

TERMS OF REFERENCE – BASELINE SURVEY

A. Objective

1. This Terms of Reference (ToR) is for a consulting firm to design and support the implementation of a baseline survey for the Smallholder Resilient Economic Development Sector Project (SREDSP).

B. Background

2. The Smallholder Resilient Economic Sector Development Project (SREDSP) will improve the income, nutrition, and resilience of smallholder farmers, with a dedicated focus on women's empowerment, building on the lessons learned from past ADB projects. The project will target seven provinces that are vulnerable to climate hazards including heatwaves, droughts, and flooding and where poverty incidence remains high: Pursat, Battambang, Banteay Meanchey, Siem Reap, Kampong Thom, Kampong Cham and Prey Veng.

3. The project is aligned with the following impact: rural economy expanded and made resilient. Its outcome is income, nutrition, and resilience of smallholders improved in target provinces with enhanced women's empowerment. The project implementation period is six years.

4. The proposed project has the following outputs:

5. **Output 1: Inclusive technical services and green investment rolled out.** This output will provide technical support to smallholders and communities to adopt sustainable and climate-resilient practices for crops (such as cashew, cassava, and rice), horticulture, poultry, insect farming, and aquaculture. Advisory services and on-farm demonstrations will support smallholders and communities in upgrading their skills, productivity, climate resilience, and capacities to transition to more commercial agriculture. Smallholders will receive support through green grants to invest in innovations allowing them to strengthen their resilience to climate change impacts, improve their margins, reduce dependence on imported fossil fuels and fertilizers, stabilize their energy costs, and cushion them from global price shocks. Government extension teams, professional associations through peer-to-peer learning, and private sector organizations will provide such services. Women farmers will have equal access to technical services and green investment opportunities for resilient agriculture.

6. **Output 2: Small-scale climate-resilient infrastructure developed.** This output will increase agricultural productivity, improve market access, strengthen local food systems, and reduce vulnerability to external shocks. The project will finance construction, and rehabilitation of small-scale irrigation infrastructure, integrating nature-based solutions where feasible. It will support the construction and rehabilitation of rural access roads that connect farmers to markets, with road designs incorporating women's safety and accessibility considerations to promote equitable access to economic opportunities. Subprojects will be selected during implementation through a participatory approach involving smallholders, community leaders, and local stakeholders, based on transparent selection criteria. Women and men will participate equally in decision-making, ensuring that women's perspectives and specific mobility, safety, and productivity needs are fully considered. Priority will be given to investments that enhance connectivity between smallholder farmers and irrigation schemes, road networks, and markets.

7. **Output 3: Gender-responsive community resilience and sustainable, healthy diets promoted.** This output will strengthen the long-term climate and disaster resilience of women,

poor communities, and climate-vulnerable communities, while also enhancing their long-term economic security. Disaster risk reduction (DRR) activities will strengthen sub-national systems and processes for inclusive and gender-responsive risk reduction and climate change adaptation. They will promote risk-informed and gender-responsive planning in local decision-making; build institutional and community capacity; and improve early warning, preparedness, and response systems. Activities will strengthen the use of multi-hazard risk information, improve coordination, and invest in last-mile communication and modernized DRR infrastructure. This integrated approach will help vulnerable communities better understand climate and disaster risks, make informed livelihood decisions, protect their assets, and recover from climate shocks. Communities will identify and prioritize activities through participatory approaches during implementation. In selected communes, this output will support dietary education and promote the production and consumption of nutritious foods, particularly by women. Through a social and behavior change approach, it will encourage healthier and more sustainable diets, help mitigate the impacts of rising food prices, and improve household resilience.

8. **Output 4: Women's empowerment across agricultural value chains enhanced.** This output will explicitly promote women's empowerment and resilience by resolving inequalities in agriculture and food systems. It will support women's economic empowerment through financial inclusion and literacy programs, digital financial skills training, expanded pre-school and childcare facilities to reduce unpaid care burdens and improve women's economic participation, and access to sustainable agribusiness opportunities. These measures will help strengthen women's resilience to extreme heat. The output will support agribusinesses led by women through the Women in Agribusiness Accelerator Program, helping them develop and implement climate-resilient business development plans. It will provide start-up financing through group revolving funds managed by livelihood improvement groups (LIGs), with a focus on businesses and groups led by women, and the poorest households.

9. The National Committee for Sub-national Democratic Development Secretariat (NCDDS) will execute the project and will also be the implementing agency.

10. As part of the project implementation activities, it is important that a baseline survey should be conducted. This baseline survey will be designed to provide a measure of the current status of beneficiary households in the areas related to socio-economic situation, food security and nutrition, climate and disaster resilience, and women's empowerment.

C. Objective

11. The objective of the consultancy is to design the tools for and guide the collection and analysis of the baseline household data which will be used to measure the overall project impact through regular monitoring and evaluation (M&E) activities during the implementation period. The survey must be designed with reference to the SREDSP design and monitoring framework.

12. Key specific tasks to be performed by the consultant are as follows:

- 1) Prepare inception report.
- 2) Develop the baseline survey household questionnaire and pilot test the survey instrument.
- 3) Develop the survey sample design and sampling method.
- 4) Train field staff who will be deployed as Field Supervisors and Survey Enumerators.
- 5) Identify and locate households to be interviewed following the sample design and sampling method.
- 6) Undertake the collection of the baseline data from households in the target areas.

- 7) Conduct analysis of data and present the major findings in terms of descriptive statistics in a final report.
 - 8) Conduct data coding and cleaning.
 - 9) Prepare progress reports and a final report.
13. It is anticipated that each survey will take approximately a maximum of 1.5 hours per household.

D. Staffing

14. The consultant will be required to provide at least the following staff:

No.	Position	No. of positions	Person-month
1	Team Leader/Senior Social Science Expert	1	3
2	Deputy Team Leader/Social Science Expert	1	5
3	Database Manager/Statistician	1	3
4	Qualitative Researcher	1	2
5	Survey Manager	1	3
6	Field Supervisor (3 person-months each)	4	12
7	Field Enumerators (2 person-months each)	24	48
	Total person-months		76

E. Responsibilities of consultant

15. The primary responsibility of the consultant will be to work with the project team and NCDDDS during the design of the survey, the supervision of data collection for the household surveys and the analysis of the datasets. The expected tasks for the consultant will be performed in accordance with a mutually agreed schedule.

Survey Questionnaire

16. The tasks of the consultant will be as follows:

- Developing, finalizing and translating (into Khmer) the household survey questionnaire;
- Pilot testing of survey questionnaire in one commune per province;
- Finalizing of survey questionnaires; and
- Development of survey template in digital platform (e.g. KoboToolbox or other agreed platforms)

17. The survey questionnaire should cover at least the following themes:

The baseline survey questionnaire should cover, at minimum, the following themes:

1. **General household information:** Basic information on household composition, age, sex, education, literacy, dependency ratio, migration status, disability status where relevant, and main occupation of household members. The questionnaire should also record proximity and travel time to roads, markets, schools, health facilities, irrigation schemes, extension services, and other key services. It should identify whether household members belong to farmer groups, agricultural cooperatives, Livelihood Improvement Groups (LIGs), water user groups, savings groups, or other community organizations, including duration and level of participation.

2. **Household socio-economic status and assets:** Information on housing type, landholdings, land tenure status, productive assets, household assets, livestock assets, farm equipment, transport assets, and access to digital devices. The survey should also record household income sources, approximate income levels, major expenditure categories, debt status, savings, and poverty/vulnerability status, including ID Poor classification where applicable.
3. **Irrigation facilities and water access:** Information on the area of land served by irrigation, reliability and seasonality of water supply, dry-season water availability, irrigation charges, water source, distance to irrigation infrastructure, membership of water user groups, and household use of irrigation. The survey should also assess constraints to irrigation access, including affordability, timing, water distribution, maintenance, governance, and whether women and poorer households have equitable access to irrigation benefits. The survey should also assess the impacts of natural hazards (e.g floods and drought) on irrigation and water access, including any observed changes over time (longer term trends), and the coping mechanisms or adaptive actions applied in response.
4. **Rural roads and market access:** Information on the condition of roads used by the household to access farms, markets, schools, health services, input suppliers, and other facilities. The questionnaire should assess whether roads are passable year-round, seasonal access constraints, travel time, transport cost, road safety concerns, flood-related disruptions and their impacts on livelihoods, and the importance of road access for agricultural marketing and household livelihoods.
5. **Disaster susceptibility and climate risk:** Frequency, timing, and severity of recent climate-related and natural disaster events affecting the household, including drought, flood, heat stress, storms, pests, disease outbreaks, and water shortages. The survey should capture impacts on crops, livestock, aquaculture, market access and income, food security, assets, debt, and coping strategies. It should also identify household adaptation measures already used and perceived priority needs for improving climate and disaster resilience.
6. **Disaster risk management:** Household access to and use of multi-hazard risk information and early warning systems, including sources, timeliness, accessibility, and understanding of warnings. The survey should assess household preparedness and response capacity, knowledge of evacuation procedures and safe locations, participation and influence in community DRR and preparedness activities, and access to relevant DRR infrastructure and services. It should also capture participation and perceived influence in local risk-informed planning and decision-making, particularly among women and vulnerable groups, and perceived gaps in preparedness, coordination, last-mile communication, and response systems. The survey should establish baseline information on household access to climate-risk information and early warning systems, including current coverage, accessibility, and utilization, to support monitoring of project-supported DRM and early warning interventions.

7. **Livelihood Improvement Groups and community institutions:** Current status of LIGs in sampled villages, including number of groups, membership, women's participation and influence in decision-making, group governance, savings and lending activities, livelihood activities supported, and linkages with FLIA, Commune Councils, CAETs, service providers, and financial institutions. Where LIGs already exist, the survey should assess perceived changes in livelihoods, income, savings, borrowing, resilience, and poverty status, including any reduction in ID Poor households compared with the situation at group formation.
8. **Agricultural production systems:** Current cropping patterns, planted area, irrigated and rainfed production, yields, production volumes, quantities sold, quantities retained for household consumption, post-harvest losses, and production costs. Crop data should be disaggregated by season and production system. The survey should collect information on seed, fertilizer, pesticide, labour, machinery, water use, pest and disease management, adoption of improved or climate-resilient technologies, and use of agroecological or nature-positive practices. Agricultural production should also cover livestock, poultry, aquaculture, agroforestry, and other livelihood activities, including marketable surplus and production constraints. The survey design should enable measurement of the adoption of sustainable and climate-resilient production techniques among project beneficiaries to support monitoring of outcome indicators in the DMF.
9. **Agricultural marketing and value chains:** Information on how households sell agricultural products, including main buyers, market locations, farm-gate prices, transport arrangements, storage, grading, processing, collective marketing, contract farming, access to market information, and bargaining constraints. The survey should collect information about how climate-linked shocks and stresses affect these. The survey should also collect information on relevant agribusiness enterprises, traders, processors, input suppliers, and service providers operating in the target areas, based on consultation with district extension staff and available district-level agribusiness enterprise surveys.
10. **Off-farm and non-farm livelihood activities:** Income-generating activities undertaken by household members outside crop, livestock, and aquaculture production, including wage labour, migration, food processing, weaving, handicrafts, input production, petty trade, transport services, household-based enterprises, and other rural businesses. The survey should identify the contribution of these activities to total household income, seasonal patterns, gender roles, coping in response to disasters, and opportunities for livelihood diversification.
11. **Extension services and technical support:** Access to, use of, and satisfaction with public, private, NGO, cooperative, and project-supported extension services. The questionnaire should assess the type, frequency, relevance, quality, and usefulness of advisory services received, including training, demonstrations, farmer field schools,

climate information, pest management advice, business planning, and market linkage support. It should also assess the reach and perceived impact of the CMA program and the number and profile of farmers who have benefited.

12. **Access to finance and green investment:** Household access to savings, credit, microfinance, agricultural loans, grants, insurance, and informal finance. The survey should collect information on loan sources, loan amounts, interest rates, repayment periods, purposes of borrowing, repayment challenges, collateral requirements, and barriers to formal finance. It should also assess the impacts of climate related shocks on access to and management of finance and financial services as well as demand for green and climate-resilient investments, such as solar pumps, drip irrigation, cold storage, improved livestock housing, post-harvest equipment, and other technologies relevant to SREDSP support. The survey should establish baseline information on household savings behavior, participation in savings groups and LIGs, financial literacy, and barriers to accessing formal financial services.
13. **Nutrition, food security, and household consumption:** Household food security status, dietary diversity, food shortages, seasonal hunger periods, sources of food, reliance on own production, market purchases, and coping strategies during food stress. The survey should collect information on household consumption of key food groups, nutrition knowledge, child and maternal nutrition practices where relevant, and links between agricultural production, income, and improved household diets.
14. **Digital access and information systems** – Access to mobile phones, smartphones, internet, digital payment services, agricultural information platforms, climate information, and digital financial services. This should include the digital literacy of household members, use of mobile banking or e-wallets, access to online market or weather information, and readiness to participate in any project-supported digital platform for LIG financial management, financial literacy, or linkage to financial institutions. The survey should also establish a baseline on the use of digital financial services, digital record keeping, and willingness of households and LIG members to participate in project-supported digital platforms.
15. **Gender equality and social inclusion:** Sex-disaggregated data should be integrated across all survey themes. The questionnaire should assess women's and men's roles in production, marketing, financial management, household decision-making, group participation and influence, access to extension, access to finance, ownership or control of assets, time use, mobility, and leadership. It should also identify constraints faced by women, youth, poor households, persons with disabilities, and other vulnerable groups in accessing project benefits.
16. **Project awareness, expectations, and priority needs:** Awareness of SREDSP (and maybe also former TSSD-AF) or related commune-level development activities,

perceived household and community priorities, willingness to participate in project-supported activities, and priority needs for technical support, infrastructure, finance, market linkage, climate resilience, gender support, and nutrition-related interventions. This will help ensure that the baseline captures demand-side expectations before major project activities commence.

Field Enumerator and Field Supervisor Training

18. The consultant will be responsible for the preparation, organization and implementation of enumerator training activities. The specific tasks of the consultant will be as follows:

- Preparation of training materials and detailed Field Enumerator Manual (and Field Supervisor Manual if necessary).
- Training of Field Enumerators and Field Supervisors, who are recruited by the consultant, in the use of the questionnaire.

19. The consultant will conduct 1 - 2 weeks of training for the household interviews after the preparation of the detailed training manuals for the survey field teams in Khmer. The pilot testing of the survey questionnaire should be done using 20 households selected from one village in one commune in each province. This will also be used as a training exercise and will be an integral part of the training of the survey enumerators and field supervisors. After pilot testing of the survey questionnaire, the consultant will debrief with the field enumerators and field supervisors and submit the pilot result to NCDDDS and the project team if any proposals for change in order to improve the survey questionnaire.

Sample Selection

20. The design of a robust sampling frame will be the responsibility of the consultant, and the proposed sampling design will be subject to the approval of the project team and NCDDDS before the commencement of any field work. The sampling frame for the beneficiary households should be designed to provide population estimates at district level with at least a 90 per cent probability of a confidence limit of ± 10 per cent and aim for an overall design effect of between 1.5 to 2 within both the target domain (TD) and control domain (CD). On this basis the average population of the targeted households per district should be calculated as well as the number of villages and communes to be sampled.

21. The sample households for the TD and CD must be randomly selected from the commune lists of project beneficiaries by ensuring comparable characteristics between TD and CD. The consultant will be required to determine the need for weights and powers to improve the precision of the sample estimates and provide recommendations to the project team and NCDDDS on their use.

22. The project plans to conduct a difference-in-difference analysis to filter the net effect of the project interventions. In this regard, the baseline survey design needs to incorporate factors that enable a repeat survey in the midterm and end-line periods. A statistical method may be needed to ensure comparable characteristics between TD and CD. The consultant shall develop a household tracking strategy, including unique household identifiers, protocols for tracking migrant and split households, procedures for managing panel attrition, and rules for replacement households where required. The strategy shall support the repeat identification and survey of the same households during the midterm and end-line surveys to ensure the robustness of the difference-in-difference analysis and longitudinal assessment of project impacts.

Data Collection

23. The consultant will be fully responsible for all data collection during the conduct of the household surveys. The specific tasks of the consultant will be as follows:

- Mobilization of the field enumerators and field supervisors to the selected target and non-target communes for the data collection.
- Organization of orientation meetings with commune councils and village leaders to introduce the field workers and to explain the purpose of the household data collection.
- Completion of household interviews in a timely manner.

Data Quality Control and Cleaning

24. The consultant will be fully responsible for data quality control and cleaning of all data collected from the household surveys. The specific tasks will be as follows:

- Development of an error checking system for data quality control based upon acceptable ranges for each parameter to minimize encoding errors;
- Verification and correction of errors detected through the assistance of the Field Supervisors/Enumerators;
- A back-check of 10% of interview questionnaire will be required to validate the data quality;
- Summaries of the baseline data will be prepared using a format for the tabulations, which is agreed to by the project team and NCDDS.

25. The final data sets must be compiled, and consistency checks performed to the approval of the project team and NCDDS. Data must be submitted in STATA, SPSS or SAS formats.

Data Analysis and Reporting

26. The consultant will be responsible for the analysis of the baseline survey data and the preparation of full report for submission to the project team and NCDDS. The specific tasks will be as follows:

- Development of structure for the final report of the studies in collaboration with NCDDS.
- Data analysis using an agreed social science software package, e.g. STATA or other agreed software.
- Presentation of the main conclusions in draft Final Report following agreed format.
- Incorporate changes/supplementary analyses following comments on draft Final Report.

27. The consultant will be responsible for preparing the format of the Final Report, based on the objectives of the baseline study, which will be subject to the agreement by the project team and NCDDS, and then used for the final report writing. The consultant will conduct comprehensive analyses of the baseline survey data in order to generate the summary tables to be used in the compilation of the draft Final Report. The consultant will submit the draft Final Report, which should also include the summary of the survey methodology and the survey instruments as annexes within two months of the completion of the fieldwork. The draft Final Report will be reviewed by the NCDDS and the project team, and the consultant should then incorporate changes and conduct extra analysis if required before submitting a final draft.

Equipment and Logistics

28. The specific responsibilities of the consultant will be as follows:

- Design/provision of all computer software used for data entry and for analyses of baseline survey data.
- All transportation and logistical arrangements for the field staff during the conduct of the household interviews within the target and non-target communes (no Project transport will be available for the fieldwork).
- Provision of computer equipment in each province for use by the data encoders.
- Secure storage of all household questionnaires upon completion of the baseline survey in each selected commune.

Provision of computer equipment for the final analysis and summarizing of the baseline survey data in Phnom Penh at the conclusion of the baseline survey.

F. Responsibilities of client (NCDDS)

29. The NCDDS will be responsible for securing the administrative approvals for the survey from the local authorities and will ensure close support to the survey work by the provincial and district authorities.

G. Required Personnel

30. All team members, aside from the Team Leader, must be fluent in Khmer and have some knowledge of English. The other minimum qualifications of the baseline survey team members will be as follows:

- 1) **Team Leader/Senior Social Science:** Advanced degree in Social Science or related fields with specialization in statistics. At least ten years of relevant experience in the management of large-scale quantitative rural surveys, experience in household and agricultural data collection, analysis, and demonstrated ability to coordinate teams and ensure timely reporting. Previous experience of working in Cambodia in rural areas. Excellent report writing skills in English and with knowledge of Khmer.
- 2) **Deputy Team Leader/Social Science:** Advanced degree in Statistics, Econometrics or related field with strong background in rural survey methodologies. At least five years of experience in the design of samples for household surveys required in Cambodia. Good reporting skills in English and fluency in Khmer required.
- 3) **Database Manager/Statistician:** Advanced degree in Statistics or related fields with strong background in the collection and analysis of agricultural survey data. At least five years of experience in designing household and agricultural surveys required. Preferably, with experience in multi-topic surveys in Cambodia. Good report writing skills in English and basic knowledge of Khmer. Knowledge of KoboToolBox, STATA is a plus.
- 4) **Qualitative Researcher:** Advanced degree in Social Science or related fields with strong background in conducting qualitative data collection and analysis, e.g. key informant interviews, focus group discussions. At least five years of experience in research field. Good report writing skills in English and basic knowledge of Khmer.
- 5) **Survey Manager:** Bachelor degree in Social Science or related fields with at least five years of managing field teams of large-scale surveys.

- 6) **Field Supervisors (4):** Degree in an agricultural science or in related fields with post-graduate training in statistics or related field. Experience with supervision of rural survey implementation in remote areas in Cambodia. Good level of English language skills and fluency in written and spoken Khmer.
- 7) **Field Enumerators (24):** High School Certificate and experience in the conduct of collection of data at household level through the use of interviews. Demonstrated experience of working independently in remote rural areas. Fluency in written and spoken Khmer.

H. Required Qualifications

31. The selected consulting firm must have the following qualifications:

- Having least seven years of experience in conducting surveys and demonstrated track record in the organization of large-scale household surveys in remote rural areas in Cambodia;
- In-house technical capacity and experience for planning and organizing household survey and in data management and statistical analysis;
- Experience in at least two of the following social science software programs: KoboToolBox, STATA, or other analytical software.

I. Proposed Sample Size

32. The following sampling has been proposed. The consulting firm may provide feedback or adjust the sampling in the technical proposal. The primary sampling unit is at commune level, with an indicating sample size of 50 households per commune for both TD and CD, taking into consideration of the attrition rate at the end-line period.

No.	Location	Survey household (TD)	Survey household (CD)	Key informant interview	Focus group discussion
1	Pursat	200	200	4	2
2	Battambang	200	200	4	2
3	Banteay Meanchey	200	200	4	2
4	Siem Reap	200	200	4	2
5	Kampong Thom	200	200	4	2
6	Kampong Cham	200	200	4	2
7	Prey Veng	200	200	4	2
	Total	1,400	1,400	28	14

J. Key Milestones and Deliverables

33. The consultant will be required to achieve the following deliverables and with approval from NCDD and the project team:

No.	Deliverable	Timing
1	Inception Report (including survey methodology and data collection tools)	Week 3
2	Training Manuals for Field Supervisors and Field Enumerators	Week 5
3	Training Report (including final version of data collection tools) and Field Schedule	Week 7

4	Field Progress Report (as of 50% of household interviews)	Week 10
5	Back-check Report and Raw Data Set (in STATA and Microsoft Excel for survey data set, and in Microsoft Excel and Word for qualitative data)	Week 14
6	Presentation of Preliminary Result (PowerPoint slide) and Clean Data Set (in STATA and Microsoft Excel for survey data set, and in Microsoft Excel and Word for qualitative data)	Week 16
7	Draft Report of the Baseline Survey	Week 18
8	Final Deliverables (including the Final Report of the Baseline Survey, data collection instrument, data sets and codebook, and other related documents)	Week 20

K. Payment Schedule

34. The payment will be made in four periods corresponding to the deliverable submission and approvals from the project team and NCDDS as follows:

No.	Payment Stage	Amount (%)
1	Mobilization + Inception Report (Deliverable 1)	10
2	Training Manuals + Training Report + Field Schedule (Deliverables 2-4)	20
3	Data Collection + Clean Dataset + Preliminary Results (Deliverables 5-6)	30
4	Draft Report (Deliverables 7)	20
5	Final Report + Final Deliverables (Deliverable 8)	20

L. Budget Estimate

35. The budget estimate for this activity is US\$247,130, excluding taxes which are subject to exemptions under the project. Key itemized budgeting has been presented as follows:

Table 1. Remuneration

No.	Position	Person-month	US\$/day (22 d/m)	Amount (pm)	Amount (US\$)
Key Staffs					
1	Team Leader/Senior Social Science Expert	3	400	8,800	26,400
2	Deputy Team Leader/Social Science Expert	5	300	6,600	33,000
3	Database Manager/Statistician	3	250	5,500	16,500
4	Qualitative Researcher	2	200	4,400	8,800
5	Survey Manager	3	180	3,960	11,880
Non key staffs					

6	Field Supervisor (4 people 3 person months each)	12	80	1,760	21,120
7	Field Enumerators (24 people, 2 person months each)	48	80	1,760	84,480
	Sub Total	76			202,180

Table 2. Field cost

No.	Item	Day	US\$/day (22 d/m)	Amount (US\$)
1	DSA for key staff	250	39	9,750
2	DSA for non-key staff	1,080	20	21,600
3	Report production and Stationary	4	150	600
4	Provisional Sum and other logistics (communication, insurance, miscellaneous)	sum	13,000	13,000
5	Contingency			-
	Sub Total			44,950
TOTAL				247,130