

**Midterm and Completion Survey**  
**Promoting Resilience of Vulnerable through Access to Infrastructure, Improved Skills and Information**  
**PROVATI<sup>3</sup> - LGED**

**1. Project Background and Rationale**

The PROVATI<sup>3</sup> (Promoting Resilience of Vulnerable through Access to Infrastructure, Improved Skills and Information) implemented by Local Government Engineering Department (LGED) under the Ministry of Local Government, Rural Development and Cooperatives (LGRDC), Government of Bangladesh (GoB) and supported by International Fund for Agricultural Development (IFAD). The project holds a implementation period from July 2018 to March 2026 covering 25 Upazilas of six districts (Kurigram, Gaibandha, Jamalpur, Rangpur, Nilphamari, and Lalmonirhat) with a goal to establish Sustainable Livelihoods for Poor Households of whom maximum are vulnerable Char people live in Teesta- Brahmaputra basin. They are the poorest of the poor in Bangladesh (around 50% live under poverty line) and are highly exposed to climate induced hazards like extreme floods, river erosion, and drought. The following table gives the detail of the project Intervening area.

**Table 1: List of districts and Upazila coverage the project intervention area**

SI #	District	PROVATI <sup>3</sup> Project Region	Number of Project Upazilas	Names of Project Upazilas
1	Jamalpur	Jamalpur	5	Madarganj, Melandaha, Islampur, Dewanganj, and Bakshiganj
2	Kurigram	Kurigram	9	Char Rajibpur, Chilmari, Raumari, Ulipur, Rajarhat, KurigramSadar, Phulbari, Nageshwari, and Bhurungamari
3	Gaibandha	Rangpur	5	Shaghata, Fulchari, GaibandhaSadar, Sadullahpur, and Sundarganj
4	Rangpur		2	Gangachara and Kaunia
5	Nilphamari		2	Dimla and Jaldhaka
6	Lalmonirhat		2	Hatibandha and Patgram
Total	<b>6</b>	<b>3</b>	<b>25</b>	

**2. Project Objectives and Activities**

**2.1 Project Objectives of PROVATI<sup>3</sup>**

The objective of the project is to enhance resilience of the project community comprising poverty prone 360,000 households with the goal to achieve sustainable livelihood.

**2.2 Project Support**

The project support comprises two development components and one project management. These are:

- Component 1: Climate resilient infrastructure and community shelters. The component comprises five sub-components: (1.1) climate change/flood preparedness research for building climate resilient infrastructure; (1.2) building climate resilient rural communication

infrastructure; (1.3) climate resilient rural market development; (1.4) building climate resilient community shelter cum school; and (1.5) training on climate/flood-proof resilient

- infrastructure design. The intended outcome is climate resilient infrastructures built and gone under use for benefiting the community.
- Component 2: Resilient communities through employment and early flood warning. The component comprises four sub-components: (2.1) Capacity building of LCS members, livelihood and diverse food intake improvement; (2.2) skill development of youth for employment generation; (2.3) development of accurate local inundation and flood warning system; and (2.4) practical policy actions. The intended outcome is resiliency built of the communities through access to flood information, economic self-reliance, and supported development policy.
- The project has the activities to realise its goal are: development of 382 kms rural roads; improvement of 135 rural markets; building 20 flood shelters cum primary schools, improving livelihoods of around 15,000 extreme poor households, imparting vocational skills to 30,000 extreme poor youths, and providing early flood warning services to around 274,570.

### **3. Objective of the Survey**

Overall purpose of the surveys is to assess the project midterm and endline achievement against the indicators of the project result framework. The project survey is subject to assess the progress of the project against IFAD Core Outcome Indicator (COI) that applied for the project activities, but not limited to, if any significant impacts occur by project inputs. The project has by this time undergone baseline survey and these surveys result will be comparable to baseline values. More specifically, the surveys have the following objectives:

- To reflect the changes attributed to project efforts improving infrastructures at household's level.
- To reflect the changes attributed to project inputs including skill building and livelihood improvement at LCS people.
- To reflect the changes of project inputs of vocational trainings at Youth trainees and their households
- To measure the changes on loss and damage pattern attributed to project initiated early flood warning system.
- Understanding the changes in knowledge and skill practiced by the LGED engineers attributed to training initiated by the project.
- To understand the impact of policy actions where project has measurable contributions.
- To measure the poverty status within the treatment areas at household level under set recognised indicators.
- To provide early evidence of project success and failures.

The project's Result Framework and Core Outcome Indicator Matrix are given in annex 1 & 2 respectably.

#### 4. Research Questions

The survey will focus on the outcome and impacts of the project activities comparing with the baseline values. The survey, not limited to, will answer the following questions:

- Have the roads and markets improved by the project impacted the households' livelihoods in terms of asset building, increasing agriculture production and productivity, access to public and private services, mobility, better, time saving, and cheaper transportation, and increased income?
- Are the roads and markets improved by the project reasonably resilient to climate changes and necessary maintenances are in place?
- Did the LCS members, disaggregated by gender, improve their livelihoods and thereby their well-being with support from project initiatives., and would be the improvement resilient and sustained?
- Did the VT improve the skills of the youths and scope for jobs and thereby the earnings?
- Did the project activities improve the poverty situation of the targeted community?
- What are the contextual factors that may have influenced the project's impact on the targeted community? What are the lessons so far learned from project interventions that may be considered for better implementation of the project activities?

#### 5. Scope of the Surveys

The surveys will be undertaken following the general framework of principles of an **impact survey** to assess how far the outcomes/ impact are relevant, effective, efficient, inclusive, innovative, and sustained as expected for with reference to project outcome and impacts indicators. Further the principles of the survey will consider that the findings should be specific and measurable, and qualitatively judged. In considering the gender aspects, both the sex and gender disaggregated findings are to be assessed including youth, person with disability and indigenous community. The observations of the survey should be with reflections of reasons for all issues of the queries.

The survey will cover the results, positive or negative, of all sub-components that are being implemented and activities completed, and outcomes are due and impact would be achieved.

The Impact will be assessed at household levels who are supposed to be benefited by the project services, directly or **indirectly**.

The project outcome matrix has mandated the outcomes against the outputs. The survey will assess that, but not limited to. Each sub-component if it generates any outcomes and impacts at household levels, those are to be captured by the survey.

The survey will further assess the project 'Theory of Change' whether its pathways initiated by t, and he project inputs and activities are valid in terms of relevance, coherence, efficiency, effectiveness,

and sustainable in realizing the intended impacts and directed to achieve the project goal in present context of all externalities and other factors which have direct or indirect influences on the project activities.

The survey will cover the households and persons taken in baseline survey from different activities. However, for vocational skill building as it was not included in baseline survey this time it will be included and will be determined as base data. For early flood warning sample will be drawn from the catchment of this activity as per the standard rules of simple random sampling.

## **6. Methodologies and Approach**

The survey will be initiated through a detail review of documents prior to undertake the survey that including project baseline report, project component status report, poverty and nutrition mapping, Gender and inclusion, GALS, LCS and livelihood improvement, vocational skill building and employment, early flood warning and impact, MDD-W status report, COSOP etc. for establishing proper indicators to assess impact and changes.

Samples for the survey will be the same as were taken in baseline survey. However, for vocational skill building of youth, trade-based cluster will be listing, and then applying rule of thumb the number of samples will be drawn, and later by systematic random sampling interviewee will be selected for outcome survey, and for Early Flood Warning System flood effected areas will be brought under the surveys covering all households as a sample frame and from that systematic random sample will be drawn based on the rules of statistical. Vocational and early flood warning were not included in baseline survey.

The surveys will review the targeting and the benefit captured by the outreach comparing with baseline values against the components/sub-components with disaggregated by farm, non-farm, indigenous community and sex and youth.

For qualitative assessment, FGD and KII and MSC will be conducted. These not only will ensure qualitative assessment, rather these will validate the household survey responses as well. For all activities, FGD will be undertaken following guideline and specific checklist.

A provision of panel data collection will be followed from the sample (around 5% from sample) whom will be assessed by any follow-up survey.

## **7. Survey instruments**

Prior to carry out the survey, the team will prepare a set of questionnaires for households and LCS; FGD guidelines for LCS group, MMC and SMC; and KII checklists for key personnel involved in project implementation at PMU and PIU, local administration and concerned line departments. All those instruments' contents and queries are to be identical to the contents of baseline survey of the project but will approach to measure the state of outcome and impact attributed to project activities Comparing with baseline values.

### 6.1 Questionnaires for household survey:

To prepare the questionnaire impact/outcome indicators of project logframe, estimated cost return of the project, IFAD's-COI Measurement Guidelines, COSOP, M&E Manual Guide for IFAD Funded projects will be consulted and considered.

### 6.2 Questionnaire for LCS members:

A set of questionnaires will be prepared for the members of Labor Contracting Society (LCS) engaged for developmental and rehabilitation works of rural markets as well as rural road maintenance, and COVID-19 response. During the development of Questionnaire for LCS members' survey, the changed status of LCS member households in asset ownership, income, food security and nutrition, gender equity, mobility, etc have been considered.

### 6.3 FGD guidelines for beneficiary respondents

FGD guidelines and checklist will be prepared for qualitative survey of beneficiary respondents, viz. (a) FGD guidelines for LCS groups from rural road maintenance, b) LCS group from market construction, c) LCS group from Covid-response, d) MMC representatives, e) SMC representative. The FGD focused further to understand the impact level as well so far achieved through project's attributions.

### 6.4 MSC guideline for beneficiary respondent

Significant changes or impacts attributed to project inputs at households assessed from the results of FGD are to be prepared by set methodology of MSC. This is a new instrument will be included in Midterm and project completion impact survey.

### 6.5 Checklist for key informant interview (KII)

KII checklists will be prepared for qualitative survey for interviewing LGED officials at PIU (Executive Engineer, Upazila Engineers/Assistant Engineers) who are involved in implementation of project activities, and other concerned line-departments aware of the project activities and potential to suggest project for effective interventions.

Besides, where necessary observation tool may be applied, such as to highlight any good practice or measures taken to reducing vulnerability/risk etc. The use of different survey instruments is given in table 3.

Table 3: Use of survey instrument for different activities

Activities	Survey Instruments used			
Road	Household/individual interview	FGD with community	KII with PIU and line-departments	Observation if applicable such as for understanding Average Daily Traffic (ADT), Model vehicle operating cost (VOC), Travel time cost etc.

Activities	Survey Instruments used			
Market	Household/individual interview Market Management Committee (MMC)	- FGD	- KII with UNO	Observation if applicable such as for understanding improved environment
Flood Shelter	Household/individual interview School Management Committee (SMC)	FGD	KII with UNO/MP	Observation if applicable
LCS (road maintenance)	Individual LCS members interview	FGD in group in cluster LCS group	KII with PIU/PMU	Observation if applicable
LCS (market constructing)	Individual LCS members interview	FGD in cluster LCS group	KII with PIU/PMU	Observation if applicable
LCS (Covid-19 response)	Individual LCS members interview	FGD in cluster LCS group	KII with PIU/PMU	Observation if applicable
MDD-W	Individual Interview	-	-	-
Youth vocational Skill building	Individual interview	-	KII with ESDO/PIU/PMU	Observation if applicable
For all activities (as applicable)		MSC	-	

## 8. Data Management

Survey will be conducted by Computer-Assisted Personal Interview (CAPI) based on face-to-face data collection in which tablet will be used to register the answers of the respondents. It is assumed this IT based method will facilitate validation of the interview and will make the process efficient and ensure quality data. Besides it will assist the management to monitor enumerators instantly. Further, as data collected by CAPI survey will be immediately uploaded in an electronic format and this will the survey team to run high frequency checks.

### 7.1 Designing online hub for data collection.

The survey will use open-source **Kobo Toolbox** suit for mobile/tablets-based data collection from the field. It will ensure quicker, reliable, and real-time data collection. Collected data will be analysed centrally by a core server and will be accessible by concerned.

## **7.2 Data quality system**

The survey will ensure quality data collection on a daily basis and progress will be tracked by survey coordinator aided by Kobo Toolbox. The following procedure will be followed for data quality control:

- a) Defining roles and responsibilities of the data collection and supervision team in field;
- b) Supervision of data collection by supervisors and survey team leader;
- c) Sending daily note on any inconsistency in data collection;
- d) Re-interviewing by enumerators, when found inconsistency;
- e) Checking dataset everyday by consultants, supervisors PMU etc.);
- f) Creating automated feedback files on errors of interview on daily basis;
- g) Maintaining zero tolerance against data manipulation; and
- h) Data processing (editing, cleaning).

## **7.3 Pre-testing/piloting of survey tools**

Field-testing/piloting of household survey questionnaires and other survey tools will be done prior to finalize the survey instruments. The supervisor will guide the piloting under guidance of the survey team leader.

## **7.4 Data collection method using 'Tablet device.'**

- Direct physical interview approach will be adopted for the collection of data. Each enumerator will be provided with a 'Tablet device' and Kobo ToolBox software, electronic version of questionnaire in the tablet and a check list sample households;
- The field enumerators will contact respondents according to pre-designed sampling technique.
- Then enumerators will explain the objectives of the survey to the respondents and filled-up the questions one-by-one on the electronic version questionnaire.
- After the completion of filling up of one electronic version questionnaire for one respondent, it will be reviewed thoroughly by the enumerator before uploading the filled-in questionnaire to server. Upon completion of review and necessary edition, it will be saved in the tablet and upload on the server.

## **7.5 Data analysis plan and process**

For making a sensible analysis of collected data following methods will be adopted. The analysis included, but not limited to, the following:

- The analysis will be conducted to understand the change in the outcome/Impact as set in the research questions of this survey comparing with the baseline values and further, where necessary, between 'before and after' project intervention following contribution-based study.
- Including both qualitative and quantitative analysis
- Conducting participatory exercise
- Rating and scaling for quantitative presentation
- Application of graph and chart

## 9. Preparation of the report

The report will be prepared following prescribed structure and contents and based on the data collection report. To make finding it easy to understand necessary graph, chart, table will be used. Besides, for qualitative results projection case-study will be added in the report. First, a draft report will be prepared and that will be finalized through a validation workshop attended by project people and project stakeholders.

## 10. Capacity building

The enumerators, supervisor, and data analyst will be trained to deliver their services by survey coordinator and concerned experts.

## 11. Deliverables

The following deliverables are to be delivered by the surveys.

- Inception report incorporating questionnaires and checklist with action plan.
- Data Collection Report
- Draft Report for review including validation by workshop.
- Final report

## 12. Schedule of the Survey

The following tentative schedule is set with a target to undertake mid-term impact survey. For Completion Impact Survey the schedule will be set later by the Client.

Table 4. Activity Schedules of Mid-term Impact Survey

Activity	Revised Time
Team mobilization	1 <sup>st</sup> September (tentative)
Primary discussion of the Team with Client	By 1 <sup>st</sup> week after signing the contract
Document review	By 1 <sup>st</sup> week after signing the contract
Reconnaissance survey	By 1 <sup>st</sup> week after signing the contract
Inception report	By one month after signing the contract
Training of the enumerator and supervisor	By 1 <sup>st</sup> week of week of September
Listing of the households	By 2 <sup>nd</sup> week of September
Data /information collection	By 31 October
Data/information analysis	By 1 <sup>st</sup> week of November
Draft report preparation and validation by workshop	By 30 November
Final report	By 15 December
Report dissemination workshop	By 31 December

## 13. Procurement method

Quality and Cost Based Selection (QCBS) Method.



#### **14. Budget**

As allocated in RDPP.

#### **15. Mode of Payment**

As mentioned in Budget, payment should cover all costs for remuneration, travel, workshops, and meetings. If the applicant is a firm or a company, VAT certificate is a must. Prevailing GoB rules will be *applied for tax purpose*.

Payments will be made in the following three installments:

- First installment: 20 (twenty) % of the agreed budget as an advance upon signing of the agreement and upon submission of the inception report with finalization of survey instruments and methodology (including results of trials/piloting and consultations) and acceptance by the Client
- Second Installment: 60 (sixty) % of the contract price shall be paid upon submission of the draft report of the survey and acceptance by the client.
- Final payment: 20 (twenty) % of the contract price shall be paid upon submission of the final report including all comments and suggestions and acceptance by the client.

#### **16. Compliance and Conditions of the Contract**

The firm should have at least 5 years' experience and remarkable activities related to current assignment. Experience of working in IFAD funded projects with COI is a critical requirement. Working experience with PROVATI<sup>3</sup> with good record will be counted on with appreciation. Working experience in development, particularly conducting socioeconomic survey, on vulnerable community in Teesta-Brahmaputra basin is an adding value.

The firm shall extend services with full liabilities to deliver the assignment- mobilizing experts as required for intended results in a timely manner. The team for the assignment should comprise Team Leader, GIS Specialist, Climate Resilient Specialist, Statistician, Gender and Social Inclusion Specialist, Survey Coordinator, Data Manager, Kobo Tools Application Expert, Data Analyst, Quality Control Officer, Field Supervisor, Enumerator. The requirements of the key consultants are as follows.

## 17. Key Consultants/Specialists

### Qualification and Task of Professional Staff

SL #	Expert role	Qualification and Requisite Experience
1	2	3
1	<b>Team Leader</b>	<p>The consultant should have a Masters/PhD degree in Social Science or equivalent with a preference to advanced degree (PhD) in Economics, Statistics or related subject from any reputed university.</p> <ul style="list-style-type: none"> <li>▪ Minimum 10 year work experience with at least 7 years of experience in the planning, management and or baseline study and working experience in a position like Benefit Monitoring Specialist for MTR and Endline/ benchmark survey/ study, feasibility study, benefit monitoring, impact study, output review or similar of rural infrastructure development projects that includes multidimensional components like infrastructure/rural infrastructure, institutional capacity building Gender, poverty, food security nutrition related Issues etc.</li> <li>▪ His/her management skills should be demonstrated by personnel management, inter-personal skills, multi-discipline and multicultural teamwork skills, communication skills (fluency in</li> </ul>
2	<b>GIS Specialist</b>	<p>The GIS Specialist will be a Graduate with a preference to Master Degree in Geography and Environment, Computer Science and engineering, Information Technology, Urban and Regional Planning, or any other discipline related field to GIS mapping and Database Management and or equivalent from any recognized university</p> <ul style="list-style-type: none"> <li>▪ Having minimum 5 years of proven experience in GIS and Database Management with at least 3 years of work experience in the making proper digital and other maps, replicating and submitting understandable data into the systems,</li> <li>▪ Performed technical support for GIS project implementation and operation, creating, testing and enhancing GIS applications.</li> <li>▪ Developed and administered web-based GIS applications, preparing GIS datasets, Geo-database, reports and specialized queries and maps.</li> <li>▪ The position requires extensive knowledge and ability to perform GIS related work. The employee will be versed and able to work GIS data effectively.</li> </ul>
3	<b>Climate Resilient Specialist</b>	<p>The consultant should have a Master/PhD degree in Social Science or equivalent with a preference to advanced degree (PhD) in Environment, Geography or related subject from any reputed university.</p> <ul style="list-style-type: none"> <li>▪ Minimum 10 years work experience with at least 7 years of experience in the environmental impact study and working experience in a position like climate resilient expert for MTR and Endline/ benchmark survey/ study, feasibility study, impact study, output review or similar of rural infrastructure development projects that includes multidimensional components like infrastructure/rural infrastructure, institutional capacity building</li> </ul>

		<p>Gender, poverty, food security Issues etc. with state-of-the-art knowledge of the climate resilient and impact evaluation methods.</p> <ul style="list-style-type: none"> <li>▪ His/her management skills should be demonstrated by personnel management, interpersonal skills, multi-discipline and multi-cultural teamwork skills, communication skills (fluency in English will be preferred);</li> <li>▪ Have experience in excellent report preparation skills, indicator-based data analyses and must be computer literate and user-at-ease ability to work on common office-use software and statistical software (e.g. STATA).</li> <li>▪ Understanding of, and experience with, Bangladesh’s biodiversity and climate change policies, approaches, and procedures.</li> </ul>
4	<b>Gender and Social Inclusion Specialist</b>	<p>A Master’s degree in Gender, Women Studies, Development Studies or a related field or other related disciplines with over seven years of relevant experience in a developing country environment.</p> <p>A minimum of 10 years’ experience in gender and development , preferably with specific experience in mainstreaming GESI into development programs.</p> <ul style="list-style-type: none"> <li>• Have experience in GESI assessments, as well as integration of GESI across development contexts.</li> <li>• Demonstrated experience in GESI program documentation, program monitoring and impact assessment</li> <li>• Strong written and oral communication skills in both English and French are highly desirable for this position.</li> <li>• Have experience working with IFAD funded rural development programme for livelihood improvement of vulnerable community.</li> </ul>
	<b>Statistician</b>	<p>A master’s degree or its equivalent in statistics, economics, or a related field with a strong background in quantitative and qualitative methods.</p> <ul style="list-style-type: none"> <li>▪ At least 5 years’ experience as a professional statistician with working experience in baseline/outcome/impact survey of development programme</li> <li>▪ Extensive experience of working with a variety of statistical software like SPSS, R, EViews, STATA, etc and skill in analysis and drawing summary statistical tables</li> <li>▪ Experience with sampling methods, design and implementation</li> <li>▪ Experience with design and system programming of questionnaires software</li> <li>▪ Training skill for capacity building of enumerator – as required.</li> </ul>
5	<b>Survey Coordinator</b>	<p>The Survey Coordinator will be a Graduate with a preference to Master Degree in any discipline from any recognized university</p> <ul style="list-style-type: none"> <li>▪ Have minimum 5 years of general professional experience with at least 3 years of work experience in the planning, management and or MTR and Endline/benefit monitoring/ impact study and sufficient experience in a position like Field Supervisor/ Field Manager/ Field Coordinator or similar for MTR and Endline/ benchmark survey/ study, feasibility study, benefit monitoring, impact study, output review or similar of rural infrastructure development projects that includes multidimensional components</li> </ul>

		<p>like infrastructure/rural infrastructure, institutional capacity building Gender Issues etc. with at least preliminary knowledge of contemporary benefit monitoring tools like Result Based Management (RBM) and/or Management for Development Result (MfDR). His/her supervisory/ coordinating skills should be demonstrated by staff management, interpersonal skills, multi-discipline and multi-cultural teamwork skills, communication skills (fluency in English will be preferred);</p> <ul style="list-style-type: none"> <li>▪ Have experience in excellent supervision skills in indicator-based data collection/survey and must be computer literate on common office-use software.</li> <li>▪ The incumbent should be able to work hard and under pressure and deliver quality output in a timely manner including preparing work program, team management ability. Experience in geo-referencing, GIS map analysis preferred (else will need to show which team member can cover this).</li> </ul>
<b>6</b>	<b>Data Manager</b>	<p>The Data Manager/Quality Control Manager should have a bachelor's degree preferably in IT or a related subject.</p> <ul style="list-style-type: none"> <li>▪ Have at least 5 years of relevant experience. His/her programming skills should be demonstrated by experience in development of excellent data management programs based on the baseline indicators and output framework of the assignment and must be expert on common office-use software.</li> <li>▪ The incumbent should be able to work hard and under pressure and deliver quality output in a timely manner including preparing work program, team management ability in data management and analyses independently.</li> </ul>

### 18. Distribution of working month of key Consultants

Position	No of Personnel	Person-Months	
Team Leader	1	Office	2.5
		Field	1.5
GIS Specialist	1	Office	2
		Field	1
Statistician	1	Office	2
		Field	1
Climate Resilient Specialist	1	Office	2
		Field	1
Gender and Social Inclusion Specialist	1	Office	0.5
		Field	0.5
Survey Coordinator	1	Office	3
		Field	1
Data Manager	1	Office	1
		Field	0.5

## Annex: 1 Project Result Framework

### Promoting Resilience of Vulnerable through Access to Infrastructure, Improved Skills and Information

#### Logical Framework

Results Hierarchy	Indicators				Means of Verification			Assumptions	Project Yr 1 (2018)			Project Yr 2 (2019)			Project Yr 3 (2020)			Project Yr 4 (2021)			Project Yr 5 (2022)				
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility		Year Targets	Year Results	Cumulative	Year Targets	Year Results	Cumulative	Year Targets	Year Results	Cumulative	Year Targets	Year Results	Cumulative	Year Targets	Year Results	Cumulative		
<b>Outreach</b>	<b>1.b Estimated corresponding total number of households</b>																								
	Household members - Number of people		467200	1461600					12000	12000		3500	15500	59000	23748	39248		54116	93364		343748	437112			
	<b>1.a Corresponding number of households reached</b>																								
	Households - Households		1201000	360000		ME system, outcome and impact surveys	annually	PMU		3071	3071		1035	4106	16000	5938	10044		13329	23373		84667	108040		
	<b>1 Persons receiving services promoted or supported by the</b>																								
	Males - Males		236780	789240						7200	7200		2000	9200	36000	14254	23454		12796	36250		78344	114594		
	Females - Females		157852	526200						4800	4800		1500	6300	23000	9494	15794		19194	34988		81578	116566		
Young - Young people														34	34				6718	6752		8870	23830		
Total number of persons receiving services - Number of people			394632	1315440					12000	12000		3500	15500	59000	23748	39248		31990	71238		159922	231160			
<b>Project Goal</b> Sustainable livelihoods for poor households and	<b>Households reporting improvements in household asset</b>				MPAT surveys, impact survey at baseline, mid-term and completion	three	PMU	Economy maintains or increases growth rates; price inflation for staple														46	46		
	Households - Percentage (%)		25	66																					
	<b>Development Objective</b> Enhanced resilience of population of selected flood-prone upazilas through resilient infrastructure development, climate adaptation research and dissemination, promotion of selected construction technologies and improved economic opportunities	<b>increase in income of extreme poor households</b>				beneficiaries surveys and periodic assessments	annually	PMU	community acts upon flood warning and mobilized to use flood-shelters														40	40	
	female headed households - Percentage (%)		15	35											2										
	male headed households - Percentage (%)		15	35											5								60	60	
	<b>1.2.8 Women reporting minimum dietary diversity (MDDW)</b>				MPAT surveys, impact survey at baseline, mid-term and completion	Three	PMU																40	40	
	Women (%) - Percentage (%)			30	80																				
Women (number) - Families			2016	6720																			5993	5993	
Households (%) - Percentage (%)			30	86																					
Household members - Number of people			27283	8185																					
<b>Outcome</b> 1. Climate resilient rural roads, markets and community shelters in project area are built, used and maintained.	<b>Structures are managed and maintained according to agreed</b>				surveys	at mid term and completion	PMU	100% infrastructure construction completed at year 5, no severe damage due to floods														13	87	100	
	structures - Percentage (%)			30	100																				
	<b>participation of women in market management committees</b>				surveys	annually	PMU																		
	women participating - Percentage (%)			30	30										30	30						30		19	19
	<b>2.2.5 Households reporting improved physical access to</b>				MPAT surveys, impact survey at baseline, mid-term and completion	Three	PMU																		
	Households reporting improved physical access to markets - Percentage (%)			30	60											0						0.75	0.75	29	30
	Households reporting improved physical access to processing facilities - Percentage (%)																							SS	SS
Households reporting improved physical access to storage facilities - Percentage (%)																							SS	SS	
<b>Output</b> 1.1 Infrastructure design	<b>Design standards incorporating climate change/resilient</b>				design manuals of LGED	annual	PMU	Willingness of LGED to internalize research																2	2
	designs - Number			21	4																				
<b>Output</b> 1.2 Climate resilient rural communication infrastructure constructed by the project (CI 2.1.5)	<b>village and union roads upgraded/paved</b>				project reports and MIS	annual	PMU	construction material costs remain within projected level; non prolonged flood restricting construction																	
	village and union roads - Km		120	330					21.63		7.29	9.65	94.45	41.81	70.73						56.13	126.86	52.06	178.92	
<b>Output</b> 1.3 Climate resilient rural markets built (CI 2.1.6)	<b>2.1.5 Roads constructed, rehabilitated or upgraded</b>				site inspections, environmental																				
	Length of roads - Km		110	382										0	0	94.45	41.81	41.81			63.59	105.4	52.93	179.58	
<b>Output</b> 1.3 Climate resilient rural markets built (CI 2.1.6)	<b>2.1.6 Market, processing or storage facilities constructed or</b>				project reports and MIS, environmental assessments	annual	PMU	construction material costs remain within projected level; non prolonged flood restricting construction																	
	Total number of facilities - Facilities		70	135									0	0	39	0	0			1	1		SS	SS	
<b>Output</b> 1.4 Multi-purpose school-cum-	<b>school-cum-flood shelters newly built in charlands</b>				project reports and MIS	annual	PMU	construction material costs remain within																	
	school shelters - Number			10	15																0			0	0
<b>Output</b> 1.5 Training on climate	<b>Engineers trained on climate resilient infrastructure</b>				PMU reports	annual	PMU	LGED makes trainees available on time for the																	
	Engineers - Number		30	60										20	55						81	136	21	157	



## Annex 2. The Indicators Matrix

Dimensions	Indicators	Description	Indicator Reference to COI-IFAD	Survey captures information from/through
1.Outreach	Numbers of persons received services promoted or supported by the Project	included the individual used services promoted by project	CI 1	Project database
	Corresponding number of households	Included numbers of households used services promoted by project	CI1.a	Project database
	Estimated corresponding number of total household members	Included numbers of members of the household received or used services promoted by the project	CI 1.b	Project database
2.Identification and Demographics	Ethnicity	Includes ethnic identity whether mainstreamed or indigenous	ToR ( <sup>1</sup> mA)	Household questionnaire
	Demographic information and occupation	Included household size, ages, gender, education, youth and occupation types	ToR (mA)	
3.Housing and Assets	Housing condition	Included ownership of dwelling house, types and conditions, rooms etc	CI IE 2.1 (mB)	Household questionnaire  <i>(FGD for outcome and Impact study)</i>
	Household asset ownership Index	Included households' physical assets and ownership	CI IE 2.1 (mB)	
	Domestic facilities and hygiene	Included access to electricity, fuel types for cooking, time spent for collecting fuels access to safe drinking water, and sources of drinking water, toilet facilities, domestic waste management, and hygienic practice.	CI 1.2.9 (mB)	
4.Income and Expenditure	Household incomes and expenditures	Included households' income sources and item-wise expenditures	ToR	Household questionnaire  <i>(FGD for outcome and Impact study)</i>



Dimensions	Indicators	Description	Indicator Reference to COI-IFAD	Survey captures information from/through
5. Access to natural resources	Improved access to land forest, water bodies with legal rights and ownership	Included type of resource bases (agriculture, fisheries, forestry etc), ownership/user right types and accessibility of households. (Included LCS hhs)	CI 1.1.1 & 1.2.1 (mC)	Household questionnaire
6. Access to agriculture technologies and production services	Adoption of new/improved inputs, technologies, and practices	Included type of production (crop, livestock fisheries) adoption and practices of inputs like new/modern technologies, seeds, fertilizers, irrigation, machineries etc of households.	CI 1.2.2 (mC)	Household questionnaire <i>(FGD for outcome and Impact study)</i>
	Production	Included increased of production of the farmers by improved farming with increased cropping intensity and cost-effective practices.	CI 1.2.4 (mC)	Household questionnaire <i>(FGD for outcome and Impact study)</i>
7. Food security /Nutrition	Food/security consumption	Included households' food consumption pattern – meal types, items, time and quality; food shortage and starvation. (Included LCS hhs)	ToR (mF)	Household questionnaire
	Minimum dietary diversification for women	Included women of the LCS household members' (age 15-49) food intake pattern following minimum dietary diversification for women	CI 1.1.8 & 1.2.8 (mF)	Household questionnaire
	Food safety and hygiene	Included washing hands of household members before handling and preparation of food, checking expiration date of process food items, use of leftover food, covering food to protect from flies etc.	CI 1.2.9 (mF)	Household questionnaire

Dimensions	Indicators	Description	Indicator Reference to COI-IFAD	Survey captures information from/through
		(Included LCS hhs)		
8. Health and Hygiene	Health services and hygienic practices	Included households' accessibility to basic health services, and improved health and hygienic practices particularly covid-19 protections. (Included LCS hhs)	ToR (mF)	LCS respondent questionnaire
9. Rural Infrastructure	Improved resilient infrastructural designs	Number of improved resilient design prepared and validated for practice	-	Observation Checklist and KII <i>(FGD for outcome and Impact study)</i>
	Rural road improved/upgraded and impacted in sales	Included more improved road, resilient to flood and erosion with upgraded designs, Increased traffic, less cost and time in travelling, better connectivity and better maintenance for sustained services	CI 2.1.5 2.2.5	Household questionnaire
	Rural market improved/upgraded	Included more improved market with increased physical facilities, increased women marketing facilities, better management, and maintenance for sustained services	CI 2.1.6 2.2.6 (mD)/LF	Household questionnaire
	Facilities of Flood shelter improved	Included more improved flood shelters with more physical facilities and connectivity, improved management for sustained services.	-	Household questionnaire
	Household accessibility to improved market, storage and processing facilities	Include accessibility of households' to improved market, storage and processing with improved physical facilities	CI 2.1.6 2.2.6 (mD)/LF	Household questionnaire

Dimensions	Indicators	Description	Indicator Reference to COI-IFAD	Survey captures information from/through
				(FGD for outcome and Impact study)
	Scope of business and trading increased	New scope of business or expansion of existing business increased	ToR	(FGD for outcome and Impact study)
	Engineers trained in improved resilient designed/quality infrastructure	Included numbers of engineers trained in improved resilient designs and practice	ToR	KII
	Structures are managed and maintained according to agreed standards one year after rehabilitation/up-grading	Numbers of improved structures maintained according to agreed standards one year after rehabilitation/up-grading	LF	KII
10. Empowering poor rural people's benefiting from IGA, and skill-based employment opportunities, participating in GALS	Poor trained in income generating activities, business/ financial management	Included training in livelihood technology adoption and engaging in IGAs for increased income of LCS members	CI 2.1.2	LCS respondent questionnaire (FGD for outcome and Impact study)
	Accessibility to microfinance promoted by the project	Included LCS household members got access to microfinance services	CI 1.2.5 (mE)	LCS respondent questionnaire
	Improvement in empowerment of women/gender transformative	Included time allocation of women LCS members in domestic chores; participation in household decision; access to microfinance; taking decision to use the earring including loan money; and responsibility to repay the loan; and mobility and sate of domestic violence.	CI IE 2.1 (mH3, mH4, mH6) /LF	LCS respondent questionnaire
	New job created	Included youth access to vocational skill building and engaging in full-time job for earning	CI 2.2.1 (ml)/LF	Youth respondent questionnaire

Dimensions	Indicators	Description	Indicator Reference to COI-IFAD	Survey captures information from/through
				<i>(FGD for outcome and Impact study)</i>
11.Environmental Sustainability and Climate changes	Degree of exposed to extreme weather/ climate changes adversities/shocks, and propensity of loss and damages	Included recurring massive flood occurring loss and damages of assets resources, and life and displacement of the households.	ToR	Household questionnaire
	Enhanced improved early flood warning information system for the vulnerable community	Included improve community centred flood early warning information dissemination and reduced loss and damages of the households.	CI 3.1.2 (mG)	Household questionnaire
	Adaptation of environmentally/climate resilient technology or practice	Included environmentally/climate resilient technology or practice. (Included LCS hhs)	CI 3.2.2 (mG)	LCS respondent questionnaire <i>(FGD for outcome and Impact study)</i>
12.Policies	Policy relevant knowledge product completed	Included umber of Policy analysis, research, working paper, studies, strategies, guidelines etc. relevant knowledge product completed as part of the project objective goal and institutional capacity building.	CI Policy 1	KII
13.Stakeholder/Community feed back	Satisfied with project supported services	Included households satisfied with any project support services (Included LCS hhs)	CI SF 2.1 (mH)	Household and LCS respondent questionnaire
	Influence in decision making of project supported services	Included household influenced in decision making of the project supported services (Included LCS hhs)	CI SF 2.2 (mH)	Households and LCS respondent questionnaire

Dimensions	Indicators	Description	Indicator Reference to COI-IFAD	Survey captures information from/through
				<i>(FGD for outcome and Impact study)</i>

