

**Draft Report on SIA Study for
Acquisition of 15.244 acres of
Private Land from Village
Bindhana under Jajpur Tahasil of
Jajpur District for "Construction
of In-stream Barrage across the
River Baitarani near
Saptamatruka Temple (Left Arm)
(ToR 55-00001)"**

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Abbreviation

BG	Broad Gauge
BPL	Below Poverty Line
CHC	Community Health Centre
CPR	Common Property Resource
CSR	Corporate Social Responsibility
EMP	Environmental Management Plan
FGD	Focus Group Discussion
GP	Gram Panchayat
HH	House Hold
ITI	Industrial Training Institute
NCDS	Nabakrushna Chowdhury Centre for Development Studies
NTFP	Non-Timber Forest Produce
OBC	Other Backward Caste
PAF	Project Affected Family
PAP	Project Affected People
PHC	Primary Health Centre
PRA	Participatory Rural Appraisal
RFTLAR&R	Right to Fair Compensation & Transparency in Land Acquisition, Rehabilitation & Resettlement
RICOR	Research & Information Centre for Orissa
ROR	Record of Right
SC	Scheduled Caste
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
SSI	Semi Structured Interviews
ST	Scheduled Tribe
WHH	Women Headed Household

Executive Summary

1. Name of the Project : "Construction of In-stream Barrage across the River Baitarani (Left Arm) near Saptamatruka temple".

2. Public Purpose of Project:

This project shall provide irrigation facility to about 2000 ha of land at Jajpur and Bhadrakh district. It will supply irrigation to 1500 ha as lift ayacut independently and 500 ha by lift under Panasa Megalift Scheme. This will also augment supply of drinking water to the nearby villages for a population of about 43000 people in Jajpur Town. There is also a long standing demand of the local people for integrated of In-stream storage structure across both left and right branches of river Baitarani near Saptamatruka Temple.

This is undoubtedly for public purpose as the project is for the general benefits of the public like better irrigation facilities by the way of retrieving water logging problem and also escape from the flood. Taking into account the totality of the present case of land acquisition for the said project, we come to the conclusion that the purpose is public and there can be no hesitation to declare the purpose as public purpose.

3. Project Location

The proposed project's name is "**Construction of In-stream Barrage across the River Baitarani (Left Arm)**" will be located near Saptamatruka Temple of Jajpur for which required private land will be acquired from village Bindhana under Jajpur Tehsil of Jajpur district.

4. Area of the Project

As per 4(1) notification issued by the Revenue & Disasters Management department, Govt. of Odisha), the total area of 15.244 acre private land required to be acquired is around 10 acres including

5. Alternatives Considered

Enough care has been taken to design the project for construction of **In-stream Barrage across the River Baitarani at Saptamatruka Temple (Left Arm)**" with bare minimum land acquisition, for less adverse impact of the project. Apart from this, noise and environmental pollution etc. would not increase much. Around 15.244 acre of private land is

required to be acquired from village Bindhana of Jajpur Tehsil under Jajpur district for the proposed project. Further, the project does not warrant any displacement. In view of this, searching of alternative sites is not considered necessary.

6. Social Impacts Assessment

The proposed acquisition of 15.244 acres of private land from the village of Bindhana in Jajpur Tehsil, Jajpur District, for the construction of an in-stream barrage across the River Baitarani near the Saptamatruka Temple will have notable social impacts on the local community. Key social impacts identified are as follows:

(a) Land Utilization Pattern: The majority of the private land to be acquired for the proposed project is agricultural, with a smaller portion consisting of residential, barren, or commercial land. Table 3.2 presents the land-use pattern of the Project Affected Families (PAFs) in the village of Bindhan, under the Jajpur tehsil. Upon examination, it is observed that out of the total 64.26 acres of land owned by the PAFs, 34.31 acres (53.40%) is agricultural land. Only 3.35 acres (5.21%) is used for residential purposes, and 0.78 acre (1.21%) is classified as orchard land. Additionally, 25.82 acres (40.18%) of the land is identified as barren or unused. Of the total land owned by PAFs, only 15.244 acres (23.72%) will be acquired for the implementation of the proposed project.

(b) Loss of Land of SC/ST Families: Due to construction of the proposed project, only 1 SC family will be affected for land acquisition. Only 0.08 acres (0.52%) of their total land area will be acquired, which a very small fraction of their total land is holding. Therefore, agricultural activities do not affect their livelihood much. However, the reduction of their landlessness may weaken their social status, as land is considered an important asset during times of distress.

(c) Sharecroppers and Agricultural Laborers:

The acquisition of 15.244 acres of private land in Bindhana village for the construction of the in-stream barrage will significantly affect sharecroppers who rely on these lands for their livelihoods. Although they do not hold legal ownership of the land, sharecroppers depend on the agricultural output for their income and sustenance.

(d) Livelihood: Wage labour in the farm sector is not the major source of livelihoods in case of most of the PAFs. However, direct wage employment opportunities during the implementation stage of the project cannot be ruled out. The project

after implementation will facilitate increased economic activities and create many employment opportunities including ancillary business activities for the local people.

Besides above, following social impacts are examined.

- **Displacement and Loss of Livelihoods:** A number of families dependent on agricultural activities on the acquired land will experience loss of livelihood. Agriculture is the primary source of income for many households in Bindhana, and the acquisition will lead to disruptions in farming activities, directly impacting their economic stability.
- **Impact on Vulnerable Groups:** Vulnerable groups, including marginalized communities, women-headed households, and landless laborers, will be disproportionately affected by the loss of income sources and land. These groups often have fewer coping mechanisms and resources to withstand such shocks.
- **Environmental and Health Concerns:** The construction activities associated with the barrage could lead to air and noise pollution, as well as water contamination during the construction phase, affecting the local population's health and well-being. Moreover, alterations in the natural flow of the river could impact local ecosystems, which many people depend on for fishing and related activities.
- **Social Cohesion and Migration:** The loss of land and livelihood opportunities may force affected families to migrate in search of employment, potentially leading to changes in the social fabric of the community. Migration, especially of youth, could also impact family structures and community support systems.

7. Mitigation Measures

To minimize and address the social impacts identified above, several mitigation measures have been proposed. These measures aim to safeguard the livelihoods, health, and well-being of the affected population while ensuring minimal disruption to local culture and the environment:

- **Resettlement and Compensation:** Adequate compensation should be provided for the loss of land and livelihoods, ensuring that the market value of land and assets is assessed accurately and transparently. In cases where displacement is unavoidable, resettlement plans must prioritize the provision of land or employment alternatives to affected households.
- **Livelihood Restoration Programs:** Affected families, especially vulnerable groups, should be provided with skill development programs, alternative livelihood opportunities, and access to financial assistance to ensure a sustainable source of income post-acquisition. This may include training in non-agricultural trades, micro-financing for small businesses, and support for women in income-generating activities.

- **Environmental Management and Health Safeguards:** To mitigate environmental and health concerns, construction activities must be planned and executed with strict environmental standards. Air and noise pollution controls, water quality monitoring, and the provision of healthcare services during the construction phase will reduce health risks. Efforts to restore or compensate for ecosystem services affected by the barrage should also be implemented.
- **Monitoring and Evaluation:** An independent monitoring and evaluation committee should be set up to oversee the implementation of mitigation measures. Regular assessments of social impacts during both the construction and operational phases of the barrage will help in identifying and addressing any unforeseen issues swiftly.

These measures aim to ensure that the acquisition of land for the in-stream barrage does not unduly burden the affected population and that the benefits of the project are shared equitably with the local community.

8. Legal Framework

Social Impact Management Plan (SIMP) was prepared as part of the SIA study in accordance with the existing policies, laws and guidelines of the government (RTFCTLARR Act, 2013 of the Government of India and Odisha Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2016). Compensation has been suggested in such a way that the affected households ultimately gain and their living standard improves.

9. Land Assessment

Land acquisition is going to inflict pain on those who lose land, it is more if one loses a substantial portion of cultivated land as it affects his/her livelihoods. It was found that 38 HHs in the villages under Jajpur NAC/Tahasil of Jajpur district are to be affected as they will lose 15.244 ac. out of 64.260 ac. land owned by them. Only a strip of land along the existing project will be acquired which does not come under scheduled area.

10. Socio-Economic Profile

Besides directly affecting the land losing households, the proposed project will interfere with the day to day life of others in these villages. The project affected tahasil have 36898 households with a population of 168063 of which 82084 are females and 859779 are males with a sex ratio of 955 (females per thousand males) and the sex ratio of 0-6 years population is 919. The average family size in this tahasil is 4.55.

Out of these, 38 HHs with a population of 208 are going to be affected by the proposed project. Of 208 Project Affected Persons (PAPs), working age group of 18 to 60 years is 146 (70.19%) of total PAPs. Married persons outnumber unmarried persons in the surveyed village i.e. 69.23% of total PAPs.

11. Education

It is observed that out of a total population of 208 project-affected people, 6 (2.88%) were found as illiterate. Of 97.11% literate, 14.40% have read up to primary class, 17.80% up to secondary level, 16.80% up to Intermediate, 24% up to graduation and above, and 26.97% have received technical education. The educational level of project affected families is better than the overall educational level of the district as a whole.

12. Livelihood

The primary sources of livelihood for individuals from the project-affected families shows that out of a total of 208 project-affected persons (PAPs), 94 (45.19%) have main occupations. The largest group consists of daily-wage earners, with 24 individuals (25.53%). Salary-based employment is reported as the principal occupation for 12 PAPs, accounting for 12.77% of the total. Additionally, 14 PAPs (14.89%) derive their income from business. Only 9 PAPs (9.57%) are engaged as craft artisans, and another 9 (9.57%) work as agricultural laborers. The table also shows that 12 individuals earn their livelihood through professional activities, primarily as priests. Lastly, only 1 PAP is found to be engaged in subsidiary occupations.

13 Family Income & Expenditure

Income is the key indicator of a household's socio-economic status. The overall quality of life of a household depends on its income. The average monthly and annual incomes of project affected households are 5236.06 and Rs. 62,865.38 only respectively.

It is observed that a PAF spends Rs.2801.00 in a month on an average against an average annual income of Rs.5236.06-. Monthly average family expenditure of the PAFs in the project affected village has been presented in the report, which implies that the average annual expenditure of a household is Rs. 62865.38.

14. Health

The expenditure of the PAFs on healthcare is not substantial mostly because they do not suffer from serious health problem. Of the total PAFs, about 80.28% reported to have health problems and all of them have been treated at institutional health centres. All the sick were

treated in government hospitals/PHC/CHC. There were 8 mortality has taken place among the PAFs during last year.

15. Vulnerability

It is noticed that there are total 7 PAFs under Vulnerable Groups in the project affected village and all are belonging to Women Headed Household (WHH).

16. Land Utilisation

The net sown area of the project affected Tehsil is 8162 ha. and Land put to non-agricultural use is 3893 ha. Land of Cultivable waste land is 1888 ha. and extent of Old fallows land is 1416 ha & Current fallows land is 1822 ha.

17. Perception of PAFs

Of the total 38 PAFs, 65.79% feel that the project will affect them positively, 26.32% disagree with them and 14.08% had no opinion. The positive impacts are increase in business and scope for employment. The negative impacts stated by the later group are increased accidents, environmental pollution, noise and vibration, and occupational health hazards. Majority of PAFs (71.84%) expect that the project will benefit the region. Majority of the PAFs have expressed that their kinship structure will be affected with increase in crime in the area and family violence after project implementation due to alcoholism and other factors. The extra money received as compensation will not add to their stress.

During construction phase of the project, increased effluents and solid waste materials including polythene, there will be health risk as expressed by more than 50.00% of PAFs. However, 63.16% PAFs opined that health related expenditure would go up.

As expressed by majority of PAFs, business opportunities in the area is likely to open up due to quick transport facilities and movement of goods after project implementation. It is likely that self-owned business will increase in the area.

18. Awareness and Support

The villagers were found to be aware of the project. They were of the view that individuals would benefit from the project by way of land compensation, employment and better business opportunity. Almost all support the project and are willing to part with their land for it and spare water during construction of the project. They expect employment in the project through skill up-gradation and higher compensation.

19. Critical Issues

Environmental problems like air, water and noise pollution associated with construction and implementation of the project is very critical from both short-term and long-term perspective. In addition, felling of trees will disturb the eco- system and bio-diversity in the locality. Social disturbances due to increased addiction to intoxicants may aggravate the situation.

20. Social Impact Management Plan (SIMP)

An attempt has been made to make the Social Impact Management Plan (SIMP) flexible such that it can adapt itself to the changing environment for being relevant throughout the project life.

The proposed project in Jajpur district requires 15.244 acres of private land to be acquired on payment of compensation. Compensations for land acquisition are to be made as per the relevant Acts and Rules while taking care of losses of PAFs as well as PAPs and addressing the social issues. Various mitigation measures and a tentative estimate of outlays have been incorporated in the SIMP.

21. Social Measures

- Any dispute between the stakeholders should be resolved and it should be ensured that compensation is given to the legal owner.
- Municipality should be helped to prepare programmes for meaningful and productive participation of the elderly in village life so that they don't feel left out and unwanted during the project implementation period and thereafter.
- Excess land acquired for the project, if any, should be handed over to the original land owner.
- Effort should be made for up-liftment of women and marginalized sections of the community by ensuring their participation in decision making and enhancing their traditional skills / developing new skills.
- Project affected persons have requested for compensation at 4 times the market value about Rs.2,00,000 per dec. and job for their family members.

22. Outlay for SIMP Implementation

An outlay plan has been prepared on the basis of SIMP outlined above and presented below. It is a tentative plan as compensation against land loss is to be decided by the Authorities concerned as per Act and Rules.

Sl. No	Description	Unit	Quantity	Rate (Rs in lakh)	Amount (Rs. in lakh)
1.	Monetary Compensation for loss of land to affected households.	Acre	15.244 Ac	2,00,00,000.00	3048.80
2.	Training for skill development for livelihood restoration.	Person	100 Persons	3000.00	3.00
3.	Compensatory afforestation	Acre	3.00 Ac	1,00,000	3.00
4.	Water & Sanitation	Village	1 Village	L.S.	1.00
5.	Other development works in villages	Village	1 Village	L.S.	2.00
Total					3057.80

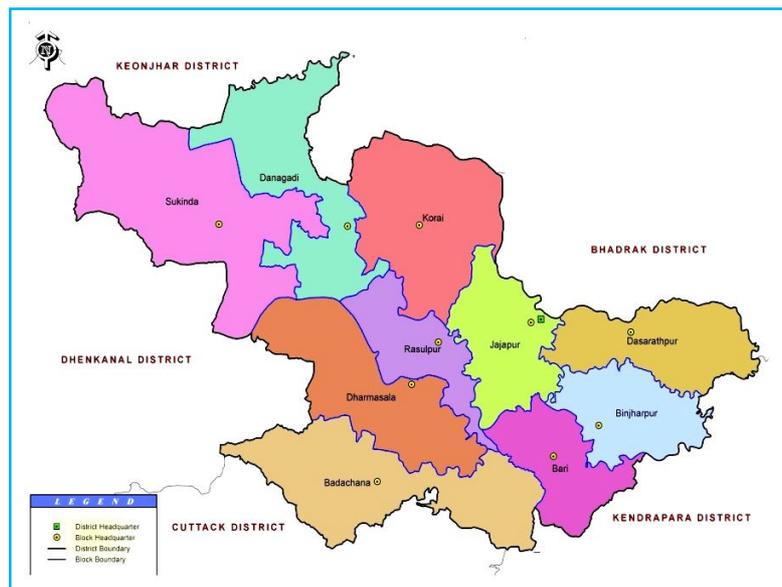
Chapter-1

Description of the Project

1. Introduction and Background of the Project

1.1 Introduction

The Baitarani River, one of the major rivers of Odisha, holds significant importance in the Jajpur district. Originating from the Guptaganga hills in the Keonjhar district, the river traverses through the scenic landscapes of Odisha before reaching Jajpur, plays a vital role in the agricultural and cultural life of the region. The river Baitarani provides essential irrigation to the fertile farmlands in Jajpur, supporting the district's agrarian



economy. The river is also deeply intertwined with local traditions, as Jajpur, an ancient city with rich historical and religious significance, regards the Baitarani as sacred. Its waters contribute not only to sustenance but also to the spiritual and cultural heritage of the region.

Jajpur is a historic place of pilgrimage located at a distance of 120 km from the state capital-Bhubaneswar and 20 km away from NH-5. The district is situated on the right bank of the Baitarani river at longitude 200 - 51' - 22.6"N and Latitude 860 -20' - 15.4"E. Jajpur is honored for the sacred shrine of Goddess Biraja (Saktipitha), Sweta Baraha, Navigaya, Sapta Matruka and a host of other shrines. It is called Biraja Khetra and also known as Baitarani Tirtha. The pilgrims from all over the state visit this place and perform the Sraddha ceremony for the departed ancestors. The decline in the flow of water in the river Baitarani at this place during the non-monsoon period has become a concern in

the recent past. However, the district often experiences severe flooding, especially during the monsoon season.

1.2 Project Background

The Baitarani River is a crucial waterway in the region, historically shaping the development of local civilization and serving as a lifeline for agriculture and livelihoods. However, frequent flooding during the monsoon season has long been a challenge for the district, causing widespread damage to crops, infrastructure, and displacing communities. The proposed project is about construction of an in-stream barrage across the left branch of the River Baitarani near the Saptamatruka Temple in the Jajpur district of Odisha. The Saptamatruka Temple, a significant cultural and religious site, adds historical importance to the location.

Besides, there is a strong public demand in the locality to create a water body at Saptamatruka for the purposes of irrigation, drinking water supply to nearby inhabitants, and other purposes during non-monsoon period. The lands are fertile, so people of the nearby area cultivate massive kharif & rabi crops. Further, the proposed barrage aims to regulate the river's flow, mitigate flooding, enhance irrigation capacity, and ensure water supply for agriculture and other uses, thereby supporting the region's socio-economic development while preserving the natural and cultural heritage of the area.

1.3 Location of the Project

The proposed integrated storage structure across the left branch of Baitarani River is contemplated at Jajpur near Saptamatruka, at longitude $86^{\circ} 20' - 13.74''$ E and Latitude $20^{\circ} 51' - 38.73''$ N. This location is 220 km far from NH-16 and 120 km from State Capital-Bhubaneswar. The nearest Railway Station is J.K.Road which is about 30 km away from the site.

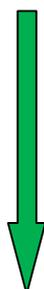




Fig.1.2: Proposed site construction of In-stream Barrage across River Baitarani near Saptamatruka Temple, Jajpur

1.4. Management Structure

The Superintending Engineer, Irrigation Division, Jajpur has been assigned with the overall responsibility to look after the development and maintenance of the proposed project as per notification No.RDM-LLA-0002-2024-31241/R&DM, dt.11.09.2024 of Department of Revenue & Disasters Management, Govt. of Odisha.

1.5. Rationale and Public Purpose of the Project

1.5.1 Rationale: The construction of an in-stream barrage across the River Baitarani near Saptamatruka Temple in Jajpur district, Odisha, is envisioned to address multiple socio-economic and environmental objectives. The primary rationale behind the project is to enhance water resource management in the region, ensuring the availability of water for irrigation, drinking, and industrial purposes. By regulating the river's flow, the barrage aims to control flooding during the monsoon season and mitigate the adverse effects of droughts during dry periods. Additionally, the project is expected to contribute to groundwater recharge, support local agriculture, and improve livelihoods in the surrounding areas. It also holds potential for promoting eco-tourism, given the cultural significance of the Saptamatruka Temple. Overall, the barrage is designed to foster sustainable development, balancing water needs with environmental conservation.

1.5.2 Public Purpose: This project shall provide irrigation to about 2000 ha of land (1500 ha as lift ayacut independently and 500 ha by lift under Panasa Megalift Scheme) in Jajpur and Bhadrakh districts. Besides, it will also augment supply of drinking water to the nearby villages for a population of about 43000 people in Jajpur Town. This project will also help in controlling flood and would undoubtedly benefit public at large. This will also satisfy a long standing demand of the local people.

Taking into account the totality of the present case of land acquisition for the said project, we have arrived at the conclusion that the purpose is public and there is no hesitation to declare the project as public purpose one.

1.6 Benefits of the project

- **Improved Water Availability:** The barrage will help regulate the flow of the River Baitarani, ensuring a steady supply of water for agricultural, drinking, and industrial purposes in the surrounding regions.
- **Flood Control:** By controlling excess river flow during the monsoon season, the barrage will mitigate the risk of flooding in nearby areas, protecting agricultural land & crops, homes, and infrastructure.
- **Drought Mitigation:** The barrage will help store water during rainy seasons and making it available during dry periods, thus reducing the impact of droughts on agriculture and daily life.
- **Groundwater Recharge:** By increasing water retention, the project will enhance groundwater levels, which are crucial for sustained agricultural practices and drinking water supply.
- **Agricultural Growth:** Reliable irrigation facilities will lead to increased agricultural productivity, supporting the livelihood of farmers and boosting the local economy.
- **Eco-Tourism Development:** The proximity of the barrage to the Saptamatruka Temple can promote tourism, attracting visitors to both the religious site and the natural beauty of the area.
- **Local Employment:** The construction and subsequent maintenance of the barrage will create employment opportunities for local residents, enhancing their economic conditions.
- **Environmental Sustainability:** By regulating river flow and reducing both flooding and drought conditions, the project contributes to better management of natural resources, supporting long-term environmental sustainability.
- **Improved Livelihoods:** With enhanced water availability and improved agricultural prospects, the project will uplift the living standards of the rural population in the region.
- **Boost to Fisheries:** The barrage may support fisheries development by providing a controlled aquatic environment, further diversifying income sources for local communities.

1.7 Details of Project size, Capacity, outputs, Production targets & cost of the project

All information about the size of the project, capacity, outputs and product targets are available in the DPR prepared by the Irrigation Division, Jajpur. However, the total cost of the project is estimated to be Rs.23, 663 lakh as envisaged from the project report prepared by Irrigation Division, Jajpur.

1.8 Examination of alternatives

Enough care has been taken to design the project for construction of **In-stream Barrage across the River Baitarani at Saptamatruka Temple (Left Arm)**” with bare minimum land acquisition, less adverse impact like noise and environmental pollution etc on people in the locality. Around 15.244 acre of private land is required to be acquired from village Bindhana of Jajpur Tehsil under Jajpur district for

the proposed project. Further, the project does not warrant any displacement. In view of this, searching of alternative sites is not considered necessary.

1.9 Phases of project construction

As stated in para-4 above, information are available in the DPR prepared by Irrigation Division, Jajpur.

1.9.1 Core design features, size & type of facilities

As stated in para-4 above, information are available in the DPR prepared by Irrigation Division, Jajpur.

1.9.2 Need for ancillary infrastructural facilities

As stated in para-4 above, information are available in the DPR prepared by Irrigation Division, Jajpur.

1.9.3 Work force requirements:

- a) **Temporary, b) Permanent.**

As stated in para-4 above, information are available in the DPR prepared by Irrigation Division, Jajpur.

1.9.4 Details of SIA or EIA if already conducted

No SIA or EIA study has been conducted earlier. Technical feasibility report was available in the DPR available at Irrigation Division, Jajpur.

Only reference available is the letter issued by the Collector and District Magistrate, Jajpur, in which it is mentioned that about 39 families are likely to be affected due to land acquisition from the village Bindhana in Jajpur Tehsil of Jajpur district. Accordingly, Social Impact Assessment (SIA) study of the said project has been undertaken.

1.10 Applicable Legislations and Policies

Acquisition of Land is a necessary concomitant of an infrastructure project like construction of an in-stream barrage. The land losers and displaced households bear the brunt of adverse livelihoods and dislocation.

Under the **National R & R Policy**, SIA study has become obligatory prior to the commencement of a new project or expansion of an existing one. It has become a part of the planning and approval process

of a development project. The RFCTLARR Act, 2013 stipulates that the affected persons should be so protected that their entitlements in the post-project implementation period would be no less than that prior to implementation of the project. Hence, a social impact assessment study was carried out. Land acquisition by government is guided by the following laws and regulations of the country.

The Act Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013)” came into force on January 1, 2014 by replacing the earlier Land Acquisition Act of 1894. The Law is designed to regulate land acquisition by the Central and State Governments except J & K for industrialization, development of essential infrastructural facilities and urbanization. The Act also has laid down the rules governing grant of compensation to the affected persons and their rehabilitation and resettlement.

The provisions of the Act are as follows:

- The land losers due to land acquisition are to be given fair compensation.
- The process of land acquisition should be transparent.
- Adequate provisions are to be made for rehabilitation of the persons displaced on account of land acquisition.
- It is to be ensured that the disturbance caused to the affected families is the least.
- Local self-governments including Gram Sabhas are to be consulted in the process of land acquisition.
- The mitigation plan is to be prepared in such a manner that the affected persons become partners in the post-acquisition development process of the region.
- Consent of at least 70% of people affected by land acquisition for Public Private Partnership (PPP) projects and 80% of affected people in case of private companies is mandatory.

Chapter-2

Team Composition, Approach, Methodology and Schedule of the SIA

2.1 Introduction

This chapter illustrates the approach and methodology adopted for undertaking the social impact assessment and gives an overview of the SIA unit and activity schedule of the study. The aim of SIA is to ensure that all stakeholders interested in a proposed project including project beneficiaries and the general public in the vicinity of the proposed project be identified and their opinion considered during project planning, design, construction, operation and decommission phase.

In order to carry out a detailed analysis of socio-economic data to present a background to the construction of the project, the team collected and analyzed secondary and primary data. Using data from two sources allows data analysis and precise identification of effect sizes. Next, there is molecular level information collected from secondary sources and finally, primary data collected through surveys, consultations and interviews are presented.

2.2 The SIA Team

A study team (Table-2.1) comprising professionals with previous experience in socio-economic studies was constituted for the purpose.

Sl. No.	Position	Name	Qualification	Responsibility
1	Project Director/ Team Leader	Dr.A.K.Behera	Ph.D (Management)	Overall supervision, collection of secondary data, stakeholder consultation, data interpretation and report preparation
2	Addl. Project Director	Sri B.Maharana	M.Sc(Ag)	Assisting PD in the process of carrying out the assignment, designing of questionnaire & their field testing, Facilitating FGD/PRA in villages, data validation
3	Addl. Project Director	Sri Pradeep Ku. Paikray	M.Tech.	
4	Supervisor / Field Coordinator	Sri Satyabrata Behera//Santosh Kumar Pradhan	M.Sc	Co-ordination of field work, FGD, data validation, assisting in report preparation
5	Field Investigator	Sri Ramakant Mishra	BA	Data collection from fields, PRA, FGD, stakeholder consultation
6	-do-	Sri Sunil Kr Behera	BA	
7	-do-	Ms. Ankita Bhabani	M.Com	
8	Computer Operator	Ms Monali Manideepa Das	MBA	Data entry, data analysis, and typing of report
9	-do-	Sri Bhudev Pattnaik	BA	

The present SIA was conducted in Bindhana village of Jajpur Tehsil of Jajpur district to assess social impact with respect to the land acquisition for construction of the proposed project “**Construction of In-stream Barrage across the River Baitarani near Saptamatruka Temple (Left Arm), Jajpur**”. The SIA team assessed the information on the impacts on social, cultural, economic and health of these development activities that influence the living conditions of the affected people with a focus on understanding the social dynamics both directly and indirectly. The mixed method approach was used to assess both qualitative and quantitative data during the Social Impact Assessment (SIA) study.

2.3. Methodology and Tools used to collect information for the SIA

2.3.1 Approach

Social impact assessment involves knowledge of the present situation as well as likely changes to be brought about by implementation of the proposed project. Since implementation of the project involves land acquisition and displacement of people, a Resettlement Action Plan is in order. The study is based on both secondary and primary data collected through census household survey, community level survey by using participatory techniques and desktop exercises. Secondary data were helpful in validating the findings at the field level.

The study provides the following information:

- Baseline data on socio-economic condition of the people (affected and Non affected) in the project area;
- Potential impact of the project on both affected and non affected people;
- Perceptions of the affected and non affected people about the impact of the project;
- Potential mitigation measures to minimize the adverse impact;
- Institutional capacity to implement mitigation measures.

2.3.2 Methodology

The methodology has been outlined keeping in view the objectives and scope of the study and provisions of law. The following steps have been followed (fig 2.1).

2.4 Sampling Methodology Used

2.4.1 Schedules of the SIA

For collection of required data, the following questionnaires / formats were designed and finalised in consultation with NCDS.

1. Questionnaire for household data
2. Format-I: For data on General Infrastructure
3. Format-II: For data on Socio-economic & Cultural Infrastructures
4. Format-III: For Focus Group Discussion

Here is given one figure relating to the steps of Methodology.



Fig.-2.1 – Steps of Methodology

Household survey was undertaken in 38 HHs consisting 208 family members in the village Bindhan of Jajpur tehsil. Apart from this, a sample survey of 10 non-affected families was made. In addition to HH survey, PRA tools like resource mapping, FGD, Key Informants Interview (KII), and Semi

Structured Interviews (SSI) were also used to get the response of the PAPs on resettlement, rehabilitation and compensation as per prevailing Act.

2.4.2 Tools for data collection

A mix of qualitative and quantitative methods was used for the SIA study. These methods helped in understanding the profile of the village, socio-economic profile of PAFs, the potential impacts of the proposed project and mitigation measures that can be adopted to minimize the negative impacts of the project. The following methods and tools were adopted for the SIA study:

- **Surveys and Questionnaires:** Design structured surveys or questionnaires to gather quantitative data from individuals or communities affected by the project. These can be administered in person, via phone interviews, or online.
- **Interviews:** Conduct qualitative interviews with stakeholders, including project beneficiaries, local leaders, government officials, and experts. These interviews provide in-depth insights into the social impacts of the project.
- **Focus Group Discussions (FGDs):** Organize FGDs with groups of stakeholders to facilitate discussions on specific topics related to the project's social impact. FGDs encourage interaction and uncover diverse perspectives.
- **Document Review:** Analyze existing documents such as project reports, environmental impact assessments, community profiles, and government records to understand the context and potential social impacts.
- **Mapping and Geographic Information Systems (GIS):** Used GIS technology to map out project areas, demographics, and resources. Spatial analysis helps visualize the distribution of social impacts and identify vulnerable populations.
- **Key Informant Interviews:** Identified and interviewed key informants such as community leaders, NGOs, or academics who have specialized knowledge on the project's social impact.
- **Participatory Methods:** Participatory Rural Appraisal (PRA) methodology was followed to identify and assess social life conditions, problems and opportunities of stakeholders.

2.5 Overview of Information or Data sources used

The design, tools used and methods followed for the study have been described above and they appear to be in line with the earlier works. Field level difficulties stood in the way of perfecting the work. Special efforts were made by the study team to overcome these problems; but still there remained something to be desired. The limitations of the study are the following:

- Incomplete documentation: Some affected respondents could not be contacted as their families had moved to distant places leaving no contact information and their houses were locked. Repeated visits to these houses by the members of the survey team were of no avail.
- Collection of data from the owners of tenanted houses was difficult as the tenants were hesitant to share information about them.
- The actual impact may be at variance with the potential ones as the real world cannot be correctly anticipated.
- Comprehensive secondary data were not available to cross-check primary data collected from the field. Hence, the possibility of marginal errors in analysis and interpretation cannot be ruled out.
- The land information collected is old. There may be changes over the time. Hence, certain variation in the records is anticipated.

In spite of all these, every effort has been made for making the study realistic as far as possible.

The following activities were carried out for preparation of the SIA report.

(a) Desk Research and Reconnaissance Survey

Desk research was conducted to review relevant documents, RORs, reports, project area baseline information, legal policies, institutional framework governing the proposed project, etc. Census Data of 2011 were also used to triangulate the field data.

(b) Data Collection

The study envisaged collection of both secondary and primary data about the socio-economic condition of project affected and unaffected people.

(i) Primary Data

The sources of primary data included field visits, household survey, Focus Group Discussions (FGDs), PRAs and interviews with key informants / stakeholders. Primary data were collected through door-to-door census survey of both project affected and sample non-affected households using structured questionnaires to elicit information about their livelihood status, socio-economic profile, general infrastructure and socio-economic status of villages in the area. Besides, Focus Group Discussions (FGDs) were organized to capture the response of the PAFs/PAPs and non-affected families about the possible impact of the project, losses of assets and infrastructure including compensation package, etc. Key informants, field level government functionaries of line departments and other local people also were interviewed.

Four separate sets of questionnaires / schedules were used;

- Household questionnaires
- General Information schedule
- Social and cultural information schedule
- Format for Focus Group Discussions

The questionnaires were prepared in consultation with the State SIA Unit and in compliance with RFTLARR Act 2013 and Odisha RFTLARR Rules 2016.

(ii) Secondary Data

The sources of secondary data were reports about the project and areas affected by it. Information was also garnered through internet and web-pages. The other sources of information were Census Reports, relevant records of Odisha Government etc. The documents required for collection of secondary data included (i) land schedule, (ii) demography of the project affected villages, (iii) map of the project area and project details, (iii) relevant Acts and policy guidelines, (iv) District Statistical Handbook, and (v) other study reports.

(c) Site Visits and Information Dissemination:

Identification of the area in village Bindhana under Jajpur Tehsil of Jajpur district to be impacted by the project was the beginning of this activity. The SIA team procured a map of the district and schedule of land to be acquired for the project. The team undertook initial field visits to explore the project area for an understanding of its geography, topography, social infrastructure, and project affected people and their socio-cultural life. The team consulted different stakeholders in the project area and organized meetings with them to generate awareness about the project.

(d) Baseline Survey through Census Method

Personal interviews were conducted on census basis using structured questionnaire. Well before the commencement of field survey, the questionnaires were pre-tested and field investigators were given necessary training. The questionnaires covered matters relating to identification of project affected persons, their social profile, family details, occupation, source of income, family expenditure and household assets, information on affected structure, commercial / self-employment activities, employment pattern, and views on resettlement and rehabilitation. The questionnaires contained a few open-ended questions like opinions and views of persons.

Data collection in household survey was not restricted to the questions enlisted in the questionnaires. Queries of the affected people were taken care of as far as possible. This helped getting a better insight into the issues, gaining the confidence of the people and facilitating data collection. Field level data were being regularly monitored and cross checked.

Baseline survey was carried out to describe the socio-economic profile of the project affected area and assess impact of the project on the affected families.

(e) Data Compilation and Analysis for Report Writing:

Data collected were consolidated to create a database. The same was subjected to analysis for generalised observations to be used in writing of the draft report.

(f) Social Impact Mitigation and Management Plan (SIMMP) Preparation:

To complete the SIA process, a Social Impact Mitigation and Management Plan (SIMMP) was prepared. Objective of the SIMMP is to minimise hardship of the households in the project affected area and compensate all the affected households for the adverse impact sustained on account of the project. This is a major contribution of the SIA study. The SIMMP will help enhance the standard of living and quality of life of people in the project area.

(g) Public Hearing

As a part of the process, the draft project report in the regional language is prepared and shared with the stakeholders, key persons, opinion leaders, and officials concerned in the affected area. One public hearing is organized in the affected village to obtain people's views about the social impacts of the project and their suggestions to mitigate the potential adverse effects. Various sections of the affected people, including women and underprivileged groups, are involved in the consultation process. During the public hearing, issues relating to land acquisition, compensation, income restoration, employment generation, grievance redressal, safety, and the role of the administration are discussed.

(h) Final Report

The final report is prepared after incorporating the views expressed in the public hearings in the draft report.

2.6 Schedule of consultations with public Representatives and key stakeholders

Discussions and Interviews

Extensive discussions were held with the stakeholders including project affected and un-affected persons, opinion makers and PRI representatives. Interactions at group level were carried out to assess the validity of field level data and have an overview of the situation. These discussions were organized by following qualitative research techniques.

- **Focus Group Discussions (FGDs):**

The participants in the FGD included men, women, youth and vulnerable groups. A typical FGD lasted 2 – 3 hours and comprised 10 – 15 persons. It covered a range of topics relating to the socio-economic impact of the project based on a check list.

- **Key Informant Interviews:**

These interviews were held with the community leaders, professionals, government officials with first-hand knowledge about the community as well as project. These interviews gave a perspective on the likely impact of the project.

Public Hearing

2.7 Introduction

According to RFCTLARR Act, 2013, SIA report is prepared to assess the losses of land losers and affected families of the area due to land acquisition for government projects. This Act provides for public hearing to know the views of the land losers about compensation, rehabilitation and re-settlement. The views of the affected persons on social impact assessment study are obtained during public hearing and are incorporated in the final report. This makes the land acquisition process transparent leaving no occasion for suspicion.

With the operation of the project, the economic, social and physical environment of the area is affected. Traditional economic and social status gets disturbed and environment deteriorates. Appropriate remedial measures are in order for overall development of the project affected area. Views of the general public are important in this connection. They very well know their conveniences and welfare; hence the importance of their views. Scope for this is created at the time of Public hearing.

2.7.1 Objectives of Public Hearing

The main objectives of public hearing are as follows:

- To make the findings of the Social Impact Assessment study transparent and make it known among the affected people.
- To put together the reactions of the affected people on the main findings of SIA study as well as their other views about land acquisition.
- To make the affected people aware of their dues as per RFCTLARR Act, 2013 and in different development projects of the Government.

- To rectify wrong ideas of the affected households and public on land acquisition.
- To analyze the views of project affected people at the time of public hearing and incorporate the same in the SIA Report.

2.7.2 The Process Followed

After preparing the draft report on Social Impact Assessment for "Construction of In-stream Barrage across the river Baitarani (Left Arm) near Saptamatruka Temple" project, by the SIA team of M/s. Research and Information Centre for Orissa (RICOR), Bhubaneswar, the same was submitted to the State SIA Unit, NCDS, Bhubaneswar in both English and Odia version. After examination, the State SIA Unit of NCDS submitted the copies of the reports to the Collector & District Magistrate, Jajpur for distribution of the same among the concerned officials including LAO, Jajpur. The district administration issued notification to all concerns and project affected villagers/families for attending the public hearings at the following venue and time given hereunder. Concerned officials were also informed for making necessary arrangements for public hearing.

Considering above, Jajpur district administration arranged public hearings for the proposed project "Construction of In-stream Barrage across the river Baitarani (Left Arm) near Saptamatruka Temple," in the Jajpur tehsil.

As per the notified schedule public hearing was held as detailed given below;

Date	➔	21.12.2024
Time	➔	10.30 AM
Venue	➔	Municipality Conference Hall, Jajpur
Affected Village	➔	Bindhana

During the public hearings, people were informed about the findings of the SIA report, provisions of RFCTLARR Act, 2013 on compensation to land losers and proposals for overall development of the project affected area. After this, views and demands of the people were invited and were documented along with video recording.

SIA Study for Acquisition of 15.2440 acres of Private Land from Village Bindhana under Jajpur Tahasil of Jajpur District for "Construction of In-stream Barrage across River Baitarani near Saptamatruka Temple (Left Arm)



Public Hearing Meeting held in the Municipality Conference Hall, Jajpur

List of Participants		
Sl. No.	Name	Position/Affiliation
1	Sri Sahebram Baskey	L.A.O (Civil), Jajpur
2	Sri Biswajit Routray	Revenue Inspector., O/o. L.A.O (Civil), Jajpur
3	Sri Khagendra Sahu	Section Officer, Irrigation Division, Jajpur
4	Sri Ramakanta Mishra	RICOR, Bhubaneswar
5	Sri Satyabrata Behera	RICOR, Bhubaneswar
6	60 Inhabitants	From Bindhana village

2.7.3 Findings of Public Hearing

The public hearing started at 10.30 AM. Sri Ramakanta Mishra from RICOR. Sri Mishra welcomed the participants and officials on Dias and presented the main findings of the SIA report.

Later, on the request of Sri. Sahebram Baskey, Land Acquisition Officer, Jajpur, all participants present in the meeting, introduced themselves.

Sri Baskey, L.A.O., Jajpur spoke on the objectives and need for public hearing. He threw light on the legal provisions relating to land acquisition Act. 2013. He also made people aware about their rights and also discussed about the compensation package and its process of release. Then the question answer session commenced.

Questions:

- **Mr. Kartik Chandra Rana, Mr. Durga Charan Samanta, Mr. Trilochan Patra, Sk. Jilani** : They all demanded to identify the affected land properly and wanted to know the current value of the land.
- **Santosh Kumar Mohapatra** : Demanded fair value of the land to be acquired and provision of land in exchange of land.
- **Anup Kumar Sahu** : He wanted to know that when the available land-records are of the year 1928, in whose name is the land now and to whom will the compensation be paid ?
- **Sitaram Dixit**: He said that in 2023 they got compensation by handing over land directly to the Government, which was very less. Is there any possibility of getting more compensation for that land now?
- **Ajay Dixit**: He said that he doesn't have any records or papers related to his land, so he wanted to know how he can get compensation.

Answers:

- **Sri. Sahebram Baskey, Land Acquisition Officer, Jajpur**, explained the provisions of RFCTLARR Act, 2013 and how these provisions were better than those under earlier Land Acquisition Act, 1894. For awareness of project affected families, he informed about their rights, legitimate claims and different compensation packages.

He further reiterated that RICOR, Bhubaneswar was entrusted with the job of SIA study and its investigators have collected information about land ownership, financial and social status of the households in the project affected areas. It was observed that the area and its people would be benefited by the project. The land loser households would receive appropriate compensation as per the new Act. The public hearing is being organized to know and consider views and demands of the people.

He explained the rules for calculation of compensation. It would be (1) market value of land + 12% of the market value + additional value on the basis of distance from the town + value of assets on the land + trees on the plot + 100% of compensation value. Carrying on the discussion, he pointed out that there is no provision for employment on account of land acquisition, but compensation will be paid as per Act, 2013. He again stated that there was no provision under Act, 2013 for land in lieu of land acquired.

2.7.4 Demand for Public welfare:

- Land losing families may be provided employment in construction work.
- Care should be taken to avoid environment pollution.
- To provide land compensation at 4 times the prevailing market rate
- Payment of compensation according to types of land
- Provide land for land and house for house to the affected families
- To provide employment to the local people in the construction of the project
- Provision of drinking water facilities

The meeting was ended at 12.30 PM with vote of thanks proposed by Sri Ramakanta Misha, Representative from RICOR.

Chapter-3

Land Assessment

3.1 Introduction

Land is the most important resource for construction of the project. As stated earlier, 15.244 acres of private land have been earmarked in the village Bindhana under Jajpur tehsil for construction of In-stream Barrage across the River Baitarani near Saptamatruka Temple (Left Arm). The details of acquisition of proposed land are hereunder.

3.2 Map of the area of impact under the project: The Map showing area of impact under the project is given hereunder.

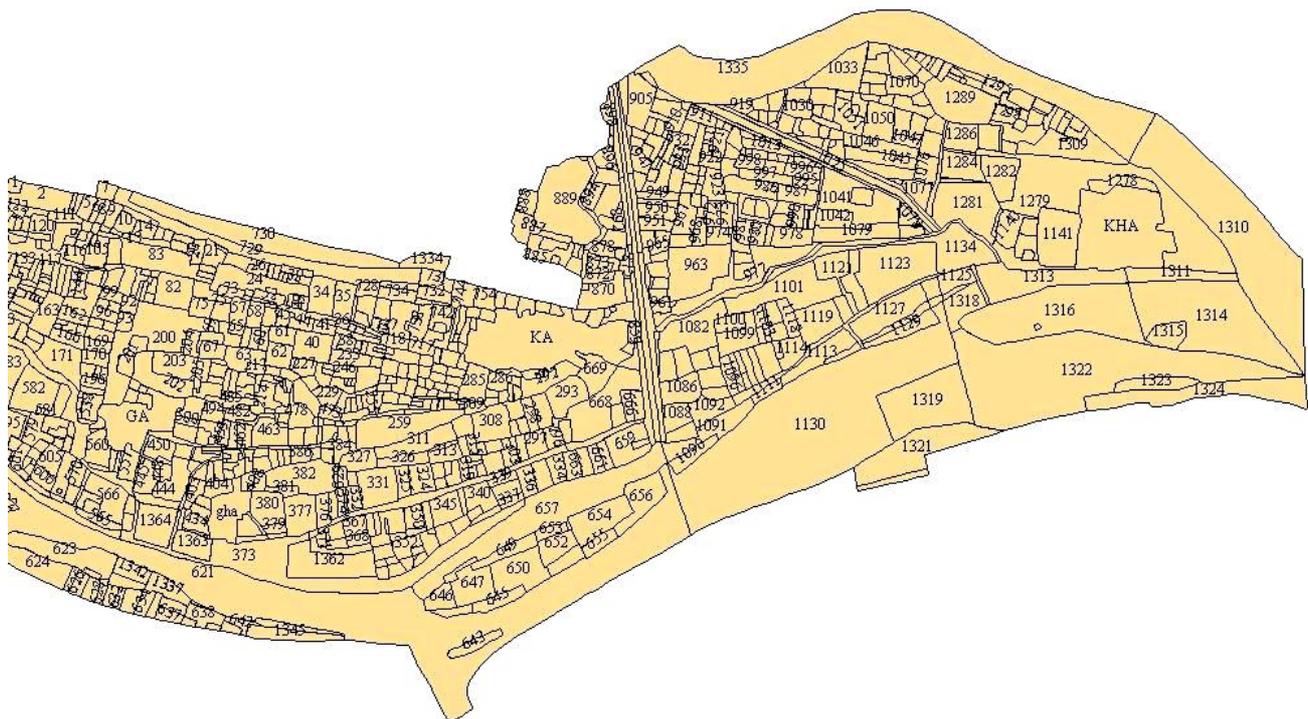


Fig. 3.1: Map showing area of impact under the project in village Bindhana, Jajpur

3.3 Area of Impact under the project

Land acquisition would inflict pain on those who are to lose land in the process, and the pain becomes more severe if one loses a substantial portion of his/her cultivated land. The construction of an In-stream Barrage across the River Baitarani near Saptamatruka Temple will impact the nearby areas of Village Bindhana under Jajpur Tahasil of Jajpur district and for this purpose a quantum of 15.244 hectares of private land will required to be acquired. This project is expected to create various social impacts in the local area, leading to significant changes for both individuals and the community. These changes may affect employment, income, productivity, lifestyles, culture, communities, political systems, the environment, health and well-being, personal and property rights, as well as fears and aspirations. While these impacts may be perceived as either positive or negative by different stakeholders, it is crucial to assess the overall social impact and the long-term benefits that the project may bring to the people and the local area.

3.4 Extent & location of land to be acquired

An area of 15.244 acre of private land is to be acquired from the village Bindhana under Jajpur Tahasil for the proposed project.

3.5 Is the land acquisition is the bare minimum requirement?

In view of the significance of land holding of a household in an agrarian society and adverse effects of land loss on farmer households, every effort has been made to acquire the proposed land which is the barest minimum requirement for construction of the proposed project.

Name of village and quantum of land to be acquired as notified by the District Authority is indicated in Table-3.1.

Table 3.1 : Nos. of households and quantum of land to be acquired.

Name of the village	Name of the GP/ULB	Tehsil	Total affected HHs	Total land owned	Total affected Area (Ac)	Area to be acquired (Ac)
Bindhana	Jajpur Municipality	Jajpur	38	64.26	15.94	15.244

(Source: 4(1) Notification by Revenue & Disasters Management, GoO)

Being the main source of livelihoods, land is considered a valuable asset by the rural people, more so when they are disposed from it through acquisition. People have emotional attachment to their land and land ownership is viewed as a symbol of social status in rural societies.

3.6 Possible alternatives sites for the project

In the context of the Social Impact Assessment (SIA) for the proposed construction of an in-stream barrage across the Baitarani River near the Saptamatruka temple, it was necessary to consider potential alternative sites as part of a comprehensive evaluation process. After careful consideration, it was found that the selected site is most suitable due to its optimal alignment with environmental, technical, and social criteria. The site fulfils all necessary conditions, such as proximity to the required infrastructure, minimal environmental disruption, and community acceptance. Hence, there was no necessity to look for alternative locations.

3.6.1 It is found that the Land to be acquired for the project is under scheduled area. Hence, the acquisition of land will be held by observing the following rules.

3.6.2 As far as possible, no acquisition of land shall be made in the Scheduled Areas, where such acquisition does take place, it shall be done only as a demonstrable last resort.

3.6.3 It has been observed that no land has already been purchased, alienated, leased or acquired and the intended use for each of land required for the proposed project.

3.6.4 It is found that there is no possibility of use of any public, unutilized land for the proposed project.

3.7 Nature, present use, classification of land to be acquired.

The majority of the private land to be acquired for the proposed project is agricultural, with a smaller portion consisting of residential, barren, or commercial land. Table 3.2 presents the land-use pattern of the Project Affected Families (PAFs) in the village of Bindhan, under the Jajpur tehsil. Upon examination, it is observed that out of the total 64.26 acres of land owned by the PAFs, 34.31 acres (53.40%) is agricultural land. Only 3.35 acres (5.21%) is residential, and 0.78 acre (1.21%) is classified as orchard land. Additionally, 25.82 acres (40.18%) of the land is observed to be as barren or unused. Of the total land owned by PAFs, only 15.244 acres (23.72%) will be acquired for the implementation of the proposed project.

Table-3.2: Use Pattern of Land holdings of PAFs (Area in acre)	
Name of Village	Bindhana
Agriculture	34.31 (53.40%)
Orchard	0.78 (1.21%)
Residential	3.35 (5.21%)
Commercial	0.00 (0.00)
Others (Forest)	0 (0.00)
Barren	25.82 (40.18%)
Total	64.26 (100.00%)

(Source: Field Survey)

Acquisition of land for the project will impact the land owners belong to SC, OBC and General category of people, who usually used their own land for agriculture purposes. It is observed that all the above agriculture lands are unirrigated.

3.8 Provisions of Food security in the proposed land acquisition

As the land area to be acquired is a small fraction of total land owned by an individual household, hence, their agriculture is not going to be impacted much. However, special provisions will be made to ensure their food security and measures will be taken to mitigate the adverse impacts of land acquisition on agricultural land and the livelihoods of farmers.

Before acquiring land for development of the proposed project, authorities have conducted a comprehensive assessment of the agricultural land to determine its productivity, the crops grown, and its contribution to local food security.

3.9 Size of holdings, ownership patterns, land distribution, number of residential houses, public & private infrastructure and assets.

Required information is available in the DPR of the project available in the Irrigation Division, Jajpur

3.9.1 Impact on Landholdings of PAFs

The land ownership pattern will change after the land acquisition. Before the acquisition, 26.31% of landowners had land holdings between 0.001 acres and 0.499 acres, 7.90% had between 0.500 acres and 0.999 acres, 31.58% had between 1.0 and 1.999 acres, 23.68% owned between 2.0 and 4.999 acres, and

10.53% owned more than 5.0 acres. After the acquisition, the land ownership distribution remains almost the same as before (Table 3.3).

Village	Holding Sizes of Project affected HHs (in acre)	Before Project		After Land Acquisition	
		No. of PAFs	% of Total	No. of PAFs	% of Total
Bindhan	0.001 to 0.499	10	26.31	10	26.31
	0.500 to 0.999	3	7.90	3	7.90
	1.000 to 1.999	12	31.58	12	31.58
	2.000 to 4.999	9	23.68	9	23.68
	5.000 to 9.999	1	2.63	1	2.63
	More than 10.000	3	7.90	3	7.90
	Total	38	100.00	38	100.00

(Source: Field Survey)

3.9.2 Land distribution of PAFs

Due to construction of the proposed project, 5 SC families will be affected by land acquisition. Only 2.45% (0.173 acres) of their total land area will be acquired, which is a very small fraction of their total land holding (Table-3.4). Therefore, agricultural activities will not affect their livelihood much. But, the reduction of their land holding may weaken their social status, as land is considered an important asset during times of distress. The caste-wise distribution of land of project affected families is narrated in Table-3.4.

Caste	PAFs	Total land owned (In Acre)	Total land loss (In Acre)	Land loss as % of land owned	Average land loss (In Acre)
SC	1	0.13	0.08	0.124	0.615
ST	0	0	0	0	0
OBC	15	43.87	3.286	5.113	0.074
General	22	20.26	11.878	18.484	0.586
Total	38	64.26	15.244	23.72	0.237

(Source: Field Survey)

3.10 Status of Infrastructure & Services

3.10.1 Village Infrastructure

The details of infrastructures available in the project affected villages are given in Table-3.5.

Village	Infrastructure	Total available	
Bindhana	Roads	Kuccha	0
		Pucca	6
		Semi-pucca	2
	Water Sources	Dugwell	2
		Tubewell	8
		Hand Pump	0
		Pipeline	19
		Other (Borewell)	45 (Individual)
	Others	Electricity	Yes
		Cremation ground	2
		Brickyard	0
		Market	1
		Cattle Market	0
		Village industry	0
		Community Hall	1
Prayer Hall	1		

(Source: Field Survey)

3.10.2 Village Level Institutions

Various village level institutions like AWC, school, and PDS shop are available in project affected villages and there is no possibility of dislocation of such institutions. The village level availability of institutions are given in Table 3.6.

Village	Institutions	Total available	
Bindhana	Village Institutions	AWC	2
		Panchayat Ghar	0
		Post Office	0
		Police Outpost	0
		Bank	0
		Cooperative Society	0
		PDS shop	1
	Educational Institutions	Primary School	1
		Secondary/High School	0
		Tech/College	0
	Healthcare Services	PHC	0
		Sub-centre	0
		ANM	1
		Dispensary	0
Veterinary Clinic		0	

(Source: Field Survey)

3.10.3 Sales and Service Centres

Sale & Service centres available in project affected villages are indicated in Table 3.7.

Table-3.7: Availability of Sales and Service Centres in Project Affected Villages			
Village	Services	Total Available	
Bindhana	Shops	Textile shops	0
		Grocery	3
		Medicine	0
		Hardware	0
		Food shops	0
	Service Centres	Flour mill	0
		Tractor repairing garage	0
		Cycle repair shop	2
	Servicemen	Barber	2
		Carpenter	4
		Black smith	0
		Gold Smith	0
		Tailor/Cobbler	2
		Potter/Mason	18
Washer man	15		

(Source: Field Survey)

Chapter-4

Estimation and Enumeration of Affected Families & Assets

4.1 Introduction

In conducting a comprehensive Social Impact Assessment (SIA), the estimation and enumeration of affected families and assets stand as fundamental components. This crucial stage of the assessment process seeks to meticulously identify and quantify the likely impact resulting from proposed development project. By meticulously cataloguing affected households and assets (both tangible and intangible), this aspect of the SIA aims to provide stakeholders and decision-makers with a clear understanding of the potential socio-economic ramifications. Through robust data collection methodologies and analytical frameworks, the estimation and enumeration phase serve as a cornerstone in facilitating informed decision-making processes, fostering community engagement, and ultimately, ensuring the sustainable development.

4.2 Enumeration of the families

Enumeration of the different types of families are given hereunder

- a) Families whose land or other immovable properties are to be acquired.

Total 38 project affected households with a population of 208 in the affected village Bindhana of Jajpur Tahsil have been surveyed. These households are going to lose a portion of their landed property and other assets. The demographic profiles of PAFs / PAPs are indicated in Table-4.1.

Table-4.1: Demographic Profile of Project Affected Households Surveyed

Village	Total affected families	Project Affected Population			Avg. family size	Marital Status		Women Headed HH	PC headed HH	BPL HH	Family to be displaced (In No.)
		Total	Male	Female		Married	Un-married				
Bindhana	38	208	114	94	5.47	144	64	7	0	0	0

(Source: Field Survey)

- b) Land under occupation of tenants

During the field survey, it has been observed that the total land to be acquired for the proposed project, are mostly agricultural land and hence, no such land found under occupation of tenants.

c) Families of the Scheduled Tribes and other traditional forest Dwellers, who have lost any of the forest rights.

No forest land is going to be acquired for the proposed project. Hence, no one is going to lose any forest rights.

d) Families of agricultural labourers, tenants or holding of usufructuary right, share-croppers or artisans or who may be working in the affected area for three years prior to the acquisition of the land.

No such cases are found during the field survey.

e) Families who have been assigned land by the State Government or the Central Government under any of its schemes.

No such families are there as observed during the field survey.

f) Families who have been residing on any land in the urban areas for preceding three years or more prior to the acquisition of the land.

No such families are there, as observed from the field data collected.

g) Families indirectly impacted by the project (Gatherers or forest produce, hunters, fisher folk, boat men etc.

No such families are there, as observed from the field survey.

h) Inventory of productive assets and significant lands

No information available.

4.3 Impact on Project Affected Land Owners

4.3.1 Change in landholdings after acquisition:

Details have been given in table 3.3 above.

4.3.2 Caste-wise Distribution of land after acquisition:

Details have been provided in table 3.4 above.

Land to be acquired for the proposed project "Construction of In-stream Barrage across River Baitarani near Saptamatruka Temple" is mostly agriculture and barren land.

Land will be acquired from the private people on payment of compensation as per the norms. The compensation is much higher than the market value of land in the area. This will enable the land losers to purchase additional land to restore their livelihood.

The total private land of 15.244 Ac. to be acquired is a negligible portion of the total land available in the area. Discussion with the people during HH survey and FGDs did not indicate any increase in the local land price on account of land acquisition.

Chapter-5

Socio-Economic and Cultural Profile

5.1 Introduction

Baseline survey aims at documenting information about demographic and socio-economic conditions, land use pattern, and social and cultural values of the project affected area. It also gives information about the existing bio-physical, environmental, economic and social situation of the area to evaluate the current socio-economic situation. This survey helps assess the changes in the context of the existing situation and environment. For this purpose, study of the latest demographic profile and overall community wellbeing in the area was imperative.

A socio-economic survey was conducted in the project-affected village on a census basis. Information related to demographic, social, and economic characteristics, infrastructure, employment conditions, community resources, and other aspects such as awareness and perceptions about the project was collected. As per the 4(1) Notification of the Revenue & Disaster Management Department, Government of Odisha, the survey was to be conducted in Bindhana village of Jajpur Tehsil, involving 39 households. However, in reality, 38 affected households were surveyed on a census basis. Additionally, 10 non-affected sample households from the same village were surveyed as a control group. The socio-economic profile of the surveyed families is presented in this chapter.

5.2 Demographic details of the Project Area

Demographic features like size, age group, and sex composition etc. of a population are important indicators of a community's level of development and its attitudes towards life. Sex ratio speaks of the social health of a society. It conveys a great deal about the state of gender relations and how a society treats nearly one-half of its population, the women folk.

The proposed project will cause land acquisition in one village of Jajpur Tahsil in Jajpur district. The demographic profile of the project affected Tahasil is indicated in Table-5.1.

Table-5.1: Demographic Profile of Project Affected Tehsil (Jajpur)

Tehsil /Municipality	HH	Population				Population in 0-6 years		
		Total	M	F	Sex Ratio	M	F	Sex Ratio
Jajpur	36898	168063	85979	82084	955	7510	6905	919

Source: Census 2011

It is revealed from the above table that the project affected Tehsil have 36898 households with a population of 168063 of which 82084 are females and 85979 are males with a sex ratio of 955 (females per thousand males) and the sex ratio of 0-6 years population is 919. The average family size in the Tehsil is 4.55.

5.2.1 Project Affected Households and Population

Total 38 project affected households with a population of 208 in the affected village Bindhana of Jajpur Tahsil have been surveyed. These households are going to lose a portion of their landed property and other assets. The demographic profiles of PAFs / PAPs are indicated in Table-5.2.

Table-5.2: Demographic Profile of Project Affected Village (Bindhan)

Village	Total affected families	Project Affected Population			Avg. family size	Marital Status		Women Headed HH	PC headed HH	BPL HH	Family to be displaced (In No.)
		Total	Male	Female		Married	Un-married				
Bindhana	38	208	114	94	5.47	144	64	8	0	0	0
Total	38	208	114	94	5.47	144	64	8	0	0	0

(Source: Field Survey) (Figures in parentheses are percentages)

5.2.2 Size and Sex-Ratio of PAFs

Size and sex ratio of project affected families across village is given in Table 5.3. The pattern of demographic composition is almost the same in all the villages. The sex ratio of the project affected HHs is 825, lower than the district average figure of 972. The average family size of the project affected PAFs is 5.47.

Table-5.3: Size and Sex Ratio of Project Affected Families

Name of village	Sl. No	Particulars	Collected data
Bindhana	1	PAFs Surveyed (No)	38
	2	PAPs of Surveyed Families (No)	208
	3	Male	114
	4	Female	94
	5	Sex Ratio	825
	6	Average family size	5.47

(Source: Field Survey)

5.2.3 Age Composition and Marital Status of PAPs

The study of age composition of people is helpful as it gives an idea about the proportion of potential workers in the total population. According to Census 2011, people in the age group of 18-60 constitute the working population and others, children and elderly persons are considered dependent. The number of working population is an indicator of the economic status of a household. Age wise gender distribution of PAPs along with their marital status is presented in Table-5.4.

Table-5.4: Age-wise Male-Female with marital status among the PAPs Surveyed

Village	Total PAPs	Distribution in age group								Marital status	
		0-6 yrs		7-17 yrs		18-60 yrs		Above 60 yrs		Married	Un-married
		M	F	M	F	M	F	M	F		
Bindhana	208	1	6	5	6	81	65	19	25	144	64

(Source: Field Survey)

It is revealed from the table that population in the working age group of 18 to 60 years is 146 (70.19%) of total PAPs. Married persons outnumber unmarried persons in the surveyed village is 69.23% of total PAPs.

5.3 Religion of PAFs

The religious belief of a person influences his/her socio-cultural behaviour. It determines his/her attitude towards life, work and ambitions. It also helps understand his/her preferences, which is a prerequisite for rehabilitation of the project affected people and their families. The household survey revealed that 35 (92.10%) the surveyed families are Hindu and 3 (7.90%) are Muslim.

Table-5.5: Religion-wise Distribution of the PAFs

Name of village	Sl. No.	Religion	Total (nos.)
Bindhana	1	Hindu	35 (92.10)
	2	Muslim	3 (7.90)
	3	Christian	0 (0.00)
	4	Others	0 (0.00)
Total			38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

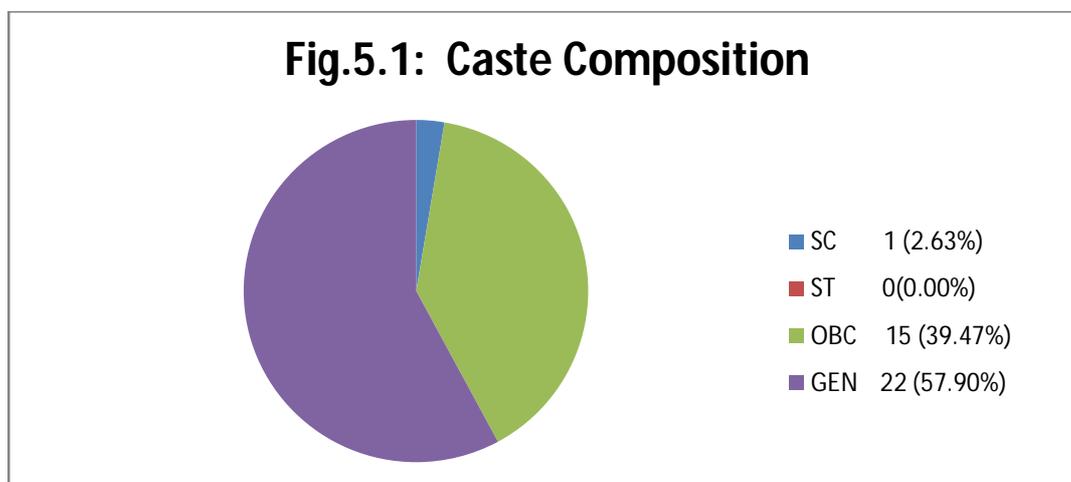
5.4 Castes of PAFs

A traditional society is divided into various castes. Caste plays a key role in determining the choices of a person and his/her welfare level. Higher caste people are generally well-off and have a wide inter-linked network by exploiting other caste people by which they appropriate maximum social gains. On the contrary, the SCs and STs are weak, vulnerable and deprived. They fail to assert their rights and access the benefits meant for them, and reconcile to whatever little comes to them by way of seepage. They deserve particular attention in the misery mitigation programmes of the project. However, in this affected village the number of ST counts nil. It is revealed from the Table-4.6 that GEN category is the dominant caste among PAFs (57.90%), followed by OBC PAFs (39.47%). The SC constitute 2.63% of the total PAFs. The details of caste composition among the surveyed households are given in Table 5.6.

Table-5.6: Caste-wise Distribution of the PAFs

Name of village	Sl. No.	Caste	Total (nos.)
Bindhana	1	SC	1 (2.63)
	2	ST	0 (0.00)
	3	OBC	15 (39.47)
	4	GEN	22 (57.90)
Total PAFs			38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)



5.5 Household Characteristics

Pattern and size of a family determine attachment level among the family members. At the same time, it also reflects how the economic structure in the family is inter-woven. The characteristics of the PAFs are discussed below.

5.5.1 Family Size

The average family size of the project affected households is 5.26 as already indicated previously. Family size of the surveyed PAFs varied between 2 and 15 members (**Table 5.7**). About 44.73% of the project affected families in the village have 4-6 members; followed by 23.69% with 1-3 members, 18.42% families with 7-9 members and 13.16% have more than 10 members.

Table-5.7: Family Size of PAFs

Name of village	Sl. No.	Family size	Total (nos.)
Bindhana	1	1-3	9 (23.69)
	2	4-6	17 (44.73)
	3	7-9	7 (18.42)
	4	>10	5 (13.16)
Total			38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Three types of families can be discerned in the project affected area, namely, individual, nuclear and joint families. Households with more than 7 members are joint and extended families. There are two or

more brothers in these households and share the same hearth even after marriage. They live in the household with their parents, siblings and other dependents.

Variations in family types of the PAFs surveyed are given in Table 4.8. It is observed from the table that majority of the surveyed families are Joint Families (89.47%), followed by Nucleus Families (10.53%).

Sl. No.	Village	Total PAFs	Type of Family (in nos.)		
			Joint	Nucleus	Individual
1	Bindhana	38	34 (89.47)	4 (10.53)	0

(Source: Field Survey) (Figures in parentheses are percentages)

5.5.2 Heads of the Households

Patriarchal system prevails in the project affected area where monogamy is practiced across castes and tribes. The system is characterized by dominance of male and subjugation of females. Women are discriminated against, which gives rise to gender disparity. As a result, women remain weak and fail to assert themselves in the society. The problem becomes more acute for a family headed by a woman. Usually a woman assumes headship of the family in adverse situations when her spouse, the head of the household dies and children are not old enough to handle family matters.

Table 5.9 indicated that only 7 households are women headed (WH) and 31 households are headed by males (MH) in the project affected village. Majority of heads of families are in the age group of 60 above years (29 nos), followed by the age group of above 45-60 years (8 nos). Only 1 household is headed by male persons less than 45 years old.

Sl. No.	Village	Age Group (Yrs)								
		< 45			45-60			> 60		
		WH	MH	Total	WH	MH	Total	WH	MH	Total
1	Bindhana	0	1	1	0	8	8	7	22	29

(Source: Field Survey)

5.6 Educational Level

Education enhances the capability of a person through skill formation and enlarges his employment choices. It is the bedrock of human capital. It enables a person to participate in the process of economic growth. It has become a basic need in a modern society. Information about the education level of the project affected population is important for drawing up economic rehabilitation plan for them. The educational attainment of the PAPs has been given in Table 5.10.

Table-5.10: Educational Level of Project Affected Persons				
Name of village: Bindhana, Tehsil: Jajpur				
Sl. No.	Level of Education	Male	Female	Total
1	Illiterate	02	04	6 (2.88)
2	Up to primary	16	14	30 (14.40)
3	Secondary	21	16	37 (17.80)
4	+ 2 / Intermediate	14	21	35 (16.80)
5	Graduation & above	34	14	50 (24.00)
6	Technical Degree/Diploma	11	06	17 (8.17)
7	ITI / Prof. Degree	26	09	39 (18.80)
Total		124 (59.60)	84 (40.40)	208

(Source: Field Survey) (Figures in parentheses are percentages)

The table indicated that out of a total population of 208 project-affected people, 6 (2.88%) were found as illiterate. Of 97.11% literate, 14.40% have read up to primary class, 17.80% up to secondary level, 16.80% up to Intermediate, 24% up to graduation and above, and 26.97% have received technical education. The educational level of project affected families is better than the overall educational level of the district as a whole.

5.7 Income and Poverty Levels.

5.7.1 Occupational Pattern

The economic condition of a family depends on its members' occupational pattern, employment and number of earners in the family. Occupation of the head of a project affected family influences that of its other members. Census data 2011 indicated that 24.00% (52054) of the total population of Jajpur Tahsil are workers and the remaining are non-workers. Main workers constitute 73.17% (38086) of the total workforce in the Tahsil.

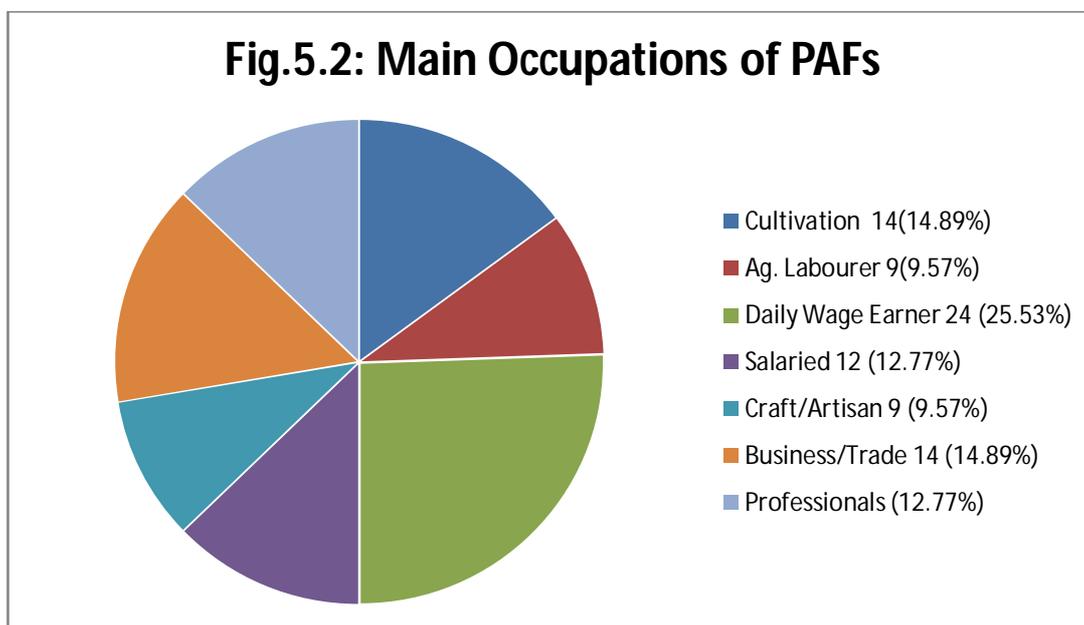
Keeping the local conditions in view, the main occupations of the PAPs have been divided into seven categories, namely, agriculture, agricultural labour, daily wage, service, business / trade, craft and others.

Table 5.11 presents the primary sources of livelihood for individuals from the project-affected families. The table indicates that out of a total of 208 project-affected persons (PAPs), 94 (45.19%) have main occupations. The largest group consists of daily-wage earners, with 24 individuals (25.53%). Salary-based employment is reported as the principal occupation for 12 PAPs, accounting for 12.77% of the total. Additionally, 14 PAPs (14.89%) derive their income from business.

Only 9 PAPs (9.57%) are engaged as craft artisans, and another 9 (9.57%) work as agricultural laborers. The table also shows that 12 individuals earn their livelihood through professional activities, primarily as priests. Lastly, only 1 PAP is found to be engaged in subsidiary occupations.

Table-5.11: Main Occupation of Project Affected People (Nos.)		
Name of village: Bindhana, Tehsil: Jajpur		
Sl. No	Occupation	Total (in nos.)
1	Cultivation /Agriculture	14 (14.89)
2	Agril. Labourer	09 (9.57)
3	Daily Wage Earner	24 (25.53)
4	Salaried	12 (12.77)
5	Craft Artisan	9 (9.57)
6	Business/Trade	14 (14.89)
7	Profession/ Professionals (Priest)	12 (12.77)
Total		94 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)



5.7.2 Family Income

Income is the key indicator of a household's socio-economic status. The overall quality of life of a household depends on its income. Findings of the survey indicated (Table 5.12) that average monthly and annual income of project affected households are 5236.06 and Rs. 62,865.38 only respectively.

Village	Total HHs	Monthly family income (in Rs)	Average monthly family income (in Rs)	Annual family income (in Rs)	Average annual family income (in Rs)
Bindhana	38	1089700.00	5236.06	13076400.00	62865.38

(Source: Field Survey)

5.8 Assets & Consumer Durables

Asset holding is another significant indicator of a household's wellbeing. Larger asset base enables a household to enjoy a better standard of life on a sustained basis. Assets owned by the households along with consumer durables reflect its standard of living and economic status.

Physical assets include land, productive animals, trees, etc., which are income-yielding. Consumer durables do not help generate income, no doubt, but have resale value for which these have been considered assets in the present study. The PAPs were found unaware of financial assets like bank deposits, post office savings, insurance products, shares, bonds, etc.

Consumer durables and livestock are the important assets of the project affected households in the region. Information about ownership of consumer durables and animal resources of the PAFs has been given in Table 4.13.

Table 5.13 : Assets and Durables of Project Affected Households:

Sl. No.	Type	Total qty. available	Approx unit cost (Rs.)	Approx. TotalCost (Rs.)
1	TV	37	9700	358900
2	Tape Recorder	03	3200	9600
3	Radio	01	830	830
4	Refrigerator	34	7500	255000
5	Telephone /Mobile phone	108	14000	1512000
6	AC/Cooler	14	30000	420000
7	Cycle	56	3000	168000
8	Three wheeler	2	0	0
9	Motor cycle	41	45000	1845000
10	Four wheeler	8	550000	4400000
11	Bus/Truck	0	0	0
12	LPG	42	5000	210000
13	Utensils	1184	70	82880
14	Ornaments	322	22000	7084000
15	Cow/Bullock	8	5000	40000
16	Buffalo	0	0	0
17	Goat	0	0	0
18	Sheep	0	0	0
19	Poultry/Others	0	0	0

(Source: Field Survey)

It is seen from the table-5.13 that almost all households have TV (37 nos) whereas each is having one or more bicycle. There are utensils of some sort or other in all the households. It is interesting to observe that all HHs have one or more mobile phones (108 Nos.) and most of the PAFs use LPG gas connections (42 nos.) as cooking fuel. Use of firewood and cow dung as cooking fuel has lost ground to LPG. This has helped in reducing pollution level and health hazards for women.

5.9 Household Economics

Household is the basic unit in any socio-economic analysis and hence the importance of its economics. Income, expenditure, saving, indebtedness, etc. are decided at the household level. Information regarding household expenditure and indebtedness of the respondents is presented below.

5.9.1 Family Expenditure

A household's expenditure on different items like food, clothing, housing, education, healthcare and other consumables is constrained by its income. Expenditure data are equally important as income data for assessment of the standard of living of a household. Income data were felt to be an underestimate as the respondents apprehended this might affect their economic status. Expenditure data would help validation of income data of a household. But even reliability of the expenditure data is in question as no written record of expenditure was reported to be maintained by the PAFs. Errors and omissions are very likely to creep in as people have to spend very often. Allowing for these lacunae, expenditure of PAFs has been estimated.

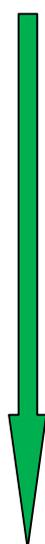
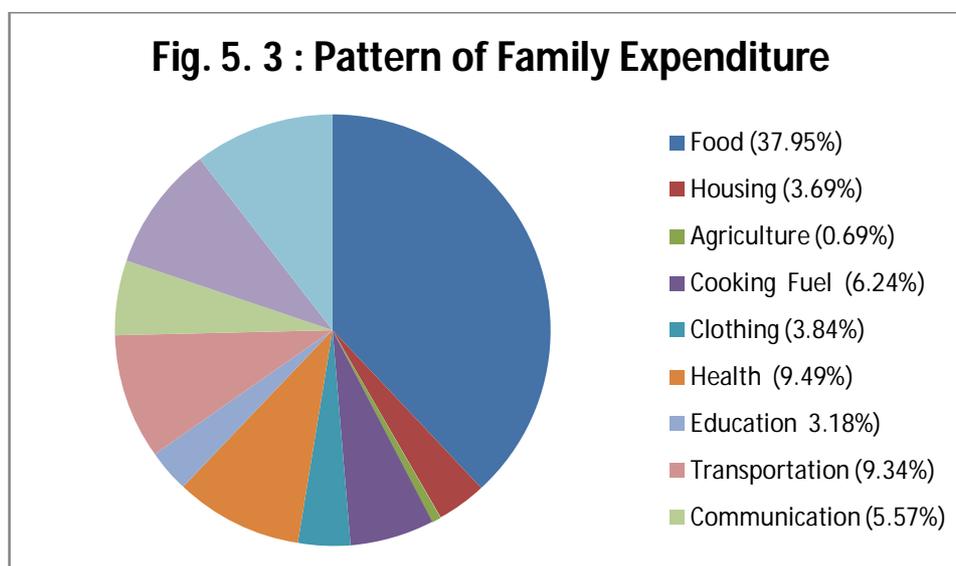


Table 5.14 : Average Monthly Household Expenditure of PAFs (In Rs)

Sl. No.	Items	Total monthly expenditure	Average Monthly expenditure
1	Food	221100.00	1063.00 (37.95)
2	Agriculture	5600.00	26.92 (0.96)
3	Housing	21500.00	103.40 (3.69)
4	Cooking fuel	36350.00	174.80 (6.24)
5	Clothing	22350.00	107.50 (3.84)
6	Health	55300.00	265.90 (9.49)
7	Education	18550.00	89.18 (3.18)
8	Transport	54400.00	261.50 (9.34)
9	Communication	32440.00	156.00 (5.57)
10	Social functions	54360.00	261.30 (9.33)
11	Others	60630.00	291.50 (10.41)
TOTAL		582580.00	2801.00 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)



It is observed from table 5.14 that a PAF spends Rs.2801.00 in a month on an average against an average annual income of Rs.5236.06-. Monthly average family expenditure of the PAFs in the project

affected village has been presented in Table 5.14 and Fig.5.3, which implies that the average annual expenditure of a household is Rs. 62865.38.

A household spends mostly 37.95% on food items followed by 9.49% on healthcare, 9.33% on social functions, 3.69% on housing, 4.94% on education, 9.34% on transportation, 5.57% on communication, 6.24% on cooking fuel, 3.84% on clothing, and 0.69% on agriculture expenses.

5.9.2 Indebtedness

The indebtedness is a pressing issue that permeates rural communities. In case of urgent need of money for medical, agriculture, marriage and other social activities, people usually turn to local banks, self help groups, Mahajans or relatives. It is found that a small number of households in the project affected villages took loans to meet their various needs as shown in Table-5.15.

Table 5.15: Indebtedness of PAFs		
Sl. No.	Particulars	Surveyed data
1	Total PAFs	38
2	No. of PAFs availed loan	14
3	Total amount of loan availed by PAFs	1489000
Sources of loan		
4	Bank	762000
5	Money lender	0
6	SHG	212000
7	NGO	0
8	Relatives	160000
9	Others	355000
Amount and Purpose of Loan		
10	Investment	232000
11	Household durables	212000
12	Marriage	346000
13	Emergency	158000
14	Agricultural operations	146000
15	Repayment	212000
16	Rate of interest(Per month) from unorganized sources	0
17	Others	183000

(Source: Field Survey) (Figures in parentheses are percentages)

It is revealed from the above table that only 11 PAFs have availed a total amount of Rs.14,89,000 as loan from different sources for the purpose of productive investment, purchase of household materials, and for meeting their emergency needs.

5.10 Dwelling Condition

Information of the dwelling condition gives an idea about a household's wellbeing. It is observed that 100% of the project affected households have their own houses and residential land. Table 4.16 also indicated that 100% houses are pucca (RCC roofs, Asbestos & Tile roofed) with brick walls while there are no Kuchha houses. Nearly all households have Patta (ROR) for their homestead land. Details of dwelling conditions of affected households are given in Table-5.16.

Table - 5.16: Dwelling Condition

Sl. No.	Village	Total PAFs	Size and type			House type		Possession	
			Owned	Rented	Total Area of constn. (Ac)	Pucca	Kuccha	With Patta	Without patta
1	Bindhana	38	38	0	2.81	38	0	38	0

(Source: Field Survey) (Figures in parentheses are percentages)

5.11 Access to Public Utilities

Besides the physical and socio-economic aspects, quality of life of a population also depends on its access to civic amenities like electricity, safe drinking water, sanitation, cooking fuel etc. Availability of these services makes living easier, comfortable and pleasurable. Provisions of these utilities in the project affected households have been indicated in Table 5.17.

Table - 5.17: Access to Utilities

Sl. No.	Village	Total PAFs	Separate shed for animals	Bath room within the house	Toilet	Washing place	Electricity	Drinking water
1	Bindhana	38	6 (15.78)	34 (89.47)	36 (94.73)	32 (84.21)	38 (100.00)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

The above table indicates that electricity and safe drinking water accessibility by PAFs is 100%.

The importance of sanitation is being emphasized by the government in recent years. The impact is visible as majority (94.36%) of the PAFs have toilets and 89.47% have bathroom within or adjacent to their residences.

Only 15.78% of project affected households have constructed separate sheds for animals. Separate washing platforms are available in 84.21% houses and the remaining families use public space including platform of tube wells for washing purpose.

5.12 Health Status

As discussed above, expenditure of the PAFs on healthcare is not substantial mostly because they do not suffer from serious health problem. Of the total PAFs, about 80.28% reported to have health problems and all of them have been treated at institutional health centres. All the sick were treated in government hospitals/PHC/CHC. There were 8 mortality has taken place among the PAFs during last year. The details of health status and treatment in the area are indicated in Table 5.18.

Table 5.18: Health Status of PAFs		
Sl. No.	Particulars	Total
1	Total PAFs	38
2	Families suffering from diseases	29 (76.31)
Type of Treatment		
3	Medical	22 (57.89)
4	Homeopathic/Ayurved	1 (2.63)
5	Private clinic	0
6	Quacks	0
7	No treatment	0
8	Expenditure on health per month.(Rs.)	104500.00
9	Average Monthly exp. on health (Rs)	2,750.00
10	Last year birth	3
11	Number vaccinated	3
12	Last year death	8

(Source: Field Survey) (Figures in parentheses are percentages)

5.13 Vulnerable Groups

The Vulnerable Groups include BPL households, weaker sections of the society like SC/ST and Women headed households (WHH). Besides, women, children, the aged, differently able and people discriminated against due to stigma are also vulnerable as they are deprived and cannot help themselves. These latter groups live in families. Impose of the project on these groups is simultaneously taken care of along with that of the household they belong to. So they are at par with others from social point of view as regards land acquisition for the project. Information about the Vulnerable Groups in the project affected area is given in Table – 5.19.

Village	Vulnerable Groups	Total
Bindhana	WHH	7 (21.05)
	SC	0 (7.04)
	ST	0 (0.00)
	BPL	0 (0.00)
	Total	7 (21.05)

(Source: Field Survey) (Figures in parentheses are percentages)

As evident from Table-4.19, there are total 7 PAFs under Vulnerable Groups in the project affected village and all are belonging to Women Headed Household (WHH).

5.14 Land Utilisation Pattern and Livelihoods

5.14.1 Utilisation Pattern of Land in Jajpur Tehsil.

The land use pattern refers to the spatial arrangement and utilization of land for various purposes such as residential, commercial, industrial, agricultural, and recreational activities. Analyzing this pattern helps assess how different sectors interact within a community, identifying potential conflicts or synergies. Moreover, it sheds light on land tenure systems, property rights, and access to resources, which are vital aspects of social and economic development. By examining the land use pattern, stakeholders can anticipate potential impacts of proposed projects or policies, including changes in livelihoods, cultural landscapes, and ecosystem services. The land utilization pattern of the Jajpur Tahasil is as under. (Table-5.20)

Table- 5.20 : Land Utilisation Pattern in Jajpur Tehsil (in ha.)

Sl.No.	Type of Land Utilization	Quantity (in ha)
1	Geographical Area (in ha)	199442
2	Forest Land	0
3	Non-Agril. Use	3893
4	Barren & Non-cultivable land	0
5	Permanent Pasture & grazing land	1164
6	Area under misc. tree crops	1098
7	Cultivable waste land	1888
8	Old fallows	1416
9	Current fallows	1822
10	Net area sown	8162

Source: District Statistical Handbook 2022-23

Table-5.21: Land Utilisation Pattern in Project Affected Village Bindhan (in ha.)

Sl. No	Village	Agricultural	Orchard	Residential	Commercial	Other (Forest)	Barren	Total
1	Bindhana	34.31 (53.40)	0.78 (1.21)	3.35 (5.21)	0.00 (0.00)	0 (0.00)	25.82 (40.18)	64.26 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

5.15 Utilisation Pattern of Land in Project Affected Village:

The majority of the private land to be acquired for the proposed project is agricultural, with a smaller portion consisting of residential, barren, or commercial land. Table 3.2 presents the land-use pattern of the Project Affected Families (PAFs) in the village of Bindhan, under the Jajpur tehsil. Upon examination, it is observed that out of the total 64.26 acres of land owned by the PAFs, 34.31 acres (53.40%) is agricultural land. Only 3.35 acres (5.21%) is used for residential purposes, and 0.78 acre (1.21%) is classified as orchard land. Additionally, 25.82 acres (40.18%) of the land is identified as barren or unused. Of the total land owned by PAFs, only 15.244 acres (23.72%) will be acquired for the implementation of the proposed project.

5.16 Livelihoods

Information about livelihoods of the PAPs is important to assess their skill level and prepare alternative rehabilitation plan for them in the post-project implementation period. PAPs earn their livelihoods from both farm and non-farm occupations. The farm based occupations primarily relate to agriculture and allied activities, and the non-farm occupations include salaried occupation, wage labour, enterprises, craft, services, etc.

The project affected households are mostly landowners and their primary source of livelihood is agriculture. Lack of assured irrigation, poor fertility of soil and low input use are the main reasons for low productivity of land. Even if irrigation is available near river banks through LIPs, the farmers are not taking up cultivation due to cattle menace and crop damage by monkeys and elephants. Further, the size of cultivable land is gradually decreasing, which reduces the labour absorptive capacity of agriculture. Therefore, the youth in the locality look forward to non-farm activities to earn their livelihood. Business/trade, wage work and miscellaneous activities are some of the sources of livelihood in the area. Income from non-farm activities acts as insurance against the uncertainty associated with agricultural production. Rapid industrialization in the immediate vicinity of the project affected area has opened up opportunities for non-farm employment of the local people. This has induced the younger generation of the PAFs to move away from agriculture and go for service or wage labour.

5.17 Impact on Local Economic Activities

For a Social Impact Assessment (SIA) study focused on the construction of an in-stream barrage across the Baitarani River near the Saptamatruka temple, in the village of Bindhan under Jajpur tehsil, the impact on local economic activities can be addressed under several key points:

1. Agricultural Impact:

- **Positive:** The barrage is likely to improve irrigation facilities in the area, leading to increased agricultural productivity. Farmers in Bindhan and neighboring villages may benefit from better water management for crops, potentially increasing the frequency of cropping cycles and diversifying crop production.
- **Negative:** During the construction phase, certain agricultural lands may be temporarily or permanently affected, leading to a loss of income for some farmers. Land acquisition may reduce the total arable land in the village.

2. Fishing Activities:

- **Positive:** The creation of the barrage may result in the formation of a stable water body, which could support local fisheries, enhancing the livelihood opportunities for communities engaged in fishing.
- **Negative:** If the natural flow of the river is altered, fish migration and breeding patterns may be affected, leading to a potential decline in fish populations, which could negatively impact local fishing activities in the short term.

3. Employment Opportunities:

- **Positive:** The construction of the barrage is expected to generate local employment opportunities, both skilled and unskilled, benefiting the village population. In the long term, improved water supply and increased agricultural activities might generate more jobs.
- **Negative:** Construction work may attract laborers from outside the region, limiting the direct employment benefits to the local workforce.

4. Impact on Local Markets and Trade:

- **Positive:** The availability of better irrigation and potential water-based activities can lead to increased agricultural output, which could boost the local economy by enhancing trade and market activity in the village. There may be increased demand for agricultural tools, seeds, fertilizers, and other supplies.
- **Negative:** Disruptions during the construction phase, including road closures or transportation issues, could temporarily reduce access to local markets, affecting traders and vendors.

5. Tourism Development:

- **Positive:** The barrage's proximity to the Saptamatruka temple could attract tourists if the area is developed as a recreational or scenic spot, leading to increased footfall and business opportunities for local shops, vendors, and service providers in Bindhan.
- **Negative:** Uncontrolled tourism may strain local resources and infrastructure, leading to environmental degradation or disturbances to the traditional lifestyle of the village.

7. Impact on Land Values and Property Prices:

- **Positive:** The improved water infrastructure could lead to increased land values in Bindhan, offering financial gains to property owners and incentivizing local investments in agriculture and infrastructure.
- **Negative:** Rapid changes in land prices may result in the displacement of low-income households, who may find it difficult to afford land or housing in the future.

8. Small-Scale Enterprises:

- **Positive:** The construction could indirectly stimulate small-scale enterprises, such as food stalls, lodging, and construction-related businesses, creating avenues for entrepreneurship.
- **Negative:** Some enterprises may experience a temporary downturn due to disruptions caused by construction activities, such as reduced footfall or transportation delays.

9. Infrastructure and Transportation:

- **Positive:** The construction of the barrage could bring in improved infrastructure in terms of roads and transportation to and from Bindhan, facilitating easier access to markets, healthcare, and education.
- **Negative:** Short-term disruption to existing infrastructure, such as roads or pathways, may temporarily affect transportation, leading to delays in trade and movement of goods.

10. Environmental and Sustainability Concerns:

- **Positive:** If the barrage is designed with sustainability in mind, it could contribute to long-term water conservation, benefiting both economic activities and the natural ecosystem of the village.
- **Negative:** Environmental degradation during construction (e.g., soil erosion, deforestation) might affect agricultural land and livelihoods in the short term. Mismanagement of the water body could also lead to long-term ecological challenges.

The above observations points in the SIA give a comprehensive view of how the local economic fabric of Bindhana could change due to the project, helping policymakers take informed decisions for compensation, rehabilitation, or livelihood restoration.

5.18 Factors that contribute to local livelihoods

In the context of the SIA study for the construction of an in-stream barrage near Saptamatruka Temple in Jajpur Tehsil, several factors contribute to the local livelihoods in the village of Bindhana. The primary factor is agriculture, which forms the backbone of the village economy, with a significant portion of the population dependent on farming for their sustenance. The fertile land, supported by seasonal rainfall and irrigation, enables the cultivation of crops like paddy, vegetables, and pulses. Livestock rearing, including cattle, goats, and poultry, provides supplementary income, while fishing and aquaculture in nearby water bodies offer an additional source of livelihood. The presence of the Saptamatruka Temple also plays a role, drawing religious tourists, which supports small businesses such as food stalls, tea shops, and sellers of religious items. Wage labor, both within the village and in nearby towns, further contributes to household income, with some community members migrating for work.

Additionally, natural resources such as water for irrigation and land for grazing are critical to sustaining these activities. These interconnected factors form the foundation of local livelihoods, and any changes due to land acquisition for the barrage project could have significant socio-economic impacts on the community.

5.19 Kinship patterns and Social & Cultural organization

5.19.1 Kinship patterns

Bindhana village likely adheres to a traditional kinship system that plays a pivotal role in shaping social structures and relationships within the community.

Pattern and size of a family determine attachment level among the family members. At the same time, it also reflects how the economic structure in the family is inter-woven. The characteristics of the PAFs are discussed below.

i) Family Size

The average family size of the project affected households is 5.47 as already indicated in **Table 4.1**. Family size of the surveyed PAFs varied between 2 and 14 members (**Table 5.22**). About 39.47% of the project affected families in the village have 4-6 members, followed by 36.85% with 1-3 members, 15.78% families with 7-9 members and 10.52% have more than 10 members.

Table-5.22: Family Size of PAFs

Name of village	Sl. No.	Family size	Total (nos.)
Bindhana	1	1-3	14 (36.84)
	2	4-6	15 (39.46)
	3	7-9	06 (15.78)
	4	>10	4 (10.52)
Total			38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Three types of families can be discerned in the project affected area, namely, individual, nuclear and joint families. Households with more than 7 members are joint and extended families. There are two or more brothers in these households and share the same hearth even after marriage. They live in the household with their parents, siblings and other dependents.

Variations in family types of the PAFs surveyed are given in Table 5.23. It is observed from the table that majority of the surveyed families are Joint Families (76.31%), followed by Nucleus Families (23.69%).

Sl. No.	Village	Total PAFs	Type of Family (in nos.)		
			Joint	Nucleus	Individual
1	Bindhana	38	29 (76.31)	9 (23.69)	0

(Source: Field Survey) (Figures in parentheses are percentages)

ii) Heads of the Households

Patriarchal system prevails in the project affected area where monogamy is practiced across castes and tribes. The system is characterized by dominance of male and subjugation of females. Women are discriminated against, which gives rise to gender disparity. As a result, women remain weak and fail to assert themselves in the society. The problem becomes more acute for a family headed by a woman. Usually a woman assumes headship of the family in adverse situations when her spouse, the head of the household dies and children are not old enough to handle family matters.

Table 5.24 indicates that in the project-affected village, there are 10 households headed by males (MH) between the ages of 45 and 60 years. The majority of household heads are in the age group of 60 years and above (27 households), while only 1 household is headed by a male under the age of 45.

Sl. No.	Village	Age Group (Yrs)								
		< 45			45-60			> 60		
		WH	MH	Total	WH	MH	Total	WH	MH	Total
1	Bindhana	0	1	1	0	10	10	7	20	27

(Source: Field Survey)

5.19.2 Socio-Cultural Organizations

Socio-cultural organizations in village Bindhan serve as platforms for community engagement, collective action, and the preservation of local traditions. The social and cultural organizations available in the village are indicated in Table 5.25.

Table-5.25: Socio-Cultural Infrastructure in Project Affected Villages

Village	Institutions	Total available	
Bindhana	Social Infrastructure	SHG	4
		Festival Location	1
		Yubak Mandal	0
		Bhajan Mandal	3
		Trading Spots	0
		Sports club	1
		Club/Recreation Centre	0
	Cultural Infrastructure	Play ground	0
		Jatra ground	0
		Samadhi Pitha	0
		Temple	3
		Matha	0
		Masjid	1

(Source: Field Survey)

5.19.3 Shrines and sacred places:

In the Social Impact Assessment (SIA) study report, it is important to note that the project titled "Construction of In-stream Barrage across River Baitarani near Saptamatruka Temple" will not adversely affect any shrines or sacred places. The project has been meticulously planned to ensure the preservation of these culturally and spiritually significant sites. Careful assessments and consultations with local stakeholders have confirmed that the construction activities will be conducted in a manner that safeguards the integrity and sanctity of the Saptamatruka Temple and other nearby sacred locations.

5.19.4 Administrative, Political, Community based and Society organizations

Besides above, it is found that no Administrative, Political, Community based and Society organizations will be affected by the proposed project.

5.19.5 Regional dynamics and historical change processes:

In the project-affected village Bindhan, the interplay of regional dynamics and historical change processes has shaped the community's socio-economic landscape over time. Historically, the region has been influenced by various factors such as migration patterns, trade routes, and colonial legacies, which have left enduring imprints on its social and cultural fabric. Additionally, developmental projects, industrialization, and infrastructural initiatives have brought about significant transformations, altering

traditional livelihoods and land-use patterns. The village's proximity to urban centers and transportation networks has led to increased connectivity and economic opportunities, but also challenges such as environmental degradation and social dislocation. Furthermore, the dynamics of caste, class, and gender relations have evolved amidst these changes, reflecting broader socio-political shifts in the region. Understanding the historical context and regional dynamics is crucial for addressing the multifaceted challenges facing by the village and devising sustainable development strategies that prioritize community well-being and resilience.

5.20 Resource Maps

As a part of PRA exercise, resource maps have been drawn for the project affected village (Annexure-III). The resource maps indicate the physical layout of the village.

5.21 Socio-Economic Profile of Non-affected Households

The household survey was undertaken on both affected and non-affected households in the project affected village. Besides 38 PAFs, 10 non-affected households were surveyed.

5.21.1 Demography of Non-Affected Households

A total of 10 non-affected households (35 persons) were surveyed, revealing a sex ratio of 750 females per 1,000 males and an average family size of 3.5. Among the surveyed non-affected families, two are identified as Below Poverty Line (BPL) families, while no women-headed or physically challenged households were found. The demographic details of the non-affected individuals in the project area are provided in Table 5.26.

Village	Non Affected HH	Non Affected Population			Average Family size	Marital Status		Women Headed HH	PC headed HH	BPL HH
		Total	Male	Female		Married	Un-married			
Bindhana	10	35	20	15	3.5	20	15	0	0	2

(Source: Field Survey)

It is evident from the above table that the demographic and socio-economic profiles of non-affected households average family size of the former group is 3.5 as against 5.47 in case of affected category.

5.21.2 Caste & Gender Distribution of N-PAF

Of 10 non-affected households, 2 (20.00%) and 8 (80.00%) belong to OBC & General category respectively, whereas no SC & ST category household found in project affected area under survey.

The details of caste distribution among non-affected category are given in Table 5.30. Of 10 non-affected HHs with 35 persons surveyed, 20 are males and 15 are females with a sex ratio of 750 females per 1,000 males. Nearly 57.14% of the population were found to be married and 42.85% were unmarried. All of (100.00%) non-affected HHs surveyed, are Hindu religion. The details are given in Table 5.27 - 5.30.

Table-5.27: Caste-wise Distribution of Non-affected Households.

Caste	Bindhana (No. of PAFs)
SC	0
ST	0
OBC	2 (20.00)
GEN	8 (80.00)
Total	10 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-5.28: Size and Sex-Ratio of Non-affected Households

Village	Items	Surveyed data
Bindhan	Total HH Surveyed	10
	Total Persons of Surveyed HHs	35
	Male	20
	Female	15
	Sex Ratio	750
	Average family size	3.5

(Source: Field Survey)

Table-5.29: Age-wise Gender Distribution with Marital Status of Non-affected People Surveyed

Particulars		Sex	Total
Distribution in age group	0-6 yrs	Male	2 (5.71)
		Female	2 (5.71)
	7-18 yrs	Male	4 (11.40)
		Female	5 (14.3)
	19-60 yrs	Male	11 (31.40)
		Female	9 (25.70)
	Above 60 yrs	Male	1 (2.86)
		Female	1 (2.86)
Marital Status		Married	20 (57.10)
		Un-married	15 (42.90)
Non-affected people surveyed (Nos.)			35

(Source: Field Survey) (Figures in parentheses are percentages)

Table-5.30: Religion of Non-affected Households

Sl. No.	Religion	Total families (Nos.)
1	Hindu	10 (100.00)
2	Muslim	0
3	Christian	0
4	Others	0
	Total	10 (100.00)

(Source: Field Survey)

5.21.3 Heads of Non-affected Households

The heads of non-affected households as indicated in table 4.34 reveals that hardly 10% households are headed by women and 90% are men and major family level decisions are taken by men only.

Table-5.31: Heads of Non- affected Households										
Sl. No.	Village	Age Group (Yrs)								
		< 45			45-60			> 60		
		WH	MH	Total	WH	MH	Total	WH	MH	Total
1	Bindhana	0	4	4 (40.00)	0	3	3 (30.00)	1	2	3 (30.00)

(Source: Field Survey)

5.21.4 Education of Non-Affected families

The educational status of non-affected families as indicated in table 4.35 reveals that among 35 non-affected PAPs the overall literacy is about 85.17%, less than that of the affected PAPs (97.11%)

Table-5.32: Educational Level of Non-affected Persons				
Village	Sl. No.	Level of Education	Male	Female
Bindhana	1	Illiterate	2 (5.71)	3 (8.57)
	2	Up to primary	8(22.85)	3(8.57)
	3	Secondary	10(28.57)	4 (11.42)
	4	+ 2/Intermediate	3 (8.57)	1 (2.85)
	5	Graduation & above	1 (2.85)	0
	6	Technical-Degree/Diploma	0	0
	7	ITI/ Prof. Degree	0	0
Total			24 (68.57)	11 (31.83)

(Source: Field Survey) (Figures in parentheses are percentages)

5.21.5 Occupation & Livelihood of Non-Affected families

The occupations of non-affected persons are indicated in Table-5.33. From the table it can be seen that out of total 35 persons only 10 persons have main occupation out of which 2 persons (20.00%) are daily wage earner, 4 persons (40.00%) are salaried and 4 persons (40.00%) are engaged in business activities. None of the unaffected individuals appeared to have a subsidiary occupation.

Table 5.33: Main Occupations of Non- affected Persons

Village	Sl No.	Occupation	Total
Bindhana	1	Cultivation	0
	2	Allied activity	0
	3	Agril. Labourer	0
	4	Daily Wage Earner	2 (20.00)
	5	Salaried	4 (40.00)
	6	Business/Trade	4 (40.00)
	7	Craft Artisan	0
	8	Others	0
Total			10 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Average annual income of non-affected families is Rs.1,35,600/-. Average monthly expenditure of affected families is Rs.23,468/- is high compared to Rs. 7879/- in case of non-affected families. The details of monthly family income and expenditure of Non-PAFs are given in Tables - 5.34 & 5.35.

Table- 5.34 - Family Income of Non-affected Households (in Rs.)

Sl. No.	Village	Total HHs	Average monthly family income (in Rs)	Average annual family income (in Rs)
1	Bindhana	10	11300	135600

(Source: Field Survey)

Table-5.35: Average Monthly Expenditure of Non-affected Households (in Rs)

Village	Sl. No.	Particulars	Monthly family expenditure (10 families surveyed)	Average Monthly Expenditure (10 families)
Bindhana (Total NA Families Surveyed- 10)	1	Food	35000	3500
	2	Agriculture	0	0
	3	Housing	3100	310
	4	Cooking fuel	6100	610
	5	Clothing	4350	435
	6	Health	6800	680
	7	Education	3350	335
	8	Transport	5500	550
	9	Communication	3400	340
	10	Social functions	5600	560
	11	Others	5590	559
Total			78790	7879

(Source: Field Survey)

5.21.6 Health Status of Non-Affected households.

The health scenario of non-affected families as indicated in Table 5.36 shows that there is not much difference in health status of both PAFs and non-affected families.

Table-5.36 : Health Status of Non-affected HHs Surveyed				
Village	Sl. No.	Particulars	Total (Nos.)	
Bindhana	1	Total Non-affected HHs surveyed	10	
	2	Families suffering from diseases	8	
	Type of Treatment			
	3	Medical	8	
	4	Homeopathic/Ayurved	0	
	5	Private clinic	0	
	6	Quacks	0	
	7	Monthly Expenditure on health (Rs.)	4800	
	8	Average Monthly exp. on health (Rs)	480	
	9	Last year birth	0	
	10	Number vaccinated	0	
11	Last year death	0		

(Source: Field Survey)

5.21.7 Perception about the Project

The non-affected persons are aware of the proposed project in their area. About 70% of them are of the view that the project will help improve their livelihoods, whereas 30% differ. Nearly 30% persons feel that crimes and disturbances in the villages will increase, but 70% do not agree with them. However, about 70% of non-affected people apprehend health problems after execution and operation of the project because of increased environmental pollution, noise and vibration. The reactions of the non-affected persons have been presented in Tables 4.37 - 4.39.

Table-5.37: Loss of Livelihood as Perceived by Non-affected Persons						
Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	0 (0.00)	2 (20.00)	1 (10.00)	7 (70.00)	0 (0.00)	10 (100.00)

(Source: Field Survey)

(Figures in parentheses are percentages)

Table-5.38: Increase in Social Unrest and Crime as Perceived by Non-affected Persons

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	0 (0.00)	3 (30.00)	0 (0.00)	7 (70.00)	0 (0.00)	10 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-5.39: Increase in Health Risk as Perceived by Non-affected Persons

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	1 (10.00)	6 (60.00)	0 (0.00)	3 (30.00)	0 (0.00)	10 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

5.21.8 Business Opportunities

About 90% of the non-affected persons expect increase in business opportunities while 10% are in disagreement with them (Table 5.40).

Table-5.40: Increase in Business Opportunities as Perceived by Non-affected Persons

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (40.00)	5 (50.00)	0 (00.00)	1 (10.00)	0 (0.00)	10 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Chapter-6

Social Impact Assessment

6.1 Introduction

6.1.1 Framework and Approach to Identifying impacts

Social impact of a project explores how availability of resources, services, living condition, quality of life and environment in the project area are affected by implementation of the project. These effects have been captured after conducting survey among both affected and non-affected households and through stakeholder consultations. The following steps were followed:

- (i) Conduct of census survey among the project affected and additional 5% non-affected households.
- (ii) Discussion with local communities.
- (iii) Consultation with local PRI representatives and local elites.
- (iv) Interaction with government officials, and opinion leaders.

Acquisition of land by a project usually causes loss of land and displacement of habitations warranting rehabilitation of people. But in the present case, the project does not cause dislocation of habitations leading to rehabilitation of people, for which loss of land and natural assets like trees remains the major concern of the PFAs. The nature and extent of impact of the project can broadly be categorized under:

- (a) Impact on the livelihood of households whose land will be acquired for the project.
- (b) Impact on the socio-economic conditions of the communities in general in the project affected area.
- (c) Impact on social security of the people living in the area affected by the project.

6.1.2 Classification of the Social Impact

The project will have different impacts during various phases of its lifecycle. Below are the classifications of social impacts during the pre-construction, construction, and post-construction phases (Table 6.1).

Table-6.1: Classification of Impact of the Project

<p>1. Impact During Pre-Construction Phase:</p>	<ul style="list-style-type: none"> • Land Acquisition and Displacement: The acquisition of 15.244 acres of private land in Bindhana village may result agricultural disruption. Affected families might face uncertainty regarding compensation and livelihood restoration. • Loss of Agricultural Land: Farmers will lose access to agricultural land, leading to potential loss of income from farming activities before compensation or resettlement is arranged. • Socio-Psychological Stress: Uncertainty about relocation, compensation, and the future of livelihoods may cause stress among the affected families, especially those heavily reliant on agriculture. • Environmental Concerns: The initial clearing of land and preparation for the construction site may result in the removal of vegetation, affecting local biodiversity and altering the landscape. • Disruption to Local Livelihoods: The prospect of relocation or changes in land ownership could disrupt livelihoods, particularly for farmers, laborers, and small business owners dependent on the local community.
<p>2. Impact During Construction Phase:</p>	<ul style="list-style-type: none"> • Temporary Employment Opportunities: The construction phase may create short-term employment opportunities for local laborers, benefiting daily wage earners and skilled workers. This could temporarily alleviate income loss due to land acquisition. • Disruption to Local Mobility and Trade: Construction activities might block or reduce access to roads, markets, and the Saptamatruka Temple, affecting local trade, tourism, and religious activities. • Noise, Dust, and Pollution: Construction work will likely lead to increased noise, dust, and air pollution, affecting the health and well-being of nearby residents. The use of heavy machinery could disturb the local environment. • Impact on Water Sources: During construction, water bodies may be temporarily affected, impacting both irrigation for agricultural fields and local aquaculture practices. • Impact on Small Businesses: Local businesses such as shops and eateries may experience both positive (increased demand from construction workers) and negative (reduced access to tourists and

Table-6.1: Classification of Impact of the Project

	<p>locals) impacts during this phase</p>
<p>3. Impact During Post-Construction Phase:</p>	<ul style="list-style-type: none"> • Enhanced Irrigation and Agricultural Productivity: The barrage, once completed, could improve water availability for irrigation, potentially boosting agricultural productivity in the region. However, proper water management is essential to realize these benefits. • Long-Term Economic Benefits: The improved water management from the barrage might encourage new economic activities such as aquaculture or horticulture, benefiting the local economy in the long run. • Displacement and Livelihood Restoration: For displaced families, the long-term impact will depend on the effectiveness of resettlement, rehabilitation, and compensation efforts. Livelihood restoration programs should focus on providing alternative employment or support for new economic activities. • Environmental Changes: The altered water flow and landscape modifications could lead to changes in local ecosystems, potentially affecting biodiversity, fishing activities, and the local environment. • Impact on Tourism and Religious Activities: If the project improves accessibility and the environment around Saptamatruka Temple, it could enhance tourism and religious activities in the area. However, poor management could lead to reduced visitor numbers if access is hindered. • Long-Term Social Impact: Changes in local social dynamics due to the influx of workers, altered economic conditions, and possible relocation of families may continue to affect the social fabric of the community.

6.2 Impact on Community Health

Construction & Establishment activities associated with the proposed project will cause more noise disturbance and air pollution. This will add to the discomforts of the households living near the project. Air pollution may cause respiratory problems among the people living nearby the project area.

Proposed Mitigation Measures

To mitigate the above impacts of the project during the implementation and operation phases of the project, the following measures are suggested.

- Alternative additional roads should be constructed for vehicles transporting construction materials to the project site
- The speed of construction material vehicles will be reduced and additional roads will have proper markings to reduce the speed.
- Water should be sprinkled on piles of project site to reduce pollution.
- As far as possible, preference will be given to local people while planning for the employment of the project.

As far as practicable, local people should be given preference in the employment plan of the project.

6.3 Impact on Livelihood & Culture

As evident from the above discussion, the PAFs earn their livelihood from different sources. The major sources of livelihood of these families are service and wage work. Variations in the asset ownership and social linkage of caste categories give rise to inter-caste variations in annual income.

Land acquisition has a negative impact on the livelihood and employment of local youth. Land acquisition for the construction of the proposed project will increase the adverse impact on the livelihood of the project-affected families. The average landholding size of these households will decrease, forcing them to perform family labour on their own land for commercial purpose. As a result, the contribution of employed labour to other trade sectors will decrease. Wage labour in agriculture is not their main source of livelihood for most of the families. Agricultural labourers will take up alternative means of earning by working in nearby industries.

The proposed project will create more economic activities and livelihood and employment opportunities for local people through business. Apart from this, direct employment opportunities can be created for them during the project implementation phase.

Possibilities of employment may motivate the local youths to go for training to make them worthy of employment in the industrial sector. Thus, indirect employment opportunities are likely to be created through the establishment of small shops like tea stalls, restaurants, retail outlets etc. in the alongside of proposed project. Some of these activities may turn out to be sustainable in the long run.

Proposed Mitigation Measures

- (i) Local people may be given preferential treatment for employment in the project according to their suitability.
- (ii) To enhance the chances of employment in the project, facilities may be created for their skill development by setting up appropriate training institutes.
- (iii) The project authority should facilitate gradual shift of workers in the project affected area from the contracting industrial sector to expanding non-farm sector.
- (iv) Local people having vocational training and technical skills should be helped to take up self employment by setting up ancillary industries / business. This will have a multiplier effect on employment creation locally.

6.4 Impact on Project Affected Land Owners

Land to be acquired for the proposed project in the district is mostly agriculture and barren land.

Land will be acquired from the private people on payment of compensation as per the norms. The compensation is much higher than the market value of land in the area. This will enable the land losers to purchase additional land to restore their livelihood.

The total private land of 15.244 Ac. to be acquired constitutes a very small proportion of total land available in the area. Discussion with the people surveyed and in FGDs did not indicate any increase in the local land price on account of land acquisition.

Proposed Mitigation Measures

Required measures are to be taken to mitigate the problems of project affected people arising from land acquisition. The mitigation measures suggested are as follows:

- i. **Cash Compensation:** The PAFs need to be compensated in cash for loss of their land preferably at higher price than the prevalent market value of land in the affected village and 100% solarium may be paid on the worked out value of the land as per RFCTLARR Act.
- ii. In the process of land acquisition, access to some patches of land may be obstructed or may be rendered unviable for cultivation. The entire plot of land should be acquired and their owners be compensated at the replacement values applicable to other pieces of land.
- iii. The project authority should take steps to restore the livelihoods of the PAFs so as to better their standard of living by focusing on their specific needs.
- iv. The project authority should give preference to the skilled and qualified persons in PAFs for employment.

The impact of the project on the PAFs depends on how the compensation money is utilised by them. Compensation can be put to different uses like purchase of land for agriculture purposes, building of house, meeting family needs like performance of social functions, medical treatment, education of children, repayment of old loans, investment in business to diversify the sources of livelihood, and purchase of vehicle for personal as well as commercial use etc. If the compensation received is misspent on alcohol and other intoxicants or conspicuous consumption, the standard of living of these households will deteriorate soon.

6.5 Loss of Land of SC/ST Families

Due to construction of the proposed project, only 1 SC family will be affected for land acquisition. Only 0.08 acres (0.52%) of their total land area will be acquired, which a very small fraction of their total land is holding. Therefore, agricultural activities do not affect their livelihood much. However, the reduction of their landlessness may weaken their social status, as land is considered an important asset during times of distress.

Proposed Mitigation Measures

- i. Vulnerability of these groups due to loss of a traditional asset like land can be mitigated by providing them land for land or by helping them to procure other non-agricultural assets with permanent value. In the choice of such permanent assets to be handed over to these affected people, special focus is to be given to their needs and preferences.
- ii. SCs/STs among the affected families with skill and suitability are to be given precedence over their general caste counterparts as regards provision of employment and other benefits under the project.
- iii. These groups need to be identified as 'Target Groups' for CSR programmes. There should be specific targeted interventions for training, skill development, and creation of infrastructure and provision of services for these groups on priority basis.

6.6 Impact on Sharecroppers and Agricultural Labourers

Land acquisition and the consequential changes in land holding size will impact the livelihoods of sharecroppers and agricultural labourers. Agriculture being labour intensive and labour requirement being very large at particular stages of operation, wage labour has to be engaged. Irrespective of landholding sizes, all classes of farmers lease out their land on share cropping basis. But no authentic information could be collected about sharecroppers as the landowners were unwilling to share the details of sharecropping on their land. A sharecropper is not permanently attached to a parcel of land. In

apprehension of legal complications, the land owners change their sharecroppers very often, even every year. Therefore, the share croppers could not be identified and no information could be collected about them to assess the impact of land acquisition on their livelihood.

Agricultural labourers are a very vulnerable group as their income is not only very low, but also uncertain. They are mostly landless labourers and marginal farmers with small land size which is not enough to keep them engaged and provide livelihood throughout the year. They belong to the lower strata of the community and have no access to credit. They move out to the nearby areas in search of employment. They usually do not perform any particular type of work and don't have many avenues of employment depending on availability of work in different seasons. They could not be contacted as they were mobile and had no time to spare for providing information in view of their time-bound engagement.

But this group, though vulnerable was less likely to be affected by land acquisition as working on agricultural fields was one of their various avocations. Scope of employment for these workers performing manual labour is manifold, more so, they may gain because of increased employment opportunities in the non-farm sector.

When the sharecroppers and agricultural labourers lose employment because of the project, measures need to be taken to mitigate their woes. These people need to be provided employment in the project or made employable elsewhere by imparting training to them for skill formation. This will increase their employability and income generation. However, their livelihoods should be restored by taking into account their skill, needs and choices. Further, they are also to be guided and supported for start-up enterprises in cottage / small scale business sector through provision of loan.

6.7 Impact on Vulnerable Groups

Impact of land acquisition for the project will not be uniform across all the affected people. The vulnerable groups run higher risk of falling into poverty than others in an adverse situation. These groups are generally poor and asset less. They do not have easy access to credit from the organized sector and the private credit market is beyond their reach as they lack in assets worth the value to be

given as collateral against borrowings. In a development project involving land acquisition, their only worthwhile asset adds to their vulnerability as they have nothing else to fall back upon at the time of crisis. These groups include BPL families, SCs, STs and women headed households. Information about vulnerable groups among the PAPs has been provided in Chapter-IV. Two other important aspects relating to vulnerable groups are tribal and gender issues.

6.8 Tribal Issues

The tribal's are poor, asset less and deprived. Government have come up with many welfare programmes for their up-liftment. Adequate care has to be taken to mitigate the problems arising on account of the proposed project, which is likely to disturb their close-knit social and economic fabric. Compensation package in the Entitlement Matrix for them need to be so designed that they would be better off in the post-project implementation period. The state and central government schemes targeted for this group of population may constitute a part of the compensation package of the project.

6.9 Gender Issues

The proposed project is expected to improve business and reduce travel time. This will enable women to better their skill by accessing market facilities in the nearby urban centres. As a result, their livelihood will improve and they can be sale and purchase their daily needs in the daily market. With strengthened economic status, they will be empowered to take part in familial decision making process and assert their rights.

Proposed Mitigation Measures

The vulnerable groups are susceptible to the adverse impacts of land acquisition and run higher risk of suffering during and after project implementation. To ameliorate the unfavourable socio-economic predicament of these groups, the project should address some mitigation measures as suggested below.

- i. The vulnerable groups are to be identified and targeted for benefits under CSR and other social welfare programmes including credit facilities.
- ii. Employment is to be provided to persons belonging to these groups on preferential basis as per their skill and ability.
- iii. Steps are to be taken to train the eligible persons in these groups for skill improvement to enable them for better employment with higher income.

- iv. Compensation may be given to these families in advance to avoid dislocation in their way of living such that their pre-project livelihood is restored.
- v. Social security is an important aspect of human rights, particularly in the case of tribals and women of the vulnerable groups. Everybody in these groups should be ensured livelihood so that he/she can lead a dignified life. Care has to be taken that the vulnerable people are adequately provided with requisite means of earning livelihood for a secured social life.

6.10 Impact on Other Productive Assets

Even though no large trees would be affected in the land acquisition associated with the proposed in-stream barrage construction, the impact on other productive assets must be carefully considered. Productive assets such as agricultural land, water resources, and infrastructure could be affected by the land acquisition process. For example, if fertile farmland is acquired, it could hinder local agricultural production, impacting the livelihoods of farmers and communities dependent on it. Additionally, changes in water flow due to the barrage could affect irrigation systems or fisheries, which would have further implications for local economic activities. Even if no trees are present in the affected land, other natural resources or built infrastructure could face significant disruptions, requiring thorough assessment and potential mitigation strategies.

6.11 Impact on Transportation and Traffic System:

During the implementation phase of the project, the movement of vehicles transporting construction materials to the work site will increase significantly. The vehicles will be used to transport equipment, materials and workers to the work site. The increased traffic may be a source of potential safety hazards for other road users. Care must be taken not to cause problems

6.12 Impact on Livestock

Household surveys and focus group discussions conducted in both project-affected and non-project-affected areas revealed concerns about their livestock. The project will be constructed in an open field and agricultural land, which will result in a lack of grazing land for domestic animals moving there.

6.13 Perception of PAFs on the Project

During surveys and FGDs the perception of the PAFs on implementation of the project were captured.

6.13.1 General Feeling

Of the total 38 PAFs, majority of the people (65.79%) feel that the project will affect them positively, 26.32% disagree with them and 7.89% had no opinion. The positive impacts are increase in business and scope for employment. The negative impacts stated by the later group are increased accidents, environmental pollution, noise and vibration, and occupational health hazards. The abstracts of the respondents' views are given in Tables 6.2, 6.3 and 6.4.

Table-6.2: Impact of the Project on PAFs

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	21 (55.26)	3 (7.89)	5 (13.16)	5 (13.16)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.3: Benefits of Local People

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	6 (15.79)	18 (47.37)	7 (18.40)	2 (7.89)	4 (10.53)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.4: Overall Benefits to the Region

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	25 (52.63)	2 (21.10)	4 (10.50)	2 (5.26)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

6.13.2 Impact on Family Structure, Unrest and Crime

Majority of the PAFs expressed that kinship structure will be affected along with increase in crime in the area after implementation of the project as evident from the response of the PAFs given in Table 6.5 & 6.6.

Table-6.5: Impact on Kinship Structure

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	7 (18.42)	23 (60.53)	4 (10.53)	0 (0.00)	4 (10.53)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.6: Increase in Crime						
Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	2 (5.26)	24 (63.16)	3 (7.89)	2 (5.26)	3 (7.89)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

It is apprehended that there will be disturbances in the family due to alcoholism and other factors after implementation of the project. Compensations to the PAFs will not help reduce their financial stress. The details are given in Tables 6.7, 6.8, 6.9 & 6.10.

Table-6.7: Impact on Family Disturbances						
Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	6 (15.79)	18 (47.37)	7 (18.40)	2 (7.89)	4 (10.53)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.8: Impact on Family Expenditure for Drugs and Alcohol						
Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	25 (52.63)	2 (21.10)	4 (10.50)	2 (5.26)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.9: Impact on Mental Stress for Compensation Money						
Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	7 (18.42)	23 (60.53)	4 (10.53)	0 (0.00)	4 (10.53)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.10: Vulnerability of Local Youths to Drugs and Alcohol						
Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	1 (2.63)	19 (50.00)	5 (13.20)	4 (10.50)	4 (10.50)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

6.13.3 Health Risks

During construction phase of the project, increased effluents and solid waste materials including polythene, there will be health risk as expressed by more than 50.00% of PAFs. However, 63.16% PAFs opined that health related expenditure would go up as revealed from Tables 6.11, 6.12, 6.13 and 6.14.

Table-6.11: Impact on Health Status

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	25 (52.63)	2 (21.10)	4 (10.50)	2 (5.26)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.12: Impact on Likely Health Risks

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	21 (55.26)	3 (7.89)	5 (13.16)	5 (13.16)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.13: Impact on Social Stress

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	7 (18.42)	23 (60.53)	4 (10.53)	0 (0.00)	4 (10.53)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.14: Anticipated Increase in Health Related Expenditure

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	25 (52.63)	2 (21.10)	4 (10.50)	2 (5.26)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

6.13.4 Business Opportunities

As expressed by majority of PAFs, business opportunities in the area is likely to open after project implementation. It is likely that self-owned business will increase in the area. The details of business opportunities are indicated in Tables 6.18, 6.19 and 6.20.

Table-6.15: Increase in Business Opportunities

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	2 (5.26)	24 (63.16)	3 (7.89)	2 (5.26)	3 (7.89)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.16 : Increase in Self-owned Business Opportunities

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	7 (18.42)	23 (60.53)	4 (10.53)	0 (0.00)	4 (10.53)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.17: Increase in Local Competition

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	25 (52.63)	2 (21.10)	4 (10.50)	2 (5.26)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

6.13.5 Local Economy & Investment

It is expressed by many that there would be no down trend in the local economy and proper business planning can prevent such downward trend. The details are given in Tables 6.18 and 6.19.

Table-6.18: Anticipated Downward Trend in the Local Economy

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	25 (52.63)	2 (21.10)	4 (10.50)	2 (5.26)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Table-6.19: Impact of Business Planning to Prevent a Downward Economic Trend

Village	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Bindhana	4 (10.53)	21 (55.26)	3 (7.89)	5 (13.16)	5 (13.16)	38 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

6.14 Findings of Focus Group Discussions

As a part of the study, Focus Group Discussions (FGDs) were conducted in the village affected by the project to get an insight into the opinions of people. The details of FGDs are given in Table-6.20.

Sl No	Name of the Village	Date of FGD	Number of participants		
			Men	Women	Total
1	Bindhana	18.09.2024	21	15	36

(Source: Field Survey)

In the project affected village, FGD was organised with a group of 36 persons (male-21 and female-15) and leading questions (prepared earlier keeping the objectives of the SIA in view) were asked to get the response of the participants. While selecting care was taken to select representatives of various socio-economic groups of a village. Wherever feasible, the village maps were used to study the field situation. The expert team facilitated discussion, maintained a neutral attitude and appearance and summarised the session reflecting the participant's opinions evenly and fairly. A detailed report was prepared after the session was over. Findings of the FGDs are presented in the subsequent paragraphs. Sample photographs of FGDs are given in **Annexure-3**.

6.14.1 General perception and awareness about the Project

Villagers were found to be aware of the project. They opined that the people will benefit from the project through compensation, employment, fresh produce from the sustainable market and access to better quality food products. Some female participants felt that the compensation money could be misused, thereby affecting family peace.

6.14.2 Support of Local People for the Project

Almost all the participants in FGDs were in support of the project, they were willing to part with their land for due compensation and work in the project on wage basis, and provide water and accommodation facilities to the project employees during construction phase.

6.14.3 Problems, Benefits and Concerns

Participants in the FGD conducted in the affected village didn't anticipate any problem after project implementation. It was apprehended that livelihoods will be affected after land acquisition. The other problems to be encountered are noise and environmental pollution. Public resentment may surface if

employment is not given to local people. On the other hand, the project may be beneficial for the people in the region. Increase in more employment opportunities, better marketing facilities, improved healthcare and education are some examples of benefits to be reaped by people in the project area. On the whole, socio-economic development is likely to occur after the project is completed.

6.14.4 Critical Issues

Environmental problems like air, water and noise pollution associated with construction and implementation of the project is very critical from both short-term and long-term perspective. Social disturbances due to increased addiction to intoxicants may aggravate the situation.

6.14.5 General Socio-Economic Situation

As the project affected village is in urban area, the major sources of livelihood of people are wage earning, small business, Govt. and private services. Economical condition is good in this area.

Cropping Pattern

The cropping pattern of the district is largely dependent on monsoon rain. Geographical situation of lands such as hills, streams, rivers, valleys, slopes and planes play important role in variation of growing crops in different regions. Paddy is the main crop in this district. Depending on availability of water and nature of soil other crops like, groundnut, mung, biri, kulthi, sugarcane and vegetables are mostly grown the project affected Tehsil. The land utilisation and cropping pattern in the region are given in Table-6.21.

Block/Tehsil	Geographical area in Ha	Net sown area in Ha	Irrigated land in Ha	Cropping pattern adopted	
				Kharif	Rabi/ Summer
Jajpur	19443	8162	-	Paddy, Wheat, Vegetables	Moong, Biri, Kulthi, Groundnut, Sugarcane, Vegetables

(Source: District Statistical Handbook, Jajpur)

Yield and Economics

The average yield of paddy was 20-30 quintal/ha, while yield of groundnut yield was 10-12 quintal/ha while Yield of moong & biri were about 3-5 quintal /ha. and sugarcane was 300-400 quintal/ha.

Paddy is sold @ Rs 1800-2000 per quintal. The selling price of groundnut is Rs 6000-7000/quintal, Biri Rs. 5000-6000/qtl., Mung Rs. 6000-7000/quintal and sugarcane was sold @ 3500-4000 per quintal. The daily agricultural wage rate is Rs 400/man-day and Rs 350/woman-day.

6.14.6 Loss of land and Property

In the proposed project, a significant portion of agricultural land is slated for acquisition, which may adversely affect the livelihoods of agriculture-dependent families in the village of Bindhana. Since most of the land being acquired is agricultural, those relying on farming as their primary source of income could face disruptions. However, it is important to note that the number of landless families in the village is relatively low, which suggests that the impact on immovable property, such as residential structures or other fixed assets, is minimal. Therefore, while the project may pose challenges to agricultural livelihoods, the overall impact on immovable property is expected to be limited.

6.14.7 Compensation Package for Land Acquisition

In the Social Impact Assessment (SIA) study for land acquisition, the compensation package is a crucial aspect for ensuring that the affected local people are fairly compensated for their loss. The affected individuals have demanded a land rate of Rs. 2.00 lakh per decimal, which amounts to Rs. 200.00 lakh per acre. This demand reflects the community's valuation of their land based on current market rates, future prospects, and the disruption the project may cause to their livelihoods. The compensation package should be carefully designed, taking into consideration the local people's expectations, while balancing legal guidelines and the project's feasibility. Fair compensation is not only essential for avoiding disputes but also for ensuring that the displaced families can restore their standard of living, rebuild their livelihoods, and contribute to the project's long-term sustainability. Proper dialogue and negotiation between the affected communities and authorities will be key in arriving at an acceptable compensation rate.

6.14.8 Social Composition

In the surveyed village, 0.48% of the affected families were Scheduled Castes, 57.90% General Classes and 39.47% Other Backward Classes, while the number of Scheduled Tribes was zero (0). Most of the people depend on Govt/private service, trade and wage labor for their livelihood. The village has 54.80% males and 45.20% females. The overall literacy rate in these villages is 99.11%, while females being less literate than males. Women in the family usually take the lead role in decision making.

6.14.9 Migration

7 persons seasonal migration is reported in the project affected village.

6.14.10 Health

In the village have healthcare service facilities within the village whereas People from the village travel 1-2 km for such services. Diseases like cold, fever, BP and diabetic are usually noticed in the area.

6.14.11 Poverty & Employment

Poverty percentage in Jajpur district is 70%, same is the situation in project affected villages. Unskilled workers had not much difficulty in getting employment, but the educated youth find it difficult to get regular employment.

6.14.12 Social Organisation

There are 2 AWC, 1 Primary school, 1 community hall and 1 ANM centre in the village. Banks and credit Cooperative Society are not available in the village.

6.14.13 Engagement in Project

The villagers apprehend loss of land and livelihoods, agricultural income, and health hazards after project implementation. Some of them are in need of employment to earn a living. Hence, there is need for skill up-gradation of such people to make them employable.

All the villagers have positive approach towards the project and are willing to extend all cooperation for its implementation. In return, they expect higher compensation and employment in the project.

6.15 Social Impact Management Plan

It cannot be gain said that acquisition of land for construction of the proposed In-stream Barrage across River Baitarani near Saptamatruka Temple in Jajpur Tehsil of the district has adverse impacts. Implementation of the proposed project may interfere with the livelihoods and socio-cultural life of people and cause environmental problems in the project area. Keeping in view the mandates of the Government of India and Government of Odisha, a strategy called Social Impact Management Plan (SIMP) has been prepared for mitigation of these unfavourable impacts. The plan has spelt out roles of the people, government and land acquiring organization for sustainable development in the area. Attempt has been made to make the plan flexible such that it can adapt itself to the changing environment for being relevant throughout the project life. The objectives of the plan are to minimize

the adverse social impacts and enhance the beneficial impacts of the project. The SIMP has been based on the SIA study and consultations with the stakeholders.

The proposed project in Jajpur Tehsil of Jajpur district requires 15.244 acres of private land to be acquired on payment of compensation. Compensation to the land owners is governed by namely, (i) Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013) and (ii) Odisha Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2016. The amount of compensation is determined and awards are made to the land losers as per the provisions in the rules.

6.15.1 Approach

This SIMP comprises a set of mitigation, monitoring and institutional measures to be taken during the design, construction and operational phases of the project to eliminate/minimize adverse social impacts or to reduce them to acceptable levels. There are provisions in the plan for implementation at various stages of the project. A description of these management measures to be followed at different stages of the project is suggested in the alongside diagram.

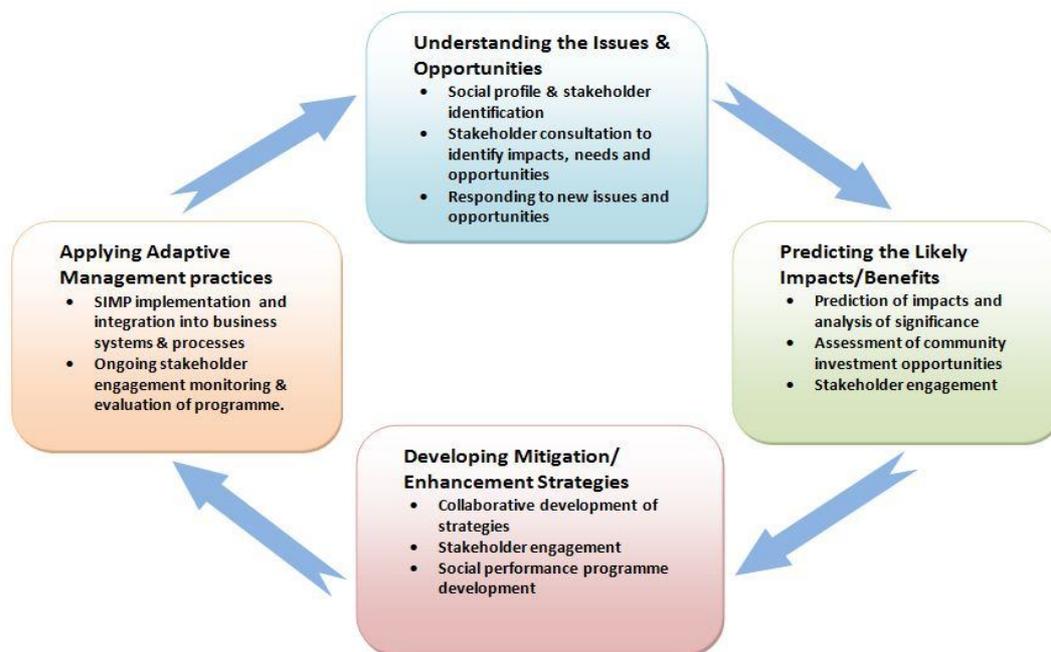


Fig.6.1: Social Impact Management Plan

It may be observed from the above diagram that social impact management process puts emphasis on stakeholder participation at all stages including development of strategies. Focus of the stakeholder engagement has gone beyond that of the traditional approach which identifies only the negative impacts associated with project activity. Views on issues relating to the future sustainability of impacted communities as well as suggestions were sought for leveraging the positive benefits of the project. Besides, baseline assessment and findings through consultation have been reflected in this SIMP. This will help promote transparency, openness and willingness to work collaboratively.

6.15.2 Findings of SIA Study

The village Bindhana of Jajpur Tahsil, Jajpur district will be affected by the proposed project.

- The household census survey estimates that 38 Project Affected Families (PAFs) and 208 Persons will be affected by the project. Among the 208 Project Affected Persons (PAPs), 25.53% are wage earners, 12.77% are salaried employees, 14.89% are engaged in business, and only 14.89% are involved in cultivation. Additionally, only one PAP has a subsidiary occupation.
- The average annual family income of the PAFs is Rs. 62,865.38, while the average monthly expenditure is Rs. 5,236.06.
- The PAFs collectively possess 64.250 acres of land. Of this, approximately 34.310 acres are utilized for agriculture/cultivation, 3.35 acres for residential purposes, and 25.820 acres consist of barren land.
- About 15.244 acres of private land will be acquired in the project-affected village under Jajpur Tahsil. Details regarding family-wise land acquisition and estimated compensation are provided in Annexure-5 of the report.
- Most affected households are male-headed, with only 8 female-headed households. No physically disabled individuals were found in the surveyed households.
- Public land, including community land and other common property resources, will also be acquired. However, the amount of such land is minimal and will not significantly affect social life in the area.
- No water bodies or community ponds will be dismantled as part of the project.

6.16 Social Impact Management Plan (SIMP)

It appears from the analysis and overview of the relevant Acts that compensation for land acquisition is to be sufficient to take care of losses of PAFs as well as PAPs and social issues. For transparency, the broad provisions of the Act are indicated below;

- Continued consultations with representatives of Panchayats/Municipality will be the main feature of the R&R planning and implementation of the project

- The Administrator and Commissioner for Resettlement and Rehabilitation will be appointed by the appropriate government.
- The Administrator of the project will ensure preparation of R&R plan and public disclosure as per the provisions of the Act.
- The SIA report shall be disclosed as per Section 7(5) of the Act.
- The R&R benefits will be as per provision of the Second Schedule of the Act, which are elaborated hereunder (Table-6.22 & 6.23)

Table-6.22: Analysis of Social Impact of Land Acquisition

Sl. No	Type of Impact	Mitigation measures
1	Loss of agricultural land	Compensation as per provision of LARR Act 2013 & Rules
2	Loss of homestead land	Compensation as per provision of LARR Act 2013

Table-6.23: Analysis of Social Impact on Livelihoods and Infrastructures

Sl. No	Type of Impact	Mitigation Measures
1	PAFs will lose their agricultural land, homestead land and livelihoods	Compensation as per the provision of LARR Act, 2013. Rehabilitation assistance as per schedule II, Alternative job opportunities may be provided to the eligible family members by the authorities of the district
2	Possibility of environmental pollution due to dust and other material during construction of the project	Surrounding the project site with very tall tin or asbestos.
3	Possibility of water pollution during construction phase	Supply of purified water to the project site and temporary housing of the employed workers

6.17 Social Impacts of the Proposed Project

6.17.1 Positive Impacts:

1. **Improved Irrigation and Water Management:** The construction of the in-stream barrage will likely improve water availability for irrigation, benefiting local farmers by enhancing agricultural productivity and reducing dependency on erratic rainfall.

2. **Employment Opportunities:** The construction phase of the project will generate temporary employment for local laborers and skilled workers, boosting local income and economic activity in the region.
3. **Enhanced Infrastructure:** The project may lead to the development of ancillary infrastructure such as roads and transport facilities, which can improve connectivity and access for the village.
4. **Increased Agricultural Efficiency:** The reliable water supply from the barrage could promote the use of advanced agricultural techniques and crop diversification, leading to better yields and higher income for farmers in the long term.
5. **Potential for Fisheries Development:** The barrage may create opportunities for the development of local fisheries, providing an alternative livelihood for some of the affected families and diversifying income sources in the village.
6. **Mitigation of Flood Risk:** The regulation of water flow through the barrage could help mitigate seasonal flooding in the surrounding areas, protecting both agricultural land and property.
7. **Boost to Local Economy:** The overall increase in agricultural output and employment opportunities may stimulate economic growth in the region, leading to long-term socio-economic benefits for the local population.

6.17.2 Negative Impacts:

1. **Loss of Agricultural Land:** A significant amount of agricultural land will be acquired for the project, directly affecting the livelihood of families who depend on farming. This could lead to reduced income for these families, as their primary source of sustenance and earnings may be compromised.
2. **Displacement of Farmers:** Farmers who lose their agricultural land may face challenges in finding alternative sources of livelihood, potentially leading to economic instability and hardship for affected households.
3. **Disruption of Local Economy:** Since agriculture is a primary economic activity in the village, the reduction in arable land could negatively impact the local economy, leading to a decline in agricultural production and related trades.
4. **Risk of Inadequate Compensation:** There is a possibility that the compensation provided for the acquired land may not fully reflect the long-term economic value of the land or account for the livelihoods lost, leading to dissatisfaction and financial distress among the affected families.
5. **Environmental Impact:** The construction of the barrage may disrupt the local ecosystem, affecting natural water flow, aquatic life, and biodiversity in the area. This could also impact water availability for nearby communities and agricultural fields not directly affected by the land acquisition.
6. **Social Disruption:** The acquisition of land and the potential resettlement of families may cause social upheaval, disrupting the traditional way of life and community dynamics in the village.

7. **Increased Dependence on External Employment:** With the loss of agricultural land, many affected families may be forced to seek employment outside of farming, leading to a shift from self-sustenance to dependence on potentially unstable or lower-paying jobs in other sectors.
8. **Impact on Cultural and Religious Sites:** If any cultural or religious sites are located within the area of the proposed project, their displacement or destruction could negatively affect the cultural heritage and social fabric of the community.
9. **Temporary Noise and Pollution:** The construction phase may lead to increased noise, dust, and pollution in the area, negatively impacting the quality of life for the local residents and potentially affecting health.

6.17.3 Mitigation Measures for the Proposed Project:

1. **Adequate Compensation for Land Acquisition:** Ensure fair and timely compensation for affected families, reflecting both the market value of the land and the long-term economic losses due to the disruption of agricultural activities. This should include compensation for both landowners and tenants.
2. **Livelihood Restoration Programs:** Implement livelihood restoration programs for affected families, such as skill development, vocational training, and support for non-agricultural employment opportunities to ensure economic stability after land acquisition.
3. **Resettlement Assistance:** If any families are displaced, provide proper resettlement assistance, including access to housing, basic amenities, and infrastructure in the resettlement areas to minimize social disruption.
4. **Alternative Agricultural Support:** Offer alternative farming options, such as providing access to irrigated land elsewhere or supporting sustainable agricultural practices, such as drip irrigation, to maximize the remaining land's productivity.
5. **Development of Fisheries and Allied Activities:** Encourage affected families to engage in alternative livelihood activities such as fisheries, livestock rearing, or small-scale agro-processing units, leveraging the water resources created by the barrage.
6. **Environmental Conservation Measures:** Implement environmental protection strategies, such as preserving local biodiversity, reforesting affected areas, and maintaining natural water flow to protect aquatic life and minimize ecosystem damage.
7. **Community Participation in Planning:** Involve the affected community in decision-making processes, ensuring that their concerns are addressed, and that they benefit from the project through employment, services, and infrastructural development.
8. **Health and Safety Measures:** During the construction phase, enforce stringent pollution control, dust suppression, and noise reduction strategies to minimize health risks for the local population. Provide access to healthcare services as needed.

9. **Monitoring and Grievance Redressal Mechanism:** Establish a robust grievance redressal mechanism to address concerns and complaints from affected families, ensuring transparency and fairness throughout the land acquisition and construction processes.
10. **Infrastructure Development for Affected Families:** Improve local infrastructure such as roads, schools, and healthcare facilities, particularly in areas where resettlement occurs, to provide long-term socio-economic benefits to the affected population.

6.18 Environment Management Plan (EMP)

The Environmental Management Plan (EMP) has been prepared to ensure that the project is implemented in an environmentally sustainable manner. This has been formulated for mitigation of the adverse impacts on the basis of the present environmental conditions. The Environmental Management Plan (EMP) relevant for construction and operation phases is described below.

1. **Soil and Land Conservation:** Implement measures to prevent soil erosion and degradation during construction, including proper land leveling, use of retaining walls, and vegetative cover to stabilize exposed soil.
2. **Water Resources Management:** Ensure sustainable water usage during construction by adopting water-efficient practices and preventing contamination of nearby water bodies. Post-construction, regulate water flow from the barrage to maintain ecological balance and support downstream agricultural activities.
3. **Air Quality Control:** Mitigate air pollution by controlling dust emissions during construction using water sprinkling, covering materials during transport, and employing dust suppression systems. Monitor air quality regularly to ensure it remains within safe limits.
4. **Noise Pollution Control:** Limit construction activities to designated hours, especially near residential areas, and use noise-reducing machinery to minimize disturbance to local residents and wildlife. Regular monitoring of noise levels should be conducted.
5. **Biodiversity Conservation:** Preserve and restore local flora and fauna by avoiding construction activities in sensitive areas and protecting natural habitats. Where necessary, reforest areas affected by the project, ensuring the survival of native plant species.
6. **Waste Management:** Implement a comprehensive waste management plan that includes proper disposal of construction debris, recycling of materials where possible, and safe handling of hazardous waste to prevent environmental contamination.
7. **Water Quality Protection:** Install sediment control systems such as silt fences and sedimentation ponds to prevent run-off from polluting nearby water bodies. Regularly monitor the water quality in rivers and streams to detect any potential contamination.
8. **Aquatic Life Protection:** Ensure that the design and operation of the barrage allows for the migration of fish and other aquatic species by including fish passes or ladders in the structure. Regularly assess the impact on aquatic life and adjust water flow as needed.

9. **Green Belt Development:** Establish green belts around the project site by planting trees and vegetation, which will help in reducing air pollution, enhancing biodiversity, and improving the aesthetic value of the area.
10. **Emergency Response Plan:** Develop and implement an emergency response plan for environmental accidents, such as oil spills or construction-related hazards, ensuring that mitigation measures are in place to minimize damage to the environment.
11. **Post-Construction Monitoring:** Conduct regular environmental monitoring during and after construction to ensure compliance with environmental standards. This includes monitoring water quality, air quality, soil health, and biodiversity to assess the long-term environmental impacts of the project.
12. **Community Awareness and Participation:** Educate the local community on environmental protection measures and involve them in conservation efforts, ensuring their participation in maintaining the ecological balance in the post-construction phase.

6.18.1 Occupational Health & Safety

Construction activities do not call for any specific measure for occupational and health safety. However, all the necessary safety measures should be taken for operation and maintenance of construction equipment and machineries used. Above all, the mitigation measures suggested in Chapter-V need to be taken up.

6.19 Proposed SIMP Outlay

An outlay plan has been prepared on the basis of SIMP outlined above. It is a tentative plan as compensation against land loss is to be decided by the Authorities concerned as per Act and Rules. The same is indicated in Table 6.24.

Table-6.24: SIMP Outlays

Sl. No	Description	Unit	Quantity	Rate (Rs in lakh)	Amount (Rs. in lakh)
1.	Monetary Compensation for loss of land to affected households.	Acre	15.244 Ac	2,00,00,000.00	3048.80
2.	Training for skill development for livelihood restoration.	Person	100 Persons	3000.00	3.00
3.	Compensatory afforestation	Acre	3.00 Ac	1,00,000	3.00
4.	Water & Sanitation	Village	1 Village	L.S.	1.00
5.	Other development works in villages	Village	1 Village	L.S.	2.00
Total					3057.80

Chapter-7

Cost-Benefit Analysis and Recommendations on Acquisition of Land

7.1 Introduction

One of the objectives of SIA is to study the social impact of the project and environmental impact. The social costs and benefits of an infrastructural project are different from its private costs and benefits because of externalities. It also aims to estimate cost of addressing them in accordance with the R&R policy of the government. It results in overall assessment of additional requirements for Rehabilitation and resettlement if any. This section provides an overview of budget required vis-à-vis the benefits of the project. It also discusses about assessment of public purpose, social impacts and social costs of this project.

The proposed project "**Construction of an In-stream Barrage across the River Baitarani near Saptamatruka Temple (Left Arm)**" presents a significant development opportunity for the region. However, like all large-scale infrastructure projects, it entails both costs and benefits that must be carefully considered. This chapter outlines the social costs and benefits associated with the project, focusing on how it will impact local communities, their livelihoods, and overall regional development.

7.2 Social Benefits of the Project

Enhanced Water Availability for Agriculture: One of the most significant benefits of the barrage is the increased availability of water for irrigation. Agriculture is the primary livelihood in the region, and the barrage will ensure a more reliable water supply, especially during the dry season. With better irrigation facilities, farmers will be able to cultivate their lands more efficiently, increasing crop yields and enabling them to grow multiple crops in a year. This will lead to higher incomes for farmers and promote food security in the area.

Employment Generation: The construction phase of the project will generate considerable direct and indirect employment opportunities for local communities. Construction workers, engineers, and support staff will be employed during the building process. Additionally, local businesses such as food vendors,

transport services, and construction material suppliers will benefit from the increased economic activity. Beyond the construction phase, the barrage will continue to support local livelihoods through enhanced agricultural productivity and other associated industries.

Flood Control and Water Management: The barrage will help in regulating the flow of the Baitarani River, reducing the risk of floods during the monsoon season. Floods have historically caused significant damage to homes, farmlands, and infrastructure in downstream areas. By controlling water levels, the project will protect local communities from the devastating effects of flooding, reducing the social and economic costs associated with disaster recovery. Furthermore, improved water management will also prevent soil erosion and enhance groundwater recharge, contributing to long-term environmental sustainability.

Improved Domestic Water Supply: In addition to supporting agriculture, the barrage will provide a steady supply of water for domestic use in surrounding villages. Communities often face water shortages during the summer months, and the barrage will help mitigate these issues by ensuring that clean water is available for drinking, cooking, and sanitation. This will lead to improved public health outcomes, reducing the incidence of water-borne diseases and improving the overall quality of life.

Social Cohesion and Community Development: The project has the potential to foster social cohesion by providing shared benefits to both upstream and downstream communities. Through proper community engagement and equitable distribution of water resources, the barrage can serve as a model for cooperative water management. Local communities, government bodies, and stakeholders can work together to maintain and manage the barrage, strengthening social bonds and promoting a collective approach to regional development.

7.3 Social Costs of the Project

Displacement and Resettlement: One of the primary social costs of the project involves the potential displacement of households located in the immediate vicinity of the construction site. While the exact number of displaced families may vary, any form of displacement can lead to disruption of livelihoods, loss of land, and the emotional and social costs of relocation. Proper resettlement and compensation plans must be implemented to ensure that displaced families are adequately compensated and rehabilitated.

Impact on Local Livelihoods: For communities that depend on the river for their livelihoods, such as fishing communities, the construction of the barrage could result in changes to aquatic ecosystems and river dynamics. This may negatively impact fish populations and the availability of fish as a resource. It is essential to address these concerns by incorporating fish ladders or other eco-friendly solutions that preserve fish migration and ensure that local livelihoods are not adversely affected.

Changes in River Ecology: The project may alter the natural flow of the river, affecting aquatic and terrestrial ecosystems in the area. This could lead to changes in biodiversity, potentially harming species that are dependent on the river's current flow patterns. While the project aims to mitigate these environmental impacts through eco-friendly design features, there may still be some unavoidable ecological costs.

Temporary Disruption during Construction: During the construction phase, there may be temporary disruptions to local life. Noise, dust, and increased traffic could affect the daily lives of people living near the project site. Local businesses and transportation routes may also be temporarily affected. These impacts, while temporary, need to be managed through proper planning and communication with the affected communities.

Social Inequities in Water Distribution: Although the barrage is designed to improve water availability, there is a risk that water distribution may not be equitable. Upstream communities could benefit more from the project than those downstream, potentially leading to social tensions and conflicts over water resources. It is critical that water management plans are designed to ensure fair and transparent allocation of water across all communities that depend on the river.

7.4 Balancing Social Costs and Benefits

While the project does involve some social costs, these can be effectively mitigated through thoughtful planning, adequate compensation, and active community participation. The long-term social benefits—enhanced agricultural productivity, employment generation, improved water security, and flood control—are substantial and have the potential to transform the socio-economic landscape of the region. By addressing the potential social costs through robust mitigation measures, the project can be implemented in a socially responsible manner.

7.5 Final Recommendation

After conducting a thorough Social Impact Assessment (SIA) of the proposed project “**Construction of an In-stream Barrage across the River Baitarani near Saptamatruka Temple (Left Arm)**” it is recommended that the project be approved for implementation. The study highlights several social, economic, and environmental benefits that will arise from the project, which significantly outweigh potential adverse impacts. The proposed mitigation measures are also considered robust and comprehensive, ensuring that any negative impacts are minimized.

- **Socio-Economic Benefits:** The barrage project is poised to bring considerable socio-economic advantages to the region. The construction and operation of the barrage will enhance agricultural productivity through improved water availability for irrigation, especially during the dry season. This will lead to an increase in crop yields, thus raising the income levels of local farmers. Additionally, the improved irrigation infrastructure will allow farmers to diversify their crops, further contributing to food security and economic resilience.
- The project is also expected to generate employment opportunities, both during the construction phase and in the long term through enhanced agricultural activities. Local communities stand to benefit from direct employment in construction activities, while local businesses and service providers will experience increased demand, stimulating the local economy.
- **Water Security and Resource Management:** The construction of the in-stream barrage will enhance water management in the region, ensuring a more reliable water supply for multiple uses, including domestic, agricultural, and industrial purposes. The regulated flow of water will help prevent water shortages during dry periods and mitigate flooding during monsoon seasons, benefiting downstream communities. The project will promote long-term water security in a region that is prone to water scarcity, which is crucial for sustaining livelihoods and supporting future development initiatives.
- **Environmental Sustainability:** While the project will have some environmental impacts, such as changes to river hydrology and aquatic ecosystems, these are expected to be manageable with the proposed mitigation measures. The project’s design incorporates eco-friendly features, such as fish ladders, to maintain fish migration patterns and preserve biodiversity. Additionally, the careful regulation of water flows will reduce soil erosion and help in groundwater recharge, contributing to the sustainable use of natural resources.

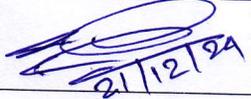
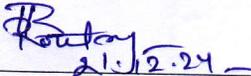
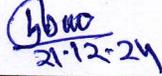
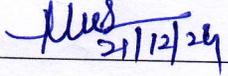
- **Positive Social Outcomes:** The barrage project is aligned with the development goals of the region, and it enjoys the support of local communities, as evidenced by the community consultations conducted during the SIA process. Improved access to water for agriculture and drinking purposes will enhance the quality of life, reduce the drudgery associated with water scarcity, and contribute to improved public health outcomes. The project is also expected to foster social cohesion through the cooperative management of water resources, ensuring that both upstream and downstream communities share in the benefits.
- **Mitigation and Monitoring Measures:** The project proponents have developed a comprehensive plan for addressing potential negative impacts, such as relocation, environmental degradation, or changes in river ecology. The mitigation measures, including proper resettlement and compensation plans, environmental monitoring systems, and community engagement frameworks, will ensure that the project proceeds in a socially and environmentally responsible manner. Regular monitoring and adaptive management strategies will help minimize unforeseen impacts, maintaining project sustainability over time.

In conclusion, the proposed project “**Construction of an In-stream Barrage across the River Baitarani near Saptamatruka Temple (Left Arm)**” is recommended for approval, given its significant potential to drive socio-economic development, enhance water security, and contribute to environmental sustainability. The SIA has demonstrated that the project’s benefits will positively impact local communities, and the well-designed mitigation strategies will minimize any adverse effects. Therefore, it is advised that the project move forward to implementation.

Public Hearing for Acquisition of 15.2440 acres of Private Land from Village Bindhana under Jajpur Tahasil of Jajpur District for "Construction of In-stream Barrage across River Baitarani near Saptamatruka Temple (Left Arm) (ToR 55-00001).

Place	Date	Time
Municipality Conference Hall, Jajpur	21.12.2024	10.30 AM

(Attendance Sheet for Officials Participants)

Sl. No.	Name of the participant	Designation	Mobile No.	Signature
1				
2	Sahabram Borker	L. A. O. Jajpur	70087930 54	 21/12/24
3	Biswajit Routroy	R.I LACO, Civil	9556541991	 21/12/24
4	Khagesendra Sahoo	Section officer Jajpur Inga-Divn	9439556395	 21-12-24
5	Rama Kant Mishra	RICOR, Con. Bm	9438155282	 21/12/24
6	Satyabrata Behera	RICOR, BBSR	9437174122	
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୧୫	Sitarom Dekhit	Sitarom Dekhit
୧୬	କାଶୀକିଶୋରୀ	
୧୭	Rasarama Dekhit	Rasarama Dekhit
୧୮	Sarat Nanda.	Sarat Nanda.
୧୯	Shiba Prasad Dekhit	Shiba Prasad Dekhit
୨୦	Sudip Ku. Sahoo	Sudip Ku Sahoo
୨୧	Balasam Sahoo.	Rinamanzi Sahoo
୨୨	Rudra Prakash Sahoo.	Rudra Prakash Sahoo
୨୩	Khagendra Sahoo, ^{Dist. An. Ingan.} ^{Divn.}	Khagendra Sahoo
୨୪	Hemanta Patra	Hemanta Patra
୨୫	Shreemanta Kishore Patra	Shreemanta Kishore Patra
୨୬	Akhay Ku. Padhi	ଅକ୍ଷୟ କୁମାର ପାଢ଼ି
୨୭	Mr. Gokula ch. Nanda	ଗୋକୁଳ ଚନ୍ଦ୍ର ନନ୍ଦା
୨୮	Rajendra Kee. Dekhit	Rajendra Kuma Dekhit
୨୯	Dalagobarda Sahoo	Dalagobarda Sahoo.
୩୦	Sanatan Bada.	ସନାତନ ବାଦା
୩୧	Bisay Patra	Bisay Patra
୩୨	Ramesh Sahoo	ରାମେଶ ସାହୁ
୩୩	SK Sarfraz	ସ୍କାମ୍ ସାରଫ୍ରାଜ୍

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(ToR: ୫୫-୦୦୦୦୧)

ଅଂଶଗ୍ରହଣକାରୀ ତାଲିକା (ଜନସାଧାରଣ)

ସ୍ଥାନ :
 ପୌରପାଳିକା ସଭାଗୃହ, ଯାଜପୁର

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୧	SK ZILANI	SKZILANI
୨	SKABJAIHOSSAIN	SKABJAI
୩	SKBAIDSHA.	SKBUI
୪	Ramesh ch. Patra	RAMESH CH. PATRA
୫	Bijay Patra	ବିଜୟ ପାତ୍ର
୬	Toilochan Patra	Toilochan Patra
୭	Santosh Ku. Mahapatra	Santosh Kumar Mahapatra
୮	RAMA CHANDRA RAMA	Rama Ch. Ram
୯	Anup Ku. Sahoo	ଅନୁପ କୁମାର
୧୦	Deeraj ch. Samanta	Deeraj ch Samanta
୧୧	Diptabhanu Dixit	Diptabhanu Dixit
୧୨	Ajay Dixit	Ajay Dixit
୧୩	Nagesingha Dixit	ନାଗେଶ୍ଵର ଦିକ୍ଷିତ
୧୪	Narayan ch. Rana.	Narayan chandoo Rana

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୩୪	SK Asif	SK ASIF
୩୫	SK Sajan	SK Sajan
୩୬	Kartik Kumar Das	Das
୩୭	Ramakanta Patra	ରମାକାନ୍ତ ପାତ୍ର
୩୮	Dilip Kumar Das	Dilip Kumar Das
୩୯	Rajesh Sahoo	Rajesh Sahoo
୪୦	Ajit Kumar Nanda	Ajit Kumar Nanda
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Annexure-I

Govt. of Odisha Notification

ଓଡ଼ିଶା ସରକାର
ରାଜସ୍ୱ ଓ ବିପର୍ଯ୍ୟୟ ପରିଚାଳନା ବିଭାଗ

No.RDM-LAA-JAJ-0002-2024- **31241** /R&DM, Dated **11 SEP 2024**

ସାମାଜିକ ପ୍ରଭାବ ନିର୍ଦ୍ଧାରଣ ନିମନ୍ତେ ଅଧିସୂଚନା

ରାଜ୍ୟ ସରକାର, ପ୍ରଭାବିତ କ୍ଷେତ୍ର ଜିଲ୍ଲାପାଳ, ଯାଜପୁର କିମ୍ବା ପରାମର୍ଶ କ୍ରମେ ନିମ୍ନଲିଖିତ ଭୂମି ଅଧିଗ୍ରହଣ କରିବାକୁ ଚାହୁଁଛନ୍ତି ଏବଂ ସେଥି ନିମନ୍ତେ ସର୍ବ ସାଧାରଣ ଉଦ୍ଦେଶ୍ୟରେ ପ୍ରଭାବିତ ଅଞ୍ଚଳରେ ସାମାଜିକ ପ୍ରଭାବ ନିର୍ଦ୍ଧାରଣ (Social Impact Assessment) ସର୍ବେକ୍ଷଣ କରିବାକୁ ଚାହୁଁଛନ୍ତି । ଭୂମି ଅର୍ଜନ, ପୁନର୍ବାସ ଓ ଆଇଆନରେ ଉଚିତ ମୂଲ୍ୟ ଏବଂ ସ୍ୱଚ୍ଛତା ଅଧିକାର ଆଇନ ୨୦୧୩ ର ଧାରା ୪(୧) ଅନୁଯାୟୀ ଉକ୍ତ ସର୍ବେକ୍ଷଣ କରାଯିବ ।

୧. ପ୍ରକଳ୍ପ ବିକାଶକାରୀଙ୍କ ନାମ:- ଅଧୀକ୍ଷଣ ଯନ୍ତ୍ରୀ, ଜଳସେଚନ ବିଭାଜନ, ଯାଜପୁର।

୨. ପ୍ରସ୍ତାବିତ ଭୂମି ଅଧିଗ୍ରହଣ ର ଉଦ୍ଦେଶ୍ୟ:- ଯାଜପୁରର ସପ୍ତମାଡ଼ୁକା ମନ୍ଦିର ନିକଟରେ ବୈତରଣୀ ନଦୀର (ବାମ ବାହୁ) ଅନ୍ତାପ୍ରବାହରେ ବ୍ୟାରେଜ ନିର୍ମାଣ ନିମନ୍ତେ।

୩.SIA ସର୍ବେକ୍ଷଣ ଅନୁଷ୍ଠାନ:- RICOR, Bhubaneswar under Nabakrushna Choudhary Centre for Development Studies, Bhubaneswar an empanelled agency under Nabakrushna Choudhary Centre for Development Studies, Bhubaneswar.

୪. SIA study କରୁଥିବା ଅନୁଷ୍ଠାନର ଯୋଗାଯୋଗ ସୂଚନା:- Nabakrushna Choudhary Centre for Development Studies, Bhubaneswar, Pin-751001 Phone No.0674 2300471, 0674 2301094.

୫. ପ୍ରକଳ୍ପ ପାଇଁ ଯାଜପୁର ଜିଲ୍ଲାରେ ପ୍ରସ୍ତାବିତ ଭୂମି ଅଧିଗ୍ରହଣର ବିବରଣୀ/ତଥ୍ୟିକ

କ୍ରମିକ ନଂ	ତହସିଲ	ଗ୍ରାମ	ବେସରକାରୀ ଜମି	ମନ୍ତବ୍ୟ
୧	ଯାଜପୁର	ବିନ୍ଧାଣ	୧୧୫.୨୪୪	-

ଏଥି ସହିତ ଭୂମି ଅନୁସୂଚୀ ସଂଲଗ୍ନ କରାଯାଇଅଛି ।

(କ) ପ୍ରସ୍ତାବିତ ପ୍ରକଳ୍ପ ର ସଂକ୍ଷିପ୍ତ ବିବରଣୀ:- ଯାଜପୁର ଜିଲ୍ଲା ଯାଜପୁର ତହସିଲ ଅନ୍ତର୍ଗତ ୧ ଗୋଟି ମୌଜାରେ ମୋଟ ୧.୧୫.୨୪୪ ପରିସୀମାରେ ଯାଜପୁରର ସପ୍ତମାଡ଼ୁକା ମନ୍ଦିର ନିକଟରେ ବୈତରଣୀ ନଦୀର (ବାମ ବାହୁ) ଅନ୍ତାପ୍ରବାହରେ ବ୍ୟାରେଜ ନିର୍ମାଣ ନିମନ୍ତେ ଅଧୀକ୍ଷଣ ଯନ୍ତ୍ରୀ, ଜଳସେଚନ ବିଭାଜନ, ଯାଜପୁରଙ୍କ ଦ୍ୱାରା ଭୂମି ଅଧିଗ୍ରହଣ ଆବଶ୍ୟକ ହେଉଅଛି ।

(ଖ)SIA ସର୍ବେକ୍ଷଣରେ ଅନ୍ତର୍ଭୁକ୍ତ ପ୍ରକଳ୍ପ ଅଞ୍ଚଳ ଏବଂ ପ୍ରକଳ୍ପ ପ୍ରଭାବିତ ଅଞ୍ଚଳ :- ଯାଜପୁର ଜିଲ୍ଲା ରେ ଉପରୋକ୍ତ ୧ ଗୋଟି ମୌଜା ରେ ୩.୧୫.୨୪୪ ଘରୋଇ ଜମି ଅନ୍ତର୍ଭୁକ୍ତ । ପ୍ରକଳ୍ପ ପ୍ରଭାବିତ ଜମିର ବିସ୍ତୃତ ତାଲିକା/ତଫସିଲ SIA ସର୍ବେକ୍ଷଣ ଅନ୍ତେ ମିଳି ପାରିବ ।

(ଗ) ଗ୍ରାମସଭା / ଭୂମି ମାଲିକଙ୍କ ସହମତି ଆବଶ୍ୟକ କି ? ଯଦି ଏହି ଅଧିଗ୍ରହଣ ଘରୋଇ କମ୍ପାନୀଙ୍କ ପାଇଁ ହେଉଥାଏ ତେବେ ୮୦ ପ୍ରତିଶତ ପ୍ରଭାବିତ ପରିବାରଙ୍କ ପୂର୍ବସମ୍ମତି ଆବଶ୍ୟକ ପଡ଼ିବ ଏବଂ ଯଦି ସରକାରୀ ବେସରକାରୀ ଭାଗିଦାରୀ ପ୍ରକଳ୍ପ ନିମନ୍ତେ ଏହି ଅଧିଗ୍ରହଣ ହେଉଥାଏ ତେବେ ୭୦ ପ୍ରତିଶତ ପ୍ରଭାବିତ ପରିବାରଙ୍କ ପୂର୍ବସମ୍ମତି ଆବଶ୍ୟକ ପଡ଼ିବ ।

(ଘ)SIA ସର୍ବେକ୍ଷଣର ପ୍ରାଥମିକ ଉଦ୍ଦେଶ୍ୟ ଏବଂ ମୁଖ୍ୟ କାର୍ଯ୍ୟାବଳୀ:- ସର୍ବସାଧାରଣ ଉଦ୍ଦେଶ୍ୟ ନିର୍ଦ୍ଧାରଣ ପ୍ରଭାବିତ ଅଞ୍ଚଳରେ ଥିବା ସମସ୍ତ ଗ୍ରାମବାସୀ କିମ୍ବା ପରାମର୍ଶ କ୍ରମେ SIA ସର୍ବେକ୍ଷଣ କରାଯିବ । SIA ସର୍ବେକ୍ଷଣ କ୍ଷେତ୍ର ପରିଦର୍ଶନ, ପ୍ରଭାବିତ ବ୍ୟକ୍ତିଙ୍କ ସାମୁହିକ ଆଲୋଚନା ଏବଂ ପ୍ରଭାବିତ ବ୍ୟକ୍ତିଙ୍କ ମତାମତ ରୂପାନ୍ତରଣ ରିପୋର୍ଟ ରେ ସ୍ଥାନିତ ହେବ । ପ୍ରଭାବିତ ଅଞ୍ଚଳରେ ଜନଶୁଣାଣି ପ୍ରକ୍ରିୟା ନିମନ୍ତେ ଓଡ଼ିଶା ନ୍ୟାୟୋଚିତ କ୍ଷତିପୂରଣ ଅଧିକାର ଏବଂ ଭୁଅର୍ଜନ, ପୁନର୍ବାସ ଓ ଅଇଥାନ କ୍ଷେତ୍ରରେ ସ୍ୱଚ୍ଛତା ନିୟମାବଳୀ ୨୦୧୬ ର ନିୟମ-୧୪ ବ୍ରହ୍ମବ୍ୟାପୀ ।

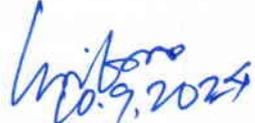
(ଙ)SIA ସର୍ବେକ୍ଷଣ ଆରମ୍ଭ ଏବଂ ସମାପନ ରିପୋର୍ଟ ପ୍ରଦାନ ଏବଂ ତାହାର ପ୍ରକାଶନ ସରକାରୀ ବିଜ୍ଞପ୍ତି ପ୍ରକାଶିତ ଦିବସଠାରୁ ୩୦ ଦିନ ମଧ୍ୟରେ SIA ସର୍ବେକ୍ଷଣ ସମାପନ କରାଯିବ । SIA ସର୍ବେକ୍ଷଣ ରିପୋର୍ଟ ସମ୍ପୂର୍ଣ୍ଣ ପ୍ରଭାବିତ ପଞ୍ଚାୟତ /ଗ୍ରାମ/ୱାର୍ଡ ସ୍ତରରେ ସ୍ଥାନୀୟ ଭାଷାରେ ପ୍ରକାଶନ କରାହେବ । ତତସହିତ ଜିଲ୍ଲାପାଳ, ଉପଜିଲ୍ଲାପାଳ ଏବଂ ବ୍ଲକ ମହକୁମାରେ ପ୍ରକାଶନ କରାଯିବ ଏବଂ ସର୍ବସାଧାରଣଙ୍କ ଗୋଚରାର୍ଥେ ସରକାରଙ୍କ ୱେବସାଇଟ ରେ ସୂଚିତ ହେବ ।

ରାଜ୍ୟ ପାଳଙ୍କ ଆଦେଶାନୁସାରେ
(ସ୍ୱରଞ୍ଜନ ପ୍ରଧାନ)
ଅତିରିକ୍ତ ଶାସନ ସଚିବ

Memo No. 31242 /Rev & DM, Dated 11 SEP 2024

Copy along with the land schedule forwarded to the Director, Printing Stationery, Odisha, Cuttack for information and necessary. He is requested to publish the Notification in the next issue of the Odisha Gazette as this is a statutory one.

SRO Number may be allotted to this publication.


Joint Secretary to Government

Memo No. 31243 /Rev & DM, Dated 11 SEP 2024

Copy forwarded to Department of Water Resources/ Superintending Engineer, Irrigation Division, Jajpur for information and necessary action.


10.9.2024
Joint Secretary to Government

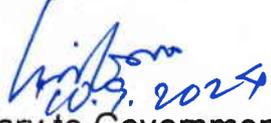
Memo No. 31244 /Rev & DM, Dated 11 SEP 2024

Copy forwarded to RDC(CD), Cuttack /Collector, Jajpur / Land Acquisition Officer , Jajpur for information and necessary action.


10.9.2024
Joint Secretary to Government

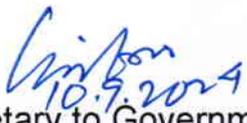
Memo No. 31245 /Rev & DM, Dated 11 SEP 2024

Copy forwarded to the State Co-ordinator ,Nabakrushna Choudhury Centre for Development Studies ,Bhubaneswar (email: ncdsbbsr1987@gmail.com) for information and necessary action.


10.9.2024
Joint Secretary to Government

Memo No. 31246 /Rev & DM, Dated 11 SEP 2024

Copy forwarded to the E-Governance Branch with a request to upload the Notification in the website.


10.9.2024
Joint Secretary to Government

ଭୂମି ଅବଦୂତ

ପ୍ରଦତ୍ତ ନାମ - ଶାନ୍ତପୁର ଓ ସଦନାୟକା ମନ୍ଦିର ନିକଟରେ ବୈଦିକଣୀ ନଦୀକୂଳ (ସମ୍ପାଦନ) ଅଧିକାରରେ ବ୍ୟାପକ ନିର୍ମାଣ ନିମନ୍ତେ
 ନୌପାଦନ ନାମ - ବିହାର, ଚନ୍ଦ୍ରପୁର - ଯାଜପୁର, ଥାନା ନଂ - ୩୭, ବିଭା - ଯାଜପୁର

କ୍ର. ନଂ	ଖାତା ନଂ	ପ୍ଲଟ ନଂ	ବିଧାନ	ମୋଟ କ୍ଷେତ୍ର	ଅଧିକାର କ୍ଷେତ୍ର	ମନ୍ତବ୍ୟ
୧	୩୪୧	୧୦୧୭	ଶରଦ	୦.୨୫୦	୦.୨୫୦	କଟକି ଚେର, ଖାମା-ବିଲିଆରୀ ବଣ୍ଡଳ, ନା-ଖଣ୍ଡପୁର ପା-ବିହାର
୨	୧୯୩	୧୦୨୧	ବିହାର	୦.୦୧୦	୦.୦୧୦	କଟକି ଚେର, ଖାମା-ମୁନିଆ ଅବଦୂର ଉପର ଖି, ନା-ମୁନିଆ, ପା-ବିହାର
୩	୨୨୭	୧୦୨୨	ବିହାର	୦.୦୧୦	୦.୦୧୦	କଟକି ଚେର ଅଧୀନ-କଟକି ଚେର ଅଧୀନ, ନିର୍ମାଣ, ବିକି ଖ - କଟକି ଚେର ଉପର, ନା-ମୁନିଆ ପା - ନିର୍ମାଣ
୪	୩୩୪	୧୦୨୬	ବିହାର	୦.୦୮୦	୦.୦୮୦	କଟକି ଚେର, ଖାମା-କଟକି ଚେର, ନା-କଟକି, ପା-ବିହାର
୫	୧୪୩	୧୦୨୭	ପୁରୁଣା ପଟିତ	୦.୧୭୦	୦.୧୭୦	କଟକି ଚେର ପିତା-ଖାମା ଚାପ, ନା-କଟକି, ପା-ବିହାର
		୧୦୨୮	ପୁରୁଣା ପଟିତ	୦.୨୩୦	୦.୨୩୦	
		୯୧୯	କାଳ ପଟିତ ଶରଦ	୦.୨୦୦	୦.୨୦୦	
୬	୧୧୧	୧୦୩୦	ବିହାର	୦.୩୫୦	୦.୩୫୦	କଟକି ଚେର, ଖାମା-ବିଲିଆରୀ ବଣ୍ଡଳ, ନା-ଖଣ୍ଡପୁର ପା-ବିହାର
୭	୧୪୮	୧୦୩୨	ପୁରୁଣା ପଟିତ	୦.୦୪୦	୦.୦୪୦	କଟକି ଚେର ପିତା-କଟକି ଚେର ନିର୍ମାଣ-ଖଣ୍ଡପୁର ପା-ବିହାର
୮	୩୦୬	୧୦୩୩	ପୁରୁଣା ପଟିତ	୧.୪୭୦	୧.୪୭୦	ଶ୍ରୀ ଅଧିକାର ନିକଟରେ କଟକି ଚେର ଉପର ମନ୍ତବ୍ୟ କରାଯାଇ ଖାମା, କଟକି ଚେର ଉପର, ନା-କଟକି, ପା-ନିର୍ମାଣ
୯	୧୭୧	୧୦୩୪	କାଳ ପଟିତ ଶରଦ	୦.୩୮୦	୦.୩୮୦	କଟକି ଚେର, କଟକି ଚେର ପିତା-କଟକି ଚେର ପା-ବିହାର
୧୦	୬୭	୧୦୩୫	ଶରଦ	୦.୧୫୦	୦.୦୭୫	ନାମ୍ନି କଟକି ପି-କଟକି କଟକି, ଖାମା କଟକି, ବିହାର କଟକି
୧୧	୧୨୭	୧୦୩୬	ଶରଦ	୦.୧୭୦	୦.୧୭୦	କଟକି ଚେର ପିତା-କଟକି ଚେର କଟକି-କଟକି ପା-ବିହାର
୧୨	୩୩୭	୧୦୩୮	ଶରଦ	୦.୧୨୦	୦.୧୨୦	କଟକି ଚେର ପିତା-କଟକି କଟକି କଟକି-କଟକି ପା-ବିହାର (କଟକି ଚେର)
୧୩	୩୩୫	୧୦୩୯	ଶରଦ	୦.୦୨୦	୦.୦୨୦	କଟକି ଚେର ପିତା-କଟକି ଚେର କଟକି ଚେର ଅଧିକାର ଅଧିକାର, କଟକି ଚେର ପା-ବିହାର
		୧୦୪୦	ଶରଦ	୦.୦୪୦	୦.୦୧୩୩	
		୧୦୪୫	ବିହାର	୦.୧୧୦	୦.୦୩୬୭	
		୧୦୧୫/୧୩୭୦	ପଟିତ	୦.୦୧୦	୦.୦୦୩୩	
		୧୦୧୬	ଶରଦ	୦.୧୮୦	୦.୦୨୦	
		୧୦୧୮	ଶରଦ	୦.୧୧୦	୦.୦୩୬୭	
୧୪	୩୩୬	୧୦୪୪	ଶରଦ	୦.୫୭୦	୦.୫୭୦	କଟକି ଚେର ଖ - ମୁନିଆ କଟକି, କଟକି ବିହାର ପା - କଟକି କଟକି, ନା-କଟକି ପା-ବିହାର
		୧୦୪୬	ଶରଦ	୦.୨୮୦	୦.୨୮୦	
		୧୦୪୫	ଶରଦ	୦.୨୧୦	୦.୨୧୦	
୧୫	୧୯୨	୧୦୪୭	ଶରଦ	୦.୨୨୦	୦.୨୨୦	ଖାମା କଟକି ପିତା-କଟକି ଚେର, କଟକି ବିହାର ପା-କଟକି ପା-ବିହାର
		୧୨୯୫	କାଳ	୦.୨୨୦	୦.୨୨୦	
		୧୨୯୬	କାଳ	୦.୩୧୦	୦.୩୧୦	
		୧୨୯୭	ପୁରୁଣା ପଟିତ	୦.୨୪୦	୦.୨୪୦	
୧୬	୩୧	୧୦୪୮	ଶରଦ	୦.୩୩୦	୦.୩୩୦	ପୁରୁଣା ପଟିତ ପି-କଟକି କଟକି-କଟକି ପା-ବିହାର
୧୭	୪୦	୧୦୪୯	ଶରଦ	୦.୩୫୦	୦.୩୫୦	କଟକି ଚେର ପି-କଟକି କଟକି ନା-କଟକି ପା-କଟକି ଚେର
୧୮	୧୧୭	୧୦୫୦	ଶରଦ	୦.୮୭୦	୦.୮୭୦	କଟକି ଚେର ପିତା - କଟକି କଟକି କଟକି କଟକି ପିତା - କଟକି କଟକି, କଟକି-କଟକି ପା-ବିହାର
		୧୦୨୨	ଶରଦ	୦.୪୦୦	୦.୪୦୦	
୧୯	୪୩	୧୦୫୧	ଶରଦ	୦.୩୩୦	୦.୩୩୦	ନିକଟରେ
		୧୦୨୦	ପୁରୁଣା ପଟିତ	୦.୩୪୦	୦.୩୪୦	

୨୦	୨୧୫	୧୦୫୩	ଶାଳ	୦.୦୭୦	୦.୦୭୦	କଳି ରଥା ପି- ରାମ ରଥା, ମୁଖା ରେଣୁ ଶାଳା- କାଶୀ ରଥା, କାଳି-ମାଳା ପା-ଦଶପଦେଶ
		୧୦୫୫	ଶାଳ	୦.୧୦୦	୦.୧୦୦	
		୧୦୫୬	ଶାଳ	୦.୧୨୦	୦.୧୨୦	
		୧୦୫୮	ଫିଟି	୦.୧୦୦	୦.୧୦୦	
		୧୦୬୨	ଫଳ ପରିଚ ଶାଳ	୦.୧୩୦	୦.୧୩୦	
		୧୦୬୧	ଫଳ ପରିଚ ଶାଳ	୦.୧୪୦	୦.୧୪୦	
		୧୦୬୬	ଶାଳ	୦.୫୧୦	୦.୫୧୦	
୨୧	୧୪୬	୧୦୫୪	ଶାଳ	୦.୨୦୦	୦.୨୦୦	ନିକେ ରେଣୁ ଶାଳା - ମାଗୁଣି ରଥା, କା-ମାଳି, ପା-ଶାଳଗଣ୍ଡପୁର
୨୨	୧୦୦	୧୦୬୧	ପାଳ	୦.୨୪୦	୦.୨୪୦	କାଳି ପାଳ ପିତା - ରାମ ପାଳ, କା-କୁଣ୍ଡା, କାଳେଇ ପାଳ ପିତା - ବୁଢ଼ି ପାଳ, କା- କିରୀରାଣୀ
		୧୨୯୩	ପୁରୁଣା ପରିଚ	୦.୦୨୦	୦.୦୨୦	
୨୩	୫୫	୧୦୬୪	ଆଳ ବରାପତ	୦.୧୭୦	୦.୧୭୦	ନିକେ ରେଣୁ
୨୪	୫୨	୧୦୬୫	ପୁରୁଣା ପରିଚ	୦.୦୬୦	୦.୦୬୦	ନିକେ ରେଣୁ
		୧୦୬୬	ପୁରୁଣା ପରିଚ	୦.୦୮୦	୦.୦୮୦	
୨୫	୧୦୩	୧୦୬୬	ପୁରୁଣା ପରିଚ	୦.୦୮୦	୦.୦୮୦	କାଳେଇ ପାଳ ପିତା - ଆଗୁଣି ରାଜର, କାଶୀ ରାଜର ପିତା - ବଧୂ ରାଜର, କାଳେଇ ରାଜର ପିତା - ଧନୀ ରାଜର, କା-ଶାଳପାତ ପା- କୋଳମପୁର
୨୬	୧୨୪	୧୦୬୮	ପାଳ	୦.୦୫୦	୦.୦୫୦	କାଳେଇ ପାଳ ପିତା - କଳି-କାଳି, କୁଳି ବିନ୍ଧା ପା - କପିଳ ଦାଶିକ, କାଳି-କାଳି, ପା-ବିନ୍ଧା
		୧୨୮୮	ଆଳ ବରାପତ	୦.୨୨୦	୦.୨୨୦	
		୧୨୯୮	ପୁରୁଣା ପରିଚ	୦.୩୧୦	୦.୩୧୦	
		୧୩୦୦	ଆଳ ବରାପତ	୦.୧୬୦	୦.୧୬୦	
୨୭	୨୯୦	୧୦୬୪	ଶାଳ	୦.୪୨୦	୦.୪୨୦	କାଳେଇ ପାଳ ପିତା - କାଳି-କାଳି, କାଳି- କାଳି, ପା-ବିନ୍ଧା
୨୮	୨	୧୨୮୦	ପୁରୁଣା ପରିଚ	୦.୦୮୦	୦.୦୮୦	ନିକେ ରେଣୁ
୨୯	୧୭୭	୧୨୮୩	ଫିଟି	୦.୧୧୦	୦.୦୭୭	କାଳେଇ ପାଳ ପିତା - କାଳି-କାଳି, କାଳି- କାଳି, ପା-ବିନ୍ଧା
		୧୩୦୬	ଶାଳ	୦.୧୨୦	୦.୦୬୧	
		୧୩୦୭	ଫିଟି	୦.୧୮୦	୦.୧୧୧	
୩୦	୭୭	୧୨୮୬	ପାଳ	୦.୪୩୦	୦.୪୩୦	କାଳେଇ ପାଳ ପିତା - କଳି-କାଳି, କା- କୁଣ୍ଡା, ପା - ବିନ୍ଧା, ମାଳେଇ-କାଳି ପିତା - କାଳେଇ ପାଳ ପିତା, କାଳେଇ ପାଳ ପିତା ପିତା - କାଳେଇ ପାଳ ପିତା, ମାଳା କାଳେଇ ପାଳ, ନିକେ ରେଣୁ ପାଳ ପିତା - ପୁରୁଣା ପାଳ, କା- ମାଳା ପାଳ, ପା - କୋଳମପୁର
୩୧	୧୫୩	୧୨୯୦	ପୁରୁଣା ପରିଚ	୦.୧୪୦	୦.୧୪୦	ନିକେ ରେଣୁ, ପି- କୁଳି ବିନ୍ଧା କାଳେଇ କାଳେଇ, ପୁରୁଣା କାଳେଇ କାଳେଇ ପି- କାଳି ବିନ୍ଧା କାଳେଇ
		୧୨୯୧	ପୁରୁଣା ପରିଚ	୦.୧୪୦	୦.୧୪୦	
୩୨	୨୧୪	୧୨୯୨	ପୁରୁଣା ପରିଚ	୦.୦୭୦	୦.୦୭୦	କଳି ରଥା ପି- ରାମ ରଥା କା-ମାଳି ପା- କାଳେଇ
୩୩	୧୬୮	୧୩୦୧	ଫିଟି	୦.୧୪୦	୦.୦୪୬୬	କଳି ରଥା ପି- କାଳି ରଥା କା - ମାଳି ପା-ବିନ୍ଧା
୩୪	୧୫୨	୧୩୦୪	ପାଳ	୦.୦୪୦	୦.୦୩୩୩	ନିକେ ରେଣୁ, କାଳେଇ ପାଳ ପି- କାଳି ବିନ୍ଧା, କାଳେଇ ପାଳ ପି- କାଳି ବିନ୍ଧା
		୧୩୦୫	ପାଳ	୦.୧୨୦	୦.୧୦୦	
୩୫	୫୩	୧୨୯୨/ ୧୩୫୭	ପୁରୁଣା ପରିଚ	୦.୦୫୦	୦.୦୫୦	କଳି ରଥା ପି- ରାମ ରଥା, କା-ମାଳି, ପା- କାଳେଇ
୩୬	୩୩୭	୧୦୪୧/ ୧୩୭୧	ଶାଳ	୦.୧୬୦	୦.୧୬୦	କାଳେଇ ପାଳ ପିତା, ପିତା-କାଳେଇ ପାଳ ପିତା, କାଳି-କାଳି, ପା-ବିନ୍ଧା (କାଳେଇ ପାଳ)
		୧୦୪୧/ ୧୩୭୨	ଶାଳ	୦.୦୪୦	୦.୦୪୦	

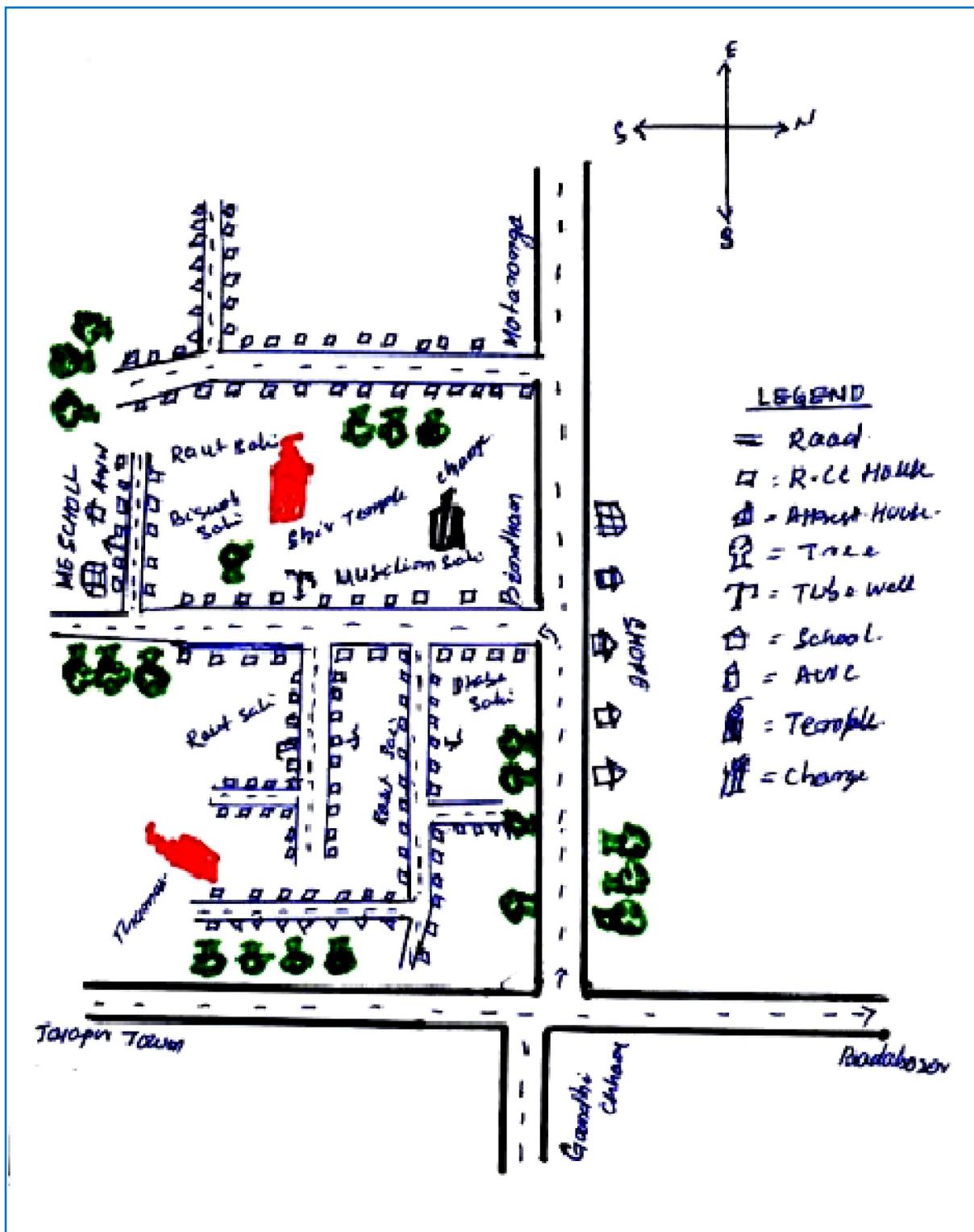
୩୭	୩୩୮	୧୦୪୧/ ୧୩୩୩	ଶାନ୍ତ	୦.୧୨୦	୦.୧୨୦	ମୁକୁନ୍ଦ ଚାନ୍ଦ ପି-ସୋନା ଚାନ୍ଦ, ରାମ ଚାନ୍ଦ ପି- ଦୁର୍ଗା ଚାନ୍ଦ, ସଖା ଚାନ୍ଦ ଓ- ଚୋରା ଚାନ୍ଦ, ରାମ ଚାନ୍ଦ ଓ-ପଞ୍ଚାଳି ଚାନ୍ଦ, ଜା-ଶାନ୍ତାଚର, ଓ-ଶିଖର
୩୮	୭୮	୧୨୮୭/ ୧୩୭୪	ପାଳ	୦.୦୭୦	୦.୦୭୦	ନିରାଚର ଚାନ୍ଦ ପିତା - ଭଜନି ଚାନ୍ଦ ଜା- ଗୁଣ୍ଡିଆ ଓ - ଶିଖର, ନୀଳଗୋବିନ୍ଦ ଚାନ୍ଦ ପିତା - ଚୋରାଚର ଚାନ୍ଦ, କାନ୍ତାଚର ଚାନ୍ଦ ନାମାଚର ପିତା - ଚନ୍ଦ୍ରଶେଖର ନାମାଚର, ନାମା ନୋହନ ନାମକ, ନିତ୍ୟାନନ୍ଦ ନାମକ ପିତା - ପଦ୍ମଚର ଚାନ୍ଦ, ଜା- ନାମାଚର, ଓ - ଶୋକନାଚର
୩୯	୧୮୮	୧୩୦୯/ ୧୩୩୩	ପୁରୁଣା ପତିତ	୦.୧୫୦	୦.୧୫୦	ନିରାଚର ଚାନ୍ଦ ପିତା - ଭଜନି ଚାନ୍ଦ, ଜା- ଗୁଣ୍ଡିଆ, ଓ - ଶିଖର
			ମୋଟ ଭଜନ	୧୩.୧୫୦	୧୩.୨୪୦	


 ଡି. ଅର୍ଚ୍ଚନ ଅଧିକାରୀ (ପି.ସି.ସି.)
 ଗାନ୍ଧୀପୁର

Annexure-II

Resource Maps of Project Affected Villages

RESOURCE MAP OF VILLAGE BINDHAN, TEHSIL: JAJPUR, DIST: JAJPUR



Annexure-III

**Photographs of FGDs
and Household Survey**

Photographs of FGD & Field Survey in Bindhana village of Jajpur Tahasil



Annexure-IV

**Questionnaire for
Household Survey**

Section 1: General Information

- 1.1. Name of the Village: 1.2. Name of the GP
- 1.3. Name of Tahasil..... 1.4. Name of Block:.....
- 1.5. District:
- 1.6. Name of the Respondent:
- 1.7. Relationship with the Head of the household:
- 1.8 Nature of property to be affected:

1	2	3	4
House	Homestead Land	Agricultural Land	Others (Specify)

- 1.9. Years of occupation of the property to be affected: _____ Years
- 1.10. Present address of the property: _____
- 1.11. Mother Tongue: (Hindi-1; Odia-2; Others-3; in case of others specify.)

Section 2 : Identification of the Household

- 2.1 Name of the Household : _____
- 2.2 Sex (1-Male, 2-Female): _____
- 2.3 Nationality: _____
- 2.4 Religion: _____
- 2.5 Caste/Tribe: (SC-1, ST-2, OBC-3, General-4) :
- 2.6 Sub Caste/ Sub Tribe (Specify):
- 2.7 Have you been displaced earlier? : Yes-1, No-2
- (a) From where: Village: _____, Tahsil: _____, District: _____
- (b) When: _____
- (c) Type of project: _____
- (d) Name of project: _____

Section 3: Socio-Economic Status

3.1 Household Particulars

Sl.	Name of Persons	Relationship with HH	Sex (M/F)	Age	Marital Status (Give coding as noted below)	Educational Qualification (Give coding as noted below)	Occupation and Monthly Income (Give coding as noted below)				Total monthly Income (Rs.)
							Main Occupation	Monthly Income	Subsidiary Occupation	Monthly Income	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

* Sex:	Male-1, Female-2, Third Gender:3
** Marital Status	Married-1; Unmarried-2; Divorcee-3; Separated-4; Widowed/Widower-5;
*** Educational Qualification:	Illiterate-(1); Just literate-(2); Primary-(3); High School-4; Matriculate-(5), Intermediate/+2 -(6) Graduate-(7), Post- Graduate-8, Technical Degree-(9), Technical Diploma-(10), ITI/CT, etc.-(11), Professional Degree (MBA, etc)-(12), Others (Specify)-(13)
**** Usual Activity:	Employed-(1), Unemployed-(2), House wife-(3), Student-(4), Non-School going Child-(5), Old-6, Retired-7, Others (Specify)-8
### Occupation:	Cultivator-1, Allied activity-2, Agricultural Labourer-3, Daily Wage Earner-4, Salaried-5, Business -6, Craft Artisan - 7, Profession/Professional-8, Others (specify)-9.

- 3.2 Number of family members: Total: _____ Male: _____ Female: _____
 Family members above 18 years of age: Total: _____ Male: _____ Female: _____
- 3.3 Type of Family: Joint-1, Nuclear-2
- 3.4 Do you have ration card (Verify)? Yes-1, No-2
- 3.5 If Yes: Ration Card no: _____
- 3.6 Vulnerability status of the household:
- A. Is it a woman headed household? Yes-1, No-2
- B. Is it headed by physically/mentally challenged person? Yes-1, No-2
- C. Is it a household Below Poverty Line (BPL)? : Yes-1, No-2
- D. If BPL, provide BPL card number: _____
- 3.7 Annual income of the family from all sources: Rs. _____

Dwelling Condition:

- 3.8. Housing: Own house-1, Rented-2, Others (Specify)-3
- 3.9 If living in own house, size of homestead land in acres (1 acre = 100 decimals):
- 3.10 Do you have Patta: Yes-1, No-2
- 3.11 If yes, specify your Khata and Plot numbers _____
- 3.12 If no, who is the owner of the land? _____
- 3.13 Details of Houses:

Sl. No.	House No.	Built-up area (sq.ft)	No. of rooms	No. of storey #	Construction Details			Use of Building##
					Wall*	Roof**	Floor***	

N.B: Serial number could be used to indicate any separate house structure owned by the household including the main dwelling. For example, separate cattle shed, separate structure for poultry, etc.

Single-1, Double-2, More than two storeys-3

* Mud-1, Brick with mud-2, Bamboo or wood with mud plaster-3, Brick with cement-4 any other specify-5.

** Thatched (Chhana)-1 Asbestos-2, Tiles-3, Concrete roof-4, Tin-5, any other specify-6

*** Earthen -1 cement-2 Tiles-3 any other specify- 6

Own-living-1, Rented-2, Shop/Business Purpose-3, any other specify-3

- 3.14 Aspects of Housing Condition:
- i. Separate place for animals : Yes-1, No-2
- ii. Bathroom within the house: Yes-1, No-2

- iii. Toilet within or adjacent to the house : Yes-1, No-2
- iv. Washing place within the house : Yes-1, No-2
- v. Electricity connection : Yes-1, No-2
- vi. Source of drinking water: Pipe water-1, Tube well/handpump-2,
 a. River/stream-3, Open well-4, Others (specify)-5
- 3.15 Whether the house presently resided by you is likely to be affected by the project? Yes-1, No-2

3.16. Possession of material /livestock assets

Type of Assets	No.	Present Value (in Rs.)	Type of Assets	No.	Present Value (in Rs.)
Television			Cooking Gas		
Tape Recorder			Utensils		
Radio			Ornaments		
Refrigerator			Any Other (specify)		
Telephone			Live Stock		
AC/Cooler			Cows		
Cycles			Buffaloes		
Three Wheeler			Sheep		
Two-Wheeler			Goats		
Four Wheeler			Poultry		
Bus / Truck			Others		

3.17. Loan and Indebtedness

1	Have you taken any loan? Yes-1, No-2	
2	Who has taken the loan? 1. HHH; 2. Spouse; 3. Son; 4. Daughter in law; 5.HHH and spouse together; 6. Son and HHH; 7. Daughter in law and Mother- in-law; 8. Others (specify)	
3	If yes, sources of loan: 1-Bank, 2-NGO, 3-Money lender, 4-Relative/Friend, 5- SHG; 6. Others (specify)	
4	If yes, amount of loan (in Rs.)	
4(i)	Loan from institutional source such as public sector, scheduled bank, etc.	
4(ii)	Loan from private source	
5(i)	Rate of interest paid per month/annum for institutional loan	
5(ii)	Rate of interest paid per month/annum for private loan	
6	Could you please tell us the purpose of loan? 1-Productive investment, 2-Purchasing durables, 3-Meeting emergency needs, 4-Children's marriage, 5- Past loan repayment, 6-Others (specify)	

3.18. Expenditure Pattern

Kindly indicate expenditures made on different items during last one year:

Sl. No.	Particulars	Monthly Expenditure (in Rs.)	Rank them from highest to lowest
1	Food		
2	Agriculture/Occupation related		
3	Housing		
4	Cooking Fuel		
5	Clothing		
6	Health		
7	Education		
8	Transport		
9	Communication		
10	Social functions		
11	Others		

3.19. Health Status

1. Has any of your family members suffered from any illness during the last 12 months?: 1-Yes, 2-No, 3-Don't Know
2. If yes,
 - (a) Number of persons suffered
 - (b) Name of diseases they suffered from
3. Type of treatment taken: 1-Allopathic Government, 2-Allopathic Private, 3-Allopathic Govt. & Private both, 4- Homeopathy, 5- Ayurvedic, 6- Faith Healers; 7- Quacks; 8-No Treatment, 9-Others (specify)
4. Which is the nearest formal medical facility available? : 1-PHC; 2-CHC; 3-Dist Hospital, 4-Private Hospital/Clinic, 5-Others
5. Where do you usually go for medical treatment? : 1-PHC; 2-CHC; 3-Dist Hospital, 4-Private Hospital/Clinic, 5-Others
6. Does anybody from your family suffer from any chronic disease and requiring regular treatment? Yes-1, No-2
If yes, specify the disease(s) _____
7. Expenditure incurred towards healthcare per month: Rs. _____
8. Whether any child was born in the family during last one year? Yes-1, No-2
9. If yes, specify whether the child has been vaccinated? Yes-1, No-2

10. Whether anybody from your family died during last one year? Yes-1 No-2

11. If yes, specify the cause of death:
1-Old age, 2-Critical illness, 3-Accident, 4-others (specify)

12. Age of the deceased at the time of death:

3.20. Access to facilities

Code	Distance of following facilities/amenities from the location of the house?	Approx. km	Mode to access	Frequency	Trips made by		
					M	F	Both
1	Primary School						
2	Secondary School						
3	College						
4	Regular Market						
5	Commonly visited health service place						
6	Hospital						
7	District Office						
8	Block Office						
9	Panchayat Office						

Mode: Walk-1; Cycle-2; Personal transport-3; Public transport-4; Frequency: Daily-1; Weekly-2; Monthly-3; Very Rare-4;

3.21. Decision Making and Participation at Household Level

Sl.	Subject	Male	Female	Both
1	Financial matter			
2	Education of child			
3	Health care of child			
4	Purchase of assets			
5	Day to day household activities			
6	On social function and marriages			
7	Women to earn for Family			
8	Land and property			
9	Others			

Section 4: Land Particulars (in acres)

4.1 Details of Land owned

Khata No	Plot No.	Kissam As per Record	Total land owned	Total Area of the affected Plot (in acre)	Total area to be acquired (in acre)

4.2 Total area of land owned:

Private	Government	Religious	Community	Forest	Others (specify)

4.3. Type of Land:

Irrigated	Non-Irrigated	. Barren	Forest	Others (specify)

4.4 Use of Land:

Cultivation	Orchard	Residential	Commercial	Forestation	No Use/Barren	Others (specify)

4.5 Status of ownership:

1. Titleholder (Pvt. owner), 2. Customary right, 3. Encroacher, 4. Squatter

4.6 Name of the land owner: _____

4.7 Father's name: _____

4.8 Name of the present occupier/tenant, if the house is given on rent: _____

4.9 Is any of the following associated with the land?

A. Agricultural labourer: Yes-1, No-2

(i) If Yes, then how many?: _____

B. Sharecropper: Yes-1, No-2

(ii) If Yes, then how many: _____

4.10 Number of trees within the affected area:

Total no. of Trees	Fruit Bearing (in nos.)	Non-fruit bearing (in nos.)

4.11 Are there other claimants over the land under acquisition? Yes-1, No-2

4.12 If yes, specify their name(s), relationship and present residential address

Sl.	Name of Claimant/shareholder	Relationship	Present address

Section 5: Resettlement and Rehabilitation Option

5.1 Do you think that you are going to lose assets and sources of your livelihood by the project? Yes-1, No-2, Can't say-3

5.2. If yes, what are those losses?

5.3 Likely Loss of Other Assets:

	Species	No.	Type
Tree			
Well			
Other individual assets			
Any other (specify)			

5.4 What percentage of your present earnings will be lost due to loss of the present asset on account of the project?

5.5 Willingness to shift: 1-Voluntarily, 2-Non-voluntarily

5.6 Are you willing to allow the company to acquire your land/house for the upcoming development project? Yes-1, No-2

5.7 If yes, please specify the price that you would like to charge to the project authority for the aforesaid land: Rs. _____

5.8 If no, please specify the reasons and any other alternative so that the project could be made operational without affecting your interest.

5.9 Besides taking cash compensation for the land, what other benefits would you like to avail from the project authority in lieu of handing over your land/house? Please specify:

5.10 Assistance Option: (Put a ✓ mark)

- 1. Self relocation
- 2. Cash for land loss
- 3. Cash for house/shop loss
- 4. Project assistance

5.11 Income Restoration Assistance (The most preferred option):

- 1. Employment Opportunities in Construction work.
- 2. Assistance/ Loan from other ongoing development scheme.
- 3. Vocational Training.
- 4. Others (specify).

5.12 Other support from Project (Specify):

5.13. Women Participation at Community Level. (Put a ✓ in the respective boxes)

1	Do women of the household participate in decision making processes at community level	
2	Is any woman member of the household a member or office bearer of village / block / zilla panchayat?	
3	Is any women member of the household works as Anganwadi worker or ANM?	
4	Is any woman member of the household also a member of any self help group?	
5	If yes, is that SHG still active?	
6	Do women of your household make direct economic contribution for your family?	
7	If so, what percentage of the family income is contributed by the women at present?	

5.14. Employment opportunity in the area:

1-Seasonal, 2-Employed throughout the Year, 3-None

5.15 Do family members migrate out for Work?

Sl.	Type of Work	In Rs. Per year	Do men migrate for work outside the village? (Daily -1, Seasonal - 2, Long term – 3, No – 4)	Do women also migrate for work outside the village? (Daily -1, Seasonal - 2, Long term – 3, No – 4)
1	Agriculture			
2	Shopkeeper/Business (including petty business)			
3	Employer (industrialist/Factory/Mill owner, etc)			
4	Government Service			
5	Private Service			
6	Wage Labour (Agriculture)			
7	Wage Labour (Non Agriculture)			
8	Self employed (insurance, finance, doctor, engineer, lawyer)			
9	Not employed (income recipient such as retired, remittance, property rent, bank interest, etc)			
10	Household work			
11	Others (specify)			
	Total			

Section 6: Perception of Household Regarding the Project

- 6.1. Are you aware of this project ?
is going to be constructed in this region? Yes-1, No-2
- 6.2. Do you think that it will be beneficial to your household? Yes-1, No-2
- 6.3. If yes, what benefits (social, economic) do you think your household will receive?

Social Benefits

- a.
- b.
- c.

Economic Benefits

a.

b.

c.

6.4 If no, what consequences (social, economic, cultural, and environmental) of the project according to you, your household will have to face?

Social Consequences

a.

b.

c.

Economic Consequences

a.

b.

c.

Cultural Consequences

a.

b.

c.

Environmental Consequences

a.

b.

c.

6.5 Do you think that it will be beneficial to your village/ area? Yes-1, No-2, Cannot say- 3

6.6 If yes, what benefits (social/economic) do you think the project will provide in the village/area:

Social Benefits

(a)	
(b)	
(c)	

Economic Benefits

(a)	
(b)	
(c)	

6.7 If no, according to you, what consequences (social, economic, cultural, and environmental) of the project your village / area will face?

Social Consequences

(a)	
(b)	
(c)	

Economic Consequences

(a)	
(b)	
(c)	

Cultural Consequences

(a)	
(b)	
(c)	

Environmental Consequences

(a)	
(b)	
(c)	

6.8. In case your land is acquired, what steps do you think the project should take to ensure your family livelihood?

6.9. Do you think that with the project functioning in your area, the employment opportunities in other sectors will improve?:

6.10. If land is acquired from you, do you have any choice in selecting the place where your household would like to resettle? Yes-1, No-1, Cannot say-3

6.11. If yes Name of the place: _____ Distance (km): _____

6.12. Reason for selection of that place:

6.13. How much do you agree with the following?

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
1.	The project will affect your family positively by increasing your socio-economic status					
2.	The project will ruin the sustainable livelihood of my family					
3.	The project will ruin our local forest on which we subsist					
4.	The project will ruin our common property resources on which the family subsists					

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
5.	The project will breakdown our kinship structure and affect our community life					
6.	The project will lead to an increase in crime					
7.	The project would affect the health status of local people due to increasing pollution					
8.	The project will cause unforeseen health risks					
9.	The project will pose more health risk for the people in its vicinity					
10.	The plant is likely to increase physical and social stress in my family due to increasing pollution and vulnerability of family members to many pollution related diseases					
11.	Family violence is likely to break out in my household in times of stress					
12.	I have to spend too much money on things that are bad for my health					
13.	A portion of my income or family income will go to drugs or alcohol					
14.	Money will be a big source of stress for me					
15.	More youths of the locality will be vulnerable to drugs and alcohol due to flow of easy money from the project					
16.	I have seen co-workers have trouble with alcohol or drugs					
17.	The project will create numerous business opportunities for my family					
18.	I am concerned about short term effects on local business					

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
19.	I am concerned about long term effects on local business					
20.	The project will open-up numerous self-owned business opportunities for the locality					
21.	It will create opportunities for my existing business					
22.	This will be good for the local people					
23.	This will be good for the people in and around the region					
24.	Out of regional business influx will hurt local business					
25.	The project will facilitate increased local competition					
26.	New businesses created as a result of development will displace or harm the existing businesses					
27.	When the project is completed, it will cause a downward trend in the local economy					
28.	Proper business planning now could prevent a downward economic trend in the local economy.					
29.	The positive overall business impact shall outweigh any negative impact that may occur.					
30.	The construction of project will affect my investments					
31.	There will be more investment opportunities for me					
32.	I foresee short-term opportunities for me (get in/get out)					
33.	I foresee long-term ongoing investment opportunities for me					

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
34.	It will create investment opportunities in local area / region.					
35.	The project is likely to cause decrease of investment in other sectors					
36.	This will cause a decrease in investments in other communities					
37.	This will cause a decrease in investments in other communities in the long-term					
38.	This will cause a decrease in investments in other communities in the short-term					
39.	Development related investments will create new businesses, new jobs, and boost the local economy for both long-term and short-term jobs.					
40.	I believe that the positive overall gains from new investment outweigh any negative impact that may occur					
41.	I feel good about the overall investment opportunities that will arise from the project					

Signature of the person answering question of the survey

(Name of the Investigator)

(Signature of the Supervisor)

Date: _____

Annexure-V

Village-wise Entitlement Matrix of PAFs

Sl. No	Village	Present address of the styling	Name of the Head of Household (HHH)	Name of Persons	Relationship with HH	Sex	Age (Yrs)	Marital Status	Caste	Khata No.	Plot No.	Nature of property	Kisama as per record	Total land owned (in acre)	Total area of affected plot (in acre)	Total area to be acquired (in acre)	Percentage of loss to total land owned
				Puspita	Daughter in Law	Female	47	Married									
15	Bindhana	Matarangapad	HemantaPatra	HemantaPatra	Self	Male	68	Widow	OBC	335	1039, 1040, 10, 24, 1015/1370, 1016, 1018	Agricultural	Sarad, Biali, Patita	7.8	0.51	0.17	2.179
				ManasPatra	Son	Male	35	Married									
				ManishaPatra	Daughter	Female	30	Married									
16	Bindhana	Matarangapad	Kiran Kumar Patra	Kiran Ku. Patra	Self	Male	70	Married	OBC			Agricultural					
				IndumatiPatra	Wife	Female	65	Unmarried									
				SailendraPatra	Son	Male	35	Married									
				SashiPatra	Daughter	Female	28	Married									
17	Bindhana	Matarangapad	MihirPatra	MihirPatra	Self	Male	70	Widow	OBC			Agricultural					
				Deepak Patra	Son	Male	46	Unmarried									
				DollipPatra	Son	Male	40	Married									
				RinaPatra	Daughter-in-law	Female	35	Unmarried									
18	Bindhana	Matarangapad	BijayaPatra	BijayaPatra	Self	Male	62	Married	OBC			Agricultural					
				AnnaournaPatra	Wife	Female	55	Unmarried									
				PrasantaPatra	Son	Male	31	Unmarried									
19	Bindhana	Sribachhapur	Raghunath Dixit	Raghunath Dixit	Self	Male	79	Widow	General	392	1044, 1046, 1045	Agricultural	Sarad	3.53	2.06	2.06	58.36
				Rajendra	Son	Male	54	Married									
				Satyabrati	Daughter-in-law	Female	44	Married									
				Urbasi	G.Daughter	Female	21	Unmarried									
20	Bindhana	Barahamath	Smt. TanulataPadhi	TarulataPadhi	Self	Male	77	Widow	General	192	1047, 1295, 1296, 1297	Agricultural	Sarada, Pala, Prunapatit a	1.13	1.08	1.08	95.58
				AkhayaPadhi	Son	Male	44	Married									
				Ranjita	Daughter-in-law	Female	35	Married									
21	Bindhana	Barahamath	BholanathPanda	Bholanath Panda	Self	Male	63	Married	General	39	1048	Agricultural	Sarad	1.1	0.33	0.33	30

