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**for**

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**reflect settled conclusions of the NAC**

# **MANUFACTURING COMPETITIVENESS**

**Progress of the work done by the**

**National Manufacturing Competitiveness Council  
(NMCC)**

**Presentation to the 'National Advisory Council'  
February 18, 2006**



**National Manufacturing Competitiveness Council  
Government of India**

# Formation of the NMCC... context

- **Setting up of the National Manufacturing Competitiveness Council (NMCC) – an important initiative of the National Common Minimum Programme (NCMP)**
- **NMCC - an interdisciplinary and autonomous body - set up to provide a continuing forum for policy dialogue, to energize and sustain the growth of manufacturing industry**
- **NCMP identified priority sectors - Food processing, Textiles and Garments, Engineering, Consumer goods, Pharmaceuticals, Capital goods, Leather and IT hardware for sustained action**
- **The manufacturing sector grew at an average of 7% during 1995 to 2004 much below India's potential**
- **Share of Manufacturing in GDP has been stagnating at 17% much below other countries**



# The NMCC

- **ROLE:** Identification of manufacturing sectors having potential for global competitiveness and their problems/constraints
  - Evolve sector specific strategies
  - Recommending measures to create common infrastructure & facilities
  - Coordinate monitoring and implementation of the strategy
- **FUNCTIONS :** Examine industry & sector specific issues Sectoral and enterprise level initiatives
  - Innovation and technology development (R&D)
  - Entrepreneurship promotion
  - Infrastructure and enabling facilities
  - Trade and fiscal policies
  - Employment generation


# Composition of the Council

- The Council is headed by Dr. V. Krishnamurthy
- 25 members which include stakeholders such as noted industrialists (from large, medium and small industries), economists, academics and senior representatives from industry associations and Government.

# Approach adopted by the NMCC

- Two pronged basic approach:
  - A National level strategy paper on Manufacturing
  - Taking up sub-sectors having immediate potential for gains in terms of growth, market share, employment and identify impediments.
- In addition :
  - Examine in-depth, certain generic issues cutting across most sub-sectors (e.g. HRD/ Training, Innovation, Taxation, etc.)
  - Engage various States in the whole process ( they drive manufacturing, investments, employment generation etc.)
- Implementation drivers :
  - Concerned Ministries/ Departments at the Centre
  - State Governments/Industry

# Progress of the work done by the NMCC

- Four National level meetings and 25 sub-sector level meetings held to prepare Strategy and sub-sector interventions 
- “National Strategy for Manufacturing” has been drawn up identifies the policy interventions and the strategic directions to be pursued for higher levels of growth and employment
- Discussions held - Sub-sectors of manufacturing where interventions can unleash higher growth rates and substantial employment along with several cross cutting issues

# **“The National Strategy for Manufacturing”**

- **Manufacturing is crucial for the robust growth of the economy, for exports and for generating substantial relevant employment**
- **Manufacturing is a force multiplier – investment in manufacturing yields four times the effect on GDP growth**
- **If Nation’s GDP is to grow at balanced 8% to 10% per annum manufacturing sector has to grow by over 12% per annum over the next decade compared to less than 7% growth in the last decade**
- **Growth target of 12% in manufacturing would create about 1.6 to 2.9 million direct jobs annually – 2 to 3 times indirectly.**
- **To achieve a growth rate of 12% existing bottlenecks/ disabilities need to be removed**
- **Competitiveness is crucial to the growth of Manufacturing**

# Competitiveness Dimensions

- Two broad levels of action - National level (including sub-National level) and Firm level
- **National level competitiveness – 3 aspects (Hyperlink)**
  - **Directly contributing to the cost (e.g. import tariff, taxes, cost of capital etc.)**
  - **Indirect effect on cost (infrastructure inadequacy, high transaction costs etc.)**
  - **Sub-optimal level of operation (lower efficiency, lower level productivity etc.)**
- **Firm level competitiveness – need to adopt modern management practices , technology etc.**
  - **National Manufacturing Competitiveness Programme (announced in the Budget 2005) to be implemented.**

# Dealing with challenges facing Indian manufacturing

- Creating conditions for growth, investment & employment 
- Ensuring macro economic stability 
- Ensuring cost competitiveness and stimulating domestic demand 
- Enabling Infrastructure Development and Labour Reforms 
- Strengthening education & skill building 
- Investing in innovations & technology 
- Providing right market framework & regulatory environment 
- Enabling Small & Medium Enterprises achieve competitiveness 
- Enabling Public Sector Enterprises to meet competitive market conditions 
- Improving firm level competitiveness 
- Engaging State Governments 
- Creating a monitoring and performance measurement mechanism. 

# Issues identified in the strategy paper

- Infrastructure – particularly Power, Port connectivity (GDP growth would be higher by at least one percent if adequate quality Power is available),
- Need for skill building; upgrading vocational training; (Industry will face acute shortage of trained manpower).
- Assistance to small & Medium Industries – Help them to become competitive and help them to grow larger.
- Investing in innovations & technology - Funds to acquire high technology.
- Taxation – More of rationalisation – NMCC does not argue for subsidy or protection. The aim is to gradually reduce an estimated 15% cost disability faced by Indian Manufacturers.
- Simplification of Procedures and reducing the transaction costs.
- Labour welfare and labour flexibility- both go together
- Realising the optimum potential of Public Sector manufacturing enterprises.
- Getting State Govts. on board on specific programmes
- Securing additional investment needed for modernisation and creation of capacities.

# Dealing with challenges ...

- **Government to**
  - Encouraging global scale of operations
  - Enabling financial institutions to finance such projects
  - Attracting large scale investment both domestic and foreign
  - Addressing issues faced by companies particularly the Small & Medium Enterprises such as risk management and debt restructuring
  - Catalyzing infusion of modern technologies for improving competitiveness.
  - Provide right market & regulatory framework to reduce transaction costs
  - Ensure effective coordination between Central, States, local levels
  - Create mechanism for resolving manufacturing policy issues etc.
- **Industry to**
  - Invest in R&D and Technology
  - Skills Development & Education
  - Benchmark against World standards
  - Adopt best manufacturing practices & Production techniques
  - Deliver on globally acceptable quality levels, etc.
- **NMCC to provide a mechanism for continuing dialogue on manufacturing – awareness building, monitoring, etc.**

# **Important suggestions of the NMCC approved by the Prime Minister On 13.1.2006**

- A Ten-year National Manufacturing Initiative will be launched, with a focus on firm level and macro economic initiatives required to make domestic industry globally competitive.
- The time-bound implementation of the recommendations of the NMCC will be done through a Mission mode. A Manufacturing Competitiveness Mission will be launched to ensure implementation of policies recommended by the NMCC by relevant Ministries.
- The NMCC will review periodically the implementation of its recommendations by various stakeholders.
- The policy work of various ministries related with manufacturing sector will be coordinated through an apex mechanism on the lines of the existing Trade and Economic Relations Committee.
- The meeting recognized the urgent need to quantitatively and qualitatively improve the supply of labour force in a wide range of industries. State Governments will be encouraged to promote public-private partnership in the management of Industrial Training Institutes (ITIs).

# Issues of Implementation

- National Manufacturing Initiative declared in the President's Address to Parliament on 16/02/2006 should be converted into a programme of implementation of the National Strategy for Manufacturing and appropriate mechanism created.
- The decisions taken at Prime Minister's level on the issues mentioned in the previous slide need to be formally acted upon
- Manufacturing sub-sectors and policies are dealt with nearly in one dozen Ministries/Departments directly and another 20 Ministries/Departments indirectly
- Therefore, coordination of implementation is essential and a suitable mechanism for coordination at Central level with adequate mandate is required
- Continuous dialogue with State Governments is essential for implementing the Strategy since the action on ground is in the State level and coordination mechanism for this purpose is essential
- The Mission mode of operation should be adopted for the Manufacturing Sector as a whole as well as in respect of at least the important sub-sectors having widespread growth and employment potential

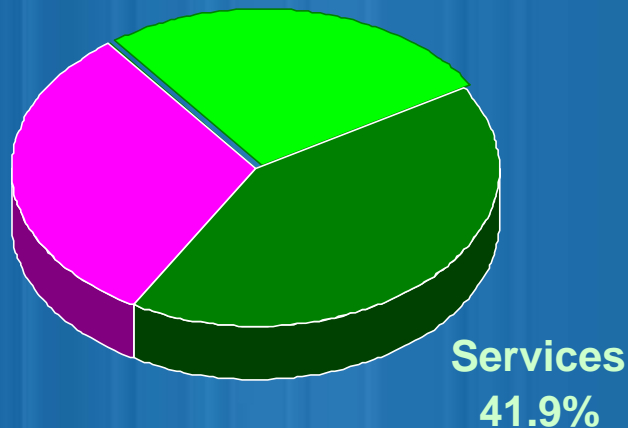
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# Share of Agriculture, Industry and Services in GDP

1991-92

Industry  
26.7%

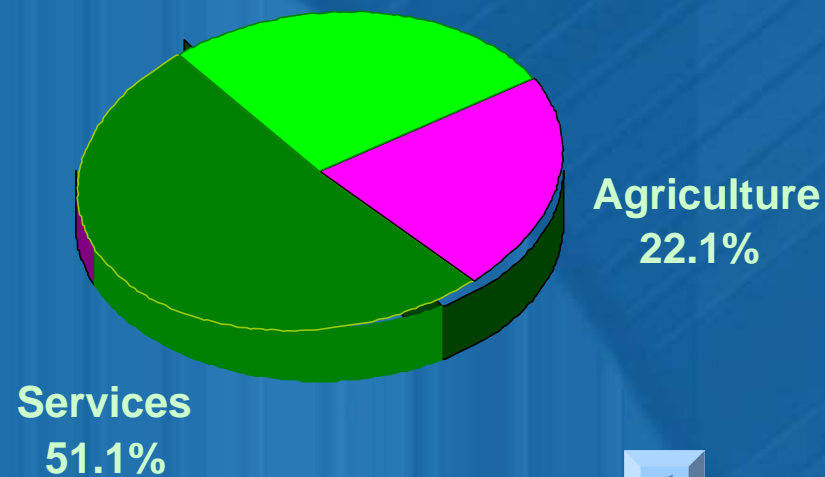
Agriculture  
31.3%



2003-04

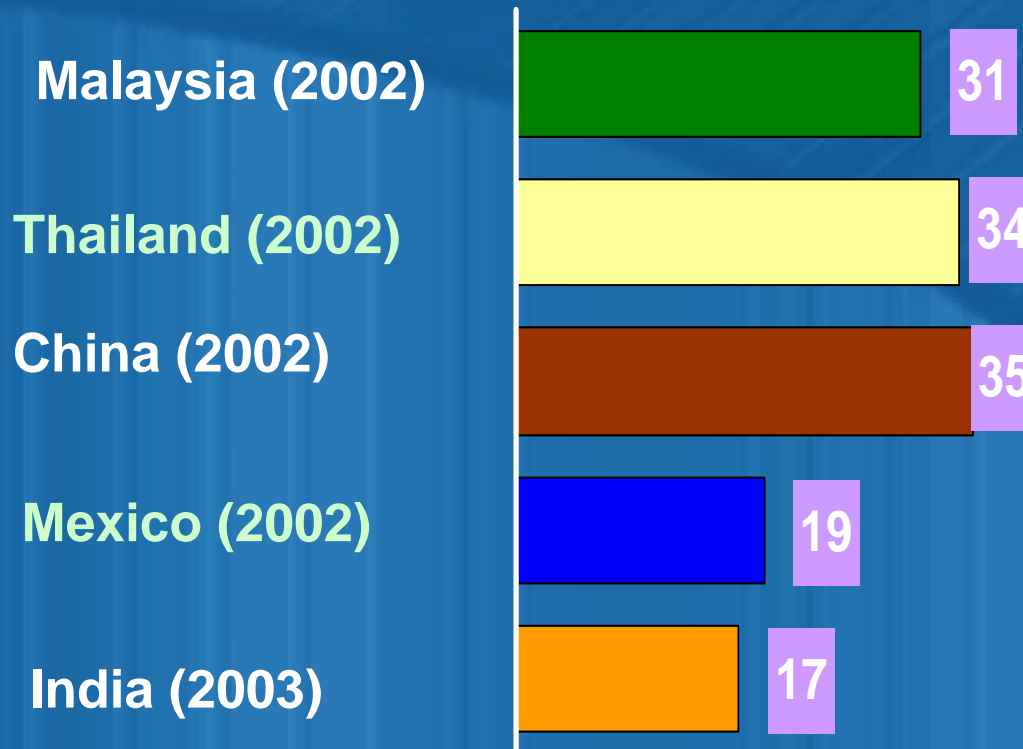
Industry  
26.8%

Agriculture  
22.1%



# Share of manufacturing in GDP

PER CENT



# Sub-sectors Interventions by the NMCC

## Made

- Leather & Leather Goods
- IT Hardware & Electronics
- Small and Medium Enterprises (SMEs)
- Textiles & Garments
- Food Processing Industries
- Auto Components
- Capital Goods
- Paper
- Chemicals & Petrochemicals
- Pharmaceuticals
- Human Resource requirement in Manufacturing sector
- Handicrafts
- Telecom equipment

## Planned

- Gems & Jewellery
- Steel
- Minerals/Metals
- Biotechnology
- Fertilizers
- Cement
- University/Industry Coordination/Collaboration
- Innovation Policy
- Infrastructure
- Tax Issues
- Labour Issues
- Offset Policy & Technology Transfer Issues



# Creating conditions for the growth of the mfg. sector

- Large scale investments needed [e.g., Auto Component Sector needs investment of US \$ 15 billion over next ten years to increase its size to US \$40 billion by 2015]
- Manufacturing sector needs to be modernized. [e.g., technology upgradation – textiles, leather]
- Streamlining Land, labour, water, electricity, environment issues which are in the domain of the State Governments.
- Appropriate State Government reforms necessary, such as providing the necessary climate, infrastructure for the growth of manufacturing, computerization of required records, reducing multiplicity of inspections.
- Modification of the Contract Labour (Regulation and Abolition) Act, 1970.
- Dispensing of State Govt. permission under Industrial Disputes Act 1947.
- Implementation of the Second National Commission on Labour 2002.
- Labour and Total Factor Productivity needs to be constantly improved.



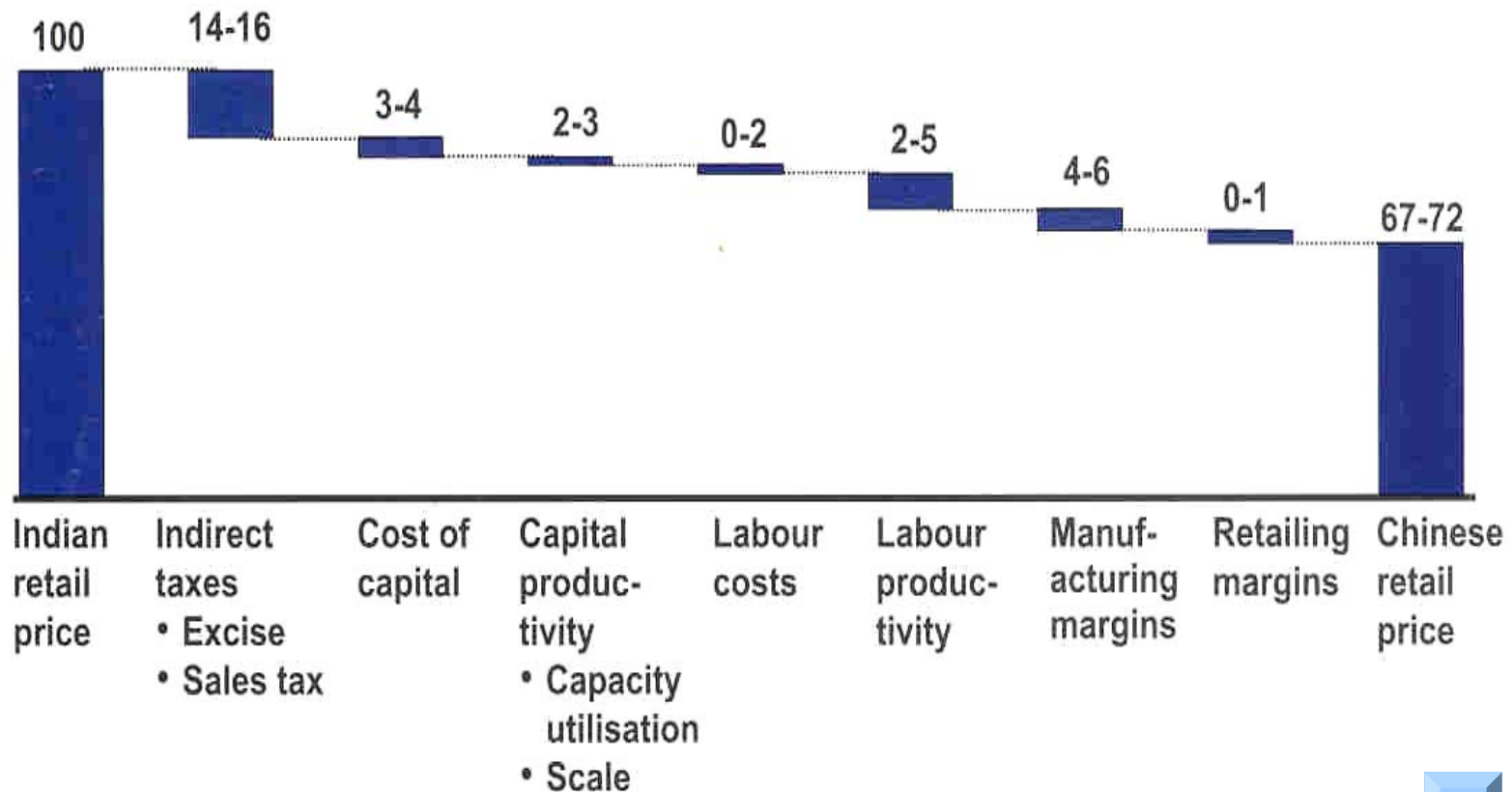
# Lowering cost of Manufacture

- Indian competitiveness suffers due to higher duties/taxes, transaction costs, cost of capital and lower efficiencies/productivity/levels
- Rationalising tax structure - Peak import duty to be no more than 10% and fixed dependent upon the levels of indirect taxation.
- While the basic customs duty may be zero, imported products should face duties equivalent to domestic indirect taxes.
- All India combined Goods and Service Tax (GST), with service sector taxation integrated into the VAT framework instead of being a tax on turnover is desirable as a long term objective – National VAT feasible under the present constitutional framework.
- With import duties declining, restrictions on DTA sales needs re-examination - Benchmarking of sub-sector costs/global best practices
- The concept of economic regions with world class infrastructure but no fiscal concession should be examined.



# Overall Drivers of Price Difference

(Indian retail price indexed to 100)



# Infrastructure Development

- Infrastructure development, particularly removing of bottlenecks in physical infrastructure is very important. In particular:
  - Additional investments for increasing the port capacities
  - Port operations & procedures need streamlining by simplifying/automating the number of procedures/processes to bring down customs clearance time [Normally it takes 1 to 2 weeks compared to 1 to 2 days in China]
  - Port connectivity to mfg. clusters and the Golden Quadrilateral and the east-west and north-south corridor projects through targeted road development projects is essential.
  - State level power reform supported by rationalized regulatory framework needs to be put in place for enabling adequate supply of quality power at reasonable prices – cross subsidization of power by mfg. sector to be progressively reduced.



# Strengthening education and training

- Improve interaction between academia-industry-government
- The quality of Technical education at the vocational level and University level needs to be improved.
- Emerging requirements of Industry to be factored while designing syllabi. Also rationalize the complex procedures for changing curricula. [e.g. process automation]
- Encourage the private sector to establish and operate demand driven technical training centres through financial and other incentives. [e.g. like NIPER]
- Develop a comprehensive 'National Vocational Education Qualification System' and set up Vocational Education & Training Institutes in each State.
- Increase in funding for capacity building specific to manufacturing sector.



# **Investing in innovations...**

- **Better coordination and focus on innovation and productivity enhancing technologies – set up an inter agency group on manufacturing R&D.**
- **Knowledge-driven industries to adopt the network model of innovation and R&D collaboration with research institutes.**
- **R&D funding, incentives for supporting generic technologies, engineering and physical sciences to be enhanced.**
- **Sector wise technology mapping and building a future model for R&D support in mfg. by the Government.**
- **Promotion of establishment of ‘Technology Parks’.**
- **A ‘Global Technology Acquisition Fund’ to be set up.**
- **Usage of ICT in mfg. in India is low – scheme to encourage extensive use of ICT for increasing competitiveness**

# **...Investing in innovations**

- Support rapid prototype development, design innovations and advanced manufacturing technologies.
- Create common testing facilities and centres of manufacturing technology excellence.
- Knowledge based industrial development and globalization by effective utilisation of IPRs particularly, patents
- Strengthen the Intellectual Property Rights framework in the country particularly the Patent and Trade Mark systems
- National campaign for investment in IP in product, process and practice domain
- Small Business Innovation Research and Small Business Technology Transfer to be addressed (incubation, venture capital).
- Unique capabilities of the National Laboratories, IITs and other Technical Institutions need to be leveraged to benefit the SMEs.



# Creating Right Market Framework

- Competition is crucial for competitiveness – establishment of appropriate regulatory competition policy and environment
- Providing the right market framework and regulatory environment to give impetus to the manufacturing sector
- For compliance with ‘environment & safety regulations’, certain special institutions identified to carry out certifications.
- Simplification of procedures for investment approvals and implementation of projects
- Consolidation of regulatory frame work - weeding out obsolete legislations - making compliance effective
- Re-engineering of procedures to reduce discretion to optimize inspections and minimize the transaction costs.



# Improving Competitiveness of Small and Medium Industries...

- Remove bottlenecks and enable easier flow of funds.
  - RBI to enable better credit delivery to the SSI sector.
  - Restructure/ Revitalize State Finance Corporations (SFCs)
  - SIDBI be given a larger role in direct lending to SSI sector
- Mandatory registration of SSI units in which Industry Associations could be empowered for facilitating the process of self registration.
- A separate law for small enterprises including chapter on provisions of credit to the SSIs, be framed as prevalent in several other countries.

# **...Improving Competitiveness of Small and Medium Industries**

- Encourage growth poles or industrial clusters
- Technology Upgradation is crucial for SMEs survival - urgent action needed to improve access to new technologies and technology transfer.
- Create effective mechanism for establishing SMEs collaboration with selected industries in India and abroad.
- A Manufacturing Advisory Service would be established to deliver practical help to manufacturing SMEs.
- Formulate National Competitiveness Programme with special emphasis on making the SMEs competitive.



# Enabling PSEs/ Firm level Competitiveness

- For enabling Public Sector Manufacturing Industries to be internationally competitive, following areas need to be addressed:
  - Autonomy, review mechanism, delegation of powers, cost and productivity, sourcing decisions, technology, ancillaries and supporting industries.
- **Firm Level Competitiveness**
  - Encourage firms to build abilities to acquire, assimilate, develop new technologies; reduce production costs; cut down delivery time; practice Total Quality Management; enhance productivity and customer service.
- A national programme on application of Lean manufacturing techniques to cover various sectors.



# Role of State Governments

- **NMCC** to ensure continuous dialogue with the States for working together in the implementation of the reforms in the manufacturing sector.
- **With a view to bring down transaction costs examine areas like:**
  - **State Government taxation,**
  - **availability of land**
  - **infrastructure requirements like water, electricity, etc.**
  - **implementation of regulatory laws dealing with labour, environment, etc.**
  - **Coordination with States/Agencies for implementing manufacturing reforms**



# Creating a Monitoring Mechanism & Measuring Performance

- Implementation mechanisms need to be properly designed.
- The Mission mode of implementation mode in some sectors such as leather & leather goods, textiles & garments and food processing.
- A focal point for decision making in a time-bound manner at the highest level needs to be provided to help in better monitoring of the growth objectives.
- Performance indicators to be identified for monitoring of performance and effectiveness of initiatives/actions by all stakeholders
- Develop relevant sub-sector wise benchmark data bases as well as global best practices
- The NMCC to monitor the delivery by various stakeholders on the recommendations/action programmes.



# Road Map for firm level competitiveness

**Input**

**Process**

**Result**

**Impact**

