Scheme to involve students from engineering colleges and polytechnics and other education and research institutes in the state in the development of the state...

Government of Maharashtra
Department of Higher and Technical Education

Government Resolution Number: Meeting - 3611/(56/15)/TE 2
Mantralay Vistar Bhavan, Mumbai 400 032.
Date: 13th of January 2016

Reference: - Government Resolution Number: Meeting - 3611/(56/15)/TE 2, dated 28/4/2015

Foreword: -
It is necessary to analyse various social and developmental issues in the state through research and to find out perfect solutions to them. Accordingly, in order to enhance the research among various Government agencies and educational institutes on serious social and economic problems, it is necessary to boost participation of students from engineering and other vocational courses in various project-wise schemes.

2. The Unnat Bharat Abhiyan is being implemented through select, advanced educational institutes in the country, to revolutionize developmental activities in rural area of the country by increasing participation of advanced educational institutes like IIT. Similarly, it is necessary to make research going on in engineering colleges, polytechnics, and other higher education institutes even in Maharashtra State public-oriented by analyzing various day-to-day social and developmental problems in the state (for example, rural sanitation, toilets, drainage management, drinking water, road development, evaluation and reinforcement of roads, water conservation, fuel and energy, health, drought, etc.). It is necessary to find out solutions on developmental issues in social field by using research and skilled manpower from these institutes and application of appropriate technology. At present, many Government, semi-Government, and private agencies and many NGOs are working on problems in various development schemes in rural and urban areas. However, it is necessary to increase involvement of maximum educational institutes in such projects and to create an institutional structure.

3. A workgroup was formed under Government resolution referred above according to orders of Hon. Chief Minister, to suggest specific agenda considering all of the above-mentioned factors for projects being run by various departments. The workgroup has provided recommendations for achieving following main objectives.

1. Apart from traditional research, higher education institutes should suggest effective solutions on obstacles/problems/quality/value/sustainability etc. of developmental work in their area through appropriate use of right technology and should start and nurture such kind of research practice and a competent system for this should be created in educational institutes.
2. Appropriate research practice in accordance with local situation based on local need/demand should be initiated and fostered; Effective research system should be developed by involving citizens, public representatives, and various government agencies.

3. Syllabus and research practices in higher education institutes should be made complementary and matching with development activities and students should be trained to become skilled manpower required for various future development schemes in the state.

4. According to recommendation to the Government by this workgroup, the Government was thinking of launching an innovative scheme on the lines of Unnat Bharat Abhiyan with mutual understanding between educational institutes and various Government agencies to meet following main objectives.

**Government Resolution:**

The Unnat Maharashtra Abhiyan is being approved to increase mutual coordination cooperation among quality educational institutes and various Government systems (Zilla Parishad, Municipal Corporations, Municipal Councils, Panchayat Samiti, District Development and Planning Development System, etc.) in order to analyse and find solutions to various social and developmental day-to-day problems in the state with help of higher and technical education institutes in the state and to transform the implementation process of various schemes through research and to find out solutions to developmental problems at local level by using technology.

**2. Objectives of the campaign will be as mentioned below.**

1. To create a platform to analyse developmental problems at local level by using technology and to initiate development through research and to make the help of various Government systems working in this field available.

2. To align / connect syllabus and research in higher and technical education institutes with developmental schemes / problems at local level.

3. To form technical and development sections at select institutes for research on developmental problems of society in respective area, and to create state-level database with reference to this research and to maintain it in a way accessible to even common public.

**3. Institutes participating in the Campaign:**

The institutes participating in this Campaign are expected to have autonomy of syllabus, capacity and experience of conducting developmental project and research, teachers and researchers having expertise in various streams, laboratory and other facilities, and interest in local development and research in accordance with it. 17 institutes participating under Technical Education Quality Improvement Programme (TEQIP) are eligible to participate in this campaign. Apart from these institutes, other willing higher education institutes (as mentioned in Appendix A) can also participate in this campaign.
The institutes will be selected from time to time according to criteria determined by advisory committee under the campaign and regional requirements.

4. Structure of the Campaign:

Pragat Maharashtra Abhiyan will have a three-level structure. The format will be like Advisory Committee at highest level, Project Coordination Section at middle level, and Technical and Development Section at Institute level.

1) Advisory Committee: Advisory Committee will work at state level. Structure of this committee will be as follows.

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<tr>
<th>Sr. No.</th>
<th>Designation of the Member</th>
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<tbody>
<tr>
<td>1</td>
<td>Chair Professor CTARA And CSE, IIT, Powai, Mumbai</td>
<td>Chairman</td>
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<tr>
<td>2</td>
<td>Director, (Business) Directorate of Business Education and Training, Mumbai.</td>
<td>Member</td>
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<tr>
<td>3</td>
<td>Director, (Training) Directorate of Business Education and Training, Mumbai.</td>
<td>Member</td>
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<td>4</td>
<td>Principals of Concerned Institutes included in Unnat Maharashtra Abhiyan</td>
<td>Member</td>
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<td>5</td>
<td>Director, Directorate of Finance and Statistics, Mumbai.</td>
<td>Member</td>
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<td>6</td>
<td>Director, Maharashtra Remote Sensing Application Center (MRSAC), VNIIT Campus, South Ambazari Road, Nagpur,</td>
<td>Member</td>
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<tr>
<td>7</td>
<td>Experts in Concerned Subjects</td>
<td>Member</td>
</tr>
<tr>
<td>8</td>
<td>Director, Directorate of Technical Education, Mumbai.</td>
<td>Secretary</td>
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This Committee will guide on the following.

a) To target developmental problems of the state and to prepare order of priority for project matters to be taken up under this campaign, also to determine annual schedule for this by coordinating with various Government systems.

b) To define working procedure of Project Coordination Section and Technical and Developmental Section at institute-level, and to prepared guidelines for them.

c) Releasing necessary orders in order to make funds available for projects taken up under the campaign.

d) To facilitate participation of various educational institutes, as required.

e) To define criteria for educational institutes to be included in the campaign and to implement it.

f) To release orders to various Government systems, offices for availability of information, data, as required.

g) To make all necessary provisions for empowerment of institutes in view of objectives and agenda of the campaign.
5. Project Coordination Section:

This section will work from Directorate of Technical Education and will assist in implementation of project. This section will be the link between Advisory Committee, participating institutes, and Government system. This section will carry out following activities on behalf of Advisory Committee.

1. To encourage engineering technical education and research institutes to take up research and projects useful to the society.
2. To make required data, other facilities available to Technical and Developmental Section available by coordinating with various Government systems.
3. To make human resource (students and researchers) from other educational institutes available to Technical and Developmental Section in institutes, if required.
4. To provide information of collected research developed by institutes to concerned Government systems and to work as a coordinator to apply it in various Government schemes.
5. To organise meeting of Advisory Committee, to assist Advisory Committee in monitoring the project.
6. To organise workshops on various topics for institutes according to instructions by Advisory Committee or to make funds available for it.
7. To carry out other activities as instructed by Advisory Committee.
8. To create and maintain database required for implementation of this campaign.
9. Number of students to be included in the project being taken up under this scheme should be based on the format of the project.

6. Technical and Developmental Section:

Technical and Developmental Section will be set up at every institute participating in the project. This section will create innovative complementary syllabus and research system in the institute and students, teachers, and researchers will be able to participate in such developmental research. According to capacity and experience of the institute and in coordination with various Government departments, this section will submit proposals of research projects for students and researchers of the institute to the District Collector and will join the campaign.

This section will consist of teachers and researchers from various streams, and other technical and non-technical staff. If the section does not include a female member and if required for a development work, a female member can be appointed. A file of technical capacity of the institute, experts and other institutes in the geographical area and their technical capacities, physical facilities will be maintained.

Once a project is conveyed to the institute, the section will carry out mapping of technical capacities and manpower available for the project and will prepare the budget. According to provisions of available funds and after receiving funds, the section will start working on the project with help of students, teachers, and researchers, and will complete
the work within stipulated time. During this project, following activities will be conducted by the section, and if required with help from Project Coordination Section: To coordinate with various Government agencies or various social elements through meetings as required, To obtain required information and data, To monitor the project, To prepare a file of research and progress reports of the project and to make this report available on website of the institute, To spend funds received for the project, etc.

7. Projects to be taken up under the campaign:
   Examples of projects to be taken up under the campaign are mentioned below. Similarly, these and other such kind of projects can be taken up through coordination between various Government agencies (local self-governance bodies, corporations, district planning and development committee, Government departments, etc.) and educational institutes.

I. MGNREGA Social Audit and Planning or Review
II. To prepare village-level action plan regarding rural sanitation, toilets, drainage management based on various statistical information, to prepare budget, to define criteria for quality and valuation, to design technical work procedure for planning.
III. To prepare a plan for water supply and sanitation department, and village-level scheme / social forestation under tribal sub-plan through micro planning, to prepare work procedure for verification of technical and financial feasibility of Government scheme plan, also to prepare guidelines for implementation.
IV. To inspect budget required for road development, road evaluation and reinforcement under district plans.
V. To prepare geographical information system (GIS) required for district development, various development works in district.
VI. To evaluate water supply schemes; planning, structure, and review during implementation, and to submit review report in this regard from time to time.
VII. Planning and evaluation of various resources on Taluka and district levels, such as energy, electric system, non-conventional energy (for example, solar energy), transport system, public distribution system, telecommunication, etc.
VIII. To increase productivity of small scale industry and village industry and to standardize them.
IX. Evaluation or planning of solid waste management, water supply, energy audit and drainage system, and other facilities and projects in municipal corporation and municipal council area.
X. To study problems in implementation at regional and local levels and to suggest improvements in the methodology for effective implementation of various Government schemes.
8. Methodology for Development Study / Project:

1. To achieve these targets, proposals can be made between participating higher education institutes, beneficiaries, public representatives, and Government agencies under this campaign, in order to resolve various local problems.

2. Government agencies / departments will ensure that the topic of project to be finalized is of considerable importance. The proposal should certainly mention project duration, expectations from the project, and the outcomes. The expenses for project in question will be made available according to Government resolution issued by planning department through regular expenses of Government agency or department. Expenses for research, field trip, and expenses for teachers and students are expected to be covered under funds available with concerned institute. Students participating in various projects, will be given special credits in concerned educational institutes.

3. Concerned institute can avail of services from specially qualified teachers and students in the institute for project of complicated and complex and special nature for the project duration. Also, the students will get an opportunity of working in relation with local development and technology through this project.

4. While implementing various projects, the institutes should develop inter-disciplinary, public-oriented, and regional approach in their syllabus and research. The research should be publicised in appropriate manner and efforts should be made for creating awareness.

5. Various Government departments (for example, public sanitation, tribal department, rural water supply, public works), or beneficiaries and their representing organisations for example, district planning committee, municipal council, local self-governance body, etc. will request Technical and Developmental Section in nearby institute regarding technical help in problems / planning of their development work. This may include providing technical advice or service on a scheme or a problem, preparing plans of common schemes such as, employment guarantee scheme, public distribution system, Jalyukta Shivar Yojana, etc., third party monitoring or audit of quality control, management, etc. Once the participating education and research institute receives such kind of request for technical help, the Technical and Developmental Section there will carry out mapping of technical capacity, manpower, etc. available with them. It will then prepare financial budget including required training, skill development (including recurring expenses) and will send list of memorandum of understanding, proposal, required statistical information, etc., with budget to concerned competent officer (such as District Collector). Considering the schedule of institute's semesters, concerned officer should verify the proposal and should make approval, information, and funds available within stipulated time (generally within 60 days). After completing these and other formalities, the section will start working on the time-bound project assigned to them, according to timetable of the institute. After completion of the research / project, the section will submit copies of its report, presentation and feedback of
beneficiaries, to the Advisory Committee, concerned department, and competent officer for their information. Also, the report and other useful information about the research will be made available on website of the institute.

The Government may approach Development and Technical Section of appropriate educational institute for the work of occasional technology or planning or evaluation and students of the institute can get time-bound opportunity. The scope of work for students, remuneration for supervisory officer, students, their convenience, and help required from the institute and its expenses, etc. will be decided as per MOU between the section and concerned department.

6. Participating educational and research institute can directly submit a proposal to other local self-governance bodies, Gram Sabha, NGOs through Technical and Developmental Section in the participating institute and can start working on the project with above-mentioned methodology. Format of the memorandum of understanding to be made by Technical and Developmental Section in the institute and concerned agency before starting the work, is enclosed herewith.

7. List of potential economic / social development projects for which technical help can be made available through institutes is given in table one (Appendix A). For projects in above-mentioned list, factors like how technical help can be provided, what type of manpower will be used for it, calculation of funds, outcomes, etc. can be modified with approval from the Advisory Committee. This is a suggestive list and projects other than these can also be taken up under this campaign. Proposals and reports prepared under this scheme will be available on website of concerned institute and Government website.

9. Funds:
   Technical and Developmental Section should submit proposal of the project to District Collector for approval. District Collector should approve the project after discussing with concerned Government agency, Technical and Developmental Section and considering usefulness of the project. The planning department will release clear orders to use funds for this project from funds reserved for innovative schemes in district development plan.

10. Information and Statistics:
   Concerned department (for example, MRSAC, RWSS, MJP, RDD, Census, MSEDCL, Economics and Statistics, MSNA, NIC, Health, Education) should provide information, statistics, and official documents required from time-to-time for the work of research / project under due confidentiality and promptly.

11. Monitoring:
   Technical and Developmental Section in the institute will prepare and maintain progress report, outcome, and a file of completed research under the project assigned to it. These reports will be sent to the Project Coordination Section to be submitted to the
Advisory Committee. If the agency funding the Technical and Developmental Section demands, reports, files, statistics of the project they have funded will be made available to them.

This Government resolution has been made available on the website of Government of Maharashtra www.maharashtra.gov.in and its code number is 201601131501523808. This order has been issued verified with digital signature.

By the order of and in the name of Governor of Maharashtra.

AVHAD
PRAKASH B
(Digital Signature)
(Prakash B. Avhad)
Section Officer, Government of Maharashtra.

Cc:
1 Secretary of Hon. Governor, Rajbhavan, Mumbai
2 Hon. Chief Minister, Mantralaya, Mumbai - 400 032.
3 Hon. Minister (Higher and Technical Education) / Hon. Minister of State (Higher and Technical Education) Mantralaya, Mumbai - 400 032.
4 All Hon. Ministers / All Hon. Ministers of State, Mantralaya, Mumbai - 400 032.
5 All Additional Chief Secretaries / Principal Secretaries / Secretaries, Mantralaya, Mumbai - 400 032.
6 Secretary of Hon. Chief Minister, Mantralaya, Mumbai - 400 032.
7 All Joint Secretaries / Deputy Secretaries, Higher and Technical Education Department, Mantralaya, Mumbai - 32
8 Director, Directorate of Technical Education / All Joint Directors
9 Under Secretary, Vidhan Mandal Secretariat, Vidhan Bhavan, Mumbai - 32
10 Director, Directorate of Information and Public Relation, Mantralaya, Mumbai - 32.