

F.No. 10/1/2013 – A&MMT
Government of India
Ministry of Textiles

Udyog Bhawan, New Delhi
Dated: 20th August, 2015

OFFICE MEMORANDUM

Subject: Government order on “Scheme for Research and Development for the Textiles Industry including Jute” for a period of five years from 2014-15 to 2018-19

1. Components/objectives under the Scheme:

The scheme has been designed with three major components with objectives as under:

Component-I: Research and Development projects to be undertaken by reputed research agencies including TRAs, research laboratories, universities, industry associations, etc engaged in research in the textiles and allied sector (Total Outlay – Rs. 50 crore)

Objectives:

R&D work does not give immediate financial yield, but it is imperative to ensure that the textile industry in India keeps pace with ever changing technology and processes. The key objective of this component is to

- Ensure market-driven research in collaboration with the industry through encouraging contract research projects.
- Development of new products and processes.
- The area of research and development will cover basic and applied research in all areas of textiles value chain and especially in the frontier areas such as technical textiles.
- This component also envisages scaling up/commercializing developed technologies to bring innovative products/processes to the market for opening up new business opportunities in emerging technology areas.
- Commercialization of technology to ensure that the R&D efforts are targeted towards technology development that is relevant and necessary for sector and industry growth.

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Component-II: Promotion of R&D in jute sector; transfer of technologies and dissemination activities in jute sector (Total Outlay – Rs. 80 crore)

Jute is an eco-friendly natural fibre produced only in few countries in the world and India is one of the largest producers of the fibre. However, development of jute as a mainstream fibre in the textile industry and jute diversified products lags behind due to various factors, including lack of adequate R&D for product development and diversification and investment. It is therefore, necessary to sustain R&D initiatives in the Jute sector through continuing innovations and market oriented research, as well as transfer of technologies so developed through developmental and dissemination programmes to reap the benefits that have arisen from the initiatives in the past.

Objectives: The objectives of this component in the scheme is to

- Promote R&D efforts for increasing the use of jute in more diversified applications, specifically where the jute will be used in bulk.
- Promoting use of jute for jute-geo-textiles, jute-agrotextiles, technical textiles, for making paper pulp, for developing jute composites for use in automobiles and other sectors, for developing jute particle boards, etc. will be the thrust of the R&D efforts during the during the period 2014-15 to 2018-19.
- Some of the technological and engineering developments (such as woolenisation, blends, fine yarn, aromatic fabrics, fire retardant and water proof fabrics, etc.) already achieved in other textiles applications will be duly re-engineered through further R&D efforts for adaptation in Jute.
- Transfer of technologies developed and industrial/field demonstration for technology adoption.

Component-III: Benchmarking studies, knowledge dissemination and promoting green initiatives through R&D (Total Outlay – Rs. 15 crore)

The textile industry accounts for considerable resource utilization in the form of water, electricity, fuel and other natural resources in the process of production. There is also a problem of pollutants, particularly in the form of effluents and chemical discharge in the processing and dyeing industry. A major gap in addressing the challenges of optimal utilization of resources and a sustainable growth of the industry is the absence of a duly accredited benchmarking system based on international/domestic best practices.

Objective: The objectives of this component of the scheme is to

- To undertake research studies to create industry standards and benchmarks and identify and document steps to attain suitable benchmarks and ensure that



industry is able to implement green initiatives.

- Dissemination and training programmes to sensitize individual units on the benchmarks so created; and

Assist accreditation for units which achieve such benchmarks to help them to achieve competitiveness and get better national international acceptability.

2. Implementing Agency and Nodal Officer:

- Office of Textile Commissioner will be the implementing agency for Component I and III and Office of Jute Commissioner will act as the Implementing Agency for Component II.
- Textiles Commissioner in the rank of Additional Secretary/Joint Secretary to Government of India will be the nodal officer directly in charge for all R&D activities and Office of Textile Commissioner will be the implementing agency for Component I and III. Jute Commissioner at the rank of Joint Secretary to Government of India will be the nodal officer directly in charge for all Jute and allied Jute R&D activities under Component II.

3. Method of Submission of Project Proposal:

- The Implementing agencies viz. Office of Textile Commissioner for Component I and III and Office of Jute Commissioner for Component II would invite the eligible agencies to submit Project Proposals through publication of advertisement in leading national dailies, website of MoT and the Implementing Agencies.
- The Project Proposal would have to be prepared and submitted according to the format prescribed for application, objective, capital expenditure and manpower (Annexure – I), to facilitate quick processing. Incomplete application forms would not be considered.

4. Agencies / Institutes / Organizations eligible for support:

Reputed research agencies including TRAs, Universities, Industry Associations, government approved research centres such as IITs/government aided institutions/recognized engineering colleges / institutions approved by DST / DSIR *etc.* would be eligible to submit Project Proposals.

5. Method of Selection of Project and Agencies:

The Project Proposals would be appraised by the PAMC (Project Appraisal and Monitoring Committee) which shall forward its recommendations to the Project Approval Committee (PAC). The compositions of the PAC, PAMC and Empowered



Committee(EC) including their respective TORs are enclosed (Annexure – II). While making appraisal of the Project Proposals, the PAMC shall identify, prioritize the thrust areas for research and indicate the same in the advertisement as per point 3 above. It shall also satisfy itself that there is no duplication of Projects / Research efforts while recommending the proposals to PAC. Past performance of the institution, originality of research, commercial potential, commercialization tie ups would all form part of the criteria for acceptance of any Project Proposal for funding support. The Project Proposal must classify whether the project is for developing a new standard or for the modification of an existing one. It should also state if the product or process developed is patentable.

6. Eligible Fund support

- (i) In cases of projects involving **applied research**, the support will be maximum upto of 70% of the total project cost and the balance would have to be arranged by the respective Project Executing Agency/Institution from the industry or its own resources, which would have to be tied up and clearly indicated at the time of submission of Project Proposal. This would ensure that research is directed towards areas required by the industry. If a part or whole of the contribution of the agency is in kind, that should be monetized and included in the project cost.
- (ii) For projects involving **basic research**, the PAMC can recommend up to 100% funding, on a case to case basis with strong justification.

7. Components eligible for funding

The project cost shall be booked under the following heads:

Capital Expenditure: Expenses should include cost of machineries, instruments, pilot plant *etc.* but shall not include cost of land or buildings or furniture, air-conditioner machines *etc.* The expenditure under this head shall not exceed 30% of total project cost.

Salaries and Wages: Salary and Wages of personnel engaged on contract for the project but shall not include the salaries of Principal or Associate Investigator or any scientist or staff on regular employment of the institution. Wages and pay of scientists and staff engaged specifically for the project can be charged to the project cost.

Consultancy: Any expenditure on consultancy services including cost of testing in other laboratories *etc.* can be charged to the project.

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Consumables: Cost of fabrication of components, cost of reagents, computer consumables *etc.* can be charged to this head.

Promotion/Proof of Concept: Projects would required to be commercialized ultimately. Expenses for demonstrating the development including pilot plant *etc.* can be included under this head. Expenses for preparation of standards, filing for patents *etc.* can be charged to this head.

Overheads and Travelling Expenses: The expenditure under this head should not exceed 20% of the total project cost.

Others: Expenses towards any other item would be admissible on merits.

Note:

8. Terms & Conditions

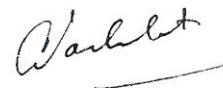
- (i) At the time of appraising the project, Project Appraisal and Monitoring Committee (PAMC) would give a clear recommendation on each of the proposed components and specify the quantum therein.
- (ii) PAC constituted for this purpose shall decide the funding for individual projects on the basis of the project appraisal and recommendations of the PAMC.
- (iii) In case of Machinery development projects, the contribution of the MoT shall be treated as equity share in the SPV formed for the same.

9. Release of Funds and Evaluation:

9.1 Payments shall be made in five installments:

- 1st installment of 35% on inception of the project.
- 2nd and 3rd installment of 20% each on achieving specified milestone(s). The milestones would have to be clearly described in the Project Proposal and would be finalized by the PAMC/PAC.
- 4th and final installment of balance 25% shall be released after successful transfer of technology. This would involve, at the minimum, identification of an institution who would commercialize the development and signing of a Technology Transfer Agreement with it.
- Only for the 1st and final instalment proposal would need the approval of PAC. Rest of the instalment proposals may be decided by the PAMC.

9.2 The fund will be released to the research institute/ agency on pro-rata basis along with the



unit's contribution. The grantee i.e. the research institute/agency etc. shall make all the payments out of the grants received from the scheme through RTGS mode only and the documentary proof have to be submitted before the release of next instalment.

9.3 Any request for release of the next grant should be accompanied by the following documents:

- a) Utilization Certificate and Statement of Expenditure for the previous financial year (in original or copy if sent earlier);
- b) Latest authenticated statement of Expenditure including Committed Expenditure, for expenditure since 1st April of that financial year till the previous month; and
- c) Progress Report.

9.4 The research agency will maintain separate audited accounts for the project. Any interest earned should be reported to this office and should reflected in the Statement of Expenditure.

9.5 All the assets acquired from the grant will be the property of Government of India and should not be disposed off or encumbered without the prior sanction of Ministry of Textiles/Office of the Textile Commissioner/Office of Jute Commissioner.

9.6 After completion/termination of the project, the Government of India will be free to sell or otherwise dispose off the assets which are the property of the Government. The Institute shall render to the Government necessary facilities for arranging the sale of these assets. The Government of India also has the discretion to gift the assets to the Institute or transfer them to any other Institute if it is considered appropriate and justified.

9.7 MoT/Office of the Textile Commissioner/ Office of Jute Commissioner reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilized or appropriate progress is not being made.

9.8 The Comptroller & Auditor General of India, at his discretion, shall have the right of access to the books and accounts of the Research agency maintained in respect of the grant received from the Government of India.

9.9 In addition, MoT/Office of the Textile Commissioner/ Office of Jute Commissioner may designate Scientist/ Specialist or an Expert Panel to visit the Institute periodically to review the progress of the work being carried out and to suggest suitable measures to ensure realization of the objectives of the project. The implementing Institute will provide all facilities to the visiting scientist/ specialist or the Expert Panel by way of accommodation etc. at the time of their visit.

9.10 On completion of the project, the research agency & unit should send the following documents to this Office:

- a) Project Completion Report as per Annex IV



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- b) Consolidated audited statement of expenditure and utilization certificates;
 - c) List of assets/ equipment as per Annex V
 - d) DD/ cheque for any un-spent amount with the Institute.

10. Monitoring:

- (i) The PAMC would monitor the progress of each approved project under this scheme. The PAMC would monitor the progress of each project at least once a quarter. The format of monitoring is enclosed in the Annexure – III.
- (ii) Monitoring shall be done strictly as per the milestones accepted in the project proposal and the activities listed by the Research Institution. Payments in installments will be released by the Implementation Agency (IA) based on the recommendations of the PAMC and approval of the PAC wherever applicable against approved milestones of both Technical and Financial parameters, as delineated in the Monitoring format. Any deviations from the accepted milestones have to be justified by the Research Institution and accepted by the PAMC before funds are released.

11. IPR and other related rights:

- (i) The applied research projects should result in creation of IPRs/Patents to the extent possible. The IPRs should vest with the funding agency. In case of Industry Sponsored Projects, the IPR shall be co-owned by the Industry and the Funding Agency.
- (iii) In order to ensure sustainability and commercial viability of the research efforts, the Industry partner/partners who have contributed 30% of the Project cost may be given some special rights such as exclusive use of the technology/processes/products developed through the research for a fixed period; and/or use of the technology/processes/products developed at a special discounted rate *etc.* This would be pre-negotiated between the Research Institution and the industry partner at the time of project formulation.
- (iii) Upfront payment for technology transfer and royalty on IPR received by the funding agency may be utilized for future R&D schemes to be taken up by them. The quantum of upfront payment and royalty may be decided at the time of technology transfer.

12. Deliverable:

The deliverables of the project at different milestones are to be identified in

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qualitative and quantitative terms. Mode and manner of delivery are to be specified in the project proposal.

13. Commercialization

Pilot scale commercialization of the project / outcome of the project shall be the task of the TRA/Research Institution and the same should be a part of the deliverables/milestones which are to be submitted along with the proposal. Equipments for the pilot scale commercialization are to be transferred to the agency / commercial partner which shall take up full scale commercialization of the project. Holding seminars, dissemination workshops and conferences shall be the task of the TRA/Research Institution. Transfer of technology to the prospective investor and its hand holding till the commercial production starts shall also be the responsibility of the TRA. Cost component of the full scale commercialization of the project will be considered under the separate scheme on commercialization.



(R.K. Vashisht)

Under Secretary to the Government of India

Tel: 011-23061561

To

1. Textile Commissioner, Mumbai
2. Jute Commissioner, Kolkata
3. Shri Devender Singh, Adviser, Niti Ayog, New Delhi
4. Secretary, Department of Expenditure, North Block, New Delhi
5. Deputy Secretary (IFW), Ministry of Textiles
6. Secretary, National Jute Board, Kolkata
7. Director of all TRAs

Copy to:

1. PS to JS(AG)/JS(AMR)

Application Form

[Title of Project]

Research Institution
 Complete Postal Address
 PIN

Telephone
 Fax
 Website
 E-mail

Collaborating Institution (if any)
 Complete Postal Address
 PIN

Telephone
 Fax
 Website
 E-mail

Principal Investigator

Project Cost (Rs. Lakh)

MoT Share Industry/Institute Share

Note: industry/institute share in terms of material should be monetised.

Capex
 Salaries and wages
 Consultancy
 Consumables
 Promotion/Proof of Concept
 Overheads & Travelling Expenses
 Others

Details in Capex Sheet
 Details in Manpower Sheet
 Details in Manpower Sheet

Project Start Date
 Duration

(months)

IPR

Is the process or product being developed patentable?
 Will a standard, national or international be developed?

Yes No
 Yes No

If yes, will a patent be filed as a part of the project?

Yes No

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Note: List about 10 publications in same or related areas in national/international journals.

Justification for the Project

Note: Clear justification for undertaking the project, including how it is different from earlier works, commercial potential etc. should be covered within 200 words.

Commercial Collaboration

Note: Weightage would be given to projects which come with clear commercial collaboration. Nature of such collaboration including the name of institution(s) may be provided.

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Principal Investigator

Name	
Qualification	
Experience	

Telephone (W)	
Telephone (R)	
Mobile	
Fax	
E-mail	

Sex (M/F)	
Date of Birth	

Associate Investigator

Name	
Qualification	
Experience	

Telephone (W)	
Telephone (R)	
Mobile	
Fax	
E-mail	

Sex (M/F)	
Date of Birth	

Deployment of Principal and Associate Investigator

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Annexure – II**Composition of Committees**

A. Project Appraisal and Monitoring Committee (PAMC): The constitution of the PAMC, for Preliminary Scrutiny and subsequent monitoring of the project, is proposed as under:

For Component I & III

1.	Textile Commissioner	Chairman
2.	Representative of R&D Division, Ministry of Textiles	Member
3.	HOD, Department of Textiles, IIT, Delhi	Member
4.	Directors of all the TRAs	Member
5.	Representatives of CITI, FICCI, CII	Member
6.	Representative of Department of Science and Technology/CSIR	Member
7.	A technical expert from a reputed research institute or universities may be co-opted by the committee	Member
8.	Joint Textile Commissioner	Member Secretary

For Component II

1.	Jute Commissioner	Chairman
2.	Representative of R&D Division, Ministry of Textiles	Member
3.	HOD, Department of Textiles, IIT, Delhi	Member
4.	Director of IJIRA	Member
5.	CMD, Jute Corporation of India, Kolkata	Member
6.	Representative of Institute of Jute Technology (IJT), Kolkata	Member
7.	A technical expert from a reputed research institute such as CRIJAF, NIRJFT, etc may be co-opted by the committee	Member
8.	Representative of Department of Science and Technology/CSIR	Member
9.	Secretary, National Jute Board	Member Secretary

In addition to the above, the chairman may co-opt any other Subject Matter Specialist from industry / academics as per requirement.

Terms of reference of these committees:

The basic function of these committees is to apprise the R&D project proposals and recommend to PAC for approval, or otherwise. The PAMCs will also be responsible for project monitoring and reviews from time to time. While appraising a project, PAMC would inter-alia ensure that:-

1. The projects are identified and prioritized based on current thrust areas for research
2. There is no duplication of Projects/Research efforts

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3. The Physical and financial targets are clearly delineated and match each other
4. Progress of project already undertaken by the agency earlier under this scheme

B. Project Approval Committee (PAC): The projects appraised and recommended by PAMCs for various sub-components will be considered for approval by High Level Committees as under:

For Component I & III

1.	Joint Secretary, R&D, Ministry of Textiles	Chairman
2.	Textiles Commissioner	Member
3.	Representative of IFW, Ministry of Textiles	Member
4.	Directors of all the TRAs	Member
5.	Director (R&D), Ministry of Textiles	Member Secretary

For Component II

1.	Joint Secretary, Jute, Ministry of Textiles	Chairman
2.	Jute Commissioner, Kolkata	Member
3.	Representative of IFW, Ministry of Textiles	Member
4.	Director, IJIRA	Member
5.	Secretary, NJB	Member
6.	Director (Jute), Ministry of Textiles	Member
7.	Director (R&D), Ministry of Textiles	Member Secretary

In addition to the above, the chairman may co-opt any other Subject Matter Specialist from industry / academics as per requirement.

Terms of reference of the committee:

The Committee will approve the proposal for undertaking various R&D activities and will monitor the successful completion of targets/ deliverables for each R&D project.

C. Empowered Committee: Overall monitoring and policy direction for implementation of the scheme will rest with the Empowered Committee to be headed by Secretary (Textiles). The composition of the committee shall be as follows:

1.	Secretary (Textile)	Chairman
2.	AS&FA, Ministry of Textiles	Member
3.	JS (R&D), Ministry of Textiles	Member
4.	JS (Jute), Ministry of Textiles	Member
5.	Textile Commissioner	Member
6.	Jute Commissioner	Member

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Secretary, NJB	Member
Director (R&D)	Member Secretary

The Empowered Committee will approve the detailed scheme guidelines and operational modalities and monitor the scheme from time to time. The EC will also have the powers to re-appropriate the cost allocations between individual activities and components within the overall budget approved depending upon the need and progress of implementation of individual component.

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Monitoring Format

[Title of Project]

Project sanction Code: _____

Research Institution _____

Collaborating Institution (if any) _____

Principal Investigator _____

Sanctioned Cost (Rs. Lakh) _____

MoT Share _____

Industry/Institute Share _____

Capex _____

Salaries and wages _____

Consultancy _____

Consumables _____

Overheads & Travelling Expenses _____

Promotion/ Proof of Concept _____

Others _____

Note: Industry share, if in kind, has to be monetized. Sanctioned Project Cost includes both components.

Note: Salaries and wages relate to personnel employed for project on contract

Project approval No _____

Project start Date _____

Duration (months) _____

Approval Date _____

Project Progress	Quarter →	[Blank header cells]																
		1	2	3	4	5	6	7	8	9	10	11	12					
Activity (as given in sanction and progress)	Planned																	
[Acti v 1]	Actual (%)																	
	Actual																	
	Planned																	
[Acti v 2]	Actual (%)																	
	Actual																	
	Planned																	
[Acti v 3]	Actual (%)																	
	Actual																	
	Planned																	
[Acti v 4]	Actual (%)																	
	Actual																	
	Planned																	
[Acti v 5]	Actual (%)																	
	Actual																	

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Note: This table should indicate the duration of each activity by a horizontal bar; as per Approved Project Proposal and as per actual progress (including assessed percentage of each activity).

Key Milestones	Target date	Link with release
Milestone 1		
Milestone 2		2nd instalment (30%)
Milestone 3		3rd instalment (20%)
Milestone 4		4th instalment (10%)
Milestone 5		Final instalment (5%)
Milestone 6		
Transfer of Technology		

Note: At least four key milestones as identified during the approval of project should be provided.

Recommendation for Release	Not Recommended	Reasons for not Recommending
Inception		
2nd Instalment		
3rd Instalment		
Final release		

Fund Purpose	Inception 35%		2nd Instalment 30%		3rd Instalment 20%		4th Instalment 10%		Final Instalment 5%	
	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount
MoT Share										
Milestone (as per Plan)										
(Actual)										
Industry Share										
Milestone (as per Plan)										
(Actual)										

Note: Milestones against which the instalments are to be released are to be inserted in the relevant boxes. Industry share, if in kind, has to be monetized. Successful transfer of technology would mean, identification of a partner and entering into a Technology Transfer Agreement with it.

Break up of Expenditure Incurred

Serial	Expenditure Head	Fund Sanctioned (Rs. lakh)	Expenditure till last Quarter	Expenditure in Review Quarter	Cumulative Expenditure	% of Total Sanctioned Cost
I	Capex					
II	Salaries and wages					
III	Consultancy					
IV	Consumables					
V	Promotion/Proof of Concept					
VI	Overheads & Travelling Expense					
VII	Others					
	Total					0%

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Project Completion Report

- Notes:-
1. 3 copies of the Project Completion Report (PCR) should be sent within one month of the completion or termination of the project.
 2. The PCR should be in bound form.
 3. Cover Page should include the title of the project, file number, names and addresses of the investigators.

1. Title of the projects:
2. Principal Investigator(s) and Co-investigator(s):
3. Implementing Research agency and other collaborating Institution(s):
4. Name & address of the unit (beneficiary):
5. Date of commencement:
6. Planned date of completion:
7. Actual date of completion:
8. Objectives as stated in the project proposal:
9. Deviation made from original objectives if any, while implementing the project and reasons thereof:
10. Experimental work giving full details of experimental set up, methods, adopted, data collected supported by necessary table, charts, diagrams & photographs:
11. Detailed analysis of results indicating contributions made towards increasing the state of knowledge in the subject:
12. Conclusions summarising the achievements and indication of scope for future work:
13. S&T benefits accrued:

i. List of Research publications

Sr No	Authors	Title of paper	Name of Journal	Volume	Pages	Year

ii. Patents taken, if any

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14. Financial Position:

No.	Financial Position / Budget Head	Funds sanctioned by this Office	Funds contributed by the unit	Expenditure	% of Total cost
I					
II					
III					
IV					
V					
VI					
VII					
	Total				100%

15. Procurement /Usage of Equipment

a)

Sr No	Name of Equipment	Make /Model	Cost(FE/ Rs)	Date of Installation	Utilisation Rate (%)	Remarks regarding maintenance/ breakdown

b) Plans for utilizing the equipment facilities in future

Name and Signature with Date

a. _____
(Authorized signatory of Research agency)

b. _____
(Principal Investigator)

c. _____
(Authorized signatory from the unit)

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Annex- V

Cost Details of Permanent Equipment/ Asset Procured

Sr No	Name of Equipment/ Asset with manufacturer & model name, etc. and date of procurement	Cost of equipment*

* This should include only the cost of equipment, insurance and freight charges.

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