

*Creating Value from
Intellectual Property Assets and Transfer of
Technology... a case study*

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Value Creation ????

Wealth Generation ??

Wealth Realisation ??

“Knowlitics™”

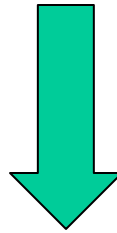
**.....A new international
phenomena**

*Emerging Socio-Political Dimensions
of the Knowledge Trade*

**Transacting Owned
Knowledge**

IPR plays a decisive role

Intellectual Creations



**Take ownership to convert them into
your property**

Therefore get your rights to them

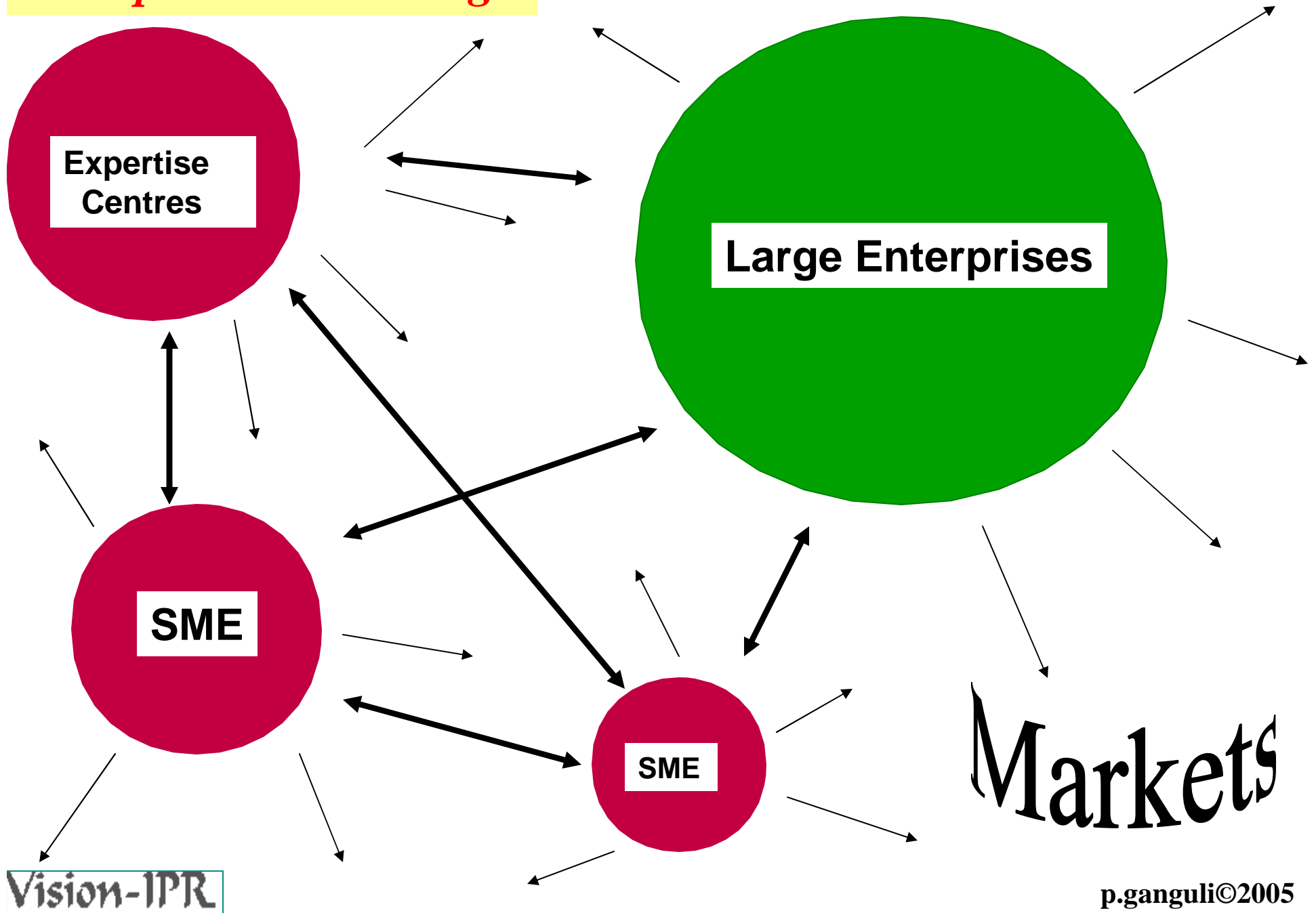
To exploit them as your assets

**Prevent others from wrongly using
your intellectual assets**

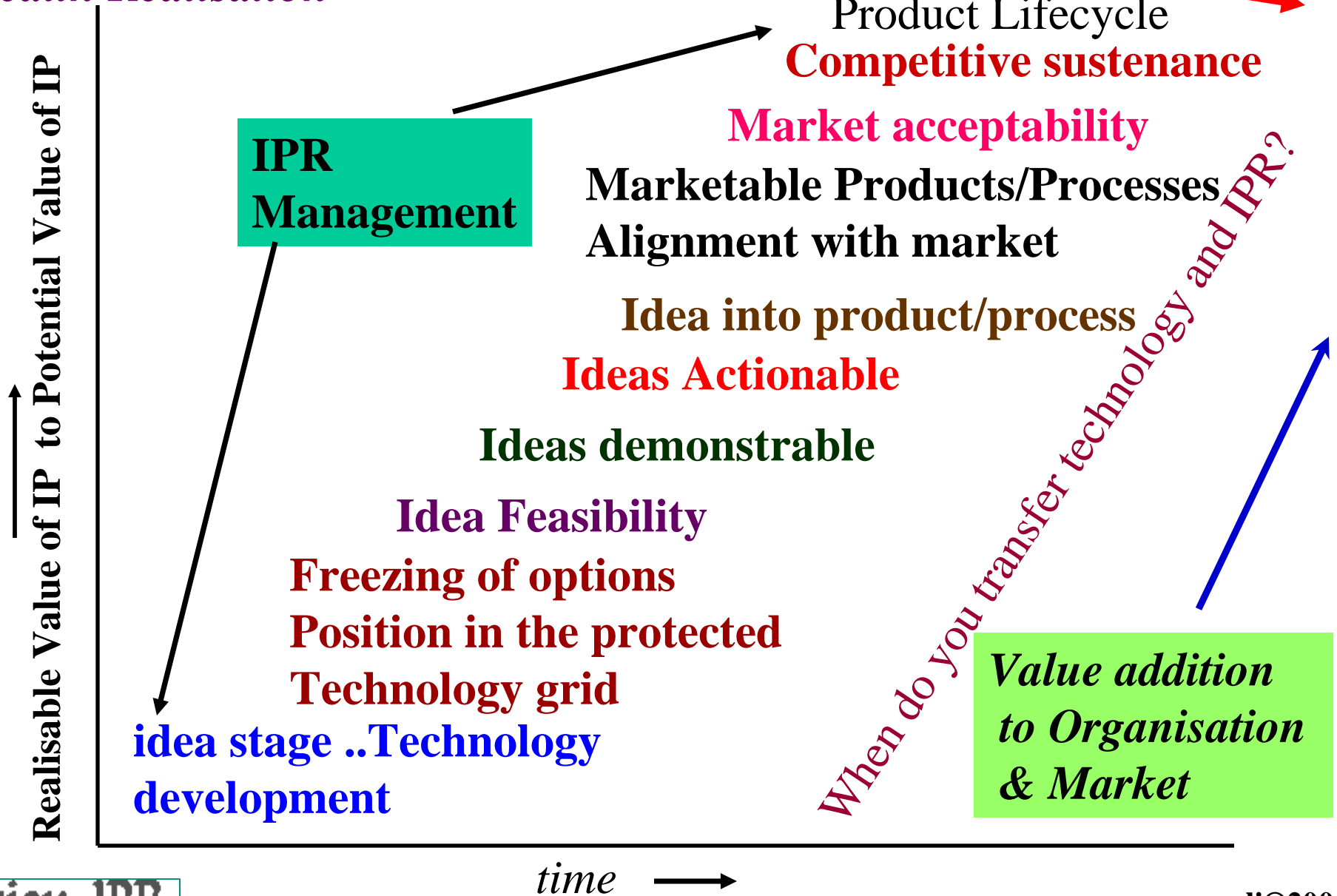
What is the correct time in the stage of development when a country should introduce strong IPR laws ???

History has shown that all countries such as USA, various countries in Europe, Japan, China, Korea, India and others have waited for the appropriate socio-economic-political stage to introduce strong enforceable IPR Frameworks.

Enterprise Networking



*IPR Enabled Knowledge Incubation and
Wealth Realisation*



In view of TRIPS

Do Developing and Least Developed

Countries have viable Options to

Survive

in a fierce Knowledge Market?

Developing Country's Concerns

- **Are Intellectual Property Rights hindrance to development?**
- **Are there National Models that one may adopt/adapt?**
- **Can developing nations and the least developing nations who are starting so late in the day ever catch-up with the developed nations?**
- **How to identify what each nation can do in various fields that synergise with global developments**
- **Are there adaptable Fair Benefit Sharing models**

Developing Country's Concerns

Typical Concerns.....

- *Will IPR stop us from using our own traditional knowledge?*
- *Will our lives be governed by trans-nationals?*
- *What will happen to local workmen?*
- *Will there be piracy of National Biodiversity*
- *Will local initiatives be negatively impacted and stunt local development?*

How do we protect the interest of SME?

- Offer Protection to innovations that are unable to cross the threshold for patentability.....utility models
- Exploit the power of Collective marks; Certification Marks etc.
- Get Venture Capital funding to protect innovations
- Consolidated role of trade and industry associations.

A Continual Challenge
to
the developmental process

*Role of
Government-Industry-NGOs-Academics
Individuals - International Agencies (?)*

Indialaunching into the future

- One sixth of the world population
- One of the largest secular democracy
- One of the most successful “well-spring” of trained human resource
- Solid built up infrastructure of Science and Technology
- Consistent economic growth now ready to meaningfully partner the process of globalisation
- Innovative entrepreneurs
- IPR Laws meeting international standards
- Economy surging ahead

A decade of changes

- **Enabling national policies and incentive schemes to encourage R&D, technology development and transfer**
- **Growth of financial institutions**
- **Moving into the new IPR Paradigm**
- **Maturation of the IPR infrastructure**
- **Several national agencies including industry associations providing IPR awareness and facilitation programmes**
- **International agencies getting involved in developmental activities at grass roots..... e.,g. UNIDO Projects, NGOs, WIPO and others.**

India Post TRIPS.... An Audit

- **Designs Registration Act 2000 with Design rules 2001**
- **Geographical Indications Act 1999 with GI rules 2002**
- **Protection of Layouts for Integrated Circuits Act 2000**
- **The Protection of Plant Varieties and Farmers Rights Act 2001**
- **Bio-diversity Act 2002**

National S&T Policy 2003

...salient features

- Vigorously foster scientific research in universities and other academic, scientific and engineering institutions; and attract the brightest young persons to careers in science and technology, by conveying a sense of excitement concerning the advancing frontiers, and by creating suitable employment opportunities for them. Also to build and maintain centres of excellence, which will raise the level of work in selected areas to the highest international standards.
- Provide necessary autonomy and freedom of functioning for all academic and R&D institutions so that an ambience for truly creative work is encouraged, while ensuring at the same time that the science and technology enterprise in the country is fully committed to its social responsibilities and commitments.

National S&T Policy 2003

.. *Salient features*

To substantially strengthen enabling mechanisms that relate to technology development, evaluation, absorption and upgradation from concept to utilization.

To establish an Intellectual Property Rights (IPR) regime which maximises the incentives for the generation and protection of intellectual property by all types of inventors.

Provide a strong, supportive and comprehensive policy environment for speedy and effective domestic commercialisation of such inventions

All efforts are made to have high-speed access to information, both in quality and quantity, at affordable costs; and also create digitized, valid and usable content of Indian origin.

National S&T Policy 2003

... Salient Features

Support innovation in all its aspects through a comprehensive national system of innovation covering science and technology as also legal, financial and other related aspects.

Set in mechanisms to achieve synergy between industry and scientific research by creation of Autonomous Technology Transfer Organizations as associate organizations of universities and national laboratories to facilitate transfer of the know-how generated to industry.

Encourage scientists and technologists to transfer the know-how generated by them to the industry and be a partner in receiving the financial returns.

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Encourage Industry to financially adopt or support educational and research institutions, fund courses of interest to them, create professional chairs etc. to help direct S&T endeavours towards tangible industrial goals.

Central Govt. S & T Departments

- DEPARTMENT OF SCIENCE AND TECHNOLOGY
- DEPARTMENT OF SPACE
- DEPARTMENT OF ATOMIC ENERGY
- DEPARTMENT OF OCEAN DEVELOPMENT
- DEPARTMENT OF BIOTECHNOLOGY
- DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH



COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)

Other Government Organisations Supporting R&D

- Indian Council of Medical Research (ICMR) under the Ministry of Health
- Indian Council of Agricultural Research (ICAR) under Ministry of Agriculture
- University Grants Commission (UGC) under the Ministry of Human Resources and Development
- All India Council for Technical Education (AICTE)
- Department of Secondary and Higher Education (DOSHE)

Several Government Sponsored Schemes

A few Examples

Promotion of technology transfernational schemes

- Stress on academic-industry-government teamwork for targeted deliver of business oriented results through innovative funding schemes such as New Millennium Indian Technology Leadership Initiative (NMITLI) <http://www.csir.res.in/nmitli/nmitli.html>; Drugs & Pharmaceutical Research <http://dst.gov.in/scprog/tecdev/drugspharmares.htm>; Instrumentation Development Programme <http://dst.gov.in/scprog/tecdev/instrdevprog.htm>; Grants to Industry- PATSER Programme Aimed at Technological Self Reliance (PATSER) <http://dsir.nic.in>; Home- Grown Technology Programme (HGT) <http://www.tifac.org.in/>; Department of Information Technology <http://www.mit.gov.in/R&D/projects/index.htm#about>

Promotion of technology transfernational schemes

- National IPR Facilitating Centers

National Research Development Council (NRDC)

Partnering innovators, entrepreneurs, institutions to protect their innovations in India and abroad and also help to commercialise their IPR

Technology Information and Forecasting Cell (TIFAC)

Facilitating patent searches, funding and facilitating filing of patents, partnering in commercialisation of IPR

National Innovation Fund

Working with grass-root innovators to protect their innovations and also to facilitate technology transfer/ IPR commercialisation

Technology Incubation Programme

DST Funded incubation centers set up to facilitate entrepreneurship development and IPR development and transfer

India Post TRIPS.... An Audit

- **1st (1999) and 2nd Patents Amendment Act (2002) with Patent Rules 2003; 3rd Amendment bill introduced in December 2003 lapsed; Patent Ordinance 2004 on December 26th 2004. The Bill for the 3rd Amendment was passed in Lok Sabha on 22/3/05 and in Rajya Sabha on 23/3/05.**
- **The Trademarks Act 1999 and TM Rules 2002 (rules notified on September 15, 2003)**
- **Copyright Act 1957 with Copyright rules 1958 followed by International Copyright Order 1999.**



A Case Study in India
**For promotion of IPR and its
exploitation for economic growth**

TECHNOLOGY DIFFUSION & SUPPORT PROGRAMME (TDSP) FOR SMALL SCALE INDUSTRIES

(A joint project of Ministry of Small Scale Industries, Government of India and United Nations Industrial Development Organisation)

- ✓ implemented jointly by UNIDO and Ministry of SSI, Government of India under the supervision and guidance of the respective steering committees headed by the Development Commissioner (Small Scale Industries)
- carved out of UNIDO's International Center for Advancement of Manufacturing Technology International Technology Centre (ITC) established jointly by Department of Industrial Policy and Promotion, Government of India and UNIDO
- to facilitate focused intervention in the small scale sector. UNIDO-ITCs to promote international collaboration, diffuse technological knowledge and innovations and buildup technology partnerships.



UNIDO Project Objectives in India

- To build up/strengthen the institutional and technical capacity and international framework for SSI sector through promotion of technological advances and innovations strengthened support.
- To establish a new mechanism and international framework for sharing experiences and best practices in timely technology diffusion and upgrading SSI for sustained growth.
- To lead the process of productivity growth in the SSI sector by providing technical support services in technology upgrading of local industry and encouraging new investments into production sector.



UNIDO Project Objectives in India

To foster South-South and North-South cooperation enabling the developing countries to enhance their productivity and competitive strengths through technology upgradation for sustainable development.

- To act as an international focal point and depositary of core competence/best practices/expertise for SSI in the developing countries tracking the latest worldwide developments in leading-edge technologies applicable for SSI sector.



Involvement in Growth Sectors

- Toys
- Machine Tools
- Locks
- Stone Industry
- Knitwear
- Sporting ware
- Bicycle

Organisational Involvement

- Small Industries Development Organisation, Govt. of India
- Small Industries Development Bank of India
- Export-Import Bank (for machine tools)
- National Small Industries Corporation (for lock)
- State Governments of Gujarat, Karnataka & Rajasthan (for stone)
- State Government of Punjab (for machine tool)
- Industry Associations (Toy, Lock, Stone & Machine Tool)

IPR initiatives

Sectors for Pilot Project

Toys and Indian Machine Tools

Launching of IPR Manuals for Growth and Sustenance of Competitive Posture

Awareness and training programmes for the stakeholders

Creation of IPR facilitating centers with involvement of respective industry associations



Recommendations

- Formulation of Comprehensive IPR Policies for various industry sectors and Academic Institutions
- Training of Personnel in Industry and Academia to manage IPR
- Creation of an association of technology transfer executives
- Manuals and Skill sets for negotiating technology transfer with IPR need to be developed.
- Providing Access and training to use Patent information databases
- Creation of a consortium of IPR professionals to offer professional services for IPR work