Summary Report

Baseline & Need Assessment Study to Design CER & CSR Initiatives

Vagra taluka, Bharuch District

2024-25

Data Collection Team:
Karishma
Vikram
Babubhai
Nikita

Team Lead:
Purshottam Sonagra

Editor:
Dixita Pariaker

Publishing Support:
Parul Shah

Prepared for

Adani Cement Industries Ltd.

Bharuch, Gujarat

Prepared by

SAVE Pvt. Ltd.

Ahmedabad, Gujarat

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BACKGROUND

During past few decades, Adani Group of Industries has played a major role in industrialisation and infrastructure development of Gujarat and Country. As part of several industrial unit along the coast of Gujarat Adani Group of Company has an important presence in Dahej region of Bharuch district. For local people, this industrial development process continues to create socio-economic opportunities in terms of enhanced employment and access to developed rural infrastructure.

Adani Foundation under CER & CSR is implementing various activities aimed at improving the quality of natural resources as well as the socio-economic aspects of life of the local people. In order to carry out these activities the company wants to carry out a baseline survey of surrounding 10 villages.

For this purpose, Adani Foundation has sought a proposal from SAVE Ltd. SAVE – Saline Area Vitalisation Enterprise Private Limited, established in 1995, is a technical service organisation (TSO). The organisation is designed to provide technical services in natural resource management, livelihood & enterprise development and market linkage services to various stakeholders (Community based organisations, NGOs, Government, Industries and donor agencies) engaged in development process in coastal regions of Gujarat.

SAVE Ltd. is engaged with Adani Group of industries since 2008, mainly in implementation of mangrove plantation projects across Gujarat.

Over the past few decades, the Adani Group has significantly contributed to the industrialization and infrastructure development of Gujarat and the country at large. With its strategic presence along Gujarat's coastline, the Group has become a key driver of economic activity in Bharuch district, particularly within the Dahej industrial region of Vagra Taluka.

This industrial growth has brought with it a range of socio-economic opportunities for local communities, including improved employment prospects and access to enhanced rural infrastructure. Recognizing the importance of inclusive and sustainable development, the Adani Foundation, through its Corporate Environment Responsibility (CER) and Corporate Social Responsibility (CSR) commitments, has initiated a range of programs aimed at enhancing the quality of life and natural resource base in the surrounding villages.

To strengthen and inform these ongoing and future initiatives, the Foundation has proposed a baseline survey of ten villages in Vagra Taluka. This study will serve as a foundational tool for understanding current socio-economic, environmental, and infrastructural conditions. It will also help identify key development needs and opportunities for collaboration between industry and community.

For this purpose, the Foundation has partnered with SAVE – Saline Area Vitalisation Enterprise Pvt. Ltd., a technical service organization with deep experience in natural resource management, livelihood enhancement, and coastal development in Gujarat. SAVE Ltd. has been associated with the Adani Group since 2008, primarily through the implementation of mangrove plantation and coastal resilience projects.

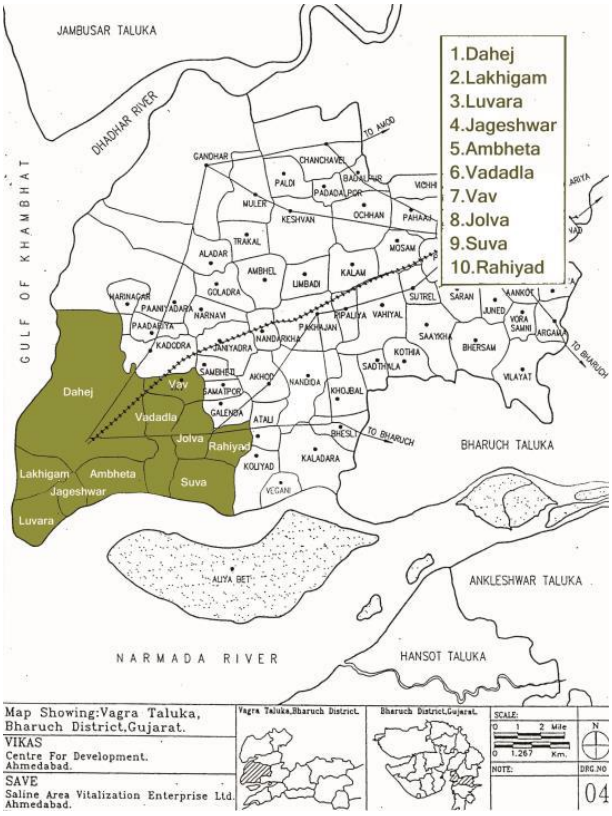
This baseline study will help lay the groundwork for a strategic and responsive CSR roadmap, aligning industrial presence with community well-being and regional sustainability.

METHODOLOGY

In order to prepare an overall strategy and detailed action plan, it is proposed to carry out the following:

- Review of the secondary information from Census of India (2011 and upgraded) and other literature available.
- Primary study of 10 villages in order to prepare a detailed profile of each village covering various demographic, socio-economic, human settlement pattern, physical, social infrastructure and institutional setup – Panchayati Raj Institutions, various community-based organisations, on-going work of different organisations and industries. Following are the parameters covered along with villages to be studied:

  i. Environment
  ii. Health
  iii. Education
  iv. Employment
  v. Drinking water
  vi. Cleanliness
  vii. Infrastructure
  viii. Energy
  ix. Transportation and Connectivity
  x. Disability
  xi. Sports
  xii. Women Empowerment
  xiii. Local Institutional & Community based
  xiv. Organisational structures
  xv. Social Enterprises
  xvi. Natural and Manmade Disasters
  xvii. Fishing business
  xviii. Regional Issues
  xix. Programmes & Schemes of Government



Map of Villages to be studied

- Focused group discussions with different socio-economic groups including members of village Panchayats & other community-based organisations to arrive at priorities of the local people particularly marginalised communities and women.

INTRODUCTION OF THE VILLAGES

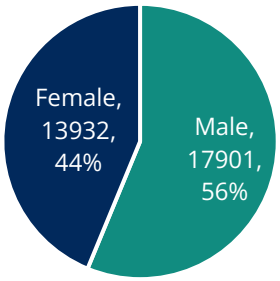
Over the past three decades, Vagra has evolved from a predominantly agrarian and resource-based economy into a hub of industrial activity. However, this transformation has posed significant challenges in ensuring sustainable development, equitable resource distribution, and social well-being.

The selceted village for the baseline are:

1. Dahej
2. Lakhigam
3. Luvara
4. Jageshwar
5. Ambheta
6. Vadadla
7. Vav
8. Jolva
9. Suva
10. Rahiyad

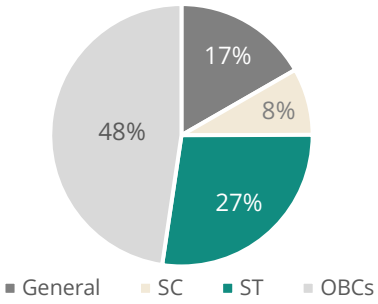
Demographics

The villages studied have a total household of 5,190 with 31,833 population in the village.



The male population stands at 56% in these villages While women constitute 44% of the populations, for the data available, average literacy rate occurs to be 85.47 while that of male and female is 90.61 and 79.19 respectively.

Caste distribution in these villages highlights how it is in alignment with broader aspects in the district where marginalised groups constitute a larger part. Overall, 1539 families belong to Rathod tribe in the village.



Village have been generally defined as a small, rural settlement or community with a defined geographical area. It's typically smaller than a town but larger than a hamlet and often characterized by a relatively low population density, with residents primarily engaged in agricultural or other rural occupations. Vagra has been increasing industrialised which has changed its demographics, same is visible in these villages. Merely 10% local population (HHLD) is observed in the studied villages. Though absence of any documentation has made it difficult to conclude the exact population of migrants in the village as some might be with family while others might have migrated independently.

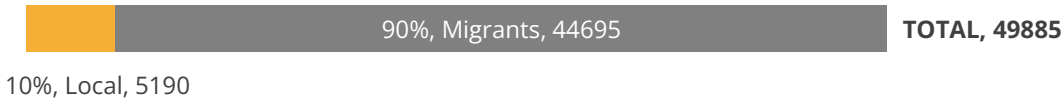


Figure 1: HHLD population distribution in these villages

1 ENVIRONMENT

1.1 Land, Vegetation, Water and Air

Vagra's environment has undergone rapid transformation due to accelerated industrialisation. Traditional practices such as agriculture, salt farming, and fishing are increasingly under stress due to salinity ingress, declining groundwater quality, and degradation of coastal ecosystems. Similarity is echoed in these villages.

Understanding land use patterns, vegetation loss, water stress, and air pollution is crucial for assessing the environmental burden on local populations and ecosystems. These insights provide the foundation for designing climate-resilient and community-sensitive environmental strategies.

1.1.1 Land

Land is a finite, non-renewable resource central to agriculture, habitat, and development. In these villages, industrialization has altered traditional land use patterns, transforming arable land into industrial zones and is visible through the land use patterns.

Today the total gamtal (habitat area) of these villages in merely 167.50 hectare out of 9147.22 hectares. 42% of the land (approximately 4321.19 hectare) is occupied by industries. In some villages at the periphery of village and industries, migrant workers who earns livelihood through industries have been accommodated. The change in social fabric is observed with this.

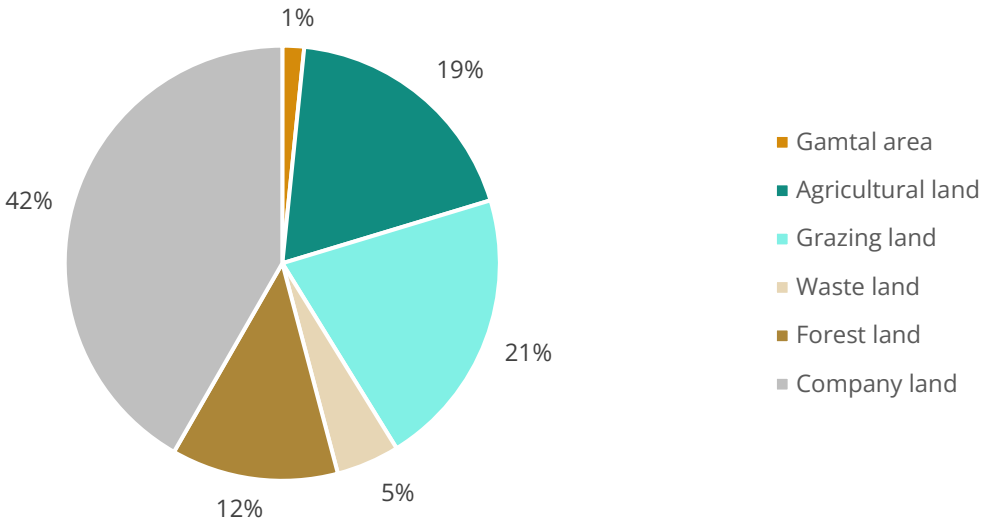


Figure 2: Land Distribution in these villages

1.1.2 Vegetation

There are three types of vegetation: Native, Naturalised and Non-Native. Native trees are species that have naturally evolved in a specific region over thousands of years, forms an integral part of oxygen generation. They also support local ecosystem and biodiversity by providing habitat and food for native wildlife while maintaining ecological balance. In contrast, naturalized trees are non-native species that have adapted to a new environment and grow independently without human intervention. While some naturalized trees coexist harmoniously, others can become invasive, outcompeting native flora. Non-native trees, also known as exotic or introduced species, are intentionally or accidentally brought from different regions for purposes such as timber, shade, or ornamental value. While they may offer economic benefits, they can sometimes disrupt local ecosystems by altering soil composition, competing with native species, or affecting water availability.

16 species of trees have been identified in these villages, a majority of which are native or naturalised. Only 92 trees (2% of the trees identified) are Non-Native Eucalyptus trees.

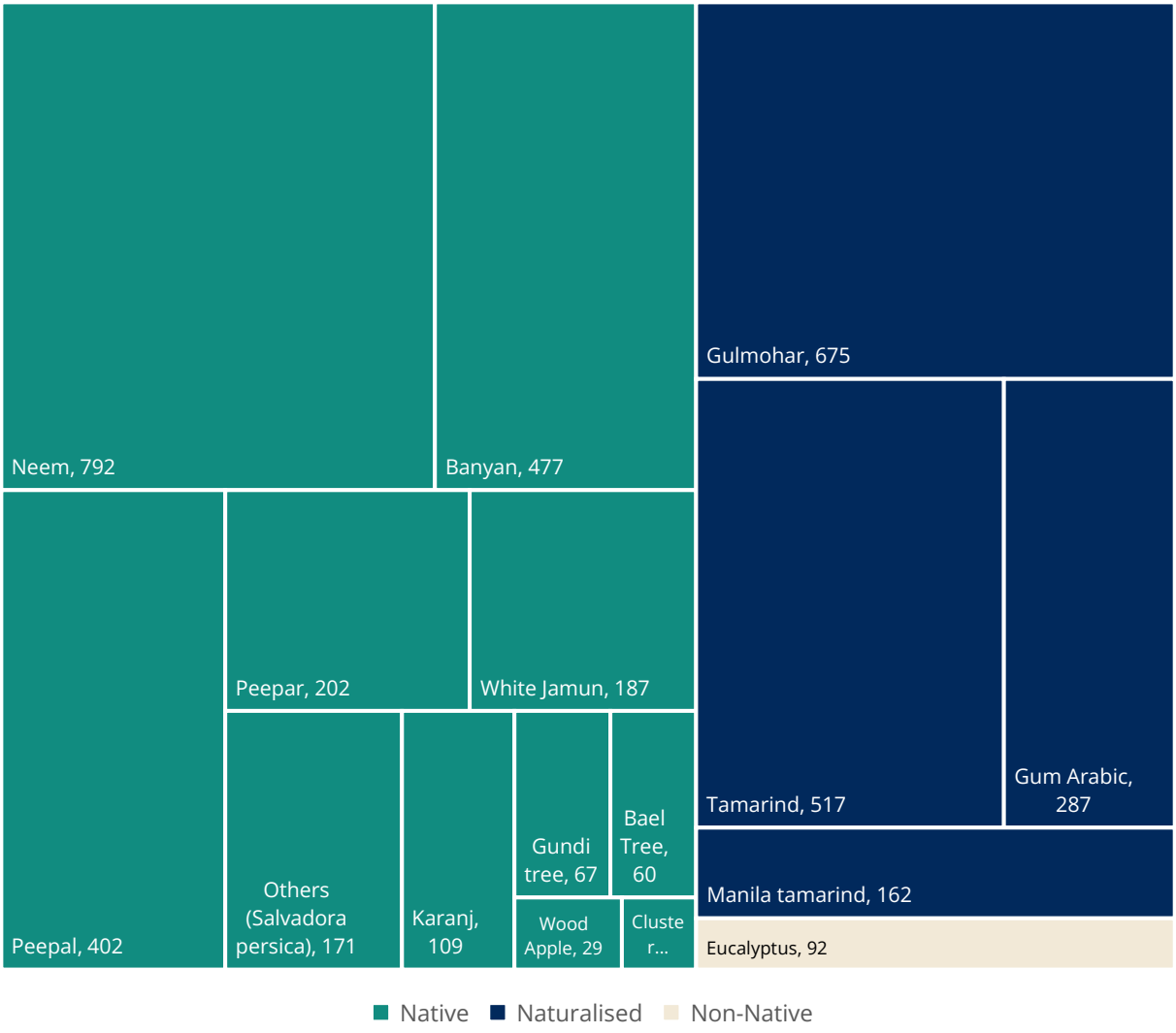


Figure 3: Tree distribution in these villages

Potential Location	No. of Trees
Pond Periphery	10500
Main roads	15700
School	3335
River Bank	21000
Wasteland	36000
Crematorium	7000
Burial Ground	100
Grazing Ground	30400
Temple	2330
Other places	1500
Cricket Ground	9200
TOTAL	**137065**

As per a study published in Nature in 2015, an estimated 422 trees per person are present on Earth. One person, needs around 7 to 8 grown trees to have enough oxygen to breath. For the local population of 31,833 at least 2,22,831 trees are required. While currently merely 4249 trees are present. The potential plantation of 1,37,065 trees should be taken up at priority.

The trees plantation can be integrated with other programs like under pond development, plantation along pond periphery can be pursued. And similarly other alignment can be identified and pursued.

1.1.3 Water

Water sources, including rivers, lakes, groundwater, and reservoirs, are fundamental to sustaining ecosystems, agriculture, and human health. They provide essential services such as drinking water, irrigation, and habitat for biodiversity. In these villages, however, water is both a lifeline and a limiting factor for development. The villages face significant water stress, with non-potable ground water. 27 out of 40 bores or wells in these villages have non-potable water. Surface water availability is also limited with 21 out of 30 ponds not having potable water. All this impacts their daily life, and agriculture. These challenges highlight the urgent need for sustainable water management practices and resilient supply systems to ensure equitable access and long-term water security.

Following will help to get equitable access in these villages:

Maintenance: 7 wells, 3 borewells and 8 ponds to be used for either dinking, or washing clothes

New Needs: 1 well and 2 ponds to be used for either dinking, or washing clothes

1.1.4 Air

Air quality is a direct indicator of environmental health. With the expansion of petrochemical and industrial units in this region and limited number of trees, air quality has deteriorated, as perceived by local communities. Understanding the scale and impact of air pollution is essential for safeguarding public health and informing regulatory measures.

	Unsafe	Airborne disease is prevalent
Primary Identified Air Quality	Very Poor	Airborne disease is likely to occur
Secondary Identified Air Quality	Poor	Stinks
	Normal	No Problem
	Good	Clean Air

Scale of air quality: The classification of air quality is based on perception of local people during the data collection

Increased tree cover, along with proper health facilities is required to be setup.

2 NATURAL AND MAN-MADE DISASTER

Given its location along the Gulf of Khambhat, this region is highly susceptible to both natural and man-made hazards. Frequent droughts, cyclonic activity, salinity ingress, and potential industrial accidents due to chemical-based manufacturing units pose serious risks to life and property. Mapping these vulnerabilities is essential for disaster preparedness, risk mitigation, and building resilient infrastructure and communities.

A permanent mitigation and preparedness against all disasters as per their risk is required to be provided.

3 INFRASTRUCTURE

Infrastructure encompasses the essential physical systems and services such as water supply, sanitation, waste management, power, transportation, and communication, that form the foundation for community well-being and economic development. It directly influences the quality of life, access to services, and opportunities for growth in any region.

Despite being a revenue-generating region for the state and national economy, the villages in the region continue to face critical infrastructure deficits. Access to safe drinking water, sanitation, drainage, power supply, and transport connectivity is

inconsistent. Furthermore, the stress on land and natural resources due to industrial expansion has not been matched by corresponding investments in civic infrastructure, particularly in rural pockets.
Assessing baseline infrastructure enables identification of service delivery gaps, and helps design targeted interventions aligned with state schemes like Swachh Bharat Mission, Nirmal Gujarat, and Jal Jeevan Mission.

3.1 Drinking water

Access to clean and sufficient drinking water is a fundamental need. Many coastal villages in Vagra face challenges due to saline groundwater and seasonal scarcity, necessitating sustainable and equitable water supply solutions. Even though they are currently getting drinking water from G.I.D.C. connection, there is significant need to improve the infrastructure to provide coverage and quality.

A significant infrastructure upgrade is required to meet the drinking water demand in these villages							
Sump	Overhead Water Tank	Main Pipeline (water source to sump)	Distribution Pipeline (families)	Pump Room	Light Connection	Pumping Machinery	Cattle Trough
5	2	2	4	3	2	2	7

Rainwater harvesting plays a crucial role in enhancing drinking water availability, especially in areas facing groundwater salinity or scarcity. By facilitating groundwater recharge, it helps replenish aquifers with fresher water, improving both quality and reliability of local drinking water sources. Currently, most (8) of the villages don't have any rain water harvesting facility.

575 rainwater storage tanks can be provided to household which will not only decentralise their water requirement but also reduce pressure on existing infrastructure.

3.2 Solid Waste Management

Solid waste management (SWM) is a common term used for waste storage, systematic collection, transportation, processing, treatment, recycling, and scientific disposal of discarded materials produced by human activities in an organized manner. It is an essential service for maintaining cleanliness, environmental sustainability, and public health.

As per SWM Rules 2016, the responsibility for SWM lies with local panchayats in rural areas and also assigns duty of source segregation on waste generator. Swachh Bharat

Mission and Nirmal Gujarat 2.0 have been helpful to facilitate achieve essential indicators for this crucial service. But, with growing population and industrial activity, the generation of solid waste has increased.
In four of this villages, VIKAS Centre for Development has initiated process of SWM collection, transportation and treatment process for a yearly contract, while in rest Panchayat or industry is managing the processes. Five villages have collection facility on permanent basis. Yet no village is visibly clean, source segregation is absent and scientific disposal is also absent. In 7 villages waste is dumped in pit while in 3 villages waste is burnt as well.

Long term program needs to be worked out for sustained results through an integrated approach for SWM where source segregation to scientific disposal, all the components are encompassed. Specific focus for scientific disposal is urgency for these villages.

3.3 Liquid Waste Management

Liquid Waste Management (LWM) refers to the systematic collection, treatment, reuse, and safe disposal of wastewater and associated sludge. Effective LWM is essential for protecting public health, maintaining environmental integrity, and conserving water resources.

In rural areas, the absence of adequate infrastructure for wastewater management often results in untreated liquid waste contaminating land and water bodies, posing serious risks to surface and groundwater sources.

As highlighted under national initiatives like Swachh Bharat Mission (Grameen) Phase II, local governance bodies such as Gram Panchayats are responsible for managing greywater and promoting decentralized treatment solutions. However, the lack of technical capacity and financial resources hinders effective implementation.

3.3.1 Drainage System

Gujarat is one of the few states where closed drainage system has been implemented in rural areas as well. Due to flat terrain and poor infrastructure, many villages of the studied area face stagnation issues during monsoon, affecting not only infrastructure, land and water but health as well. Untreated sewage from each of the village is discharged either river, storm water nallah, open area or in sea. Which further contaminates the source of discharge as well.

Based on available land, appropriate Sewage Treatment plant is essential to be installed in all the villages. Maintenance of these system is also required to be undertaken.

3.3.2 Toilets and Bathing Facilities

Access to sanitation is vital for dignity, especially for women and marginalized groups. As per study published in Scientific Reports in 2024, approximately 60,000–70,000 infant deaths are averted annually with implementation of Swachh Bharat Mission, where focus was to become Open Defecation Free (ODF). While Swachh Bharat Mission has improved coverage, infrastructure quality and usage remain areas of concern in the studied villages. Some households don't have usable toilets due to building connection or not connected to soak pits. Even though some households have

After understanding reason behind non usage of toilets, appropriate IEC- BCC can be undertaken. Apart from providing required infrastructure, regular checking of the facilities and other awareness activities in the schools can be initiated to ensure hygiene and maintenance of the facilities.

Individual Toilets: 231	**Soak pits: 45**	**Bathing Space: 430**	**Public Toilets: 8**

3.4 Energy

Reliable electricity and fuel supply is crucial for households, education, and local enterprises. The electricity penetration is 100% in these villages. Solar energy has also made its limited inroads in these villages, with usage for public places and individual houses.

To transition to solar energy, the public places like Gram Panchayat Office, Schools, Aanganwadi, Community Hall, Religious Places, Water Distribution and Health centres.

Street lights in all the villages can be transitioned to solar street lights using a participatory mechanism for community ownership.

Even though gas connection has penetrated in these villages, dependence of fire wood is still prevalent. And even though livestock is available in the village, gobar gas plants have not been adopted.

Alternatives for fire wood along with complete gas connection can be promoted. Also, possibility of gobar gas plants can be explored in these villages.

3.5 Transportation and connectivity

Road and public transport connectivity impact access to markets, health, and education. With increasing industrial movement, road infrastructure has improved but rural connectivity and last-mile transport need some intervention. Bus timings are not reliable for a lot of these villages. There are a lot of private vehicles like Mini Bus, EECO Van, big and small rickshaw in these villages, which reflects absence of last mile and reliable public transport.

While bus stops in the villages where they are not there can be initiated in collaboration with the government entity, Self Help Group (SHG) operated e-rickshaws can be explored for last mile and reliable coverage.

Broadband facilities are present in public places of 5 villages only.

Broadband facilities can be provided in public places of 5 villages.

3.6 Infrastructure facilities

The state of physical infrastructure determines the living conditions and development potential of any region. In these villages of Vagra, despite its economic significance, basic infrastructure has not kept pace with industrial growth. The availability and quality of essential services influences public health and well-being.

While maintenance of some infrastructure is required, there has been requirement for new infrastructure as well.

Key Maintenance required for infrastructure:	New Requirement of infrastructure:
• Village pond • Village well / Step well • Sewer System • Roads connecting other villages • Crematorium • Facility for computer education • Space for waste segregation / recycling • Village Inner Road • Street lights on inner roads • Street lights in common places • Rural housing (Awas Yojana)	• De-addiction Rehabilitation Centre • Employment Centre • Any special facility for a disabled person • Primary Health Centre • Common Library • Milk Cooperative Building • Animal Health Centre • Community Toilet • Availability of ambulance • Legal aid centre

4 SOCIAL INFRASTRUCTURE

Social infrastructure refers to the foundational services and facilities that support the well-being and quality of life of a community. This includes healthcare, education, social welfare, community centres, and other public amenities that enable people to live healthy, productive, and dignified lives. It plays a critical role in fostering human development, social equity, and inclusive economic growth.

In these villages of Vagra, however, social infrastructure has not kept pace with the region's rapid industrialization. While economic activity has surged, public investments in health, education, recreation, and services for vulnerable groups remain inadequate. This has widened socio-economic disparities and placed added strain on existing services, especially amidst population shifts due to inward and outward migration.

The current status of social infrastructure across the villages has helped to identify existing gaps and recommend pathways for more inclusive and resilient development.

4.1 Health

Access to affordable, quality healthcare is a fundamental right and a cornerstone of community well-being. The presence and effectiveness of health infrastructure, such as Primary Health Centres (PHCs), Accredited Social Health Activists (ASHAs), and sub-centres directly influence health outcomes, particularly for women, children, and the elderly.

In these villages of Vagra, challenges such as exposure to industrial pollution, unsafe drinking water, and inadequate sanitation have led to increased health vulnerabilities. 6 of these villages experience diseases related to breathing, while 5 experience skin diseases. Prevalence of Diabetes, Tuberculosis, Leprosy and blood pressure is also observed in these villages.

Strengthening preventive and curative healthcare systems is critical to improving community resilience.

6 villages have any public health centre, hence prevalence of private or trust based hospital is observed.

Ambulance and mobile medical vans can be made available for easier access especially during childbirth. Other capacity building training programmes, awareness campaigns and requirements can be fulfilled.

4.2 Education

Education is a powerful enabler of social mobility and economic progress. It shapes the future workforce and fosters informed citizenship. Education infrastructure, including access to schools, trained teachers, and learning material combined with metrics such as literacy rates, enrolment, and dropout rates, provides insights into social equity.
In these villages of Vagra, Aanganwadi is present but needs infrastructural or equipment support. Also support for facilitating learning is not available.

Equipment and infrastructural support can be provided as per requirement. Also, tools and materials that facilitate learning can be provided through a comprehensive approach.

In these villages of Vagra, while primary schooling is present, issues such as gender disparity, quality of education, and early dropouts persist. The public schools ar4e heavily understaffed which has affected quality of education as well. A number of kids are orphan (15) and some (77) are fostered by single parents.

Enhancing infrastructure, reducing digital gaps, and promoting inclusive learning environments are necessary for long-term development. A comprehensive program for improved education needs to be worked out.

4.3 Differently Abled Persons

Equitable development requires intentional inclusion of persons with disabilities. This includes accessible infrastructure (ramps, toilets, transport), inclusive education, and livelihood support tailored to their needs.

Currently, the differently-abled in these villages of Vagra face multiple barriers in accessing education, healthcare, and employment. 73 people are disable in these villages and of all, 12 people don't have disability certificate. 59 people have not received any support of government scheme and 71 of them needs some or the other support.

Focused interventions, both physical and institutional are needed to ensure dignity and independence for all residents, irrespective of ability. Also, support for fulfilling required support can be provided.

4.4 Sports

Recreational and sports facilities, though often deprioritized, are vital for youth development, mental health, and social cohesion. These spaces foster community engagement, reduce anti-social behaviour, and promote physical well-being.
In these villages of Vagra, such facilities are minimal or underutilized. Even though 8 villages have players who have recognisably performed up to district or state level, lack of equipment or infrastructure may hinder their further growth.

Investment in playgrounds, sports equipment, and organized activities can significantly enhance community vitality, especially among the younger population. It will also help to facilitate good performers in sports to represent in various national and international competitions.

4.5 Women Empowerment

Women's participation in social, economic, and political life is both a measure and driver of development. Access to Self-Help Groups (SHGs), skill-building opportunities, safe mobility, and leadership roles are key indicators of empowerment.

In these villages of Vagra, traditional gender norms still limit women's access to education, employment, and decision-making spaces. 40 women groups, majorly

engaged in savings activity, exists in these villages. Apart from savings these groups are also engaged in "Bhajan Kirtan" and awareness, but they haven't been recognised for any activity. It is also to be noted that these villages have higher influx of migrants and hence self-defence training for girls came out as an urgent need. Further, these villages have 502 widows and 15 divorced women who are earning through daily wages.

Strengthening women's institutions, providing livelihood options, and ensuring their representation in governance can lead to more inclusive and sustainable development. Further Skill and Enterprise Development intervention for daily wage earner widows and divorces can be worked out. It is equally important to ensure safety of women and hence necessary steps to be taken to address it.

4.6 Institutional Infrastructure

Robust local institutions are the backbone of decentralized governance and effective service delivery. Institutions such as gram panchayats, cooperatives, SHGs, and community-based organizations play a crucial role in mobilizing resources, implementing schemes, and resolving local issues.

In these villages of Vagra, institutional capacity varies across villages. While few of these institutions are active, a few are also inactive but they require support in terms of financial, capacity building or infrastructural.

Strengthening these bodies through infrastructure, training, and resource support can lead to more responsive and accountable development planning.

5 LIVELIHOOD

Livelihoods form the backbone of socio-economic well-being, influencing access to food, education, healthcare, and dignity of life. In these villages of Vagra, the livelihoods landscape is undergoing a significant transformation. While the area has witnessed rapid industrial growth, this boom has not translated into inclusive or equitable employment for the local population.

5.1 Employment

Employment, whether through wage labour, self-employment, or industrial jobs, plays a fundamental role in determining economic resilience and social security. In these villages of Vagra, traditional occupations such as agriculture, salt farming, and fishing which once the backbone of rural livelihoods are increasingly under threat due to land acquisition, ecological degradation, and water stress.

At the same time, employment opportunities in the burgeoning industrial sector are often inaccessible to local youth and workers. Mismatches in skill sets and limited access to vocational training contribute to a growing disconnect between economic growth and local livelihood security.

5.2 Agriculture

Agriculture has long been the cornerstone of rural livelihoods, offering sustenance, income, and a deep connection to land and tradition. However, in these villages of Vagra, this vital sector has witnessed a sharp decline. Today, only two villages across the ten surveyed villages continue to rely on farming as their livelihood. This near-collapse of agriculture is attributed to chronic water scarcity, increasing soil salinity, and the large-scale diversion of agricultural land for industrial use.

5.3 Animal Husbandry

Animal husbandry serves as a key supplementary livelihood for many rural households, especially those with limited or no access to agricultural land. Rearing livestock such as cattle, goats, and poultry not only provides milk, meat, and eggs for consumption and sale but also offers a relatively stable income source in times of agricultural distress.
In these villages of Vagra, animal husbandry remains relevant, particularly for landless and smallholder families. But these cattle rearer are not collectivised and lack basic infrastructure for appropriate cattle habitat and treatment during diseases.

5.4 Fisheries

Fisheries are a critical livelihood in Vagra's coastal villages, deeply tied to cultural heritage and local food systems. Fishing, whether for local consumption or trade, has long sustained communities along the shoreline. However, industrial pollution, changes in coastal land use due to port development, and ecological degradation are threatening this way of life. Further, shifts in the marine ecosystem, access to fishing resources, and the lack of infrastructure such as cold chains and storage facilities are impacting fisherfolk.

Mapping current livelihood patterns, explores the emerging need for skill development, the role of informal and seasonal labour, and potential pathways for sustainable and diversified income generation. A deeper understanding of these dynamics is essential to designing context-specific livelihood interventions and ensuring that economic development in these villages of Vagra to become more inclusive and resilient.

Further, by strengthening services and infrastructure around animal husbandry, there is potential to enhance income security, promote nutrition, and support women's participation in the rural economy.

Additionally, the role of traditional knowledge in sustaining fisheries and explores potential interventions to protect and enhance the viability of fishing as a livelihood in the face of rapid industrialization.

Figure 4: Glimpses from data collection

6 CER PLANNING

Based on the need assessment of the ten villages in Vagra, Corporate Environmental Responsibility (CER) budget can be allotted to following activities:

6.1 Integrated Water body development program

Sr No.	Details	Unit	Price (Rs.)	Total Cost (Rs.)
1	**Cleaning the pond**			
1.1	Cleaning of Prosopis juliflora from periphery with machinery	18	1,00,000	18,00,000
1.2	Labor work	18	40,000	7,20,000
1.3	Cleaning of unwanted vegetation from inside the pond (labour work and equipment)	18	50,000	9,00,000
2	**Deepening of pond**			
2.1	15000 Sqm * 1.5 m	18	25,00,000	4,50,00,000
3	Cleaning and repairing of inlet and outlet			
3.1	Cleaning of inlet and outlet	18	70,000	12,60,000
3.2	Repairing work	18	1,00,000	18,00,000
4	**Repairing and development of periphery and retaining wall**			
4.1	Land levelling at pond periphery	18	50,000	9,00,000
4.2	Retaining wall	18	5,00,000	90,00,000
5	**Well and bore well**			
5.1	Cleaning of well and deepening	0	0	0
5.2	Repairing work	0	0	0
5.3	New Bore well	0	0	0
5.4	Washing Ghaat repairing	8	2,00,000	16,00,000
6	**Plantation**			
6.1	Tree plantation on the perimeter of the pond	10500	500	52,50,000
6.2	Fencing 200 mt. X 400/- = 80000/-	18	80000	14,40,000
7	**Recreational activities**			
7.1	Bal Vatika	18	1,00,000	18,00,000
7.2	Pathway development	18	1,50,000	27,00,000
7.3	Flowering plantation	18	50,000	9,00,000
7.4	Seating development/ benches @ 10 Nos.	18	50,000	9,00,000
7.5	Street light @ 10 Nos. X 30000/-	18	3,00,000	54,00,000
7.6	Railing @ 100 mtr. X 700/-	18	70000	12,60,000
	Total Cost			**8,26,30,000**

A total cost for developing **18** ponds under Integrated Water body development program will cost Rupees **8,26,30,000**.

6.2 Plantation

Sr No.	Details	Unit	Price (Rs.)	Total Cost (Rs.)
1	**Plantation at Public places**			
1.1	Main roads	15700	1500	2,35,50,000
1.2	School	3335	500	16,67,500
1.3	River Bank	21000	800	1,68,00,000
1.4	Wasteland	36000	800	2,88,00,000
1.5	Crematorium	7000	500	35,00,000
1.6	Burial Ground	100	500	50,000
1.7	Temple	2330	500	11,65,000
1.8	Other places	1500	1,000	15,00,000
	Total Cost			**10,74,32,500**

A total cost for plantation across various locations will cost Rupees **10,74,32,500.**

6.3 Sanitation

Sr No.	Details	Unit	Price (Rs.)	Total Cost (Rs.)
1	**Toilet**	231	20,000	46,20,000
2	**Bathing facility**	430	10,000	43,00,000
3	**Soak Pit**	50	5,000	2,50,000
4	**Community toilet**	8	5,00,000	40,00,000
5	**STP**			
5.1	Construction of STP	10	3,00,000	30,00,000
5.2	STP Operational cost	10	3,50,000	35,00,000
6	**Required Drainage lines @ 500 running m/village**	5000	1500	75,00,000
7	**Waste collection system**			
7.1	Dustbin	10000	200	20,00,000
7.2	Tricycle	0	30,000	0
7.3	Sanitation Worker 12,000 x 12	20	1,44,000	28,80,000
7.4	Segregation 5 labour x 500 = 2500 x 10 days =25000 X 12	10	3,00,000	30,00,000
7.5	Making of Fertilizer	10	40,000	4,00,000
7.6	Plastic digester	10	2,50,000	25,00,000
7.7	Digester Management	10	1,20,000	12,00,000
	Total Cost			**3,91,50,000**

A total cost for making these villages clean and healthy through proper sanitation facilities of solid and liquid waste will cost Rupees **3,91,50,000.**

6.4 Drinking water

Sr No.	Details	Unit	Price (Rs.)	Total Cost (Rs.)
1	Sump	5	3,00,000	15,00,000
2	Overhead Tank	1	15,00,000	15,00,000
3	Main Pipeline @ 500 running m X 02 Village	1000	500	5,00,000
4	Distribution Pipeline @ 1000 running m X 04 Village	4000	500	20,00,000
5	Pump Room	3	75,000	2,25,000
6	Electricity connection	2	30,000	60,000
7	Pumping Machinery	2	50,000	1,00,000
8	Cattle Trough	7	1,00,000	7,00,000
9	R.O Plant	10	5,00,000	50,00,000
10	Village Water Committee Training and capacity building	10	50,000	5,00,000
	Total Cost			**1,20,85,000**

A total cost for providing clean drinking water to these villages will cost Rupees **1,20,85,000.**

6.5 Solar energy

Sr No.	Details	Unit	Price (Rs.)	Total Cost (Rs.)
1	**Solar Street light - 100 X 10 Village**	1000	25,000	2,50,00,000
2	**Solar at Public places**			
2.1	Gram Panchayat building – 5 KW	5	5,00,000	25,00,000
2.2	School building - 5 KW	10	5,00,000	50,00,000
2.3	Anganwadi – 3 KW	10	3,00,000	30,00,000
2.4	Community hall- 3KW	2	3,00,000	6,00,000
2.5	Religious places - 3 KW	5	3,00,000	15,00,000
2.6	Hospital building - 5 KW	0	5,00,000	0
2.7	Water supply- 5 HP	4	3,75,000	15,00,000
2.8	Disaster hall- 10 KW	1	10,00,000	10,00,000
	Total Cost			**4,01,00,000**

A total cost for making these villages transition to solar energy will cost Rupees **4,01,00,000.**

6.6 Smokeless Crematorium

Sr No.	Details	Unit	Price (Rs.)	Total Cost (Rs.)
1	Furnace at Crematorium	5	45,000	2,25,000
2	Crematorium operation in Gasifier system	3	1,00,00,000	3,00,00,000
	Total Cost			**3,02,25,000**

A total cost for developing **8** Smokeless Crematorium cost Rupees **3,02,25,000**.

6.7 Smokeless stove for households

Sr No.	Details	Unit	Price (Rs.)	Total Cost (Rs.)
1	Smokeless stove for kitchen	2000	2,500	50,00,000
	Total Cost			**50,00,000**

A total cost for distributing 2000 smokeless to households will cost Rupees **50,00,000**.

Overall, the CER activities will cost Rupees 31,66,22,500 (31.66 crore).

7 CSR PLANNING

Based on the need assessment of the ten villages in Vagra, Corporate Social Responsibility (CSR) budget can be allotted to following activities:

7.1 Natural and Man-Made Disaster

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	Disaster hall development	1	10,00,000	1	10,00,000
2	Disaster support equipment	10	1,00,000	1	10,00,000
3	Training and awareness program	10	10,000	2	2,00,000
	Total Cost				**22,00,000**

A total cost for enhanced resilience for natural and man-made disaster in these villages will cost Rupees **22,00,000.**

7.2 Transportation and Connectivity

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	**Internet Connection**				
1.1	Gram Panchayat	4	10,000	1	40,000
1.2	Community Hall	2	10,000	1	20,000
1.3	School	5	10,000	1	50,000
1.5	Health centre	2	10,000	1	20,000
2	**E- Rickshaw Project through SHG's**	20	2,50,000	1	50,00,000
	Total Cost				**51,30,000**

A total cost for improving accessibility of these villages through improved transportation will cost Rupees **51,30,000.**

7.3 Health

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	**Ambulance Service in 10 village**	2	50,000	12	12,00,000
2	**Mobile Health Van in 10 village**	1	2,00,000	12	24,00,000
3	**Health Centre Taluka Level/ Laboratory / X-ray Machine**	1	5,00,000	12	60,00,000
4	**Support in Government Health Clinic**				
4.1	Equipment	5	5,00,000	1	25,00,000
4.2	Building Repairing	1	2,00,000	1	2,00,000
4.5	Support Staff	5	30,000	12	18,00,000
5	**Malnourishment Training and Awareness Programme**	10	20,000	4	8,00,000
6	**Adolescent Educational Training and Awareness Programme**	10	10,000	4	4,00,000
7	**HIV Training and Awareness Programme**	10	10,000	2	2,00,000
8	**Health Camp**	3	2,00,000	2	12,00,000
9	**Training and Capacity Building Programme for Asha Workers**	10	15,000	12	18,00,000
	Total Cost				**1,85,00,000**

A total cost for improving health infrastructure will cost Rupees **1,85,00,000.**

7.4 Education

7.4.1 Aanganwadi

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	Building repairing	1	3,00,000	1	3,00,000
2	Compound wall repairing/ rebuilding	5	2,00,000	1	10,00,000
3	Kitchen equipment	16	50,000	1	8,00,000
4	Play equipment	16	25,000	1	4,00,000
5	Educational material	16	25,000	1	4,00,000
6	BALA Painting	16	50,000	1	8,00,000
7	Support staff	10	15,000	12	18,00,000
8	Internet facility	16	5,000	1	80,000
	Total Cost				**55,80,000**

A total cost for infrastructure and human resource of the Aanganwadi will cost Rupees **55,80,000.**

7.4.2 School

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	**School**				
1.1	Support staff	28	20,000	12	67,20,000
1.2	Library	1	5,00,000	1	5,00,000
1.3	Mid-day meal dome	5	2,00,000	1	10,00,000
1.4	Computer lab	2	10,00,000	1	20,00,000
1.5	Internet facility	5	5,000	1	25,000
1.6	Sports equipment	2	50,000	1	1,00,000
2	**Scholarship Program for Orphan and single Parent's Children**	92	3,000	12	33,12,000
3	**Distribution of School KIT**				
3.1	School Bag	3912	500	1	19,56,000
3.2	Stationary/ Books	3912	1,000	1	39,12,000
3.3	School Dress	3912	1,000	1	39,12,000
4	**Support Program for Dropout Students**	10	20,000	1	2,00,000
5	**Teachers' capacity building**	10	20,000	3	6,00,000
6	**School Van For higher education**	5	40,000	12	24,00,000
7	**Medicinal garden for education**	5	1,00,000	1	5,00,000
8	**Programs To Increase quality of education**				
8.1	PT (Sports)	10	10,000	12	12,00,000
8.2	Computer education	10	10,000	12	12,00,000
8.3	English	10	10,000	12	12,00,000
8.4	Maths	10	10,000	12	12,00,000
8.5	Science	10	10,000	12	12,00,000
8.6	Environment	10	10,000	4	4,00,000
8.7	Self defence	10	10,000	4	4,00,000
	Total Cost				**3,39,37,000**

A total cost for improving School infrastructure will cost Rupees **3,39,37,000.**

7.5 Differently Abled Persons

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	Certificate of disability	12	10,000	1	1,20,000
2	Supporting Document	12	10,000	1	1,20,000
3	Linkage to Government scheme	59	10,000	1	5,90,000
4	Financial Support for Treatment	63	1,00,000	1	63,00,000
5	Supporting equipment	37	10,000	1	3,70,000
6	Support Program for livelihood	17	1,00,000	1	17,00,000
	Total Cost				**92,00,000**

A total cost for providing support for differently abled persons in these villages will cost Rupees **92,00,000.**

7.6 Sports

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	**Development of Playground**	3	5,00,000	1	15,00,000
2	**Sports equipment**	10	50,000	1	5,00,000
3	**Sports Program**				
3.1	Support To Youth for Olympic level	10	1,00,000	1	10,00,000
3.2	Support To School for State level Program	10	1,00,000	1	10,00,000
4	**Tournament**				
4.1	School Tournament	1	5,00,000	1	5,00,000
4.2	Youth Tournament	1	5,00,000	1	5,00,000
4.3	Sponsorship Tournament	1	10,00,000	1	10,00,000
4.4	Women Tournament	1	5,00,000	1	5,00,000
	Total Cost				**65,00,000**

A total cost for providing support to sports activity in these villages will cost Rupees **65,00,000.**

7.7 Women Empowerment

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	SHG's Programme For women	40	1,000	12	4,80,000
2	SHG's Programme for Girls (Kishori)	20	1,000	12	2,40,000
3	Awareness Program for women	40	2,000	6	4,80,000
4	Livelihood Program for women	100	2,000	2	4,00,000
5	Self-defence Programme for Girls	100	500	2	1,00,000
6	Mahila Nyay Kendra	1	20,000	12	2,40,000
7	Single women Supporting program	500	10,000	1	50,00,000
	Total Cost				**69,40,000**

A total cost for women empowerment and safety initiative in these villages will cost Rupees **69,40,000.**

7.8 Infrastructure Facilities

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	Rainwater drainage	10	10,00,000	1	1,00,00,000
2	Gaushala	1	5,00,000	1	5,00,000
3	Village Garden	6	5,00,000	1	30,00,000
4	School Playground (Secondary School)	8	2,00,000	1	16,00,000
5	Common Library	4	2,00,000	1	8,00,000
6	Milk Cooperative Building	4	5,00,000	1	20,00,000
7	Village Inner Road maintenance	5	8,00,000	1	40,00,000
8	Roads connecting other villages maintenance	5	10,00,000	1	50,00,000
9	Small bridges	6	5,00,000	1	30,00,000
10	Community Hall maintenance and new	3	10,00,000	1	30,00,000
11	Rural housing (Aawas Yojana) Number of family	360	3,00,000	1	10,80,00,000
12	De-addiction Rehabilitation Centre	10	1,00,000	1	10,00,000
13	Crematorium maintenance	5	1,00,000	1	5,00,000
	Total Cost				**14,24,00,000**

A total cost for enhanced infrastructure in these villages will cost Rupees **14,24,00,000.**

7.9 Institutional Infrastructure

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	**Financial Support Program**				
1.1	Gram panchayat	3	10000	12	3,60,000
1.2	Water Committee	5	10000	12	6,00,000
1.3	Religious organisation	6	20000	1	1,20,000
1.4	Youth organisation	5	50000	1	2,50,000
2	**Training and Capacity Building**				
2.1	Gram panchayat	3	20000	4	2,40,000
2.2	Water Committee	5	15000	4	3,00,000
2.3	Religious organization	3	10000	1	30,000
2.4	Youth organisation	8	10000	4	3,20,000
	Total Cost				**22,20,000**

A total cost for building institutional infrastructure in these villages will cost Rupees **22,20,000.**

7.10 Livelihood

7.10.1 Employment

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	**Skill development Centre for Technical education**				
1.1	Infrastructure	1	5,00,000	1	5,00,000
1.2	Education/ training	1	2,00,000	12	24,00,000
1.3	Management	1	50,000	12	6,00,000
2	**Skill development centre for cottage industry**				
2.1	Education/ training	10	2,00,000	2	40,00,000
2.2	Management	10	50,000	2	10,00,000
3	**Employment camp**	10	25,000	2	5,00,000
	Total Cost				**90,00,000**

A total cost for improving livelihood opportunities in these villages will cost Rupees **90,00,000.**

7.10.2 Animal Husbandry

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	Animal health check-up camp	2	50,000	2	2,00,000
2	Animal vaccination camp	2	50,000	1	1,00,000
3	Veterinary clinic	1	1,50,000	12	18,00,000
4	Animal breeding program	1	50,000	1	50,000
	Total Cost				**21,50,000**

A total cost for improving animal husbandry in these villages will cost Rupees **21,50,000.**

7.10.3 Fisheries

Sr No.	Details	Unit	Price (Rs.)	Time (Month)	Total Cost (Rs.)
1	Support for equipment	300	2000	1	6,00,000
2	Support for licence and documents	300	1000	1	3,00,000
3	Support to fisheries co-operative	1	25000	12	3,00,000
4	Training and financial support	9	25000	4	9,00,000
5	Linkage to Government scheme	9	20000	1	1,80,000
6	Support to market linkage	9	50000	1	4,50,000
	Total Cost				**27,30,000**

A total cost for improving fisheries in these villages will cost Rupees **27,30,000.**

Overall, the CSR activities will cost Rupees 24,64,87,000 (24.65 crore).

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