## Kerala State Council for Science, Technology and Environment

# Technology Development and Adaptation Programme (TDAP) Guidelines for submitting application

#### Introduction

The Kerala State Council for Science, Technology & Environment (KSCSTE) is an autonomous body under the Government of Kerala which is established to promote the Science & Technology related activities in the State. Technology Development and Adaptation Programme (TDAP) is instituted by KSCSTE for developing innovative and need-based technologies, upgradation of existing technologies, resulting in a product and preferably ending with demonstration in commercial environment.

#### **Objectives**

- ➤ To provide catalytic support for the development and demonstration of innovative and need-based technologies.
- > To perfect the technologies and develop suitable adaptation strategies for technology product development and to raise such technologies to the level of commercialization.

#### Who can Apply?

- ➤ Individual innovators (The applicant should possess a professional degree. He/ She should possess a Diploma or Degree in Engineering or equivalent. Those who are studying for professional technical courses (engineering streams) can also apply. Prior experience in developing innovative projects will be an added advantage.)
- > Scientists/ Researchers from Research Organizations/ Academic Institutions/ Non-Governmental Organizations who are involved in technology product development
- ➤ Medical Professionals who are involved in the development of medical devices and aids. In cases where the PI is a medical professional, the Co-PI shall compulsorily be a faculty

of an engineering institution or a scientist of an R&D institute and the tie-up institution shall be either an engineering college or an R&D institute.

#### **Programme Implementation**

The project proposals under this Scheme are evaluated by the Technical Committee for TDAP (TC-TDAP). Based on the recommendations of the Committee, financial grant not exceeding Rs. 25 lakhs will be provided for the project, for a maximum duration of two years. The financial support from KSCSTE primarily covers prototype development, cost of process equipment or its fabrication/ development, test and evaluation of products, user trials etc. In the case of individual innovators, a Tie-up Institution has to be identified for implementing the project and the applicant will be attached to that Tie-up institution for developing the proposed technology. The financial assistance will be released to the Tie-up institution, where the applicant intends to carry out the project. The tie-up institution can be any Research organization under the Govt. of Kerala or Govt. of India or an Engineering academic institution affiliated to a University in Kerala (Polytechnic or Engineering Colleges/ University Departments).

In the case of student applicant, the grant will be disbursed through a regular staff/ faculty of the Institution of study, who will act as supervisor of the project. In such cases the faculty shall bear the financial responsibility of the project.

The project approved for implementation will be provided with financial sanction, subject to certain terms and conditions. The following guidelines assist for smooth implementation of the project in conformity with those terms and conditions.

#### 1. Submission of Projects

a. Project proposals must be submitted online. The online project submission portal shall be open while the call for applications under TDAP is open.

- b. The project proposals will be evaluated by the Technical Committee for TDAP (TC-TDAP).
- c. The Maximum grant for a project shall be Rs. 25 lakhs for two years excluding Institutional overheads and the funds will be disbursed to the applicant through the Head of the tie-up institution. The tie-up institution will be eligible for an overhead @ 10% of total project cost.
- d. Budget The main budget heads shall be
  - i. Equipment / Instruments
  - ii. Consumables (raw materials, accessories etc.)
  - iii. Man Power Only skilled manpower as per the requirements of the project will be allowed
  - iv. Travel @ max. Rs. 20,000/ year- (In exceptional cases when the development involves extensive traveling, this can be relaxed)
  - v. Contingencies @ max. Rs. 20,000/ year
- e. After receiving the project proposal, it will be scrutinized. If the project proposal is as per the format and norms of Council, and the proposal is found to result in an innovative technology product, then the proposals will be placed in the TC-TDAP for evaluation and final decision.

#### 2. Sanction order

- i) Once the project is approved, the Principal Investigator (PI) should execute an agreement in the prescribed format in a non-judicial stamp paper worth Rs.100/-countersigned by the Head of the Institution/ Tie-up Institution.
- ii) If the documents furnished by the PI is in order, Sanction Order will be issued. The first Sanction Order provides the detailed breakup of funds allocated under the different heads like Equipment, Manpower, Travel, Consumables, Contingencies etc.

- iii) Copies of the Sanction Order will be sent to the Principal Investigator (PI) and the Head of the Institution (Director/ Registrar/ Comptroller/ Principal, etc. as the case may be).
- iv) Any correspondence with KSCSTE regarding the project should invariably quote the reference (file) number and date and should be addressed to the Director, KSCSTE.
- v) After issue of the Council order, the KSCSTE administration will take steps to effect the payment. The payments will be made in installments which will be specified in the sanction order. The payment will be effected directly to the tie-up institution's account through the State Treasury.

#### 3. Date of Commencement of Project & its Duration

- i) The duration of the project will be specified in the first sanction order.
- ii) The project becomes operative within one month from the receipt of first installment project grant by the implementing Institution. This date, called as the Date of Start, should be intimated by the Institution authorities/ Principal Investigator to KSCSTE.

### 4. Principal Investigator & Co-Investigator (s) and the Implementing Institution

- i) It is necessary to ensure that the project is carried out by the Principal Investigator (PI), Co- Principal Investigator(s)/ Supervisor in a cohesive manner. Periodic meetings of the team are essential for this purpose.
- ii) Once the project is sanctioned, PI should also furnish the following documents:
  - > Date of start of the project
  - > Specifications and Quotation of the equipment purchased
  - ➤ Purchase procedures followed by the implementing institution.

- iii) KSCSTE's name should be engraved or affixed permanently on all equipment/ instruments procured and also in the fabricated ones under the TDAP Programme of KSCSTE like 'Procured under the TDAP project sanctioned from KSCSTE'.
- In case the PI leaves the project due to unforeseen circumstances, the Co-PI will assume the responsibility of the PI. In cases were the Co-PI is a student or not affiliated to the Institution, then the Institution shall identify a new PI to pursue for the smooth implementation of the project.
- v) The implementing institution has an important role to play and in consultation with the KSCSTE, it should take steps to ensure smooth implementation of the project, before relieving the PI.
- vi) PI should strictly adhere to the purchase procedures of the implementing institution for the purchase of equipment sanctioned for the project.
- vii) The implementing Institute should provide full infrastructural facilities such as accommodation, water, electricity, library, communication facilities etc. for smooth implementation of the project.
- viii) Normally only one project will be sanctioned to an Innovator/Principal Investigator at a time by the KSCSTE.

#### 5. Release of grants in yearly installment and financial management

i) The grants for the project are released on the basis of yearly/ half-yearly requirements taking note of the technical progress and expenditure incurred and considering the duration of the project. The first sanction order indicates the budgetary allocation for the duration of the project under various heads like Equipment, Manpower, Travel, Consumable, Contingency etc.

- ii) Diversion of funds from Equipment and Manpower are normally not allowed. However, any reallocation/ re-appropriation of grants under different heads requires prior approval of KSCSTE.
- iii) The Equipment sanctioned in the project should be procured at the earliest to avoid any cost escalation. The PI and the implementing Institute should complete all formalities in advance for placing the order.
- iv) Quarterly Progress reports (report for every three months) should be sent with effect from date of start of the project. Annual progress report on project year/ half year basis should be submitted.
- v) There should not be a break time gap in between the project period. The project has to be done continuously and it will end on expiry of approved duration.
- vi) The Tie-up Institution shall forward a utilization certificate and audited statement of expenditure (UC & SE) countersigned by the HoI (Tie-up Institution) to the effect that the grant has been utilized for the research works for which it was granted to KSCSTE. The UC & SE shall be furnished on a project year-to-year basis. The institution should maintain separate audited accounts for the project.
- vii) The subsequent installment of grant will be released on the basis of expenditure incurred in the previous project year and expected expenditure in that year.
- viii)However, any request for release of the next installment should be accompanied by the following documents: a) Utilization Certificate and Statement of Expenditure audited by a Chartered Accountant for the previous year (in original) b) Latest authenticated Statement of Expenditure including Committed Expenditure c) Technical Annual Progress Report, if not sent earlier

- ix) The unutilized portion of the grant amount at the end of the project period, shall be refunded to Council forthwith by DD in favour of Member Secretary, KSCSTE. In the case of project duration exceeding one year, the amount need not be refunded at the end of first year as the case may be, but the amount may be automatically carried forward, unless otherwise it is specified.
- x) The Statement of Accounts and the Utilization Certificates are project year wise and are to be submitted within a period of 3 months from the completion of each project year.
- xi) The implementing institute will maintain separate audited accounts for the project. Any interest earned should be reported to this Council and should be reflected in the Statement of Expenditure.
- xii) The institute will not entrust the implementation of the work for which the grant is being sanctioned to another institution nor will it divert the grant to other institute as assistance. In case the Institute is not able to implement the project, it should refund to KSCSTE the entire grant or the balance grant at the earliest.
- xiii) For permanent, semi-permanent or infrastructural assets acquired solely from the project grants, an audited record in the form of a register in the prescribed format shall be maintained by the Institute. The term "Assets" include (a) the immovable property acquired out of the grant; and (b) movable property of capital nature where the value exceeds Rs 1,000/-. The Institute is required to send to this Council list of assets acquired from the grant.
- xiv) The grant shall not be utilized for construction of any building unless specific provision is made for this purpose in the sanction order.
- xv) All the assets acquired from the grant will be the property of KSCSTE and should not be disposed of or encumbered or utilized for purpose other than those for which the grant had been sanctioned, without the prior sanction of KSCSTE.

- xvi) After completion/ termination of the project, the KSCSTE will be free to sell or otherwise dispose of the assets which are the property of KSCSTE. The Institute shall render to the Government necessary facilities for arranging the sale of these assets. The Council 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.
- xvii) KSCSTE 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. In such cases, the implementing institute should refund to KSCSTE the entire project grant.

#### 6. Progress evaluation and Monitoring

- i) PI shall furnish Progress Report of the activities on the project on quarterly basis (three months) (QPR). Quarterly Progress Reports (QPR) should be submitted with effect from the Date of start of the project.
- ii) The PI through the tie-up Institute shall furnish to KSCSTE, the Annual Technical Progress report of the project work carried on project year basis. (ie. if the date of start of a project is 12.01.2010 the first Annual Technical Progress report shall be for the period 12.01.2010 to 31.01.2011, the next will be from 01.02.2011 to 31.01.2012 and so on).
- iii) In addition, KSCSTE 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.
- iv) KSCSTE may also organize Group Monitoring Workshops/ online meetings wherein the PIs/
  Co-PIs and research personnel are invited to present the technical progress of their project.

  The Investigators should attend such workshops since it provides an opportunity to review their progress based on which any midterm requests by the PIs for additional grants/

extension in duration etc. are considered by this Department. Subsequent releases of grant would be based on the reviewing and monitoring by the TC-TDAP.

- v) If the PI does not submit Annual Progress Report and audited financial statements in time, the grant in the subsequent year will not be released.
- vi) On completion of the project, the PI through the Institute should send the following documents to KSCSTE to settle the account:
  - a) The Project Completion Report in the prescribed format (both in soft copy and hard copy);
  - b) Consolidated audited statement of expenditure and utilization certificates;
  - c) List of assets/ equipment in the prescribed format; and
  - d) DD/ cheque for any un-spent amount with the Institute.
  - e) Asset Transfer Certificate in the prescribed format from the Head of Tie-up Institution to the effect that all the equipment purchased have been handed over to the Institution.

A review will be arranged for all completed projects and overall grading awarded by the TC-TDAP will be communicated to Principal Investigator.

#### 7. Reappropriation of funds

Re appropriation of funds within the total budget may be approved based on the recommendation of TC- TDAP. Re appropriation from man power and equipment will not be normally allowed.

#### 8. Extension of the duration of the project

The extension of duration of the project will not be granted normally. In exceptional cases where the work could not be completed PI should submit request for extension, 3 months before completing the tenure and final decision by TC- TDAP.

#### 9. Guidelines for publication of results

- i) Investigators wishing to publish technical/ scientific papers based on the research work done under the project should acknowledge the assistance received from KSCSTE.
- ii) The Investigator(s) should not enter into collaboration with a foreign party (individual/ industry) without prior approval of KSCSTE.
- iii) Investigators are also requested to publish some of the research papers emerging out of the project work in leading Journals.
- iv) If the results of research are to be legally protected, the results should not be published without action being taken to secure legal protection for the research results. In such cases, the legal rights shall be proportionately shared with KSCSTE, unless specified, as the case may be.
- v) The knowledge generated from the project will be the property of KSCSTE and should be properly acknowledged. Transfer of technology generated, applications for patents, etc., shall be done only in consultation with KSCSTE and as agreed upon by KSCSTE.

The above guidelines provide general information only. KSCSTE reserves the right to review these guidelines and modify them, as and when required. In addition to these, the implementing agency has to follow its own rules and regulations, wherever necessary.

In case of any specific clarifications please contact:

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