

Department of Science and Technology Ministry of Science and Technology Government of India

Call for Project Proposal under Strengthening, Upscaling & Nurturing Innovations for Livelihood (SUNIL) programme

Website: <u>https://dst.gov.in/seed-home</u>

Last date of application: 30th April 2025

Project proposals are invited for financial support under the programme Strengthening, Upscaling & Nurturing Innovations for Livelihood (SUNIL), Science for Equity, Empowerment & Development (SEED) Division, Department of Science & Technology (DST), Government of India.

About SUNIL programme

The programme aims to support need-based & action research projects for delivery of locally appropriate pilot-tested technologies and social enterprise creation of field-tested S&T models to strengthen the livelihood efficiency of Economically Weaker Section (EWS) of society {such as small and marginal farmers, landless laborer, workers in non-farm sector, traditional artisans (e.g. blacksmiths, mason, weavers, carpenters etc.) and skilled & semi-skilled rural/urban population working in unorganized sector (including construction, workers transgender and prisoners)}. It also encourages improving their S&T knowledge, skill enhancement, capacity building and socio-economic conditions.

Identification of EWS

More than 50% of the target beneficiaries under the project should belong to EWS and implementing institute/organization/agency will ensure to produce the income & asset certificate of the beneficiaries selected as and when required.

Identification of geographical coverage area

The proposed geographical area should be identified on the basis of preliminary assessment of the people, availability of minimum infrastructural facilities particularly roads, water & sanitation, health centres, communication medium, marketing facilities, electricity and potential for irrigation; climate, land use pattern, crops & cropping patterns, natural resources & raw materials, availability of special skills/ trades; and presence of local organizations like Panchayats, cooperatives, voluntary groups, FPOs, SHGs etc. It is desirable to consider Indigenous Knowledge (IK)/ Traditional Knowledge (TK), skill & practices, socio-economic status and demographic details of target population including their present livelihood conditions, present average income level and occupations of the target beneficiaries. A base-line survey on the above should be conducted before submission of project proposal.

Project implementation model

- Multiple organizations are encouraged to apply in a network structure such as 'Hub & Spoke model'. It is mandatory to involve at least one NGO and one KI partner in the project implementation. In Hub & Spoke/ network project, total financial grant proposed under project will be released to Lead/ Hub agency. A signed MoU/ consent mentioning role of each partner in the project will be required for all shortlisted proposals.
- The programme encourages the Land-Lab-Land approach of project implementation, first to identify regional/ local and livelihood-centric issues or challenges being faced by target

population and then, deployment of adapted technologies & sustainable scientific solutions from Lab to field.

- The involvement of Knowledge Institutes (KI), NGOs, target community, local Govt., and other Community based organizations viz. Community Interest Groups (CIG), Self-Help Groups (SHGs), Farmer Producer Organizations (FPOs), Social entrepreneurs, Start-ups and community will be encouraged.
- Before applying to new proposal, PI/ organization must ensure to maintain maximum two number of ongoing projects supported to Host Institution (HI) by SEED division at a time.

Thematic areas for proposal submission -

Identifying needs of the local community and providing innovative, low-cost and user-friendly S&T based solutions to address the challenges in following livelihood sectors -

• Precision Agriculture and farm automation

- Climate control agricultural practices and decision making through sensors, IoT, GPS, actuators, automated machinery, drone & robot-assistance to improve crop resilience, increase efficiency, minimize resource waste and ensure sustainable productivity;
- Precision agriculture to monitor and manage biotic stress (pests, pathogens, weeds, parasitic plants) and abiotic stress (extreme temperatures, drought, salinity, flooding, and nutrient deficiencies) of crops for optimizing available resource.
- Management of protected cultivation particularly hydroponics, aeroponics, aquaponics and vertical farming through AI & ML to monitor and optimize the use of resources like water, fertilizers, seeds, and pesticides etc. for ensuring higher yields, year-round production and improved quality crops;
- Low-cost quality control, disease detection and management tools (mobile-based applications and imaging tools, portable testing kits, integrated pest management kits, remote irrigation management for remote monitoring etc. for affordable and data driven decision making by smallholder farmers or marginal farmers;
- Autonomous machinery, robotic harvesters, drones, sensors etc. to automate manual tasks for small and medium size farmers and social entrepreneurs;
- Innovative models of production and consumption for enabling & scaling circular economy (viz. Energy-from-waste; Desalination & water recycling; Nanotechnology for water purification; Waste heat recovery; Transform organic waste into biofuels, bioplastics, and other valuable products; Product life cycle management; On-demand & localized production with recyclable materials etc.).

• Sustainability in traditional handicraft and handloom

- S&T solutions to benefit artisans with increased efficiency, prototyping, customisation, personalization, creativity, market access, maintaining craftsmanship and promoting sustainable practices in the region;
- Sustainable, eco-friendly, organic, plant-based and biodegradable textiles materials (fabrics and dyes) to maintain traditional techniques of artisans;
- Improving efficiency and productivity in weaving machines of textiles (cotton, wool, silk, Jute & Allied Fibres) and their products such as biodegradable fabrics, sari, carpets, rugs, and dhurries etc.;

- Innovative techniques to preserve and replicate traditional motifs (viz. recurring patterns/ images/ symbols) such as 3D-printed products and accessories etc.;
- Innovative tools and technologies for black-smith artisans to improve moulding, drawing, upsetting, flaring, punching, splitting, forge welding and repairing ornamental, tools, machinery, and other items made of steel, iron, brass, copper and bronze etc.
- Addressing raw material issues & production cost (e.g., clay, glazes, fuel for firing, use of water, electricity etc.) and enhancing design creativity, productivity and precision of products by artisans in Pottery and Ceramics;
- Sustainable and cost-effective bamboo & wood drying and preservation technologies such as Kiln drying, solar wood drying etc. to prevent warping, cracking, and decay, making the wood more durable for use in high-quality products like furniture and carvings for smallscale artisans in rural areas;
- Technologies for increasing the strength, resistance, resilience and durability of the bamboo/ wood products and non-toxic adhesives for use in furniture, flooring, or construction etc.;
- S&T driven eco-tourism (including wildlife, cultural, adventure, marine, agriculture) for preserving natural ecosystems, supporting local communities, and promoting economy
 - AI and wireless sensor networks (WSNs) to support eco-tourism by monitoring tourist movement, environmental conditions like wildlife sightings, weather patterns, and natural resources etc.;
 - Low-cost chatbots, virtual assistants, smart check-in & check-out systems, self-service kiosks, mobile apps, automated warning and emergency response system, for easy access of information and safety of tourists;
 - Wearables for tracking and health monitoring during kayaking, Scooba diving, snorkelling, guided nature walks, snow-hiking etc.;
 - IoT-enabled sensors for high-risk areas to detect changes in environmental conditions such as water levels (flood warnings), extreme temperature, seismic activity, alerting tourists and authorities to potential hazards etc.;
 - Eco-lodge, beach front eco-resort and treehouses built using sustainable materials, energyefficient systems, rainwater harvesting, and organic waste management etc.

• Supply chain optimization in on-farm and off-farm ventures

- Low-cost techniques and solutions for refrigeration, advance storage, adequate processing and transportation facilities for remote areas;
- Automation in demand forecasting, processing, inventory management, real time tracking, route optimisation, ethylene gas management for ripening, sorting & grading, packaging etc. of Agri-products;
- Cold chain management solutions and market access to reduce costs, improve delivery times & security, enhance customer satisfaction, and increase overall operational efficiency of goods and services;
- Asset tracking and management for improving inventory control, optimizing resource allocation, and reducing loss or theft.
- Online marketplaces, e-commerce platforms, branding, digital design tools, and sustainable practices through online learning platforms for traditional artisans and craftsmanship to sell their products locally and globally without needing intermediaries;

Duration of Project support: The duration of project support will be for a period of 3-5 years based on the proposed activities and deliverables.

Who can apply-

A coordinated/network project proposal involving multiple project partners from KI and S&T enabled NGOs should be submitted online through e-Project Management System (e-PMS Portal) (<u>https://onlinedst.gov.in/</u>). Project partners eligible for receiving financial grant under the SUNIL programme include:

Principal Investigator (PI) & Co-PI

- Scientists, engineers, technologist working in Knowledge Institutions (KI) such as IITs, NITs, Autonomous Bodies/Aided Institutions and other educational institutions/ Universities under Central/State Governments, R&D institutions, laboratories having adequate infrastructure and project implementation experience at societal level.
- Non-Governmental Organization/private institutions with minimum 3 years of relevant field level experience in S&T interventions and delivery of proven technology on field level applications.
- Experience in handling projects having focus on S&T with support from scientific departments of Govt. of India will be encouraged.
- NGO should come with legal status or as a society registered under the Societies Registration Act 1860 or a trust registered under the Indian Trusts Act 1982 or Charitable or Religious Act 1920 or under the corresponding State Act. Details of NGO will be verified through DARPAN portal of NITI Aayog <u>https://ngodarpan.gov.in</u>.
- NGOs/VOs Should submit foreign contribution regulation Act (FCRA) certificate (to access international funding, if any).

Involvement of CBOs/Community Groups/FPOs/ SHGs & Social ventures during implementation of project: Direct funding to these groups of project partners will not be supported. However, they will have to apply through NGOs or KIs mentioning their specific role and budgetary requirement in the project proposal.

- FPOs promoted and supported by Government Departments, Corporates and Domestic & International Aid Agencies, National Bank for Agriculture and Rural Development (NABARD), Small Farmers Agribusiness Consortium (SFAC) or registered on e-NAM (Electronic National Agriculture Market) platform and having formal working space/ office, bank account and Aadhar details etc.
- SHGs supported and guided by Khadi & Village Industries Commission (KVIC), Common Service Centre (CSC), NABARD and having saving bank account in the name of SHG.
- Social Start-ups/entrepreneurs including private as well as state sponsored incubators who offer accelerated technological and innovation growth etc. with socio-economic development of target community under project area.

Details on Funding Pattern, Shortlisting & Selection Criteria, Operation of Programme, Monitoring & Evaluation Indicators and Proforma of Project Proposal is available in "Guidelines of SUNIL programme" [https://dst.gov.in/sites/default/files/Guidelines-SUNIL-English.pdf].

Instructions to be Followed & Documents/Enclosures Required to be Submitted along with the Project Proposal

- The applicants, after assessing their eligibility and suitability as per the eligibility conditions of the programme, shall be required to apply in fresh 'call for proposal' initiated through e-PMS Portal (<u>https://onlinedst.gov.in/</u>) (Open in Google Chrome or Mozilla Firefox for better results), attaching required documents with the signatures and rubber stamps of the concerned persons/ officials, failing which will reject the proposal. *Proposal submitted through email will not be considered*.
- DST will not be responsible for the non-submission of proposal by PI due to any personal reasons, regional festivals, poor network speed, natural calamities, etc. All the incomplete applications will be summarily rejected. However, the rejected candidates will have the option to apply in the next call for proposal.
- Please keep ready with a copy of the following documents (formats available on ePMS portal) :
 - Copy of 'Endorsement from Head of Institutions' (Annexure-I)
 - Certificate from PI & Co-PI (Annexure-II)
 - Copy of signed 'Terms & conditions' (Annexure- III)
 - Signed copy of 'Conflict of Interest' (Annexure-IV)(<u>https://dst.gov.in/sites/default/files/DST-Conflict-of-Interest-Document%20-</u> <u>Approved-Final%20Version-07062016.pdf</u>)
 - \circ Memorandum of Understanding/ Consent between project partners.
 - o Authenticated copy of valid registration certificate (for NGO/society/trust etc.).
 - Memorandum of Association, Rules and Bylaws (for NGO/society/trust etc.).
 - Balance sheets, statement of Accounts and Annual report of the organization for the last 3 financial years (for NGO/society/trust etc.).
- Count minimum 9-12 months from submission of the proposal to arrive at expected time point for final decision on the proposal for financial support. Please site file number/TPN number received from e-PMS portal in all future correspondence.

Any query/ correspondence regarding the above Call for Proposal may be initiated on 011-26590618 or mail to the following address: -

Dr Anita Aggarwal (Scientist 'F' & HEAD), Email: anita.a@nic.in Dr Anuradha Pughat (Scientist 'D'), Email: anuradha.pughat@gov.in Science for Equity, Empowerment and Development (SEED) Division Department of Science and Technology (DST) Govt. of India

ENDORSEMENT FROM HEAD OF THE INSTITUTE

(on letter head of the institution)

1. Certified that the Institute welcomes participation of all project implementing individuals for implementation of project-

Name of Mentor, designation and organisation:

Name of PI, designation and organisation:

Name of Co-PI, designation and organisation:

- 2. This proposal has not been submitted to any other agency / organization for financial support.
- 3. Organization will abide by the "Terms and Conditions" for project support under SEED division of DST.
- 4. The scale of pay, allowance, etc. proposed are those admissible to persons of corresponding status employed in the Institute/ University/ NGO/ Voluntary Organization, and are in accordance with the DST guidelines (enclose guidelines in case of any other of Central/State Government Institutions).
- 5. It is agreed that any research outcome or intellectual property right(s) on the invention(s) arising out of the project shall be taken in accordance with the instructions issued with the approval of the competent authority, DST.
- 6. Institute assures financial and other managerial responsibilities of the project.
- 7. The Institute will render all administration and financial support for successful completion of the project ensuring minimum Infrastructure and support services to project manpower.
- 8. Implementing organizations should also strengthen networking with KVKs, smaller Voluntary Organisation (VOs) in respective area of influence for large scale technology dissemination and other outreach activities. Also, project personals would catalyse and promote capacity building of these partner VOs.
- 9. In the unforeseen event of discontinuance of project, organization will inform DST in advance will submit all the required documents requesting foreclosure of project and/ or if PI leaves the project, the Co-PI will assume the charge and take responsibility for the fruitful completion of the project (after obtaining prior approval of DST).
- 10. Project team and Grantee organization will facilitate to conduct audit or inspection of project at any time by expert team of DST
- 11. Certified that the organization has never been blacklisted by any department of the State Government or Central Government.

Signature with seal

(Executive Authority of Institute/University/Head of Institution)

Date:

Place.....

Note: In case of collaborative projects where budget for different institutions has been proposed, the endorsement letter has to be submitted by all the collaborating institutions.

ANNEXURE-II

CERTIFICATE FROM PI & Co-PI

(on letter head of organization)

- 1. This is to certify that the information given in the proposal is true to the best of my knowledge and belief.
- 2. We did not submit this or a similar project proposal elsewhere for financial support from any agency/organization.
- 3. We (PI & Co-PI) and project partner agencies will abide by the **"Terms and Conditions"** for project support under SEED division of DST.
- 4. We assure financial and other managerial responsibilities of the project implementation.
- 5. We have explored and ensured that equipment and basic facilities will actually be available in the host institution and collaborating institution will be used as and when required for the purpose of the project. We shall not request financial support under this project, for procurement of these items.
- 6. Support of SEED division, DST will be acknowledged in all future internal or external publications/ reports/ presentations etc. and IPR guidelines will be followed.
- 7. Project team and Grantee organization will facilitate to conduct audit or inspection of project at any time by expert team of DST.
- 8. We undertake that spare time on permanent equipment procured through DST grant will be made available to other users for larger societal benefit.
- 9. We understand that shifting of the sanctioned project from one institution to other institution due to change of the institution by the principal investigator/co-investigators is not allowed and is at sole discretion of DST, subject to submission of No Objection Certificate from the Host Institution by the PI.
- 10. We will keep ready to provide following materials & documents in case project proposal is shortlisted/ selected by DST (in soft copy)
 - (a) "Terms & Reference" of DST grant.
 - (b) Endorsement from the Head of the Institution (on letter head of organization)
 - (c) Valid Registration certificate (only for NGOs)
 - (d) Memorandum of association, rules and regulations of the institution (only for NGOs)

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- (e) Audited Balance Sheets/ audited accounts of last 3 years (only for NGOs).
- (f) Annual reports of last 3 years (only for NGOs).
- (g) Letter of Support and tie up with S&T institutions mandatory for NGOs.

) Signature Principal Investigator

) Signature Co-Principal Investigator

Date: Place:

Date: Place:

Department of Science & Technology Science for Equity, Empowerment & Development Division (SEED) Division

Terms and Conditions for implementation of project support under SEED-DST

(to be accepted and signed by each implementing organization)

1.

Focus of project will adhere to scheme/programme guidelines of SEED-DST.

- 2. Manpower sanctioned under project should have relevant qualifications and experience/expertise against each sanctioned post, which should be relevant to activities proposed for three/ five years of project. The scale of pay, allowance etc. proposed for manpower are those admissible to persons of corresponding status employed in the Institute/University/Non-Government Organization (NGO)/Voluntary Organisation (VO), and are in accordance with the DST guidelines.
- 3. Project manpower will work for full time in project mode as per organizations rules and regulation, and not as employee(s) of Department of Science and Technology (GoI) and may also be utilized in coordinating data collection & analysis in terms of output, outcome and impact SEED-DST. Such staff member will **not** draw salary from other projects but may receive honorarium for specific activities.
- 4. Project Manpower should be willing to work in remote areas. Organization should evolve an appropriate mechanism with incentives etc. to retain and nurture manpower at least for 3-5 years to ensure timely delivery of expected outcome. Recruitment from the marginalized section (SC/ST)/ EWS/ young scientist/ women candidates should be encouraged.
- 5. After receipt of project grant, signed bio-data and joining details about the manpower recruited should be intimated to SEED Division, DST within three months.
- 6. The support should also be utilized to visualize innovative ideas and activities for effective implementation
- 7. Continuation and financial support for project will depend on evaluation of progress and assessment by expert team of DST from time to time. Non-performance may lead to stoppage of grant/disqualification for further project support.
- 8. International travel is subject to the programme specific guidelines of SEED-DST.
- 9. Progress report along with audited statement of expenditure (SoE) and utilization certificate (UC) as per prescribed format of GFR 2017 & timeline for each financial year should be submitted to DST.
- 10. Unspent balance at the end of each financial year should also be reported in SoE & UC and permission may be sought to carry forward the unspent balance to the next financial year.
- 11. Interest accrued/if accrued in each financial year should be deposited to Consolidated Fund of India-Bharat Kosh and details should be mentioned in UC & SoE.
- 12. Capital assets/facilities created from project support will be used by the intended beneficiaries during implementation period, and even after completion of the project support. GFR-2017 rules should be followed for retention of Capital assets on completion of project period.
- 13. SEED-DST will be immediately informed in case any member of the project team leaves the organization and replacement within 3 months of vacancy should be reported to DST for final approval.
- 14. All equipment and other field assets, banners, boards, manuals, reports etc. should carry the credit as "Catalyzed & Supported under (scheme/programme name) of Science for Equity, Empowerment & Development Division, Dept. of Science & Technology, New Delhi".
- 15. DST will be authorized to conduct audit and inspection of the project support at any time. The project team with Grantee Organization will facilitate to conduct such audit or inspection of project at any time, whenever communicated by DST.

- 16. An official of DST may be invited to attend the meetings of the executive body of the organization, wherein progress and expenditure details related to project activities are discussed. DST will nominate a suitable officer for this purpose.
- 17. DST will be kept informed about projects funded by other agencies. Accounts of such projects should be separately maintained.
- 18. Each training activity should be properly documented along with the subject matter, date(s) and content of training programs; contact details & names of trainers; and details of participants along with their address, contact number, place etc.
- 19. Each member of the project team should maintain a log book for recording the tasks performed by him/her on a day-to-day basis in direction with the milestones proposed in the project.
- 20. Proper documentation should be maintained in respect of activities taken up by the project support group as each new idea being pursued, expenses incurred in processing the idea, person involved, equipment proposed etc.
- 21. Benefits accrued to society / beneficiaries, directly or indirectly should be documented in story and video form.
- 22. Project implementing agency/organization will be responsible in case of any financial & legal administrative responsibility and dispute between the agency/organization and project staff. DST will not be liable for such legal cases of disputes.

We agree to the above terms and conditions.

Date: Place:

Date: Place: Signature with seal Head of the Organization 1

) Signature with seal Head of the Organization 2

)

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Signature with seal Head of the Organization 3

Date: Place:

Signature with seal Head of the Organization 3

*Signature of all partner organizations/ agencies

Date:

Place:

PROFORMA FOR SUBMISSION OF PROJECT PROPOSAL

PART 1: GENERAL INFORMATION

- 1. Name of the Institute/University/Organization submitting the Project Proposal :
- 2. State :
- 3. District and block:
- 4. Principal Investigator/ Network Coordinator Name and Institute : -
- 5. Age (in years) as on closing date of application submission :
- 6. Category (SC/ ST/ OBC/ Gen/ Others) : -
- 7. Designation :
- 8. Division of DST:
- 9. Programme Or Scheme of SEED division (SYST/ TIDE/ SCSP/ TSP/ SUNIL/ STW/ Network/ special call) : -

10. Proposed Subject Area -

- Innovative Machines and Tools in agriculture and allied sectors (Horticulture, Sericulture, Fisheries, Animal Husbandry etc.);
- Rural development through application of IoT/ICT/AI/ML;
- Natural Resource Management;
- Artisans & Textile;
- Integrated-farming & best practices;
- Allied sectors (Seaweed, fisheries, animal husbandry etc.);
- Affordable Healthcare & Nutrition and Integrative Medicine solutions;
- Hygiene & Sanitation management;
- Sustainable Habitat & Environment;
- Clean & Drinking Water;
- Sustainable waste management.
- Local transport & Retrofitting;
- Low-cost Electricity & Clean Energy solutions;
- Digital education tools in remote villages.
- Innovative Approaches to Rural Broadband Connectivity
- Citizen safety and social security;
- Linking people to financial services;
- Telecommunication for remote areas;
- Livelihood & skill development;
- Technologies & services for Rural enterprises;
- Technologies for Elderly and Persons with Disability (PwD);
- Innovative S&T solutions for Tourism
- Any other (specify);
- 11. Type of Proposal (Institute-based/ PI-based): -
- 12. Mode of implementation (individual/ network): -

13. Nature of the project (select any one): -

Development and deployment of Technology for societal benefit (new technology, new product/process)	
Adaptive R&D (Location Specific Research & Technology Development including Technology modification/modulation/ optimization, up/down	
scaling of existing systems, technology adaption/adoption etc)	
Technology transfer (field trials, demonstrations & promoting social enterprises)	
Technology dissemination (Replication of successful models, deployment of mew and available technologies for identified problem)	
Establishment of Science Technology and Innovation (STI) Hub	
Establishment centers for Strengthening Upscaling and Nurturing Innovations for Livelihood (SUNIL)	
Establishment of Women Technology Park (WTP)	
Network project with multiple agencies	
Any other (specify)	

- 14. Project Title (should include problem, proposed solution/technology, target community/beneficiaries and name of implementing Districts and State for establishment of STI hub/ WTP/SUNIL etc.):
- **15. Project Duration :**
- 16. Prosed budget (in Rs.) :
- **17. Proposal Submit Date :**
- **18.** Project Keywords (should include subject area, selected livelihood, name of technology, and geographical area of implementation etc.) :
- **19.** Project Summary (in 250 words only, including livelihood of proposed area, S&T component, source of technology, problem statement, proposed solution, target beneficiaries and expected outcomes, community identified etc.) :
- 20. Summary of work accomplished by PI/ Lead Institute in the proposed area during last 5 years (100 words):
- **21. Proposed Geographical coverage Area** (to be identified on the basis of preliminary assessment of the areas as well as the people, availability of minimum infrastructural facilities particularly roads, water & sanitation, health centers, communication, marketing facilities, electricity and potential for irrigation; climate, land use pattern, crops & cropping patterns, natural resources & raw materials, availability of special skills/ trades; and presence of local

organizations like Panchayats or cooperative or voluntary groups etc.):

SI. No.	State	District	Block/ village	PMAGYvillageorNo. ofbeneficiaries/Houaspirationaldistrict,ifHold (HH) to be coveredapplicable
1.				
2.				

- 22. Target Beneficiaries: -
 - Gender-wise distribution type and total size of target population (Male/ Female/ Transgender):
 - Category-wise % disof Gen/SC/ST/OBC/Women/EWS of total population in proposed geographical area :
 - Number of beneficiaries (Gen./SC/ST/OBC/Women/EWS) targeted to cover :
 - % of Gen./SC/ST/OBC/Women/EWS of total beneficiaries under proposed project :
- **23.** Background of target community (considering Indigenous Knowledge (IK)/ Traditional Knowledge (TK), skill & practices, socio-economic status and demographic details of target population including their present livelihood conditions, present average income level and occupations of the target beneficiaries) :

Sl. No.	Category viz. Gen./ SC/ ST/ EWS/ GEN/ OTHERS (Specify)	Age- group (range in years)	Target no. of beneficiaries	(Artisan/ Laboure/	average income (in
1.					
2.					
3.					
4.					
5.					
6.					

PART 2: INSTITUTE/ ORGANIZATION DETAILS

24. Type of the Lead Institute (collaborative proposal from two/three different types of Institutes will be encouraged): -

Туре	Tick mark
Academic/ research institute	
State S&T council	
NGO/ Voluntary Organization	
Panchayati Raj Institute (PRI)	
Krishi Vigyan Kendra (KVK)	
Others (specify)	

25. Registration number & year, if registered as Society/ Trust (applicable for NGO/ private institute only) :

26. NGO Darpan ID of NGO/ private institute:

S.No.	Name & Designation	Highest Qualification	Specialization	Date of Joining	Full Time/ Part Time Employee

27. Scientific Manpower in position in the organization as on date (for NGO only)

28. Details of ongoing /completed project of Lead Institute during last 5 years (relevant to current proposal only) :

S.No.	Funding Agency	Type of Funding (National/ International)	Amount (in Rs.)	Year	Purpose	Present status (ongoing/ completed)

29. Infrastructure available with institution for implementing the project (land/ building, equipment etc.) : -

30. Collaboration partner, if any : -

Sl. No.	Name & address of organization/ Institute	Type of Institute	Role as partner organization in proposed work

PART 3: PROBLEM IDENTIFICATION AND PROPOSED S&T INTERVENTIONS

- **31.** State the target population related problem you seek to address and brief of their Socio-Economic status, in 200 words only (should be based on identification of weakest links/gaps/problems in the predominant livelihood, health, quality of life and socio-economic status of people in select area – the problem identification should be supported with evidence based data – may be based on livelihood system analysis, investigators fieldwork in the target area, district (industrial) reports, data from various others reports, NRLM, SRLM data etc) :
- **32.** Brief Industrial Scenario of the target area, in 100 words only (may refer to Industrial Profile of Districts by State Govt. and MSME schemes such as SFURTI/ ASPIRE/ Cluster/ innovation etc.) :

- **33**. Was the District Industry Centre report examined for identification of the problem: (Yes/ No)
- 34. Existing regional/ National/ International solutions for the proposed problem, (in 200 words only) :
- **35.** Any other Government National Initiatives related to proposed activities to solve this problem (mention outcomes of the initiatives, in 100 words only) :
- **36.** Technology gaps and new innovative S&T component/ adaptive R&D solution proposed as per need identification (mention importance of the project in context of the current status, and demonstrate how the project will progress beyond the "state-of-art" or the best initiative tried by others in providing new innovative technological solution such as design modification, improvement in existing solutions etc. to the identified problem and user needs) :

Sl.	Technology gap in	Proposed S&T interventions,	Justification (technology development/ up
No.	identified problem		scaling/ down-scaling/ adaptation/
			adoption/ transfer/ demonstration/
		R&D solution	dissemination/ deployment etc.)
a.			
b.			

37. Proposed Objectives (aligned with title of project and 4-5 only): (5 lines only in drop down)

38. Institution/ places where detailed lab/ field testing or experimentations and validation will be carried out :

39. Proposed S&T delivery methods -

- Demonstration of technology or training package;
- Technology transfer & commercialization;
- Knowledge dissemination, publicity and promotion;
- Training/ capacity building;
- Handholding through local panchayats/welfare organizations;
- Any other (specify);

40. Source of identified Technology/ package of practice under project:

Source	Technology/ package of practice	Name of agency/ institution/ individual expert
Generated in-house by staff		
Generated in-house by employing outside experts		
Borrowed from an outside institution/expert		

Modification of technlogy/know-how being used by the beneficiaries	
Any other (please specify):	

- **41. Technical back-up support and linkages established in the project area** (State Govt. involvement for large scale technology dissemination; forward & backward linkages; stakeholders with emphasis on extent and nature of their involvement in documenting traditional knowledge, development of technology / modification/ transfer/ adoption etc.):
- **42. Methodology** (defined steps/relevant process details e.g. PERT chart, model, diagram including methods such as Survey; Protocols, Mobilization; Technology Identification, Assessment, Transfer, Adaptation & Adoption; Demonstration & Training, Result & Impact analysis, Stakeholders engagement, Marketing, Linkages, Feedback and Follow-up from stakeholders/ben etc.):
- 43. Details/ Mechanism for ensuring the involvement and participation of target population in the project area, (in 100 words only):

44. Number of training programs planned for beneficiaries (Topic, purpose, no. of trainings/yr., duration of training days, level of Participation, cost/training):

Торіс	Purpose	Duration (days)	No. of trainees	Cost (in Rs.)	Output

45. Work plan and expected deliverables of project (please don't give baseline survey, recruitment of project staff and purchase of Capital as milestone/ target. Refer evaluation and monitoring indicators in Guidelines of scheme/ programme of SEED division), refer Annexure- A:

Proposed objective	Work plan/ Milestones/ targets (minimum 5-6 per year)	Timelines to complete the task/ target objective (in months)	Expected deliverables (anticipated quantitative output, outcome & socio- economic impact on target beneficiaries)
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- 46. Plan of the institution about the usage, maintenance and retention of capital equipment to be procured under project (in 50 words only):
- 47. PUBLICITY, PROMOTION & DISSEMINATION PLAN: (provide a publicity, promotion & dissemination plan which shows how the project achievements will be properly disseminated, in 50 words only):
- **48.** Self-sustainability/revenue generation plan of the project work, in 100 words only (planning to continue the project activities even after project duration and support from DST is over; details in terms of finite time including cost benefit analysis of the project Techno-economic viability of the project and its self-sustainability; comment on the possibilities of the activity becoming self-sustainable / marketing/ buy back arrangements /Micro Enterprise Development etc.) :
- **49**. Relevance of the proposed interventions to the existing Micro & Small Enterprises and Artisan Units, Industrial clusters and augmentation of proposed technologies in development of existing clusters (in 50 words only):
- **50.** Possibility of replication of project in similar areas (after the proposed technological solution is proven, how it will be scaled up or taken forward- whether by involving State Government for large scale technology dissemination or via market or any other means any entrepreneur or business person can be involved in any manner?) (in 50 words only):
- 51. Whether project activities require any clearance from relevant authorities in respect of any environmental/ legal/ ethical issues? Yes/No
- **52**. Any other related information, if not covered under fields of proforma (please specify in 100 words only):

PART 4: PARTICULARS OF INVESTIGATORS

PRINCIPAL INVESTIGATOR (INSERT OPTIONS FOR MULTIPLE PI):

- 1. Name:
- 2. Gender (M/ F/ Other) :
- 3. Date of Birth:
- 4. Likely Date of retirement :
- 5. Designation :

- 6. Department:
- 7. Institute/University:
- 8. State:
- 9. District:
- 10. City/Place:
- 11. Address:
- 12. Pin:
- **13.** Communication Email:
- 14. Alternate Email:
- 15. Mobile:
- 16. Phone:
- 17. Category:
- **18. Highest Qualification :**

19. Education and Training (Graduation onwards):

Degree	Year	University/Institute	Field of Specialization

20. Field of Experience relevant to current proposal area (in 50 words only) :

21.

Work Experience:

Designation	Year	University/ Institute/ Organization	Job profile

22. Details of ongoing /completed project of project investigator (PI) during last 5 years :

S.No.	Funding Agency	Type of Funding (National/ International)	Amount (in Rs.)	Year	Purpose	Present status (ongoing/ completed)

23. Number of Papers published :

24. Significant publications (Maximum 10) :

Title	Authors	Journal/ Book/ Article	Volume	Page	Year	SCI Index

- 25. List of proposed area related publications from last five years (Maximum 10) :
- 26. Patent filed/ granted, if any :
- 27. Award/ Prize/ Certificate etc. won, if any :
- 28. Technology transferred, if any :
- 29. Worked with industry/ NGO/ any other :

CO-INVESTIGATOR (INSERT OPTIONS FOR MULTIPLE CO-PI):

- 1. Name:
- 2. Gender:
- 3. Date of Birth:
- 4. Highest Qualification :
- 5. Designation :
- 6. Department:
- 7. Institute/University:
- 8. State:
- 9. District:
- 10. City/Place:
- 11. Address:
- **12**. Pin:
- **13.** Communication Email:
- 14. Alternate Email:
- 15. Mobile:
- 16. Phone:
- **17.** Fax:
- **18.** Category:

19. Education and Training (Graduation onwards):

Degree	Year	University/Institute	Field of Specialization

20. Field of Experience relevant to current proposal area (in 50 words only) :

21. Work Experience:

Designation	Year	University/ Institute/ Organization	Job profile

22. Details of ongoing /completed project of project investigator (PI) during last 5 years :

S.No.	Funding Agency	Type of Funding (National/ International)	Amount (in Rs.)	Year	Purpose	Present status (ongoing/ completed)

23. Number of Papers published :

24. Significant publications (Maximum 10) :

Title	Authors	Journal/ Book/ Article	Volume	Page	Year	SCI Index

- **25.** List of proposed area related publications from last five years (Maximum 10) :
- 26. Patent filed/ granted, if any :
- 27. Award/ Prize/ Certificate etc. won, if any :
- **28.** Technology transferred, if any :
- 29. Worked with industry/ NGO/ any other

PART 5: SUGGESTED REFEREES

Suggested Referees -:

• Name and designation

- Organization and address
- Contact number
- Email ID

• Professional relation with applicant, if any

PART 6: FINANCIAL (BUDGET) DETAILS:

A. <u>Non – Recurring (Capital)</u>

Other Non-Recurring (Please give estimates, if the equipment is to be fabricated locally for prototype testing etc. Include installation charges, transport, taxes/duties/levies, etc. and try to avail tax/duty exemptions as applicable to your institution/ organization. Proper record should be maintained for the items procured under this Head. As per rule 149 of GFR, the procurement of Goods & Services is Mandatory for Goods and/or Services available on GeM Portal only and PI will also follow DoE's guidelines for incurring expenditure under the different sub-head. The budget under construction cost is only for low-cost structures like Common Facility Centre (CFC) and/or renovation or refurbishing of existing space and not for construction of new buildings or structures. Approval of such grant is at sole discretion of DST and as per extant GFR norms. Budgetary quotations (min. 3 no.) will be required in support of estimates for equipment, if project is approved for financial support.)

S.	Item/ Description	Justification	1 Year (in Rs.)	2 Year (in Rs.)	3 Year (in Rs.)	4 Year (in Rs.)	5 Year (in Rs.)	Total (in Rs.)
1	Equipment cost							
	Fabrication/ installation cost (Bill of materials/ estimate for fabrication & development cost should be provided)							
3	Construction cost (Bill of materials/ estimate for construction cost should be provided)							
		Total						

B. <u>Recurring (General)</u>,

Project Staff (team of scientists/engineers/technical support staff including social scientist total not more than four), refer latest OM of SEED-DST

S.	Project Staff designation and monthly emoluments as per DST order	No.	Justification	1 Year (in Rs.)	3 Year (in Rs.)	4 Year (in Rs.)	5 Year (in Rs.)	Total (in Rs.)

Consumables (Supplies/Materials for adaptive R&D/technology refinement, Fabrication, Installation and field testing/training etc.)

S.	. Items	Qty	• • • • • • • • • • • • • • • • • • • •	2 Year (in Rs.)		
			Total			

Contingency

S.	Description	Justification	2 Year (in Rs.)		Total (in Rs.)
		Total			

Travel (International travel is not permitted)

S	. Description	Justification	1 Year (in Rs.)	2 Year (in Rs.)	3 Year (in Rs.)	4 Year (in Rs.)	5 Year (in Rs.)	Total (in Rs.)
1.	Local travel & logistics							
2.	Outstation travel & logistics							
3.	DST's Field visits/annual review meetings etc. (Tentative budget to be proposed for two meetings per year and should cover the travel cost, accommodation and local field visits of 4-6 experts)							

Others (Outsourcing, Field Testing/ Demonstration, Technology Dissemination, Documentation, Publicity, Training & capacity building, Publication and patenting etc.)

S.	Description	Justification	1 Year (in Rs.)			Total (in Rs.)
1.						
2.						
3.						
4.						
5.						
		Total				

Overhead

S.	Description	Justification	1 Year (in Rs.)		4 Year (in Rs.)	Total (in Rs.)
1	Institutional Overheads	Institutional Overheads				

BUDGE	T HEAD	SUMMA	RY IN (II	NR)		
Budget Head	Year- 1	Year- 2	Year- 3	Year- 4	Year- 5	Total
1- Non-Recurring						
Other Non Recurring						
Subtotal (Capital)						
2- Recurring						
Project Staff						
Consumables						
Contingency						
Travel						
Others (Outsourcing, Field Testing/ Demonstration, Technology Dissemination, Documentation, Publicity, Training & capacity building, Publication and patenting etc.)						
Institutional Overhead						
Subtotal (General)						
Total Project Cost (Capital + General)						

Part 7: PFMS Details

Type of Registration : PAN Number : **Agency Name :** Act Registration No. : **Registering Authority : Registering Authority Other : TIN Number : TAN Number : GST Number :** Block No /Building /Village /Name of Premises : **Road/Street/Post Office :** Area/Loacality : City: **Pin Code :** State : **District : Contact Person : Designation : Phone Number : Mobile Number : Email ID : Bank Name : Branch Address of the Bank : Bank Branch Name :**

Bank Account Number of the Beneficiary : IFSC Code of the bank : MICR Code of the bank :

ANNEXURE-A

Tentative Monitoring & Evaluation indicators of project Proposals under SEED division

Note:

1. Applicant may select appropriate indicators relevant to the project from the list below.

2. May also incorporate any other indicator relevant to the project.

Output and outcome indicators (quantitative only)

Indicator	Target N	lumber		Tentative list & details	
Technologies/products/processes developed, transferred	deployed,	adapted,	propaga	ated, disseminated,	
New technologies/products/tools/processes developed and deployed on field (through action research)					
Technologies/tools/processes adapted/ modified/ pilot tested/ standardized for local deployment in field					
Technologies/products/tools/processes demonstrated, propagated & disseminated to community (through on-field deployment and awareness programs)					
Value-added products developed and marketed Technologies/product/tools/processes transferred or commercialized					
Models developed for social business plans/ entrepreneurship in project area					
STI capacity building and community en demonstrations and handholding etc. (details o to be provided)	-	0			

Techno-centric (S&T based) skills and training		
programs standardized (aligned towards National		
Skill Qualification Framework)		
Skill training programmes and workshops conducted for livelihood issues and S&T solutions		
Roundtable discussions and conferences		
conducted for livelihood issues and S&T solutions		
Exhibitions and technology demonstrations		
organised for livelihood issues and S&T solutions		
Surveys conducted for livelihood issues and S&T		
solutions		
Panchayat meetings/ focussed group discussions		
conducted with local Govt. for livelihood issues		
and S&T solutions		
Improved access of facilities and resources to b	eneficiaries, HH, SHGs, C	IGs, FIGs, FPOs, social
enterprises, start-ups, cooperatives etc.		
Sustainable livelihood opportunities created		
through S&T interventions and utilized by		
community (livelihood sector, subject area,		
location, type of opportunities)	~	
Human resources/scientific manpower involved	• Subject experts	Gender-wise
	Project personnel	• Male
	InternsPhD	Female Transcender
	PhDPost-doc	• Transgender
	 Post-doc Others (specify)	
Direct beneficiaries (farmers, artisans etc. on-field	Category-Wise	Gender-wise
implementation) created under project	• ST	• Male
imprementation) ereated under project	• SC	Female
	• OBC	 Transgender
	• Gen	11000 geneer
	• Others(specify)	
	EWS out of total	
	beneficiaries-	
Indirect beneficiaries mobilized under project (viz.	Category-Wise	Gender-wise
skilled manpower, trainees, facility users, people	• ST	• Male
impacted through project implementation area)	• SC	• Female
	• OBC	• Transgender
	• Gen	
	• Others(specify)	
	EWS out of total	
	beneficiaries-	
New community groups formed during project	• SHGs	
period (Provide list with name of group, location	• CIGs/FIGs/FPOs,	
and type of support provided under project)	 Social enterprises/Start- 	

	ups	
•	Cooperatives	
isting community groups nurtured for	• SHGs	
stainability (Provide list with name of group, cation and type of support provided under	• CIGs/FIGs/FPOs,	
bject)	Social enterprises/ Start-	
<i>j</i> (<i>c</i> (<i>j</i>)	ups Communities	
tal no of han of signing / Hayan Hald (IIII)	Cooperatives District wise HH	District-wise
tal no. of beneficiaries/House Hold (HH) vered within project area	Total HH	beneficiaries
vered within project area	 EWS out of total HH 	Male
	• EWS out of total HH	Female
		Transgender
tellectual Property Right (IPR), publicity, pro	motion and dissemination	
blications including S&T component,	Review/ Survey	
mmunity knowledge and availability of IK	Papers	
ills/TK skills, details of existing special	Reports/ Popular	
ills/trades, including art, craft etc. of the target	Articles on	
pulation	Indigenous	
	Knowledge (IK)/	
etails with Title, year of publication, publisher,	Traditional	
ge no., doi/online link, if available)	Knowledge (TK),	
	Manuals/ Booklets/	
	Leaflets/ Best	
	Practices	
	Compendiums	
most some munity based sussess staries and	Books/ Monographs	(link to coord online
rget community-based success stories and ecasting/video films on the technology		(link to access online should be provided)
roduced (using available handy cameras/ mobile		should be provided)
one with implementing institute)		
R on technology projects process design	Geographical Indication	(details of applied/
semicroby projecto process design	(GI) tags	granted)
	Copyright	
	• Trademarks/ Trade	
	secrets	
	Patents	
	 Industrial design 	
	 Intellectual property 	
	• Data-base rights/ Design	
	rights	
	 Joint ownership 	
	• Others (if any)	
ward/ prize/ certificate etc. won, if any	•	
rtals, Apps & data-base created on locally	• Portals	
ailable resources, services and knowledge	• Apps	
anagement.	• Data-base	

Dissemination of the project achievement through	• Social media	
media coverage	• Print media	
	• Mass media	
	Electronic media	
Physical Infrastructure and Assets		
Low-cost structures created (may include	Community Facility	
renovation or refurbishing of existing space)	Centre (CFC)	
	• S&T Hubs	
	• SC/ ST cells	
	Women Technology	
	Parks (WTP)	
	 Technology resource 	
	centre	
	Permanent Structures	
	 Technology Labs 	
	 Others (specify) 	
Capital assets/ equipment procured and installed		
for long term utilization by community (post-		
installation upto 5 year approx.)		
Capital assets/ equipment procured and installed		
for long term utilization in lab/ own establishment		
of supported institute/ organization (post-		
installation upto 5 year approx.)		
Forward and backward linkages for replication	and dissemination of project output	
MoUs/consent signed for linkages with local		
bodies (Panchayats/ RWAs/ BDO/ local		
cooperatives) for on-field implementation		
MoUs/consent signed for linkages with State		
Government for support through		
schemes/programmes		
MoUs/consent signed for linkages with S&T institutions/ Universities/ Labs/ Extension Center		
etc. for knowledge sharing		
MoUs/consent signed for linkages with voluntary		
organizations (NGO/ SHG/ CBO/ FPO/social		
enterprise etc.) for community adoption &		
participation		
MoUs/consent document/ formal contracts signed		
for linkages with industry, banks/ other financial		
institutions to benefit citizen		
Any other project specific indicator (may be add	ed below)	
	· · ·	
	8	

Impact indicators to promote inclusiveness and equity (quantitative and qualitative)

(May be measured in % increase or decrease with respect to number of households and total population benefited)

Indicator	Expected percentage change/ value and details in maximum 50 words each			
Improved access to Clean and Safe Drinking Water				
Improved access to Clean Energy – including cooking	; and			
electricity				
Improved access to Health care facilities or Nutrition	improved			
Improved access to indigenously developed or modified	ed			
technologies, socially relevant S&T innovations, servi				
facilitative units and other infrastructure (viz. low-cos				
retrofitted transport, labs etc.) due to project intervent	ions			
Improved access to human resource pool and knowled				
Improved Index of living standard in society				
Improved access to market and financial institutions				
Improved livelihood diversification (Farm and Non-Fa	arm - indicate			
the diversified trades)				
Improved household income due to project intervention	ons			
Improved productivity (in crop/livestock/poultry/fishe	eries/non-			
farm/traditional practices etc.)				
Improved availability and cost-effective management	of resources			
and assets (natural and/or physical)				
Improved livelihood and employment opportunities (1	ist the			
areas/field and give the number of entrepreneurs)				
Increased new enterprises or nurtured existing through	n S&T			
(mention type)				
Reduced drudgery (pertaining to difficulty felt, time specific spe	pent in			
particular activity, frequency of performance)				
Reduced cost and hesitation over use of technology/ to	ool/ process/			
products by target population				
Improved S&T outreach and geographical coverage an	rea			
Improved linkages with market/ enterprises for replica				
achievements				
Improved adoption of newly developed technologies/				
processes for community empowerment (indicate by r				
adopters and their category)				
Contribution towards Sustainable Development Ge		d National Missions (NMs)-		
provide name of indicator of project mapped with SD				
Indicator	SDG name	NM name		
1.				
2.				