

Towards an Inclusive & Innovative India

**1st ADB-Asia Think Tank Development Forum
“Innovation and Inclusion for a Prosperous Asia”**



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India's Economic Growth is Slowing Down...

Indicators	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
<i>GDP Growth Rate</i>	9.3	6.7	8.6	9.3	6.2	5.0
<i>Savings Rate (% of GDP)</i>	36.8	32.0	33.7	34.0	30.8	na
<i>Capital Formation Rate (% of GDP)</i>	38.1	34.3	36.5	36.8	35.0	na
<i>GDP per capita, PPP(constant 2005 international \$)</i>	2606	2672	2861	3122	3277	3341
<i>Inflation(WPI) average (% change)</i>	4.7	8.1	3.8	9.6	8.9	7.6
<i>Inflation CPI(IW) average (% change)</i>	6.2	9.1	12.4	10.4	8.4	10.0
<i>Index of Industrial production (growth)</i>	15.5	2.5	5.3	8.2	2.9	0.7
<i>Current Account Balance (% of GDP)</i>	-1.3	-2.3	-2.8	-2.8	-4.2	-4.6
<i>Gross Fiscal Deficit (% of GDP)</i>	2.5	6.0	6.5	4.8	5.7	5.1

- Short-term “fixes” will not kick-start the economy in the absence of low-cost, effective policies to tap into India’s human and technological base and, thus, increase its long run potential output.
- There is a need for a new growth model – one that capitalises on India’s human and technological capital to meet its development challenges and sustain its long-term growth.
- Innovation is the engine for national and global growth, employment, competitiveness and sharing of opportunities.
- It will be the key to driving competitive advantage and growth in the 21st century.
- Knowledge will be the new frontier on the basis of which nations will compete and grow.
- Innovation is being seen as a broader platform moving beyond the formal confines of R&D and S&T to re-define business models, processes, design and organisational capabilities across domains and sectors to deliver social benefits and affordable solutions.

State of Innovation

- India's Gross Expenditure on R&D(GERD) is only about 0.8% of GDP.
- The contribution of private sector in research was only one-fourth of the total expenditure.
- At a global level, India's GERD accounts for about only 2.5 percent of the world's aggregate R&D spend.
- High-technology exports (% of manufactured exports) in India was last reported at 7.18 in 2010
- Total researchers in India are about 155,000 (156 researchers/m population).
- Current share of publications in high impact international journals is only about 2.5%.
- According to the Global Innovation Index Rankings (2013), India ranks 66th amongst 142 nations.
- In the Global Innovation Index report 2012, India has been rated 2nd in terms of innovation efficiency. India's innovation spend is reasonably efficient when benchmarked against a selection of other BRICs and more developed countries.

India today is uniquely poised....

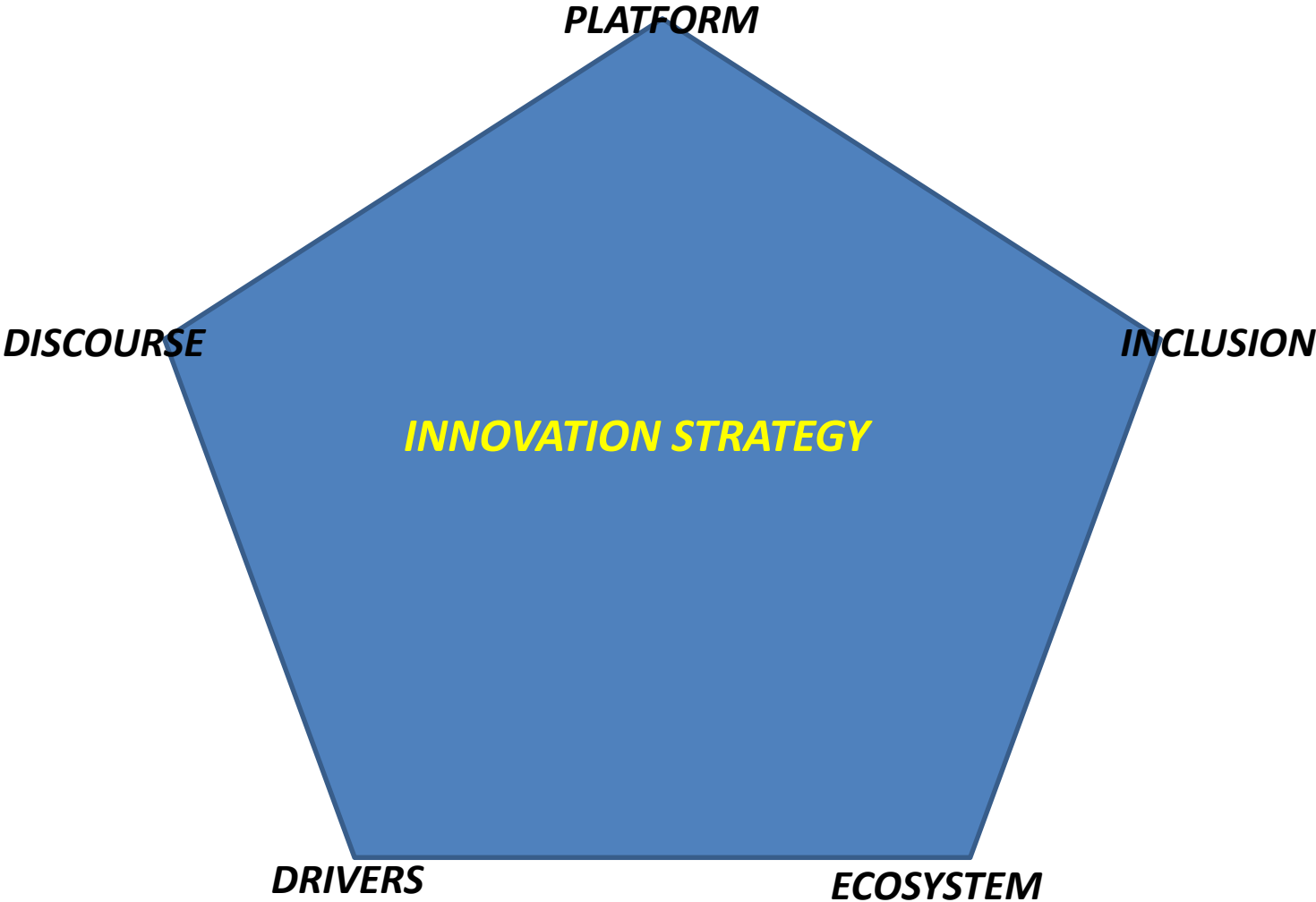
- India's science budget has grown at 25% a year for the last 5 years.
- We have huge talent in the form of home-grown entrepreneurs and innovators who are bringing affordable and frugal innovation to many.
- In the new Science, Technology and Innovation Policy,
 - Investments in GERD to 2% of GDP in the next 5 years.
 - Share of private sector R&D in GERD to rise from current 30% to 50%.
 - Double India's share in global trade of hi-tech products by stepping up R&D intensity in select industry segments where India can aspire for leadership.
- Unique demographic dividend with 550 million below the age of 25 who can emerge as the work force for the world.
- Government of India has declared 2010-2020 as the Decade of Innovation with a focus on inclusive growth.
- The National Innovation Council(NInC) will create a roadmap for innovation for the decade.
- An inclusive model of innovation will move the country to become not merely a knowledge-producing economy but a knowledge-sharing society.

Inclusive Innovation: the Indian Model of Development

“India especially needs more ‘frugal, distributed, affordable’ innovation that produces more ‘frugal cost’ products and services that are affordable by people at low levels of incomes without compromising the safety, efficiency, and utility of such products.” (Twelfth Five Year Plan, GOI)

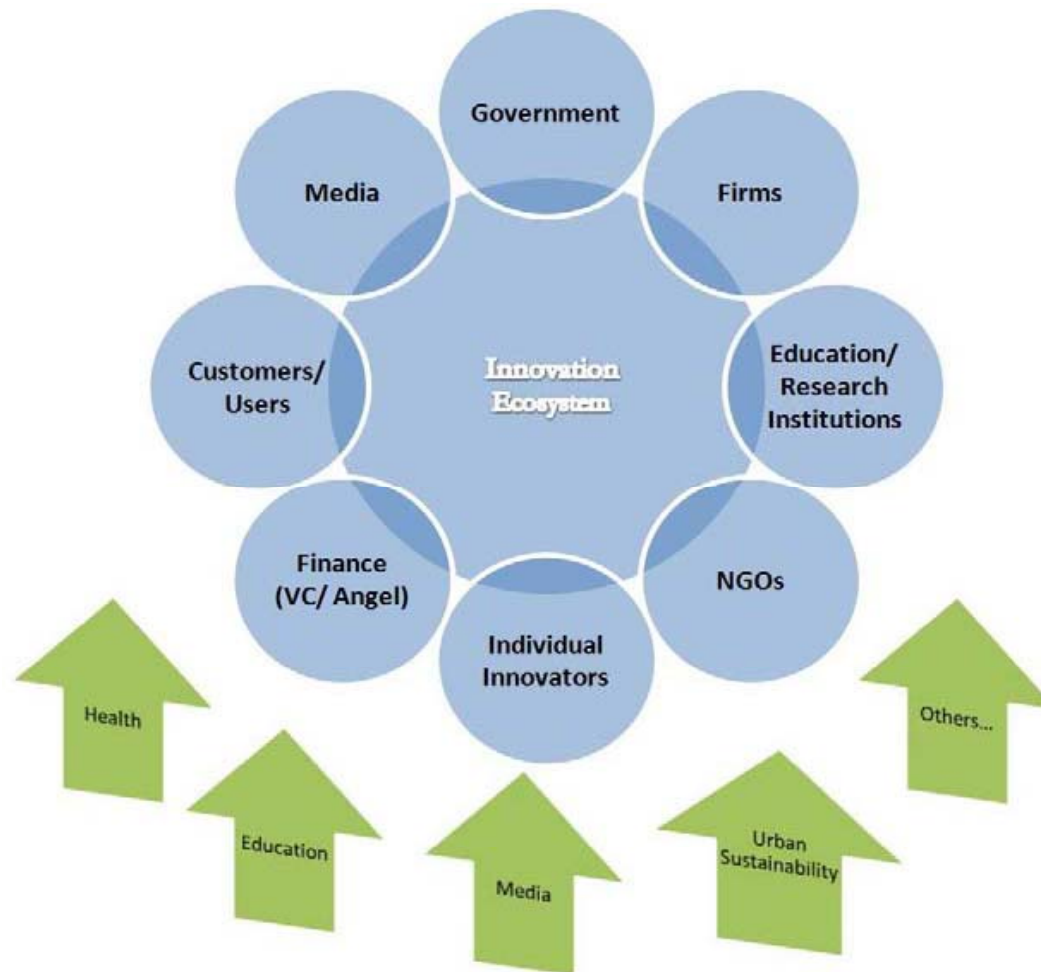
- Focus on an inclusive innovation model
- Understand how innovation in its various dimensions can be leveraged to solve the problems of those at the bottom of the economic pyramid through affordable solutions
- Provide an improved eco-system for enterprises engaged in delivering innovation to the bottom half of the population
- Create enabling structures for innovation by people at the bottom of the economic pyramid
- Encourage and foster an innovative mind-set
- Understand the new dimensions of innovation beyond a R&D and S&T focus
- Outline a long-term perspective for driving innovation

Strategy Towards Inclusive Innovation



The Innovation Eco-System

- Conversion of R&D to results for people requires an ecosystem of enterprises working in conjunction: entrepreneurs, researchers, finance providers, business enterprises and policymakers.



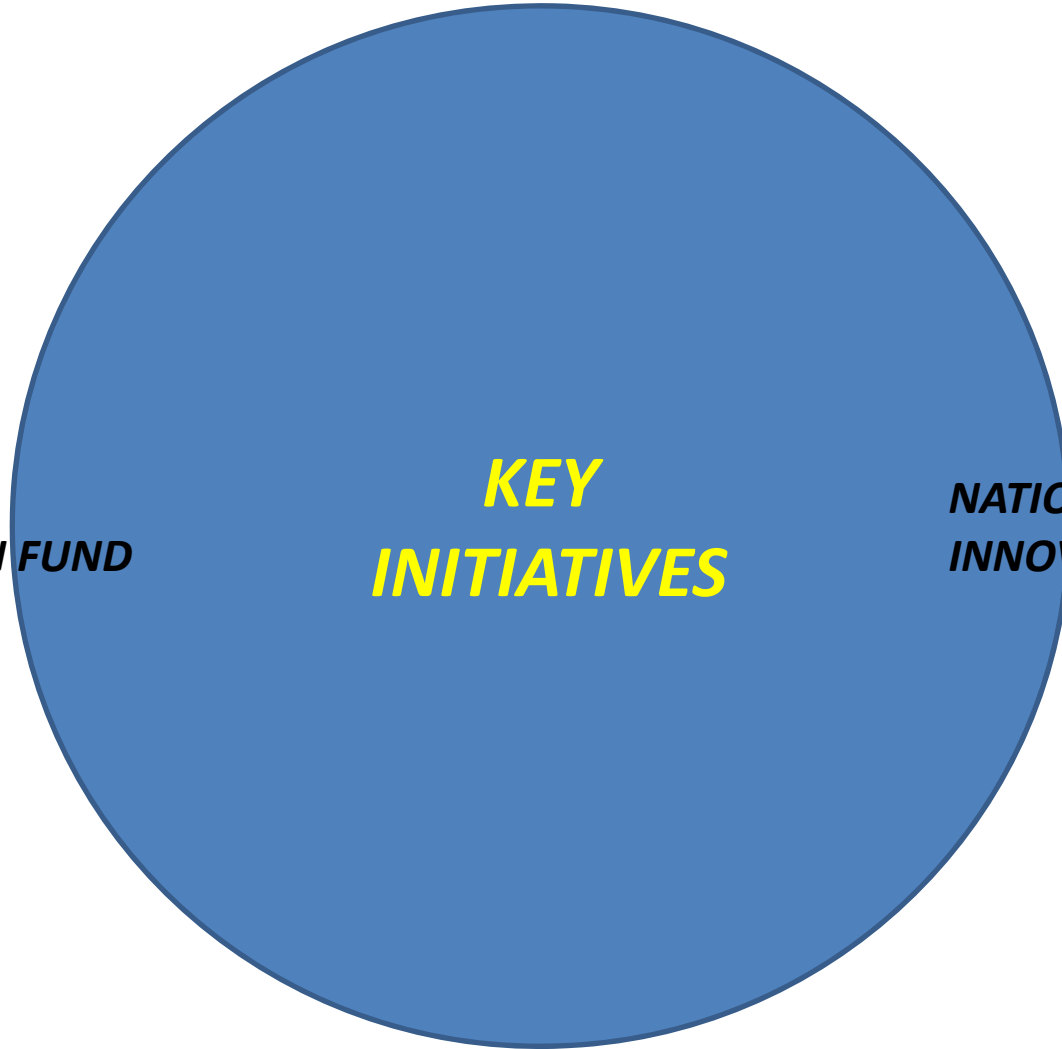
INNOVATION COUNCILS

***INCLUSIVE
INNOVATION FUND***

***KEY
INITIATIVES***

***NATIONAL
INNOVATION PORTAL***

INNOVATION CLUSTERS



Innovation Councils

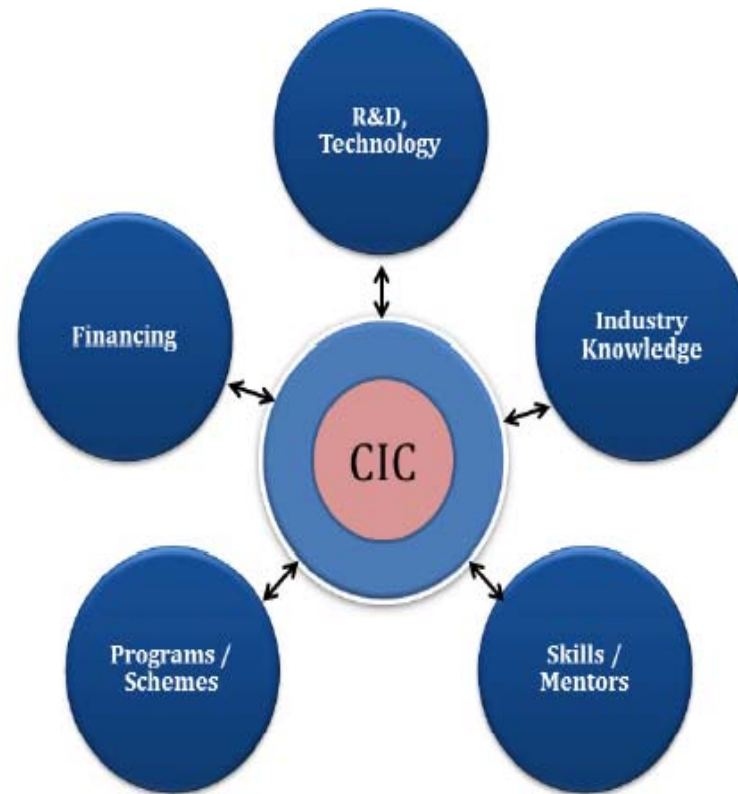
- To prepare a Roadmap for Inclusive Innovation, NInC, State Innovation Councils and Sectoral Innovation Councils have been created.
- NInC will create a framework for:
 - *Evolving an Indian model of innovation with focus on inclusive growth*
 - *Delineating policy initiatives within the Government, required to spur innovation*
 - *Developing and championing innovation attitudes and approaches*
 - *Creating appropriate eco-systems and environment to foster inclusive innovation*
 - *Exploring new strategies and alternatives for innovations & collaborations*
 - *Identifying ways and means to scale and sustain innovations*
 - *Encouraging central and State Governments to innovate*
 - *Encouraging universities and R&D institutions to innovate*
 - *Facilitating innovations by SMEs*
 - *Encouraging all important sectors of the economy to innovate*
 - *Encouraging innovation in public service delivery*
 - *Encouraging multidisciplinary and globally competitive approaches for innovations*
- Currently, 22 State Innovation Councils and 25 Sectoral Innovation Councils have been set up. NInC is also encouraging the setting up of City Innovation Councils

India Inclusive Innovation Fund

- IIF seeks to establish a venture capital fund dedicated to supporting innovation for citizens in the lower half of the income pyramid.
- It will provide early and expansion-stage equity financing and mentoring support to enterprises that offer innovative solutions to challenges in key developmental sectors.
- It will be kickstarted with seed investment from the government and bilateral/multilateral institutions and go to scale with private capital.
- It will be capitalized to an eventual target of Rs 5,000 crores.
- IIF backed innovations could occur in the domains of technology, revenue models, and business processes; and be scalable, generating both social and commercial returns.
- Existing examples of such enterprises include Selco, Aravind Eye Care and Lifespring Hospitals, all which are providing quality services to people in the lower half of the income pyramid.

Industry Innovation Clusters

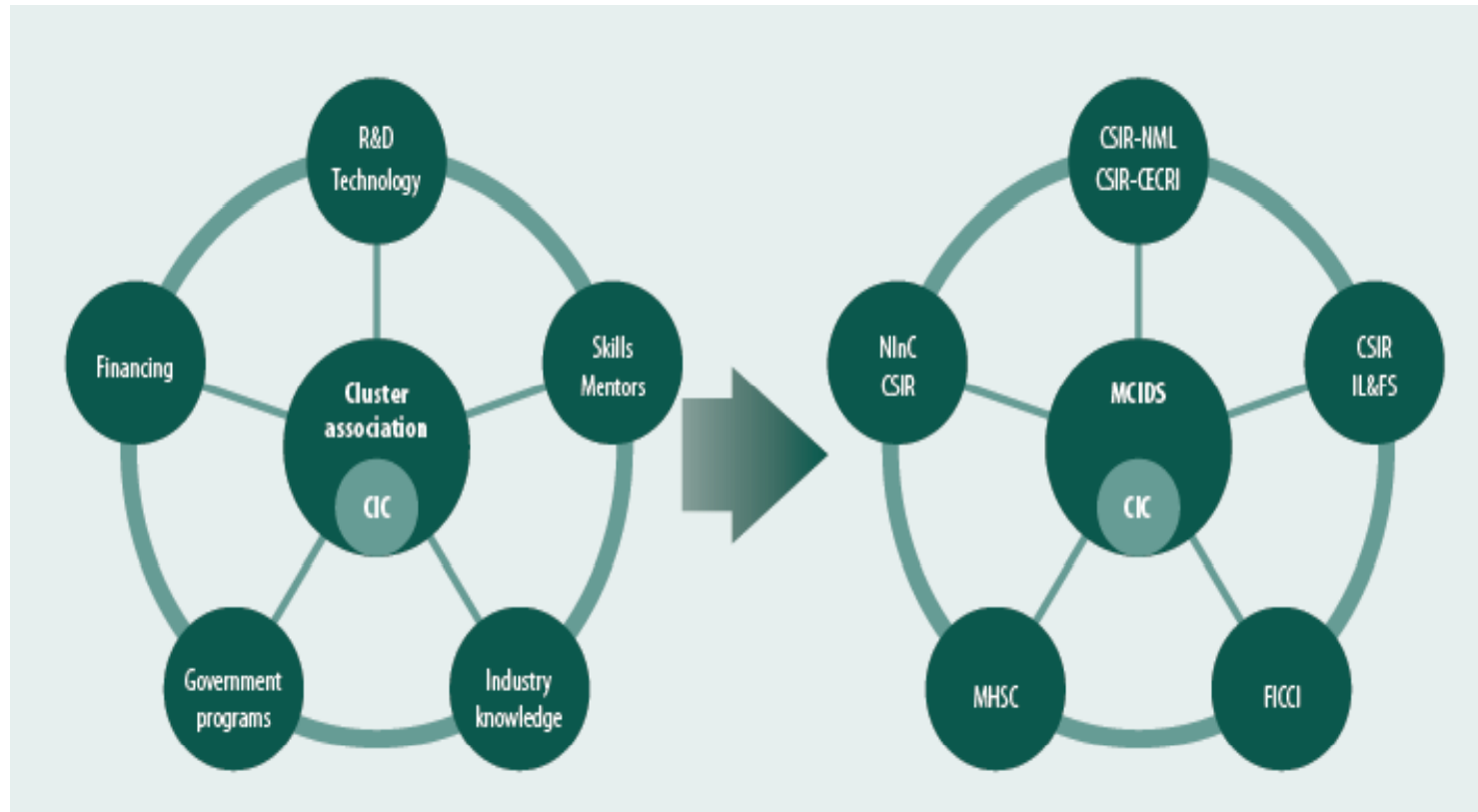
- To enhance the innovation capabilities in MSME clusters, the NInC has initiated the Industry Innovation Clusters initiative. At the core of this effort is creating a Cluster Innovation Centre (CIC) to strengthen the innovation ecosystem in clusters by creating linkages with relevant stakeholders to enhance the productivity and innovation capacity of the cluster.



India's Innovation Cluster Initiative Pilots, 2011-13

<i>Location(region,state)</i>	<i>Industry sector</i>	<i>Total size of seven plots (combined)</i>
Krishnagiri, Tamil Nadu	Agriculture, Food processing	More than 1 million people employed 85,000 MSME units US\$4 billion annual revenue
Agartala, Tripura	Bamboo	
Moradabad, Uttar Pradesh	Brassware	
Thrissur, Kerala	Ayurveda medicine	
Ernakulam, Kerala	Furniture	
Faridabad, Haryana	Auto components	
Ahemdabad, Gujarat	Life sciences	

Innovation Eco-system Development at Moradabad



Note: CIC=Cluster Innovation Centre; CECRI=Central Electrochemical Research Institute; CSIR=Council of Scientific & Industrial Research; FICCI=Federation of Indian Chambers of Commerce & Industry; IL&FS=Infrastructure Leasing & Financial Services; MCIDS=Moradabad Cluster Innovation & Development Society; MHSC=Metal Handicrafts Service Centre; NML= National Metallurgical Laboratory

Future Policy Directions

- Outline a Public Procurement policy
- Support Innovative Enterprise Development
- Strengthen the Knowledge Infrastructure for Innovation
- Strengthen Information Infrastructure for Innovation
- Create Networks for Knowledge sharing & Collaboration
- Incentivise Innovation through Challenges, Awards and Competitions
- Promote and Scale Grassroots Innovation