

The Recommendations of the 10th All India Conference on Engineering Materials and Equipment, held in Calcutta, 16-18 January, 1981

Organised by : The Association of Engineers, India

Co-Sponsor :

The Regional Computer Centre, Calcutta-32.

M/s Ghosh, Bose & Associates, Calcutta-16.

Scientific community as a whole is rather selective in its approach towards issues and problems that confront us all in the society. We talk too much among ourselves. We take very little effort to talk to others, for instances, elected representatives, leaders, social reformers, bureaucrats, students and lay public. We show little patience to listen to others. We spend little time to educate or to motivate people around us. Such practices have done us more harm than good.

Public awareness and concern are very difficult to generate. Equally difficult is to motivate the policy makers and leaders. We have yet to succeed to take the science and its fruits to the masses. Never before in the history of mankind and for that matter of our country have we confronted with such acute and complicated problems. This is a serious matter to ponder about. Obviously there is a need of "Mission-Oriented-Institutions" in scientific fronts in the country.

The consensus of the Congregation at the 10th AICEME was to put on record the salient features discussed in the Seminars.

- Water supply in Rural Areas for Agro-Irrigation,

- Application of Computational Technique in Design,
- Production and Productivity, in the form of "recommendations" and to bring them to the notice of all in different walks of life. Both the jobs are difficult on different counts. The former is difficult because reproductions of the sentiments of a technical meeting is not that easy. The difficulty in the latter case is due to involvement of huge time and money and effort to bring this paper within the reach of a representative cross-section of people in different walks of life.

We have received financial assistance of Rs 3,000/ to meet the part expenses incurred in bringing out this proceedings from the West Bengal Science & Technology Committee. Thanks are due to them. We also appreciate the help and encouragement we have received from various persons at different times in the publication of the issue of the Journal.

Lastly, opinions expressed here in this "White Paper" are the sentiments and recommendations of the Congregation and

not necessarily of The Association of Engineers, India. The Association would appreciate it very much to receive opinions, suggestions and constructive criticisms on this 'paper'. The Association would not hesitate to identify itself as a "Mission-Oriented Institution" to serve the nation with all its resources and capabilities.

Editor

Production & Productivity

- A "Scientific Administrative Service" for engineers, technologists, scientists and doctors in the governmental service in the same line as the other "Higher Services" existing in the country is to be introduced without further delay to achieve effective management of men, machine, material and capital.
- "Production and Productivity", the prime tool for economic growth and progress are to be geared with "Action-Oriented-Programme" to achieve National Development.
- "Rational Wage Policy" is vital for the utilisation of trained and untrained personnel in the country.
- Mechanisation is vital to increase productivity but it should be labour-intensive.
- A "Rational Policy" should be framed to equate the productivity in the Public and Private sector organisations.

- "Rational Pricing Policy" is needed to bring the fruit of technology within the reach of masses.
- The index of National Development should not be fixed on "Trading and Profit Earning", but on the material development of the country as a whole.

Application of Computational Technique in Design

- Computer has got to be accepted in order to keep pace in development with the rest of the world.
- Central and Regional Organisations (in the line of the R. C. C., Calcutta) should come forward to help the users on the up-to-date trend in the advance of both in "Computer Technology" and "Programme Development".
- "Manual of Standard Programme Packages" is to be made available to the user.

Water Supply in Rural Areas for Agro-Irrigation

- Water sources (including the underground sources) in the country are to be surveyed and updated.
- "Drinking Water Projects" should get primary importance in Planning.
- "Area Planning" and "Land-use Planning" cannot be isolated from "Water Resources Planning"
- 'Integrated and Interdisciplinary Approach' must be undertaken for

planning and development of water resources in the country.

- “Liason and Co-ordination Units” on Statewise, Regional and National, are to be established for effective utilisation and management of water resources without further delay.

Concluding Remarks

The three “P”-s—Poverty, Population and Pollution have a firm grip on us. Never before in the history of our country we confronted such a crucial stage as we are facing to-day.

Should we want to overcome this crucial period, which “we must”, we need to act in a rational manner. How long the men at the helm of affairs would undermine the “rational views” of scientists and technologists of the country on one pretext or the other? A time has come to change our outlook, our approach and our mode of work. This is very vital for our survival.

We do not claim the “document” we produce as a complete one. One point is, however, definite that we have moved one step forward in the preparation of a “Blue Print to achieve National Development”!

Programme

A. M. A. E. Section-A Examination (June, 1981)

(for diploma holders in Mechanical, Electrical and Civil Engineering)

Venue : THE ASSOCIATION HALL

24, Netaji Subhas Road, Calcutta-1.

Time : 12-00 to 15-00 hrs.

June 21	:	Mathematics
June 22	:	Physics
June 23	:	Material Science & Processes
June 24	:	Electrical Technology
June 25	:	Engineering Thermodynamics
June 26	:	Strength of Materials.

Er. R. C. Bhattacharya
Controller of Examinations.