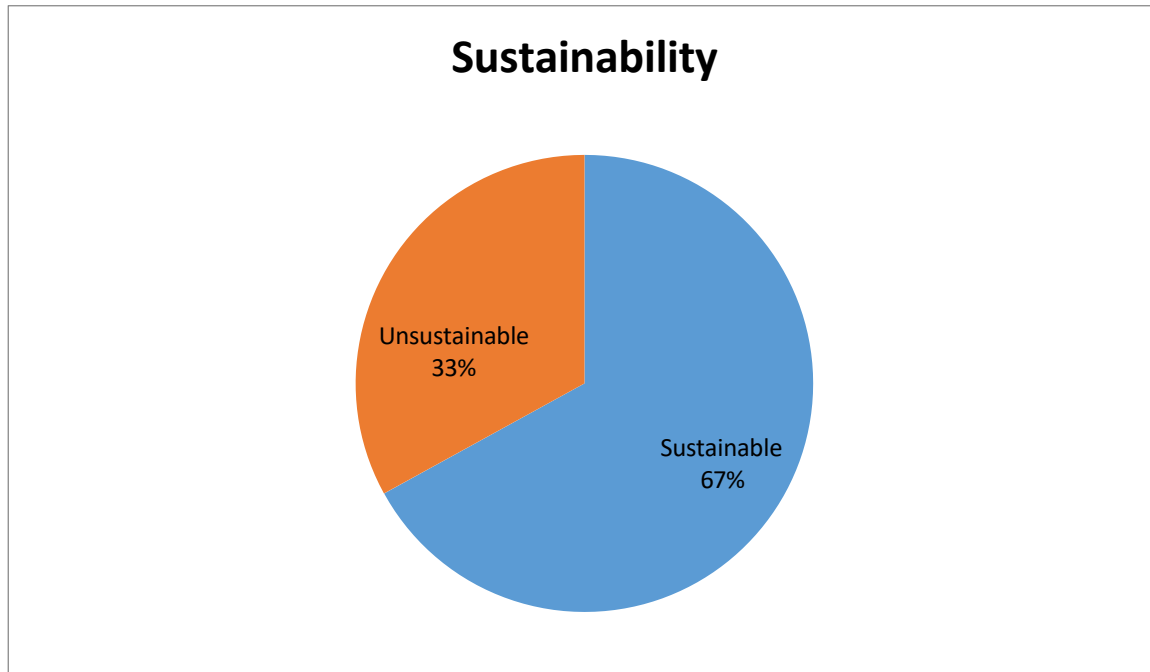
**Impact:**

As per the data collected, 88% of the users believed that Biodigester Toilet have impacted the lives of the beneficiaries positively.

**Effective:**

Effectiveness of the Biodigester Toilet services is evident from the satisfied response of the users which accounted 95 %.

### **Sustainable:**



From the data collected, 67 % end users were satisfied that the services being provided by Biodigester Toilet were sustainable in nature as they were aware that the sustainable means to dispose of the wastes generated during the process.

### **2.6 Expected impacts in the long run:**

Most of 14 sites users believe that this has impacted their lives in positive way. Haridwar and Rishikesh being pilgrimage area, a lot of people visit here every day. The bio-digester toilet will enhance eco-friendly way of sanitation.

### **2.7 Coverage of other points as mentioned in the Objectives Tabulated at point a) above.**

All the points for impact analysis has been made successfully. However, the following observation was made:

- (i) Some of the water dispensers are not working properly. The proper maintain ace

should be adopted.

- (ii) The sanitation in and around the Biodigester Toilets could be improved.
- (iii) Inoculum bacteria charging complaint was made by BHEL at Gandhi Park.
- (iv) Initially toilets were supposed to be completed by 2015. However, after due diligence an extension was granted to M/s FICCI until 2022.
- (v) 14 Sites/23 Clusters was completed out of 15 sites/25 clusters as per the agreement.

### **2.8 Intangible benefits derived from completed projects.**

These bio-toilets convert the foul-smelling human waste into odourless gas and water that can be released at no risk to the ecosystem into the sewage system. Another benefit is that the methane produced is combustible and can, therefore, be used for various household chores such as cooking, heating water, etc.

## **3 CONCLUSION**

Health is wealth as rightly observed in the following quote of Mahatma Gandhi “It is health that is real wealth and not pieces of gold and silver”. The CSR initiative of BHEL, Haridwar towards healthcare of the travelers which lack community health center is a paradigm move and needs to be appreciated as it focused on improving the quality of health of the visitors and daily passengers. The beneficiaries were satisfied with the services being provided to them. The holistic approach represented by BHEL, Haridwar in funding Biodigester toilets is remarkable.