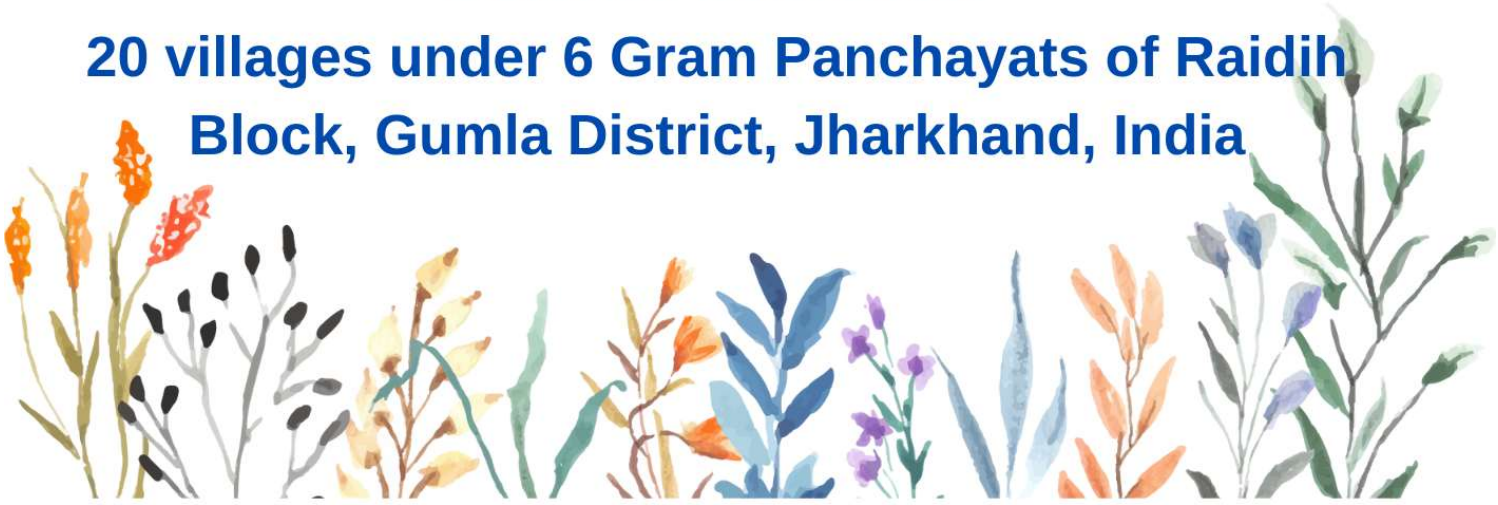
BASELINE SURVEY REPORT

PROJECT
"Ensuring Nutritional Security for Sustainable Health and Development"

SURVEY LOCATION
20 villages under 6 Gram Panchayats of Raidih Block, Gumla District, Jharkhand, India



Submitted to
Terre des Hommes (TDH), Kolkata
Bread for the World (BFTW)

Submitted by
Vikas Samvad Samiti

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SURVEY LOCATION

20 villages under 6 Gram Panchayats of Raidih Block, Gumla District, Jharkhand, India

Gram Panchayats Covered:
Sikoee, Tulumunga, Mokra, Kasira, Bocta, and Rengola

Report - submitted to	**Report - submitted by**
Terre des Hommes (TDH), Kolkata Bread for the World (BFTW)	Vikas Samvad Samiti Gumla

Chapter 1. Executive Summary

1.1 Project background & purpose of baseline:

Jharkhand continues to face significant challenges in food and nutrition security, particularly among tribal and small farming communities. Gumla district, located in the southwestern part of the state, is one of the most underdeveloped areas in terms of health, nutrition, and livelihood indicators. The district is predominantly inhabited by tribal populations, including the Oraon, Munda, Kharia, and Lohra, who rely heavily on rain-fed agriculture, forest products, and daily wage labor for their livelihoods. Poor dietary diversity, a lack of awareness about nutrition, limited access to healthcare and government schemes, and inadequate sanitation facilities have led to persistent issues of malnutrition and poverty in the region.

To address these challenges, Vikas Samvad Samiti (VSS), with the support of Terre des Hommes (TDH) Germany and Bread for the World (BFTW), is implementing a project titled "Ensuring Nutritional Security for Sustainable Health and Development" in 20 villages across six Gram Panchayats of Raidih Block, Gumla District, Jharkhand. This project primarily focuses on promoting nutrition-sensitive, climate-resilient agricultural practices; improving health and sanitation; empowering women and youth through sustainable livelihoods; and strengthening local governance systems, including the Integrated Child Development Services (ICDS), Public Distribution System (PDS), and Gram Panchayat Development Plan (GPDP). The project aims to benefit approximately 400 households, representing about 1,800 to 2,000 individuals.

The purpose of the baseline study is to evaluate the initial socio-economic, nutritional, health, livelihood, and governance conditions of the target families before project interventions start. This study offers benchmark data to track progress and assess the project's impact in future years. Using a mixed-methods approach that combines quantitative surveys and qualitative discussions, the study administered structured questionnaires to 400 households (20 households from each of the 20 villages). Additionally, 20 Anganwadi Centers, 16 schools, 8 Focus Group Discussions (FGDs) with women and youth, and 6 Key Informant Interviews (KIIs) with local stakeholders—including PRI members, AWWs, teachers, and health workers—were conducted to gather detailed insights.

1.2 Objectives of the Baseline Study:

The baseline study aims to conduct a comprehensive assessment of the current social, economic, health, and nutritional status of the target families. It collected initial data on key indicators related to food production, nutrition, health, livelihood, and governance, representing the situation before the project's implementation.

This study seeks to gain a deeper understanding of the issues surrounding malnutrition, food insecurity, and socio-economic challenges within the communities. It includes analyses of child nutrition, local dietary diversity, anemia prevalence, the availability of health services, and existing agricultural practices.

The findings of this study will guide project strategies and interventions in subsequent phases in a data-driven manner. It will also empower youth and community leaders to prioritize nutrition, food security, and sustainable livelihoods within the Gram Panchayat Development Plan (GPDP). This baseline study will serve as a strong foundation for assessing the project's future progress and impact.

1.3 Methodology: (sample size, tools, analysis approach)

Study design: This study used a mixed-methods approach to combine both factual (numerical) and experiential (qualitative) evidence.

Quantitative survey: A total of 400 households were surveyed (20 villages × 20 households). Information was also collected from Anganwadi Centers (AWCs) and government schools in all selected villages using institutional questionnaires.

Qualitative methods:

- **Focus Group Discussions (FGDs):** Group discussions were conducted with women, youth, men, and other community members.
- **Key Informant Interviews (KIIs):** Interviews were conducted with panchayat representatives, Anganwadi workers, ASHA workers, teachers, and block-level officials.
- **Observations:** Information was gathered through observation of WASH (water, sanitation, and hygiene) facilities, and the infrastructure and services of Anganwadi centers and schools.

Sampling strategy:

Households: For the household survey, 400 households were selected from 20 villages, with 20 households from each village. Systematic random sampling was used to ensure representation of all groups; for this, every fourth house was selected after skipping three houses. The primary respondent was the adult woman caregiver in the family, while for livelihood-related questions, information was taken from the household head or a youth member.

Institutions (AWCs and schools): One Anganwadi center and one primary or secondary school from each selected village were included in the survey. In villages with more than one institution, the school was chosen at random.

Focused group discussions (FGDs): In the Gumla district, 8 FGDs were conducted with women, men, adolescent girls, and youth.

KIIs: A total of 6 key informant interviews were conducted, including with gram panchayat members, Anganwadi workers, ASHA workers, and teachers.

Analysis approach:

- Quantitative data was entered into Excel and analyzed using statistical measures such as averages, percentages, and correlations.
- Qualitative data were analyzed using thematic analysis to capture the community's experiences, perspectives, and behaviors in depth.
- The findings from the analysis were linked to the project objectives, and the resulting situation is presented here as the baseline scenario

1.4 Key findings (indicator-wise baseline values)

SN	Planned outcome	Initial situation/baseline
1	**Objective 1**: Children and women in 400 households adopt nutritional and hygiene practices.	**Indicator 1.1:** Household dietary diversity (HDDS, 5+ food groups) • Only 18.75% households consume ≥5 food groups, indicating low dietary diversity. • Micronutrient-rich food consumption is low for dairy (7%), vitamin A-rich foods (16%), fruits (17%), and animal-source foods (26–29%). • Meal Frequency among Children Under 5 Years: 14.3% of children eat four meals per day, while Meal frequency data was not known for 74.5% of children, indicating poor tracking of child feeding practices. • Meal Frequency among Women (15–49 Years): 83.25% women reported eating three meals daily. But nutritionally inadequate, aligning with low dietary diversity and high anemia concerns seen in FGDs.
		Indicator 1.2: Incidence of malnutrition (stunting, wasting, underweight in U5s) • Stunting is high at 27%, indicating chronic malnutrition linked to long-term poor feeding and maternal nutrition. • Underweight prevalence is 6%, reflecting inadequate diet quantity or recurrent illness. • Wasting is 4%, pointing to acute malnutrition requiring timely intervention.
		Indicator 1.3: Women's/caregivers' WASH & child feeding knowledge and practices • 53.5% of households depend on wells as the primary source of drinking water. • 43.75% of households do not treat drinking water. • 38.5% of households practice open defecation, and improved toilets are used by 52.75%. • Handwashing: before feeding children, in 23% households, after defecation 89%, and soap present at the handwashing place in 63% households. • Early Childhood Feeding: Colostrum feeding 74%, exclusive breastfeeding 85%, complementary feeding adequate only in 45%.

2.1	**Objective 2:** 200 women and 100 youth generate income from climate-resilient and nutrition-sensitive livelihoods	**Indicator 2.1:** % trained women/youth reporting 20%+ income increase • Agriculture: 94% of households depend on farm-based livelihoods. Daily wage labor: 59% households are the second key source of income, indicating reliance on informal, low-paying work. • 81% households earn ≤ Rs.5000/month; (45% <Rs.3000/month and 36% earn Rs.3000–Rs.5000), indicating widespread low income. • Income from Livelihood diversification is low: Livestock/poultry 30%, NTFPs 32% serve as supplementary but essential income options. • Limited income from small businesses is 13%, highlighting the lack of formal and entrepreneurial opportunities. • 26% respondents received training in agriculture/entrepreneurship; no training occurred in food processing or green jobs. • Income increased after training, 3% respondents reported >20% income increase, while 59% reported no income change.
		Indicator 2.2: % participants starting/joining green enterprise • 28% households started or joined an enterprise in the last year. • Organic farming (7%) and livestock enterprises (5%) dominate; minimal processing (1%) or eco-products. • Most entrepreneurs earn Rs.1000–Rs.3000/month from enterprises; only 1% earn >Rs.5000.
		Indicator 2.3: % households using climate-resilient practices (compost, intercropping, resilient seeds, water-saving, agroforestry, IPM, etc.) • Adoption of organic manure 58%, and intercropping, 46% is moderate. • Very low use of resilient seeds is 9%, drip irrigation 5% and agroforestry 14%. • Main constraints are: 74% of farmers report high input costs as the main financial barrier. 72% of farmers lack knowledge/skills, and 46% lack irrigation water

		• Women's Decision-Making Joint decisions 56%, male-only 34%, female-only 10%.
	Objective 3: Communities improve local governance to secure food and nutrition entitlements	**Indicator 3.1**: % villages with functional food & nutrition committees • 18% of households reported that their village has a Food & Nutrition Committee. • 14% households participated in any committee meeting.
		Indicator 3.2: % households accessing at least one social security scheme • 38% received benefits from ICDS Anganwadi, • 27% received wage employment from MGNREGA. • 22% benefited from PM Kisan, • 36% received pensions (old age/widow/disability). • 48% beneficiaries do not receive timely/adequate benefits.
		Indicator 3.3: % GPDP/micro-plans with nutrition & sustainable Agri actions • 25% of households are aware of the GPDP/micro-plan. • 22% of households were consulted in micro-plan preparation. • Nutrition issues were included in 23% of village micro plans. • Sustainable agriculture issues are included in 36% of villages' micro plans.

1.5 Major Gaps Identified:

SN	Planned outcome	Major Gaps Identified
1	**Objective 1**: Children and women in 400 households adopt nutritional and hygiene practices.	**Indicator 1.1:** Household dietary diversity (HDDS, 5+ food groups) • Heavy cereal-based diet with impoverished dietary diversity. • Weak tracking and awareness of child meal frequency. • Inadequate complementary feeding; poor access to micronutrient-rich foods.

		Indicator 1.2: Incidence of malnutrition (stunting, wasting, underweight in U5s) • Low diet diversity + inadequate complementary feeding. • Poor growth monitoring and maternal nutrition counselling.
		Indicator 1.3: Women's/caregivers' WASH & child feeding knowledge and practices • Unsafe water practices; incomplete sanitation usage. • Very poor handwashing before feeding/cooking. • Weak complementary feeding knowledge and practice.
	Objective 2: 200 women and 100 youth generate income from climate-resilient and nutrition-sensitive livelihoods	**Indicator 2.1: % trained women/youth reporting 20%+ income increase** • Heavy reliance on climate-sensitive farming and low-paying wages. • Few high-value enterprises and market linkages. • Very low-salaried jobs (2%).
		Indicator 2.2: % participants starting/joining green enterprise • Weak follow-up support after training. • Skill building limited to agriculture; no value addition.
		Indicator 2.3: % households using climate-resilient practices (compost, intercropping, resilient seeds, water-saving, agroforestry, IPM, etc.) • Limited technical know-how, irrigation, and access to inputs. • Poor farmer awareness of climate-resilient benefits. • Low control of women over resources and income decisions.
	Objective 3: Communities improve local governance to secure food and nutrition entitlements	**Indicator 3.1**: % villages with functional food & nutrition committees • Weak community institutions for nutrition oversight.
		Indicator 3.2: % households accessing at least one social security scheme • Low linkage to income/entitlement schemes.

		• Irregular delivery and weak grievance mechanisms.
		Indicator 3.3: % GPDP/micro-plans with nutrition & sustainable Agri actions • Weak convergence between PRI, ICDS, agriculture, and WASH. • Poor community participation in planning.

1.6 Recommendations for programming and monitoring

SN	Planned outcome	Recommendations for programming and monitoring
1	**Objective 1**: Children and women in 400 households adopt nutritional and hygiene practices.	**Indicator 1.1:** Household dietary diversity (HDDS, 5+ food groups) • Strengthen and increase diet diversity through counselling and demonstrations. • Promote nutrition gardens and low-cost local recipes. • Track meal frequency and ensure eggs/milk/green veg in diet of children.
		Indicator 1.2: Incidence of malnutrition (stunting, wasting, underweight in U5s) • Monthly growth monitoring of children, SAM/MAM referral, and regular home visits. • Promote maternal diet counselling and IFA compliance. • Link ultra poor families to Government schemes, THR, MDM, and nutrition gardens.
		Indicator 1.3: Women's/caregivers' WASH & child feeding knowledge and practices • Behavior change on water treatment/purification, • Increase toilet use and handwashing practices. • Ensure household soap availability at handwashing points.
	Objective 2: 200 women and 100 youth generate income from climate-resilient and nutrition-sensitive livelihoods	**Indicator 2.1: % trained women/youth reporting 20%+ income increase** • Promote nutrition-sensitive and climate-smart enterprises: Integrated farming, poultry, goat rearing, vegetables cultivation and NTFP processing.

		• Build market linkages, credit access, value chain support. • Skill development of youth and women, and women-led enterprises.
		Indicator 2.2: % participants starting/joining green enterprise • Focus on processing, value addition, green-enterprise training. • Provide post-training handholding support, tools, working capital & market links.
		Indicator 2.3: % households using climate-resilient practices (compost, intercropping, resilient seeds, water-saving, agroforestry, IPM, etc.) • Establish farmer field schools, demo plots, local seed banks. • Facilitate drip subsidies, common irrigation structures. promote natural farming practices. • Promote women-led enterprises, credit linkage, collective farming. • Ensure participation of women.
	Objective 3: Communities improve local governance to secure food and nutrition entitlements	**Indicator 3.1**: % villages with functional food & nutrition committees • Formation and activate Community Food & Nutrition Committees (CFNCs) in all villages. • Training of committee members for monitoring of ICDS, PDS, MDM and WASH.
		Indicator 3.2: % households accessing at least one social security scheme • Deploy scheme facilitation support via women and youth leaders. • Track timely & adequate delivery of schemes.
		Indicator 3.3: % GPDP/micro-plans with nutrition & sustainable Agri actions • Support PRIs to integrate nutrition and climate-agri actions in village level micro plans. • Ensure community consultations and tracking of GPDP.

Chapter 2. Introduction

2.1 Context: Nutrition, Livelihood, WASH, and Governance in Jharkhand

Jharkhand, particularly Gumla District, is rich in natural resources but continues to face significant developmental challenges. Located in the southwestern part of the state, Gumla has a predominantly tribal population (68.9%). According to the 2011 Census, the total population of Gumla is approximately 1.025 million, of whom nearly 74.5% live below the poverty line (BPL).

Agriculture is the primary source of livelihood in the region; however, it is mostly rain-fed, low-yielding, and highly susceptible to risks. Limited income opportunities, scarce resources, and weak local governance systems contribute to extremely fragile socio-economic conditions in the area.

Nutrition:

The situation regarding malnutrition and anemia in Gumla District is critical. According to the NFHS-5 (2019–2021):

- 40.2% of children under five are stunted (low height for age).
- 20.1% of children are wasted (low weight for height).
- 38.7% of children are underweight (low weight for age).
- 65.8% of children (ages 6–59 months) and 59.5% of women (ages 15–49 years) suffer from anemia.
- 90% of children (ages 6–23 months) do not receive adequate dietary diversity.

Low dietary diversity, poor awareness about nutrition, and limited access to government nutrition schemes such as ICDS, SNP, and PDS have negatively impacted the health of women and children.

Livelihood:

The project targets 400 households, primarily small and marginal farmers who rely on rain-fed agriculture, wage labor, and forest produce. Their average annual income ranges from Rs.10,000 to Rs.15,000. Agricultural productivity remains low due to a lack of irrigation, quality seeds, organic inputs, and market linkages.

The project aims to create local employment and income opportunities for women and youth through initiatives such as nutrition gardens, vegetable clusters, organic farming, goat rearing, backyard poultry, and other sustainable livelihood activities.

WASH (Water, Sanitation, and Hygiene):

Poor access to safe drinking water, sanitation facilities, and hygiene practices has resulted in widespread health issues, including diarrhea, skin infections, anemia, and other nutrition-related diseases. In most villages, hand pumps and open wells serve as the primary sources of drinking water; however, water quality and maintenance are inadequate. The project promotes safe water use, improved sanitation, and behavioral change in hygiene at the community level.

Governance in Jharkhand:

Local governance institutions and services, including ICDS, PDS, MGNREGA, the Health Department, and Gram Panchayats (GPDP), exist in the area but function with limited effectiveness, low community participation, and weak accountability. The project's goal is to enhance transparency, accountability, and community leadership at the village level, enabling government benefits to reach marginalized families more effectively.

2.2 Project Overview: target areas, population, expected outcomes:

Target Area:

The project is being implemented in 20 selected villages within 6 Gram Panchayats of Raidih Block, Gumla District, Jharkhand. The region is primarily inhabited by tribal groups such as Oraon, Munda, Kharia, Chik Baraik, Nagesia, and Lohra. The selected villages share similar socio-economic conditions to ensure uniform and focused interventions.

Population:

The project aims to benefit around 400 families, primarily women and youth, who are directly impacted by nutrition, health, and livelihood activities. In total, the project intends to reach approximately 1,800 to 2,000 individuals.

Major Activities and Interventions:

- Nutrition-sensitive and Climate-resilient Agriculture: Promotion of nutrition gardens, organic farming, vegetable clusters, and chemical-free cultivation.
- Sustainable Livelihood Development: Establishing Farmer Field Schools, promoting goat and poultry rearing, providing skill training for women and youth, and supporting micro-enterprises.
- Improved WASH and Health Practices: Conducting awareness campaigns on safe drinking water, sanitation, and personal hygiene.
- Community Governance and Participation: Strengthening community participation in ICDS, PDS, MGNREGA, and Gram Panchayat Development Plans (GPDP) to ensure improved implementation and monitoring.

Expected Outcomes:

1. Out of 400 households -
   75% of target households report increased dietary diversity, with family members consuming at least five different food groups daily.
2. Incidence of malnutrition among children under five is reduced by 30% in target households.
3. 90% of women and caregivers demonstrate improved knowledge and practices in WASH (Water, Sanitation, and Hygiene) and child feeding behaviors.
4. Out of the targeted 200 women and 100 youth from the ultra-poor households, -
   At least 70% of women and youth trained in sustainable agriculture and entrepreneurship report a 20% increase in income.
5. 50% of trained participants start or join a green enterprise (e.g., organic farming, small-scale food processing, eco-friendly products).
6. 75% of participants use climate-resilient agricultural practices.
7. 100% of target villages establish community-led food and nutrition committees.

8. 90% of eligible households have access to at least one social security scheme.
9. 80% of micro-plans submitted include specific actions for nutrition and sustainable agriculture.

Overall Goal:

Empower 400 families by improving their nutrition, health, and sustainable livelihoods, while strengthening community participation and local governance systems in Gumla District.

2.3 Purpose of the Baseline Study: why it is done, how it links to the log frame:

The primary purpose of the baseline study is to conduct a comprehensive assessment of the current situation of the targeted households before the project's implementation, with a special focus on women and children. This study gathers reliable data on existing conditions in nutrition, health, livelihoods, and governance, providing a foundation for project planning, monitoring, and evaluation.

Main Objectives of the Baseline Study:

1. **Assess Food and Nutrition Security:** Evaluate the status of food and nutrition security among the targeted families, particularly focusing on dietary diversity and nutrition levels among women and children.
2. **Document Agricultural Practices:** Record existing practices related to agriculture and livelihoods, including organic and chemical-free farming, land ownership, and sources of income.
3. **Study Knowledge, Attitudes, and Practices (KAP):** Examine the knowledge, attitudes, and practices related to nutrition, maternal and child health, hygiene, and other relevant behaviors.
4. **Analyze Community Participation:** Investigate the role and involvement of community institutions, such as self-help groups, youth groups, and panchayat representatives, while assessing access to government schemes like ICDS, PDS, and MGNREGA.
5. **Develop a Baseline Dataset:** Establish a baseline dataset that acts as a reference point for assessing the project’s results and impacts, thereby improving evidence-based planning and management.

Relation to the Project Log frame

The baseline study is closely linked to the project log frame because it:

- Provides reference values for all output and outcome indicators, such as reductions in malnutrition, improvements in income, and participation in governance.
- Aids in setting realistic and measurable targets.
- Lays the groundwork for the monitoring and evaluation (M&E) framework, allowing for the tracking of the project's progress and timely adjustments to strategies.

Consequently, the baseline study ensures that project interventions are context-appropriate, evidence-based, and measurable, ultimately strengthening the project's effectiveness and accountability.

2.4 Specific Objectives of the Baseline Study:

1. **Assess Food and Nutrition Security:** Evaluate the status of food and nutrition security of the targeted families, particularly in terms of dietary diversity and nutrition levels among women and children.
2. **Document Current Agricultural Practices:** Gather information on existing farming practices, including organic and chemical-free cultivation, land ownership, and income sources.
3. **Examine Knowledge, Attitudes, and Practices (KAP):** Study the knowledge, attitudes, and practices surrounding nutrition, maternal and child health, hygiene, and associated behaviors.
4. **Analyze Community Participation:** Assess the role and participation of community institutions (such as self-help groups and panchayat representatives) and evaluate service delivery and access to government schemes (ICDS, PDS, MGNREGA, etc.).
5. **Prepare a Baseline Dataset:** Create a baseline dataset that will serve as a reference point for evaluating the future results and impacts of the project, strengthening evidence-based planning and management.

Chapter 3. Methodology

3.1 Study Design: (quantitative + qualitative, triangulation approach)

The baseline study used a mixed-methods approach, collecting both quantitative and qualitative data. This triangulation method ensures that information is verified from multiple sources and perspectives.

3.2 Sampling Strategy: HH sample, institutions, FGDs, KIIs

Households: A representative sample was drawn from the targeted 400 households.

Community Institutions: This included self-help groups, youth groups, and representatives from local panchayats.

Focus Group Discussions (FGDs): Conducted with women's groups and youth groups.

Key Informant Interviews (KIIs): Conducted with gram panchayat representatives, Anganwadi workers, teachers, and health workers.

3.3 Data Collection Tools: HH survey, AWC/school checklist, FGDs, KIIs, observation

Household Survey: This collected socioeconomic, nutrition, and livelihood data from the households.

AWC/School Checklist: This evaluated services and nutrition practices at Anganwadi centers and schools.

FGDs: These were conducted to understand community experiences, knowledge, and perspectives.

KIIs: These analyzed the functioning and challenges of local institutions and programs.

Observation Checklists: Used for direct observation of water, sanitation, health, and nutrition practices.

3.4 Enumerator Meeting, Training, and Pilot Testing

Enumerator Meeting: An introductory meeting was held before data collection commenced.

Training: The training covered data collection tools, questions, interview techniques, and ethical guidelines.

Pilot Testing: This involved testing the relevance and clarity of the tools and incorporating any necessary improvements.

3.5 Data Quality Measures: spot checks, daily debriefs, 10% re-checks

Spot Checks: Random verifications were conducted during data collection.

Daily Debriefs: Daily team meetings were held to review progress and address any issues.

10% Re-checks: A re-verification of 10% of the entire survey was conducted.

3.6 Data Analysis Methods:

Quantitative Data: This was coded and analyzed using SPSS, STATA, or Excel, employing tables, percentages, averages, distributions, and cross-tabulations.

Qualitative Data: Thematic analysis was used to extract key findings from FGDs and KIIs.

Triangulation: Findings from various sources and methods were cross-checked for accuracy.

3.7 Ethical Considerations: consent, confidentiality, gender-sensitive approach

Consent: Written or verbal consent was obtained from all participants.

Confidentiality: Personal information was kept secure.

Gender-sensitive Approach: A supportive environment for female participants was ensured.

Voluntariness and Rights: Participants had the right to refuse participation at any time.

3.8 Limitations coverage, recall bias, seasonal timing

Coverage: Full coverage of all households and institutions was not achievable.

Recall Bias: Errors or omissions may occur due to difficulties in recalling past information.

Seasonal Timing: Agricultural or food patterns may vary due to seasonal influences.

This summary encapsulates the key aspects of the methodology used in the baseline study, highlighting a rigorous mixed-methods approach that includes sampling, data collection, analysis, ethical considerations, and limitations.

Chapter 4. Study Area and Sample Profile

4.1 Geographic Coverage: Number of Districts, Blocks, and Villages

The study was conducted in the Raidih Block of Gumla District, Jharkhand, encompassing 20 villages. The villages vary in terms of population size, geography, and socio-economic conditions. Larger villages included Sikoi, Tulumunga, Mokra, and Kasira, while smaller ones featured Bocta, Loonga, and Kapodih.

In total, the study area comprises 2,634 households with a population of 14,213 (7,150 males and 7,063 females). The sex ratio is 988 females for every 1,000 males, indicating a balanced population structure in the region.

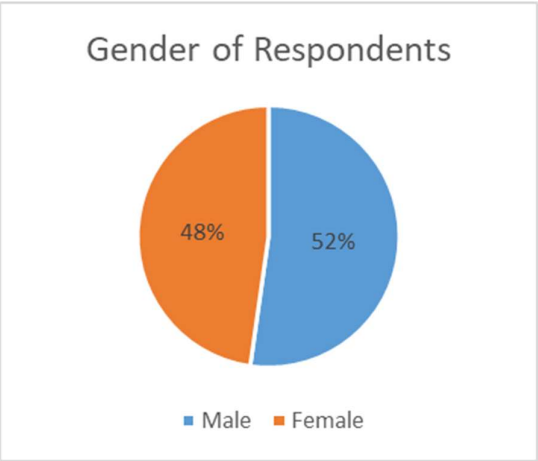
4.2 Sample Composition: Households, Women, Youth, AWCs, and Schools

A total of 400 respondents participated in the baseline survey, consisting of 209 men (52%) and 191 women (48%). The selection of respondents was designed to ensure representation from various social groups and institutional stakeholders.

Table 1: Gender of Respondents

Gender of Respondents	Number of Families	Percentage
Male	209	52%
Female	191	48%
Total	**400**	**100%**

Key Insights:



- **Balanced Gender Representation**: The sample includes 52% men and 48% women, providing a well-rounded understanding of household and community conditions.
- **Strong Female Participation**: Nearly half of the respondents are women, indicating active female participation in the survey.
- **Representative Sample Size**: With 400 respondents drawn from 2,634 households, the findings are representative of the project area.
- **Youth Presence in Sample**: Approximately one-third of respondents are youth aged 18 to 35, offering insights into education, agriculture, and migration-related livelihoods.
- **Coverage of Key Institutions**: Data was collected from 20 Anganwadi Centers and multiple schools across the villages, strengthening the institutional perspective.
- **Village-Level Variation Captured:** The higher number of beneficiaries in Sikoi, Rengola, and Teliya indicates varying levels of service reach across the villages.

4.3. Socio-Economic Profile of Respondents: caste/tribe, education, occupation, landholding, income brackets

Caste and Tribe Composition

Scheduled Tribes (STs) and Other Backward Classes (OBCs) predominantly inhabit the study area. Major tribal groups include Oraon, Munda, and Lohra, while some villages also have Scheduled Caste (SC) and Other Backward Class (OBC families. The region reflects a traditional tribal-rural structure with limited economic diversification.

Education Profile

The overall literacy level among surveyed families is moderate, indicating gradual educational improvement, especially among women.

Villages	Illiterate	Primary	Middle	High school	Intermediate	Graduate/Masters
Mokra	2	8	4	3	2	1
Rengola	2	5	4	3	5	1
Birkera	8	8	1	3		
Tulmunga	5	4	3	8		
Raidih	9	6		3	1	1
Lunga	5	4	3	5	3	
Kapodih	5	1	1	7	5	1
Karida	4	3	2	3	6	2
Telia	4	2	5	6	3	
Unchdih	3	4	2	5	4	2
Sipringa	3	4	7	4	1	1
Pogra	9	10	10	4	6	1
Konkel	9	2	3	5	1	
Ramdega	6	5	6	2	1	
Kasira	11	3	1	3	2	
Pakartoli	6	1	2	4	6	1
Sikoi	5	1	3	7	3	1
Bokta	4		5	7	4	
Raghunathpur	1	3	2	9	4	1
Total	**101**	**74**	**64**	**91**	**57**	**13**
Percentage	25%	19%	16%	23%	14%	3%

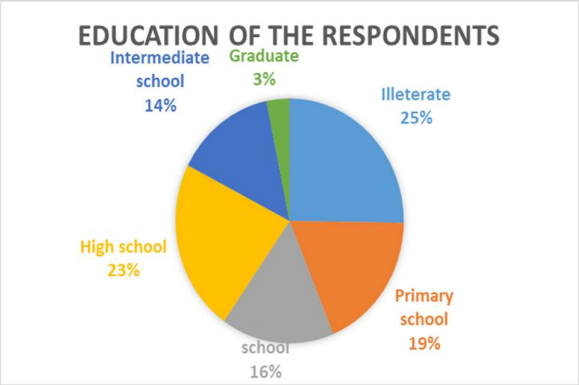
Key Findings:

1. High Illiteracy Rate (25%): One-fourth of the respondents are illiterate, indicating a significant gap in basic education and highlighting the urgent need for education-focused interventions.

2. The Majority Have Basic or School-Level Education (58%): A large proportion of respondents have completed primary education (19%), middle or secondary education (16%), or high school (23%). This shows that foundational schooling is standard; however, access to higher education remains limited.

3. Low Higher Education Attainment (17%): Only 14% of respondents have studied up to the intermediate level, and just 3% have graduated from college. This points to restricted access to advanced education opportunities.

4. Education Levels Reflect Rural Constraints: The overall distribution of education levels reflects typical rural patterns, characterized by strong school attendance but low college enrollment.



5. Potential Links to Livelihood Patterns: Limited education beyond school may contribute to greater reliance on agriculture, wage labor, and migration-based livelihoods.

Occupation:

The study area is characterized by a rural economy composed predominantly of tribal communities, where agriculture is the primary source of livelihood. Notably, men and women participate equally in the survey, and the region has a moderate literacy rate and relies on government schemes.

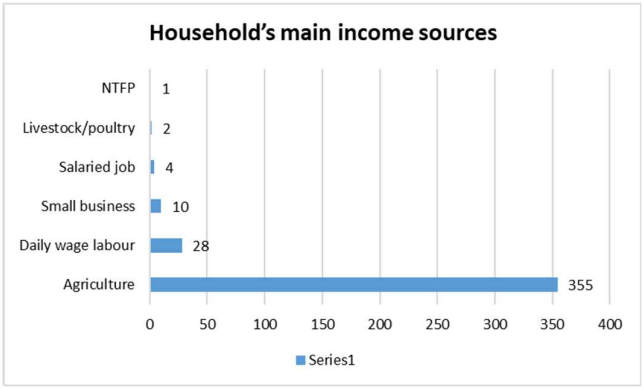
Most families in this area are small and marginal tribal farmers who face challenges such as limited resources, low income, poor dietary diversity, and restricted access to health and nutrition services. This socio-economic profile underscores the urgent need for project interventions to improve nutrition, promote sustainable livelihoods, and strengthen governance in the region. Agriculture and wage labour are the primary sources of livelihood for most families**.**

Table 3: household's primary income sources

Villages	Agriculture	Daily wage labour	Small business	Salaried job	Livestock /poultry	NTFP
Mokra	16	1	3			
Rengola	17	3				
Birkera	20					
Tulmunga	15	4	1			
Raidih	13	5	2			
Lunga	18	1	1			
Kapodih	18	1		1		
Karida	18	2				
Telia	15	4	1			
Unchdih	19	1				
Sipringa	18	1		1		
Pogra	38			1		1
Konkel	18				2	
Ramdega	20					
Kasira	18		2			
Pakartoli	19	1				
Sikoi	18	2				

Bokta	19			1		
Raghunathpur	18	2				
Total	**355**	**28**	**10**	**4**	**2**	**1**
Percentage	**88.75**	**7**	**2.5**	**1**	**0.5**	**0.25**

Key Findings:



- Agriculture is the primary source of income for 355 out of the 400 households in the area, making up 88.75% of all households. These families are classified as small and marginal farmers, each owning less than 2 acres of land.
- In addition to farming, households also earn income from various sources, including the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), agricultural labor, and seasonal migration. For 28 households, daily wage labor is the primary source of income, representing 7% of households.
- Only 10 households (2.5%) support themselves through small businesses. In comparison, only 4 families (1%) rely on salaried jobs, indicating that opportunities for non-farming and formal employment are limited in the area.
- Very few households depend primarily on livestock or poultry for their income, with only two households (0.5%) identifying this as their primary source. Additionally, only one household (0.25%) reports non-timber forest products (NTFP) as its primary income source, suggesting that forest-based income is negligible in this region.
- The average monthly household income ranges between Rs.6,000 and Rs.12,000**,** derived mainly from agriculture, labour, and government welfare schemes.

Chapter 5. Findings

Objective 1: Children and women in 400 households adopt nutritional and hygiene practices

5.1.1. Household dietary diversity (HDDS, 5+ food groups)

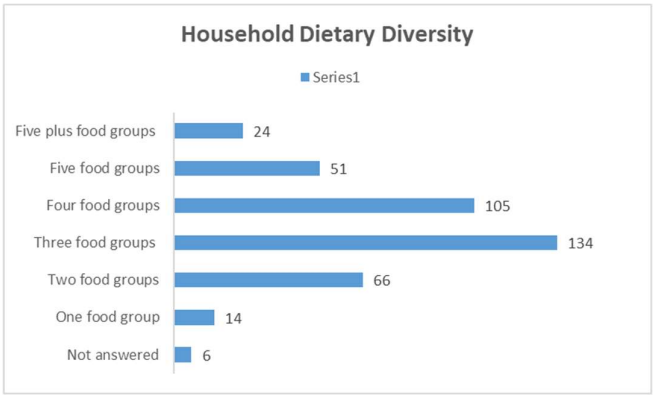
Most respondents reported consuming between three and four food groups, indicating a moderate level of dietary diversity in the sample.

Table -5.1.1: Household dietary diversity (HDDS, 5+ food groups)

HDDS food groups	Families	percentage
Five+ food groups	24	6
Five food groups	51	12.75
Four food groups	105	26.25
Three food groups	134	33.5
Two food groups	66	16.5
One food group	14	3.5
Not answered	6	1.5
Total	400	100

5.1.1 Key findings: Distribution across food groups

- A total of 24 families (6%) are consuming more than five food groups, representing the nutritionally better-off segment, which includes both eggs and fruits on top of cereals, tubers, pulses, dairy, meat/fish, and green vegetables, representing the most nutritionally adequate pattern in the table



- A smaller number reported higher diversity, with 51 (12.75%) respondents' families consuming five food groups, which include fish, mutton or chicken, and green vegetables, along with cereals, tubers, pulses, and dairy, giving a broad mix of macronutrients and key vitamins and minerals.
- Four food groups consuming families are (105) (26.25%), showing that most diets cover four food groups, and diets further include oils or fats, but still may lack a complete variety.
- The largest share of respondents fell in the three-food-group category, a total of 134 family respondents (33.5%). These families add dairy products, tubers, pulses, animal protein, and calcium to their diet.
- 66 family respondents (16.5%) reported consuming foods from two food groups, suggesting that very low dietary diversity, as the pulses are added to cereals and tubers in food.

- A total of 14 family respondents (1.5%) reported consuming foods from just one food group, one food group, diets consist only of cereals with tubers and roots, indicating heavy reliance on starchy staples and impoverished dietary diversity.
- Six cases were recorded as "not answered," which is a tiny fraction and is unlikely to affect the interpretation of overall dietary diversity patterns.

5.1.1.1 Details of food item consumption in the families:

Households report very high consumption of cereals/roots/tubers and oils/fats, while intake of animal-source foods, milk products, and vitamin A–rich fruits and vegetables is low. Overall, diets appear to be heavily cereal-based, with limited diversity across key nutrient-dense food groups.

Table 5.1.1.1 - Food Items consumption in families:

Food Items	Yes	% Yes	No	% No
Cereals/roots/tubers	377	94.25	23	5.75
Pulses/beans/nuts	234	58.5	166	41.5
Milk/yogurt/cheese	27	6.75	373	93.25
Eggs	104	26	296	74
Meat/fish/poultry	116	29	284	71
Dark green leafy vegetables	163	40.75	237	59.25
Vitamin A-rich fruits/vegetables (carrots, mango, papaya)	63	15.75	337	84.25
Other vegetables	218	54.5	182	45.5
Other fruits	66	16.5	334	83.5
Oils/fats	313	78.25	87	21.75
Sweets	93	23.25	307	76.75
Condiments/spices	296	74	104	26

Key Findings:

5.1.1.1 - Food Items consumption in families:

Staple Foods and Fats:

Almost all respondents consume cereals, roots, and tubers, with 377 families (94.25%) indicating a strong dependence on these staple foods. A large majority also use oils and fats, with 313 families (78.25%) consuming them. Furthermore, 296 families (74%) use condiments and spices, suggesting that most meals are prepared with added fats and seasonings.

Plant Protein and Vegetables:

Pulses, beans, and nuts are consumed by more than half of the households, with 234 families (58.5%) including them in their diet. However, a significant proportion of respondents still lack this key source of plant protein. Dark green leafy vegetables are consumed moderately but still insufficiently by 163 families (40.75%), suggesting that 237 families (59.25%) do not meet their recommended intake of micronutrient-rich vegetables. Other vegetables are consumed by 218 households (54.5%), indicating that 182 families (45.5%) also have insufficient access to micronutrient-rich vegetables.

Animal-source Foods and Dairy:

Egg consumption is relatively low, with only 104 households (26%) including them in their diet. Meat, fish, and poultry are consumed by 116 households (29%), indicating limited access to high-quality animal protein and associated micronutrients. Dairy consumption is very low, with only 27 households (6.75%) consuming milk, yogurt, or cheese, revealing a significant gap in dairy intake for 373 families (93.25%).

Fruits and Vitamin A-Rich Foods:

Consumption of vitamin A-rich fruits and vegetables, such as carrots, mangoes, and papayas, is alarmingly low, with only 63 households (15.75%) consuming them. Similarly, consumption of other fruits is low, with only 66 households (16.5%) reporting regular fruit intake, leaving 334 households (83.5%) who do not incorporate fruit into their diet consistently.

Discretionary Foods:

Sweets are consumed by 93 households (23.25%), while no sugary foods are reported in 307 households (76.75%). This suggests that the intake of sugary foods is relatively limited when compared to staples and fats.

5.1.1.2. Meal Frequency among children under 5 years:

The objective of this survey was to determine how many times children under five years of age ate during the previous day and to assess their nutritional status and household food availability.

Table 5.1.1.2 - Meal Frequency of children under 5 years:

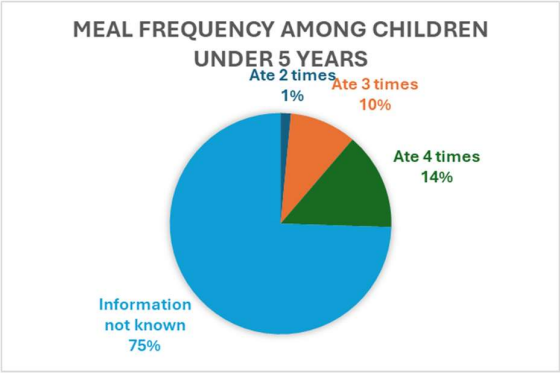
Meal Frequency	Number of Children	Percentage (%)
Ate 2 times	6	1.5%
Ate 3 times	39	9.8%
Ate 4 times	57	14.3%
Information not known	298	74.5%
Total	**400**	**100%**

Key findings:

5.1.1.2. Meal Frequency among children under 5 years:

Out of 400 surveyed families, the meal frequency information among children under 5 years was available for only (25.5%) of children, while data for 298 children (74.5%) was not known.

- Among the children with known information, the majority, 57 children (14.3 %), ate four times a day.
- A smaller proportion of 39 children (9.8%) had three meals daily.
- Only a few children, six children (1.5%), ate two times a day.
- The high proportion of missing information indicates a need for improved data collection or record-keeping on children's meal frequency.
- The data highlights a need for improved tracking of daily meal practices and support for families to ensure children receive at least three nutritious meals daily.



5.1.1.3. - Meal frequency among women in the reproductive age group 15-49 years

Women's nutrition is a cornerstone of social and economic development, particularly for those in the reproductive age group (15–49 years). Their meal regularity and diet quality directly affect their own health and that of their children. In many rural communities, women often eat after other family members, which can contribute to undernutrition, anemia, fatigue, and low maternal weight. Most women in the sample households reported eating three times a day, with very few eating only once.

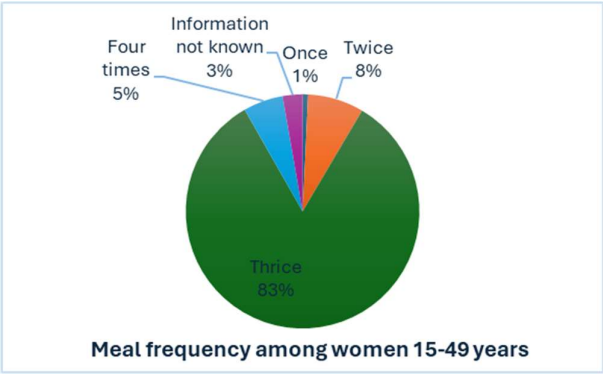
Table 5.1.1.3 - Meal frequency among women 15-49 years

Meal Frequency	Number of Households	Percentage (%)
Once	3	0.75%
Twice	31	7.75%
Thrice	333	83.25%
Four times	22	5.5%
Information not known	11	2.75%
Total	**400**	**100%**

Key findings

5.1.1.3 - Meal frequency among women 15-49 years

- Out of 400 women, a total of 333 (83.25%) ate three times in the previous day.
- A small proportion, 31 women (7.75%), ate twice a day, while only three women (0.75%) ate once.
- About 22 women (5.5%) reported eating four times a day, indicating a smaller group with higher meal frequency.
- For 11 women (2.75%), information on meal frequency was not known.



- The baseline study conducted in 20 villages of Raidih Block, Gumla District, provides a clear and evidence-based understanding of the social, economic, nutritional, health, livelihood, and governance conditions of the target households. The findings reveal that communities face multidimensional, deeply interconnected challenges that directly affect the well-being of women, children, and youth.
- According to the FGD with women, Nutrition outcomes in the region remain poor, with very low dietary diversity, inadequate feeding practices, and a high burden of child malnutrition and anemia. Despite the presence of ICDS and school-based nutrition schemes, service delivery gaps and low awareness continue to undermine the health and nutrition status of families. The absence of functional growth monitoring systems and community nutrition committees further restricts early
- identification and management of undernutrition.

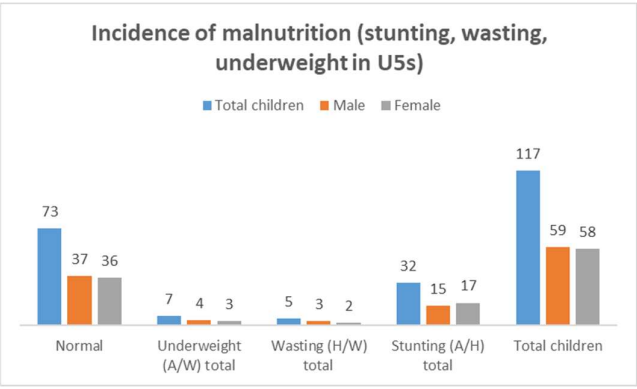
5.1.2 Incidence of malnutrition (stunting, wasting, underweight in U5s):

This report presents an assessment of the nutritional status of 117 children (59 boys and 58 girls) using anthropometric indicators to classify them as Normal, Underweight (weight-for-age), Wasted (weight-for-height), and Stunted (height-for-age). The analysis provides a snapshot of both acute and chronic forms of undernutrition in the study area and helps quantify the current burden of nutritional problems among young children. These findings serve as evidence base for planning and prioritizing targeted nutrition and health interventions to improve child growth and development in the project villages.

Table 5.1.2 Incidence of malnutrition (stunting, wasting, underweight in U5s)

Anthropometric indicators	Male	Female	Total children	Percentage
Normal	37	36	73	62%
Underweight (A/W) total	4	3	7	6%
Wasting (H/W) total	3	2	5	4%
Stunting (A/H) total	15	17	32	27%
Total children	**59**	**58**	**117**	**100%**

Key Findings:



- Out of the 117 children assessed, a total of 73 (62%) children have a normal nutritional status.
- Stunting is significantly high in 32 (27%) children who show stunting (A/H), reflecting chronic malnutrition, long-term undernutrition, and possible gaps in maternal and child health practices.
- Underweight prevalence is moderate in 7 (6%) underweight children (A/W), pointing to inadequate dietary intake or recent illness among some children.
- Wasting is present in 5 (4%) of children, who show wasting (H/W), signaling acute malnutrition and the need for timely intervention.
- Gender participation is balanced. The assessment covered 59 boys and 58 girls, ensuring equal representation and reliable gender-wise analysis.

- Stunting exceeds other forms of malnutrition. The much higher stunting rate compared to underweight and wasting highlights long-term structural issues such as low diet diversity, poor feeding practices, and limited access to nutrition and health services.

Based on the key findings, the scope of work focuses on regular growth monitoring of all children through Anganwadi Centers, maintaining child-wise tracking for stunting, wasting, and underweight, and ensuring home visits and counselling for at-risk children. It aims to improve dietary practices by promoting household and community nutrition gardens, conducting food demonstrations, and encouraging the use of local, seasonal foods.

Strengthening health and nutrition services—including immunization, deworming, IFA supplementation, and referral of SAM/MAM cases—along with improved delivery of THR and hot cooked meals is central.

5.1.3 Indicator: Women's/caregivers' WASH & child feeding knowledge and practices

5.1.3.1 – Source of Drinking Water:

Drinking water is the most essential element of a community's health, hygiene, and quality of life. In rural India, the primary sources of drinking water include wells, handpumps, tap-water schemes, and other local sources such as springs, tanks, and ponds. The availability of safe drinking water is directly linked to public health. Waterborne diseases like diarrhea, cholera, and typhoid are more prevalent in areas where water sources are unsafe or inadequate. This survey aimed to identify the primary drinking water source used by households in the villages so that water security, hygiene, and the reach of government programs can be assessed.

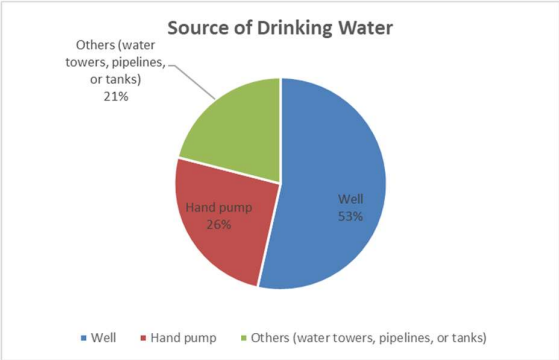
Table 5.1.3.1 Source of Drinking Water

Village	Well	Handpump	Others
Mokra	18	2	0
Rengola	10	10	0
Birkera	10	8	2
Tulmunga	20	0	0
Raidih	13	6	1
Lunga	2	14	4
Kapodih	0	6	14
Karida	10	10	0
Telia	15	4	1
Unchdih	13	6	1
Sipringa	0	0	20
Parasima	20	0	0
Konkel	15	4	1
Ramdega	17	3	0
Kasira	20	0	0
Pakartoli	11	9	0
Sikoi	13	7	0
Bokta	4	13	3
Raghunathpur	0	0	20
Pogra	3	0	17

Total	**214**	**102**	**84**
Percentage	**53.5**	**25.5**	**21**

Key Findings:

Among the 400 households surveyed, Wells are the dominant source of drinking water, used by 214 (53.5%) households, indicating continued reliance on traditional water sources in the villages.



Hand pumps are used by 102 households (25.5%), indicating moderate access to semi-protected groundwater sources.

The remaining 84 (21%) households depend on "other" sources (such as water towers, pipelines, or tanks).

Overall, the data suggests that more than half of the families rely on wells, and only one-fourth use hand pumps, highlighting potential concerns around water safety, seasonal availability, and sustainability of these sources.

5.1.3.2 - Treatment of Water before Drinking:

In rural areas of India, access to safe drinking water is a significant public health challenge. Although the government has launched schemes such as "Jal Jeevan Mission" and "Har Ghar Nal se Jal," many rural households still drink untreated water, increasing the risk of waterborne diseases (such as diarrhea, cholera, typhoid, and hepatitis). The objective of this survey was to find out whether rural households treat water before drinking and how this practice varies from village to village.

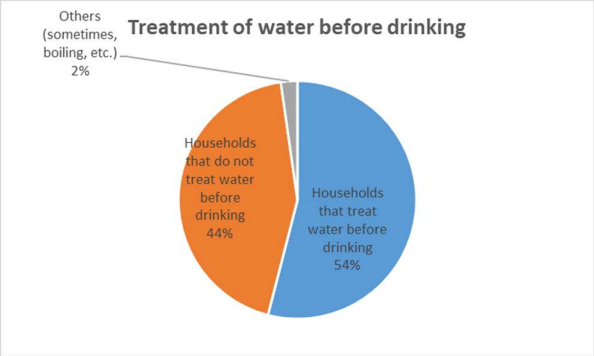
Table 5.1.3.2 Treatment of water before drinking:

Village	Treat water before drinking	Do not treat water before drinking	Other
Mokra	7	13	0
Rengola	10	9	1
Birkera	14	6	0
Tulmunga	16	3	1
Raidih	15	5	0
Lunga	15	5	0
Kapodih	14	5	1
Karida	15	5	0
Telia	11	8	1
Unchdih	13	6	1
Sipringa	3	16	1
Parasima	4	16	0
Konkel	9	11	0

Ramdega	10	10	0
Kasira	7	13	0
Pakartoli	12	8	0
Sikoi	7	13	0
Bokta	7	10	3
Raghunathpur	13	7	0
Pogra	14	6	0
Total	**216**	**175**	**9**
Percentage	**54%**	**43.75%**	**2.25%**

Key findings:

- 54% of households treat water in some form before drinking.
- 43.75% of households still drink water without treating it, which keeps the risk of waterborne diseases high.
- Only 2.25% of households reported "other" practices, such as sometimes boiling the water, etc.



5.1.3.3. Status of Use of Rural Sanitation Facilities:

This survey was conducted to understand the sanitation facilities used by families across 400 households in 20 villages in the project area. Sanitation facilities were classified into the following three categories: 1. Families practicing open defecation, 2. Families using pit (semi-improved) latrines, 3. Families using improved (safe and hygienic) toilets.

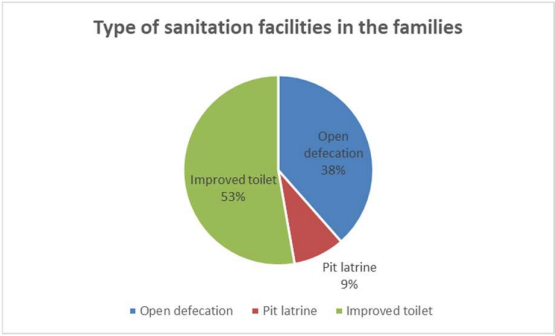
Table 5.1.3.3 Sanitation Facilities in the Families:

Village	Open defecation	Pit latrine	Improved toilet
Mokra	13	0	7
Rengola	11	0	9
Birkera	15	0	5
Tulmunga	10	0	10
Raidih	7	5	8
Lunga	14	0	6
Kapodih	8	12	0
Karida	12	0	8
Telia	1	0	19
Unchdih	2	1	17
Sipringa	1	0	19
Parasima	9	8	3
Konkel	9	2	9
Ramdega	4	4	12
Kasira	4	0	16

Pakartoli	9	0	11
Sikoi	10	0	10
Bokta	14	3	3
Raghunathpur	0	0	20
Pogra	1	0	19
Total	**154**	**35**	**211**
Percentage	**38.5**	**8.75**	**52.75**

Key findings:

- Out of 400 households, 154 households (38.5%) still practice open defecation. which contributes to issues of poor sanitation, waterborne diseases, and environmental pollution. Villages with the highest number of families practicing open defecation: Birkera – 15 households, Loonga – 14 households, Bokta – 14 households,



- A total of 35 families (8.75%) use pit-type toilets. Kapodih village has the highest number of pit latrine users (12 families).
- A total of 211 families (52.75%) use improved (safe) toilets. Villages like Raghunathpur, Teliya, Pogra, Unchdih, and Sipringa have more than 90% families with improved toilets. In contrast, Kapodih, Paraseema, and Bokta have a very low percentage of improved toilets.
- There is a need to strengthen awareness, ensure the availability of sanitation facilities, and promote behavior change among project villages.

5.1.3.4 Handwashing practices among households:

Handwashing with soap is a critical aspect of maintaining good health. In rural areas—where sanitation facilities and availability of clean water may be limited—proper handwashing practices play a decisive role in preventing infectious diseases, diarrhea, skin infections, and nutrition-related illnesses among children.

This survey was conducted to understand people's handwashing behavior and the availability of soap at household handwashing locations.

It evaluates rural families' hygiene habits during key moments. The findings will help inform policy planning and determine priorities for community health programs.

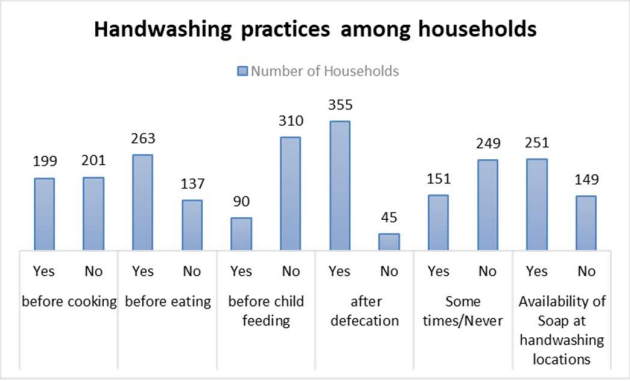
Table 5.1.3.4 Handwashing practices among households:

गांव	before cooking		before eating		before child feeding		after defecation		Sometimes /Never		Availability of Soap at handwashing locations	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Mokra	10	10	6	14	1	19	19	1	5	15	15	5

Rengola	7	13	12	8	0	20	14	6	7	13	18	2
Birkera	12	8	13	7	10	10	15	5	3	17	13	7
Tulmunga	10	10	15	5	0	20	18	2	1	19	19	1
Raidih	19	1	20	0	18	2	19	1	14	6	17	3
Lunga	4	16	20	0	9	11	20	0	0	20	14	6
Kapodih	6	14	20	0	7	13	19	1	0	20	15	5
Karida	5	15	20	0	8	12	20	0	0	20	12	8
Telia	5	15	20	0	9	11	20	0	0	20	14	6
Unchdih	6	14	19	1	3	17	18	2	1	19	18	2
Sipringa	13	7	15	5	3	17	18	2	5	15	17	3
Parasima	15	5	17	3	4	16	20	0	4	16	9	11
Konkel	19	1	14	6	5	15	17	3	13	7	12	8
Ramdega	18	2	19	1	4	16	19	1	9	11	8	12
Kasira	17	3	16	4	1	19	19	1	18	2	7	13
Pakartoli	7	13	3	17	0	20	17	3	20	0	6	14
Sikoi	6	14	1	19	0	20	15	5	17	3	6	14
Bokta	7	13	7	13	8	12	15	5	8	12	2	18
Raghunathpur	9	11	6	14	0	20	19	1	9	11	19	1
Pogra	4	16	0	20	0	20	14	6	17	3	10	10
Total	**199**	**201**	**263**	**137**	**90**	**310**	**355**	**45**	**151**	**249**	**251**	**149**
Percentage	50%	50%	66%	34%	23%	78%	89%	11%	38%	62%	63%	37%

Key findings:

Handwashing before cooking:



- Only 50% of families wash their hands with soap before cooking. Nearly half still wash only with water or occasionally use soap. This directly affects food contamination and nutrition.
- Village Konkel is the best performing willage where 19 out of 20 families wash hands with soap. And villages - Lunga, Kapodih, Karida, Pogra are the villages where around 80% households do not use soap.

Handwashing before eating

- A total of 263 (66%) of surveyed households regularly wash their hands with soap before eating.
- Villages Lunga, Kapodih, and Karida are the best performing villages where 100% of households wash their hands before eating.
- Village Pogra, Sikoi, and Pakartoli are the weak-performing villages.

Handwashing Before Feeding a Child

- This is the most concerning indicator, as only 23% families wash their hands before feeding a child. This directly affects child health and nutrition.
- Best-performing villages are the village Raidih, where 18 families use hand washing, and the village Bokta, where eight families use hand washing before feeding a child.
- Weak-performing villages are Pakartoli, Sikoi, Raghunathpur, Pogra.

Handwashing After Defecation

- A total of 355 (89%) of surveyed households use soap after defecation, which is the strongest and most positive indicator. Only 45 (11%) households are still using water or ash.
- Best-performing villages are Lunga, Karida, Telia, and Parasima, where 100% households are using soap after defecation.

Sometimes/Never Washing with Soap:

- A total of 151 (38%) of households surveyed admit they wash their hands with soap only occasionally or not at all. This indicates a need for stronger awareness and behavior change interventions.
- High rates of irregular handwashing were found in Tulmunga, Karida, Kapodih, and Lunga villages.

Availability of Soap at Handwashing Locations:

- A total of 251 (63%) surveyed households have soap available at the handwashing place. There is a clear link between soap availability and handwashing frequency.
- Best-performing villages are Raghunathpur – 95%, Tulmunga – 95%, Telia – 70% and Weak-performing villages are Bokta where only 10%, Pakartoli – 30%, Kasira – 35% have availability of soap at handwashing locations.

Key highlights:

- Handwashing after defecation is well-established among the project villages.
- However, handwashing before cooking and especially before feeding children remains very limited.
- The gaps found in the survey indicate the need for strengthened efforts in – 1. Behavior change communication 2. Ensuring soap availability, and 3. Continuous hygiene education.

5.1.3.5 Early Childhood Feeding:

Early childhood feeding practices are crucial for a child's survival, growth, and long-term health. Three key behaviors, feeding colostrum at birth, exclusive breastfeeding for the first six months, and timely complementary feeding from 6–23 months, form the foundation of optimal nutrition in the early years. Colostrum provides essential antibodies that protect newborns, exclusive breastfeeding ensures complete nutrition during infancy, and appropriate complementary feeding meets the growing child's additional energy and nutrient needs. Understanding the adoption of these practices helps identify gaps and guide interventions to improve nutrition and health outcomes among young children in rural communities. These three key behaviors covered in the baseline survey and the key findings are given below.

Table 5.1.3.5 Early Childhood Feeding Behaviors:

Villages	Feed colostrum after birth		Villages	Exclusive Breastfeeding (<6 months):		Villages	Practice of complementary feeding for 6–23-month			
	Yes	No		Yes	No		2 times	3 times	4 times	Don't know
Mokra	16	4	Mokra	19	1	Mokra	3	12	5	0
Rengola	11	9	Rengola	12	8	Rengola	3	11	6	0
Birkera	17	3	Birkera	18	2	Birkera	4	11	4	1
Tulmunga	13	7	Tulmunga	19	1	Tulmunga	3	8	8	1
Raidih	14	6	Raidih	14	6	Raidih	0	0	0	20
Lunga	14	6	Lunga	14	6	Lunga	0	1	4	15
Kapodih	17	3	Kapodih	16	4	Kapodih	0	1	0	19
Karida	14	6	Karida	14	6	Karida	0	0	2	18
Telia	16	4	Telia	16	4	Telia	1	2	1	16
Unchdih	10	10	Unchdih	10	10	Unchdih	0	0	2	18
Sipringa	18	2	Sipringa	20	0	Sipringa	1	0	0	19
Parasima	18	2	Parasima	17	3	Parasima	2	0	0	18
Konkel	19	1	Konkel	20	0	Konkel	0	0	2	18
Ramdega	20	0	Ramdega	20	0	Ramdega	0	1	0	19
Kasira	20	0	Kasira	20	0	Kasira	2	1	0	17
Pakartoli	5	15	Pakartoli	20	0	Pakartoli	5	6	9	0
Sikoi	17	3	Sikoi	17	3	Sikoi	5	8	7	0
Bokta	20	0	Bokta	20	0	Bokta	5	2	3	10
Raghunath pur	3	17	Raghunath pur	20	0	Raghunath pur	3	5	3	9
Pogra	14	6	Pogra	14	6	Pogra	4	6	7	3
Total	**296**	**104**	**Total**	**340**	**60**	**Total**	**41**	**75**	**63**	**221**
Percentage	**74%**	**26%**	**Percentage**	**85%**	**15%**	**Percentage**	**10%**	**19%**	**16%**	**55%**

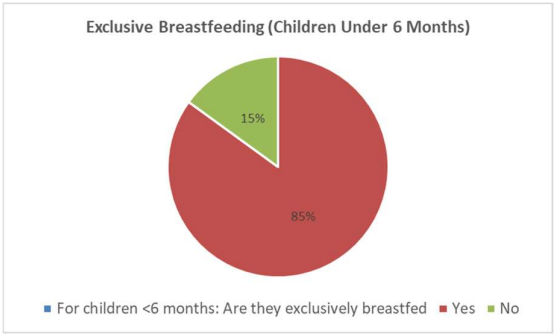
5.1.3.5.1 Feeding colostrum at birth:

Feeding colostrum, the nutrient-rich yellow milk produced immediately after birth, is vital for newborn immunity and early protection against infections.

Out of 400 Households, 296 (74%) reported giving colostrum immediately after birth, while 104 (26%) did not. This indicates that nearly three-fourths of the respondents practiced timely colostrum feeding, whereas about one-fourth did not, suggesting scope for further counselling and behavior change communication on early breastfeeding.

High-performing villages such as Ramdega, Kasira, and Bokta demonstrate 100% compliance, indicating strong adoption of recommended newborn care practices. However, villages like Raghunathpur (15%) and Pakartoli (25%) show significantly low compliance, likely due to cultural beliefs, limited awareness, or poor access to health services. These findings highlight the need for targeted behavior change efforts and strengthened maternal health counselling to ensure that all newborns benefit from colostrum feeding.

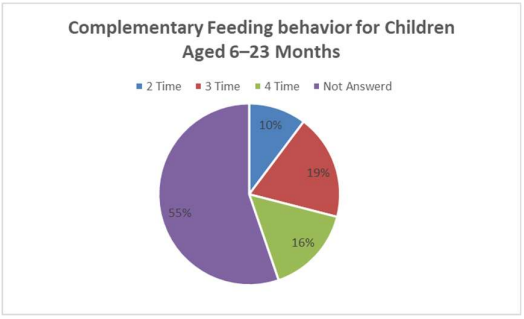
5.1.3.5.2 Exclusive Breastfeeding (Children Under 6 Months)



Exclusive breastfeeding practices are generally strong across the surveyed villages, with 340 (85%) of households exclusively breastfeeding infants under six months. The villages, including Sipringa, Konkel, Ramdega, Kasira, Pakartoli, Bokta, and Raghunathpur, show 100% compliance, reflecting high awareness and good maternal practices. Moderate compliance (60–79%) is observed in villages such as Rengola, Raidih, Lunga, Karida, and Pogra, while Unchdih records the lowest rate at 50%, indicating significant gaps. High-compliance villages benefit from reduced infection risks and better nutritional security for infants.

In contrast, areas with moderate or low compliance need focused counselling and support, as inadequate exclusive breastfeeding increases vulnerability to diarrhea, infections, and growth-related issues.

5.1.3.5.3 Complementary Feeding for Children Aged 6–23 Months



Complementary feeding becomes essential after six months of age, as breastmilk alone cannot meet a child's growing nutritional needs. The study shows wide variation across villages in the adoption of appropriate complementary feeding practices. A total of Villages like Mokra, Rengola, and Pakartoli demonstrate strong adoption, with 100% compliance, indicating good awareness among caregivers. Moderate compliance (50–79%) is seen in Birkera, Tulmunga, Pogra, and Bokta, while a majority of villages—including Raidih, Lunga, Kapodih, Karida, Telia, Unchdih, Sipringa, Parasima, Konkel, Ramdega, and Kasira—fall in the poor category (<50%), reflecting significant gaps in awareness and practice. Low adoption is primarily driven by limited knowledge, economic challenges, and cultural barriers, which collectively result in inadequate nutrition among children aged 6–23 months. Strengthened counselling, community awareness, and improved access to diverse foods are needed to address these gaps.

Objective 2: 400 women and 200 youth generate income from climate-resilient and nutrition-sensitive livelihoods

Section C: Livelihood and Income (Objective 2)

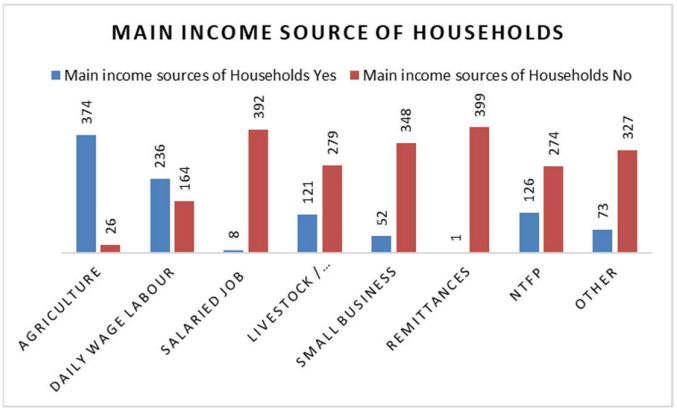
Theme 1 - Income and Training (Indicator 2.1)

5.2.1.1 Main Income Source of Households:

The livelihood profile of the surveyed villages indicates that rural households rely on a diverse mix of income sources, reflecting both their economic realities and adaptive strategies. While agriculture, including crop production, horticulture, and other local produce, remains the backbone of rural earnings, many families also depend on daily wage labor in farms, construction, and small industries. Additional sources such as salaried employment, livestock and poultry rearing, small businesses, remittances, and the collection of non-timber forest products (NTFP) contribute varying degrees of support to household incomes. A smaller share of families also depends on irregular or region-specific income-generating activities. This diversity of livelihood options enhances rural households.

	Main Income Source of Households															
Village	Agriculture		Daily wage labour		Salaried job		Livestock /poultry		Small business		Remittances		NTFP		Other	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Mokra	18	2	4	16	1	19	0	20	3	17	0	20	1	19	4	16
Rengola	18	2	2	18	0	20	1	19	2	18	0	20	0	20	0	20
Birkera	20	0	14	6	0	20	0	20	7	13	0	20	1	19	1	19
Tulmunga	12	8	10	10	0	20	0	20	2	18	0	20	0	20	0	20
Raidih	20	0	20	0	1	19	2	18	6	14	1	19	3	17	6	14
Lunga	20	0	1	19	0	20	1	19	1	19	0	20	0	20	0	20
Kapodih	18	2	1	19	1	19	0	20	0	20	0	20	2	18	0	20
Karida	20	0	6	14	0	20	0	20	0	20	0	20	2	18	0	20
Telia	20	0	8	12	0	20	0	20	2	18	0	20	5	15	0	20
Unchdih	19	1	3	17	0	20	0	20	1	19	0	20	2	18	0	20
Sipringa	20	0	13	7	1	19	13	7	2	18	0	20	13	7	13	7
Parasima	20	0	14	6	0	20	15	5	0	20	0	20	15	5	15	5
Konkel	20	0	15	5	1	19	11	9	9	11	0	20	4	16	16	4
Ramdega	19	1	14	6	0	20	16	4	6	14	0	20	8	12	12	8
Kasira	19	1	18	2	0	20	14	6	8	12	0	20	0	20	1	19
Pakartoli	19	1	19	1	2	18	7	13	0	20	0	20	18	2	1	19
Sikoi	17	3	19	1	0	20	11	9	0	20	0	20	16	4	1	19
Bokta	17	3	16	4	1	19	16	4	1	19	0	20	17	3	1	19
Raghunathpur	18	2	20	0	0	20	0	20	2	18	0	20	1	19	0	20
Pogra	20	0	19	1	0	20	14	6	0	20	0	20	18	2	2	18
Total	**374**	**26**	**236**	**164**	**8**	**392**	**121**	**279**	**52**	**348**	**1**	**399**	**126**	**274**	**73**	**327**
Percentage	**94%**	**7%**	**59%**	**41%**	**2%**	**98%**	**30%**	**70%**	**13%**	**87%**	**0%**	**100%**	**32%**	**69%**	**18%**	**82%**

Key Findings



1. Agriculture is the dominant livelihood source, with 374 out of 400 households (93.5%) depending on farming activities such as crop production and horticulture. This makes agriculture the backbone of the village economy.
2. Daily wage labor is the second most significant income source, supporting 236 households (59%). This indicates a high dependence on informal, seasonal, and low-paying work in agriculture, construction, and small industries.
3. Minimal access to formal employment is seen, with only eight households (2%) reporting salaried jobs. This highlights the lack of government or private sector opportunities in the region.
4. Livestock and poultry serve as important supplementary livelihoods, supporting 121 households (30%). This reflects a strong potential area for livelihood strengthening and income diversification.
5. Forest-based income (NTFP) contributes to the livelihoods of 126 households (31%), underscoring the dependence of rural and tribal families on forest products like firewood, fruits, and herbs.
6. Small businesses remain limited, with only 52 households (13%) engaged in activities such as small shops, vending, and handicrafts. This indicates a need for skill development, entrepreneurship support, and market linkages.
7. Remittances are negligible, with only one household (<1%) receiving income from outside the village, suggesting very low levels of migration for work.
8. A significant portion (73 households or 18%) falls under the “other income sources” category, indicating the presence of irregular, diverse, or locality-specific livelihoods.
9. Overall, the data show high dependence on agriculture and daily wage labor, coupled with low diversification, making households vulnerable to climate-related risks, crop failures, and seasonal income fluctuations.

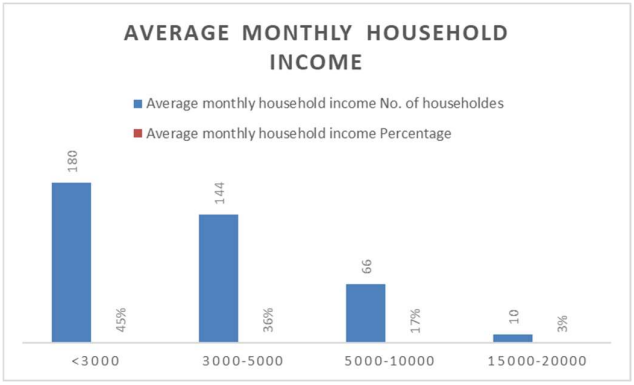
5.2.1.2 Average monthly household income

This section presents the household income profile of the surveyed villages to understand the economic status of families and its influence on their living conditions. Since income directly affects access to food, nutrition, healthcare, and education, assessing monthly earnings helps identify vulnerable households and income disparities across villages. The analysis provides a foundation for planning targeted interventions and for designing support strategies to improve overall well-being.

Table 5.2.1.2 Average Monthly Household Income:

Average monthly household income				
Village	**<3000**	**3000-5000**	**5000-10000**	**15000-20000**
Mokra	7	6	6	1
Rengola	16	4	0	0
Birkera	15	5	0	0
Tulmunga	10	8	2	0
Raidih	7	8	5	0
Lunga	5	6	8	1
Kapodih	6	11	3	0
Karida	5	6	9	0
Telia	6	6	6	2
Unchdih	9	8	2	1
Sipringa	14	5	1	0
Parasima	13	6	1	0
Konkel	10	6	3	1
Ramdega	2	15	3	0
Kasira	10	7	2	1
Pakartoli	9	6	3	2
Sikoi	7	12	1	0
Bokta	8	8	3	1
Raghunathpur	16	3	1	0
Pogra	5	8	7	0
Total	**180**	**144**	**66**	**10**
Percentage	**45%**	**36%**	**17%**	**3%**

Key Findings:



1. Low Income Group (< Rs.3000): About 45% of households (180 families) fall in this category, indicating a high level of poverty. Villages such as Rengola, Birkera, Sipringa, Parasima, and Raghunathpur have the highest concentration of very low-income families.

2. Lower-Middle Income Group (Rs.3000–Rs.5000): Nearly 36% of households (144 families) belong to this group. This income bracket is dominant in villages like Ramdega and Sikoi, where a relatively higher number of families fall into it.

3. Middle Income Group (Rs.5000–Rs.10000): Only 17% of households (66 families) fall within this range. These families are mainly found in Lunga, Karida, Telia, and Pogra, along with a few other comparatively better-off pockets.

4. Higher Income Group (Rs.15000–Rs.20000): A tiny proportion—just 3% of households (10 families) belong to this category. These higher-income families are in select villages, including Mokra, Lunga, Telia, Unchdih, Konkel, Pakartoli, and Bokta.

The distribution shows significant income inequality, with a large share of economically vulnerable families and only a tiny segment of higher-income households across the surveyed villages.

5.2.1.3 Household members attended training in agriculture or entrepreneurship in the past year:

Training in agriculture, livestock, and entrepreneurship plays a vital role in enhancing the income, productivity, and overall economic condition of rural households. Such training enables families to learn new techniques and adopt modern tools, leading to increased agricultural production, improved livestock management, and new opportunities in food processing and small enterprises. As a result, income improvements following training directly contribute to greater economic stability and better living standards. This section aims to assess the number of household members who received training in the past year, the types of training they attended, and the extent of income change thereafter, providing essential data to support policy-making and targeted livelihood interventions.

Table 5.2.1.3 Household members attended training in agriculture or entrepreneurship in the past year:

	Agriculture or entrepreneurship training		Type of training						Change in income after training		
Village	Yes	No	Agriculture	Livestock	Food processing	Green jobs/eco-products	Others	No training	No change	Increased <10%	Increased >20%
Mokra	2	18	1	0	0	0	0	19	0	1	0
Rengola	7	13	5	3	0	0	11	1	12	4	3
Birkera	6	14	3	3	0	0	0	14	2	4	0
Tulmunga	12	8	10	4	0	0	6	0	8	9	3
Raidih	6	14	3	0	0	0	3	14	1	4	1
Lunga	5	15	5	0	0	0	0	15	4	1	0
Kapodih	10	10	9	0	0	0	1	10	10	0	0
Karida	2	18	2	0	0	0	0	18	2	0	0
Telia	5	15	3	0	0	0	1	16	1	3	0
Unchdih	2	18	1	1	0	0	3	15	5	0	0
Sipringa	3	17	2	1	0	0	8	9	8	3	0
Parasima	5	15	5	0	0	0	0	15	3	2	0
Konkel	6	14	5	1	0	0	14	0	11	7	2
Ramdega	6	14	6	5	0	0	9	0	8	10	2
Kasira	0	20	0	2	0	0	0	18	2	0	0
Pakartoli	5	15	5	2	0	0	0	13	5	2	0
Sikoi	8	12	8	0	0	0	0	12	5	3	0
Bokta	9	11	9	0	0	0	0	11	8	1	0
Raghunathpur	0	20	0	0	0	0	0	20	0	0	0

Pogra	3	17	3	0	0	0	0	17	3	0	0
Total	**102**	**298**	**85**	**22**	**0**	**0**	**56**	**237**	**98**	**54**	**11**
Percentage	**26%**	**75 %**	**21%**	**6%**	**0%**	**0%**	**14 %**	**59%**	**25%**	**14%**	**3%**

Key Findings:

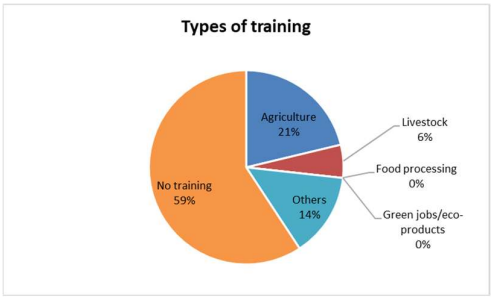
5.2.1.3.1 Attended training in agriculture or entrepreneurship:

- Out of 400 respondents, 102 (25%) attended the agriculture or entrepreneurship training, while 298 (75%) did not receive any training.
- Highest participation in the training was seen in Tulmunga (12), Kapodih (10), Bokta (9), Sikoi (8), and Rengola (7) household members.

- Some villages like Kasira and Raghunathpur (0 each) had very little participation.

5.2.1.3.2 Types of Training Attended:

- Agriculture training was the most common, taken by 85 households (21%), indicating a strong focus on farming skills.
- Livestock training was much lower, with only 22 (6%) household members participating.
- No households received training in food processing or green jobs/eco-products, revealing a significant gap in the diversification of rural skills.



5.2.1.3.3 Change in Income after training:

- No income change was reported for the majority: 59% (237 households).
- 25% (98 households) experienced a slight income increase of less than 10%, often seen in villages such as Tulmunga, Ramdega, and Konkel.
- Only 3% (11 households) saw a significant income increase of over 20%, observed mainly in Tulmunga, Konkel, and Ramdega.

Indicator 2.2: % participants starting/joining green enterprise

5.2.2 Status of Green enterprises:

Micro, small, and local enterprises play a crucial role in strengthening the rural economy in India. Their purpose is to generate employment opportunities, utilize locally available resources, and empower women and youth economically. This survey explored whether rural households started any new enterprises in the past year or joined an existing green enterprise activity.

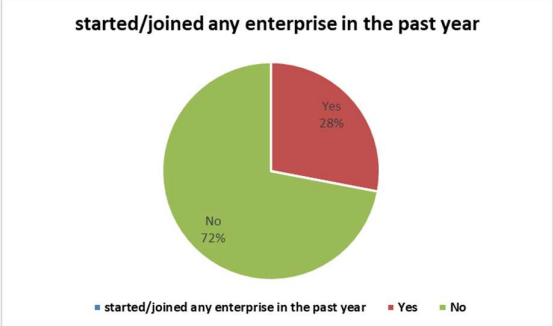
Table 5.2.2.1 Status of Green enterprises:

Village	started/joined any enterprise in the past year		Type of Enterprise					Monthly income earned from the enterprise			
	Yes	No	Organic farming	Small-scale processing (food, oil, etc.)	Poultry / dairy/ pig rearing	Eco-friendly products (compost, handicrafts)	Other	<Rs.1,000	Rs.1,001 – Rs.3,000	Rs.3,001 – Rs.5,000	>Rs.5,000
Mokra	0	20	0	0	0	0	0	0	0	0	0
Rengola	7	13	2	0	4	0	0	2	4	0	0
Birkera	6	14	3	0	1	0	2	4	2	0	0
Tulmunga	14	6	7	0	5	0	2	8	6	0	0
Raidih	4	16	1	1	2	0	0	2	2	0	0
Lunga	2	18	2	0	0	0	0	2	0	0	0
Kapodih	4	16	4	0	0	0	0	4	0	0	0
Karida	18	2	1	0	0	0	0	1	0	0	0
Telia	3	17	2	1	0	0	0	2	1	0	0
Unchdih	14	6	1	0	0	0	0	1	0	0	0
Sipringa	3	17	0	0	0	0	8	7	1	0	0
Parasima	11	9	1	0	0	0	4	5	0	0	0
Konkel	11	9	0	1	5	0	6	6	4	2	0
Ramdega	6	14	0	1	2	0	1	1	1	2	0
Kasira	5	15	1	1	0	1	2	5	0	0	0
Pakartoli	1	19	0	0	0	0	1	1	0	0	0
Sikoi	1	19	1	0	0	0	0	1	0	0	0
Bokta	2	18	1	0	0	0	1	2	0	0	0
Raghunathpur	0	20	0	0	0	0	4	4	0	0	0
Pogra	0	20	0	0	0	0	0	0	0	0	0
Total	**112**	**288**	**27**	**5**	**19**	**1**	**31**	**58**	**21**	**4**	**0**
Percentage	**28%**	**72%**	**7%**	**1%**	**5%**	**0%**	**8%**	**15%**	**5%**	**1%**	**0%**

Key Findings:

1. Started or joined an enterprise:

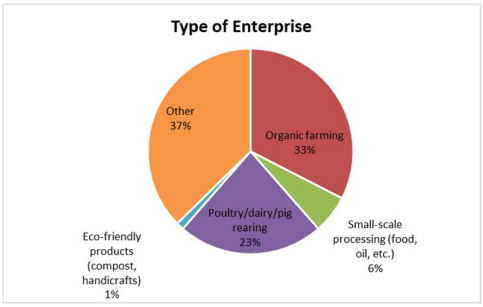
- The data reveal that out of 400 respondents across 20 villages, about 112 households (28%) started or joined an enterprise in the past year, while 288 households (72%) reported no such involvement.



- This indicates that about one in four villagers are engaged in some form of income-generating activity.

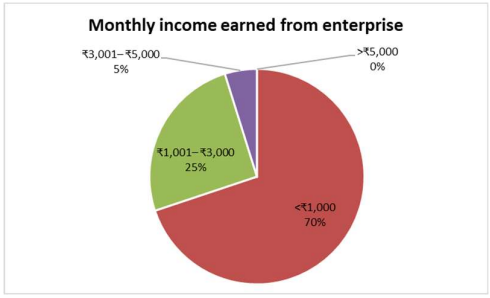
2. Type of Enterprises:

- The most common enterprise type is organic farming, reported by 27 respondents (7%).
- Poultry, dairy, or pig rearing, 19 respondents (5%), and small-scale processing such as food or oil, five respondents (1%), are the preferred activities.
- A small number of households is involved in eco-friendly products like compost or handicrafts, while another 31 respondents (8%) fall under miscellaneous or localized enterprises.



3. Income from Enterprises:

- Most enterprise owners, 58 households (15%), reported that they earn between Rs.1,001 - Rs.3,000 per month from their small-scale or supplementary income activities.
- A total of 21 households (5%) reported a smaller share earns Rs.3,001 - Rs.5,000, and only four households (1%) reported income above Rs.5,000.



4. Overall Insights:

Overall, the findings suggest that enterprise development in the surveyed villages remains at an early stage, with limited diversification and moderate-income outcomes. Organic farming and livestock-based enterprises dominate, indicating a reliance on low-investment, agriculture-linked ventures. To strengthen this sector, there is significant potential for capacity-building, technical training, and market-linkage interventions, particularly in high-participation villages, to enhance the profitability and sustainability of rural enterprises.

Indicator 2.3: % households using climate-resilient practices (compost, intercropping, resilient seeds, water-saving, agroforestry, IPM, etc.)

5.2.3.1 Use of Agricultural Practices:

A large share of India's rural economy depends on agriculture and livestock. Over time, climate change, declining soil fertility, and changing market demands have pushed farmers to adopt improved, sustainable farming practices alongside traditional methods. The purpose of this study is to assess the extent to which farmers across different villages use climate-resilient agricultural technologies and practices. These include organic manure, crop diversification, drought/flood-resistant seeds, water-saving irrigation, and agroforestry.

During the survey, the farmers were asked whether they use the following practices: 1. Organic manure/compost, 2. Crop diversification/intercropping, 3. Drought/flood-resistant seeds, 4. Water-saving irrigation (drip, sprinklers), 5. Agroforestry

Table 5.2.3.1 Use of Agricultural Practices:

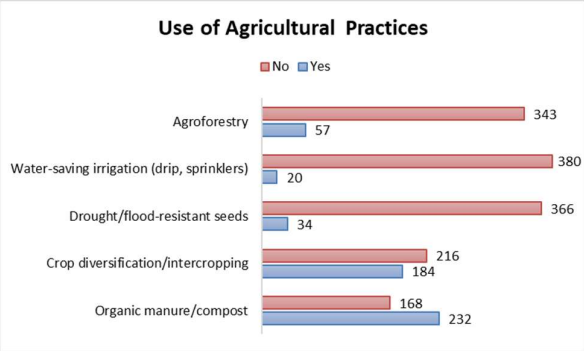
	Do you use any of the following									
	Organic manure/compost		Crop diversification/intercropping		Drought/flood-resistant seeds		Water-saving irrigation (drip, sprinklers)		Agroforestry	
Village	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Mokra	0	20	8	12	0	20	0	20	0	20
Rengola	10	10	14	6	0	20	1	19	2	18
Birkera	3	17	20	0	0	20	0	20	0	20
Tulmunga	13	7	19	1	0	20	1	19	1	19
Raidih	1	19	4	16	3	17	3	17	5	15
Lunga	17	3	0	20	0	20	0	20	0	20
Kapodih	9	11	2	18	0	20	0	20	0	20
Karida	16	4	20	0	0	20	0	20	0	20
Telia	17	3	2	18	0	20	0	20	0	20
Unchdih	11	9	5	15	3	17	0	20	0	20
Sipringa	5	15	5	15	2	18	0	20	2	18
Parasima	8	12	7	13	0	20	0	20	0	20
Konkel	14	6	13	7	5	15	6	14	6	14
Ramdega	17	3	19	1	9	11	7	13	1	19
Kasira	18	2	20	0	12	8	1	19	20	0
Pakartoli	18	2	2	18	0	20	0	20	4	16
Sikoi	0	20	20	0	0	20	1	19	6	14
Bokta	17	3	3	17	0	20	0	20	6	14
Raghunathpur	18	2	0	20	0	20	0	20	0	20
Pogra	20	0	1	19	0	20	0	20	4	16
Total	**232**	**168**	**184**	**216**	**34**	**366**	**20**	**380**	**57**	**343**
Percentage	58%	42%	46%	54%	9%	92%	5%	95%	14%	86%

Key Findings:

Overall, use of climate-resilient practices is mixed: organic manure and crop diversification are moderately common. In contrast, drought- and flood-resistant seeds and water-saving irrigation are rarely used, and agroforestry adoption is low but slightly higher than for these technologies.

- About 232 farmers (58%) reported using organic manure or compost, showing reasonably good uptake of soil health practices, while 168 farmers (42%) still depend on only chemical or non-organic inputs.
- Crop diversification/intercropping is practiced by 184 farmers (46%), indicating moderate diversification but also a firm, continued reliance on monocropping.

- Use of drought/flood-resistant seeds is minimal: only 34 farmers (9%) of respondents reported using them, while 366 respondents (92%) do not use these seeds.
- Water-saving irrigation methods, such as drip and sprinklers, are almost absent, adopted by just 20 farmers (5%) of respondents and not used by 380 farmers (95%).



- Agroforestry practices are used by 57 farmers (14%). In comparison, 343 farmers (86%) do not adopt them, showing that tree-based systems are still at an early stage despite their well-documented benefits for soil fertility, micro-climate regulation, and income diversification.

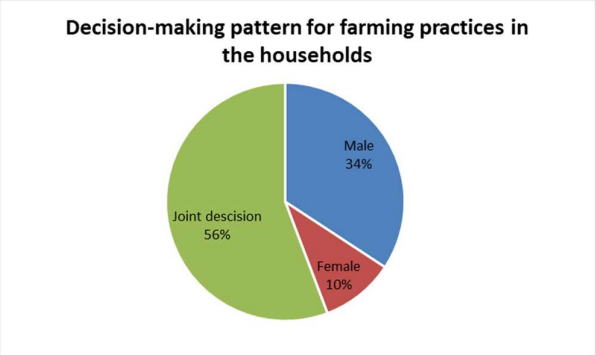
5.2.3.2 Decision-making pattern for farming practices in the households:

Family structures strongly shape agriculture in rural India. Traditionally, men play a dominant role in decision-making, while women contribute significantly through labor and support for household-based farming. Joint decision-making is more visible in extended or cooperative family structures.

Table 5.2.3.2 Decision-making pattern for farming practices in the households:

Who decides farming practices in your household			
Village	**Male**	**Female**	**Joint decision**
Mokra	4	0	16
Rengola	3	2	15
Birkera	11	0	9
Tulmunga	5	2	13
Raidih	6	0	14
Lunga	6	3	11
Kapodih	4	3	13
Karida	7	4	9
Telia	8	4	8
Unchdih	7	2	11
Sipringa	1	0	19
Parasima	4	0	16
Konkel	7	6	7
Ramdega	4	2	14
Kasira	7	3	10
Pakartoli	8	3	9
Sikoi	6	0	14
Bokta	15	2	3
Raghunathpur	15	4	1
Pogra	9	0	11
Total	**137**	**40**	**223**
Percentage	**34%**	**10%**	**56%**

Key Findings:



- Across all villages, 223 households (56%) reported joint decision-making on farming practices, indicating relatively high collaboration compared to many rural areas where male-only decisions involve 137 households (34%). Meanwhile, only 40 households (10%) reported women as the sole decision-makers, highlighting ongoing gender inequality in control over agricultural choices, despite women making significant contributions to farm work in India.
- Villages such as Sipringa, Parasima, Raidih, and Sikoi show very high levels of joint decision making (14–19 households out of 20), indicating more shared authority between spouses in these locations.
- In contrast, Bokta and Raghunathpur stand out for strongly male-dominated decision patterns, with 15 male-only decisions each and very few joint decisions (3 and 1, respectively), pointing to more patriarchal norms in these villages.
- Villages such as Sipringa, Parasima, Raidih, and Sikoi show very high levels of joint decision making (14-19 households out of 20), indicating more shared authority between spouses in these locations.
- In contrast, Bokta and Raghunathpur stand out for strongly male-dominated decision patterns, with 15 male-only decisions each and very few joint decisions (3 and 1, respectively), pointing to more patriarchal norms in these villages.

5.2.3.3 Challenges in adopting climate-resilient practices:

Lack of knowledge and high input cost are the most frequently reported barriers to adopting climate-resilient practices in these villages, followed by labor shortages and inadequate irrigation. Access to quality seeds/tools and weak markets for organic/eco products are comparatively less reported but still essential constraints.

Table 2.3.3 Challenges in adopting climate-resilient practices:

What challenges prevent you from adopting climate-resilient practices? (Multiple choice)														
Village	Lack of knowledge /skills		High cost of inputs		Lack of access to quality seeds/tools		Labour shortage		Lack of irrigation water		Market not available for organic/eco products		Other	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Mokra	19	1	17	3	0	20	20	0	7	13	0	20	1	19
Rengola	11	9	19	1	1	19	20	0	8	12	0	20	0	20
Birkera	17	3	14	6	0	20	19	1	15	5	0	20	0	20
Tulmunga	10	10	20	0	0	20	20	0	11	9	0	20	2	18
Raidih	19	1	20	0	16	4	16	4	18	2	18	2	10	10

Lunga	20	0	17	3	1	19	0	20	9	11	0	20	0	20
Kapodih	19	1	20	0	0	20	0	20	12	8	1	19	0	20
Karida	16	4	19	1	0	20	0	20	12	8	0	20	0	20
Telia	13	7	20	0	0	20	2	18	1	19	0	20	0	20
Unchdih	15	5	15	5	11	9	0	20	11	9	0	20	0	20
Sipringa	16	4	14	6	9	11	12	8	7	13	3	17	13	7
Parasima	19	1	13	7	11	9	11	9	7	13	2	18	15	5
Konkel	18	2	17	3	14	6	10	10	14	6	0	20	11	9
Ramdega	17	3	19	1	17	3	9	11	8	12	5	15	4	16
Kasira	19	1	19	1	19	1	4	16	18	2	2	18	4	16
Pakartoli	9	11	3	17	0	20	0	20	2	18	0	20	0	20
Sikoi	8	12	6	14	0	20	0	20	9	11	0	20	2	18
Bokta	11	9	15	5	1	19	2	18	9	11	2	18	1	19
Raghunathpur	0	20	0	20	0	20	0	20	0	20	0	20	0	20
Pogra	10	10	7	13	0	20	1	19	6	14	0	20	0	20
Total	**286**	**114**	**294**	**106**	**100**	**300**	**146**	**254**	**184**	**216**	**33**	**367**	**63**	**337**
Percentage	72%	29%	74%	27%	25%	75%	37%	64%	46%	54%	8%	92%	16%	84%

Key findings:

- Lack of knowledge/skills is reported by 286 farmers (72%) of respondents, showing that limited awareness and technical capacity are a primary obstacle.
- High cost of inputs is reported by 294 farmers (74%), confirming that financial barriers and high upfront costs are a critical deterrent to adopting improved seeds, irrigation equipment, and other climate-smart technologies.
- A total of 100 respondents (25%) farmers mention lack of access to quality seeds/tools, while 146 farmers (37%) report labor shortage, indicating that both input availability and labor constraints limit uptake of more labor- or input-intensive practices.
- Lack of irrigation water is a concern for 184 farmers (46%) of respondents, reflecting wider evidence that inadequate and unreliable water supply is a significant barrier to scaling water-demanding climate-resilient options such as improved varieties and diversified cropping.
- Only 33 farmers (8%) reported “market not available for organic/eco products” as a barrier, suggesting that most farmers are not yet market-oriented
- “Other” constraints are reported by 63 farmers (16%), and they include locally specific issues such as risk perception and limited access to credit; it has been documented as an additional barrier to climate-smart agriculture adoption.

Objective 3: Communities improve local governance to secure food and nutrition entitlements

- **Indicator 3.1**: % villages with functional food & nutrition committees
- **Indicator 3.2**: % households accessing at least one social security scheme

- **Indicator 3.3**: % GPDP/micro-plans with nutrition & sustainable agri actions

(Add qualitative insights: community participation in Gram Sabha, women/youth roles, barriers to accessing PDS/ICDS/MGNREGA)

5.3.1 villages with functional food & nutrition committees:

At the village level, Community Food and Nutrition Committees (CFNCs) are formed to raise awareness of nutrition, food security, and health in rural areas. These committees involve village members in schemes, nutrition-related activities, and food distribution programs.

In this study, the presence of CFNCs in the villages, the number of meetings held, and whether households participated in these meetings were assessed.

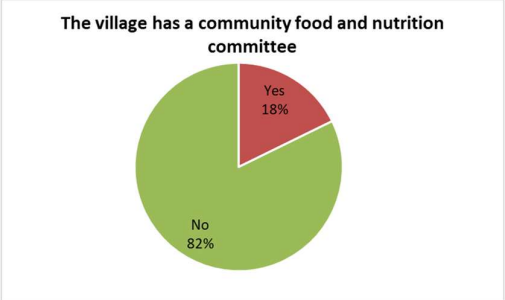
Table 5.3.1.1 villages with functional food & nutrition committees:

	The village has a community food and nutrition committee		Number of meetings held in the past 6 months				Household member attended such meetings	
Village	**Yes**	**No**	**0**	**1-2 times**	**3-5 times**	**>5 times**	**Yes**	**No**
Mokra	3	17	17	0	3	0	3	17
Rengola	3	17	17	0	3	0	2	18
Birkera	2	18	18	0	2	0	2	18
Tulmunga	6	14	15	2	3	0	5	15
Raidih	4	16	18	2	0	0	2	18
Lunga	8	12	16	4	0	0	4	16
Kapodih	11	9	9	9	2	0	11	9
Karida	5	15	16	4	0	0	4	16
Telia	5	15	15	4	1	0	5	15
Unchdih	5	15	18	2	0	0	2	18
Sipringa	5	15	18	1	1	0	5	15
Parasima	2	18	20	0	0	0	3	17
Konkel	3	17	18	2	0	0	2	18
Ramdega	0	20	20	0	0	0	0	20
Kasira	4	16	15	5	0	0	5	15
Pakartoli	5	15	20	0	0	0	0	20
Sikoi	0	20	20	0	0	0	0	20
Bokta	0	20	20	0	0	0	0	20
Raghunathpur	0	20	20	0	0	0	0	20
Pogra	0	20	20	0	0	0	0	20
Total	**71**	**329**	**350**	**35**	**15**	**0**	**55**	**345**
Percentage	**18%**	**82%**	**88%**	**9%**	**4%**	**0%**	**14%**	**86%**

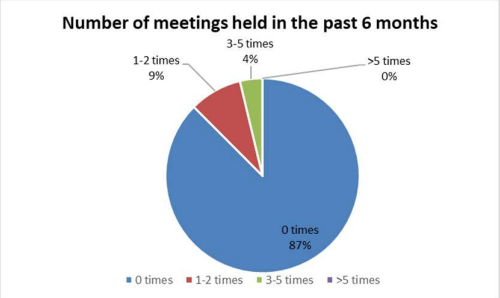
Key Findings:

- Out of 400 households surveyed, only 71 respondents (18%) reported that their village has a community food and nutrition committee, whereas 329 (82%) reported that no such committee exists in their village.

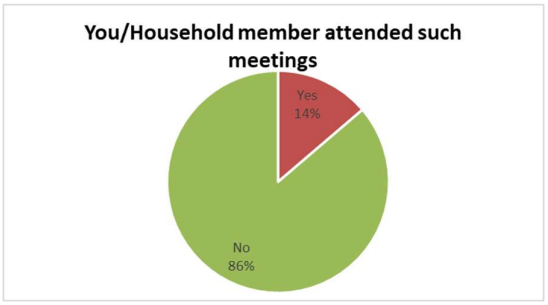
- In the last six months, 350 respondents (88%) reported that no meeting was held, 35 (9%) reported that 1–2 meetings took place, and only 15 (4%) reported that 3–5 meetings were held; no village reported more than 5 meetings.
- Only 55 respondents (14%) said that any household member attended a committee meeting, while 345 (86%) reported that nobody from their household participated in the CFNC's meetings.



- Overall, community food and nutrition committees are largely absent, and where they exist, meetings are infrequent, and community participation is very low.
- Establish a functional CFNC in every village to ensure that all communities have a basic institutional platform for nutrition and food security.



- Organize regular CFNC meetings and motivate villagers to participate actively so that awareness and accountability can improve.
- Provide training to villagers and committee members on the importance of nutrition, dietary diversity, and food security, and on their entitlements under government programs.
- Involve local authorities and frontline workers to increase both the number and the quality of meetings and to support follow-up actions decided in these forums.



5.3.2: households accessing at least one social security scheme

The government has implemented various schemes for rural development and social welfare, and villagers' awareness of these schemes is essential for their success. This study measured how many villagers know about these schemes and how many do not, to understand how effectively the schemes are reaching villages and the strength of awareness.

Major schemes are as follows:

- Public Distribution System (PDS): Providing villagers with food grains, sugar, pulses, and other items at subsidized rates.
- ICDS (Anganwadi): Providing nutrition, health, child development, and early education services for children and mothers.
- MGNREGA: Providing 100 days of employment under the rural employment guarantee scheme.

- Pradhan Mantri Kisan Samman Nidhi (PM-Kisan): Providing direct financial assistance to farmers to support agriculture and income security.
- Pension schemes: Providing regular financial assistance to older persons, widows, and persons with disabilities.
-

Table 5.3.2.1 Awareness of the Government schemes

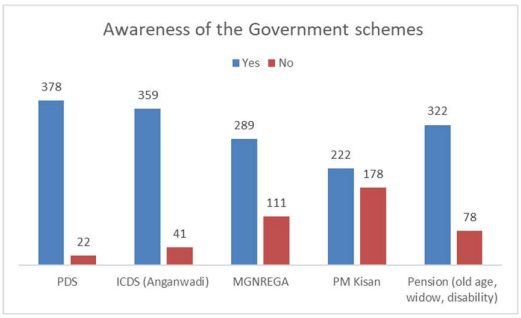
Village	Public Distribution System (PDS)		ICDS (Anganwadi)		MGNREGA		PM Kisan		Pension (old age, widow, disability)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Mokra	18	2	20	0	15	5	2	18	12	8
Rengola	13	7	12	8	7	13	9	11	13	7
Birkera	20	0	15	5	10	10	6	14	11	9
Tulmunga	19	1	20	0	8	12	5	15	12	8
Raidih	13	7	16	4	18	2	17	3	16	4
Lunga	20	0	18	2	16	4	17	3	20	0
Kapodih	20	0	18	2	16	4	12	8	14	6
Karida	20	0	16	4	10	10	9	11	19	1
Telia	20	0	15	5	12	8	9	11	11	9
Unchdih	17	3	14	6	11	9	11	9	15	5
Sipringa	19	1	20	0	16	4	7	13	13	7
Parasima	20	0	20	0	16	4	10	10	14	6
Konkel	20	0	18	2	13	7	9	11	20	0
Ramdega	20	0	20	0	18	2	9	11	20	0
Kasira	20	0	20	0	20	0	19	1	20	0
Pakartoli	20	0	20	0	16	4	16	4	20	0
Sikoi	20	0	20	0	18	2	16	4	20	0
Bokta	20	0	17	3	17	3	11	9	15	5
Raghunathpur	20	0	20	0	14	6	10	10	17	3
Pogra	19	1	20	0	18	2	18	2	20	0
Total	**378**	**22**	**359**	**41**	**289**	**111**	**222**	**178**	**322**	**78**
Percentage	**94%**	**6%**	**90%**	**10%**	**72%**	**28%**	**55%**	**45%**	**80%**	**20%**

Key Findings:

Awareness and non-awareness under each scheme (from the table "Awareness of the Government schemes")

- **Public Distribution System (PDS):** Out of 400 respondents, a total of 378 households (94.5%) are aware, and 22 households (95.5%) are not aware. This indicates that almost all villagers are aware of PDS and food security information.
- **ICDS (Anganwadi):** Out of 400 respondents, a total of 359 households (90%) are aware, and 41 households (10%) are not aware. This indicates that most villagers are familiar with Anganwadi services. though awareness is somewhat lower in villages such as Unchdih and Birkera villages.

- **MGNREGA:** A total of 289 households (72%) are aware, and 111 households (28%) are not aware; information about income and employment schemes is lower in Mokra, Tulmunga, and Rengola villages.
- **PM-Kisan:** A total of 222 households 55%) are aware, and a total of 178 households (45%) are not aware; in some villages, such as Mokra and Tulmunga, awareness of this farmer income support scheme is low.



- **Pension (elderly/widow/disabled):** A total of 322 households (80%) respondents are aware, and 78 households (20%) are not aware. Awareness of pension schemes is relatively good in Lunga, Konkel, Ramdega, Pakartoli, and Sikoi villages.

5.3.2.2 Previous year status of benefits received by villagers from government schemes:

The government runs several schemes for rural development and social security, aimed at providing direct and indirect benefits to citizens. The central schemes covered here are the Public Distribution System (PDS), Integrated Child Development Services (ICDS – Anganwadi), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA – rural employment guarantee), PM-Kisan (income support for farmers), and social security pensions for old age, widows, and persons with disabilities.

The purpose of this report is to show how many people in each village benefited from these schemes over the past year, to support policy decisions and improve program implementation.

Table 5.3.2.2 Received benefits from any scheme in the past year

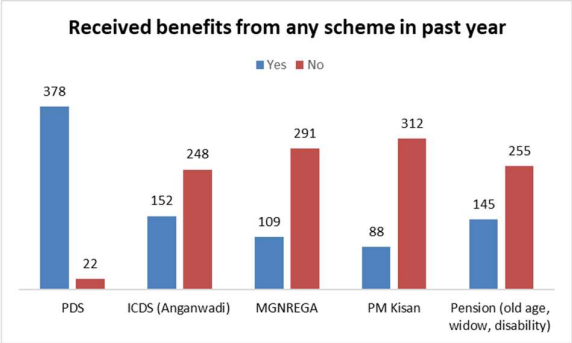
	Public Distribution System (PDS)		ICDS (Anganwadi)		MGNREGA		PM Kisan		Pension (old age, widow, disability)	
Village	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Mokra	17	3	7	13	0	20	1	19	2	18
Rengola	14	6	3	17	0	20	2	18	5	15
Birkera	20	0	4	16	7	13	2	18	10	10
Tulmunga	19	1	8	12	0	20	2	18	7	13
Raidih	17	3	19	1	18	2	17	3	18	2
Lunga	20	0	6	14	3	17	5	15	11	9
Kapodih	20	0	7	13	5	15	6	14	8	12
Karida	20	0	2	18	3	17	4	16	6	14
Telia	20	0	20	0	3	17	4	16	6	14
Unchdih	20	0	3	17	2	18	6	14	6	14
Sipringa	19	1	7	13	6	14	2	18	2	18
Parasima	20	0	11	9	6	14	4	16	2	18
Konkel	19	1	3	17	9	11	4	16	12	8

Ramdega	20	0	5	15	3	17	2	18	10	10
Kasira	19	1	0	20	7	13	3	17	20	0
Pakartoli	18	2	8	12	5	15	1	19	2	18
Sikoi	18	2	12	8	9	11	8	12	2	18
Bokta	20	0	12	8	12	8	4	16	2	18
Raghunathpur	19	1	2	18	2	18	3	17	9	11
Pogra	19	1	13	7	9	11	8	12	5	15
Total	**378**	**22**	**152**	**248**	**109**	**291**	**88**	**312**	**145**	**255**
Percentage	95%	6%	38%	62%	27%	73%	22%	78%	36%	64%

Key findings:

Analysis and key findings from the data table "Received benefits from any scheme in past year."

- **Public Distribution System (PDS):** PDS shows near-universal coverage, with 378 out of 400 households (95%) reporting benefits, and only 22 households (6%) not covered. Coverage is very high in almost all villages; only a few villages have slightly lower numbers.
- **ICDS (Anganwadi):** Of 400 households, 152 are beneficiaries, representing about 38%. Telia and Raidih have full coverage, with 100% of the relevant households benefiting from ICDS services.
- **MGNREGA:** Out of 400 households, 109 are beneficiaries, which is about 27%. Most villages have low participation in MGNREGA. In Mokra, Rengola, and Tulmunga, very few households, or none at all, received MGNREGA work.
- **PM-Kisan:** Out of 400 households, 88 are beneficiaries, which is about 22%. Raidih has the highest number of PM-Kisan beneficiaries (17 families), while most other villages have very few.
- **Pension (old age, widow, disability):** Of 400 households, 145 are beneficiaries, representing about 36%. In Kasira, all eligible beneficiaries are receiving a pension.
- **Best-performing villages** include Telia (ICDS 100%, strong PDS) and Birkera and Bokta (good performance in both MGNREGA and PDS).
- **Low-performing villages** include Kasira (no ICDS benefits), and Mokra and Rengola (very low participation in MGNREGA and PM-Kisan despite good PDS coverage).
- While PDS reaches almost all households in nearly every village, coverage of MGNREGA and PM-Kisan remains relatively low, highlighting the need for better awareness, facilitation, and inclusion in these livelihood and income-support schemes.



5.3.2.3 Timely and Adequate Scheme Benefits

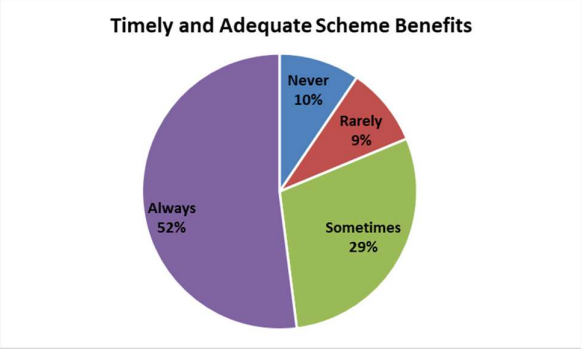
The objective of government welfare schemes is to provide benefits to eligible beneficiaries and ensure timely, adequate delivery. The success of these schemes and the trust they generate among rural communities depends significantly on consistent and sufficient benefit distribution.
In this survey, households were asked whether, during the past year, they received benefits from government schemes never, rarely, sometimes, or always.

Table 5.3.2.3 Timely and Adequate Scheme Benefits

Were benefits timely and adequate?				
Village	**Never**	**Rarely**	**Sometimes**	**Always**
Mokra	1	3	9	7
Rengola	0	2	2	16
Birkera	3	3	3	11
Tulmunga	0	0	2	18
Raidih	3	5	10	2
Lunga	0	0	8	12
Kapodih	0	0	3	17
Karida	0	0	3	17
Telia	0	1	5	14
Unchdih	0	1	9	10
Sipringa	0	0	12	8
Parasima	0	4	13	3
Konkel	2	5	10	3
Ramdega	1	4	12	3
Kasira	6	5	9	0
Pakartoli	1	2	4	13
Sikoi	0	2	0	18
Bokta	0	0	3	17
Raghunathpur	20	0	0	0
Pogra	1	0	0	19
Total	**38**	**37**	**117**	**208**
Percentage	10%	9%	29%	52%

Key findings:

- Among all respondents, total 208 households (52%) reported that they "always" received scheme benefits on time and in adequate quantity, while total 117 households (29%) received benefits "sometimes," total 37 households (9%) "rarely," and 38 households (10%) "never" received timely and adequate benefits.
- While a slight majority consistently experienced positive outcomes, a substantial proportion of beneficiaries (48%) reported irregular or insufficient delivery of government assistance, highlighting gaps in the execution of program objectives.
- Several villages, including Rengola, Tulmunga, Kapodih, Karida, Telia, Sikoi, Bokta, and Pogra, demonstrated high reliability, with the majority of households in these locations confirming that benefits were "always" received in a timely and adequate manner.



- Villages such as Sipringa, Parasima, Konkel, and Ramdega exhibited greater variability, with many households indicating that they received benefits only "sometimes." This suggests operational or logistical inconsistencies that merit targeted intervention.
- In Kasira, none of the surveyed households reported "always" receiving benefits; most received them "never" or "rarely," pointing to persistent delivery concerns.
- In Raghunathpur, all respondents reported "never" receiving timely and adequate benefits, indicating a critical lapse in scheme implementation in this village.

5.3.3 GPDP/micro-plans with nutrition & sustainable Agri actions:

5.3.3.1 Preparation of Village Micro-plan:

Village-level micro-planning is a participatory process through which community members collectively assess their local resources, needs, and problems, and then prepare a realistic plan for the village's social and economic development. It helps to translate broader development programs into concrete actions at the smallest planning unit, ensuring that priorities are decided from the bottom up rather than imposed from outside. The question "Do you know if your village has prepared a micro-plan?" Therefore, it explores the extent to which villagers are aware of, and involved in, this planning exercise in their own settlements.

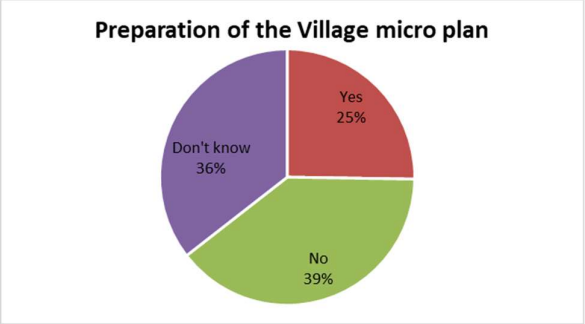
Table 5.3.3 Preparation of village micro plan

Do you know if your village has prepared a micro-plan?					**If yes, were you/your household consulted?**	
Village	**Yes**	**No**	**Don't know**		**Yes**	**No**
Mokra	0	9	11		0	20
Rengola	2	6	12		0	20
Birkera	8	5	7		8	12
Tulmunga	5	6	9		2	18
Raidih	2	16	2		6	14
Lunga	8	8	4		8	12
Kapodih	12	5	3		9	11
Karida	8	9	3		7	13
Telia	6	7	7		6	14
Unchdih	9	5	6		4	16
Sipringa	5	8	7		3	17
Parasima	7	6	7		4	16
Konkel	6	6	8		6	14
Ramdega	0	10	10		3	17
Kasira	0	8	12		4	16
Pakartoli	14	0	6		13	7
Sikoi	3	6	11		1	19
Bokta	6	3	11		3	17
Raghunathpur	0	20	0		0	20
Pogra	0	14	6		2	18
Total	**101**	**157**	**142**		**89**	**311**
Percentage	**25%**	**39%**	**36%**		22%	78%

Key findings:

5.3.3.1 Preparation of Village Micro-plan:

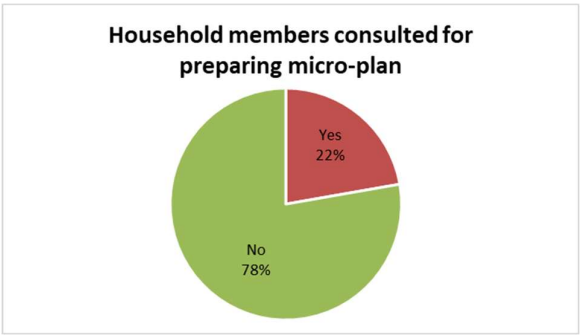
- About one-fourth of the surveyed 101 respondents (25%) reported that their village has prepared a micro-plan. In contrast, a larger share, 157 households (39%), said no, and over one-third were unsure, 142 households (36%), indicating generally low clarity and uptake of village-level planning.



- Out of 400 responses, only 101 said "Yes", compared to 157 "No" and 142 "Don't know", showing that confirmed non-preparation or non-awareness together (76%) far exceeds confirmed preparation (25%).
- The high "Don't know" proportion suggests weak communication and participation of households in the micro-planning process, even where plans may exist.
- Villages with relatively higher "Yes" responses include Pakartoli (14), Kapodih (12), Unchdih (9), Birkera (8), Karida (8), and Lunga (8), indicating comparatively better initiation or awareness of micro-plans in these locations.
- In these villages, "No" responses are low (e.g., Pakartoli has 0 "No"; Kapodih 5; Unchdih 5), which points to a stronger consensus that a micro-plan exists.
- Raghunathpur shows 0 "Yes" and 20 "No", strongly indicating that no micro-plan has been prepared there.
- Raidih (2 Yes, 16 No) and Pogra (0 Yes, 14 No) also show a predominant perception that a micro-plan has not been prepared.

5.3.3.2 Household members consulted for preparing micro-plan:

- Out of 400 households across all villages, a total of 89 households (22%) reported "Yes" they or a household member had been consulted for the preparation of the micro-plan.



- A total of 311 households (78%) reported "No," they or a household member were not being consulted at all, indicating that community participation in consultation processes is generally low. The high proportion of "No" responses suggests that decision-making or planning activities are essentially happening without direct input from most households.
- In three villages (Mokra, Rengola, and Raghunathpur), none of the households reported being consulted (0 "Yes" and 20 "No") in each village, reflecting complete exclusion from consultations in these locations.

- Pakartoli stands out with the highest level of consultation, where 13 of 20 households (65 percent) reported being consulted, indicating relatively better engagement compared with other villages.

5.3.3.3 KIIs with PRI: Does the micro-plan include nutrition actions (ICDS strengthening, dietary diversity awareness)?

Gram Panchayat micro-plans are a key way to turn national nutrition priorities into real actions in the village, primarily through ICDS and POSHAN 2.0. This question checks whether PRI members include child and maternal nutrition activities, such as strengthening ICDS and promoting dietary diversity, in their village plans and budgets.

Table 3.3.3 KII wit PRI:

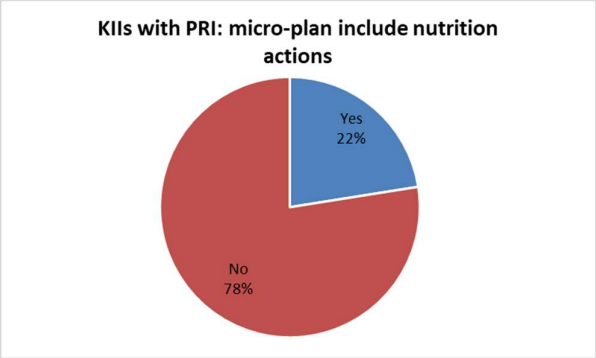
3.3.3 KIIs with PRI: micro-plan includes nutrition actions (ICDS strengthening, dietary diversity awareness)				3.3.4 KIIs with PRI: include sustainable agriculture actions (organic farming, rainwater harvesting)	
Village	**Yes**	**No**		**Yes**	**No**
Mokra	0	20		0	20
Rengola	0	20		4	16
Birkera	8	12		5	15
Tulmunga	0	20		3	17
Raidih	6	14		2	18
Lunga	9	11		11	9
Kapodih	8	12		12	8
Karida	7	13		8	12
Telia	4	16		6	14
Unchdih	3	17		7	13
Sipringa	1	19		9	11
Parasima	4	16		7	13
Konkel	8	12		14	6
Ramdega	6	14		14	6
Kasira	18	2		13	7
Pakartoli	6	14		14	6
Sikoi	1	19		3	17
Bokta	1	19		9	11
Raghunathpur	0	20		0	20
Pogra	0	20		1	19
Total	**90**	**310**		**142**	**258**
Percentage	**23%**	**78%**		**36%**	**65%**

Key findings:

5.3.3.3 The micro-plan includes nutrition action:

- A total of 90 respondents (23%) reported “Yes” that their village micro-plans include explicit nutrition actions for ICDS strengthening and dietary diversity awareness, indicating weak integration of nutrition in local planning.
- A total of 310 respondents (78%) reported “No”, showing that nutrition-sensitive planning is still an exception rather than the norm across the surveyed villages.

- Out of 20 villages, only 7 have at least one-third of KIIs confirming that micro-plans include nutrition actions, while in several villages, no respondent reported such inclusion at all. Villages like Mokra, Rengola, Tulmunga, Raghunathpur, and Pogra have zero "Yes" responses, suggesting a complete absence of planned activities on ICDS strengthening or dietary diversity awareness in PRI micro-plans.

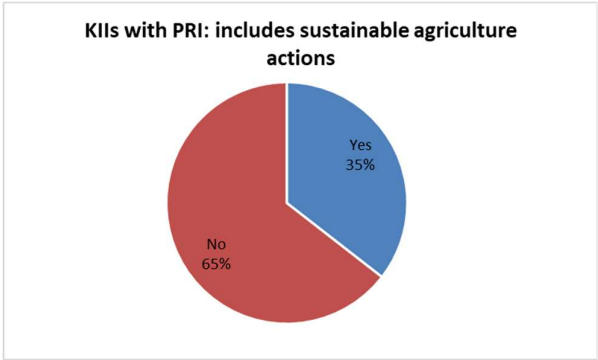


- Village Kasira stands out, with 18 out of 20 KIIs (90 percent) affirming that nutrition actions are reflected in the micro-plan, indicating strong PRI engagement and prioritization of ICDS and dietary diversity. A moderate level of inclusion is seen in Lunga (9 yes, 11 no), Birkera and Kapodih (8 yes each), Karida (7 yes), and Ramdega and Pakartoli (6 yes each), where nutrition has at least entered the planning discourse but is not yet universal among PRI respondents.
    - Nutrition actions related to ICDS strengthening and dietary diversity awareness are poorly mainstreamed in PRI micro-plans, with only 23 percent affirmative responses overall.
    - One village (Kasira) demonstrates good practice, with very high inclusion of nutrition actions in micro-plans, which could be documented as a positive example for peer learning.
    - A cluster of villages with mixed but still minority "Yes" responses indicates partial convergence, pointing to the need for targeted capacity-building of PRI members and better joint planning with ICDS functionaries.
    - The concentration of "No" responses in many villages signals gaps in awareness, planning processes, and accountability for nutrition outcomes at the Gram Panchayat level, underscoring the need to institutionalize nutrition-sensitive micro-planning and regular review of ICDS-related actions in Gram Sabha and sector meetings.

5.3.3.4 Micro plan includes sustainable agriculture actions:

The KIIs indicate that only about thirty-five percent of PRI representatives reported including sustainable agriculture actions, with substantial variation across villages. Overall, "No" responses (65 percent) clearly outweigh "Yes" responses (36 percent), suggesting limited mainstreaming of organic farming and rainwater harvesting in PRI agendas.

- A total of 142 respondents (35%) reported that PRI work includes sustainable agriculture actions, while 258 respondents (65%) reported that such actions are not included. This pattern aligns with broader evidence that sustainable agricultural practices remain underrepresented in PRIs' agenda.



- Some villages show relatively high inclusion of sustainable agriculture in PRI actions: Konkel, Ramdega, and Pakartoli each have 14 "Yes" and 6 "No", while Kasira has 13 "Yes" and 7 "No", indicating that a clear majority of respondents there acknowledge PRI engagement with organic farming and/or rainwater harvesting.

- Lunga, Kapodih, Sipringa, Bokta, Karida, Telia, Unchdih, Parasima, and Sikoi show a more mixed picture, with “Yes” counts between 6 and 11, suggesting that sustainable agriculture is on the agenda but not yet universal within the PRI.
- Mokra and Raghunathpur have zero “Yes” and 20 “No” each. At the same time, Pogra has only 1 “Yes” against 19 “No”, indicating that PRIs in these villages are currently not seen as supporting sustainable agriculture actions at all.
- Birkera, Tulmunga, Raidih, and Sikoi also show low positive responses (2–5 “Yes” against 15–18 “No”), reflecting that conventional practices still dominate and that PRI-led initiatives on organic farming or rainwater harvesting are either absent or poorly communicated.

5.4 Institutional Findings (AWCs and Schools)

5.4.1 Institutional Findings (Anganwadi Centers AWCs):

The baseline from 20 Anganwadi Centers shows that enrolment is good and many basic services are regular. Still, there are apparent gaps and variations in record-keeping, infrastructure (buildings, toilets, nutrition gardens), and the quality of health-nutrition sessions. The situation is that services are running, but greater attention is needed to quality, facilities, and monitoring.

Infrastructure and regular services

- Out of 20 Anganwadi Centers, 17 (85%) have their own building, and 3 (15%) are still functioning in rented/other structures. Having a dedicated building is significant for stability, resource management, and service delivery. Whereas guidelines require a permanent, child-friendly building for all AWCs.
- All 20 centers (100%) are open daily, signifying consistent operational status and accessibility for children and mothers in the community.
- Every center (100%) provides hot cooked meals every day, ensuring basic nutrition and supporting food security for enrolled children.
- 19 out of 20 AWCs consistently distribute monthly take-home rations for families. Regular ration distribution supplements child nutrition and helps reduce malnutrition at the household level.

Children's enrolment and attendance

- At all centers, in the 0-5 months age group, a total of 70 children are enrolled, including 39 boys and 31 girls (8.6%), and in the 6–59 months age group, 816 children are enrolled, with 386 boys and 440 girls (91.4%). The sex ratio is balanced and slightly favors girls.
- On the survey day, a total of 279 (130 boys and 147 girls) out of 830 enrolled children (33.6%) were present at the centers. The attendance rate is low, indicating the need to increase regular attendance.

Growth monitoring and nutrition status

- All 20 centers report that growth monitoring is being done. Still, 17 out of 20 centers (85%) maintain registers that categorize children as severely acutely malnourished (SAM), moderately acutely malnourished (MAM), or normal, suggesting that systematic listing and follow-up of high-risk children remain weak in some centers.
- A total of 18 out of 20 centers (90%) report that malnourished children are referred to health facilities, ensuring access to medical services and specialized care.

Health services and VHSND

- Village Health Sanitation and Nutrition Day (VHSND) sessions are regularly organized monthly in all 20 AWCs (100%), promoting the integration of health and nutrition services for children and mothers.

Water, sanitation, and nutrition garden

- Out of 20 centers, 10 centers (50%) have a handpump, two centers use wells (10%), and one center (5%) has a piped supply as a source of safe drinking water. In comparison, 7 centers (35%) have no water source of their own, which violates "Swachh Anganwadi" standards and poses risks to handwashing and food preparation.
- None of the centers have a nutrition garden, although policy documents view nutrition/kitchen gardens as an opportunity for dietary diversity and nutritional education for children; this is therefore a clear area of opportunity.

Toilets and a child-friendly environment

- Only 7 AWCs (35%) have child-friendly toilets, and all seven are functional (100%). Child-friendly toilets are vital for hygiene and encouraging regular attendance, especially among young children. Whereas guidelines recommend a safe, child-friendly, and functional toilet at every AWC.

Overall conclusions and action points

- This cluster appears relatively functional in terms of enrolment, regular meals, THR distribution, and basic growth monitoring. Still, attendance is low, VHSNDs are limited, and the process for listing malnourished children is only partial.
- Addressing infrastructural gaps such as buildings, drinking water, functional child-friendly toilets, and nutrition gardens, along with a focused plan to increase attendance, ensure monthly VHSNDs, and improve documentation of SAM/MAM lists and referrals, emerges as the main action-oriented conclusion from this baseline.

5.4.2 Institutional Findings (Schools):

There are 18 schools in 20 project villages. Among the 18 functioning schools covered in the survey, 1,156 children were enrolled, of whom 942 were present on the day of the study. the average attendance was about 81–82 percent. Of the 20 villages/school locations, two (Raidih and Bokta) lack schools, indicating a significant gap in educational access.

- In 18 schools, total enrolment is 1,156 children, including 522 boys and 634 girls, so girls account for about 55% of total enrolment, and the gender balance appears favorable. Attendance on the same day was 429 boys and 514 girls, which is about 82% of the total enrolment; this suggests that regular provision of the midday meal helps to maintain good attendance.
- All 18 functioning schools reported that the mid-day meal is being provided regularly, which is positive in terms of coverage of the scheme. The sample includes primary (PS), middle (MS/UMS), and high schools (HS).
- Safe drinking water is available in nearly all schools. Handpumps are the primary water source in 16 out of 18 schools (88.9%). One school relies on a well (5.6%), and another on a water supply (5.6%). However, two schools (11.1%) lack dedicated water sources, which could affect children's health and convenience. Most schools depend on groundwater or piped water, and those without their own source still need access to safe, reliable drinking water.
- Among the 18 schools, 12 (67%) have separate toilets for boys and girls; of these, only 11 (61%) report these toilets as functional, indicating that at least one school has unusable separate toilets. Six schools still lack separate toilets, which can negatively affect girls' attendance and continuation beyond grade 5, as research shows that a lack of toilets is one of the reasons adolescent girls drop out of school.
- Only two (11%) schools report having a nutrition garden (kitchen garden), while 16 (89%) schools do not have this facility; this means local availability of fresh vegetables or fruits to supplement the mid-day meal is still minimal, even though nutrition gardens are recognized as good practice in many states. The absence of schools in two villages, the lack of their own water source in one school, and non-functional toilets in some schools together suggest that while midday meals are almost universal, there is still a clear need to strengthen basic WASH and support nutrition infrastructure in these schools.

5.5 Interview with PRI & Community Leaders

This section describes the situation of village-level planning in the study area. It examines whether microplanning has been undertaken in each village, how far community members are involved, and whether issues such as Anganwadi services, nutrition, food diversity, sustainable farming, and rainwater conservation are included in the plans. It also reviews whether PRI and community leaders have received any training on nutrition and environmental planning under the GPDP process. A total of 20 PRI members and community leaders from 20 villages participated in the interview.

5.5.1 Micro-Planning Done in Village

- Out of 20 villages, 12 reported that micro-planning has been done (60%), while 3 reported no micro-planning (15%) and 5 reported that they don't know or they were not aware (25%).
- The presence of "don't know" responses in 25% of villages suggests limited information flow and weak ownership of the planning process among PRI representatives.

5.5.2 Community participation in planning

- Only half of the villages (10 out of 20) confirmed community participation in planning (50%), while the remaining villages were split between "no participation" (25%) and "don't know" (25%).
- This pattern indicates that participatory processes are not institutionalized across the gram panchayat and that in several locations, PRI members themselves are unclear about how inclusive the planning has been.

5.5.3 Inclusion of Anganwadi/Nutrition/Food Diversity in Plan:

- Nutrition/Anganwadi/food diversity considerations are explicitly included in plans in just 9 of 20 villages (45%); 6 villages reported no such inclusion (30%), and five did not know (25%).
- The data point to a significant missed opportunity to integrate ICDS, dietary diversity, and Anganwadi-linked actions systematically within GPDP or village plans, despite the presence of PRI representatives from almost all wards.

5.5.4 Sustainable Agriculture/Rainwater Conservation Included:

- Provisions related to sustainable agriculture and/or rainwater conservation are present in plans for 13 villages (65%), while 5 reported no such components (25%) and two were unaware (10%).
- Compared to nutrition, environmental, and agriculture-related themes are relatively better integrated, but the remaining one-third of villages still lack or are unaware of concrete sustainability measures in their plans.

5.5.5 Training of PRI/Community Leaders on Nutrition & Environmental Planning:

- Training on nutrition and environmental planning for GPDP has been received in 12 villages (60%), whereas eight villages reported that relevant PRI/community leaders have not been trained (40%).
- The coverage of training with uneven integration of nutrition and low community participation suggests that existing training may be inadequate in quality, follow-up, or practical application, highlighting the need for refresher and more hands-on capacity-building support.

5.6 FGD with Youth

5.6 Youth, Livelihoods, and Awareness:

5.6.1 Key Findings on Youth Status Across the Surveyed Villages FGDs:

The baseline survey covered 20 FGDs with youth from 20 villages. It recorded a total of 1,200 youths across 20 villages, of whom 648 (54%) currently reside in those villages. The analysis highlights several structural and livelihood-related challenges faced by rural youth, as well as emerging opportunities.

1. Youth Presence and Migration

A significant proportion, 46% of youth, have migrated from the villages, primarily due to the lack of steady, locally available employment. In villages such as Birkera, Mokra, Sipringa, Kasira, and Pogra, only about half of the youth live permanently in the village; the rest are away for study or work as labourers in the city where they migrated. Villages such as Pogra, Mokra, and Birkera show high migration rates. For example, out of 102 youth in Mokra, only 50 reside in the village. This out-migration reflects both economic distress and the lack of diversified livelihood options within the villages.

2. Predominant Livelihood Activities

Most of the youth who remain in the villages are engaged in daily wage labor (masonry, construction, agricultural labour) as their occupation. Some are involved in skilled professions such as tailoring, masonry, driving, or business. Engagement in agriculture and allied sectors remains limited, despite agriculture being the dominant village activity. The number of youth directly engaged in farming or livestock rearing is very small; only in a few villages like Sipringa, Konkel, Telia, and Karida do 20–60 youth appear to be involved in vegetable cultivation, poultry, livestock rearing, or fish farming, while in the remaining villages this number ranges from zero to only 10–15.

3. Limited Access to Skill Development:

In almost all villages, youth reported that they have never received farmer-training from government, non-government, or other agencies; only in a few villages (such as Lunga, Telia, Karida, Sipringa, Konkel, Kasira, etc.) have a limited number of 68 youth (mostly 3–20) from 6 villages ever received any training. Where training has taken place, it has not been linked to systematic follow-up support, market linkages, or capital assistance, thereby preventing the development of youth participation and entrepreneurship.

4. Youth Engagement in Agriculture and Allied Sectors:

Although a portion of youth are linked to farming. A total of 284 youth from 12 villages are engaged mainly in agriculture, vegetable cultivation, poultry, goat rearing, pig rearing, or minor livestock activities. The overall engagement remains low and fragmented. In several villages, youth expressed interest in agriculture-based enterprises but lacked the resources and technical knowledge to pursue them effectively.

5. Key Challenges Identified by Youth

Youth reported during the FGDs across 20 villages that they face multiple constraints that limit their livelihood opportunities. Main constraints they face are: 1. Lack of capital and investment support, 2. Inadequate irrigation and water scarcity, 3. Absence of technical knowledge and training, 4. Weak

market linkages and a lack of storage/sheds 5. Pest infestation in vegetable crops, 6. Low and unstable income from agriculture.

These challenges collectively discourage youth from engaging in agriculture and reinforce dependence on wage labor and migration.

6. Emerging Opportunities and aspirations:

Despite the constraints, youth identified several livelihood opportunities that could be strengthened with support: 1. Vegetable production and horticulture, 2. Poultry, goat rearing, dairy, and beekeeping 3. Fishery and small livestock-based enterprises 4. Skill-oriented activities such as tailoring and masonry.

The presence of these aspirations indicates potential for local livelihood diversification if supported with training, inputs, and market facilitation.

7. Understanding of nutrition and food diversity:

In most villages, youth understand nutrition in practical terms, such as “eating and drinking, getting energy/strength for the body”; in some villages (Raidih, Rengola, Kasira, Raghunathpur), the concept of a balanced diet, different nutrients, vitamins-, and proteins is also mentioned. In the villages (Tulmunga, Lunga, Unchdih, Telia, Karida, Ramdega, Bokta, Pakartoli, Pogra, Sikoi), the information on food diversity and nutrition is either very general or recorded as “do not know”, which shows a strong need for nutrition education.

8. Understanding of biodiversity and environmental conservation:

Youth in some villages (Rengola, Mokra, Sipringa, Konkel, Kasira) link biodiversity with different animals, species, and environmental balance, whereas in many other villages, there is no clear understanding of this concept, or it is recorded as “no information”. In the context of environmental conservation, in most villages, statements such as stopping tree-felling, planting trees, not setting forest fires, and conserving natural resources and biodiversity are repeated, indicating that people are experiencing environmental risks but have not yet fully connected them to livelihoods and food systems.

Overall Summary

The baseline data reveal that rural youth are at a critical juncture: they are willing to engage in diversified livelihoods, especially agriculture and allied activities, but are constrained by limited skills, capital, and institutional support. High migration rates further indicate that local economic opportunities are insufficient to retain youth. Strengthening youth-focused skill development, improving access to irrigation and credit, and promoting Agri-allied enterprises could significantly enhance livelihood security and reduce distress migration in the project villages.

5.7 FGD with Students attending School on a balanced diet, malnutrition, dietary diversity, and ecology concepts

Overall, the FGDs show that students broadly understand "balanced diet" as eating a variety of foods across groups, yet there are gaps in explaining malnutrition, dietary diversity practice, and ecology concepts; awareness of ecological imbalance is minimal.

Participants and context

- Twenty FGDs were conducted, with 276 students from classes 1 to 10 across multiple schools in Gumla district during 10–19 Sept 2025. Typically, there were 9 to 27 students per group. This spread indicates diverse age groups and school settings, allowing comparison of understanding across primary and upper-primary levels.

Knowledge of a balanced diet

- Most groups described a balanced diet as including staples with pulses, vegetables, fruits, eggs, milk, or animal-source foods, reflecting food-group awareness but not portion balance or frequency. This aligns with recommended KAP items, in which "balanced diet" is defined by variety across groups, suggesting partial but incomplete knowledge.
- Older classes occasionally mentioned nutrients (protein, vitamins, fats, water) rather than only foods, showing a shift from food-based to nutrient-based framing with grade level.

Understanding of malnutrition

- Children usually describe malnutrition as "not getting good food," "being thin/weak," or "not getting adequate nutrition." Some specify that poor eating habits or a lack of essential nutrients lead to malnutrition.
- Students reported malnutrition only with being thin, weak, or "not getting proper food," with limited recognition of stunting, wasting, or micronutrient deficiencies; overweight was never mentioned. This indicates a narrow undernutrition-only view compared with comprehensive definitions.
- For the Prevention of malnutrition, the Responses of children were focused on "eating good food," "nutritious food," and "proper intake" (dal, vegetables, rice, egg, milk). Emphasis on diversity, hygiene, and regularity in meals.
- Only a few children's groups linked prevention of malnutrition to cleanliness or safe food handling. In contrast, most groups focused only on "good food," highlighting a WASH, nutrition knowledge gap that baseline tools often miss.
- No group mentioned deworming, anemia, or fortified foods, which are standard elements in school health and nutrition programs.

Dietary diversity practices

- Across FGDs, Children recognized dietary diversity as "different types of food" or "changing the kinds of food" eaten daily. Children's groups mention a variety (dal, rice, vegetables, fruits, eggs, fish/meats, and sometimes millets - madua, bajra, etc.) as necessary for nutrition. But they did not know about the portion sizes or the frequency of the food items. References to fruits were less frequent than to rice–dal–sabzi combinations, suggesting a gap in the emphasis on fruit intake commonly targeted in school nutrition education. Prior qualitative work also finds such patterns among school children.

Environment and ecology concepts

- Many children defined "environment" as trees, animals, water, air around us, aligning with simple "surroundings" definitions taught in schools, but the term "ecology" (paristhitiki) was rarely understood as relationships between organisms and their environment.

- Awareness of “ecological imbalance” was largely absent; when mentioned, it was framed as irregular rain/heat or species loss, which only partially reflects the concept of disturbed interactions within ecosystems. A handful of mentions: “creatures, plants, and humans are part of ecology”, or “imbalance due to excessive cutting or climatic changes.”

Key baseline gaps to target

- Clarify malnutrition as deficiencies, excesses, or imbalances, covering undernutrition, micronutrient deficiencies, and overweight; introduce stunting/wasting concepts age-appropriately.
- Move from generic “good food” to practical dietary diversity: minimum food groups per meal/day, inclusion of fruits and animal/plant proteins, and weekly variety, following KAP guidance for school-aged children.
- Integrate hygiene/WASH, anemia and iron–folate, deworming, and fortified foods into school messages to connect diet with infection and absorption as per standard nutrition frameworks.
- Teach ecology as relationships and interactions (biotic–abiotic) and define ecological imbalance with concrete local examples (deforestation, pollution, species loss), expanding beyond tree planting to broader stewardship behaviors.

Implications for program design

- Curriculum: Use age-graded modules on balanced diet, food groups, and malnutrition concepts aligned to FAO/UN KAP tools for school-aged children; include locally available millets and seasonal fruits.
- Behavior change: Emphasize actionable habits—one fruit serving daily, a pulse/egg serving, green leafy veg thrice weekly, and handwashing before meals—to translate knowledge to practice, reflecting evidence that behaviorally focused education improves KAP.
- Monitoring: Track changes in knowledge on malnutrition’s full definition, correct identification of at least five food groups per meal/day, and ability to state two ecology–interaction examples, using brief KAP quizzes derived from standard items.

5.8 FGD with women 15 to 49 years. (group size - 8 to 12)

Food Consumption Patterns:

- A total of 20 FGDs were conducted in 20 villages. Women (15–49 years) reported that household diets are cereal-based, with rice and roti as staples, usually consumed with dal and seasonal vegetables, and fish, egg, or meat taken occasionally, depending on availability and cash. Protein-rich foods and milk are available in some households but not all, and their intake is irregular, especially among younger children. Coarse grains such as mandua, bajra and gondli are grown and eaten in several villages, but mostly in small quantities and only at certain times of the year rather than as a regular part of the daily diet. 10 groups (50%) reported consuming millets within 1 month to 3 months, while 10 groups (50%) reported not consuming millet within 1 to 3 months.

child Feeding Practices:

- Colostrum feeding: Almost all the FGD members in 20 villages reported giving colostrum soon after birth, which is a positive newborn-care practice.
- Breastfeeding (0 to 6-month-old child): all 20 FGD members reported a high prevalence of breastfeeding and noted any villages where water or other liquids are given 6 months before.
- Complementary feeding: 18 FGD members reported that most families start complementary foods at 6 months, but two families reported some delay, one family reported at 7 months, and one family reported at 10 months. Complementary foods are cereal-based with some pulses and milk or eggs.
- For children aged 2-6 years, typical foods include rice, lentils, vegetables, eggs, and fish.

Child feeding practices and hygiene

- Most women FGD members report that young children are offered food separately in their own plate or bowl, with quantity judged “by eye” rather than by age-appropriate measures. In contrast, in some households, children still eat from the standard plate with adults. Mothers generally describe feeding children solid or family foods from around six months onward, alongside breastfeeding for two or more years. However, snack foods such as biscuits or packaged items are also entering the child’s diet.
- Hand-washing is a strong norm in many villages: women say they wash hands before cooking, before feeding children, and after defecation, using soap, water, or sometimes ash; households also report routine sweeping, cow-dung plastering of floors, regular bathing, and cleaning of nails and surroundings.

Use of services and malnutrition management:

- Almost all groups stated that Anganwadi centers are functional and provide multiple services, including supplementary nutrition, growth monitoring, immunization, basic medicines, and health-nutrition counselling for mothers and children. Mothers are aware that children are weighed and measured regularly, and many said that they are informed if the child is not gaining adequately. However, a few villages reported that growth status is not always clearly explained. Some women knew of severely malnourished children from their village who had been referred to Malnutrition Treatment Centers. However, this experience was not universal and suggests that identification and referral of high-risk children can still be strengthened.

Nutrition gardens, agriculture training, and opportunities:

- Women in around half of the study villages described having nutrition gardens or kitchen gardens near their houses, with between 5 and 34 households per village cultivating leafy greens, seasonal vegetables, tubers, and some fruits for home consumption. Where gardens

exist, women emphasized the value of diverse, nutrient-rich produce close to home and expressed a desire to expand species diversity and improve management.

- Across villages, between roughly 3 and 25 women per site reported receiving some form of agriculture or nutrition-sensitive farming training, such as organic methods, preparation of manure and biopesticides, weather-smart cropping, and improved seed and input use; they associated these trainings with better vegetable production, some savings on purchased inputs, and increased household food security.
- Taken together, the FGD suggests good awareness of basic child-feeding and hygiene behaviors, emerging but uneven adoption of nutrition gardens, and clear scope to intensify counselling on dietary diversity (especially regular inclusion of pulses, animal-source foods, milk, and millets), age-appropriate complementary feeding, and broader coverage of women's agriculture and nutrition trainings.

6. Qualitative Insights

6.1 Community perceptions of dietary change and barriers

Across villages, people recognize that diets have slowly shifted from diverse home-grown foods to rice, dal, and vegetables, with occasional eggs, fish, or meat. Households report that millets, tubers, forest foods, and local greens are consumed less frequently than in earlier years, mainly due to reduced cultivation, greater market dependency, and irregular income. The main barriers they report are limited cash to buy diverse foods, limited availability of fruits/animal-source foods, seasonal scarcity, and a lack of awareness of the importance of dietary diversity beyond "filling meals."

6.2 Women's and youth aspirations in livelihoods

Women express willingness to expand their nutrition gardens, adopt organic methods, and increase small livestock rearing (poultry and goat rearing), particularly if irrigation and seed/seedling support are provided. Youth aspire to income-oriented agriculture, especially vegetable cultivation, poultry, and fishery, as well as skill-based enterprises such as tailoring, driving, and masonry. However, both groups emphasize the need for training, credit, and market linkages to make these activities profitable and sustainable.

6.3 Gender norms influencing decision-making in food, hygiene, and agriculture

Women manage child feeding, cooking, hygiene practices, and many agricultural tasks. However, men dominate decisions on farming choices, seed purchases, irrigation, the sale of produce, and income use, limiting women's agency in nutrition-linked agriculture. Joint decision-making appears firmer in some villages, but women rarely control finances or land-use decisions, affecting the adoption of climate-resilient practices and household nutrition choices.

6.4 Governance and accountability issues from FGDs/KIIs

FGDs and KIIs reveal weak community participation in Gram Sabha meetings, limited awareness of GPDP processes, and irregular involvement of parents/PRIs in monitoring AWC and school services. Nutrition and ICDS actions are rarely included in micro-plans, even where PRI members are trained. Referral of SAM/MAM children, IFA coverage, diversified school meals, and irrigation solutions often depend on frontline workers' initiative rather than institutional accountability and follow-up by PRI leaders.

6.5 Seasonal variations (food availability, migration, disease burden)

Food availability fluctuates with monsoon and harvest cycles. Summer and lean seasons are characterized by higher migration, greater wage dependence, and reduced intake of animal-source foods and vegetables. Post-monsoon periods offer more green leafy vegetables and fish, while winter sees higher horticulture potential. Seasonal disease burden (diarrhea, fever, worm infestation) affects children's nutrition and school attendance, but preventive measures such as deworming and anemia control are inconsistently practiced and poorly understood in communities.

7. Conclusions

7.1 Summary of baseline values against each log frame indicator

The baseline findings establish a mixed picture of service access, nutrition practices, and livelihood capacities in the project villages.

7.1.1 **Nutrition Practices (Objective 1)**: Meal frequency is adequate among women (83% eat thrice daily), but information for young children is largely missing (75% data unknown), and complementary feeding practices lack diversity. Among 117 assessed children, 27% are stunted, 6% underweight, and 4% wasted, indicating chronic nutrition challenges.

7.1.2 **Institutional Performance (Objective 1)**: AWCs operate regularly with hot meals (100%) and THR supply (95%), yet attendance is low (34%), record-keeping is inconsistent, and only 35% have toilets. Schools ensure MDM regularly (100%), boosting attendance (82%), but only 61% have functional toilets, and IFA/deworming remains irregular.

7.1.3 **Livelihoods (Objective 2)**: 94% households depend on agriculture, yet income is exceptionally low, with 45% earning < Rs . 3,000/month, and only 26% have received any livelihood-related training, mostly without income gains. Only 28% households have started/joined enterprises, and climate-resilient agriculture remains limited—only 9% use resilient seeds, 5% use water-saving irrigation, and 14% adopt agroforestry.

7.1.4 **Governance & Social Security (Objective 3)**: Awareness is high for PDS (94%) and ICDS (90%), yet benefits are delayed or irregular for 48% households. Only 18% of villages have functional food & nutrition committees, and just 25% of households know of micro-plans. Nutrition actions are poorly integrated into GPDP, with only 23% PRI members reporting inclusion.

These baseline values highlight the need for stronger monitoring systems, nutrition-sensitive livelihoods, and better governance convergence for nutrition and climate resilience.

7.2 Key Cross-Cutting Themes (Gender, Social Inclusion, Climate Resilience)

7.2.1 **Gender:** Women shoulder the responsibility for food preparation, child feeding, hygiene, and small livestock, yet have limited decision-making power in agriculture (only 10% women make farm decisions independently). Their high involvement in nutrition and home-based activities positions them as key agents for improving diets. Still, gender norms limit their control over resources, affecting the uptake of climate-resilient farming, diversified food choices, asset ownership, and nutrition investments.

7.2.2 **Social Inclusion:** Food security schemes like PDS are nearly universal, yet marginalized households face inconsistent delivery, unclear entitlements, and weak participation in village-level committees and planning. Limited awareness of GPDP processes, low attendance in nutrition committees, and poor inclusion in decision-making underline structural barriers that exclude vulnerable families from nutrition and livelihood improvements.

7.2.3 **Climate Resilience:** Although agriculture dominates livelihoods, adoption of climate-resilient practices is minimal due to high costs (74%), knowledge gaps (72%), and inadequate irrigation (46%). Youth and women express interest in climate-smart livelihoods, such as poultry,

vegetables, nutrition gardens, and organic inputs, but lack training, market support, and access to water. Strengthening climate resilience through training, irrigation solutions, and local enterprises can link food security and income generation.

8. Recommendations

8.1 For Program Implementation (Targeting, approaches, SBCC strategies)

8.1.1 Targeting of Households and Groups

- Prioritize malnourished children (SAM/MAM), low-income households (<Rs.5,000/month), women-headed households, and youth without training for focused support.
- Identify and track high-risk children using AWC registers and community validation.
- Select youth and women willing to adopt climate-resilient livelihoods for enterprise development.

8.1.2 Program Approaches

- Promote nutrition-sensitive agriculture (vegetables, fruits, small livestock, millets, pulses) linked to household diet improvement.
- Establish Farmer's field Schools run by trained youth/women for skill training, demonstrations, and bio-input access including seeds.
- Scale nutrition gardens and small livestock units (poultry, goatery, fishery) with phased support (training, input and market linkages).
- Ensure agro-ecology practices (organic manure, crop diversity, rainwater storage, seed production) in all training modules.

8.1.3 SBCC (Social & Behavior Change Communication) Strategies

- Use locally contextualized messages: seasonal foods, millets, pulses, eggs, hygiene–nutrition linkage, safe complementary feeding, balanced meals using 5 food groups.
- Conduct community-led actions: recipe demos, youth eco-clubs, school food diversity competitions.
- Integrate WASH, nutrition, hygiene messages (handwashing, safe water, clean cooking).
- youth volunteers, school students, and frontline workers as SBCC champions.
- Focus communication on portion size, frequency, dietary diversity, not just "good food."

8.2 Recommendations for Government/PRI Convergence

8.2.1 Strengthen Committees & Planning

- Revive or form Food & Nutrition Committees in all villages and link them to Gram Sabha monitoring.
- Institutionalize nutrition-sensitive GPDP planning: include ICDS strengthening, diet diversity activities, nutrition gardens, and growth monitoring.
- Ensure annual PRI training on nutrition and sustainable agriculture at block level.

8.2.2 Convergence for Nutrition & Agriculture

- Link PRI, ICDS, NRLM, Agriculture, Horticulture, Health, Education, and Forest Department for better nutrition.

- Advocate for including poultry sheds, nutrition gardens, small irrigation structures in GPDP budget allocations.

8.2.3 Strengthen ICDS–Health Coordination

- Joint AWC, VHND tracking of malnutrition cases, IFA and deworming coverage, referrals.
- Support AWCs with measurement tools, growth registers, fortified foods, and ensure follow-up counselling.

8.3 Recommendations for Future Monitoring and Evaluation

8.3.1 Indicator-Based Monitoring

- Track progress on:
    - Diet diversity (5+ food groups), meal frequency for U5s
    - Stunting, wasting, underweight trends
    - Youth & women livelihoods income increase
    - Adoption of climate-resilient practices
    - Functionality of AWCs, Schools, WASH
    - GPDP nutrition and agriculture convergence

8.3.2 Digital & Community-Based Tracking

- Introduce simple digital tools (Excel formats) community scorecards for monitoring AWC, School services, nutrition gardens, and training follow-up.
- Train SHGs, youth, Vikas Mitras to collect monthly data on growth monitoring, THR/MDM regularity, and service gaps.

8.3.3 Outcome Evaluation

- Conduct midline (18 months) and endline assessments focusing on:
    - old income diversification
    - Adoption of climate-resilient and nutrition-sensitive farming
    - InFood & nutrition access
    - Househstitutional strengthening & PRI convergence effectiveness