

TECHNOMILLENNIUM 2009 – A NATIONAL LEVEL CONFERENCE

Conference Theme Perspectives:

The necessity of harnessing science and technology for transforming rural India has long been recognized. Though the importance of science and technology for rural India was appreciated in the 1930s by Gandhi M. K., the Father of our Nation giving rise to the work of the Centre for Science for Villages, advanced institutions of education, science and technology turned their attention to this area only in the 1970s. The most well-known of these efforts was from the Indian Institute of Science with its programme for the application of science and technology to rural areas known by its acronym ASTRA. ASTRA (recently renamed as Centre for Sustainable Technologies) was based on a model of science–technology interactions in a ‘dual society’ like India with a small affluent elite amidst a large economically deprived majority living primarily in rural areas.

The Indian society is predominantly a rural society. Out of a total population of one billion, nearly 75% live in 567,000 villages. Again, 73% out of this rural population live in villages with a population of less than 1,000. The rural areas are characterized by limited land, poor infrastructure, such as irrigation, roads, communication systems, inadequate health, sanitation, drinking water facilities, high rate of illiteracy, and poverty. The government of India is spending

enormous amounts through its Five-year plans on developmental activities. However, the recent 'India Rural Development Report, published by the National Institute of Rural Development, Hyderabad, India, (NIRD), indicates that 30 to 38% of the rural people (over 300 million) live below the poverty line.

Well the statistics are quite alarming and we all belonging to the fraternity of science and technology need to devote a special attention to this fact. As noted by an economist Zijp economic poverty stems partly from information poverty, since development requires strengthening the infrastructure for harnessing physical resources, cultivating intellectual and creative resources like those that build human capital. The impact of inadequate information affects the entire rural development sector. Government agencies lack information needed for the efficient distribution of agricultural products, for ensuring food security, for providing warning and protection against natural calamities such as flood and famine, and for managing natural resources. Development is about information and knowledge, how to organize society to perform productive activities, and how to create an environment that is friendly to investment. Timely access to information is a crucial ingredient for the success of any development effort. Thus, development has to be a knowledge-based process.

In the field of rural development, a number of institutions and organizations are trying to grapple with development oriented projects. It is necessary to pool

together the nation-wide information resources to improve access and utilization of available information at various levels. In this context, National Institute of Rural Development (NIRD), Hyderabad, is the apex research and training organization in rural development in India. Since its inception in 1985, it has been working as a think tank for the Government of India, in policy formulations, modifications, monitoring and evaluation, through its research and consultancy programmes.

Realizing the importance of information, NIRD is attempting to coordinate the efforts of different organizations in the country to fulfill the information needs of various participants in development, mainly researchers, trainers and policy makers and planners of rural development programmes and projects.

Thus in this context, this National paper presentation competition “Technomillennium 2009” at MIT Aurangabad is aimed at integration of the efforts in information generation and dissemination and to cater to the information needs of the varied groups dispersed at various levels nationally, regionally and locally. To this end, it is hoped that this challenge of bringing together institutions and individuals using the various diverse technologies be viewed as an opportunity to respond effectively to the demands of the rural development sector.

Looking into this the theme for this conference titled as Technomillennium 2009 has been finalized as:

Human – Technology Interaction, Interface and Usability – Focus on Rural Development in India

The developments taking place in the Science and Technology are quite amazing ever since they started to happen for the first time. Admirably, majority of these developments have been used by the human race for a constructive cause. The complete change from a desert to lush green horizon like Dubai or Conceiving of floating cities in the oceans are unbelievable achievements of remarkable technical developments in the history of mankind and its civilization. It is very easy and appealing for anybody to portray such marvels on an international, urbanized canvass but always it is very difficult to feel even a glimpse of such a towering technical excellence when considered in a remote rural, tribal part of any country in general and a developing country like India in particular. Considering this on three different levels i.e. Interaction, Interface and Usability, the theme for this year's Technomillennium, has been decided.

Technology has various constraints like climate, adaptability, affordability, availability and alike. The human – who is going to be always at the very centre of any technological development, has to have appreciation in all these three levels. Any technology developed in one part of the globe can't be directly acceptable in another part, for this there has to be a resurgence of interaction of the stalwarts working in the technological developments. So this point needs to be elaborated.

Making a particular, tailor-made technology available at the place where it is needed the most is the second level in this line. Many times it so happens at many places that the food and hunger are there but not coming together. Sharing of all the available information about technological developments, making them suitable for the targeted problematic situations and releasing it for the said use is really a need of today's development activities.

Usability – this is the last consideration. Particularly when it happens in the rural area that a particular technique has been made available for its right use, it fails miserably. The problems may be different but end result is a failure. To focus all these aspects, the different areas of Engineering and Technology should come on front with a redefinition of the development in the context of rural development.