

GAIL (India) Limited

Impact Assessment Report on Support for Installation of Hand Pumps in Auraiya, Uttar Pradesh (FY 20-21)



Disclaimer and Notice to Reader

- 1. This report This report has been prepared by KPMG Assurance and Consulting Services LLP ("KPMG" or "we") exclusively for GAIL (India) Limited ("Client") in accordance with the terms of the Request for Quotation dated 18.08.2022 issued by GAIL (India) Limited , our quotation for services dated 07.09.2022, the Fax of Acceptance issued by GAIL (India) Limited on 20.09.2022, KPMG's acknowledgement of Fax of Acceptance on 23.09.2022, the Letter of Acceptance issued to KPMG dated 27.09.2022 , and KPMG's Letter of Acceptance dated 11.10.2022 . The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.
- 2. This report is for the use of management only and not for use by any other party, in whole or in part, without our prior written consent.
- 3. This report sets forth our views based on the completeness and accuracy of the facts stated to KPMG and any assumptions that were included. If any of the facts and assumptions is not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.
- 4. While performing the work, we have assumed the authenticity of all documents or information referred or provided. We have not independently verified the correctness or authenticity of the same.
- 5. We have not performed an audit and do not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion.
- 6. In accordance with its policy, KPMG advises that neither it nor any partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than GAIL (India) Limited in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.
- 7. In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.
- 8. While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. We assume no responsibility for such information.
- Our report may make reference to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the veracity of the underlying data.
- 10. By reading our report the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.



Table of Contents

| 1.1 | Executive Summary | 4 |
|-------|--------------------------------|--------|
| 1.2 | Introduction | 6 |
| 1.2.1 | CSR at GAIL | 6 |
| 1.2.2 | GAIL CSR Vision | 6 6 |
| 1.2.3 | GAIL CSR Objectives | 6 |
| 1.2.4 | About the project/ programme | 7 |
| 1.3 | About the Implementing Agency | 8 |
| 1.4 | Methodology and Approach | 8 |
| 1.4.1 | OECD DAC: Evaluation Criteria | 9 |
| 1.4.2 | Geographical Scope | 10 |
| 1.4.3 | Sampling strategy | 10 |
| 1.4.4 | Sample Coverage | 10 |
| 1.4.5 | Data Collection and Analysis | 11 |
| 1.4.6 | Stakeholder Map | 11 |
| 1.4.7 | Impact Map | 11 |
| 1.5 | Scoring Matrix | 13 |
| 1.6 | Impact Assessment | 14 |
| 1.6.1 | Relevance of Intervention | 14 |
| 1.6.2 | Coherence of Intervention | 14 |
| 1.6.3 | Effectiveness of Intervention | 16 |
| 1.6.4 | Efficiency of Intervention | 17 |
| 1.6.5 | Sustainability of Intervention | 18 |
| 1.6.6 | Branding of intervention | 18 |
| 1.6.7 | Impact of Intervention | 19 |
| 1.7 | Overall rating of the project | 22 |
| 1.8 | Conclusion and Way Forward | 23 |



1.1 Executive Summary

Over the last few decades, India has expedited its journey to being a global leader in both thought and action. Being the second most populous country in the world, India has the ability to offer the pivotal traction required to achieve the 2030 Sustainable Development Goals (SDGs). India's alignment with the international development agenda, as exemplified by the motto "Sabka Saath Sabka Vikas" (collective efforts, inclusive growth), underlines the country's commitment to the SDGs.

With over 1.4 billion people from diverse social, economic, and cultural backgrounds, India faces an arduous challenge in meeting their aspirations. Nonetheless, the story of India since 1947 reflects an impressive growth. The country has effectively lifted more than 271 million people out of multidimensional poverty through economic growth and empowerment. Inequalities in housing, nutrition, child health, education, sanitation, drinking water, and electricity have decreased as a result of enhanced access and reduction in poverty.

Nonetheless, at the national level, there is still a substantial amount of work to be done in multiple sectors. Once such sector is WASH as access to safe and clean water is a persistent issue, especially in rural areas². Handpumps are essential for the sustenance of many rural communities in India. Over 40% of India's population, about 500 million people residing in rural communities rely on handpumps for their daily water needs³.

Handpumps are affordable and easy to install, making them ideal for rural areas, and they are often the only way for communities to access water. Handpumps have been proven to be extremely effective in helping areas with water scarcity. In many places, handpumps are the only way for people to access clean water, as the alternative is to use contaminated water sources.

Handpumps can also help improve health and hygiene in rural communities. By providing access to clean drinking water, handpumps can help to reduce the spread of water-borne diseases, making a significant impact on public health. Furthermore, they can save the time spent every day collecting water from distant sources.

GAIL (India) Limited, being a socially responsible public sector company recognizes the necessity of addressing the above- mentioned issue and contributing towards providing safe drinking water to rural communities in Auraiya district, Uttar Pradesh. Thereby, in alignment with the

¹ Sashakt Bharat- Sabal Bharat (Empowered and Resilient India)- Voluntary National Review :2020

² Clark, G., & Wakoki, D. (2017). Assessing the contribution of handpumps to rural water supply security. International Journal of Water Resources Development, 33(4), 567-582.

³ https://www.livemint.com/news/india/hand-pumps-a-major-source-of-drinking-water-in-rural-areas-shows-data-11574727669034.html



thematic areas as mentioned in the Schedule VII of the Companies Act, 2013, for implementing the subject project, GAIL engaged Implementing agency, M/s UPSICL (A Govt. of UP Undertaking) for installation of hand pumps in the villages of Auraiya district of Uttar Pradesh.

To evaluate the impact of the project and understand the perception of the stakeholders, GAIL (India) Limited empaneled KPMG to conduct an impact assessment study. Along with stakeholder consultations, review of documents and data provided by the team was undertaken to understand the objective and coverage of the project. Subsequent to the desk review, key performance indicators were identified and finalised, in consultation with the programme team. For the purpose of this study, OECD- DAC (Organisation for Economic Co-operation and Development- Development Assistance Committee) framework was used for developing the research tools (questionnaires for qualitative surveys) and evaluating the impact created.

All the respondents of the study replied being satisfied with the intervention and shared that the installation of handpumps had improved their access to clean drinking water. Further, the average time required for sourcing water reduced from 22 minutes to only 8 minutes after the intervention. Therefore, overall, the project was categorized as 'Highly Impactful' for its tangible positive impact.



1.2 Introduction

1.2.1 CSR at GAIL

GAIL (India) Limited, conferred with the status of Maharatna in 2013, is India's leading natural gas company with diversified interests across the natural gas value chain of trading, transmission, LPG production, LNG-regasification, petrochemicals, city gas, etc. It owns and operates a network of around 14617 km of natural gas pipelines spread across the length and breadth of country. GAIL firmly believes that meeting people's needs, enhancing communities, and safeguarding the environment will ultimately determine how long progress can be sustained.

Pursuant to the provisions of the Companies Act, 2013 and rules made thereunder including the statutory modifications/ amendments from time to time as notified by the Government of India, GAIL (India) Limited earmarks two percent of its average net profit of the preceding three financial years towards achieving its CSR objectives through implementation of meaningful and sustainable CSR programmes.

1.2.2 GAIL CSR Vision

GAIL, through its CSR initiatives, will continue to enhance value creation in the society and in the community in which it operates, through its services, conduct & initiatives, so as to promote sustained growth for the society and community, in fulfillment its role as a Socially Responsible Corporate, with environmental concern.

1.2.3 GAIL CSR Objectives

- Ensure an increased commitment at all levels in the organization, to operate its business in an economically, socially & environmentally sustainable manner, while recognizing the interests of all its stakeholders.
- To directly or indirectly take up programmes that benefit the communities in & around its work centres and results, over a period of time, in enhancing the quality of life & economic wellbeing of the local populace.
- To generate, through its CSR initiatives, goodwill, and pride for GAIL among stakeholders and help reinforce a positive & socially responsible image of GAIL as a corporate entity.



1.2.4 About the project/ programme

Universal access to safe drinking water is a basic human right and a critical sustainable development challenge. The challenge will only worsen and its impact on people will only increase as competing demands for clean fresh water (agriculture, households, energy generation, industrial use, ecosystems) are exacerbated by the effects of climate change putting more pressure on water quality and availability⁴. Millions of people die every year from diseases associated with unsafe drinking water, sanitation, and hygiene⁵. Despite significant progress, 2.2 billion people worldwide do not have safely managed drinking water services⁶.

A safe water supply and equitable access to it is the ultimate backbone of a healthy economy⁷. However, not much headway has been made in this direction, especially in India. While India has numerous ambitious policies to this effect, their translation to action has been dismal.

More than 50 per cent of the population lacks access to safely managed drinking water (located on-premises, available when needed, and free of contamination)⁸. Moreover, two-thirds of India's districts are affected by extreme water depletion, and the current lack of water safety and security planning is a significant concern⁹.

Many families, especially in rural areas, lack a safe and reliable water source such as piped supply directly to homes. In such cases, the onus of collecting water often falls on women and children, who usually have to spend about half an hour each day in sourcing it¹⁰. Therefore, sustainable management of water resources and access to safe water and sanitation are essential for unlocking economic growth and productivity and provide significant leverage for existing investments in health and education¹¹. Providing access to safe water is one of the most effective instruments in promoting health and reducing poverty¹².

In a step towards improving access of rural communities to water, GAIL (India) Limited, in alignment with its CSR ambitions, deployed Uttar Pradesh Small Industries Corporation Limited (UPSICL) to install 168 hand pumps across villages of Auraiya district. The project was implemented in FY 2020-21 with the implementing agency supplying and installing handpumps and subsequently handing them over to the identified beneficiaries and gram panchayats.

⁴ SDG 6: Ensure availability and sustainable management of water and sanitation for all – SDG Compass

⁵ SDG Goal 6: Clean Water and Sanitation - UNICEF DATA

⁶ Ibid

⁷ https://www.unicef.org/india/what-we-do/clean-drinking-water

⁸ Ibid

⁹ Ibid

¹⁰ https://www.unicef.org/india/what-we-do/clean-drinking-water

¹¹ GOAL 6: Clean water and sanitation | UNEP - UN Environment Programme

¹² Water, sanitation and hygiene (WASH) - India (who.int)



1.3 About the Implementing Agency

For the purpose of comprehensive development of small industrial units of the state, Uttar Pradesh Small Industries Corporation Limited (UPSICL) was established in June 1958 as a wholly Government owned company. To fulfill its objectives, the corporation is providing assistance to the small-scale industrial units of the state. The main objective of the organization is to provide various raw materials like iron, steel, coal and so on to small scale units. Additionally, the organization is also involved in establishment and maintenance of the industrial establishments of the Directorate, providing marketing assistance to small scale entrepreneurs, establishing industrial estates and clusters in backward areas etc.

U.P. Small Industries Corporation Limited is the only corporation of the state government which is responsible for the MSME of the state. For the purpose of this project, GAIL collaborated with UPSICL for installation of handpumps in Auraiya district of Uttar Pradesh. UPSICL (A UP Government Undertaking) is an eligible CSR implementing agency with form CSR – 1 registration under the MCA.

1.4 Methodology and Approach

GAIL has been implementing successful CSR initiatives based on community needs. A third-party evaluation of the results attained is essential given the dynamic nature of the social development programmes deployed. This impact assessment aims to explain what has been done well and what can be done moving forward. It will not only assist in determining the significance of the project, including the efficiency of project design and interventions, sustainability of results, and impact of the intervention on the target community, but it will also provide guidance for expanding or replicating the successful initiatives while redesigning or ending the projects/initiatives that were unable to have the intended impact.



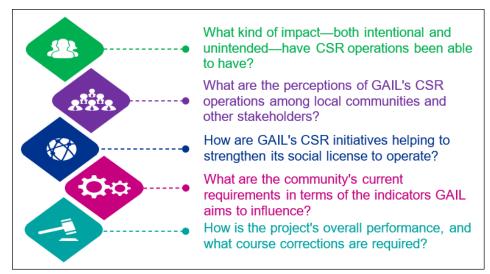


Figure 1: Research Questions

The impact assessment is intended to provide key insights on the following questions:

The study was conducted through qualitative data collection techniques. This includes in-depth interviews with key stakeholders, as well as secondary research in the multiple thematic areas for a baseline perspective.

1.4.1 OECD DAC: Evaluation Criteria

Given the fundamental approach for conducting an impact study, the OECD-DAC (Development Assistance Committee) Evaluation Network's framework is well regarded for assessing the efficacy of development programmes. In response to the need for a method through which bilateral development agencies could monitor the financing supplied to multilateral organisations for various development initiatives, the DAC Evaluation Network developed a set of evaluation criteria for measuring the performance of any development project (UNICEF, 2012).

In 1991, the OECD Development Assistance Committee (DAC) devised the criteria for assessing international development cooperation. They are now widely used beyond the DAC and have established themselves as a cornerstone of evaluation methodology. These standards have routinely been used for international donors, including UN agencies (OECD, 2020).



The OECD DAC Network has identified six evaluation criteria and two principles for their application: relevance, coherence, effectiveness, efficiency, impact, and sustainability. These criteria are meant to help facilitate evaluations. They were revised in 2019 to improve the accuracy and utility of assessment and to strengthen the evaluation's contribution to sustainable development (OECD, 2020).

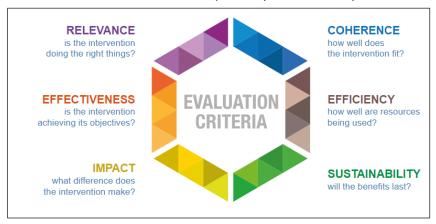


Figure 2: OECD-DAC Evaluation Criteria

1.4.2 Geographical Scope

The impact assessment for this project covered 1 state and 1 district.

Table 1: Geographical Coverage

| | | | Districts |
|--------------|--------|---------------|-----------|
| Under GAIL C | SR's I | Uttar Pradesh | Auraiya |

1.4.3 Sampling strategy

The sample size for this study has been calculated using purposive sampling methodology. Out of the total population, a sample size of 38 was chosen for the study. This was done keeping in mind the beneficiary spread as well as collecting data from diverse stakeholders. Duplication of responses were also avoided to ensure opinion of all stakeholders is covered adequately.

1.4.4 Sample Coverage

An actual sample of 38 was covered across the district as per the availability of beneficiaries present in the field. The sample is divided among beneficiaries (village residents) and stakeholders (GAIL CSR and Implementing Agency SPOCs).



1.4.5 Data Collection and Analysis

In Uttar Pradesh, KPMG carried out the data collection exercise on-field with assistance from GAIL CSR SPOCS as well as UPSICL SPOCs.

In-depth interviews and focused group discussions were conducted with the relevant stakeholders, with the help of pre-designed questionnaires, through face-to-face interviews for data collection. The data was later updated and translated into excel sheets. Following data collection and cleaning, the data was analysed, and the outcomes were utilised to assess the project's impact.

1.4.6 Stakeholder Map

Stakeholders play an imperative role in project implementation on the ground. Stakeholder involvement can offer insightful information that aids in making critical decisions for the organisation.

They can aid in designing improved guidelines, processes, and systems, as well as future communications and plans. Institutions and stakeholders taking part in the exercise include:

Table 2: Stakeholder Map

| Project | Type of Stakeholder | Number of stakeholders |
|--|--------------------------|---------------------------|
| Support for | Beneficiaries | 35 |
| Installation of Hand Pumps in Auraiya, Uttar | Implementing agency SPOC | 2 |
| Pradesh (FY 20-21) | GAIL CSR Project SPoC | 1 |

1.4.7 Impact Map



Table 3: Impact Map

| Thematic Area | Location | Project Name | Implementing Agency | Overall Objective | Key Activities | Key Outputs | Key Outcomes | Impact |
|--|------------------------------|---|--|--|---|--|--|--|
| WASH Making available safe drinking water [item no (i) schedule VII of Companies Act] | Auraiya, Uttar Pradesh | Project 23: Support for Installation of Hand Pumps in Auraiya, Uttar Pradesh (FY 20-21) | Uttar Pradesh Small Industries Corporation Limited (UPSICL) | To improve drinking water availability to rural people | Supply and Installation of 168 Nos. of India Marka Hand Pumps as per beneficiary list provided by GAIL Pata Handing over of hand pumps to the beneficiaries/ village Panchayats | No. of hand pumps installed No. of village beneficiaries engaged with No. of Panchayats engaged with | Improved access to drinking water facilities Improved health indicators due to access to clean drinking water Improvement in time management due to lesser time spent on water collection Improved community engagement in provision of drinking water | Improved availability of drinking water facilities in rural areas Improved socioeconomic status of village beneficiaries Improved WASH conditions in the rural communities |



1.5 Scoring Matrix

A scoring guideline was designed where OECD DAC parameters were scored and bundled basis our understanding of the project and availability of information. Weights were assigned to the bundled OECD DAC parameters. Also, a parameter on Branding was included to understand the community's awareness on the project. Various components within the parameters have been assigned scores. Weights and scores have been used to compute the overall score for the location.

The following scoring matrix was developed to rate the performance of the project:

Table 4: Scoring Matrix

| OECD Parameters | Indicators | Weightage | Combined Weightage | |
|--------------------|--|-----------|-----------------------|--|
| Relevance | Needs Assessment Report | 20% | | |
| | Relevance to target beneficiaries | 50% | | |
| | Alignment to SDGs | 30% | W1: 40% | |
| Coherence | Alignment with national policy | 50% | | |
| | Alignment with GAIL CSR policy | 50% | | |
| Efficiency | Timeline Adherence: Project Completion | 40% | | |
| | Duplication | 20% | | |
| | Adherence: Budget | 40% | | |
| Effectiveness | veness Identification of problem | | | |
| | Process driven implementation strategy | 25% | | |
| | Qualified implementation team | 25% | W2: 40% | |
| | Targeted beneficiaries | 25% | | |
| Impact | Access to clean water for domestic consumption | 25% | | |
| | Reduction in time required to fetch water | 25% | | |
| | Improved health of community 2 | | | |
| | Positive community perception | 25% | | |
| Branding | Visibility (visible/word of mouth) | 100% | W3: 10% | |
| Sustainability | Sustainability Mechanism, Convergence | 100% | W4: 10% | |

Score= W1*Average (Relevance, Coherence) + W2*Average (Efficiency, Effectiveness, Impact) + W3* (Branding) + W4* (Sustainability)



1.6 **Impact Assessment**

1.6.1 Relevance of Intervention

Relevance is a measure of how much the intervention objectives and design respond to the needs, beliefs, and priorities of the beneficiaries and continue to do so even if circumstances change.

Relevance measures how effectively a programme is aligned with the goals and policies of the government in which it is implemented. It also aims to know if the programme is relevant to the needs of the beneficiaries. The program's relevance is understood in this context in terms of community needs as well as linkages to existing government operations.

Safe drinking water and sanitation is a crucial aspect for ensuring the health of communities. Inadequate water and sanitation services expose individuals to preventable health risks such as Cholera, Diarrhoea, Dysentery, Hepatitis A, Typhoid, And Polio. The global effort to achieve sanitation and water for all by 2030 will necessitate holistic action and mitigating the spatial inequities between urban and rural areas in accessing clean and safe water.

In rural areas of India, access to clean and safe water is often limited, leading to dependence on hand pumps as a source of water. According to a recent study by National Statistical Organisation (NSO), around 43% of rural households in India rely on handpumps as the principal source of drinking water¹³. Further, a 2019 report by the Ministry of Drinking Water and Sanitation highlights that access to tap water is limited in rural India, thereby increasing the dependence on hand pumps as a source of water¹⁴. Having access to a reliable source of water not only improves the health and socio-economic outcomes of the community but also effectively mitigates the stress and burden of having to source water from far-off places on a regular basis.

In this regard, the initiative of providing hand pumps to rural communities in Auraiya district was relevant as it enabled their access to a safe and clean source of water

1.6.2 Coherence of Intervention

Coherence refers to the compatibility of the intervention with other interventions in a country, sector, or institution.

It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

https://www.livemint.com/news/india/hand-pumps-a-major-source-of-drinking-water-in-rural-areas-shows-data-11574727669034.html
 "Drinking Water Supply and Sanitation in Rural India," Ministry of Drinking Water and Sanitation, Government of India (2019)



I. Alignment of the programme with Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), commonly recognized as the global goals, were established in 2015 by all United Nations members with the purpose of eradicating poverty, protecting the environment, and ensuring that everyone lives in peace and prosperity by 2030. India was a significant contributor to the development of the SDGs and is committed to achieving them by 2030.







Table 5: Coherence wit SDGs

| SDG Goal | Target | Sub-targets ¹⁵ | Coherence | | |
|-------------|----------------------------------|---|---|--|--|
| GOAL 3 | Good Health and Well-Being | 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination | Water safety and quality are fundamental to human development and well-being. Providing access to safe water is one of the most effective instruments in promoting health and socio-economic outcomes ¹⁶ . | | |
| GOAL 6 | Clean Water and Sanitation | 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations | The project aimed to improve access to clean drinking water of rural communities which will reduce the health burden, improve socio-economic outcomes and thereby enhance the overall quality of life. | | |

 ¹⁵ https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals
 16 Water, sanitation and hygiene (WASH) - India (who.int)



II. Coherence with national priorities:

The project is further aligned with the national and state government goals, policies, and initiatives, as listed below:

Table 6: Coherence with national priorities

| Project | Description | Coherence | | |
|--|--|---|--|--|
| Department of Drinking Water and Sanitation | The Department of Drinking Water and Sanitation provides technical and financial assistance to the States to provide safe and adequate drinking water to rural India with focus on service delivery. | The project improved access to water to previously underserved areas by providing handpumps. | | |
| National Rural Drinking Water Programme | The National Rural Drinking Water Program is a centrally sponsored scheme aimed at providing safe drinking water to the rural population of India. The program includes the provision of safe drinking water at healthcare centers, with a particular focus on rural areas and areas with high levels of water-borne diseases. | The project aims to provide safe drinking water to all rural dwellings by installing hand pumps for use by the rural community. | | |

1.6.3 Effectiveness of Intervention

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy in order to achieve the greatest possible social impact. The efficacy of the programme is established by examining how well the program's activities were carried out as well as the efficiency with which the program's systems and processes were implemented.

The project's primary objective was to make safe and clean drinking water available to the rural community by installing 168 hand pumps across the villages of Auraiya. The following measures were adopted to successfully attain the project outcomes:

I. Identification of the problem: The implementing agency, on behalf of GAIL conducted regular field visits to the villages and interacted with



other public representatives to identify the beneficiaries and gram panchayats that required the hand pumps.

- **II. Targeted beneficiary mobilization:** The core objective of the project was to make available safe drinking water through the provision of hand pumps to the rural community. This initiative was significant for a district such as Auraiya where access of rural households to tap water is low. Only about 5% of the villages of Auraiya have been certified Har Ghar Jal villages under the Jal Jeevan Mission¹⁷.
- **III. Collaboration:** GAIL hired UPSICL, an organization with the competitive advantage and necessary infrastructure, capacity, expertise, and experience required for carrying out and conducting the requisite activities for the project.

1.6.4 Efficiency of Intervention

The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way.

The purpose is to establish whether the inputs—funds, knowledge, time, etc.—were effectively employed to create the intervention outcomes. This evaluation criterion attempts to determine whether the programme was completed on schedule and within budget.

I. Timeliness of delivery or implementation of project interventions

The programme was implemented within the given time period by UPSICL with support from GAIL CSR team in the target district.

II. Cost efficiency of project activities

Interaction with the GAIL CSR and UPSICL team members also revealed that there was no budget overflow and that all the activities were successfully carried out within the allotted budget.

III. Duplication/ overlap of project activities

Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. Here, it was recognized that the problem of access to safe drinking water in rural communities was persistent. In this regard, supporting government initiatives is critical for achieving timely universal coverage. National priorities provide a confluence for public-private collaboration that can

_

¹⁷ https://jjmup.org/site/districtwise.php?profile



be explored and strengthened till the set targets are met. Therefore, the intervention by GAIL was not a duplication of effort as it helped provide basic WASH facilities to previously underserved areas and thus took the country closer to achieving the goal of providing WASH services to all by 2030.

1.6.5 Sustainability of Intervention

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence.

The project was successfully completed by the implementing agency i.e. supplying and installing 168 hand pumps in villages of Auraiya. After the successful installation, the hand pumps were handed over to the authorities (individuals or gram panchayats) for use and maintenance. All the respondents covered by the study shared that the installed handpumps are functional and they do not face any issues in using them. This establishes the fact that the handpumps were handed over in proper working condition.

1.6.6 Branding of intervention



Figure 3: Handpump with visible GAIL branding

Adequate branding and visibility of GAIL (India) Ltd was ensured at all intervention sites. All the respondents reported being aware of the handpump installation being supported by GAIL as a CSR intervention.



1.6.7 Impact of Intervention

Impact has been measured in terms of the futuristic vision to address the issue and significant changes observed.

The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favourable or harmful.

The impact assessment study covered 35 respondents with an average age of 50 years. The respondents in the study were representative of diverse social categories with around 66% belonging to the OBC category, 28% SCs and the remaining belonging to General category. Further, the average annual family income reported by the respondents was around INR 44,000.

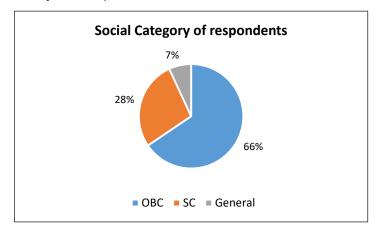


Figure 4: Social Category of respondents

The study covered beneficiaries from multiple villages as highlighted in Figure 5.

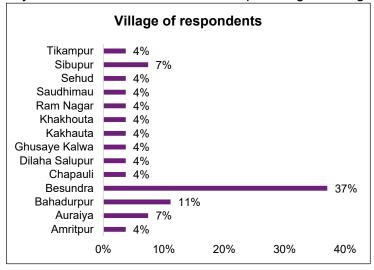


Figure 5: Villages covered by the study



a. Improved accessibility to clean drinking water

The intervention has improved the access of rural community to an improved water source. The World Health Organisation (WHO) defines "improved water source" under the Global Nutrition Monitoring Framework as a source protected from outside contamination and fecal matter in particular18. Handpumps, which have been used for generations, often are a low-cost alternative for providing clean water to underserved areas for drinking and other needs. They are commonly employed in areas with limited access to water and scarce financial resources for investment, operation, and upkeep. Handpumps pump water from underground and open up access to the deeper groundwater that is most often unpolluted and free of contamination¹⁹.

All the respondents shared that the access to water had improved after the installation of hand pumps. Further, all the respondents reported using the handpumps on a regular basis for drinking and other domestic purposes such as washing clothes, cooking, and cleaning.

When asked about how the handpumps had helped improve access, majority of the respondents (93%) highlighted that after the installation of handpumps, they had to travel lesser distances to source water which in turn saved their time. Further, around 52% of them shared that water was easily accessible and available for a longer time as a result of the intervention.

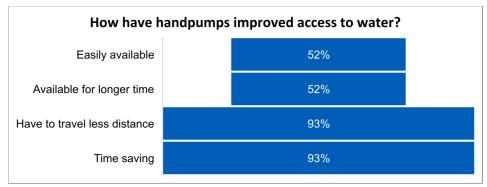


Figure 6: Benefits of the handpump to the community

b) Reduction in time required to fetch water

As per the 76th round of National Sample Survey Office (NSSO), 42% of the rural households in India have to travel considerable distance every day to collect drinking water and about 11% of them have to spend more than 30 minutes every

-

¹⁸ www.who.int

¹⁹ Martin, Jenna, and U. S. F. Civil. "Environmental Engineering, Hand pumps for Rural Water Supply.



day in carrying out this activity²⁰. According to UNICEF, one roundtrip to collect water in rural Asia is 21 minutes long²¹.

According to the respondents, the average time required for sourcing water was close to 22 minutes prior to the installation of handpumps. The same reduced to about 8 minutes after the intervention. The change is significant as the time can be utilized by the community members in a more productive manner. Further, using water from the handpumps considerably increases the possibility of reduced number of days of sickness which will in turn enhance the socioeconomic conditions of the community.

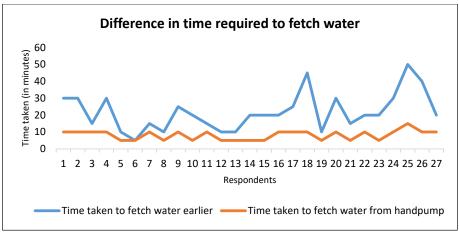


Figure 7: Difference in time required to fetch water

c) Positive community perception

All the respondents reported that they were satisfied with GAIL's intervention. Further, when asked to rate the intervention on a scale of 1-5 with 1 being the lowest score and 5 being the highest, 78% of the respondents rated the intervention as 5. The remaining respondents rated it as 4. This implies that the intervention was thoughtfully designed by GAIL (India) Ltd and catered to the needs of the beneficiaries.

-

 $[\]underline{\text{https://www.downtoearth.org.in/news/water/4-out-of-10-rural-households-travel-every-day-for-drinking-water-67935}}$

²¹ https://www.unicef.org/





Figure 8: A functional handpump with GAIL branding

1.7 Overall rating of the project

The scoring matrix was used to evaluate and score performance of the project across Auraiya district of Uttar Pradesh. The following table provides the district-wise rating across the defined parameters:

| Location | Relevance | Coherence | Efficiency | Effectiveness | Impact | Sustainability | Branding | Total Score |
|------------------------------|-----------|-----------|------------|---------------|--------|----------------|----------|----------------|
| Auraiya, Uttar Pradesh | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Overall scoring of project

The GAIL project implemented in Auraiya was scored 100% as per the scoring sheet. The project was aligned to GAIL's CSR policy and SDGs and was relevant to the needs of the community. The project was efficiently executed across the selected district within the allocated budget and timelines. The completion rate was 100% for the project and 100% of the beneficiaries surveyed were satisfied with the support being provided.

The total score of the project is 100% due to which this project can be rated as "**Highly Impactful**" in nature.



1.8 Conclusion and Way Forward

Ralph Waldo Emerson, a renowned American writer once rightfully said, "An ounce of action is worth a ton of theory". In this line, every intervention to improve access to water by the government as well as the public and private entities alike takes the country closer to the goal of achieving universal access to water by 2030.

This study presents the impact assessment of the handpump project of GAIL implemented in Auraiya, Uttar Pradesh to support the communities in accessing safe and clean drinking water. The installed handpumps were handed over directly to the beneficiary or local public authority for use and upkeep. Through the handpump project, GAIL created positive impact for the beneficiaries on several indicators such as improving access to safe and reliable water. Overall, GAIL contributed towards improving water infrastructure in the villages

According to a 2019 report by the Ministry of Drinking Water and Sanitation, around 42% of rural households in India still do not have access to tap water. This leads to reliance on hand pumps, which can be unreliable, as they often break down and require maintenance. In some cases, hand pumps are the only source of water in rural areas, and their poor maintenance can result in contamination of water, leading to waterborne illnesses. Improving access to clean water and reducing dependence on hand pumps is an important priority for the Indian government and international organizations.

The World Health Organization recognizes India as one of the top countries with a high incidence of water-borne diseases²². Contaminated water and poor sanitation are linked to the transmission of diseases such as cholera, diarrhoea, dysentery, and so on. Absent, inadequate, or inappropriately managed water and sanitation services expose individuals to preventable health risks. For the world to attain universal coverage with basic drinking water services by 2030, historical rates of progress would need to be doubled. Rates would have to treble to achieve universally safe managed services. Climate change, growing water shortages, demographic shifts, and groundwater contamination pose growing threats in meeting universal coverage. The situation is especially dire in countries like India with a predominantly rural population that lacks access to clean drinking water.

This calls for collaboration and convergence between the government and public or private entities to realize universal coverage of drinking water in a timely manner. CSR provides a robust platform for such confluences. There are multiple reasons to establish synergies with government objectives, especially in the WASH sector, via CSR interventions as enlisted below:

²² https://www.who.int/news-room/fact-sheets/detail/drinking-water



- a. Increased Investment: Private sector involvement can bring in additional financial resources and expertise, increasing investment in the mission.
- Improved Efficiency: Public and private entities bring in technical knowhow and efficient management practices, leading to improved water supply systems.
- c. Encourages Innovation: Competition among the entities can drive innovation and lead to the development of new and improved water supply solutions.
- d. Increases Access: Private sector involvement can help expand access to water supply in underserved areas, especially in rural areas.
- e. **Supports Sustainability:** Private sector involvement can help ensure the sustainability of such WASH initiatives by promoting cost recovery mechanisms and long-term maintenance planning. This further helps ensure sustainable access to safe drinking water for all.

In this regard, the intervention by GAIL (India) Ltd to provide 168 handpumps across multiple villages of Auraiya district of Uttar Pradesh in FY 2020-21 is a significant step in this direction. The intervention was lauded by beneficiaries and stakeholders alike for its strategic planning and systematic implementation. However, to further maximize the impact and enhance the project outcomes, the following recommendations are suggested:

- 1. Engaging in Community Sensitization: Community sensitization is a key factor in ensuring sustainable access to clean drinking water, as it helps create a supportive environment for change and long-term behavior change. This is because it is ultimately the people that decide to use a particular source of water over the other. Firstly, it is critical to educate the community on the importance of clean water and the dangers of contaminated water. Moreover, sensitization promotes a sense of ownership and responsibility among community members to protect and maintain water sources. Lastly, by educating communities on the link between hygiene practices and water quality, sensitization can improve hygienic behavior.
- 2. Fostering multi-stakeholder collaboration: In continuation with the above recommendation, sensitization can bring together different community members, organizations, and local authorities to work together towards a common goal of providing clean drinking water. This will not only ensure continued momentum for the purpose, but also lead to newer avenues for innovation and community participation. Further, GAIL can enhance the sustainability of impact created, through strengthening its participatory approach and establishing mechanisms for continued active participation of the community stakeholders.

Local community leaders and government representatives can be engaged in a more focused manner throughout project implementation to promote



accountability, especially in designing and monitoring of the intervention. Feedback from Gram Panchayat and other local leadership can be sought to build a governance structure for project with clear roles and responsibilities for various stakeholders. This will also help build transparency and accountability for the infrastructure installed in the villages.

3. Devising a holistic 360° approach: GAIL can augment the impact created and ensure its sustainability through exploring opportunities for convergence and partnerships. The current project model is based on complete funding support from GAIL as a one-time support for installation of handpumps. Currently, the project is not designed to provide regular maintenance services for the installed handpumps.

Regular maintenance of handpumps is critical as the lack of it reduces the reliability of the handpumps and increases the chances of source contamination thereby defeating the purpose of installing them in the first place. Through encouraging convergence from other government or nongovernment sources, GAIL can work towards ensuring long-term support for project activities and the creation of sustained impact. Also, collaborating with NGOs with expertise in similar thematic and geographical regions could bolster both implementation as well as monitoring and evaluation processes.



Thank you



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG Assurance and Consulting Services LLP, an Indian Limited Liability Partnership, and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved