



CALL FOR PROPOSALS

SCIENCE TECHNOLOGY AND INNOVATION (STI)
HUBS FOR DEVELOPMENT OF SCHEDULED CASTE
(SC) AND SCHEDULED TRIBE (ST) COMMUNITIES

SCIENCE FOR EQUITY EMPOWERMENT AND DEVELOPMENT (SEED) DIVISION

GENERAL INFORMATION &
FORMAT FOR SUBMISSION OF PROJECT PROPOSALS



GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY

https://dst.gov.in/

Government of India

Ministry of Science and Technology

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

CALL FOR PROPOSALS (JUNE 2023) – STI HUBS

(LAST DATE FOR SUBMISSION OF PROPOSALS: 20/08/2023)

ESTABLISHMENT OF SCIENCE TECHNOLOGY AND INNOVATION (STI)
HUBS FOR DEVELOPMENT OF SCHEDULED CASTE (SC) AND SCHEDULED
TRIBE (ST) COMMUNITIES

INTRODUCTION

The Scheduled Castes (SC) and Scheduled Tribes (ST) comprise about 16.6% and 8.6%, respectively of India's population (2011 census) which is more than 25 % of the total population. The Department of Science and Technology is implementing various Schemes and Programmes for Human Capacity Building and Empowerment of SC and ST Communities through promotion of Research, Development, Adoption, Transfer and Dissemination and Delivery of Proven Technologies. The Science for Equity Empowerment and Development (SEED) Division is implementing various programmes under the Special Component Plan for Scheduled Castes (SCSP) and Tribal Sub Plan (TSP) Schemes for creation of sustainable livelihoods and holistic development of SC and ST Communities. However, the connotation of 'Development' has changed over a period of time. The initial attention of economic growth and economic development has now slowly moved on to include human perspective into the notion of development. Hence there is a need to strengthen the societal welfare system through delivery of science led solutions, development of location specific appropriate technologies and Science Technology and Innovation (STI) Capacity Building of SC/ST people for creation of sustainable livelihoods and improved quality of life in tune to their growing aspirations.

Science and Technology (S&T) based innovation, development and delivery programmes for the vulnerable sections of the society should try to address the problems in the livelihood system consisting of Human, Natural, Social, Physical and Financial capitals (details in Annexure VII) including health in the context of growing aspirations and Quality of Life. It is thus envisaged that establishment of Science Technology and Innovation (STI) Hubs will develop, nurture and ensure the development, improvement and delivery of appropriate and relevant S&T approaches for inclusive social and

economic development of the Scheduled Caste and Scheduled Tribe population in the country. The STI Hubs may follow a bottom up approach for gathering information on livelihood system and should try to identify the strongest and weakest links in the predominant livelihood systems for appropriate STI interventions and creation of social enterprises. Attempts should be made to capture the Indigenous Knowledge Systems of different communities and improving them with infusion of advanced technologies.

OBJECTIVES

- (1) To capture the weakest linkages in the predominant livelihood systems of the SC and ST Communities and improving the livelihoods through Science and Technological interventions
- (2) To Identify the strongest aspects in the livelihood system in respect of current occupations/livelihoods of the SC and ST Communities in the target area for establishing social enterprises, local manufacturing units and startups for boosting the rural/village economy
- (3) To harness, document, research, validate and conserve the Indigenous Knowledge Systems (IKS), skills and practices of different communities through inputs of Science and Technology to integrate IKS into appropriate technology, innovation and development for sustainable development practices in livelihood systems

The investigators may give specific objectives related to the above in the proposal for STI Hub and should avoid copying objectives of the programme.

IMPLEMENTATION MECHANISM

The project implementation may be in collaborative, networked and partnership framework to resolve the last mile problem in the induction, delivery, management, use and extension of technology applications for social and economic development of target population. The STI Hubs may be established by Local Academic or S&T institutions, R&D Labs, S&T based Voluntary Organizations (NGOs) etc having majority of SC or ST population in their catchment area. In order to create mechanisms for S&T based Sustainable Rural Livelihoods in tune to the societal requirements, the Academic or S&T institution should collaborate with a network of local NGOs. Similarly, in case of S&T based Voluntary Organizations, there should be well-defined partnerships/collaboration S&T Institutions R&D Laboratories having expertise in the proposed area of work and developing need-based location specific technologies. The STI Hubs shall also have backward linkage with Higher Educational/Scientific Institutions viz. Agricultural Universities, IITs, NITs, KVK's, Central Scientific Departments etc. for harnessing and

leveraging frontier technologies available with them. STI Hubs should also try to involve the existing SHGs/FPOs/FPCs etc for sustainability. Thus, the STI Hubs shall facilitate the ecosystem for the socioeconomic development of SC/ST communities through the following:

- Creation of sustainable livelihoods and employment opportunities
- o Promoting equitable economic growth
- o Improving productivity and reduce drudgery
- o Promoting efficient and effective use of local and natural resources
- Establishment of social enterprises
- o Equity and Inclusion

The projects under SCSP and TSP Schemes of SEED Division are aimed at knowledge strengthening for welfare of SC and ST Communities. The prime objective of these projects is improving the efficiency of Welfare System through Science Technology and Innovation (STI) and strengthening the S&T delivery mechanism. The projects are implemented for Livelihood System efficiency through S&T Interventions which in turn are building Knowledge and Capacity Building of NGOs in addition to improving the field and outreach capabilities of Knowledge Institutions.

CRITERIA FOR ESTABLISHMENT OF STI HUBS

The STI Hubs may be located in a geographical area with predominant presence of SC and/or ST population (The figures showing population distribution of SC and ST population is given in figures 1 & 2). At least 50-70% of the total beneficiaries of the STI Hubs should belong to SC and/or ST Community. The STI Hub can be co-located in the Host Institution. This co-location should not only promote more effective utilization of the knowledge centres, but would also redefine their usage and role in fostering problem solving and project based learning and provide hands on/ practical learning and engagement in the process of Science, Technology and Innovation. Each STI Hub may focus on not more than 4-5 interventions as per the objectives for Creation of Sustainable Livelihoods to the SC and ST Communities. While proposing the technological interventions based on the weakest and strongest links of the predominant livelihood system of the SC and ST Communities, the following indicative aspects may be considered:

- Availability of local resources and skills
- Capable to remove drudgery
- ➤ Able to enhance efficiency of the livelihood system

- ➤ Empowerment and enhancement of the socio-economic status of the SC/ST community.
- ➤ Bringing the community to higher market value chain
- ➤ Adaptable and affordable interventions/technologies

The S & T based thrust areas for interventions for socio-economic development, capacity building (both institution and human capacities) and sustainable development for development of SC/ST Communities, though not restricted may also focus on various domains for socioeconomic development of SC and ST Communities which is given in Annexure VIII.

ELIGIBILITY

The following organizations/institutes are eligible for receiving financial support for establishment of STI Hubs

- (a) Government Academic Institutions (Central and State Government), Government S&T bodies, R&D Labs etc.
- (b) Private Academic Institutions and R&D Institutions (Universities/ Colleges/ Institutions and Government Aided Colleges recognized or regulated by UGC/AICTE/ MCI/DCI/PCI etc, having SIRO recognition etc) would be considered as Non-Government Organization (NGO) and shall use 'NGO/ VO' option during the process of online submission of proposal.
- (c) S&T based Voluntary Organizations (NGOs) 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 with
- o Minimum 10 years of field level experience in technology development, dissemination, delivery and management.
- Experience in handling projects having focus on S & T with support from Scientific Departments of Government of India.
- The organization has not been blacklisted by any Central or State Government Department.

In addition, the S&T based voluntary organizations are also required to submit the following documents while submission of proposal online on the DST e-PMS portal.

 Copy of valid registration certificate/Trust Deed, Memorandum of Association, Rules and Byelaws of the society.

- Audited Statement of Accounts and Annual Activity Reports of the organization for the last 3 financial years.
- o Organization's Unique ID in NGO Darpan Portal
- Well-defined partnership/collaboration with academic institution, university, department, engineering college or a research laboratory having expertise in the proposed area of work

General Terms and Conditions:

- 1. Institutions/Organization receiving funds would assume financial and other administrative responsibility of the project.
- 2. In case of multi-institutional project, the Principal Investigator (PI) must furnish formal agreement from the collaborating institutions/scientists along with separate budget for each of the implementing institutions.
- 3. International travel is not permissible under the projects.
- 4. Staff recruited for a project should be paid as per the norms and guidelines of the DST.
- 5. In case the Principal Investigator (PI) leaves the Institution, the Co-Investigator (Co-I) will assume the charge of the Investigator for Competing the Project with prior approval of DST.
- 6. Shifting of the sanctioned project from one institution to other institution due to change of the institution by the principal investigator is not allowed and is at sole discretion of DST, subject to submission of No Objection Certificate from the Host Institution by the PI.

CRITERIA FOR EVALUATION: The proposals would generally be evaluated based on the following criteria. However, the weightage of each of these criteria will vary depending upon the anticipated output, outcome and significance to the beneficiaries

- (i) Relevance with the Call and mandate of the programme
- (ii) Relevance of the proposal with the objectives of the programme
- (iii) Demand or need of proposed interventions
- (iv) Novelty, feasibility and scientific merit of proposed interventions
- (v) The improvement (novelty) of proposed interventions over existing alternatives
- (vi) Clear definition/identification of problem based on livelihood system analysis
- (vii) Clear articulation of methodology and the expected outputs and outcomes for the benefits of the target population.
- (viii) Clear delineation of roles and responsibilities of collaborators.
- (ix) Technical, Social and economic viability of proposed interventions.
- (x) Credibility, Track Record and Commitment of Project Team/Institute in implementing S&T based projects

DST on recommendations of the Programme Advisory Committee (PAC)/Expert Committee (EC) may introduce any other criteria considered to be critical for successful implementation of the project. The decision of the PAC/EC is final and binding.

The proposals received against the call will be shortlisted by the Departmental Screening Committee comprising of experts also from the PAC/EC. The shortlisted proposal will then be invited for presentation before the PAC/EC for final selection and support. The decision of the PAC/EC regarding selection of projects is final and no further queries will be entertained.

SUBMISSION OF PROJECT PROPOSALS

The Principal Investigator should submit the project proposal **online only** through DST's Electronic Project Management System (e-PMS) on portal www.onlinedst.gov.in the given format along with necessary documents. **Proposal submitted by any other means will be summarily rejected**. The investigators may please note the following for submission of proposal online.

- 1. Browse onlinedst.gov.in to access the homepage of the "DST e-PMS Portal", register, log in and submit the project proposal in prescribed format under Science Technology and Innovation (STI) Hubs for SC/ST community.
- 2. Those who wish to submit proposals for STI Hubs for SC Population should use the Link STI Hubs for SC Community and those submitting proposals for STI Hubs for ST Population should use the Link STI Hubs for ST Community
- 3. Before filling up the form candidates are advised to carefully go through the call for proposals published at the DST Website (www.dst.gov.in) and also available under Proposal Formats in the e-PMS Portal after logging in the portal site.
- 4. To save your time and avoid data loss please download the appropriate proposal format and fill all the information required as per the format as a Word and PDF file and then keep it ready for upload during submission of mandatory documents.
- 5. Click on "Submit Proposals" link which would take you to a page seeking multiple information starting with General information, Details of principal investigator etc. Ensure to fill all the mandatory information sought against each menu.
- 6. After filling all the above particulars there is provision for preview your detail before final submission of application form on clicking on "Preview" button. Preview page will display all the particulars that you have mentioned. Click on "Submit" button for final submission of the proposal.

- 7. Applicants are advised to carefully fill and verify the details filled in the online application as no change will be possible/ entertained after clicking the Final Submit Button. The TPN number generated after submission of proposal may be noted for future reference.
- 8. The enclosed conflict of interest document (Annexure V) should also be signed and submitted.
- 9. The submission of proposals is open to all categories and the investigators submitting proposal may not necessarily belong to SC or ST Community
- 10. The Last Date for Submission of Online Proposals is 20/08/2023 after which the web-link will be automatically disabled for any usage.

Note: Please ensure submission of online proposals well before the due date. Generation of T-PIN ensures successful submission of proposal online.

CONTACT PERSONS

Ms. Rajni Rawat, Scientist 'D'

Science for Equity Empowerment and Development Division

Room No. 219, New Block – I, Technology Bhavan

Department of Science and Technology

New Mehrauli Road, New Delhi – 110016

E – Mail: rajni@nic.in, Phone: 011-29512324: Extn: 12093, Mobile: 9868249596

Dr. Konga Gopikrishna, Scientist 'F'

Science for Equity Empowerment and Development Division

Room No. 105, New Block – I, Technology Bhavan

Department of Science and Technology

New Mehrauli Road, New Delhi – 110016

E – Mail: k.gopikrishna@nic.in, Phone: 011-26590298

Only the proposals for STI Hubs should be submitted against this call. Other proposals pertaining to SC and ST should be submitted against Scheduled Caste Sub Plan and Techno Interventions for Tribal Empowerment Schemes respectively which are currently open under SEED Division in e PMS (onlinedst.gov.in). Proposals other than STI Hubs submitted against this call will be summarily rejected.

(LAST DATE FOR SUBMISSION OF PROPOSALS: 20/08/2023)

FORMAT FOR APPLICATION

SCIENCE TECHNOLOGY AND INNOVATION HUBS

Guidelines for formulation of proposals for establishing Science, Technology and Innovation (STI) Hubs at Knowledge Institutions for SC/ST Population

- 1. The proposal should be specifically aimed at improving the livelihood system of SC/ST Population using Science and Technology inputs/processes
- 2. The proposal/project may focus on
- (a) Livelihood system analysis for identifying weakest and strongest links.
- (b) Development and delivery of novel/innovative technologies for the livelihood system improvement of SC/ST communities
- (c) Dissemination and Deployment of location specific relevant technologies.
- (d) Creation of social enterprises
- (e) Interventions focusing on Indigenous Knowledge System strengthening pertinent to livelihood system.
- (f) Any other interventions focusing on issues of Multidimensional Poverty (MDP) can be the components of the project (STI Hub).
- (g) Direct Welfare Activities in the above domains will NOT be considered for financial support.
- (h) Only Proposals on interventions aiming at (i) Improving the efficiency of Welfare System and (i) Improving Livelihood System efficiency through Science Technology and Innovation (STI) will be considered for support
- (i) Routine proposals on standardized technologies like vermicompost, mushroom cultivation, food processing etc will NOT be considered for financial support.
- (j) Proposals crosscutting with the activities of line function Ministries/Departments, extensions activities of KVKs, activities falling under NRLM/SRLM will NOT be considered for financial support.
- 3. The project should clearly bring out how it will benefit the target population.
- 4. Financial support would be provided for purchase of equipment and creation of small infrastructure (including common facility centres)/construction costs, for establishment of STI Hubs (as per extant norms of DST).
- 5. The target areas for project implementation should be in the vicinity of the selected target population
- 6. Efforts should be made for the direct involvement of SC/ST population in the project so that technology transfer/interventions could be done effectively.

- 7. The Interventions should aim at improving at mid and long term the physical, social and economic conditions of the target communities in addition to their short term/immediate need.
- 8. Efforts should be made to link the proposed interventions/activities of STI hubs to other National and State level programmes (larger perspective of the interventions with National Missions) for sustenance.
- 9. The project should not lead to environmental degradation or ecological imbalance.
- 10. The project activities should be oriented towards generation of self-employment/additional revenue generating and should not displace current job. The focus should be on strengthening the local level self-reliance through Science Technology and Innovation.
- 11. The project should develop strategies for S&T absorption capacity building, Knowledge improvement and innovation capabilities among the beneficiaries.
- 12. Please submit only the duly filled in application form along with the annexures. Do not submit/upload the call document and the guidelines.

PART I: EXECUTIVE SUMMARY

(This part should not exceed 10 pages)

1. Project Title

Science Technology and Innovation H		Block,			
District,	State.				
2. Name of the Institution & Address 3. Details of the Project Team					
i. Principal Investigator					
Name					
Date of Birth					
Highest Qualification					
Designation					
Department					
Institute/University					
Complete Address with Pin Code					
Telephone and Fax Numbers					
Mobile Number					
E – Mail					
ii. Co Investigator					
Name					
Date of Birth					
Highest Qualification					
Designation					
Department					
Institute/University					
Complete Address with Pin Code					
Telephone and Fax Numbers					

4. Project Area Profile:

Mobile Number

E-Mail

- (a) Demographic Details (give details of geographical area covered, climate, land use & cropping patterns)
- (b) Target Area/Location for Establishing STI Hub (please mention whether the target

- area (STI Hubs) falls under aspirational district or PMAGY Village etc) As far as possible the STI should be located in the vicinity of the beneficiaries.
- (c) Target Beneficiaries (type, total size of target group(s), % of SC/ST of total population in project area etc, number of beneficiaries, % of SC and ST of total beneficiaries)

Note: (i) In case the STI caters to beneficiaries in different target locations (villages/blocks/districts), the details of each of the project area should be given

(ii) In case the beneficiaries of STI Hubs are predominantly SC, the proposal should be applied under SC Category and if the beneficiaries are predominantly ST, the proposal should be applied under ST Category in the e PMS

5. Baseline Data Capture

{Describe the current situation that STI Hub intends to address (as a point of reference to measure success upon project completion). Briefly provide quantitative and/or qualitative information on the existing conditions that support the need for STI Hub}.

- **6. Analysis of Livelihood Systems** (may please refer to Sustainable Livelihood Framework in Annexure VII)
- (a) Predominant Livelihoods in the target area (current major occupations of the community, present average annual income etc)
- (b) Predominant Livelihoods of SC/ST community (current occupations of the target beneficiaries, present average annual income etc)
- (c) Details of Livelihood Assets (ex: agriculture land, animals etc)
- (d) Industrial milieu of the target area
- (e) Details of Existing Social/Rural Enterprises
- (f) Socio-economic Status (details of social and economic conditions, availability of basic amenities and facilities etc.)
- (g) Availability of Natural Resources & Raw Materials
- (i) Access to Technologies
- (j) Details of Indigenous Knowledge Systems (traditional skills, practices, art, craft etc)
- (k) Information on human capital (health, education, nutrition, skill etc.) of target beneficiaries.

7. Problem Statement

(should be based on identification of weakest links/gaps/problems in the predominant livelihood systems – 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)

8. Proposed Solution (should correspond to the problems identified, may focus on immediate, short-term, medium and long term requirements/solutions)

9. Details of Proposed Interventions

Sl.	Interventions	Justification
No.		
a.		
b.		

10. Nature of the project

Technology development (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 & transfer of technology)	
Technology dissemination (Replication of successful models, deployment	
of mew and available technologies for identified problem)	

11. Give the details of technologies proposed/to be proposed

- (a) selected for development and/or
- (b) selected for up/down scaling, technology adaption/adoption etc and/or
- (c) selected for transfer
- (d) selected for demonstration, dissemination and deployment
- 12. Importance of the proposed Interventions (Technologies) in the context of current status (please indicate how the proposed interventions will improve livelihoods, health, socioeconomic status etc)
- 13. Science & Technology component/Innovativeness/Novelty of the project.
- 14. Expected Deliverables (5-6 clear cut deliverables)
- 15. Expected benefits to the target groups/population (5-6 clear cut deliverables)
- **16.** Suggested plan of action for utilization of the outcome expected from the project (please give a larger perspective of the projects outcomes to National Developmental Goals/National Missions etc)

- 17. Please give a detailed business plan/enterprise model/sustainability of the project.
- 18. Details of the beneficiaries (direct and indirect)

19. Details of Collaborators

Sl.	Name and Address of the Collaborators	Purpose
No.		
1.		

20. Duration (months):

21. Budget Summary (in Rs):

Recurring Cost (in Rs):

Non-Recurring cost (in Rs):

Sl.	Items	Budget (in Rs.)				
No.		1 st Year	2 nd year	3 rd year	Total	
<i>A</i> .	Recurring					
1.	Manpower					
2.	Consumables					
3.	Travel					
4.	Training Programme					
5.	Other Costs					
6.	Contingency					
7.	Overheads					
	Total (A)					
B.	Non Recurring					
1.	Equipment					
2.	Fabrication Costs					
3.	*Construction Costs					
	Total (B)					
	Grand Total (A+B)					

^{*}The budget under construction cost is only for low cost structures like Common Facility Centre 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.

PART II: TECHNICAL DETAILS OF PROJECT

1. Introduction (under the following heads)

- (a) Existing Natural Resource Endowment of the Target Area (to promote efficient and effective use of local and natural resources for improved livelihoods give details of geographical area, climate, land use pattern & cropping patterns, availability of natural resources & raw materials etc.)
- (b) Demographic details and Socio-economic profile as per 2011 census (type of target beneficiaries total size of target group(s), % of SC/ST of total population in project area, details of social conditions, current occupations of the target beneficiaries, present average annual income, availability of basic amenities and facilities etc.)
- (c) Brief Industrial Scenario of the target area (may refer to Industrial Profile of Districts by MSME)
- (d) Indigenous Knowledge (IK)/Traditional Knowledge (TK), Skill and Practices and the problems identified (Community Knowledge and availability of IK skills/TK skills, Details of existing special skills/trades, including art, craft etc. of the target population)
- (e) Details of the project implementation site/ Location map of the target area (as far as possible should be in the vicinity of the targeted population).
- (f) Expertise available with proposed investigating group/institution for implementing project.
- **2. Objectives** (well defined, restricted 3-4 objectives do not copy from the objectives of the programme)

3. Interventions (Technologies) selected for development and/or dissemination, deployment, delivery along with justification

- (a) Proposed Interventions with Details focusing on Technology development (development of new technology, new product/process) and/or Adaptive R&D (Location Specific Research & Technology Development) and/or Technology dissemination (Replication of successful models)].
- (b) 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
- (d) Details of proposed interventions and solutions for problems identified in IK/TK for strengthening the livelihoods.
- (c) Details indicating how the project/proposed technologies will benefit the target population.

4. Methodology and Work Plan (under the following heads)

- (a) Methodology (Give in detail all proposed project activities and describe the methodologies for running the STI Hub. Describe the innovative approach and technical methodology for carrying out the activities the relation between project objectives and activities should be clear. The proposed activities may also include details on technology development, demonstration, dissemination and deployment etc)
- (b) Time schedule of activities (in Gantt chart)
- (c) Organization of work elements

Sl.	Component/Work	Expected Start	Expected	Deliverables
No	Elements	(Month/Year)	Completion	
			(Month/Year)	

Please don't give baseline surveys, recruitment of project staff, purchase of equipment as activities or deliverables

- 5. Details/Mechanism for the involvement of SC/ST Population in the project.
- 6. Indicate whether the project will help in maintaining environmental/ecological balances (if applicable).
- 7. Give a brief description the social and economic impact the project will create in the livelihood system of target beneficiaries and whether the STI Hub address the issues of Multidimensional Poverty.
- 8. Details of self-employment/revenue generation through the project in long term/development of entrepreneurship (also indicate the additional income per annum through this project per beneficiary/family).
- **9.** Comment on the possibilities of the activity becoming self-sustainable / marketing / buy back arrangements /Micro Enterprise Development etc (give in terms of finite time including cost benefit analysis of the project) Techno-economic viability of the project and its self-sustainability

10. Details of Trainings and STI Capacity Building Programmes

- a. Training and Awareness Programme for STI Capacity Building etc.
- b. Training and Awareness Programme for demonstration, dissemination and deployment of selected technologies.

11. Para	meters to	be i	used for	evaluation	of	the	impa	ct
----------	-----------	------	----------	------------	----	-----	------	----

(in terms of expected output and outcomes – See Annexure VI for indicators for monitoring)

Pre Intervention (Bench Mark)	Anticipated Outcome (likely deliverables)

12. Linkages/Collaborations with R&D institutions/S&T Based Knowledge Institutions (NGOs) etc.

Name of Organization	Role in project implementation

13. Details on likely impact of the Project.

14. Details of ongoing/completed projects of the investigator(s) during the last 5 years

S1.	Name of the project and	Funding	Cost & Duration	Status
No.	Reference No	Agency/Division		

15. Details of ongoing/completed projects of the Institute during the last 5 years

Sl.	Name of the project and	Funding	Cost & Duration	Status
No.	Reference No	Agency/Division		

PART III: BUDGET

BUDGET ESTIMATES – SUMMARY*

(The budget under different heads will be sanctioned as per the extant norms of DST)

Sl. No	Item	Item Budget			
		1st Year	2 nd Year	3 rd Year	Total
A	RECURRING				
1	Manpower				
2	Consumables				
3	Travel				
4	Training Programs				
5	Other Costs				
6	Review Meeting by DST				
7	Contingencies				
8	Institutional Overheads				
В	NON RECURRING				
1	Permanent Equipment				
2	Fabrication of Equipment	·			·
3	Construction Costs				
	TOTAL				

^{*}In case of collaboration with different institutions, separate budget requirements should be furnished along with formal agreement from the collaborating institutions/scientists. Detailed justification need to be provided for all the budget heads as per the break up given below.

A. RECURRING

1. BUDGET FOR MANPOWER

Sl.	Designation	Budget (Rs)				
No.		1 st Year	2 nd Year	3 rd Year	Total	
1.						
	TOTAL					

(Staff recruited for a project should be paid as per the norms and guidelines of the DST. The justification should contain the work allocation/functions of each project staff. Please refer to different OMs regarding salary structure of various categories of project staff available on DST Website)

2. BUDGET FOR CONSUMABLES

Sl. No	Consumables	Budget (Rs)				
		1st Year	2 nd Year	3 rd Year	Total	
1.						
TOTAL						

(Detailed break up of consumables should be given)

3. BUDGET FOR TRAVEL

Sl. No	Purpose	Budget			
		1st Year	2 nd Year	3 rd Year	Total
1.	Project Logistics				
2.	Field Activities				
	TOTAL				

4. BUDGET FOR TRAININGS

Sl. No	Description of	Budget			
	Trainings/Awareness	1st Year	2 nd Year	3 rd Year	Total
1.					
TOTAL					

5. BUDGET FOR OTHER COSTS

Sl. No	Item	Budget			
		1st Year	2 nd Year	3 rd Year	Total
1.					
	TOTAL				

(This head will cover costs for technology testing, field trials, deployment, patents etc)

5. REVIEW MEETINGS BY DST

Sl. No	Description of Trainings	Budget			
		1st Year	2 nd Year	3 rd Year	Total
1.	Costs for Review and				
	Monitoring, field visits etc				
TOTAL					

(Tentative budget to be proposed for two meetings a year – should cover the travel cost, accommodation and local field visits of 6-8 experts)

6. BUDGET FOR CONTINGENCIES

Sl. No	Item	Budget				
		1st Year	2 nd Year	3 rd Year	Total	
1.						
	TOTAL					

(Should be for unforeseen costs)

7. BUDGET FOR OVER HEADS

Sl. No	Item	Budget				
		1st Year	2 nd Year	3 rd Year	Total	
1.						
	TOTAL					

B. NON RECURRING

BUDGET FOR PERMANENT EQUIPMENT/STRUCTURES

Sl. No.	Item	Budget			
		1st Year	2 nd Year	3 rd Year	Total
1.	Equipment				
2.	Fabrication Costs				
3.	*Construction Costs				
	TOTAL				

- o Detailed justification for each and every item of equipment should be given
- The construction cost should also include the costs towards establishment of STI
 Hub at Host Institute/CFC for trainings/demonstrations etc (It is expected that the
 Host Institute should provide space for STI Hub Refurbishing costs for existing
 structure may be supported)
- o Bill of materials/estimate for fabrication and construction cost should be provided

*The budget under construction cost is only for low cost structures like Common Facility Centre 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.

PART IV: DETAILS OF THE IMPLEMENTING INSTITUTE

1. Description of the implementing agency (ies)

(In case of Voluntary Organizations/NGOs and Private Institutes please enclose copies of Registration Certificate/Trust Deed, Memorandum of Association including By-laws and Mandate, Audited statement of accounts for the last three years, Annual Report including activity profile for last three years.)

1. Type of organization:

Туре	Implementing Org.	Collaborator
Academic Institution		
Research Organization		
S&T Council		
Voluntary Organization		
Other (please specify)		

- 2. Expertise available with the proposed investigating group/institution for implementing the project (describe briefly in not more than one page)
- 3. Infrastructure available land/building (including equipments).
- 4. Whether the organization is implementing EAT Module under PFMS?

ENDORSEMENT FROM HEAD OF THE INSTITUTE (on letter head)

It is certified that the project proposal titled "title of the project"

- 1. Has not been submitted to any other agency/agencies for financial support
- 2. 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 guidelines on emoluments for research personnel as contained in (enclose guidelines if any in case of Central/State Government Institutions)
- 3. 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 Ministry of Finance, Department of Expenditure
- 5. In case the Principal Investigator (PI) leaves the Institution, the Co-Investigator (Co-I) will assume the charge of the Investigator for Competing the Project with prior approval of DST.
- 6. The proposed equipment is not available with the Host Institution.

Signature of Executive Authority of Institute/ University with Seal with date

- 1. Signature of Principal-Investigator with place and date
- 2. Signature of Co-Investigator place and date

CERTIFICATE FROM THE INVESTIGATORS

It is certified that

- 1. We agree to abide by the terms and conditions of the DST grant.
- 2. We did not submit this or a similar project proposal elsewhere for financial support.
- 3. We have explored and ensured that equipment and basic facilities will actually be available as and when required for the purpose of the project. We shall not require financial support under this project, for procurement of these items.
- 4. We undertake that spare time on permanent equipment will be made available to other users.
- 5. The proposed equipment is not available with the Host Institution
- 6. In case the Principal Investigator (PI) leaves the Institution, the Co-Investigator (Co-I) will assume the charge of the Investigator for Competing the Project with prior approval of DST.
- 7. 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.

We have enclosed the following materials.

Duly filled application form (complete with all Annexure)		
valid Registration Certificate/Trust Deed, MOA with Bye Laws, Annual		
reports & audited accounts of the organization for previous 3 years (only for		
NGOs)		
Letter of Support and tie up with S&T institutions – Mandatory for NGO'S		
Endorsement from Head of Institute and Certificate from Investigators		
(original)		

1. Signature of Principal-Investigator with place and date

2. Signature of Co-Investigator place and date

BIODATA OF PRINCIPAL INVESTIGATOR

A. Name:

B. Dat	e of Birth				
C. Inst	itution				
D. Wh	ether belongs to SC/ST				
(From	demic and professional card Graduation to highest dization – Enclose copy of c	qualification level	•	and area	of
Profess	sional career:				
F. Awa	ard/Prize/Certificate etc. wo	on by the investigator	:		
Details	olication (Numbers only) s of Papers, Books, General t of Completed/Ongoing and		ny		
Sl.	Name of the project and	Funding	Cost & Duration	Status	
No.	Reference No	Agency/Division			

BIODATA OF CO INVESTIGATOR (S)

A. Name:
B. Date of Birth
C. Institution
D. Whether belongs to SC/ST
E. Academic and professional career: (From Graduation to highest qualification level indicating subject and area of specialization – Enclose copy of certificate of highest qualification):

F. Award/Prize/Certificate etc. won by the investigator:

Professional career:

- G. Publication (Numbers only)
 Details of Papers, Books, General Articles, Patents if any
- H. List of Completed/Ongoing and Submitted projects

Sl.	Name of the project and	Funding	Cost & Duration	Status
No.	Reference No	Agency/Division		

POLICY ON CONFLICT OF INTEREST FOR REVIEWER & COMMITTEE MEMBER or APPLICANT or DST OFFICER ASSOCIATED/ DEALING WITH THE SCHEME/ PROGRAM OF DST

Issues of Conflicts of Interest and ethics in scientific research and research management have assumed greater prominence, given the larger share of Government funding in the country's R & D scenario. The following policy pertaining to general aspects of Conflicts of Interest and code of ethics, are objective measures that is intended to protect the integrity of the decision making processes and minimize biasness. The policy aims to sustain transparency, increase accountability in funding mechanisms and provide assurance to the general public that processes followed in award of grants are fair and non-discriminatory. The Policy aims to avoid all forms of bias by following a system that is fair, transparent and free from all influence/ unprejudiced dealings, prior to, during and subsequent to the currency of the programme to be entered into with a view to enable public to abstain from bribing or any corrupt practice in order to secure the award by providing assurance to them that their competitors will also refrain from bribing and other corrupt practice and the decision makers will commit to prevent corruption, in any form, by their officials by following transparent procedures. This will also ensure a global acceptance of the decision making process adopted by DST.

Definition of Conflict of Interest:

Conflict of Interest means "any interest which could significantly prejudice an individual's objectivity in the decision making process, thereby creating an unfair competitive advantage for the individual or to the organization which he/she represents". The Conflict of Interest also encompasses situations where an individual, in contravention to the accepted norms and ethics, could exploit his/her obligatory duties for personal benefits.

Coverage of the Policy:

- (i) The provisions of the policy shall be followed by persons applying for and receiving funding from DST, Reviewers of the proposal and Members of Expert Committees and Programme Advisory Committees. The provisions of the policy will also be applicable on all individuals including Officers of DST connected directly or indirectly or through intermediaries and Committees involved in evaluation of proposals and subsequent decision making process.
- (ii) This policy aims to minimize aspects that may constitute actual Conflict of Interests, apparent Conflict of Interests and potential Conflict of Interests in the funding mechanisms that are presently being operated by DST. The policy also aims to cover, although not limited to, Conflict of interests that are Financial (gains from the outcomes of the proposal or award), Personal (association of relative / Family members) and

Institutional (Colleagues, Collaborators, Employer, persons associated in a professional career of an individual such as Ph.D. supervisor etc.)

2. Specifications as to what constitutes Conflict of Interest.

Any of the following specifications (non-exhaustive list) imply Conflict of Interest if,

- (i) Due to any reason by which the Reviewer/Committee Member cannot deliver fair and objective assessment of the proposal.
- (ii) The applicant is a directly relative# or family member (including but not limited to spouse, child, sibling, parent) or personal friend of the individual involved in the decision making process or alternatively, if any relative of an Officer directly involved in any decision making process / has influenced interest/ stake in the applicant's form etc..
- (iii) The applicant for the grant/award is an employee or employer of an individual involved in the process as a Reviewer or Committee Member; or if the applicant to the grant/award has had an employer-employee relationship in the past three years with that individual.
- (iv)The applicant to the grant/award belongs to the same Department as that of the Reviewer/Committee Member.
- (v) The Reviewer/Committee Member is a Head of an Organization from where the applicant is employed.
- (vi)The Reviewer /Committee Member is or was, associated in the professional career of the applicant (such as Ph.D. supervisor, Mentor, present Collaborator etc.)
- (vii) The Reviewer/Committee Member is involved in the preparation of the research proposal submitted by the applicant.
- (viii) The applicant has joint research publications with the Reviewer/Committee Member in the last three years.
- (ix)The applicant/Reviewer/Committee Member, in contravention to the accepted norms and ethics followed in scientific research has a direct/indirect financial interest in the outcomes of the proposal.
- (x) The Reviewer/Committee Member stands to gain personally should the submitted proposal be accepted or rejected.

The Term "Relative" for this purpose would be referred in section 6 of Companies Act, 1956.

3. Regulation:

The DST shall strive to avoid conflict of interest in its funding mechanisms to the maximum extent possible. Self-regulatory mode is however recommended for stake holders involved in scientific research and research management, on issues pertaining to Conflict of Interest and scientific ethics. Any disclosure pertaining to the same must be made voluntarily by the applicant/Reviewer/Committee Member.

2. Confidentiality:

The Reviewers and the Members of the Committee shall safeguard the confidentiality of all discussions and decisions taken during the process and shall refrain from discussing the same with any applicant or a third party, unless the Committee recommends otherwise and records for doing so.

5. Code of Conduct

5.1 To be followed by Reviewers/Committee Members:

- (a) All reviewers shall submit a conflict of interest statement, declaring the presence or absence of any form of conflict of interest.
- (b) The reviewers shall refrain from evaluating the proposals if the conflict of interest is established or if it is apparent.
- (c) All discussions and decisions pertaining to conflict of interest shall be recorded in the minutes of the meeting.
- (d) The Chairman of the Committee shall decide on all aspects pertaining to conflict of interests.
- (e) The Chairman of the Committee shall request that all members disclose if they have any conflict of interest in the items of the agenda scheduled for discussion.
- (f) The Committee Members shall refrain from participating in the decision making process and leave the room with respect to the specific item where the conflict of interest is established or is apparent.
- (g) If the Chairman himself/herself has conflict of interest, the Committee may choose a Chairman from among the remaining members, and the decision shall be made in consultation with Member Secretary of the Committee.
- (h) It is expected that a Committee member including the Chair-person will not seek funding from a Committee in which he/she is a member. If any member applies for grant, such proposals will be evaluated separately outside the Committee in which he/she is a member.

5.2 To be followed by the Applicant to the Grant/Award:

- (a) The applicant must refrain from suggesting referees with potential Conflict of Interest that may arise due to the factors mentioned in the specifications described above in Point No. 2.
- (b) The applicant may mention the names of individuals to whom the submitted proposal should not be sent for refereeing, clearly indicating the reasons for the same.

5.3 To be followed by the Officers dealing with Programs in DST:

While it is mandatory for the program officers to maintain confidentiality as detailed in point no. 6 above, they should declare, in advance, if they are dealing with grant applications of a relative or family member (including but not limited to spouse, child, sibling, parent) or thesis/ post-doctoral mentor or stands to benefit financially if the applicant proposal is funded. In such cases, DST will allot the grant applications to the other program officer.

6. Sanction for violation

6.1 For a) Reviewers / Committee Members and b) Applicant

Any breach of the code of conduct will invite action as decided by the Committee.

6.2 For Officers dealing with Program in DST

Any breach of the code of conduct will invite action under present provision of CCS (conduct Rules), 1964.

7. Final Appellate authority:

Secretary, DST shall be the appellate authority in issues pertaining to conflict of interest and issues concerning the decision making process. The decision of Secretary, DST in these issues shall be final and binding.

8. Declaration

I have read the above "Policy on Conflict of Interest" of the DST applicable to the Reviewer/ Committee Member/ Applicant/ DST Scheme or Program Officer # and agree to abide by provisions thereof.

I hereby declare that I have no conflict of interest of any form pertaining to the proposed grant*

I hereby declare that I have conflict of interest of any form pertaining to the proposed grant *

* & # (Tick whichever is applicable)

Name of the Reviewer/ Committee Member or Applicant or DST Officer

(Strike out whichever is not applicable)

(Signature with date)

TENTATIVE INDICATORS FOR MONITORING THE OUTPUT AND OUTCOMES (The indicators are only tentative, only the indicators relevant to your project may be selected, no need to respond to all the indicators)

(a) Output Indicators (expected during the project implementation period)

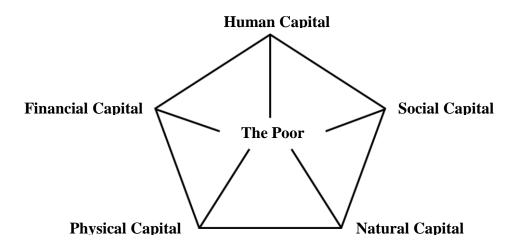
Sl. No	Indicators	Numbers	
1	New technologies/ techniques/ tools/processes to be developed		
2	Technologies/ techniques/ tools to be deployed (existing technologies)		
3	Technologies to be modulated and deployed (<i>adaptive R&D</i>)		
4	Technologies to be field tested (new and modulated technologies)		
5	Technologies that can be transferred		
6	Technologies that can be commercialized		
7	Reports/Manuals that can be generated		
8	Patents (applied/granted) if any [expected to be generated]		
9	Paper published, if any Popular articles, awareness leaflets, pamphlets developed and published		
10	Short duration user friendly video/photo gallery produced using available handy cameras for technology popularization		
11	Beneficiaries covered under the Project (Numbers with gender wise percentages: District wise, age groups wise)		
12	New SHGs/CIGs/TAG's to be formed under the Project and how many are all women SHG		
13	Existing SHGs/CIGs/TAG's to be strengthened under the Project		
14	Agriculture Land Covered to be for project interventions		
15	FPOs to be formed under the Project		
16	Awareness, Training and skill development Programmes Conductedwith number of male and female participants		
19	Manpower to be trained- total with gender wise percentages		
20	Youth to be employed- total with gender wise percentages		
21	Common Facility, village community Centers/ Rural science and technology translation and dissemination hub (new or upgraded)/Permanent Structures/Common Resources to be Created		
22	Beneficiaries directly using the facilities to be created	-	
23	Beneficiaries indirectly using the facilities to be created		
24	HHs(households) to be involved		

Outcome Indicators (expected at the end of project implementation period)

Sl. No	Indicators	Numbers	
1	Access to Clean and Safe Drinking Water (give number of		
	households and total population benefited)		
2	Access to Clean Energy – including cooking and electricity		
	(give number of households and total population benefited)		
3	Access to Health care facilities/Improved Nutrition (give number		
	of households and total population benefited)		
4	Access to other infrastructure – toilets/low cost houses (give number		
	of households and total population benefited)		
5	Access to financial institutions (give number of households)		
6	Livelihood Diversification (Farm and Non-Farm - indicate the		
	diversified trades)		
7	Increase in household income due to project interventions (give %)		
8	Number of other organizations, rural institutions, cooperative		
	societies, Youth clubs and Progressive circles, FPOs to be		
	motivated and mobilized for replication of project outcomes		
	(scientific capacity building)		
9	Increase in Agricultural (crop/livestock/poultry/fisheries)		
	Productivity		
10	Increased availability of resources (natural and/or physical) and		
	assets		
11	Increase in livelihood/ employment opportunities in different areas		
1.0	(list the areas/field and give the number of entrepreneurs)		
12	New Enterprises to be developed (mention the enterprises)		
13	Drudgery reduction (brief achievements) - Name and number of		
	technologies to be developed or upgraded, and adopted) for		
1.4	drudgery reduction		
14	Improved linkages with market/ enterprises		
15	Adoption of newly developed technologies/		
16	products/processes/ indicated by number of adopters No. of organizations entrapraneurs metivated and mebilized		
16	No. of organizations, entrepreneurs motivated and mobilized		
19	for replication of project achievements Linkages, established, with Govt, schemes, and any subsidy availed		
17	Linkages established with Govt schemes and any subsidy availed from Govt agencies		
20	Community's empowerment (technology user group formed;		
20			
21	saving cum credit group; health improvement etc.) 1 Database/Documentation of livelihood system, indigenous		
	resources and knowledge capacity and aspiration.		
22	Preparation of map of soil C, pH, surface soil moisture map (of		
	entire area or parts)		
<u> </u>			

THE SUSTAINABLE LIVELIHOODS FRAMEWORK

LIVELIHOOD ASSETS



COMPONENTS OF LIVELIHOOD ASSETS (indicative)				
Natural Capital	Human Capital			
o Land and produce	o Health			
o Water & aquatic resources	o Nutrition			
o Trees and forest products	o Education			
o Wildlife	o Knowledge and skills			
o Wild foods & fibres	o Capacity to work			
o Biodiversity	o Capacity to adapt			
o Environmental services				
Financial Capital	Social Capital			
o Savings	o Networks and connections			
o Credit/debt - formal, informal, NGOs	Patronage			
o Remittances	 Neighbourhoods 			
o Pensions	 Kinship 			
o Wages	o Relations of trust and mutual support			
	o Formal and informal groups			
Physical Capital	o Common rules and sanctions			
o Infrastructure	o Collective representation			
 Transport, roads, vehicles, etc. 	o Mechanisms for participation in decision-			
 Secure shelter & buildings 	making			
 Water supply & Sanitation 	o Leadership			
• Energy				
 Communications 				
o Tools and technology				
 Tools and equipment for production 				
 Seed, fertiliser, pesticides 				
 Traditional technology 				

CRITICAL DOMAINS OF SOCIO-ECONOMIC WELL-BEING OF SC COMMUNITIES (Identified by MoSJ&E for PMAGY Villages)

- 1. Drinking water and Sanitation
- 2. Education
- 3. Health and Nutrition
- 4. Social Security
- 5. Rural Roads and Housing
- 6. Electricity and Clean Fuel
- 7. Good Agricultural Practices
- 8. Financial Inclusion
- 9. Digitization
- 10. Livelihood & Skill Development

DOMAINS OF DEVELOPMENT FOR ST COMMUNITIES (Ministry of Tribal Affairs)

- 1. Drinking Water and Sanitation
- 2. Irrigation
- 3. Connectivity
- 4. Housing
- 5. Health and Nutrition
- 6. Protection of Rights
- 7. Economic Development
- 8. Social Empowerment
- 9. Education and Skill Development
- 10. Traditional Knowledge and Practices

The domains given above are purely indicative and the investigators my take other domains also pertaining to their target area and target population

- > Direct Welfare Activities in the above domains will NOT be considered for financial support.
- > Only interventions aiming at (i) Improving the efficiency of Welfare System and (ii) Improving Livelihood System efficiency through Science Technology and Innovation (STI) will be considered for support
- ➤ Proposals crosscutting with the activities of line function Ministries/Departments, extensions activities of KVKs, activities falling under NRLM/SRLM will NOT be considered for financial support.

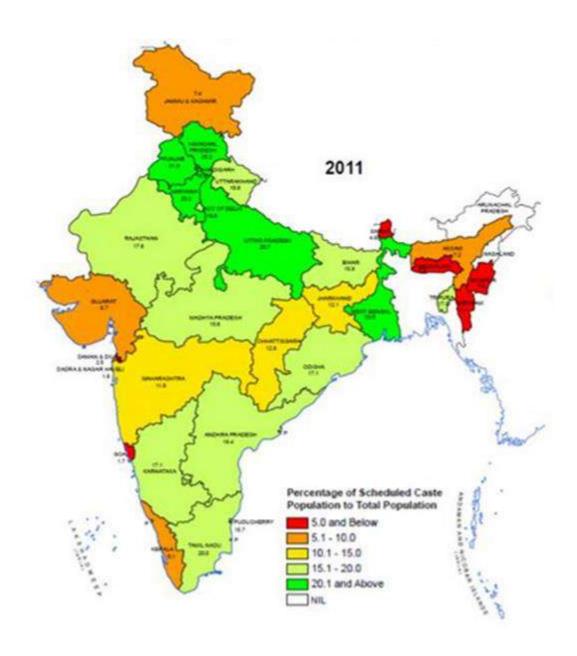


Figure 1: Distribution of Schedule Caste Population in India

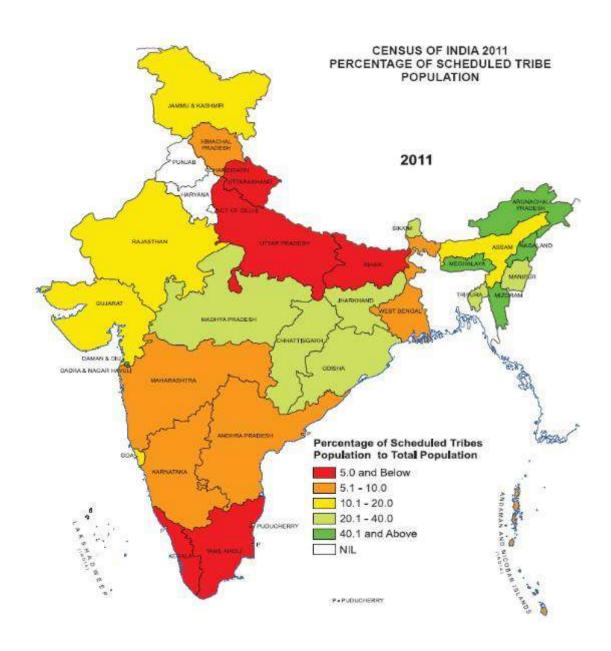


Figure 2: Distribution of Schedule Tribe Population in India