









# CSR Impact Assessment Report

## **Submitted to:**

NHPC Limited NHPC Corporate Office Complex, Sector-33, Faridabad, Haryana 121003, India

# Submitted by:

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# **CSR Project:** Electrification of hamlets in Alchi village, Leh

**Project Proponent** NHPC Limited

**Project Executioner** M/s Avisha Infrastructure Pvt. Limited.

**Start Date** 19-11-2016

**Completion Date** 30-08-2018

State U.T. of Ladakh

**Activities** • 11 KV OH line on Rabbit Conductor for

9.5 km.

• 11 KV T-off Arrangement with isolator.

• LT line 1-Ph, 2-wire for 4.5 km.

• LT line 3-Ph, 4-wire for 3.0 Km.

Construction of 04 nos. 25 KVA, 3-Ph Sub-

Station.

• Construction of 63 KVA, 3-Ph Sub-Station.

**Total Expenditure** Rs. 138.72 lakhs

# **Acknowledgment**

This Impact Assessment Report is prepared with considerable consultation and engagement with Mr. U S Sahi (Executive Director), Mr. R. K Agrawal (Group GM, Civil, CSR and SD) and other officials of the CSR & SD division, NHPC. The impact assessment team had also interacted with implementing agencies and met beneficiaries in all the selected villages of in U.T of Ladakh

This impact assessment exercise would not be possible without the help of good souls who have readily offered their support for the successful completion of this project. We are very grateful to the entire team of NHPC Limited at various project sites for providing valuable insights and support throughout the evaluation and impact assessment process. We are also very much thankful to all the stakeholders for parting their valuable time, and sharing inputs and information for making this assessment very insightful.

Birendra Raturi International Director, SR Asia. June 2022



# **Preface**

This is an Impact assessment report of a CSR project on 'Electrification of hamlets in Alchi village of Leh district, implemented by NHPC'. This project was developed and implemented for electrification of two hamlets of Alchi village which were deprived of electricity supply. This is an initiative under Rural Development category as per the CSR Annual Report.

This report briefly covers NHPC Ltd., its CSR policy, and its objectives. Further, the aims and objectives of this CSR project are detailed by giving information about project beneficiaries living in identified hamlets of Alchi village namely Omlung and Chulungtse.

The assessment is carried out in both the hamlets. During this assessment transmission line was observed and stakeholder mapping was done. Impact assessment team had consultation with the project beneficiaries and assessed key impact. The impact assessment results are derived from quantitative and qualitative data collected and analyzed using ZOHO analytics along with success case studies and stories.

The conclusions are specific to this intervention and encompasses learnings which may be embraced in the future endeavours.

# **Impact Assessment Team**

The assessment team comprised of subject experts, experienced CSR professionals from public sector enterprises, social scientists, environmentalists, health professionals, energy experts in renewal energy domain etc.

#### **Designation Name**

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## List of Abbreviation

**CSR** : Corporate Social Responsibility

**SDG** : Sustainable Development Goals

i Impact Assessment

**CD** : Community Development

**CSR & SD** : Corporate Social Responsibility and Sustainable Development

Division

**OECD** : Organization for Economic Cooperation and Development

**ToR** : Terms of Reference

**PDD**: Power Development Department

**RLG**: Rural Local Governance

**ULG**: Urban Local Governance

**PHC**: Primary Healthcare Centre

**NGO**: Non Governmental Organization

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# **Executive Summary**

NHPC Limited has supported the project 'Electrification of hamlets in Alchi village, Leh' for achieving 100% electrification in and around affected villages due to construction of NBPS, Alchi Dam. This project is a major milestone towards attaining the Sustainable Development Goal target 7.1 of providing universal access to affordable, reliable, and modern energy services in rural hamlets of U.T. of Ladakh.

The study was initiated with the preparation of research tools and methodology based on the guidelines given by the CSR & SD division of NHPC Limited. There were 7 households who are the direct beneficiary of the project and other people including farmers or small business owners from other villages are the indirect beneficiaries of the project. Impact Assessment team has covered consulted with family heads of all the households. It also mapped the project location and observed electricity transmission line from Sub station to the every household. Planning and training of Investigators were done by Impact Assessment experts of SR Asia. SR Asia has deployed teams in selected constituencies where the project was implemented. During the fieldwork, the team covered both the hamlets where transmission line was commissioned by NHPC..

The objective of the study was to understand the outcome of the initiative and its contribution in 100% electrification of the in remote rural hamlets. The assessment was made in terms of installation, commissioning, utilization, and present condition of the 11 KV transmission line. This CSR project is aligned to national developmental priorities with a view to empower people living in remote rural areas.

The project has created a positive impact on several indicators such as standard of living, daily output in local activities, increase in use of technology, as well as other socioeconomic indicators. It was observed that the installation was done and it has been the source of 24/7 electricity supply for people. It had a positive impact in the life of people living in and around the project site. The overall impact of the project is found to be satisfactory.

# **CHAPTER I**

# **Impact Assessment**

#### 1.1 Introduction

Impact Assessment (IA) is a structured process for considering the implications for people and their environment, of proposed actions while there is still an opportunity to modify (or even, if appropriate, abandon) the proposals. It is applied at all levels of decision-making, from policies to specific projects. The process involves the identification and characterization of the most likely impacts of proposed actions (impact prediction/forecasting), and an assessment of the social significance of those impacts (impact evaluation).

Overall, the CSR project implemented by NHPC is in line with Schedule VII of Companies Act 2013. The CSR policy of NHPC is also in line with the Companies Act 2013. This is well identified in view of the national policy, CSR policy, needs and aspirations of the people and areas where they operate. This project had positive impact in the respective areas which witnessed its implementation and may need attention to plan some work towards sustainability aspects.

The impact is assessed and compared against the planned benchmarks fixed at the time of planning to gauge the degree of success or failure of the CSR initiatives. Team used ZOHO survey tool for conducting the survey and its real time monitoring. Video-graphic and Photographic records of the progress, achievements and impacts are systematically documented. Research team also noted the fieldwork observations and prepared case studies as per given instructions. The team conducted stakeholder consultation with implementing partners, local representatives and other line departments to understand more about the projects, its impact and sustainability strategy to ensure long term goals. SR Asia has used the OECD DAC framework for evaluating the impact created by the CSR projects of NHPC. It scores all the projects under study based on its relevance, effectiveness, efficiency, impact and sustainability parameters. The project efficiently utilized the inputs (funds, expertise etc.) to achieve the intervention outcomes and had a target achievement rate between 90-100%.

## 1.2 About Impact Assessment Agency

Social Responsibility Asia (SR Asia) is an ISO 9001: 2015 Certified international non-profit organization registered with Ministry of Corporate Affairs (MCA) New Delhi, India in the year 2012, and has legal entities in Bangladesh and Indonesia. SR Asia has country representative offices in Mongolia, Malaysia, Philippines and Vietnam. SR Asia is an affiliate to Asian Productivity Organization (APO) Japan and also works closely with APO member National Productivity Organization in complementing and promoting CSR, Sustainability and Sustainable Development.

SR Asia's mission is to conserve natural resources for the welfare of current and future generations by promoting change. SR Asia wants to work with all stakeholders to create awareness among consumers and manufacturers. We want to reach out to consumers through campaigns and work with companies in the design, development, and production of sustainable goods and services.

# 1.3 Scope of work as per ToR

As per the guidelines of NHPC and scope of the work, the Impact Assessment team framed impact assessment tools and carried out extensive fieldwork. The Scope of the Impact Assessment study is given below:

- To carry out Impact Assessment Study of CSR Programs/Projects/Activities as per given list.
- To determine the impact of CSR activity/ Projects in the applicable dimensions of social/cultural/economic/environmental/education/health conditions, etc. on the people in communities or on the environment and suggest steps for better implementation in future.
- To assess the changes in the quality of life and environment in the geography.
- To undertake an assessment of the project design in terms of its relevance and contribution to the development of the community.
- To assess the performance of the project in terms of effectiveness and efficiency and bottlenecks.
- To analyze and underlying factors beyond NHPC's control that affect the project achievement result.

- To ascertain the sustainability of the project after its completion.
- To evaluate the level of awareness of CSR projects/initiatives amongst the target beneficiaries/concerned stakeholders.
- To identify the consistency in the process of project implementation together with fulfilment of stated objectives.
- To identify the gaps in the project identification, beneficiary's involvement, implementation of projects and recommendations for improvements.
- To provide separate reports of each of the CSR activities/projects as per CSR activities listed at Annexure-1 in stipulated timelines.

## 1.4 Methodology Guidance for conducting Impact Assessment

- To produce a high-quality impact assessment report for wider dissemination and future reference, the research methodology should involve both qualitative and quantitative techniques.
- Qualitative methods should include techniques like questionnaire survey, focused group discussion, in-depth interview with targeted beneficiaries/end user community representatives/ Panchayati Raj Institutions (PRIS) and govt. officials etc.
- Quantitative method will include collection of secondary data available with project implementing agencies, district administration, and NHPC.
- Other stakeholders may be involved for tertiary inputs.
- Survey/data findings should be interpreted and analyzed using statistical software such as SPSS (Statistical Package for the Social Sciences).
- The impact assessment study should be well supported with the relevant geo-tagged photographs.
- The NHPC location concerned will provide the details/documents of CSR Programs/Activities undertaken and completed for carrying out Impact Assessment studies.

# 1.5 Assumptions and Limitations

- It was expected that the NHPC, implementing agencies would facilitate the field work.
- The facility/infrastructure created will have proper addresses/geo-tagged to locate and carry out assessments.
- The data regarding CSR projects will be made readily available by the NHPC Limited and project executioner.
- Poor access to internet in remote locations in U.T. of Ladakh.

# **CHAPTER II**

# **About NHPC Limited**

#### 2.1 Introduction

NHPC Limited is a Mini-Ratna Schedule-A Enterprise committed to plan, promote and organize an integrated and efficient development of power through conventional and non-conventional sources in India and abroad. As on date, NHPC Limited has become the largest organization for hydropower development in India, with capabilities to undertake all the activities from conceptualization to commissioning in relation to setting up of hydro projects. NHPC Limited has also diversified in the field of solar & wind power.

NHPC's commitment towards environment and people is affirmed through its Corporate Vision and Mission, policies and practices adopted by the organization. NHPC is also a member of the United Nations Global Compact (UNGC) and subscribes to the principles of human rights, labour standards, environmental consciousness and anti-corruption.

#### Vision

To be a global leading organization for sustainable development of clean power through competent, responsible and innovative values.

#### Mission

- To achieve excellence in development of clean power at international standards .
- To execute & operate projects through efficient and competent contract management and innovative R&D in an environment friendly and socio-economically responsive manner.
- To develop, nurture and empower the human capital to leverage its full potential.
- To practice the best corporate governance and competent value based management for a strong corporate identity and showing concern for employees, customer, environment and society.
- To adopt & innovate state-of-the-art technologies and optimize use of natural resources through effective management.

#### Scope

- Schemes/activity chosen under CSR/Sustainability should primarily benefit stakeholders other than the staff of NHPC Limited.
- In case the benefits of the initiative are extended to NHPC employees and their families also, the proportionate expenditure incurred on other than NHPC employees and their families shall be considered under CSR.
- NHPC will have an appropriate organization structure both at corporate level and NHPC's projects/field units for identification & selection of CSR & sustainability schemes, guidance in implementation, monitoring and review of the schemes/ activities.
- NHPC will take steps to sensitize and impart training to its employees regarding CSR & sustainability policies of the Corporation and to bring about the desired attitudinal change towards environmental protection, social development & the need to adopt ethical business practices.
- NHPC will take up schemes/activities which would give visible social, economic or environmental benefits to the society.
- NHPC will also make efforts, to the extent possible, to involve the suppliers and contractors associated in the adoption of sustainable technologies as a part of its CSR/sustainability endeavours.

### 2.2 CSR & Sustainability Policy

CSR has been an integral part of NHPC's business philosophy. NHPC is conducting its business in a socially responsible way by maintaining high level of organizational integrity and ethical behaviour, in conformity with expected standards of transparency in reporting and disclosing the performance in all spheres of its activities, demonstration of concern for social welfare, adoption of best management practices and effective operational methods to win the trust and confidence of all stakeholders.

#### 2.3 CSR Vision and Mission

#### **CSR Vision**

• To contribute to sustainable development and inclusive growth while taking care of people, planet and organizational goals/ growth.

#### CSR Mission

- To become socially responsible corporate entity committed to improving the quality of life of the society at large.
- To create and develop facilities for the communities where NHPC has presence.
- To balance social, economic and environmental development objectives through collective and unified efforts of all stakeholders.

# 2.4 Objectives of NHPC's CSR Policy

# **Objectives**

- To address the social, economic, environmental and welfare concerns of key stakeholders including those directly impacted by NHPC's operations & activities.
- Adopt green technologies, processes and standards that contribute to social and environmental sustainability.
- Contribute to inclusive growth and equitable development through capacity building measures, empowerment of marginalized and underprivileged sections/communities.

# **CHAPTER III**

# Research Methodology

#### 3.1 Introduction

This chapter gives a brief introduction to the study, its rationale, its objective, survey questions, sampling, data collection and limitations. This becomes pertinent to have thorough understanding about the research process followed so as to give a rationale and background to the findings of the study.

### 3.2 Objectives of Impact Assessment

The objective of this study is to assess the impact and sustainability of the projects being implemented, find the strength, weakness and deficiencies in the project implementation, benefits received by the targeted groups so that its impact can be measured and learning can be used in further CSR project designs and implementation. Some of the key areas are as follows:

- 1. Assessment of NHPC CSR Policy, its alignment with outcomes at different project locations.
- 2. Process and approach followed by NHPC in CSR project identification, implementation, monitoring and impact assessment.
- 3. Stakeholder engagement, site visit and meeting direct and indirect beneficiaries.
- 4. Analyzing the successful implementation and degree of benefits received.

# 3.3 Methodology

An explorative research was conducted to understand the nature, design, and aspects of implemented projects for which impact assessment has to be done. This was completed primarily through desk study. Various literatures are referred to get a comprehensive knowledge about CSR project implemented areas and objectives, parameters, goals, structure, and sustainability criteria of the implemented project.

- The literature review of secondary data and literature available such as NHPC website, baseline reports, sample monitoring and evaluation report, implementation agencies, beneficiary data and CSR Annual Reports of NHPC, media reports etc.
- Preparation of data collection tools, preparation of survey questionnaires (computer and internet enabled), training of field investigators, pilot testing of tools, and data collection on site etc.
- The assessment process which involves segregation of data and data analysis, evaluation, or comparison with the planned guidelines and the standards available.

Approach & Data

Desk Review Research Collection and Methods, tools Analysis

Fig 3.1 Methodology

### 3.3.1 OECD DAC Framework for measuring sustainability

The Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria (relevance, coherence effectiveness, efficiency, impact, and sustainability) in 1991. These six criteria serve as the core reference for evaluating international development and humanitarian projects, programs, and policies. These evaluation criteria have been defined below:

RELEVANCE COHERENCE is the intervention how well does doing the right things? the intervention fit? **EFFECTIVENESS EFFICIENCY** is the intervention how well are resources achieving its objectives? being used? **IMPACT** SUSTAINABILITY what difference does will the benefits last? the intervention make?

Source: oecd.org

Fig 3.2: Six criteria of OECD DAC Framework

- Relevance: The extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so if circumstances change.
- **Coherence**: the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa. Includes internal coherence and external coherence.
- **Effectiveness**: The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.
- **Efficiency**: The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.
- **Impact**: The extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects.
- **Sustainability**: The extent to which the net benefits of the intervention continue or are likely to continue.

The IA team has identified some key parameters and components as necessary to apply this framework to this study, and they are indicated in table.

Table 3.1: Six criteria of OECD DAC Framework and its components

Parameters	Components			
Relevance	<ul> <li>Need Assessment Report</li> <li>Availability of Information on need assessment</li> <li>Alignment to CSR Policy of NHPC Limited</li> <li>Alignment to SDGs</li> </ul>			
Coherence	<ul> <li>Internal and External Coherence (CSR Policies and policies of Government of India)</li> </ul>			
Effectiveness	<ul><li>Adherence to timeline</li><li>Adherence to Budget</li></ul>			
Efficiency	Target achievement (Planned vs. Actual)			
Impact	<ul><li>Baseline Assessment Report</li><li>Impact and Availability of impact indicators</li></ul>			
Sustainability	Sustainability mechanism, convergence			

Weighted scores were used to develop a 6-point scale. Following criteria is applied while rating the sustainability score of CSR project impact assessment.

85-100 % -> Extremely satisfactory
70-84% -> Satisfactory
55-69 %-> Moderately satisfactory
40-54 %-> Marginally satisfactory
20-39 %-> Dissatisfactory
< 20 % -> Extremely dissatisfactory

#### 3.4 Research Instruments

Mixed method research design was used in order to have a comprehensive approach in data collection and stakeholder consultation. Both the qualitative and quantitative research techniques were used. Quantitative techniques like survey questionnaire were extensive in nature and covered minimum no. of sample size as per the research standards. Qualitative research tools were used focusing on the public consultation and in-depth engagement with project beneficiaries. After data collection, it was processed for analysis using ZOHO survey analysis tool, MS Excel and SPSS.

#### 3.5 Data Collection

The following approach was adopted for the collection of primary and secondary data.

#### **Primary Data:**

Collection of primary data was done in the field and data collection was done in both
offline and online mode (ZOHO questionnaire), feedback and consultation, interviews
of beneficiaries, focused group discussion and in-depth interviews. The geo-tagged
photographs and short videos were also made.

#### Secondary Data:

 This involves literature review of NHPC website, baseline reports, sample monitoring and evaluation report, implementation agencies, beneficiary data and CSR Annual Reports of NHPC, media reports etc.

# 3.5.1 Sampling and sample size

Following sampling plan was made for the survey. Impact Assessment team covered 100% households for conducting all the impact assessment activities including stakeholder consultation, semi structured interviews, field observations and other activities.

Table 3.2 Sampling plan

Sr. No.	Name of the village	Households	Sample size (%)	Total no of Surveys
Alchi village, Leh		7	100	7
	7			

#### 3.5.2 Data Collection tools

#### • Survey Questionnaire :

An intensive questionnaire (as per the requirement of project) to assess the impact of projects upon villagers lives was developed. A significant number of responses were recorded to collect quality data for each project. ZOHO survey tool was used to facilitate online and offline data collection depending on internet connectivity in the areas. Procedure for conducting survey was as follows:

- 1. Participants were identified by the method of random sampling as per the inclusion criteria.
- 2. The participants were made comfortable and briefed about the purpose of the survey and in the process their consent was obtained.
- 3. The responses were recorded by the investigator manually.
- 4. Debriefing was done after the completion of the questionnaire.

#### Stakeholder's consultation:

Stakeholder consultations were also conducted for assessment of all the projects. Participants in this activity were very specific and included local people, public representatives, implementing agency representatives and local administration. During stakeholder consultation, the impact assessment team has also ensured equal proportion of engagement of women and men.

#### • Semi structured Interviews:

Semi structured interviews were conducted to gain information about benefits of the implemented projects.

#### • Observations during fieldwork:

A walk through to the project areas/village/ streets were made by the surveyors for the physical verification, functionality of the project.

# 3.5.3 Data analysis tool

Automated ZOHO analytics and MS- Excel were used as a data analysis tool to analyze the primary data collected during the survey. All the objective inputs are analyzed using this tool while subjective responses are analyzed using semantic analysis methods.

# 3.6 Project Management - Planning and Execution of Impact Assessment (PEIA)

This involves consultation with NHPC project site officials, implementing agencies and impact assessment team to plan the field work within stipulated time. The Impact Assessment team has developed a standard operating procedure along with checklists and forms & formats. The brief details of the PEIA SoP's is as follows:

## 3.6.1 Checklist for Impact Assessment study

# Stage 1: Schedule, Survey preparation, and training

- 1. Field visit schedule.
- 2. Preparation of survey questionnaire and preparation of ZOHO link.
- 3. Training and briefing of investigators.
- 4. Defining role and responsibilities.
- 5. Preparation of format for daily report.

# Stage 2: Collection of Documents and Material Needed before going to field

- 1. Representation letter from SR Asia.
- 2. ToR for investigators.
- 3. ID for all investigators.
- 4. Project details.
- 5. Survey Questionnaire link.
- 6. Feedback Form.
- 7. Other data collection formats.
- 8. Smartphone.
- 9. Diary and pen.

#### Stage 3- During Field visit

- 1. Meeting with Nodal officer of implementing agencies.
- 2. Meeting with stakeholders.
- 3. Verification of activities.
- 4. Conducting survey of beneficiaries.
- 5. Case Studies and success stories.
- 6. Geo-tagged photographs.
- 7. Short videos of beneficiaries.
- Photographs and video evidences of field visits (Meetings, Streetlights, Survey participants, interviews)
- 9. Preparation and submission of daily progress report.

# Stage 4: Data Analysis and Report Writing

- 1. Preparation of graphs and pie charts.
- 2. Preparation of success stories and case studies.
- 3. Drafting and proofreading of the report.
- 4. Review from impact assessment experts.

## 3.7 Ethical Considerations

Informed consent is an important principle for all research endeavours and the same was maintained during the study. The respondents and key stakeholders of the study were informed about the purpose of the study. Further an assurance about confidentiality of the interview was given to all the respondents. They were free to choose to not answer any question while conducting survey or interview.

# 3.8 Fieldwork Schedule

Table 3.3: Fieldwork Schedule

Project Name	Planned Sch fieldw		7.000.0	hedule of work
	Start Date	End Date	Start Date	End Date
Electrification of hamlets in Alchi village, Leh.	24th May 2022	30th May 2022	26 May 2022	01 June 2022

# **CHAPTER IV**

# Electrification of hamlets in Alchi village, Leh

### 4.] About the Project

NHPC fulfilled the dream of the villagers in two of the farthest villages of Ladakh which were deprived of the electricity even after 70 years of independence. Visualising the aim of our Honourable Prime Minister to electrify all the villages of India, the Nimmo Bazgo Power Station, illuminated Unlung and Chulungtse villages under CSR. The arduous task of electrifying these villages was done by NHPC and in this work approx. 5 Km high tension (HT) line has been constructed which includes crossing of a long span of a reservoir. It was a difficult task to take electrical poles, conductors, and many other items through the narrow passage under the extreme circumstances. Currently, Power Development Department (PDD) of administration of U.T. of Ladakh looks after the maintenance of power line and collection of electricity bills.

On December 02, 2017, Hon'ble CEC of Leh Dr. Sonam Dawa Lonpo in a program, formally dedicated the electricity to Umalung and Chulungtse village and fulfilled their long-awaited dream. A total of Rs. 1.4 crores were expended in the above said works. In his address, Dr. Sonam Dawa Lonpo, while congratulating the villagers, appreciated the officials of NHPC working under adverse conditions and thanked for the electrification of Umlung and Chulungse villages and also for installing the bore well for the villagers who were suffering from water shortage in the neighbouring village of Alchi.

In the program, Executive Councilor of Leh Mr. Sonam Wangdus, Mr. Mumtaz Hussain, Chief Engineer-PDD, and Mr. S Adhikari, Chief Engineer, NHPC were also present. This was only possible under the able leadership of the head of the power station, Sh. S Adhikari, and the dedication of officers working in the power station in Leh district. Honourable CEC also inaugurated the 3-phase connection with 3 km long HT line being provided to 2 nos. of bore wells at Alchi village under the CSR. This will improve the irrigation and provide drinking water to Alchi Village.

This project was covered under the scheme for provision of Electricity for affected villages due to construction of NBPS, Alchi, Leh. Following activities were covered under this project:

- 1. 11 KV OH line on Rabbit Conductor for 9.5 km.
- 2. 11 KV T-off Arrangement with isolator.
- 3. LT line 1-Ph, 2-wire for 4.5 km.
- 4. LT line 3-Ph, 4-wire for 3.0 Km.
- 5. Construction of 04 nos. 25 KVA, 3-ph Sub-Station.
- 6. Construction of 63 KVA, 3-Ph Sub-Station.

### 4.2 Objectives of the Project

- Achieving 100% electrification for nearby villages of Nimmo Bazgo Power station (NBPS) which are affected due to construction of NBPS, Alchi, Leh.
- Increase the economic standard and social wellbeing of the project affected families.
- Increase the time of study of children after dawn.

### 4.3 Project sites

Alchi is a village in the Leh district of Ladakh, India. It is located near Saspul town in the Likir tehsil, on the banks of Indus River 70 km downstream from the capital Leh. 1 km East of Nimoo Bazgo Power Station, Alchi. Villages Unlung and Chulung-Tse unlike the other gompas in Ladakh, Alchi is situated on lowland, not on a hilltop. According to the 2011 census of India, Alchi has 145 households with population of 720.

Fig 4.1: Project sites on Political Map of U.T. of Ladakh (India)



#### 4.4 Implementing Agency

The project was implemented by the Civil Department of Nimmo Bazgo Power Station, NHPC Limited and work was awarded to M/S Umed Singh, SCO-50-51, 02nd Floor, Old Judicial Complex, Gurugram, Haryana.

### 4.5 Findings and analysis

All the observations, feedback received from the individual beneficiaries, information gathering through stakeholders consultation are recorded in true form as follows:

During stakeholder consultation it is found that electricity was available to Alchi main village but its hamlets Chulungtse and Oulung were in the darkness. The local government has provided solar panels to these families. But it was not fulfilling the demand of electricity as access to sunlight is limited. People could only use a single bulb at night for around 4 hours. But this 11 KV power line has changed their lives. Now, they have access to 24/7 electricity supply since 2018. Villagers are happy with this CSR initiative of the NHPC Limited.

Table 4.1 List of Key respondents/ Beneficiaries

Sr No	Name of the Respondent	Description	Age	Village	Family size	Male	Female
1	Sonam Dorjee	Family Head	65	Chulungtse , Alchi	06	03	03
2	Thewangd Dorjee	Family Head	60	Chulungtse , Alchi	04	02	02
3	Stanzin Zing Mo	Family Head	62	Chulungtse , Alchi	05	03	02
4	Rigzen Nangail	Family Head	73	Chulungtse , Alchi	05	04	01
5	Tshetan Tashi	Family Head	61	Oulung, Alchi	09	05	04
6	Chheatan Gyurmat	Family member	60	Oulung, Alchi	11	08	03
7	Tashi Angchuk	Family Head	65	Oulung, Alchi	09	02	07

## 4.5.1 Key Observations made by Field Investigators

- Electricity line covers distance of 5 km approx. from sub station established at NHPC
  Alchi Dam to the Omlung and Chulungtse In total 07 households living in two different
  hamlets are the beneficiaries of this 11 KV power line. There are approx. 70 people who
  are using electricity on regular basis.
- The average monthly consumption of electricity by individual household is around 100 units for which the Electricity Department charges them approx. Rs. 1.50 per unit.
   When usage exceeds 100 units then it will be charged Rs. 3.50 per unit.
- Currently, Power Development Department looks after the maintenance of the electricity transmission line and also collects the electricity bill from the local beneficiary.
- During fieldwork Impact assessment team observed that there is 24/7 hours supply of electricity in Omlung and Chulungtse villages. Power cut only happens in case of any maintenance work.
- People are happy with the initiative and they thanked NHPC for bringing about a
  positive transformation in their lives.

## 4.5.2 Success Stories

#### Story-1

ताशी आंगचुक Oulung, Alchi

मैं इसी गांव का रहने वाला हूँ क्योंकि पहले यहाँ पर लाइन ही नहीं था जब से यहाँ पर प्रोजेक्ट बना था एनएचपीसी ने हमारे लिए इतना फायदा क्या हमारे गांव में लाइट लगवा दिया? सर इसकी वजह हमारा गांव में जो भी काम होता था लाइट की वजह से लाइट नहीं होने की वजह से बहुत दिक्कत होता था अभी तो लाइट आने की वजह से बहुत बेनिफिट बहुत ज्यादा हो रहा है सर इस गांव के और आगे मैं और एक गांव है सर दोनों के लिए लाइन नहीं था अभी दोनों के लिए लाइट है सर इसकी वजह से एनएचपीसी को बहुत बहुत धन्यवाद देता हूँ सर थैंक यू सर

#### Story- 2

Sonam Dorjee Chulungtse , Alchi

Our village was not having any source of light except kerosene in night time. Later, the local government provided us solar light for domestic purpose but it used to work for only 2-3 hours a day when fully charged. It was only sufficient for lighting one bulb. When NHPC people came here we requested them to provide us with electricity. After long time and due to continuous request they agreed to make the arrangement for electricity connection. Now we are happy that we have access to electricity.

#### Story- 3

Rigzen Nangail Chulungtse, Alchi

हमारे अल्ची गांव के तीन अलग अलग जग पर लोग रहते हैं। इनमेसे मैं गांव में बिजली पहले से लेकिन इधर जो दो जग है याहा बिजली नहीं था। बहुत दिकत होता था मुझे चूहा। लेकिन बिजली एनएचपीसी ने दिया बहुत अच्छा हुआ। हम खुश हैं|

# 4.5.3 OECD-DAC Framework Scoring

Overall performance and rating by the beneficiary are satisfactory. The project was successfully implemented and commissioned in 2018. Currently both the hamlets of Alchi village have access to 24/7 electricity supply with 100% households covered under electricity network.

Table 4.2: OECD-DAC framework Scoring of the project

OECD Parameters	Score
Relevance	Satisfactory
Coherence	Satisfactory
Effectiveness	Extremely Satisfactory
Efficiency	Satisfactory
Impact	Satisfactory
Sustainability	Satisfactory

## 4.6 Impact of the project

Access to electricity has created a new era in the people's life in Alchi village. Actual beneficiaries are needy and underprivileged; also old age people and they needed this support and care. This vulnerable group is the real beneficiary as in these hamlets young and adults have moved to nearby bigger towns and cities for education and/or work. Mostly old age people live here and practice agriculture, animal husbandry, etc. They use different machines in their daily life which need electricity. This 11 KV power line is a lifeline for them. The access to electricity to these old age groups of beneficiaries has given a new ray of hope in their lives.

The beneficiary feel socially privileged and almost at par with the nearby town. As a result of electricity supply, they the agriculture and livelihood has improved as well.

## **4.7** SDG and Sustainability of the project

Sustainable Development Goals are designed to be a blueprint to achieve a better and more sustainable future for all. The CSR Activities of NHPC are aligned with the SDG's. This initiative is compliant with the SDG 7.

Access to clean, modern, sustainable energy is critical for improving the health and livelihoods of people living in two hamlets of Alchi village. They are away from the modern energy resources and facilities. Creating facilities and proper infrastructure was fundamental to the development of this local community. There is growing evidence linking socio-economic benefits with access to a reliable and affordable supply of electricity.

This CSR project could ensure adequate lighting and a reliable supply of electricity in the evening, children are able to read, old age people are using various machines and tools due to make their life easier. Agricultural families can use the continuous supply of electricity for irrigation through bore wells. People now can listen to the radio, watch television, use washing machine and other appliances. Electricity line improved the overall living standards of the community and created opportunities for generating income. There would also be tangible health benefits because currently many alternative lighting sources like kerosene lamps or wood fire stoves are a major source of pollution, and also harms people's health.

## 4.8 Conclusion

The project has created a high impact on the life of people and their willingness to stay in the area and has brought happiness in their lives. The availability of power to the area has helped the residents of the area to improve their living standards.

It has also enabled them to get regular water supply by the use of bore wells, a few of which were also installed by the NHPC. Beneficiaries of the area are extremely thankful to NHPC for this CSR initiative which has alleviated their economic standard and social wellbeing.

The happiness index of the people has definitely scaled up and visible as we see excitement and smiles on their faces regarding this CSR project.





# Photo Gallery





















# References

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# **Annexures**

**Annexure 1** : Format for Case study

**Annexure 2** : Format for Field Observations

**Annexure 3** : Format for daily fieldwork scheduling

**Annexure 4** : Format for collecting feedback about the project

**Note:** Please find all the Annexure, Geotagged Photographs and Videos through following link

https://drive.google.com/drive/folders/1LWQ28FXihwTZoUUeu9iV5fnhLBJQoUgN?usp=sharing





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