

# National Knowledge Commission

14<sup>th</sup> March 2007

Lecture Series for Members of Parliament



# Agenda

- Introduce NKC
- Outline activities
- Discuss recommendations
- Solicit advice/input
- Engage on implementation



# Vision

The National Knowledge Commission (NKC) was constituted as an advisory body to the PM to help restructure knowledge related institutions and infrastructure to meet the challenges of the 21<sup>st</sup> Century with a focus on meeting the aspirations of the 550 million young in an increasingly global knowledge society



# Terms of Reference

- Build excellence in the educational system
- Promote the creation of knowledge in S&T laboratories
- Improve the management of institutions engaged in intellectual property rights
- Promote knowledge applications in agriculture and industry
- Promote the use of knowledge capabilities in making government an effective, transparent and accountable service provider



# Members

Dr. Sam Pitroda

Dr. P.M. Bhargava

Dr. Ashok Ganguly

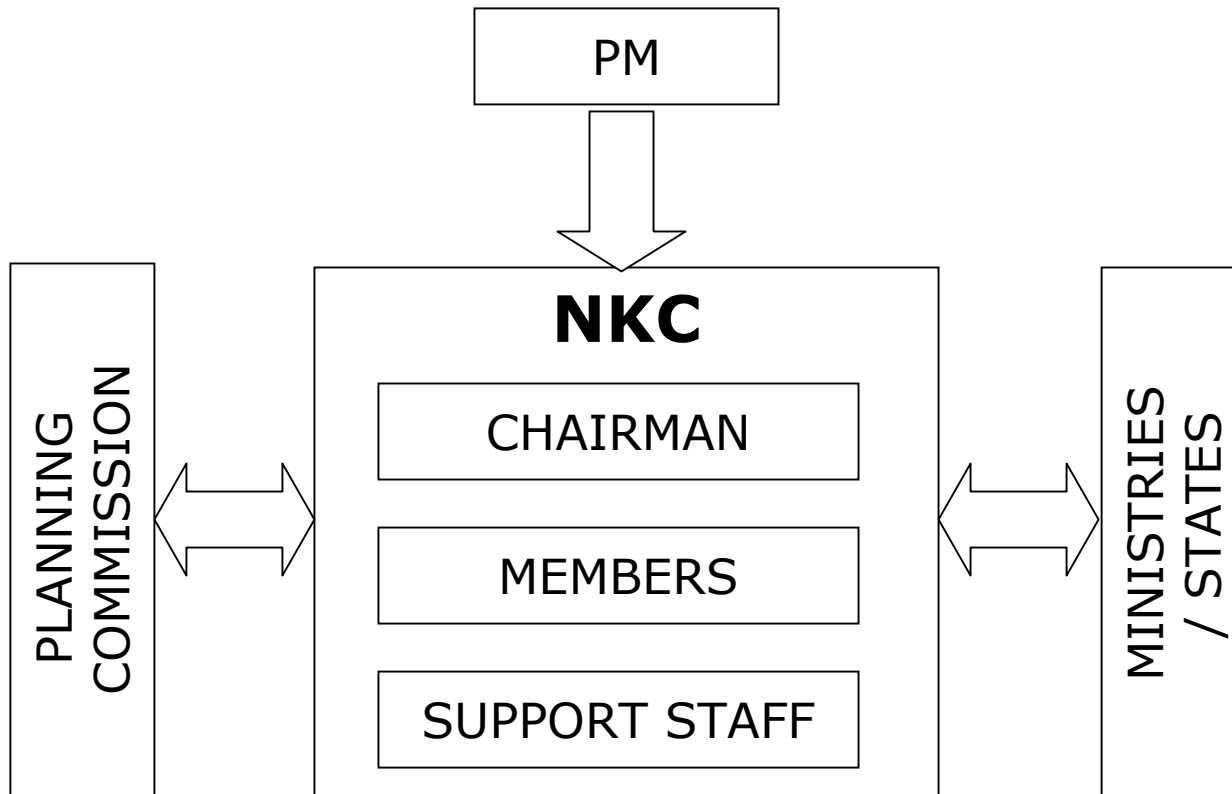
Dr. Jayati Ghosh

Dr. Deepak Nayyar

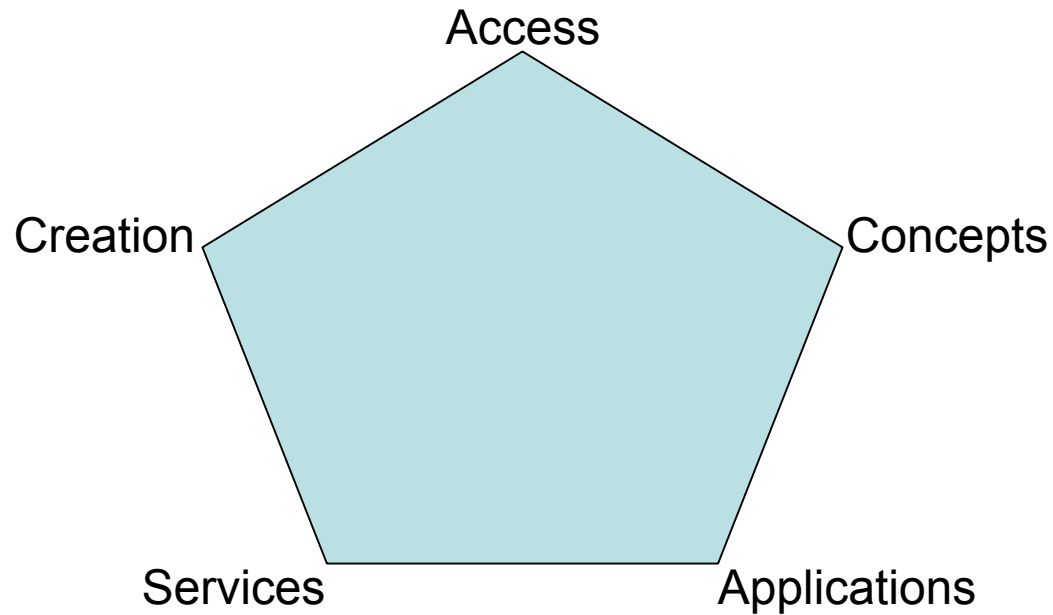
Mr. Nandan Nilekani



# ORGANIZATION



# Knowledge Pentagon



# Focus Areas

## **ACCESS**

- Literacy
- Translation
- Libraries
- Language
- Networks
- Portals

## **CONCEPTS- EDUCATION**

- School
- Vocational
- Higher
- Professional
- Open and Distance





# Contd..

## **CREATION**

- Innovation & Entrepreneurship
- Intellectual Property Rights
- Science & Technology

## **APPLICATION**

- Agriculture
- Traditional Knowledge
- Small & Medium Scale Enterprises

## **SERVICES**

- e-Governance



# Methodology

- Identify focus areas/target groups
- Consultations – formal and informal
- Background research and analysis
- Constitution of Working Groups
- Internal deliberations of NKC
- Finalization of recommendations
- Submission to PM
- Widespread dissemination
- Implementation



# NKC Consultations

- **Working Groups:** Libraries, Language, Health Information Network, Undergraduate Education, Medical Education, Legal Education, Management Education, Traditional Knowledge
- **Workshops/Seminars:** Translation, Knowledge Network, Literacy, School Education, Muslim Education, Vocational Education, Open and Distance Education, Intellectual Property Rights, Science and Technology
- **Surveys:** Innovation, Health Information Network, Traditional Knowledge



# Recommendations Submitted 2006

- Libraries
- Translation
- Language
- Knowledge Network
- Portals (Water, Energy)
- Right to Education
- Higher Education
- Vocational Education
- National Science and Social Science Foundation
- e-Governance



# Recommendations Submitted



# Libraries

- Set up a National Commission on Libraries
- Prepare a National Census of all Libraries
- Revamp Library Information Science (LIS) Education, Training and Research facilities
- Re-assess staffing of libraries
- Set up a Central Library Fund
- Modernize library management, encourage greater community participation in library management
- Promote Information Communication Technology (ICT) applications in all libraries
- Facilitate donation and maintenance of private collections
- Encourage Public Private Partnerships in LIS development



# Translation

- Provide impetus for developing translation as an industry
- Establish a store-house of information on all aspects of translation involving Indian languages
- Promote printed as well as virtual publication of translation studies
- Create and maintain various tools for translation, encourage machine translation
- Provide quality training and education for translators
- Translate pedagogic materials at all levels specifically in natural and social sciences
- Project Indian languages and literatures through high-quality translation
- Set up a national web portal on translation
- Organize Annual National Conferences on translation
- Promote book launches, festivals, fellowships and prizes etc.



# Language

- Introduce English, along with the first language starting from Class I in school
- Modify pedagogy of language learning/ teaching
- Train the nearly 4million school teachers regardless of expertise through vacation training programmes or other short-term courses.
- Induct graduates with high proficiency in English and good communication skills without formal teacher-training qualifications
- Develop pedagogically sound English textbooks from Class I to XII.
- Use all available media- audio-visual, print etc.





# Knowledge Network

- Interconnect all knowledge institutions throughout the country, through an electronic digital broadband network with adequate capabilities (minimum access speed of 100mbps or more) to encourage sharing of resources and collaborative research
- To utilize various available options including existing commercial networks
- The network will be based on Internet Protocol (IP), Multi-Packet Labeled Services (MPLS) technology
- A Special Purpose Vehicle (SPV) consisting of major stakeholders should manage the day to day working



# Portals

- Create national web based portals for basic needs on certain key sectors such as Water, Energy, Environment, Education, Food, Health, Agriculture, Employment, Citizen Rights etc
- Management by a consortium consisting of representatives from a wide range of stakeholders
- Provide access to government held data
- Encourage collaborative funding
- Portals on Water and Energy have been developed
- Water Portal has been developed by Arghyam Trust, & the Energy Portal developed by TERI
- Proposed future portals: environment, health, citizens' rights, etc.



# Right to Education

- A legislation on Right to Education must be enforced by the central government following upon the commitment made in the Constitutional Amendment Article 21A
- A financial provision requiring the central government to provide the bulk of the additional funds needed to ensure the Right to Education must be there in the Central legislation,
- The responsibility of the Government, at different levels, must be recognized and made justiciable



# Higher Education

- Expand massively to around 1500 universities nationwide, that would enable India to attain a gross enrolment ratio of at least 15 per cent by 2015
- Establish an Independent Regulatory Authority for Higher Education (IRAHE)
- Increase public spending and diversify sources of financing
- Establish 50 National Universities
- Reform existing universities-frequent curricula revisions, course credit system etc
- Restructure undergraduate colleges
- Promote enhanced quality- upgrade infrastructure, salary differentials
- Ensure access for all deserving students
- Affirmative action



# Vocational Education

- Place Vocational Education entirely under the Ministry of Human Resource Development (MHRD)
- Increase the flexibility of VET within the mainstream education system
- Quantify and monitor the impact of vocational education
- Increase resource allocation to vocational education
- Expand capacity through innovative delivery models
- Enhance the training options available for the unorganized and informal sector
- Enhance the training options available for the unorganized and informal sector
- Ensure a robust regulatory and accreditation framework
- Ensure proper certification
- Undertake a re-branding exercise



# National Science and Social Science Foundation

- Set up a National Science and Social Science Foundation (NS3F) which will look at all knowledge as one seamless entity
- The objectives of the NS3F would include:
  - suggest policy initiatives to make India a leader in the creation and use of new knowledge in all areas of natural, physical, agricultural, health, and social sciences.
  - ensure that science and technology are maximally used for betterment of the lives of our people



# E- Governance

- Re-engineer government processes first, to change basic governance pattern for simplicity, transparency, productivity and efficiency
- Develop common standards and deploy common platform/infrastructure for e-governance
- Select 10 to 20 important services that make a critical difference, simplify them and offer them as web-based services
- Begin all new national programmes (like Bharat Nirman, Rural Employment Guarantee Scheme, etc.) with well-engineered e-governance implementation and web interface
- Ensure speedy delivery, productivity and efficiency of services making them citizen centric and ensuring that the right people get the benefits



# Areas to be closed

Consultative process has been completed and recommendations will be finalized shortly on the following areas:

- Legal Education
- Health Information Network
- Medical Education
- Management Education





# Professional Education

- Recommendations on Legal, Medical and Management Education
- Recommendations focus on reform of regulatory structures, hiring and retaining qualified faculty, faculty training, accreditation of institutions etc
- In Medical Education NKC recommendations highlight the need to leverage the country's extensive Public Health System
- Coherence with international trends has been focused upon in Legal Education
- Recommendations on management education focus on creating management programs relevant for the Indian context and designing programs for previously unmanaged sectors



# Health Information Network

- Initiate Indian Health Information Network Development (IHIND) by creating a web-based network, connecting all health care establishments in both private and public and public sector
- Establish national standards for clinical terminology and health informatics
- Create a common electronic health record (EHR)
- Frame policies to promote the use of IT in health care and to provide for adequate security for citizens' health data
- Form public-private partnership for a financially viable plan
- Create an institutional framework for implementation



# Works in Process

- Literacy
- Portals (Environment, Health etc)
- Open and Distance Education
- School Education
- Technical Education
- Innovation and Entrepreneurship
- Intellectual Property Rights
- Science and Technology
- Agriculture
- Traditional Knowledge



# Looking Ahead

- Possible future areas include:
  - Teachers training
  - Think tanks
  - More PhD students
  - More Math & Science students
  - Nanotechnology
  - Cryptology
  - Special Needs Education,
  - Knowledge needs of PRIs
  - Others



# NKC Report to the Nation

- Submitted Report to the Nation on 12<sup>th</sup> Jan 2007
- Report contains NKCC recommendations made during 2006 on nine areas
- PM's Comments: 'NKCC has addressed the major problem of the "bottom of the pyramid", namely, Access. Six of its ten recommendations deal directly with access. This is consistent with the objective of building an inclusive society, the guiding principle of the government'



# PM's Comments

- “ NKC recommendations on Libraries, Translation, Knowledge Networks, National Portals, Higher Education, Vocational Education are timely and merit immediate attention”
- “ NKC should not see its role only in terms of guiding reforms in government policy. It must be involved in ensuring the implementation of its innovative ideas. It must finally serve as the lighthouse for society, showing the way forward in the knowledge century”
- “ The Commission should take its ideas across the country and build consensus”



# Outreach

- Wide dissemination of the NKC Report to the Nation
- All recommendations and relevant information available on Website
- Website content to be translated into all 23 Indian languages
- Discussions around recommendations on Libraries, Higher Education, Translation, and Vocational Education underway
- A series of seminars and workshops at National, Regional & Local levels are being organized



# Way Forward

- Provide input and advice to NKC
- Help create awareness about NKC activities and recommendations
- Focus on recommendations and related activities in your constituencies
- Encourage community participation to focus on solving local problems at the local level
- Encourage public private partnerships on implementation and resource mobilization





[www.knowledgecommission.gov.in](http://www.knowledgecommission.gov.in)

Thank You

