

## Today's Paper » NATIONAL » KERALA

### Call to promote collaborative research and innovation

Special Correspondent

*Two-day workshop on National Knowledge Network gets under way*



India needs a much better knowledge ecosystem to move up the global innovation ladder and compete with frontrunners in generating intellectual property, according to P.H. Kurien, Principal Secretary, IT.

Delivering the inaugural address at a two-day workshop on the 'National Knowledge Network' here on Wednesday, Mr. Kurien stressed the need for a mechanism to disseminate the knowledge generated in academic, and research and development institutions in the country.

#### Innovation ecosystem

"Since the latter part of the 20<sup>th</sup> century, India has moved a little ahead in knowledge creation, but the country's global ranking is still poor. In the 2011 Global Innovation Index, India has moved from the 63<sup>rd</sup> to the 56<sup>th</sup> position, whereas a small country like Qatar is ranked 29<sup>th</sup>."

Small countries such as Israel, Sweden and Switzerland with less number of science and technology personnel are able to create knowledge and disseminate it because they have a much better innovation ecosystem."

Mr. Kurien, former Controller General of Patents, said India was unable to bring in that much innovation despite the millions of science and technology personnel the country had. He attributed this to the poor dissemination of knowledge within the science and technology community.

#### Patents

"Of the 40,000 patent applications filed in India in 2010, only 20 per cent were from within the country while 60 per cent of the applications filed in the US were internally generated. China received half a million applications, 50 per cent of which were from within the country."

#### In China

He said the kind of knowledge ferment happening in China was enormous.

"The Chinese government has decided to have 2 million patents granted by the year 2020, with 60 per cent based on applications from within the country. Their innovation advancement is based on a clear strategy and knowledge ecosystem. The ferment happening in Chinese universities is mindboggling."

Mr. Kurien said academic institutions accounted for very few of the 5,000 to 6,000 patents granted in India annually.

The National Knowledge Network (NKN), he said, would fill that gap by providing a mechanism to disseminate knowledge.

Mr. Kurien said the limited dissemination of patent information in India was inhibiting innovation among scientists, researchers and the academic community. NKN, he said, would provide fast, real time information. He added that by linking all educational institutions, NKN would revolutionise the knowledge sector in India.

#### To promote tie-ups

Addressing the inaugural function over a video conference network from New Delhi, R. Chidambaram, Principal Scientific Advisor to the Government of India, said NKN was designed to promote collaboration between scientists within the country and abroad.

He said NKN could be used to provide a virtual classroom experience linking educational institutions across the country.

"It will make it possible to share the capability of professors across boundaries. We are thinking of a much broader scale of operation. The faculty in some super specialty areas is fragmented, students are also distributed across various institutions. NKN can be used to provide a platform for them to share knowledge".

Dr. Chidambaram, who chairs the high level committee on NKN, said collaborative research, sharing of scientific databases and remote access to advanced research facilities were other major areas where the network could bring about positive changes.

Grid applications in the areas of climate change, cancer and brain research and computer applications were being tried out, he added.

### **Remote mentoring**

S.V. Raghavan, chairman of the technical advisory committee, NKN said the network offered a solution to the paucity of teachers in educational institutions.

He said it would help bring out the innovative spirit in students by remote mentoring.

Suresh Das, Director, National Institute for Interdisciplinary Science and Technology (NIIST); B.K. Gairola, Director General, National Informatics Centre (NIC); and K.S. Raman, state information officer, NIC spoke.

The NKN project uses a high bandwidth network to link 1,500 knowledge and research institutions in science, technology, higher education, healthcare, agriculture and governance across India and facilitate the flow of information and knowledge.