TERMS OF REFERENCE (TOR) – FOR FEASIBILITY STUDIES OF INFRASTRUCTURE PROJECTS ON THE ACROSS PROJECT, BAGUDO AND DANDI LOCAL GOVERNMENT AREAS, KEBBI STATE, NIGERIA

ACTIVITY: AS 1.1: Technical feasibility studies--Infrastructure Feasibility studies in Bagudo and Dandi LGAs (9 communities)

LOCATION: 9 Targeted Communities in 2 LGAs of Kebbi State

Dandi Local Government Area: Geza, Fingillah, Shiko, Kamba and Buma, ,

Bagudo Local Government Area: Matsinkai, Kende, Tuga and Kaoje,

1. INTRODUCTION

Catholic Relief Services (CRS) is implementing the Advancing Cross-border Resilience and Opportunity for Safety and Stability (ACROSS) Project in Kebbi State in partnership with Northeast Youth Initiative for Development (NEYIF), with funding from the PATRIP Foundation. The project aims to catalyze inclusive, sustainable development in rural and semi-urban communities of Kebbi State through community-driven infrastructure planning and investment. Between April and June 2026, participatory infrastructure needs assessments and co-creation workshops were conducted in nine communities across Dandi and Bagudo LGAs. Each community produced a Five-Year Infrastructure Development Plan (2026–2030) containing five prioritized projects.

To move from planning to implementation, CRS and NEYIF require feasibility studies for the first three (3) projects of each community (27 projects in total). Given the limited resources and the need for timely progress, a rapid feasibility assessment methodology will be employed. This will rely on community-held knowledge, visual inspections, stakeholder validation, and existing secondary data Including full-scale engineering surveys. The output will be a concise, evidence-based report that confirms project viability, refines concept designs, provides realistic cost estimates, and identifies any critical environmental and social safeguards required

2. OBJECTIVE OF THE CONSULTANCY

To conduct rapid feasibility studies for the Year 1, Year 2, and Year 3 projects of each of the nine communities, generating sufficient information to:

- Validate the technical concept and community readiness for each project.
- Provide an indicative cost envelope and a simple implementation plan.
- Screen for environmental and social risks and propose basic mitigation measures.

- Enable CRS and the communities to proceed to resource mobilization and the preparation of detailed design and implementation.

3. SCOPE OF WORK

The consultancy will cover the following for each of the 27 community-prioritized projects in the community 5-year infrastructure development plan.

3.1 Document Review and Inception

- Review the nine community Five-Year Plans, needs assessment data, and any available site photographs.
- Conduct an inception meeting with CRS and NEYIF to agree on priority data needs, reporting format, and field itinerary.
- Deliver an inception note with the detailed work plan, field schedule, and data collection tools.

3.2 Engineering Surveys and Field Investigations

The consultant shall conduct comprehensive, full-scale engineering surveys for all project sites where relevant. These surveys must be sufficiently detailed to inform conceptual design, accurate quantity estimation, and future detailed design. They include:

- **Topographical Surveys:** Detailed ground surveys using total stations, GPS, or drone photogrammetry for all sites involving earthworks, drainage, roads, bridges, culverts, embankments, buildings, market layouts, and cemetery perimeters. Surveys shall produce digital terrain models (DTMs), contour plans, cross-sections, and spot heights as appropriate for each project type.
- **Geotechnical Investigations:** Trial pits, auger borings, or standard penetration tests as required to determine soil bearing capacity, groundwater levels, and soil classification at all structural sites (bridges, classroom blocks, market sheds, town hall, health facility foundations, embankments). The number and depth of tests shall follow relevant Nigerian standards and be justified in the inception report.
- **Hydrological and Hydraulic Studies:** For bridges, culverts, drainage channels, embankments, and erosion control works, conduct catchment analysis, stream flow measurements (or use of regional hydrological data), flood frequency analysis, and determination of design flood levels. This will inform sizing and siting of hydraulic structures.
- **Hydrogeological Surveys:** For borehole rehabilitation or new drilling projects, conduct geophysical surveys (e.g., vertical electrical sounding) to determine aquifer depth, yield, and water quality. Perform pumping tests on existing or test boreholes to establish sustainable yield. Collect water samples for laboratory analysis (physicochemical and bacteriological) at all targeted water points.

- **Condition Assessments of Existing Structures:** Detailed visual inspections, crack mapping, material sampling, and non-destructive testing (where needed) for all buildings, drains, roads, and boreholes proposed for rehabilitation. This will determine the extent of repairs required.
- **Solar Resource Assessment:** For all solar-powered systems (boreholes, streetlights), obtain and analyse satellite-derived solar irradiation data for the project locations and estimate the required system capacity based on load calculations.
- **Waste Characterization Study:** For the Kamba Town waste management project, conduct a waste audit (composition, generation rates) to inform the design of collection, sorting, and composting facilities.

All survey data shall be geo-referenced and delivered in standard digital formats compatible with CAD and GIS software.

3.3 Stakeholder Engagement and Community Validation

- Engage with community development associations, traditional leaders, women and youth groups, market traders, school-based management committees, WASH committees, health facility committees, and persons with disabilities to validate project scope, siting, and desired features.
- Facilitate participatory design validation sessions in each community to ensure the feasibility study captures user needs and specific requirements for accessibility, gender, and cultural sensitivity.
- Consult with Local Government Area (LGA) Works Departments, relevant state ministries (Works, Environment, Water Resources, Education, Health, Energy, Commerce), and regulatory agencies (RUWASSA, State Primary Health Care Development Agency, electricity distribution company) to align proposals with government standards and secure early technical endorsement.

3.4 Environmental and Social Assessment

- Conduct environmental and social screening for each project using a standardized checklist compliant with national regulations and good international practice.
- For projects with potential significant adverse impacts, prepare a site-specific Environmental and Social Management Plan (ESMP) that includes mitigation measures, monitoring indicators, and institutional responsibilities.
- Ensure screening and ESMPs address gender-based risks, disability inclusion, community health and safety, and labour conditions.
- Document stakeholder consultations and how community feedback was incorporated.

3.5 Technical Feasibility Assessment and Conceptual Design

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- Using the survey data, develop for each project a **conceptual/preliminary design** that defines:
    - Key dimensions, alignments, and specifications like road length and width, bridge span and type, drainage channel cross-sections, embankment height and slopes, number and size of classrooms, borehole depth and pump capacity, market shed layout and stall dimensions, solar streetlight quantity and wattage.
    - Functional layouts illustrate through simple plans, profiles, and typical cross-sections. These are not detailed construction drawings but must be sufficiently clear for cost estimation, environmental assessment, and regulatory approval.
    - Proposed construction materials and methods, justified by local availability, cost-effectiveness, and durability.
    - Identify major technical risks (e.g., flood, erosion, poor ground conditions) and propose mitigation measures in the design.

3.6 Cost Estimation and Economic Viability

- Prepare detailed Bills of Quantities (BoQs**)** and cost estimates based on the conceptual designs and prevailing unit rates in Kebbi State. Estimates shall be accurate to ±20% (feasibility level) and broken down by major work items.
- Estimate recurrent operation and maintenance costs over a 10-year period.
- Propose sustainable cost-recovery or co-financing mechanisms.
- Monetize the value of community contributions (labour, local materials) where these have been pledged.

3.7 Implementation Planning

- Propose a realistic implementation schedule for each project, considering seasonal constraints (rainy season), community labour mobilization, and procurement lead times.
- Recommend procurement packaging and an appropriate contracting strategy.
- Identify the next steps required to proceed with detailed design, tender documentation, and construction, including any additional studies or permits needed.

3.8 Institutional Capacity and Sustainability Assessment

- Review existing community management structures and their capacity to operate and maintain the proposed assets.

- Recommend any training or organizational strengthening required and outline a simple sustainability plan for each project that addresses maintenance schedules, spare parts, and funding sources.
- For energy systems (solar boreholes, streetlights), include a maintenance and spare parts plan.

3.9 Reporting

- Produce a stand-alone feasibility study report for each community, structured with an executive summary, full survey findings, conceptual designs, ESMP summary, detailed cost estimates, implementation schedule, and sustainability plan. Reports shall include all survey data, maps, and schematic drawings.
- Produce a consolidated summary report covering all nine communities with comparative tables of projects, costs, timelines, and key recommendations.
- Provide all raw survey data (topographical, geotechnical, hydrological, hydrogeological, solar) in both digital and printed formats as part of the final deliverables.

4. METHODOLOGY

The consultant is expected to employ a rigorous, evidence-based methodology that integrates full-scale engineering surveys into the feasibility process. The approach should include:

- Desk review of existing plans, historical data, and satellite imagery.
- Full-scale field surveys as specified in Section 3.2, using qualified surveyors, geotechnical engineers, hydrologists, and hydrogeologists with appropriate equipment.
- Participatory community validation workshops to confirm project concepts and incorporate feedback.
- Environmental and social assessment using rapid screening tools and ESMP preparation.
- Cost estimation based on detailed quantity take-offs from conceptual designs and validated local market rates.
- Regular coordination with CRS, NEYIF, and government technical partners, including presentations of draft findings.

The technical proposal should detail the survey methodologies for each type of project, including equipment to be used, number and location of tests, and how data quality will be assured

5. DELIVERABLES

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The following deliverables are required, all to be submitted according to the schedule described in Section 6. The deliverables are presented below:

- **Inception Report:** To be submitted by the end of Week 1. This document shall include a detailed work plan, a refined field itinerary showing how all nine communities will be covered, the data

collection tools and checklists to be employed, and confirmation of the team composition. It will be reviewed and approved by CRS before field work commences.

- **Draft Consolidated Rapid Feasibility Study Report:** To be submitted in electronic format (Microsoft Word and PDF) by the end of Week 7. The draft report shall follow the structure outlined in Section 3.7, providing complete community-by-community findings for all 27 projects, environmental screening summaries, indicative cost estimates, and implementation notes. The draft must be of sufficient quality for review by CRS, NEYIF, and government technical partners.
- **Community Validation Briefs:** These shall be compiled as an integral part of the draft and final reports. For each of the nine communities, a brief (1–2 pages) will summarize the validation workshop held, list the participants (disaggregated by gender and group), document the key feedback received, and explain how that feedback was incorporated into the project concepts. The briefs should be supported by photographs of the workshop and site walk.
- **Final Consolidated Rapid Feasibility Study Report:** Following the incorporation of all comments from CRS, NEYIF, and government reviewers, the final report shall be submitted by the end of Week 9. Three hard copies (professionally bound) and an electronic copy (including all annexes, BoQs in Excel, and original photographs) are required. The report must be publication-ready, with clear language and a polished layout suitable for external audiences.

6. DURATION AND TIMELINE

The assignment is expected to be completed within **8 weeks** from contract signing, to accommodate the scope of full-scale surveys across nine communities. The timeline is described below:

- **Week 1:** Inception phase. The consultant will conduct a desk review of all community plans and relevant documents, finalize data collection tools, and hold an inception meeting with CRS and NEYIF. The Inception Note is due by the end of this week.
- **Weeks 2 to 5:** Field consultations. The consultant will visit all nine communities over a period of four weeks, averaging two to three communities per week. In each community, the team will carry out joint site walk-throughs, participatory validation workshops, and basic measurements. All field data collection will be completed by the end of Week 5.
- **Weeks 6 to 7:** Data analysis, costing, environmental screening, and drafting. The consultant will analyse all collected data, prepare indicative BoQs and cost estimates, complete environmental screening checklists, and write the community-by-community findings. The Draft Consolidated Rapid Feasibility Study Report, along with the Community Validation Briefs, will be submitted electronically by the end of Week 7.
- **Week 8:** Review period. CRS, NEYIF, and government technical partners will review the draft report and provide consolidated feedback. The consultant will address all comments and revise the report

accordingly and finalization and submission. The consultant will produce the Final Consolidated Rapid Feasibility Study Report, incorporating all revisions. Three hard copies will be printed and bound, and the electronic files will be delivered.

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7. CONSULTANT QUALIFICATIONS

The consultancy team must include the following expertise:

Team Leader / Project Manager

- Advanced degree in Civil Engineering, Water Resources, or related field.
- Minimum 10 years' experience managing multi-site infrastructure feasibility studies, including full-scale surveys, in rural Nigeria.
- Strong project management and stakeholder facilitation skills.

Civil/Structural Engineer

- Professional engineering degree with COREN registration.
- Experience in conceptual design and condition assessment of roads, bridges, drainage, and buildings.

Water Resources Engineer / Hydrogeologist

- Expertise in borehole geophysics, pumping tests, and solar water supply design.
- Experience in hydrological and hydraulic analysis for small-scale flood control and drainage works.

Geotechnical Engineer

- Degree in Geotechnical Engineering or Civil Engineering with geotechnical specialization.
- Experience in soil investigations for rural infrastructure foundations and embankments.

Land Surveyor

- Professional qualification in surveying (e.g., SURCON registration).
- Proficiency in total station, GPS, and drone-based topographical surveys, with proven ability to deliver digital terrain models and CAD outputs.

Environmental Specialist

- Advanced degree in Environmental Sciences, Environmental Engineering, or related field.
- Experience in environmental screening and ESMP preparation for infrastructure projects in Nigeria.

Social Development / Gender Specialist

- Degree in Sociology, Gender Studies, or Community Development.
- Experience in participatory engagement, gender analysis, and disability inclusion.
- Fluency in Hausa (and/or local Kebbi languages) is essential.

Quantity Surveyor / Cost Estimator

- Professional qualification in Quantity Surveying.
- Ability to produce detailed BoQs and cost estimates for rural infrastructure.

The firm must provide evidence of having successfully completed similar multi-site feasibility studies with full-scale surveys, including references from at least three clients.

8. CONCLUSION

This Terms of Reference outlines a comprehensive yet time-sensitive assignment to produce robust feasibility studies for 27 community-prioritized infrastructure projects across nine communities in Bagudo and Dandi LGAs of Kebbi State. The engagement demands a highly experienced multi-disciplinary team capable of executing full-scale engineering surveys, participatory design validation, environmental and social assessments, and detailed cost estimation within a compressed 8-week period.

The successful completion of this consultancy will transform the community-driven Five-Year Infrastructure Development Plans from aspirational roadmaps into bankable, technically validated investment proposals. The feasibility studies will serve as the critical bridge between participatory planning and tangible implementation, enabling Catholic Relief Services, its partners, and the benefiting communities to approach government, donors, and private investors with the confidence that each project is viable, cost-effective, and sustainable.

CRS invite qualified consulting firms to submit proposals that demonstrate not only technical competence but also innovative approaches to meeting the 8-week delivery schedule without compromising quality. This is an opportunity to contribute to a landmark community-led resilience-building programme in rural communities of Dandi L.G. As and Bagudo L.G. As of Kebbi State, Nigeria, with potential for replication and scaling across the region.

9. APPLICATION PROCESS

Interested consulting firms should submit separate Technical and Financial Proposals to (tenders.ngr@crs.org) **on or before 5pm 23rd September, 2026.**

The Technical Proposal must include:

- Understanding of the ToR and how the proposed approach meets the requirement for full-scale surveys.
- Detailed methodology and work plan, including survey techniques, equipment, and quality control.
- Team composition with CVs of key personnel.
- Evidence of similar experience (minimum three references with contact details).
- Implementation schedule (Gantt chart).

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The Financial Proposal must provide a fixed-price budget covering all professional fees, survey equipment, laboratory testing, travel, accommodation, community engagement, and incidental costs. The budget should be broken down by major activity and deliverable.

For any inquiries, please feel free to reach out via nigeriaprocurement2@crs.org / nura.sadiq@crs.org

EVALUATION CRITERIA

Evaluation Category	Weight	Key Sub-Criteria & Requirements

TECHNICAL EVALUATION	70%	Overall Technical Evaluation Score
1. Firm's Experience & Track Record	15%	• Evidence of successfully completed multi-site infrastructure feasibility studies with full-scale surveys in rural/semi-urban settings. • Minimum of three verifiable client references for similar past assignments. • Familiarity with international donor-funded projects and regional contexts in Northern Nigeria.
2. Methodology & Understanding	20%	• Comprehensive comprehension of objectives and scope for all 27 projects across nine communities. • Robustness of survey techniques (topographical, geotechnical, hydrological, hydrogeological, solar, waste). • Adequacy of data quality control, equipment specs, and adherence to Nigerian standards. • Quality of stakeholder engagement, participatory design validation, and inclusion approaches.
3. Work Plan & Timeline Feasibility	10%	• Realism and completeness of the Gantt chart to fit the 8-week delivery window. • Logical sequencing of desk review, field investigations, data analysis, and reporting phases. • Risk management strategies for seasonal constraints or logistical challenges in Bagudo and Dandi LGAs.
4. Key Personnel Qualifications	25%	• Team Leader: Advanced civil/water engineering degree with 10+ years managing multi-site studies. • Civil/Structural Engineer: COREN-registered with road/bridge/building condition assessment experience. • Water Resources/Hydrogeologist: Expertise in geophysics, pumping tests, solar water, and hydraulics. • Geotechnical Engineer: Specialized in soil investigations for rural infrastructure foundations. • Land Surveyor: SURCON-qualified with total station, GPS, and drone-based DTM/CAD capabilities. • Environmental & Social Specialists: Advanced environmental screening/ESMP experience and local language fluency (Hausa).

		• Quantity Surveyor: Professional qualification for rural infrastructure BoQs and cost estimates.
FINANCIAL EVALUATION	**30%**	**Overall Financial Evaluation Score**
1. Budget Completeness & Cost Realism	15%	• Inclusion of all professional fees, equipment rentals, lab testing, travel, and engagement costs. • Alignment of the fixed-price with the budget ceiling.
2. Value for Money	15%	• Clear financial breakdown mapped against major activities and deliverables. • Efficiency in resource allocation for field logistics across target communities .

ANNEX A: FIRST THREE PRIORITIZED PROJECTS PER COMMUNITY (27 PROJECTS)

BAGUDO LOCAL GOVERNMENT AREA

1. Matsinkai Community

- Priority 1 Project: Construction of one block of 3 classrooms and rehabilitation of the existing one-classroom block, including sanitation facilities for male and female pupils.
- Priority 2 Project: Construction of drainage channels and embankment of flood water.
- Priority 3 Project: Rehabilitation of health facility including staff quarters and water supply facility.

2. Kende Community

- Priority 1 Project: Construction of a bridge at the most critical stream crossing point.
- Priority 2 Project: Construction of drainage channels.
- Priority 3 Project: Fencing of community cemetery.

3. Tuga Community

- Priority 1 Project: Construction of bridge, drainages, and culverts.
- Priority 2 Project: Rehabilitation of rural roads in the community (approximately 3 km).
- Priority 3 Project: Rehabilitation of non-functional boreholes for water supply (2 units).

4. Kaoje Community

- Priority 1 Project: Erosion control through restoration of land destroyed by gully erosion around the Allied Bank area and rehabilitation of damaged drainage channels.
- Priority 2 Project: Construction of drainage channels and culverts.
- Priority 3 Project: Rehabilitation of non-functional boreholes for water supply (3 units).

DANDI LOCAL GOVERNMENT AREA

5. Geza Community

- Priority 1 Project: Construction of market sheds with 2 VIP toilets and upgrade of existing boreholes to solar powered.
- Priority 2 Project: Construction of 2 blocks of 3 classrooms (one at Government Day Secondary School and one at Ilela Primary School).
- Priority 3 Project: Construction of community town hall.

6. Fingillah Community

- Priority 1 Project: Rehabilitation of 3 community boreholes.
- Priority 2 Project: Rehabilitation of hospital building and its dedicated borehole.
- Priority 3 Project: Rehabilitation of junior secondary school and primary school buildings.

7. Shiko Community

- Priority 1 Project: Construction of embankment to block and divert flood water.
- Priority 2 Project: Construction of 4 culverts and drainage channels.
- Priority 3 Project: Upgrading of the existing dispensary to a primary health care centre, including rehabilitation of the building structure.

8. Buma Community

- Priority 1 Project: Upgrade of the flooded access road (approximately 2.5 km) from the highway to the community, including raising, side drains, and culverts.
- Priority 2 Project: Rehabilitation of primary school buildings.
- Priority 3 Project: Rehabilitation of the community borehole (solar-powered).

9. Kamba Town (Semi-Urban)

- Priority 1 Project: Erosion control through construction of drainage channels and repair of broken drainages.
- Priority 2 Project: Rehabilitation of non-functional boreholes including drilling one borehole
- Priority 3 Project: Distribution of waste bins, establishment of a waste dumpsite, and construction of a waste management facility.