Mekong Region Futures Institute Foundation

399 Interchange 21, 32nd floor, Sukhumvit Rd., North Klongtoey, Wattana, Bangkok 10110
Thailand

Terms of Reference

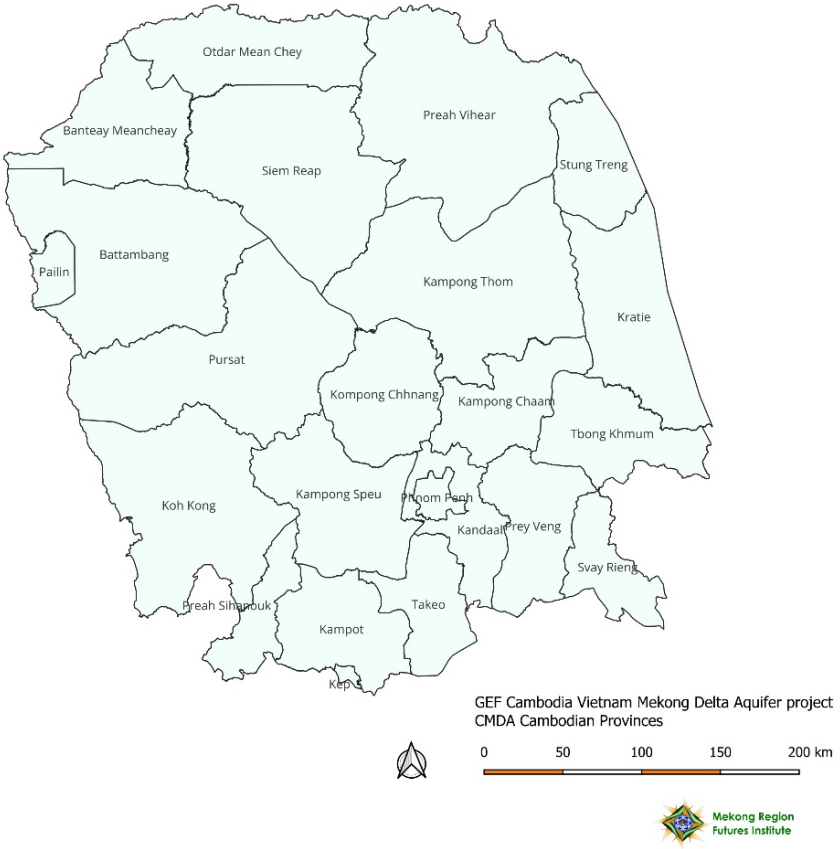
Cambodia Mekong Delta Aquifer (CMDA) Project: Household Livelihood Survey Implementation

1. Background

As a partner of the Global Environment Facility funded *Cambodia Mekong Delta Aquifer (CMDA) project*, the Mekong Region Futures Institute (hereafter referred to as "MERFI") is seeking to contract an organization (hereafter referred to as "the Contractor") to conduct a livelihood survey with rural households across the Cambodian Mekong delta CMDA region. This survey will collect essential data to support the objectives of the CMDA project (See Attachment 1). The survey questionnaire focuses on household level livelihoods and their dependencies on surface and groundwater, including questions regarding their current and future groundwater use.

2. Geographic Scope

The survey will cover all selected Provinces within the Cambodian Mekong delta CMDA region.



3. Survey Scope and Methodology

3.1 Sample Size and Distribution

- Total number of randomly selected households to be surveyed: n = 2500

- Sampling regime: 250 randomly selected villages from randomly selected communes, subject to the agreement of central and local authorities
- Households per village: approx.10 randomly selected households

3.2 Survey Implementation

- Interview method: Face-to-face interviews with one household member using digital tablets
- Estimated interview duration: 60 minutes per household
- Data collection: Interview responses will be automatically uploaded to the MERFI web-based data platform

4. Responsibilities

4.1 MERFI Project Responsibilities

MERFI will provide:

- Government approval for administering the survey
- Comprehensive on-site enumerator training and questionnaire pre-testing
- List of randomly selected Provinces, Communes, and villages to be surveyed (in both tabular and map formats)
- The survey questionnaire, including voluntary consent form, translated into Khmer
- Web-based data platform for automatic upload of survey responses and data
- Survey data analysis
- Provide templates or basic requirements of baseline reports, progress reports and survey reports

4.2 Contractor Responsibilities

The Contractor will be responsible for:

- Recruiting, managing, and providing logistical support to a sufficient number of qualified enumerators to complete the survey by November 30th 2025
- Ensuring all enumerators are available for the MERFI enumerator training program, including replacement enumerators
- Managing all fieldwork logistics including transportation to and within survey locations
- Weekly data validation in consultation with MERFI:
- Randomly selecting village households
- Providing enumerator tablets
- Covering all costs related to:
    - Enumerator and supervisor recruitment, compensation, and management
    - Transportation and travel expenses
    - Accommodation for field staff
    - Any other operational costs not explicitly covered by the CMDA project and agreed between MERFI and the Contractor
- Ensuring quality control of data collection
- Ensuring the confidentiality and privacy of respondents
- Adhering to ethical standards for research involving human subjects
- Completing all fieldwork and data collection by the 30th of November 2025

5. Deliverables

The Contractor shall provide:

1. An inception report in English outlining the detailed implementation plan
2. Weekly progress reports during the survey implementation period
3. A report in English on survey completion, including challenges faced and solutions implemented
4. Raw and cleaned datasets in consultation with MERFI

6. Timeline

- Contract award: September 2025
- Inception report: Within two weeks of contract award
- Survey implementation: September-November 2025
- Survey completion deadline: November 30th, 2025
- Final report submission: December 31st, 2025

7. Required Qualifications

The Contractor must demonstrate:

- Proficiency in spoken and written English
- A minimum of five (5) years of experience conducting large-scale household surveys, ground water surveys, or natural resource surveys
- A minimum of five (5) years of experience conducting livelihood surveys or related surveys in the Cambodian-Mekong Delta region, in collaboration with Cambodian government agencies and/or international/UN agencies
- Proven capacity to mobilize qualified field staff in Cambodia
- Strong data and survey management capabilities
- Previous experience with data collection methods
- Familiarity with the Cambodian Mekong delta regional context, particularly in rural areas

8. Submission Requirements

Interested organizations must submit:

1. A written technical proposal in English outlining:
    - Understanding of the ToR requirements
    - Proposed household selection methodology
    - Field interview implementation plan
    - Quality assurance mechanisms
    - Team composition and qualifications
    - Relevant previous experience
2. A detailed financial proposal including:
    - Breakdown of costs
    - Indicate that the Contractor will provide digital tablets to conduct the survey interviews
3. Supporting documentation and or references demonstrating eligibility based on the required qualifications

Mekong Region Futures Institute Foundation
399 Interchange 21, 32nd floor, Sukhumvit Rd., North Klongtoey, Wattana, Bangkok 10110
Thailand

9. Evaluation Criteria

Proposals will be evaluated based on:

- Technical approach and methodology (30%)
- Qualifications and experience of the organization and key personnel (40%)
- Cost effectiveness (30%)

10. Terms of Payment

- 40% upon contract signature and approval of inception report
- 30% upon completion of 50% of the survey
- 20% upon completion of 100% of the survey
- 10% within 1 month after submission and approval of the final report and data evaluation

11. Submission Details

Proposals must be submitted by email by 5:00 pm Bangkok time on the 8th of September, 2025. No proposals will be accepted after the submission deadline.

Dr John Ward
John.ward@merfi.org

For questions or clarifications, please contact
Dr John Ward
Email: john.ward@merfi.org
WhatsApp: +85620 55839609.

The CMDA project and MERFI reserve the right to reject any or all proposals.

Mekong Region Futures Institute Foundation
399 Interchange 21, 32nd floor, Sukhumvit Rd., North Klongtoey, Wattana, Bangkok 10110
Thailand

Attachment 1: CMDA Socio-Economic Assessment

Assessment stage 1: Assessment of Past Trends and Status Quo of Socio-Economic Conditions in the Lower Mekong Basin

This assessment examines historical trends and the current status of socio-economic conditions in the CMDA area. By analysing past developments in livelihoods, income distribution, demographic shifts, and economic dependency on groundwater and groundwater-dependent ecosystems, this study provides a basis for informed policy recommendations aimed at fostering sustainable socio-economic resilience in the region.

Key Indicators and Data Sources

The ex-post assessment relies on a set of key indicators that reflect socio-economic trends, household well-being, and economic dependencies.

Economic and Livelihood Indicators

- **Household Income Levels:** Trends in income distribution across rural and urban populations, with a focus on fisheries, agriculture, and non-farm activities.
- **Employment Patterns:** Historical changes in labour participation, sectoral shifts, and informal economy contributions.
- **Poverty and Inequality Trends:** Past variations in poverty levels, measured through indicators such as the Gini coefficient, Human Development Index and poverty headcount ratio.
- **Market Access and Trade Trends:** Analysis of historical trade patterns, price volatility, and access to domestic and international markets.

Demographic and Social Indicators

- **Population Growth and Migration Patterns:** Historical demographic changes, including urbanization rates and rural-urban migration.
- **Education and Literacy Rates:** Long-term trends in educational attainment and workforce skill levels.
- **Health and Nutrition Trends:** Changes in access to healthcare, malnutrition rates, access to potable water and public health investments.

Environmental and Resource Dependency Indicators

- **Dependence on Natural Resources for Livelihoods:** Longitudinal analysis of household reliance on agriculture, fisheries, and forestry, where possible, including groundwater-specific dependencies.
- **Climate and Disaster Vulnerability:** Past impacts of floods, droughts, and extreme weather events on socio-economic stability.
- **Infrastructure Development and Access to Services:** Trends in rural electrification, road connectivity, and access to clean water and sanitation.

Primary data sources include:

- **Mekong River Commission (MRC):** Socio-economic reports and rural development data.
- **National Statistical Offices:** Census data, labour force surveys, and poverty assessments.
- **World Bank, ADB, UNDP, ILO and FAO:** Reports on economic growth, trade, and human development.
- **Remote Sensing and GIS Data:** Spatial analysis of infrastructure development, urbanization, and disaster impacts.
- **IPCC and National Climate Assessments:** Historical socio-economic vulnerabilities linked to climate change.

Methodological Approach

A combination of statistical analysis, remote sensing, and participatory research methods will be applied to assess past socio-economic trends. Gender disaggregated analysis will be applied where reliable data are available.

Trend Analysis of Socio-Economic Data

- **Time-Series Analysis of Economic Indicators:** Statistical evaluation of income levels, poverty reduction trends, and employment shifts.
- **Demographic and Migration Studies:** Examination of census data, education patterns, access to potable water and rural-urban transition patterns.
- **Infrastructure and Service Provision Assessments:** Historical analysis of public investment in transport, energy, and social services.

Spatial and GIS Analysis

- **Mapping Economic Activities and Resource Use:** GIS-based assessments of employment concentration, resource-dependent livelihoods, and urban expansion.
- **Infrastructure and Connectivity Analysis:** Remote sensing of road networks, market access, and service distribution.
- **Disaster and Vulnerability Mapping:** Historical analysis of flood and drought exposure and their socio-economic impacts.

Stakeholder Consultations and Field Surveys

- **Community and Household Surveys:** Collection of qualitative insights on economic resilience, market challenges, and livelihood adaptations.
- **Policy and Governance Reviews:** Evaluation of past socio-economic policies, poverty alleviation programs, and rural development strategies.

Key Findings and Expected Insights

- Identification of long-term socio-economic trends affecting livelihoods and economic stability in the CMDA area.
- Assessment of the role of natural resources in household income and food security.

- Understanding of past infrastructure developments and their impact on economic opportunities.
- Policy recommendations and Strategic actions derived from previous social protection and rural development initiatives.

This ex-post assessment provides a comprehensive understanding of the socio-economic dynamics of the CMDA area, serving as a foundation for future scenario assessments and policy planning.

Assessment stage 2: Future Scenario Assessment of Socio-Economic Conditions in the CMDA area

This assessment will analyse potential future socio-economic developments in the CMDA area under various environmental, economic, and policy scenarios. By integrating projections of population growth, economic diversification, and climate change impacts, this study provides a basis for policy interventions that enhance regional resilience and sustainable development. The assessment is guided by scenarios developed by the Joint Technical Committee (JTC) to explore socio-economic trajectories under different governance and environmental conditions. Differences in gender and ethnicity-specific variables will be assessed where reliable data are available.

Scenario Development

The JTC will define multiple future socio-economic scenarios to assess possible pathways for development and resilience in the CMDA area. Key scenarios include:

- **Baseline Scenario:** Assumes continuity of current socio-economic trends without major policy shifts or environmental disruptions.
- **Economic Growth and Diversification Scenario:** Models the expansion of non-agricultural sectors, increased industrialization, and regional trade liberalization.
- **Climate and Disaster Vulnerability Scenario:** Evaluates socio-economic risks under increased frequency and severity of floods, droughts, and extreme weather events.
- **Sustainable Development Scenario:** Examines the effects of policies promoting equitable growth, poverty reduction, and sustainable resource management.

Each scenario will be analysed to understand its potential socio-economic implications.

Key Indicators and Data Sources

The scenario assessment will rely on a range of indicators and data sources to evaluate future socio-economic trends.

Economic and Livelihood Indicators

- **Future Income Distribution:** Projected changes in income inequality, poverty levels, and sectoral earnings.
- **Employment and Labour Market Trends:** Predicted shifts in labour force participation across agriculture, fisheries, industry, and services.

- **Market Access and Trade Projections:** Future developments in local and international trade affecting food security and economic stability.

Demographic and Social Indicators

- **Population Growth and Urbanization Rates:** Forecasted demographic changes influencing migration and resource distribution.
- **Education and Workforce Skills:** Projections of literacy, vocational training, and higher education access.
- **Health and Nutrition Outcomes:** Predicted trends in public health investments, food security, and malnutrition rates.

Environmental and Resource Dependency Indicators

- **Reliance on Natural Resources for Livelihoods:** Projected economic impacts of groundwater depletion and land degradation.
- **Infrastructure and Service Development:** Expected expansion of transportation, energy, and digital infrastructure.
- **Disaster Vulnerability and Resilience:** Future exposure to climate-induced socio-economic shocks and adaptation capacity.

Primary data sources include:

- **Mekong River Commission (MRC):** Socio-economic and environmental projection reports.
- **National Statistical Offices and ILO:** Population and labour force projections.
- **World Bank, UNDP, ADB, and FAO:** Economic growth forecasts and poverty reduction scenarios.
- **Remote Sensing and GIS Data:** Spatial assessments of urban expansion, infrastructure development, and climate vulnerability.
- **IPCC and National Climate Reports:** Future climate change impacts on socio-economic stability.

Methodological Approach

The scenario assessment will utilize integrated modelling approaches and stakeholder consultations.

Economic and Social Modelling

- **Agent-based simulation modelling:** Forecasts of demographic transitions, income and poverty changes based on MERFI's MerSim model.

- **Spatial and GIS-based analysis:** Scenario-based land use projections.
- **Groundwater dependency assessments:** Predictive mapping of groundwater-related socio-economic vulnerabilities.

Expected Outcomes

- Identification of socio-economic vulnerabilities and opportunities under different future scenarios.
- Policy recommendations and strategic actions for promoting inclusive economic growth and resilience to environmental shocks.
- Development of adaptive governance strategies for sustainable livelihoods and resource management.
- Strengthened capacity for long-term socio-economic planning in the CMDA area.

This future scenario assessment provides critical insights into potential development pathways for the CMDA area, supporting evidence-based policymaking and regional sustainability strategies.

Assessment stage 3: Integrated Assessment

The third assessment stage will be guided by MERFI and will entail two key steps. First, a workshop-based process will be conducted to connect the disciplinary assessments of the TDA. Each discipline will review and discuss the implications of assessment results provided by the other disciplinary teams and revise the assessment from stage 2 accordingly. This approach will ensure that cross-disciplinary implications are being considered. This approach will help mitigate a range of methodological limitations.

In addition, MERFI's integrated assessment model MerSim will be used to analyse cross-sector implications. These complex system effects will further advance the disciplinary integration towards a transdisciplinary assessment, as requested by the GEF IW team.