

# NKC: Impact



# Knowledge Initiatives in the Eleventh Five Year Plan

In view of the critical role that knowledge institutions would play in making India a global leader in the 21st Century and in meeting the growing aspirations of the large component of the young in India's population, there was little doubt that education and related sectors would merit large infusion of resources in the XI Plan. It was also apparent that institutional reform would need to supplement this infusion. NKC was envisaged by the Government as one of the key concurrent processes for the XI Plan: 2007-12. Recommendations of NKC have been key inputs in formulating broad contours of the XI Plan. Some of these are highlighted below.

## XI Plan 2007-2012

The XI Plan, approved at the meeting of the National Development Council on 19 December 2007, places the highest priority on education as a central instrument for achieving rapid and inclusive growth. This is reflected in the four fold increase in resources allocation. At Rs. 2.70 lakh crore, it constitutes 20 per cent of the Plan, representing a credible progress towards the target of 6 per cent of GDP. The following paragraphs summarise the major components of the XI Plan relating to the recommendations made by NKC. They appear in the same order as in the Plan.

### E-governance for better service delivery (Volume I: Inclusive Growth)

- Process re-engineering to be the most crucial element of the agenda to make delivery of services citizen centric.
- Creation of a common service delivery platform including State Wide Networks, Common Service Centres and Last Mile Connectivity.
- A body with PM as Chair to prescribe deliverables and milestones for the National e-Governance Plan.
- Make use of e-governance in implementation of all major flagship programs.

### Vocational training & skill development (Volume I: Inclusive Growth)

Launch a National Skill Development Mission with an outlay of Rs 31,200 crore to increase capacity from 2.5 million to 10 million per annum. The National Skill Development Mission would:

- Encourage Ministries to expand existing public sector skill development infrastructure and its utilisation by five fold.
- Modernise existing public sector infrastructure to get into PPP mode with functional and governance autonomy, establish a credible accreditation system and a guidance framework for all accrediting agencies, encourage agencies to rate institutions on standardised outcomes, and establish a "National Skill Inventory" and a "National Database for Skill Deficiency Mapping" on a national web portal.
- Set up a National Qualifications Framework, which establishes equivalence and provides horizontal mobility between various Vocational, Technical and Academic streams at more than one career points and a Trainee Placement and Tracking System for effective evaluation and future policy planning.
- Enlarge the coverage of skill spectrum to 1000 trades, with relevance to our emerging needs while making a distinction between structural, interventional and last mile unemployment and correspondingly set up programs for 24 months, 12 months and 6 months duration. "Finishing Schools" will be encouraged to take care of last mile unemployment.
- Create a "National Skill Development Fund" imposing a universal skill development obligation on industry to invest in skill development of SCs/STs/OBCs/Minorities/other candidates from BPL families – as their contribution to affirmative action combined with matching government contribution.

- Facilitate repositioning of employment exchanges as outreach points of the Mission for storing and providing information on employment and skill development and to function as career counselling centres.
- Enlarge the 50,000 Skill Development Centres program eventually into a “Virtual Skill Development Resource Network’ for web based learning.

### Innovation (Volume I: Inclusive Growth)

- Put in place a National Innovation Policy which encourages competition among enterprises, greater diffusion of knowledge and increased support to early stage technology development initiatives and grassroot level innovators.
- Foster increased collaboration among the R&D institutes, Universities and private sector enterprises and leverage upon their cumulative strengths in designing and implementing various innovation programs.
- Create new interface structures to forge partnerships between academia and industry.

### School education (Volume II: Social Sector)

- Reorient Sarva Shiksha Abhiyan bringing in a strong rights focus to make Right to Education a reality: ensure basic learning conditions, special focus on Math, Science & English, common syllabi and curriculum and pedagogy.
- Gradually reduce Central Government’s funding over the Plan period rather than move immediately to 50:50.
- Ensure minimum standards and norms for public and private schools and address systemic issues of accountability and decentralisation of decision making, teacher recruitment, teacher training, learning outcome measurement, teacher motivation.
- Recognise and encourage the role of private providers.
- Special focus on disadvantaged groups and educationally backward areas.
- Scheme for Universal Access and Quality at the Secondary Stage; set up 6000 Model Schools one in each Block, upgrade 15000 primary schools to secondary level, additional infrastructure and additional teachers, hundred per cent trained teachers.
- Use ICT based pedagogy and learning aids, provide

broadband connectivity to all the Government and Government aided secondary schools.

- Strengthen teacher training and professional development.

### Higher & technical education (Volume II: Social Sector)

- Expansion, inclusion and rapid movement in quality by enhancing public spending, encouraging private initiatives and initiating the long overdue major institutional and policy reforms, will form the core of the XI Plan effort.
- Improve quality: work on a detailed reforms agenda including: a) admission, curriculum and assessment; b) accreditation & ratings; c) teachers competence and motivation; and d) restructure affiliated colleges and research for policy formulation.
- An apex Independent regulatory mechanism accompanied by greater autonomy and internal accountability; establish a high level committee to suggest specific reforms
- Quantitative expansion through establishment of new government and private funded institutions and increased intake in existing institutions.
- Reduce disparities based on gender, caste, region etc. through differential support.
- Establish 30 new Central Universities, 16 in States where they do not exist and 14 as World Class Universities (all India admissions, course credits, regular syllabi revision, incentives for faculty, strong linkage with industry and research institutions, no affiliated colleges, outsource non teaching functions).
- Establish 8 new IITs, 7 new IIMs, 10 new NITs, 3 IISERs, 20 IIITs and 2 new SPAs.
- Provide flexibility to universities to raise fees accompanied by scholarships, fellowships and student loans.
- Establish a National Science & Engineering Research Board for rejuvenation of research in Universities.
- Launch a national Mission in education through ICT coverage in all the Universities and colleges; broadband connectivity through National Knowledge Network and requisite nodes within institutions; to be implemented through an Empowered Committee.
- Revitalise and reform polytechnics through industry linkage and teacher development, establish 210 community colleges and 700 polytechnics.
- Strengthen Open Universities and reform statutory

bodies, scale up SAKSHAT as the education portal for 50 crore people.

### **Libraries (Volume II: Social Sector)**

- Develop Public Libraries including Rural Public Libraries.
- Special collections and technological support for visually challenged and hearing impaired.

### **Translation (Volume II: Social Sector)**

- A National Translation Mission for promoting Translator education including specialised courses in translation technology.
- Translate at least five good literary works in every language into all other major languages.

### **Legislative framework for public funded research (Volume II: Social Sector)**

There is a need for an appropriate legislative framework for incentivising innovators and commercialisation of public funded R&D where the Government, the recipients of funds, the inventor as well as the public benefit from the protection and commercialisation of IP.

### **Traditional health systems (Volume II: Social Sector)**

The Plan recognises that no single system of health care has the capacity to solve all of the society's health needs. It lays special thrust on strengthening professional education, strategic research programs, promotion of best clinical practices, technology upgradation in industry, setting internationally acceptable pharmacopeial standards, conserving medicinal flora, fauna, metals and minerals, utilising human resources of AYUSH in the National health programs and strengthening IPRs with the ultimate aim of enhancing the outreach of AYUSH health care in an accessible, acceptable, affordable and qualitative manner.

### **Intellectual property rights (Volume III: Economic Sector)**

- Undertake the second phase of modernisation of IP offices to address the needs of human resources development, training and awareness and also infrastructure besides regular updating of the IT facilities.
- Indian IPO would be made an International Searching Authority and an International Preliminary Examining Authority under the Patent Co-operation Treaty of WIPO.

# Follow Up on NKC Recommendations

## Highlights

The Government has been committed to implementing the Commission's recommendations. The action taken includes:

### Right to education

- The Right of Children to Free and Compulsory Education Bill, 2008 has been introduced in the Parliament.

### School education

- Under the Scheme for Universal Access and Quality at the Secondary Stage, 6000 high quality Model Schools are being set up, with at least one school in each Block. The first stream will consist of 2500 public funded schools (2000 in KVs and 500 in NVs template) in the Educationally Backward Blocks which have a significant SC, ST, OBC and minority population. The second stream of about 2500 schools would be set up through Public Private Partnership in other Blocks with emphasis on geographical, demographic, gender and social equity. Modalities for the remaining 1000 schools have yet not been finalised.

### English language teaching

- Twenty five states have already introduced English as a subject from Class I. With the help of NCERT and CIEFL, the MHRD is guiding English Teaching in schools in the states/UTs by developing appropriate curriculum, materials and training of teachers with skills in English.

### Vocational Education and Training (VET)

- For expansion, redesign and quality enhancement of VET in the country a three tier structure has been constituted in July 2008 under the **National Skill Development Mission (NSDM)** consisting of:

a) **National Council on Skill Development:** The functions of the Council under the Prime Minister would be to lay down policy objectives, strategies, financing and a governance model to promote skill development.

b) **National Skill Development Coordination Board:** The Board will enumerate strategies to implement decisions of the Prime Minister's National Council on Skill Development. It would develop operational guidelines and instructions for meeting larger objectives of skill development needs of the country and also make appropriate practical solutions and strategies to be adopted by the Union and State Governments.

c) **National Skill Development Corporation:** It will develop a system of institutionalising measures to this end.

### Higher and technical education

- To expand capacity and improve quality of higher education, the Government has sanctioned the setting up of 15 new Central Universities and 14 new Universities based on world-class standards.
- The Government is in the process of setting up eight Indian Institutes of Technology (IITs), 10 National Institutes of Technology (NIT), 20 Indian Institutes of Information Technology (IIITs) as far as possible in the Public-Private Partnership mode, three Indian Institutes of Science Education and Research (IISERs), seven Indian Institutes of Management (IIMs) and two Schools of Planning and Architecture (SPA).
- The Committee for Rejuvenation and Renovation of Higher Education, set up for the review of UGC/AICTE has submitted its report.
- The Science and Engineering Research Board Bill 2008 has been introduced in the Parliament.
- The National Mission on Education through Information and Communication Technology (ICT) has been launched to leverage the potential of ICT in the teaching learning process with an aim to enhance the GER in Higher Education

by 5 percentage points by the end of the XI Plan. Under this Mission 20,000 institutions of Higher Education and nearly 10,000 University Departments will be provided connectivity, beginning with a minimum of 5 Mbps for each one of them. The Central Government will bear 75 per cent of the connectivity charges for 5 years, even for institutions not belonging to it. The estimated cost of the Mission is Rs. 4612 crore.

### Integrated National Knowledge Network

- During 2008-09 Rs. 100 crore has been allocated for the National Knowledge Network (NKN) which proposes interconnecting all knowledge institutions in the country with gigabit capabilities, for sharing resources and research. A high level committee (HLC) constituted by the Department of Information and Technology (DIT), under the chairmanship of the Principal Scientific Adviser, was set up to operationalise the network. The design of NKN was prepared by a Technical Advisory Committee set up by the HLC, and the initial implementation is being managed by NIC (under DIT).
- The network is ready for roll out and is awaiting a formal launch. The network would be operationalised in two phases. The core and distribution network covering 1000 nodes with gigabit capacity would be set up in the first phase and this process has already started. The network is scalable and coverage can grow up to 10,000 nodes/institutions.

### Translation

- The Government has approved the setting up of a National Translation Mission (NTM) with an outlay of Rs. 75 crore. The CIIL, Mysore is the nodal agency implementing the Mission.

### Libraries

- Based on the recommendations of NKC, the Department of Culture (DoC) proposed setting up a National Mission for Libraries (NML) in the XI Plan as a Central Sector Scheme. The EFC memo is under revision by the DoC and is being restricted to Rs. 180 crore earmarked for the same during the XI Plan. The NML will cover libraries under the DoC and the activities under it will include: National Census of Libraries; Modernisation including networking of Libraries under DoC; establishing Knowledge Centres and Digital Libraries.

### E-governance

- The XI Plan envisages the creation of core infrastructure such as SWAN (State Wide Area Network), Common Service Centres (CSCs) and State Data Centres (SDCs) for creation of a common service delivery platform
- SWAN has been implemented in 6 states/UTs till date and in 18 states implementation is in process.
- Till date SDCs have been approved for 26 states by the Government.
- Under the approved CSC scheme which envisages establishing over 100000 CSCs across India, 20,558 CSCs have been rolled out. The process for roll out for another 250968 CSCs has also been initiated.

### Legal framework for public funded research

- The Protection and Utilisation of Public Funded Intellectual Property Bill 2008 has been introduced in the Parliament

### Legal education

- Ministry of Law and Justice has conveyed in-principle approval for new Standing Committee on legal education under IRAHE and consequent changes in the role of BCI, curriculum development, developing research tradition in law schools/ universities.
- Proposal for setting up Centre for Advanced Legal Studies and Research (CALSAAR) for the northern region at Manesar (Gurgaon) was submitted by the Department of Legal Affairs to Planning Commission. The Department has been advised to make budget provisions for the scheme of CALSAARs in the XI Plan by the Planning Commission.

### Intellectual Property Rights

- The IP Office has put the relevant acts, rules, manuals on its website and there is no restriction on access to these materials.
- Digitisation of all patent records is underway. Forty-five thousand patent records are already on the website.
- National Institute of Intellectual Property Management (NIIPM) to be set up at Nagpur.
- An IP Appellate Board has been set up for trademarks, geographical indications and patents.
- DIIPP is examining the issue of sui-generic legislation for protection of traditional knowledge.

# NKC: State Level Initiatives

Many of the subjects on which the National Knowledge Commission has submitted recommendations fall within the purview of the State Governments. Implementation of most of the recommendations, be it reform of existing Universities, revitalising libraries in the region, introduction of English in schools, are all initiatives that need to be undertaken at the state and district level. In light of this, NKC has successfully engaged with several State Governments to formulate knowledge initiatives at the state level. It is working with 26 States and 3 Union Territories for implementation of its recommendations. Key highlights include:

- All States have appointed nodal officers and departments for implementation of NKC recommendations.
- Many State Governments are preparing blueprints for reform based on NKC recommendations. These include Rajasthan, Orissa and Andhra Pradesh. The Delhi Government has already approved

an action plan for implementation of NKC's recommendations.

- Several states are evaluating setting up a State Board of Undergraduate Education to reduce the burden of affiliating colleges on Universities. These Boards would aim to separate the academic functions from the administrative functions and provide quality benchmark.
- Karnataka has started a Knowledge Commission to lay the groundwork for reforms in the knowledge sector in the state. Rajasthan has set up a Rajasthan Knowledge Corporation Limited for promoting IT education and application of IT systems for process improvement and knowledge delivery.
- As part of the National e-Governance Project (NeGP), six state governments – Haryana, Himachal Pradesh, Tamil Nadu, Chandigarh, Delhi and Tripura have implemented State Wide Area Network (SWAN) and in 18 states implementation is in process.