

Terms of Reference

Survey Implementation service provider – Feasibility Study on Rice Residue Aggregation and Supply for Sustainable Aviation Fuel (SAF) in Vietnam

1. Background

About SNV

SNV is a global development partner, deeply rooted in the countries where we operate. We are driven by a vision of a better world: A world where across every society all people live with dignity and have equitable opportunities to thrive sustainably.

To make this vision a reality, we need transformations in vital agri-food, energy, and water systems. SNV contributes by strengthening capacities and catalysing partnerships in these sectors. We help strengthen institutions and effective governance, reduce gender inequalities and barriers to social inclusion, and enable adaptation and mitigation to the climate and biodiversity crises.

Building on 60 years of experience, we support our partners with our technical and process expertise and methodological rigor. We do this in more than 20 countries in Africa and Asia with a team of approximately 1,600 colleagues. By being adaptable and tailoring our approaches to these different contexts, we can contribute to impact at scale, resulting in more equitable lives for all.

SNV has been working in Vietnam since 1995 and currently has over 70 national and international experts. SNV Vietnam implements projects in more than 30 provinces across the country, including the poorest and most remote areas.

About the Study

The aviation sector faces an acute decarbonisation challenge. Sustainable Aviation Fuel (SAF) is widely recognised as the most viable near-term pathway to reducing aviation emissions at scale, yet its global scale-up is constrained by the availability of reliable, cost-competitive, and sustainably sourced feedstocks. Rice residue (straw and husks left after harvest) produced in vast quantities across the Mekong Delta of Vietnam represents one of the most promising and underexplored feedstock opportunities in Southeast Asia.

SNV Vietnam is undertaking a Comprehensive Rice-to-SAF Value Chain Feasibility Study to assess the technical, economic, environmental, and operational feasibility of mobilising rice residues at scale in Vietnam for use as SAF feedstock. The study covers 3–4 Mekong Delta provinces (including An Giang, Đồng Tháp, Cần Thơ, and Tây Ninh – former province of Long An) and addresses five core research questions:

- RQ1: Current Use & Value Mapping – how rice straw and husks are currently used and the financial/agronomic incentives required to redirect them into the SAF supply chain.
- RQ2: Aggregation Bottleneck Assessment – localised logistical, financial, and infrastructure constraints to large-scale residue extraction.
- RQ3: Pricing & High-Integrity Benchmarks – delivered price ranges along the supply chain, benchmarked against ICAO/CORSIA standards.
- RQ4: Environmental Risk Analysis – soil health, safe extraction thresholds, and GHG modelling vs. the open-burning baseline (ICAO/CORSIA aligned).
- RQ5: Offtake Feasibility & Supply Modelling – Monte Carlo simulations of supply reliability,

regulatory framework review, and contract precedent analysis.

The study will draw on a substantial body of existing data and evidence alongside additional primary data collection determined necessary during the study design phase. Final outputs include a comprehensive study report, executive summary, statistical analyses, data visualisations, and Advisory Group outputs, delivered by March 2027.

SNV Vietnam is now seeking a survey implementation firm/ company to serve as the service provider to conduct 900 farmer interviews in the former Soc Trang, Hau Giang, and Long An provinces, plus 80–120 key informant interviews (KIIs) with rice-straw supply-chain actors and relevant experts across An Giang, Dong Thap, Can Tho and Tay Ninh. The selected survey implementation company will be responsible for high-quality, ethical, and timely implementation of the farmer survey and KIIs, using survey instruments and technical guidance provided or approved by the Study Team.

2. Objectives and Scope of Work

The objective of this assignment is to collect complete, accurate, consistent, and securely managed primary data from:

1. **900 rice-farming respondents** in the former Soc Trang, Hau Giang, and Long An provinces; and
2. **80–120 key informants** involved in the rice-straw supply chain in An Giang, Dong Thap, Can Tho, and Tay Ninh (former Long An province) with the possibility to extend to other provinces in the Mekong Delta if not enough respondents can be located in the aforementioned regions – mainly straw balers/aggregators, straw buyers, storage facilities, cooperatives, drying/processing facilities, biorefineries, and related technical, institutional, or market functions.

The data will support the study's assessment of:

- Rice production and seasonal crop-management practices.
- Post-harvest rice-straw management, including burning, incorporation, removal, sale, and other uses.
- Farm-level conditions affecting potential straw collection, including field access, harvest practices, stubble height, crop turnaround time, water management, and availability of baling services.
- Straw collection, baling, aggregation, transport, storage, preprocessing, commercial arrangements, equipment capacity, cost components, and constraints.
- Existing markets and competing uses for rice straw.
- Operational conditions that influence the suitability and reliability of straw supply for potential SAF development.

The assignment requires a survey company with demonstrated capacity to implement digitally enabled agricultural field surveys in the Mekong Delta, manage probabilistic sampling, recruit and supervise trained enumerators, conduct structured KIIs with business and institutional respondents, and deliver auditable datasets with robust quality assurance.

See Annex A for more details on the individual tasks.

3. Deliverables

The selected survey implementation company shall undertake all tasks required for successful field implementation, including mobilization, field preparation, sample selection, enumerator training, piloting, data collection, quality assurance, cleaning, documentation, and transfer of final datasets.

Structured survey with 900 rice farmers:

The farmer survey will collect information on rice production, field characteristics, management practices, straw handling, collection constraints, and relevant farm-level economics. The questionnaire will be provided by the Study Team and may be refined collaboratively during the inception and piloting stages. The anticipated farmer questionnaire will include, at minimum:

- Province, commune, village and, if possible, GIS location.
- Age, gender and other demographic info.
- Farm area size, parcel characteristics, production system, and number of rice seasons cultivated.
- Rice yield, variety, crop calendar, pre-planting flooding period and timing/amount of residue incorporation, planting and harvest dates, and harvest method incl. approximate stubble height.
- In-season water management, irrigation, field drainage, and seasonal flooding conditions where relevant.
- Fertilizer, organic amendment, residue, manure, and compost application practices.
- Seasonal straw and stubble-management practices, including percentages burned, incorporated, removed, sold, used, or otherwise managed.
- Timing between harvest and the next planting season.
- Straw-removal experience, frequency, quantities where known, bale size, and prices received.
- Access to, experience with, and perceived reliability of baling and collection services.
- Constraints to straw removal, including field wetness, rainfall, machinery access, land size and shape, road/canal access, timing, labor, cost, and service availability.
- Other locally relevant uses of rice straw, including animal feed, mushroom production, composting, mulching, packing material, or other uses.

Key Informant Interviews:

- The contractor shall conduct **80–120 structured KIIs** with rice-straw supply-chain actors and relevant local experts across An Giang, Dong Thap, Can Tho, and Tany Ninh – former province of Long An (with a possibility of extension to other provinces depending on availability of respondents).
- The contractor should plan for a purposive and diversified sample. Because some balers, collectors, and small operators may be informal or unregistered, the contractor must use multiple local identification channels rather than rely solely on formal business registries. These channels may include agricultural authorities, local government offices, cooperatives, farmer organizations, machinery-service networks, existing project contacts, storage operators, rice mills, buyers, and snowball referrals.

The KII survey instrument will collect structured qualitative and quantitative information on:

- Type, ownership, age, capacity, condition, and expected operating life of machinery and vehicles.
- Baler, loader, transport, storage, drying, shredding, pelletizing, and other equipment characteristics.
- Service area, number of customers/farmers served, seasonal operating period, and approximate annual or seasonal volumes handled vs. maximum capacity.

- Field, road, waterway, access, and weather conditions affecting service delivery.
- Straw collection, baling, loading, storage, transport, and preprocessing practices.
- Costs and revenues, including equipment purchase, maintenance, repair, fuel, twine, labor, loading, rental, storage, transport, and other relevant cost components.
- Service fees, farm-gate bale prices, purchase prices, sale prices, and price variation by season, quality, location, or delivery conditions.
- Bale mass, straw moisture% by season, yield per hectare, collection efficiency, losses, rejected material, and quality assessments.
- Current customers, end uses, competing straw markets, supply shortages, seasonal constraints, and willingness to expand.
- Storage availability and capacity, rental and operating costs, storage losses, fire and pest risks, and constraints to year-round operations.
- Transport modes, routes, transport distances, unit costs, road/canal conditions, and loading constraints.
- Collection constraints, supply-chain bottlenecks, regulatory issues, financing needs, market risks, coordination needs, and potential requirements for scaling supply.

The final KII sample shall be agreed with the Study Team during inception. The target respondent categories include the following:

KII respondent group	Respondent types	Main information sought
Straw collection and baling providers	Baler owners, machinery-service providers, straw collectors, loading and transport service providers	Equipment, service area, capacity, timing, costs, field conditions, operational constraints
Aggregators and traders	Straw aggregators, brokers, sellers, buyers, local market intermediaries	Volumes, price formation, procurement, market flows, seasonal availability, quality requirements
Cooperatives and farmer organizations	Agricultural cooperatives, farmer groups, local production organizations	Member practices, service arrangements, aggregation potential, institutional constraints
Straw users and buyers	Mushroom producers, livestock-feed users, compost producers, fruit growers using mulch or packing material, other biomass users	Competing demand, volumes, prices, quality preferences, seasonal requirements
Storage and logistics operators	Warehouse owners, storage facilities, boat operators, trucking providers, logistics providers	Storage capacity, storage costs, loss risks, transport routes, infrastructure constraints
Preprocessing and biomass facilities	Drying, chopping, shredding, pelletizing, biomass-energy, and other relevant processing facilities	Existing capacity, feedstock requirements, utilization, costs, infrastructure, willingness or ability to receive straw
Rice mills and related actors	Millers, rice-processing enterprises, husk or straw handlers	Residue handling, market linkages, logistics, potential unutilized residue streams

Technical and local experts	Sub-PPPD officers, district agricultural officers, extension personnel, machinery specialists, other technical experts	Validation of local practices, collection conditions, seasonal constraints, and stakeholder networks
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Table 1: List of deliverables, outputs, and timing expectations

Deliverables	List of outputs per deliverable	Timeline
Fieldwork plan	Methodology review, workplan, sampling-frame approach, farmer and KII recruitment approach, contact and replacement protocols, quality-control plan, data-protection plan	5-7 days after contracting
Sampling and respondent-identification plan	Random-selection method, strata, reserve sample, KII respondent-list development approach, proposed respondent distribution	5-7 days after contracting
Programmed survey instruments	Digitized farmer and KII questionnaires with logic, range checks, metadata, IDs, and user-testing documentation	2 weeks after contracting
Training package	Enumerator manual, interviewer guide, training agenda, training materials, attendance record, competency assessment results	2 weeks after contracting
Clean preliminary datasets	Preliminary cleaned farmer and KII datasets, fieldwork tracker, initial quality-control findings	1 week after completing field work activities
Final datasets and documentation	Clean and raw datasets, codebooks, sample disposition, KII tracker, cleaning log, QC report, final instruments, fieldwork completion report	2 months after contracting

4. Evaluation criteria

Proposals will be evaluated and ranked by SNV in the order in which they represent, at SNV's sole discretion, the best value for SNV. The reviews are a closed process and not open to the public.

Greater weight will be given to the technical services than to price, but price (value for money) remains an important determinant for selection.

The Technical scores will be awarded as follows:

No.	Criteria	Maximum score
	Due Diligence	Pass/Fail
1	Qualification	25
2	Understanding of the Assignment	15
3	Methodology and Work Plan	30
4	Relevant Experience, Network, and Track Record	30
	TOTAL TECHNICAL SCORE	100

**Minimum total technical score: 70*

Technical Scores are weighed at 70%. Financial scores are weighed at 30%.

The Bidder's Financial proposal shall include applicable taxes.

Negotiations with the winning bidder will be restricted to the ToR and work plan.

5. Duration and Payment Schedule

The assignment is expected to be implemented from **October 2026 to December 2026**, over an estimated period of three **(3) months**.

Payments will be made on a delivery basis upon submission and approval of the deliverables, with the first tranche upon delivery of the sampling framework and field work plan, the second tranche after the completion of the data collection, and the final tranche upon delivery of the final outputs.

6. Due Diligence Instructions

Due Diligence (DD) checks apply to all firms engaged by SNV for the provision of consultancy services. Conducting these checks supports SNV in managing donor funds responsibly, ethically, and in full compliance with relevant regulations. To apply, download the Microsoft Word Due Diligence and Vetting Form, click [Due Diligence and Vetting Form](#).

7. Eligibility and Qualifications

This opportunity is open to firms/organizations only. Individual consultants are not eligible to apply.

Firms must demonstrate the organizational, technical, operational, and financial capacity to deliver the assignment to a high standard.

The firm should demonstrate:

- Valid legal registration and authorization to operate in Vietnam, subject to SNV's due diligence and vetting requirements, completed using the file [Due Diligence and Vetting Form](#).
- At least 5 years of relevant organizational experience conducting household, farmer, agricultural, rural-livelihood, agribusiness, environmental, or value-chain surveys in Vietnam.
- Proven organizational experience in digital data collection, using KoboToolbox, ODK, CommCare, or comparable platforms.
- Demonstrated institutional capacity for probability-based household/farmer surveys, including sampling-frame cleaning, random selection, stratification, replacement control, and sample-disposition reporting.
- Demonstrated organizational experience conducting Key Informant Interviews (KIIs) with private-sector, informal-sector, cooperative, government, and technical stakeholders.
- Established field presence, partner networks, or operational capacity in the Mekong Delta, preferably including An Giang, Dong Thap, Can Tho, and Tay Ninh (former Long An province).
- Established systems for field supervision, data quality assurance, respondent safeguarding, data security, and secure handling of personally identifiable information (PII).
- Ability to mobilize an adequate team of qualified enumerators and supervisors within the required timeframe.
- Sufficient financial and operational capacity to implement the assignment without interruption.

- Relevant organizational experience in agricultural value chains, rice production, agricultural machinery, biomass, renewable energy, logistics, storage, or related sectors will be considered an advantage.

8. Submission requirements

Interested consulting firms are requested to submit the following documents via the instruction in this link <https://smrtr.io/BRTz>

Proposals must be submitted in **two separate files**: one file containing the **Technical Proposal** and a separate file containing the **Financial Proposal**.

1. **Technical Proposal:** The Technical Proposal should clearly outline the bidder's proposed approach and methodology for delivering the assignment and should include:
 - The organisation's business licence or appropriate registration;
 - **Company profile**, including CVs of the proposed key team members;
 - A completed Due Diligence document, together with all required supporting documents, please refer to [Due Diligence and Vetting Form](#)
2. **Financial Proposal:** The Financial Proposal must be **fully inclusive of all applicable taxes** and submitted as a separate file. It should include:
 - A **detailed cost breakdown**, clearly linked to the specific deliverables and/or activities;
 - An indication of whether the proposed fees are **open to negotiation**.

Proposals must be submitted by **17:00 hrs on 28 September 2026**.

Annex A

Geographic Coverage

The contractor shall implement fieldwork in the following locations:

Activity	Geographic coverage
Farmer survey	Former Soc Trang (N=300), Hau Giang (N=300), and Long An (N=300) province areas
KIIs	An Giang, Dong Thap, Can Tho, and Tay Ninh (former Long An province only) and potentially extending to other provinces of the Mekong Delta dependent upon ability to find and confirm interviews to reach the target of 80-120 KIIs
Stakeholder identification	Provincial, district, commune, cooperative, service-provider, and local business networks as necessary
Fieldwork planning	Locations selected from validated sampling frames and purposive KII lists, subject to Study Team approval

The exact district, commune, and respondent distribution will be finalized during inception, based on available sampling frames, local accessibility, seasonal considerations, and the need to achieve representative farmer coverage and a diversified KII sample.

Sampling and Recruitment Requirements

Farmer Survey Sampling

Farmers shall be randomly selected from official or locally validated sampling frames, include lists maintained by Provincial or commune agricultural authorities (Sub-PPPD), agricultural extension services, or cooperatives and farmer organizations.

The contractor shall:

- Document the source, coverage, date, and known limitations of each sampling frame.
- Clean and deduplicate sampling lists before selection.
- Define eligibility criteria in consultation with the Study Team.
- Conduct random selection using a documented reproducible method.
- Apply stratification, by relevant factors for straw removal such as distance from main roads or canals, rice-growing season, contracted versus uncontracted farmers, and access conditions.

KII Sampling and Recruitment

KIIs will use purposive sampling because many targeted supply-chain actors, particularly balers and small machinery-service providers, may not be formally registered or visible in commercial databases.

The contractor shall develop a KII respondent-identification and recruitment plan that includes:

- Compilation of preliminary respondent lists by province, commune, actor category, and contact source with the main focus being on straw collection service providers (at least 70% of the respondents).
- Consultation with cooperatives, machinery manufacturers and distributors, agricultural officers, local authorities, farmer organizations, and service-provider networks.
- Identification of both formal and informal straw-market actors.
- Deliberate inclusion of actors representing different scales, operating models, locations, seasons, and straw end uses.

The contractor shall aim for a KII sample that focuses mainly on collection and aggregation with a target of 70% of the sample, then the remaining 30% divided between buyers and alternate users of straw, storage facilities, transporters of straw and baling equipment, preprocessing facilities (e.g., drying, chopping, shredding, pelletizing), and biorefineries (e.g., Vinh Thanh Biomass Power Plant, Hau Giang Biomass Power Plant, Erex Hau Giang Mega-Project, HCG Tra Vinh Biomass Plant).

Responsibilities of the Survey Company

The contractor will be responsible for the following tasks.

Inception and Fieldwork Planning

- Participate in an inception meeting with the Study Team.
- Review the draft farmer and KII questionnaires, sampling design, fieldwork schedule, informed-consent script, quality-control plan, and data-management requirements.
- Submit a detailed fieldwork plan.
- Develop a province- and district-level mobilization plan.
- Develop a contact protocol for sampled farmers and KII respondents.
- In consultation with the Study Team's Project Manager and Research Data Analyst, coordinate required local permissions.

Survey Programming and Piloting

- Program the final questionnaires in a secure digital data-collection platform, such as KoboToolbox, ODK, CommCare, or another platform approved by the Study Team.
- Ensure that the programmed instrument includes skip logic, required fields, validation ranges, consistency checks, automated calculations where appropriate, and unique respondent identifiers.
- Configure the instrument to capture metadata, including interview date, start time, end time, duration, enumerator identifier, and GPS coordinates where appropriate, permissible, and approved.
- Test the programmed questionnaire internally before field deployment.
- Conduct a pilot survey with an adequate number of farmers and KII respondents, to be agreed with the Study Team.

Enumerator Recruitment and Training

The contractor shall recruit a sufficient number of qualified enumerators and supervisors to complete the fieldwork within the agreed schedule without compromising quality.

Enumerators should, at minimum:

- Have demonstrated field-survey experience, preferably in agriculture, rural livelihoods, rice production, machinery services, biomass, or value-chain research.
- Be fluent in Vietnamese and, where needed, capable of communicating effectively in relevant local languages or dialects.
- Have strong interpersonal skills and experience working respectfully with rural households, small businesses, informal operators, and local institutions.
- Be competent in smartphone- or tablet-based data collection.
- Be able to explain informed consent clearly and protect respondent privacy.

The contractor shall provide training covering:

- Study purpose, boundaries, and nature of the research.
- Questionnaire content, definitions, answer options, and examples.
- Rice production, seasonal cropping, harvest, straw-management, and supply-chain terminology used in the instrument.
- Interviewing techniques and neutral probing.
- Informed consent, voluntary participation, confidentiality, and personal-data protection.
- Procedures for interviewing women and men respectfully and avoiding bias.
- Digital data-collection procedures, GPS and timestamp protocols, device use, synchronization, and troubleshooting.
- Quality-control requirements and error correction.
- Procedures for handling missing, inconsistent, implausible, or sensitive responses.
- Safety and conduct expectations during travel and fieldwork.

The Study Team reserves the right to review training materials, attend all or part of the enumerator training, and request corrective or refresher training where necessary.

Fieldwork Implementation

The contractor shall:

- Implement the farmer survey and KIs in accordance with the approved sampling and fieldwork protocols.
- Secure informed consent before beginning each interview.
- Conduct interviews in a manner that is respectful, non-coercive, confidential, and appropriate to the respondent's schedule.
- Use the approved digital questionnaire only.

- Ensure each interview is completed by a trained enumerator or approved KII interviewer.
- Ensure supervisors provide active field support and daily monitoring.
- Maintain a secure contact and sample-management system separately from the analytical dataset.
- Escalate material fieldwork issues promptly to the Study Team.

Supervision and Data Quality Assurance

The contractor shall implement a documented multi-level quality-assurance system. At minimum, this shall include:

- Automated checks within the digital questionnaire.
- Daily review of all submitted records by field supervisors.
- Daily or near-real-time review of data by the contractor's data manager.
- Checks for missing values, out-of-range values, logical inconsistencies, duplicate cases, unusually short or long interview durations, and unusual patterns of enumerator responses.
- Accompanied or spot-check observations of enumerator performance during fieldwork.
- A documented protocol for correcting, flagging, excluding, or replacing records that do not meet agreed quality standards.
- Immediate investigation of suspected fabrication, duplication, systematic bias, or serious protocol deviations.

The Study Team will be independently reviewing incoming data and may request clarification, identify records for re-contact, or require corrective action. Records found to be fabricated, materially incomplete, duplicate, ineligible, or otherwise non-compliant may be rejected and must be replaced at the contractor's expense.

Data Cleaning and Transfer

The contractor shall conduct data cleaning and prepare a final fieldwork dataset suitable for analysis by the Study Team.

The final submission shall include:

- A clean farmer-survey dataset in CSV and XLSX format.
- A clean KII dataset in CSV and XLSX format.
- The raw, unaltered export from the digital data-collection platform.
- A codebook/data dictionary, including variable names, labels, response values, units, skip logic, derivations, and missing-value codes.
- A separate, secure respondent-contact file, if required for validation, to be kept separate from analytical records.
- A cleaning log listing all data edits, corrections, recoding, exclusions, duplicate removals, and unresolved data-quality issues.
- A quality-control report covering validation findings, back-check results, GPS/duration checks where used, protocol deviations, corrective actions, and final data-quality assessment.

- The final programmed survey instruments and associated metadata.
- A brief fieldwork completion report summarizing coverage, respondent recruitment, operational challenges, limitations, and recommendations for interpreting the data.

Study Team Responsibilities

The Study Team will:

- Provide and approve the final farmer and KII questionnaires.
- Provide technical orientation on the study's objectives, terminology, analytical needs, and intended use of the data.
- Review and approve the fieldwork plan, sampling protocol, programmed instruments, pilot findings, and final deliverables.
- Provide available contact points, letters of introduction, and relevant local stakeholder support where feasible.
- Coordinate with relevant local authorities, partner organizations, and technical stakeholders as appropriate.
- Provide timely feedback on survey-programming, pilot, and data-quality issues.
- Conduct or participate in quality assurance, including participation in enumerator training and surveys/KIIs, review of incoming data, and selected back-checks where necessary.
- Retain responsibility for the technical analysis and interpretation of field data after final transfer.