



Terms of Reference (TOR) for Consultancy Services

Title	Solarizing Raitha Samparka Kendras (RSKs) in Karnataka
Location	Karnataka (Tumkur, Shivamogga, Hassan, Raichur, Belagavi, Chikkamagaluru, Uttarakannada, Mysore, Kalaburagi, Ballari, Mandya, Bidar, Kolar, Chikkaballapura, Chitradurga, Vijayapur, Davangere, Koppal, Haveri, Bagalkote Ramanagara, Bengaluru Rural, Kodagu, Chamarajanagara, Yadagir, Dakshina Kannada, Bengaluru Urban, Gadag, Udupi)
Timeline	6 Months
Expected area of expertise	Baseline–Midline studies and research; GIS mapping; public finance and scheme design and unlocking; government stakeholder engagement in Karnataka; Decentralised renewable energy (DRE) / rooftop solar PV engineering; energy audits and load assessment; solarisation of public buildings; agriculture extension systems; Kannada language field capability.
Apply Link	https://forms.gle/nzzJhTzAv35TjuiN7
Last Date for Apply	5th September, 2026 17.00 hrs

About SELCO Foundation:

SELCO Foundation's mission is to create a platform of solutions that uses sustainable energy as a catalyst to bridge environmental sustainability and poverty alleviation. With holistic development as the primary focus, the organization strives to create equitable societies, where services are accessed by all communities. The interventions of SELCO lead to a sustainable delivery model of essential services like livelihoods, education, and health till the last mile. (Read more about SELCO here: <http://www.selcofoundation.org/>)

1. About the Programme

Raitha Samparka Kendras (RSKs) are the frontline farmer-facing institutions of the Department of Agriculture, Government of Karnataka. Established under the Raitha Mitra Yojane, RSKs were set up at the rate of one per hobli — approximately 747 centres across the State — and function as single-window farmer contact centres. They deliver certified seeds and critical inputs, soil and seed testing, agro-advisory and extension services, farm mechanisation support, weather and market information, and act as the delivery counter for a wide range of central and state schemes (PM-KISAN, crop insurance, soil health cards, crop survey, FRUITS/farmer registration, input subsidy and DBT services).

Over the last decade, the service load at RSKs has shifted decisively towards digital and equipment-dependent delivery: online registrations, biometric authentication, printing and scanning, data entry against tight seasonal deadlines, soil-testing instrumentation, and in some locations cold storage for bio-inputs and bio-fertilisers. This shift has made reliable electricity a precondition for service delivery. Many RSKs, however, are located in rural hoblis that experience scheduled load shedding, long unscheduled outages during monsoon and peak agricultural seasons, and poor voltage quality. The consequences are concrete: farmers travel to a centre and are turned away or asked to return; registration deadlines are missed; instruments and computers suffer damage; staff resort to diesel

gensets or personal devices; and thermal discomfort during summer reduces both staff productivity and farmer waiting comfort.

SELCO Foundation works to demonstrate that decentralised renewable energy, when combined with energy-efficient appliances and thoughtful built-environment design, can make essential public services reliable, dignified and climate-resilient — and that these demonstrations can then be institutionalised through government schemes and public budgets. The Foundation has applied this approach at scale in primary healthcare, education and rural livelihoods.

Through this assignment, SELCO Foundation intends to extend this approach to agriculture extension infrastructure in Karnataka. The programme will establish a rigorous evidence base on the energy status of RSKs across the State, design context-appropriate and standardised solarisation packages, demonstrate implementation at a set of representative sites, and — critically — develop a financing and scheme pathway through which the Government of Karnataka can take solarisation of RSKs to scale using public funds. Karnataka's policy environment is favourable: the Karnataka Renewable Energy Policy 2022–27 explicitly promotes rooftop solar on public buildings, and KERC's Distributed Solar PV (DSPV) framework (which from July 2025 replaced the earlier SRTPV regulations) permits rooftop, elevated ground-mounted, façade-integrated, and virtual/group net-metering configurations — options that are directly relevant to the varied building typologies in which RSKs operate.

2. Objective

Overall objective: To enable reliable, affordable and climate-resilient energy access at Raitha Samparka Kendras across Karnataka, so that farmer-facing services are delivered without interruption, and to create a costed, government-ready pathway for state-wide solarisation of RSKs.

Specific objectives:

- Establish a verified, geo-referenced master database of all RSKs in Karnataka, covering ownership and tenure status, building typology, roof and site characteristics, electricity connection details, load profile, appliance inventory and reliability of supply.
- Generate a robust baseline on service delivery, energy cost and energy reliability against which the impact of solarisation can be measured.
- Develop a prioritisation framework and an evidence-based shortlist of RSKs for Phase-1 intervention, along with standardised, replicable design packages for each identified building archetype.
- Demonstrate solarisation at an agreed set of RSKs, with efficient appliances, quality assurance, staff capacity building and a functioning operations-and-maintenance (O&M) arrangement. (Separate Order will be released to EPC Vendor for installation).
- Identify and unlock at least one viable public financing pathway — a scheme, budget line, convergence route or delivery model — through which the Department of Agriculture can fund state-wide scale-up, supported by ready-to-use documentation.
- Measure and document outcomes through midline and end-line assessments, and produce knowledge products that support replication in Karnataka and in other states.
- Ensure that all designs, specifications, costings and tools produced are open-source and usable by the Government of Karnataka without dependence on the consultant.
- Implementation Monitoring and Ensuring Handover and other documents collection for the projects for selected RSK's. Total target of implementation will be 500 Nos.

3. Scope of Work

The scope is organised into eight components. The consultant is expected to propose refinements to this scope in its technical proposal, with justification.

Note on Hardware cost: Unless otherwise stated in the contract, the capital cost of solar hardware, batteries, efficient appliances and civil/structural works for the sites will be procured and financed separately by SELCO Foundation and/or the Department of Agriculture. The consultant's financial proposal should cover advisory, engineering, supervision, research and project-management services, and co-ordination till implementation and handover of the project.

Component 1: Baseline Study and State-wide RSK Enumeration

1.1 Desk study and secondary data review

- Review of Department of Agriculture records (Raitha Mitra portal, Commissionerate and Joint Director offices), district and taluk-level administrative data, and any prior RSK evaluations (including NABARD/PAC studies) to establish the institutional and operational profile of RSKs.
- Review of the applicable policy and regulatory framework: Karnataka Renewable Energy Policy 2022–27, KERC DSPV/net-metering regulations and tariff orders, KREDL procedures, ESCOM interconnection processes, MNRE quality and ALMM requirements, and relevant central schemes.
- Review of public expenditure and scheme documents relevant to RSK infrastructure, maintenance and capital works.

1.2 Enumeration and profiling of all RSKs in Karnataka (Scope item: 'List all RSKs in Karnataka')

The consultant shall compile a complete, verified and geo-referenced master list of every RSK in Karnataka (indicatively 747 centres, one per hobli; the exact universe to be verified with the Department). For each RSK the database shall record, at minimum:

Data domain	Fields to be captured
Identification	RSK name and code; hobli; taluk; district; Agriculture Division; agro-climatic zone; jurisdictional Assistant Director/Joint Director; GPS coordinates; postal address; contact number of officer-in-charge.
Ownership and tenure	Government-owned / rented / leased / shared premises / located within APMC, Gram Panchayat, Taluk Panchayat or other government campus; name of owner; rent payable; lease tenure and expiry; whether written consent for rooftop installation is obtainable; encumbrances.
Building and site	Built-up area; number of floors; year of construction; roof type (RCC / sheet / tiled / asbestos); structural condition and load-bearing assessment (preliminary); usable and shadow-free roof area; roof orientation and obstructions; available ground/open area; compound wall and security; presence of parapet, water tank, overhead lines.
Electricity connection	ESCOM (BESCOM / MESCOM / HESCOM / GESCOM / CESC / Hukkeri RECS); RR number; consumer category and tariff; sanctioned and connected load; 3 months of consumption, billing data, Payment Data; existing metering arrangement; presence of transformer/LT line; approved load, power factor and voltage quality issues.
Reliability of supply	Average hours of supply per day (seasonally disaggregated); frequency and duration of scheduled and unscheduled outages; outage pattern during peak agricultural seasons; existing backup (DG set, inverter, UPS, solar); monthly diesel/backup expenditure.
Appliance and load inventory	Lighting, fans, computers, printers, scanners, biometric devices, projectors, internet/router, CCTV, soil-testing laboratory equipment, weighing scales,

Data domain	Fields to be captured
	refrigeration for bio-inputs/bio-fertilisers, water pump and drinking water systems, seed storage requirements, etc.
Services and demand	Services delivered and their electricity dependency; average and peak-season farmer footfall; number of transactions/registrations; working hours; peak-season working patterns; staff strength and composition.
Water, sanitation and comfort	Water availability, sanitation facilities, indoor thermal comfort, ventilation and daylighting; waiting area for farmers.

1.3 Field baseline survey

- Physical survey of a statistically defensible, purposively stratified sample of RSKs — indicatively not fewer than 75 centres (approximately 10%) — stratified across all four Agriculture Divisions, all agro-climatic zones, and by ownership type, building typology and supply-reliability class. The consultant shall propose and justify the sample design in the inception report.
- Primary data collection from RSK staff, Agriculture Officers/Assistant Agriculture Officers, and farmers (including women farmers, small and marginal farmers, and farmers from SC/ST households), using structured and semi-structured tools.
- Establishment of baseline values for the indicator set agreed at inception. Indicative indicators: hours of reliable supply; service downtime attributable to power failure; number of farmers turned away or asked to return; average service turnaround and waiting time; monthly energy and backup-fuel expenditure; equipment damage and repair incidence; staff-reported productivity and comfort; and estimated baseline GHG emissions.
- Digitisation of all data into a GIS-enabled, filterable database and dashboard, handed over in open, non-proprietary formats (CSV/GeoJSON/shapfile) together with the underlying data dictionary.
- Compliance with informed consent, data minimisation and the Digital Personal Data Protection Act, 2023 in all primary data collection.

Component 2: Identification and Prioritisation of RSKs

- Develop, in consultation with SELCO Foundation and the Department of Agriculture, a transparent multi-criteria prioritisation framework. Indicative criteria: severity of the reliability deficit; criticality and volume of services delivered; farmer footfall (with weighting for women and small/marginal farmers); technical feasibility (roof area, structural condition, shading); tenure security and ease of obtaining consent; agro-climatic and climate vulnerability; presence in Karnataka, aspirational or under-served districts; cost per site and value for money; and replicability of the archetype.
- Apply the framework to the full universe of RSKs to produce a weighted, ranked list, classified into Tier 1 (immediately ready), Tier 2 (ready with remediation) and Tier 3 (not currently feasible), with reasons recorded for each classification.
- Conduct a validation workshop with the Department of Agriculture and SELCO Foundation to secure agreement on the framework, the ranked list and the demonstration shortlist.
- Obtain, or support SELCO Foundation in obtaining, the necessary administrative approvals, owner consents and site access permissions for the shortlisted sites.

Component 3: Site Assessment and Design Options

3.1 Detailed site assessment

- Detailed energy audit and load profiling at each shortlisted site, including measurement of actual loads and usage patterns, identification of critical versus non-critical loads, and construction of a 24-hour and seasonal load curve.

- Efficiency-first assessment: identify opportunities to reduce demand before sizing generation — LED lighting, BLDC fans, energy-efficient and star-rated appliances, efficient refrigeration, daylighting, ventilation and passive cooling measures. Sizing must be based on the post-efficiency load.
- Structural assessment of the roof or mounting surface with reference to IS 875 (wind and imposed loads), including a qualified engineer's certification of adequacy or a specification of the strengthening required.
- Shadow analysis, solar resource assessment and generation summary with a documented report.
- Assessment of safety requirements: earthing and lightning protection (IS/IEC 62305), fire safety, cable routing, accessibility for cleaning and maintenance, and theft/vandalism risk.
- Cover name of Incharge, contact number, ID Card, etc.

3.2 Design options and technical documentation

For each site, and for each identified building archetype, the consultant shall develop and comparatively evaluate at least the following configurations:

- Grid-tied DSPV without storage under net or gross metering, where supply is reasonably reliable and the objective is cost reduction.
- Grid-interactive hybrid system with battery backup sized for critical loads, where outages are frequent — the expected default for most rural RSKs.
- Off-grid / standalone system, where the grid is weak, absent or economically unviable to rely on.
- Elevated ground-mounted, carport, shade-structure or façade-integrated configurations where roof area or structural capacity is inadequate — now expressly permitted under the KERC DSPV framework.
- Virtual or group net-metering options where multiple government premises share a campus or an ESCOM jurisdiction.

Deliverable-grade documentation for each design shall include:

- Technical specifications, bill of materials (BoM) and bill of quantities (BoQ), conforming to MNRE/ALMM requirements, IS 14286 / IEC 61215 / IEC 61730 for modules, IEC 62109 for inverters, and applicable BIS standards for balance of system, cables, mounting structures and batteries (LFP chemistry with BMS preferred, with documented end-of-life plan).
- Single-line diagram, layout drawings, mounting and structural details, earthing and protection scheme.
- Capital cost estimate, five-year and ten-year O&M cost estimate, levelised cost of energy, simple payback and net present value against the baseline energy cost.
- Regulatory and approval pathway per site: ESCOM feasibility and interconnection, online DSPV application, KREDL registration where applicable, meter change, PWD or owner NOC, and expected timelines.
- Provisions for e-waste and battery end-of-life management in compliance with the E-Waste (Management) Rules, 2022 and Battery Waste Management Rules, 2022.
- A standardised 'Solar-Ready RSK' package for each archetype — a repeatable specification, drawing set and indicative cost that the Department can tender directly at scale.

Component 4: Unlocking Scheme, Financing and Institutionalisation

This component is the principal route to scale and should be treated as central rather than incidental to the assignment.

- Map all plausible funding sources for state-wide solarisation of RSKs, including: Department of Agriculture state-sector and district-sector budget lines; RKVY and ATMA; Krishi Bhagya and allied

state schemes; MNRE grid-connected rooftop solar programme support for government buildings; PM-KUSUM where applicable; KREDL programmes; MGNREGA for eligible civil and structural works; District Mineral Foundation funds; 15th Finance Commission untied grants at panchayat level; NABARD (RIDF, Climate Change Fund); CSR from agri-input, banking, cooperative and corporate sectors; and philanthropic or multilateral climate finance.

- Assess and compare delivery and ownership models — government CAPEX; RESCO/OPEX with third-party ownership; ESCO models monetising energy savings; hybrid grant-plus-CAPEX; and panchayat-level ownership — including a risk, control and value-for-money analysis of each in the Karnataka regulatory context.
- Build a financial model for state-wide scale-up: total capital requirement, phasing options, annual O&M liability, avoided energy and diesel expenditure, and fiscal implications for the Department, with sensitivity analysis on key assumptions.
- Prepare government-ready documentation to convert the recommendation into a funded scheme, including: a scheme concept note; a draft note for administrative/cabinet approval; a Detailed Project Report (DPR) for the priority tranche; a proposed budget-line formulation; and model tender documents, technical specifications and evaluation criteria compliant with the Karnataka Transparency in Public Procurements Act, 1999 and e-procurement requirements.
- Design the institutional mechanism for sustainability: nodal officer and reporting structure within the Department; a dedicated recurring O&M budget line; AMC contracting approach; asset registration; vendor empanelment and local service-network requirements; monitoring dashboard ownership; and grievance redressal.
- Conduct structured stakeholder engagement and advocacy with the Department of Agriculture, Energy Department, Finance Department, KREDL and the relevant ESCOMs, including at least two consultation workshops.

Target outcome: at least one funding pathway secured in principle, evidenced by a written commitment, an approved note, an inclusion in a budget proposal, or an equivalent formal step by the concerned department.

Component 5: Implementation of Solarisation at Demonstration RSKs

- Support SELCO Foundation and/or the Department in procurement: preparation of the RFP/tender, BoQ, technical evaluation criteria, vendor pre-qualification and empanelment, bid evaluation and negotiation support.
- Supervise installation at each demonstration site: pre-dispatch inspection of major equipment; verification of make, model, serial numbers and ALMM listing; site supervision; adherence to safety protocols; and photographic and written documentation of each stage.
- Manage testing, commissioning and regulatory closure: commissioning tests and performance verification against the design estimate; net-metering approval and meter installation; ESCOM sign-off; and issuance of a commissioning certificate for each site.
- Install efficient appliances and complete associated electrical remediation (internal wiring, earthing, distribution board upgrades) where the audit identifies these as prerequisites for safe operation.
- Establish O&M: a one-year comprehensive AMC or equivalent arrangement; defined uptime SLA (indicatively not less than 95% availability) with a response time of 48–72 hours; spare-parts availability; a local trained service technician network; and a service ticketing and escalation process.
- Build capacity: hands-on orientation for RSK staff and Agriculture Officers on safe operation, basic troubleshooting, cleaning schedules and fault reporting; a bilingual (Kannada and English) user manual and quick-reference card at each site; and on-site signage and IEC material explaining the installation to visiting farmers.

- Complete formal handover: asset tagging, entry in the Department's asset register, warranty and insurance documentation, as-built drawings and O&M manuals.

Component 6: Midline Study

- Conduct the midline assessment approximately 60–90 days after commissioning of the demonstration sites, using the tools and indicators established at baseline to ensure comparability.
- Assess technical performance: actual generation versus design estimate, performance ratio, battery health and cycling, system availability, fault log and downtime analysis.
- Assess operational and service outcomes: change in service downtime, farmer footfall and waiting time, transactions completed, equipment reliability, staff experience, and energy and diesel expenditure.
- Identify teething problems, design or specification gaps and behavioural issues, and issue a time-bound corrective action plan with clear ownership.
- Feed the findings back into the standardised design packages and the scale-up documentation prepared under Components 3 and 4 — the midline is a course-correction instrument, not merely a reporting exercise.

Component 7: End-line Study (6 months post-implementation) (Cost to be provided separately)

- Conduct the end-line assessment six months after commissioning, replicating the baseline instruments to permit a valid pre-post comparison at the same sites, with a comparison group of non-solarised RSKs where feasible.
- Quantify outcomes against baseline: reliability of supply and downtime; service delivery volumes and turnaround; energy and backup-fuel cost savings; equipment damage avoided; GHG emissions abated; and staff and farmer satisfaction, disaggregated by gender and social group.
- Undertake a cost-benefit and value-for-money analysis, including realised payback and the fiscal case for state-wide scale-up.
- Assess sustainability: O&M functioning in practice, uptime achieved against SLA, responsiveness of the service network, staff capability retained, and institutional ownership within the Department.
- Produce revised, evidence-corrected design and cost benchmarks and a final scale-up recommendation.

Timing note: an end-line at six months after implementation cannot fall within a six-month total assignment. This component is therefore structured as an optional extension of the same contract, to be triggered by written notice from SELCO Foundation, and is to be priced separately in the financial proposal (see Section 8, Payment Terms).

Component 8: Knowledge Management, MEL and Dissemination (cross-cutting)

- Develop a Monitoring, Evaluation and Learning (MEL) framework at inception — theory of change, indicator matrix with definitions, means of verification, data collection protocols and quality-assurance procedures — approved by SELCO Foundation before any data collection begins.
- Produce photographic and video documentation of representative sites (before and after), with appropriate consent.
- Produce a minimum of three site-level case studies and one state-level policy brief suitable for circulation within government.
- Produce a replication toolkit: standardised designs, specifications, model tender documents, survey instruments, costing templates and the O&M protocol, released as open-source material.

- Facilitate one state-level dissemination workshop with the Department of Agriculture, ESCOMs, KREDL and other stakeholders.

Cross-cutting requirements (applicable to all components)

- Gender and social inclusion: all sampling, tools, analysis and reporting shall disaggregate by gender and social group, and the design shall consider the specific needs of women farmers and women staff (including safety, lighting of approach areas and waiting facilities).
- Government coordination: the consultant shall work through the protocols of the Department of Agriculture, keep SELCO Foundation informed of all official communication, and shall not make commitments to government on behalf of the Foundation.
- Data protection, ethics and safeguarding: informed consent, data minimisation, secure storage, compliance with the Digital Personal Data Protection Act, 2023, and adherence to SELCO Foundation's safeguarding and PoSH requirements for all field teams.
- Field safety and insurance: the consultant is responsible for the safety, transport, accommodation and insurance of its own personnel, including at height and near live electrical equipment.
- Risk management: maintain a live risk register (delays in government approvals, ESCOM interconnection timelines, monsoon disruption, tenancy and consent failures, vendor performance, price volatility) with mitigation measures, reviewed at every monthly review.

4. Roles and Responsibilities

Role of SELCO Foundation (SF)	Expectation from Bidder / Consultant
Overall programme direction, approval of inception report, methodology, tools, sample design and site shortlist.	Deliver the full scope of work to professional standard, on time, with its own team, tools and logistics.
Share SELCO Foundation's design standards, technical benchmarks and prior learning from solarisation of public institutions.	Undertake day-to-day government liaison, obtain site access, owner consents and regulatory approvals, and keep SF informed.
Technical review and sign-off of designs, BoQs, cost estimates and study reports; nominate a Programme Lead as single point of contact.	Apply these standards; propose deviations only with written technical justification and SF approval.
Arrange or approve capital financing for demonstration-site hardware, and hold the vendor contracts where SF procures directly.	Submit all deliverables in draft for review, incorporate feedback within 7 working days, and maintain a version-controlled deliverable log.
Convene review meetings; participate in stakeholder workshops; support advocacy with government.	Provide procurement support, technical evaluation and supervision; flag any conflict of interest with vendors immediately and in writing.
Approve knowledge products and authorise external dissemination.	Prepare all workshop content and documentation; organise logistics; produce minutes and action-tracking.
Release payments against accepted deliverables in accordance with the agreed schedule.	Produce case studies, policy brief, toolkit, photo and video documentation to publication standard.
Provide access to relevant SF datasets, contacts and prior studies.	Raise invoices with supporting documentation; maintain auditable records of all expenditure and field data.

Role of SELCO Foundation (SF)	Expectation from Bidder / Consultant
	Treat all data as confidential; hand over all raw data, tools, code and databases in open formats at closure.
	letters of support to the Department of Agriculture, KREDL and ESCOMs where required.

5. Deliverables

All deliverables are to be submitted in English (with Kannada versions of field tools, user manuals and site-level IEC material), in editable formats, with underlying data. Timelines are counted from the date of contract signing.

#	Deliverable	Timeline	Acceptance criteria
1	Inception Report — refined methodology, MEL framework and indicator matrix, sample design, survey instruments (English and Kannada), work plan, risk register, team deployment plan, stakeholder engagement plan.	Month 1	Approved in writing by SF; tools pilot-tested before roll-out.
2	Master Database of all RSKs in Karnataka — geo-referenced, with ownership, building, electrical, load and service fields populated; GIS dashboard; data dictionary; open formats.	Month 2	Complete coverage of the verified RSK universe; ≥95% field completeness on core fields; spot-check verification passed.
3	Baseline Study Report — desk study, field survey findings, energy and reliability analysis, service-delivery baseline, baseline indicator values, and archetype typology of RSK buildings.	Month 2	Sample achieved as approved; indicator values traceable to raw data; report accepted by SF.
4	Prioritisation Framework and Ranked RSK List — weighted scoring model, Tier 1/2/3 classification, and recommended Phase-1 demonstration shortlist; validation workshop conducted.	Month 3	Framework endorsed by SF and Department of Agriculture; shortlist approved.
5	Site Assessment and Design Report — energy audits, structural assessments, comparative design options, technical specifications, BoM/BoQ, drawings, cost estimates, LCOE and payback, approval pathway; standardised 'Solar-Ready RSK' packages by archetype.	Month 3	Designs technically reviewed and signed off; costs benchmarked; drawings complete and buildable.
6	Scheme Unlocking and Financing Strategy — funding source map, delivery-model comparison, scale-up financial model, scheme concept note, draft approval note, DPR for the priority tranche, model tender documents, institutional and O&M mechanism.	Month 4	Government-ready documents; at least two stakeholder consultations held; SF acceptance.

#	Deliverable	Timeline	Acceptance criteria
7	Implementation Completion Report — commissioned demonstration sites with commissioning certificates, as-built drawings, net-metering approvals, monitoring configured, AMC in place, staff trained, assets tagged and handed over.	Month 5	All agreed sites commissioned and generating; documentation complete per site; training attendance recorded.
8	Midline Study Report — performance versus design, service and cost outcomes, fault analysis, corrective action plan, and revisions to the standard design packages.	Month 6	Report accepted; corrective actions assigned with owners and dates.
9	Final Consolidated Report and Knowledge Products — synthesis of Components 1–6, three case studies, policy brief, replication toolkit, photo/video assets, full raw data and tool handover; state-level dissemination workshop.	Month 6	All materials accepted by SF; workshop conducted; complete data handover verified.
10	End-line Study Report (optional extension) — pre-post comparison against baseline, cost-benefit and VfM analysis, sustainability assessment, revised benchmarks and final scale-up recommendation.	Month 12 (6 months post-commissioning)	Comparable to baseline methodology; findings evidenced; accepted by SF.

In addition, the consultant shall submit a brief monthly progress report (maximum three pages, with a deliverable tracker, risk register update and expenditure summary) and participate in a monthly review meeting with SELCO Foundation.

6. Selection Criteria

The agency will be selected on a combined technical and financial evaluation. Proposals must score a minimum of 70% on the technical components (1–5 below) to be considered for financial evaluation.

Evaluation Component	Criteria Focus	Weighting (%)	Required Evidence in Proposal
1. Technical understanding and methodology	Grasp of the RSK context and of energy-reliability constraints in rural Karnataka; soundness of the proposed approach to enumeration, sampling, audit, design and impact measurement.	20%	Technical approach note; sample design; draft indicator matrix; illustrative survey instrument.
2. DRE engineering and solarisation experience	Demonstrated experience designing and supervising rooftop/hybrid solar systems for institutional or public buildings; energy audits; net-metering approvals; quality assurance.	20%	At least two comparable completed assignments with client references, scale, and outcomes; sample design/BoQ (redacted as needed).
3. Research, MEL and analytical capability	Capability to design and execute baseline–midline–endline studies; statistical rigour; GIS and data management; quality of prior analytical outputs.	15%	Two sample research reports; description of data-quality protocols; GIS/database capability.

Evaluation Component	Criteria Focus	Weighting (%)	Required Evidence in Proposal
4. Public finance, scheme design and government engagement	Track record of working with state governments on scheme design, DPRs, budget lines or procurement documentation; ability to convene and influence departmental stakeholders.	15%	Evidence of prior scheme/DPR/policy work; named government references; description of proposed engagement strategy.
5. Team, Karnataka presence and delivery capacity	Quality and availability of key personnel; field team strength; presence in Karnataka; Kannada language capability; ability to deliver within six months.	10%	CVs of key personnel with time allocation; organogram; office/field presence; language capability of field team.
6. Financial proposal and value for money	Completeness, realism and transparency of costing; person-day rates; appropriate allocation across components; cost per site.	20%	Completed financial templates (Sections A–E) with HR-day breakdown.
TOTAL		100%	

Minimum eligibility (screening — pass/fail):

- Entity legally registered and operating in India for a minimum of three years (company, LLP, partnership, registered society, trust or Section 8 company), or a consortium with a clearly designated lead entity.
- Valid PAN, GST registration and statutory compliance; audited financial statements for the last two financial years.
- At least two completed assignments of comparable scope and scale in the last five years, at least one of which involved solar/DRE for institutional or public infrastructure.
- Demonstrable field presence and Kannada-language capability in Karnataka.
- Not blacklisted or debarred by any central, state or semi-government body, or by any public sector undertaking.
- Availability of key personnel covering, at minimum: a Team Leader/Project Manager, a Solar PV/Electrical Engineer, a certified Energy Auditor, an MEL/Research Specialist, a GIS/Data Analyst, a Policy and Public Finance Specialist, and field enumerators.

Submission Requirements

Interested collaborators (individuals, teams, or agencies) are requested to submit the following before the deadline:

1. Organizational / Individual Profile: Overview of the organisation, legal status, registration documents, statutory registrations, audited financials for the last two years, and relevant institutional experience.

2. Proposed Approach: A technical document setting out your understanding of the RSK solarisation challenge in Karnataka and your proposed strategy to execute the scope of work — covering enumeration and sampling methodology, energy audit and design approach, scheme-unlocking strategy, implementation supervision, and the baseline–midline–endline measurement design. Include a detailed work plan with a Gantt chart, a risk register, and a stakeholder engagement plan.

3. Relevant Portfolio: Examples of previous work on decentralised renewable energy, solarisation of public institutions, agriculture extension systems, government scheme design, or large-sample field research — with client references and, where possible, evidence of outcomes achieved.

4. Team Composition: CVs of all key personnel, an organogram, the number of person-days each will commit, and confirmation of their availability for the assignment period.

5. Financial Proposal: Detailed quotation for the entire scope of work using the templates provided in this ToR, with the end-line extension quoted separately. Each cost proposed should be detailed with break up of Man Power, Experience of personnel planned, No of Hours/Days, travel and accommodation breakup, quality check, etc.

Please ensure your application directly addresses your capability to own the end-to-end execution of this assignment across research, engineering design, government engagement and implementation supervision. Agencies are asked to account for flexibility in time allocation and in the number of sites within the given duration of the assignment.

Note: Applicants are required to submit applications through the link provided. Each application should detail the plan, methodology, and deliverables specific to the requirements mentioned in the scope of work.

7. Intellectual Property

All final outputs, datasets, databases, survey instruments, designs, drawings, specifications, cost models, templates, and visual assets created under this engagement will be the intellectual property of SELCO Foundation and will be freely available for public sharing under an open-source licence. The consultant shall not retain, reuse or publish any project data or output without prior written permission from SELCO Foundation. All raw data, code, GIS layers and editable source files shall be handed over at the close of the assignment in open, non-proprietary formats.

8. Payment Terms

Payment will be deliverable-based, made in accordance with the terms agreed between the consultant and SELCO Foundation, and released only against deliverables formally accepted in writing by SELCO Foundation. Please provide your proposal and quotation for the above-mentioned programme requirements, capturing timelines and splitting costs wherever possible.

Tranche	Milestone / Deliverable accepted	Timeline	% of contract value
1	Signing of contract and acceptance of Inception Report (Deliverable 1)	Month 1	20%
2	Acceptance of RSK Master Database and Baseline Study Report (Deliverables 2 and 3)	Month 2	20%
3	Acceptance of Prioritisation Framework and Site Assessment & Design Report (Deliverables 4 and 5)	Month 3	15%
4	Acceptance of Scheme Unlocking and Financing Strategy (Deliverable 6)	Month 4	15%
5	Commissioning of demonstration sites and acceptance of Implementation Completion Report (Deliverable 7)	Month 5	10%

Tranche	Milestone / Deliverable accepted	Timeline	% of contract value
6	Acceptance of Midline Study, Final Consolidated Report, knowledge products and full data handover (Deliverables 8 and 9)	Month 6	20%
Sub-total — base assignment		6 months	100%
7	Acceptance of End-line Study Report (Deliverable 10) — optional extension, triggered by written notice	Separate Agreement	50% - 50%
TOTAL			100%

TDS will be deducted as applicable. Travel and field costs, if reimbursable rather than lump-sum, must be pre-approved and supported by original documentation.

9. Application Process

If your enterprise meets the eligibility criteria and is interested in collaborating with the SELCO Foundation, please complete the application form linked below with the required information. Agency / Consultant are requested to upload their technical proposals and financial quotations directly into the application form.

Provide split costs as per deliverables based:

Please provide your proposal and quotation as per deliverables based and mentioned programme requirements. Capture Timelines and Split cost wherever possible.

10. To Apply

Interested consultants / organisations, with relevant experience (please include samples and/or references of previous similar work as proof of experience) and based out of India are requested to reach out with a detailed proposal giving a brief on the methodology and the process they will undertake for this project, including budgets (with break-ups and explanation), timelines and milestones, and submit the same to the Google form <https://forms.gle/nzzJhTzAv35TjuiN7> on or before 5th September, 2026 17.00 hrs.

Any further queries please write to procurement@selcofoundation.org with a subject line:

"Solarizing Raitha Samparka Kendras (RSKs) – Karnataka" (Name of Project)

Financial Proposal SAMPLE Template (Bidders are free to use their own template): Budget Breakdown & HR Allocation

Collaborators are requested to use template so as to provide a transparent breakdown of the costs associated with the assignment. All amounts in INR, exclusive of GST (indicate GST separately).

Section A: Studies, Design and Strategy (Lump Sum by Deliverable)

Deliverable	Estimated HR days	Key personnel deployed	Proposed cost (INR)
A.1 Inception, MEL framework and tool development (Del. 1)	[Input]	[Input]	[Input]
A.2 State-wide RSK enumeration and master database (Del. 2)	[Input]	[Input]	[Input]
A.3 Baseline field survey and report (Del. 3)	[Input]	[Input]	[Input]
A.4 Prioritisation framework and ranked list (Del. 4)	[Input]	[Input]	[Input]
A.5 Site assessment, energy audits and design packages (Del. 5)	[Input]	[Input]	[Input]
A.6 Scheme unlocking, financial model and DPR (Del. 6)	[Input]	[Input]	[Input]
A.7 Midline study (Del. 8)	[Input]	[Input]	[Input]
A.8 Final report, knowledge products and dissemination workshop (Del. 9)	[Input]	[Input]	[Input]
TOTAL SECTION A	[Input]		[Input]

Section B: Implementation Support (Unit Cost per Site)

Advisory, engineering and supervision services only. Capital hardware and EPC cost is to be quoted separately in Section D if the consultant intends to execute the works.

Activity / unit of output	Qty (no. of sites)	HR days per site	Cost per site (INR)	Total cost (INR)
B.1 Detailed energy audit and site survey	[Input]	[Input]	[Input]	[Input]
B.2 Detailed engineering design, drawings and BoQ	[Input]	[Input]	[Input]	[Input]
B.3 Procurement and tender support	[Input]	[Input]	[Input]	[Input]
B.4 Installation supervision and quality assurance	[Input]	[Input]	[Input]	[Input]
B.5 Testing, commissioning and net-metering approvals	[Input]	[Input]	[Input]	[Input]
B.6 Staff training, manuals and site IEC material	[Input]	[Input]	[Input]	[Input]

Activity / unit of output	Qty (no. of sites)	HR days per site	Cost per site (INR)	Total cost (INR)
B.7 Monitoring system configuration and handover	[Input]	[Input]	[Input]	[Input]
TOTAL SECTION B				[Input]

Section C: HR Allocation and Management

Role / personnel title	Description of responsibility	Total days on assignment	Rate per day / total (INR)
Team Leader / Project Manager	Overall delivery, client communication, government engagement, quality control.	[Input]	[Input]
Solar PV / Electrical Engineer	System design, sizing, drawings, specifications, commissioning oversight.	[Input]	[Input]
Certified Energy Auditor	Load profiling, energy audits, efficiency recommendations.	[Input]	[Input]
Structural / Civil Engineer	Roof and mounting structural assessment and certification.	[Input]	[Input]
MEL / Research Specialist	Study design, indicators, analysis, baseline–midline–endline reporting.	[Input]	[Input]
GIS / Data Analyst	Database design, geo-referencing, dashboard, data quality.	[Input]	[Input]
Policy and Public Finance Specialist	Scheme mapping, financial model, DPR, tender and approval documentation.	[Input]	[Input]
Field Coordinators and Enumerators	Primary data collection across districts; Kannada-language interface.	[Input]	[Input]
TOTAL SECTION C		[Input]	[Input]

Section D: Travel, Logistics and Other Direct Costs

Item	Unit / basis	Quantity	Cost (INR)
D.1 Field travel (districts covered, trips, mode)	[Input]	[Input]	[Input]
D.2 Accommodation and per diem	[Input]	[Input]	[Input]
D.3 Survey and measurement instrumentation	[Input]	[Input]	[Input]
D.4 Workshops and consultations (2 consultations + 1 dissemination)	[Input]	[Input]	[Input]
D.5 Translation, printing, IEC and documentation	[Input]	[Input]	[Input]
D.6 Software licences, dashboard hosting	[Input]	[Input]	[Input]

Item	Unit / basis	Quantity	Cost (INR)
D.7 Optional: solar hardware / EPC (only if executed by consultant — quote separately per site)	[Input]	[Input]	[Input]
TOTAL SECTION D			[Input]

Section E: Total Contract Value Summary

Description	Amount (INR)
A. Total studies, design and strategy cost (Section A)	[Input]
B. Total implementation support cost (Section B)	[Input]
C. Total HR / management cost (Section C)	[Input]
D. Total travel, logistics and direct costs (Section D)	[Input]
E. Contingency (e.g., 5% of A+B+C+D)	[Input]
F. SUB-TOTAL — BASE ASSIGNMENT (6 months)	[Input]
G. End-line Study (optional extension, Month 12) — quoted separately	[Input]
H. GST as applicable	[Input]
I. TOTAL PROPOSED CONTRACT VALUE (F + G + H)	[Input]

Note: If there is travel required, kindly mention the tentative budget along with the number of days of travel. Bidders should note that field work will span multiple districts across all four Agriculture Divisions of Karnataka and should cost travel realistically.

Refer Terms and Conditions:

1. Sub-contracting

In the event that the Consultant requires the services of subcontractors to perform any obligations under the Contract, the Consultant shall obtain the prior written approval of the Foundation. Any rejection or non-performance of the subcontractor shall not, in and of itself, entitle the Consultant to claim any delays in the performance, or to assert any excuses for the non-performance, of any of its obligations under the Contract, and the Consultant shall be solely responsible for all services, obligations and deliverables performed by its subcontractors.

2. Quality Assurance

The data submitted to SELCO Foundation should be accurate, complete, reliable and relevant. Consulting agency shall establish additional layers for data cleaning and submission.

3. Financials & Reporting

TDS will be deducted on the fixed amount as per Income Tax Act and Rate of Percentage. In accordance with the Central Board of Direct Taxes circular No. 7 of 2022 dated 30th March, 2022 in relation to the clarifications with respect to Section 114AAA of the Income-tax Rules, 1962, failure to link Aadhar number to the PAN card and/or failure by any person, who falls within the income tax bracket or otherwise, to file tax returns in relation to payment of TDS for any service (in accordance with Section 206AB and 206AA) and/or an inoperative PAN card will result in a 20% tax deduction.

4. Indemnification

Both parties shall indemnify and hold its Trustees, Directors and representative officers, employees, agents harmless from and against any and all claims, demands, actions, losses, liabilities, charges, damages, costs and expenses (including but not limited to reasonable attorney's fees) arising out of or resulting from (1) any claims arising in connection with activities undertaken by both parties in connection with the project or (2) Consultant's gross negligence or willful misconduct or breach of any undertaking, covenant, representation or warranty contained in this agreement and/or the actual infringement of any patent, trademark, copyrights, trade secret or any other intellectual property right of the third party.

5. Patent, Copyright and other Proprietary Rights

- i. Except as is otherwise expressly provided in writing in the Contract, the Foundation shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Consultant has developed for the Foundation under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract. The Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for the Foundation.
- ii. Subject to the foregoing provisions, all documents, reports, recommendations, documents, and all other data compiled by or received by the Consultant under the Contract shall be the property of the Foundation, shall be made available for use or inspection by the Foundation at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to the Foundation's authorized officials on completion of work under the Contract.
- iii. The Consultant will treat all information given to him/her as information with proprietary value and will not disclose the same to competitors or any outsiders. The Consultant will not at any time, except under legal process, divulge any trade or business secret relating to the Foundation or any customer or agent of the Foundation, which may become known to him by virtue of his position as

consultant, save in so far as such disclosure shall be necessary in the interest and for the benefit of the said Foundation and will be true and faithful to the Foundation in all dealings and transactions whatsoever relating to the said Foundation.

iv. Reports or other data that are developed specifically for the performance of this Contract shall be the property of the Foundation and the Consultant shall deliver reports and data to the Foundation as per the milestones. Dissemination of the reports and any information from the said contracts shall be done with written approval from the Foundation.

6. Publicity, use of name & Logo of the Foundation

The Consultant shall not advertise or otherwise make public for purposes of commercial advantage or goodwill that it has a contractual relationship with the Foundation, nor shall the Consultant, in any manner whatsoever use the name, emblem, logo or official seal of the Foundation or that of SELCO in connection with its business or otherwise without the written permission of the Foundation.

7. Observance of Law

Compliance with Laws and Regulations: The Consultant will comply with all applicable laws, rules, regulations and statutory requirements and amendments thereof, in the manufacture and distribution of products and supplies and in providing services to SELCO and during the term of this Agreement.

Child Labor: The Consultant will ensure that neither it, its parent entities, partners or subcontractors nor any of its subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the Child Labour (Prohibition and Regulation) Act of 1986, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

Forced Labor: The Consultant will not engage in any activity that will result in forced or compulsory labor under applicable laws including the Bonded Labour System (Abolition) Act, 1976.

Abuse of Labor: Consultant will act in accordance with applicable laws and regulations and will not violate the rights of labourers as stated in The Factories Act, 1948 and similar legislations.

Working Hours, Overtime, Wages and Other Benefits: Working hours, wages and benefits shall be provided by the Consultant to its staff and employees in accordance with applicable laws including the Minimum Wages Act, 1948.

Declaration of blacklisting: Consultant represents and warrants to SELCO that, as on the date of signing of this Purchase Order, it is neither blacklisted/debarred nor is it under a declaration of ineligibility by Central/State or Semi-Government Organization/Department or Institutions and Public Sector Undertakings in India and abroad. The Consultant further undertakes to duly inform SELCO in the event it is blacklisted subsequent to execution of this Purchase Order.

Compliance with Anti-bribery Laws: Consultant and each of its directors, officers, employees, agents or other (collectively referred to as "Consultant") represent and warrant that it shall not either directly or on behalf of SELCO Foundation give, offer, promise to offer, or authorize the offer, directly or indirectly (proxy bribing), anything of value (such as money, shares, goods or service, gifts or entertainment) to government officials, government customers, potential government customers or foreign government officials including officials of any public international organizations or officials of any political party either in India or abroad ("Officials") with an intent to influence any act or decision in his or her official capacity, induce the Official to do or omit to do any act in violation of his or her lawful duty to obtain any improper advantage, or induce such Official to use his or her influence improperly to affect or influence an act or decision.

The Consultant shall not provide any offering, promising, giving or receive, solicit or accept a financial or other advantage, or any other thing of value, with the intention of influencing or rewarding the behaviour of a person in a position of trust to perform a public, commercial or legal function to obtain or retain a commercial advantage.

The Consultant understands and acknowledges that any non-adherence to the warranty as stated herein above will be a violation of the provisions of the Indian Prevention of Corruption Act, 1988 and other applicable laws and legislations ("Anti-bribery Laws"). In addition, Consultant agrees to promptly report to SELCO Foundation any incident of breach or potential breach of this section.

Compliance with Sexual Harassment of Women (Prevention, Prohibition & Redressal) Act, 2013 (PoSH): The Consultant shall agree to adhere to the mandates prescribed under the Sexual Harassment of Women (Prevention, Prohibition & Redressal) Act, 2013, which requires all workplaces to have a Policy and Internal Committee to address complaints of sexual harassment that women may face at the workplace.

8. Termination

Either party may terminate this contract by giving a notice in writing to the other party stating their intention to terminate the same on the expiration of Seven (7) days from the date of such notice. In addition, the Foundation may also terminate this contract forthwith in the event of any fraud, misconduct or neglect of duties on the part of the Consultant. Any notice to be given hereunder shall be sufficiently given to the Consultant if forwarded by registered post or by Courier Service to the last known postal address of the Consultant and shall be sufficiently given to the Foundation if similarly forwarded to the registered office. Upon the termination of this contract and payment of the said fees due up to such termination, and payment of all disbursements and out-of-pocket expenses incurred up to the date thereof (provided the same have been incurred after obtaining prior approval), the Consultant shall deliver all deeds, documents and paper in his possession relating to the business of the Foundation or as the Foundation shall direct, and shall continue to afford all reasonable assistance for concluding pending matters at the date of such termination without making any charge thereof.

9. Force Majeure

- i. Force majeure as used herein means any unforeseeable and irresistible act of nature, any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, provided that such acts arise from causes beyond the control and without the fault or negligence of the Consultant.
- ii. In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the affected Party shall give notice and full particulars in writing to the other Party, of such occurrence or cause if the affected Party is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The affected Party shall also notify the other Party of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the Contract. Not more than fifteen (15) days following the provision of such notice of force majeure or other changes in condition or occurrence, the affected Party shall also submit a statement to the other Party of estimated expenditures that will likely be incurred for the duration of the change in condition or the event of force majeure.
- iii. On receipt of the notice or notices required hereunder, the Party not affected by the occurrence of a cause constituting force majeure shall take such action as it reasonably considers to be appropriate or necessary in the circumstances, including the granting to the affected Party of a reasonable extension of time in which to perform any obligations under the Contract.
- iv. If the Consultant is rendered unable, wholly or in part, by reason of force majeure to perform its obligations and meet its responsibilities under the Contract, the Foundation shall have the right to

suspend or terminate the Contract on the same terms and conditions as are provided for in this Contract.

v. Both the Foundation and the Consultant fully and freely intend to create an independent Contractor relationship under this Contract. Nothing herein shall be deemed to establish a partnership, joint venture, association or employment relationship between the parties. Both parties agree that the consultant has the right to sole and exclusive control over the manner and means employed in performing their activities under this Contract.

10. Settlement of disputes

i. The Parties shall use their best efforts to amicably settle any dispute, controversy, or claim arising out of the Contract or the breach, termination, or invalidity thereof.

ii. Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, the matter shall be referred by either Party to arbitration in accordance with the Arbitration and Conciliation Act, 1996. The venue of the arbitration shall be at Bangalore. Likewise, the jurisdiction will vest with courts in Bangalore.

Annexures (indicative — to be finalised at inception)

Annexure 1: RSK Master Database — field list and data dictionary (as set out in Component 1.2).

Annexure 2: Site Assessment Data Capture Format — energy audit sheet, appliance inventory, roof and structural checklist, photographic record protocol.

Annexure 3: Baseline–Midline–Endline Indicator Framework — indicator definitions, means of verification, frequency, disaggregation and responsible party.

Annexure 4: Technical Specification Benchmarks — minimum acceptable standards for modules, inverters, batteries, mounting structures, cabling, protection, monitoring and efficient appliances.

Annexure 5: Format for CVs of key personnel and the person-day allocation matrix.

Annexure 6: Self-declaration of non-blacklisting, conflict of interest, and PoSH compliance.