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MANUFACTURING MATTERS

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Highlights

TOP STORY Page4
Manufacturing Policy: The Key Imperative
 For India to maintain high single-digit GDP growth, the manufacturing sector, which contributes 15-16% of GDP, will have to increase its share to 25%. A national manufacturing policy is perhaps required to boost the sector's global competitiveness

SPECIAL FEATURE Page13
Manufacturing: For a Place in the Sun
 The interim CII-BCG report entitled Indian Manufacturing: The Next Growth Orbit defines the aspirational goals and growth path for the Indian manufacturing sector. Here's a snapshot of the key findings

INTERVIEW Page11
Policies that foster a more liberal export climate will benefit manufacturing
 Jamshyd Godrej, Chairman, CII Mission for Sustainable Growth & Climate Change, on what can transform Indian manufacturing



Dr. Surinder Kapur
Chairman,
CII Manufacturing Council

From The Chairman's Desk

As the custodian and key representative of the manufacturing sector in India, CII has been taking pioneering steps in improving the competitiveness of the sector by improving the policy environment as well helping individual companies and clusters of enterprises to imbibe better business processes and standards.

This journey has a long history and has many successes to its merit. However, it is still early days in India's manufacturing history. While there are indeed examples of excellence and success, the sector as a whole is yet to achieve its true potential.

It is the objective of the Manufacturing Council of CII to ensure that a conducive business environment is created, which caters to the need of the sector and simultaneously, we are also able to highlight some of the success stories within Indian Manufacturing industry, which could merit emulation.

The Council for this year started work in May 2009, when the situation in the industry was rather grim with the slowdown having impacted most aspects of business for almost every player. Naturally, the focus of our work at that time was to work closely with the Government to ensure that the fiscal and monetary policy environment stayed as a stimulant to recovery.

Our recent survey (ASCON) and feedback from members convince me that the recovery of the manufacturing sector is underway. The process is still nascent and needs nurturing and as part of the pre budget memorandum of CII, we have requested the Government not to exit suddenly from the stimulus measures that have been in place.

On the monetary side too, we hope that the RBI would not shift away from the benign/ neutral policy stance that is currently in place to a tight one.

At the same time, we are working with the government

to pro actively advocate for policy changes, which are aimed at the long term interest of the whole sector as well as specific industry segments. It is CII's aspiration that Indian manufacturing would now enter a phase of transformational growth, which would entail a long term average of 12 percent plus growth, taking us through to 2025.

CII is currently working with the Boston Consulting Group to prepare a detailed roadmap for this transformational growth story to take shape. I shall be writing to you soon with more details of this report once it is formally released next month.

In the meantime, I have the great pleasure of presenting to you the first issue of Manufacturing Matters. This is one of the initiatives to share with you success stories and key policy issues, which are important for the sector.

I am especially delighted that in the inaugural issue, we have been able to get a detailed interview of Mr Jamshyd Godrej, who besides being a Past President of CII has been leading Indian manufacturing through the last two decades. His own journey along with that of CII through this period has been an outstanding one from a state of despondency to global success. His interview outlines the transformation that has come about in the sector.

In addition there are many interesting stories, interviews and articles in this publication, which I hope you would appreciate. However, it is our endeavour to provide you with relevant and useful information. From that point of view, I shall really look forward to receiving your feedback and comments on. [www](mailto:surinder.kapur@cii.in)

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Inside This Issue

IN BRIEF	Page 2
TOP STORY	Page 4
SPECIAL FEATURE	Page13

GOING GREEN	Page17
POLICY ACTION	Page19
EVENTS UPDATE	Page21

INDUSTRY DATA	Page23
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Car-makers race ahead in India



Record sales, 30 new launches and companies reporting historically high quarterly profits the passenger car industry could not have asked for more, reports Hindu Businessline. Year 2009 was a tumultuous year for the global auto industry, which witnessed the world's largest car maker General Motors filing for bankruptcy, Toyota posting a net loss for the first time in 70 years and car sales falling in most of the mature markets. And, yet, the Indian car market showed a 20% growth. The high double-digit growth comes immediately on the heels of a year ridden with inflation, credit squeeze and the global slowdown factors that threatened to put a spoke in domestic car sales. Industry officials attribute the domestic growth to the Union Government's stimulus package comprising an excise duty cut and Cenvat reduction, besides a slew of other measures to ease the credit situation. [\[1\]](#)

Manufacturing arrives in India

Manufacturing has arrived in India and the country can now look forward to getting back at 9% growth trajectory sooner. Stating this recently, Commerce Ministry's Department of Industrial Policy and Promotion Secretary, Mr Ajay Shankar, said the growth reflects "the arrival of manufacturing in India and the extraordinary dynamism of the growth fundamentals of the Indian economy". The economy clocked a robust 7.9% growth in the second quarter, catapulted by a stimulus packages-powered strong

industrial growth. And, manufacturing grew by 9.2% against 5.1% in the year-ago quarter.

Mr Shankar pitched for maintaining the stimulus packages in the current fiscal. He said, "With the global economy improving, exports are likely to move into the positive direction soon". The few exceptions among the export items that have shown a rise in recent months are the small, fuel-efficient cars. It signals the arrival of manufacturing in India, he said. [\[1\]](#)

GST could boost India Inc's bottomline

The proposed dual-goods and services tax (GST) system could boost the bottomline of India Inc in an appreciable manner as it will bring down their net burden of taxation by as much as 25-30%, informal calculations made by the Finance Ministry showed. That the GST would substantially enhance the competitive edge of both the manufacturing and services industry, said Revenue Secretary, Mr P.V. Bhide.

Mr Bhide highlighted some of the invisible advantages that needed to be factored in by the GST sceptics. He pointed out that GST could remove the disability that domestic producers suffer from and also equalise the burden between domestic and imported goods. Currently, domestic industry is subject to a variety of indirect taxes on its output. As the rates of tax and their nature vary from state to state, it becomes impossible to apply these taxes fully to competing products that enter the domestic stream through imports in a WTO-compatible manner.

Mr Bhide said that special additional duty of 4% currently applicable to import of goods does not fully counter-balance all domestic taxes such as Central sales tax, value added tax and others, as the rates of tax on a given product varied from state to state. Once these taxes are subsumed within GST and the rate of SGST for a product is uniform across the country, a border tax equivalent to that rate would equalise the burden between domestic and imported goods, he said. [\[1\]](#)

Reducing Carbon Intensity



No sooner had environment minister Jairam Ramesh announced in Parliament that India would cut its emission intensity by 20-25% by 2020, there was a welter of protests. Jamshyd Godrej, chairman, CII's Climate Change Council, wrote in the ET, that the Copenhagen Accord is a necessary and constructive platform that enables the global community to maintain momentum towards a final agreement.

Globally, there are about five or six policies that have been proven to help win the energy-climate battle, and the good news is that these are exactly the policies that the

Indian government is focusing on. By putting greater political will at central, state and city levels and by promoting better coordination and deploying technical capacity behind these policies, India shall meet, but possibly also exceed the goal of reducing our emissions intensity by 20-25%.

The India of 2030 has yet to be built including 80% of the needed infrastructure. If this new capacity is green, estimates show that India's carbon productivity could improve by around 45% while meeting our development objectives. At the same time, India's energy consumption could decrease by 22%. [\[1\]](#)

Boost manufacturing: Ahluwalia

Planning Commission Deputy Chairman, Mr Montek Singh Ahluwalia, advocated the need for strengthening India's manufacturing sector through some modifications in the country's existing labour laws and said that if India was to grow at 9% per annum, the manufacturing sector needed to have a double digit growth rate. India can't expect a 9% sustainable growth depending only on the services sector. We need at least 10-12% growth in the manufacturing sector to reach 9% growth rate. However, I think that the Indian labour laws are unduly restricted. The existing labour laws should be modified, engaging the unions and convincing them that these changes are in their interest only. The investing community will also have to give up their reluctance to deal with large workforce in the interest of the growth of labour-intensive industry," he said. **MM**



India to maintain edge in generics

Mr Kenji Toda, chairman, Japan Pharmaceutical Manufacturers Association, while speaking at a CII seminar on Investment opportunities in the Japanese pharmaceutical market, said Japan and India can join hands in the areas of reverse engineering for cost-effective manufacturing. India also had an upper hand over Japan in having an attractive environment for clinical research and a large English-

speaking professional. Mr Toda said generics had not been used on a large scale in Japan as Japanese were hyper-sensitive to the quality of food and medicines and the generic makers had not yet obtained a level of trust from them. Japan is an extremely quality-demanding society, he said, adding that the small size of the companies does not allow them to cut costs even on large-scale production of goods does

not fully counter-balance all domestic taxes such as Central sales tax, value added tax and others, as the rates of tax on a given product varied from state to state. Once these taxes are subsumed within GST and the rate of SGST for a product is uniform across the country, a border tax equivalent to that rate would equalise the burden between domestic and imported goods, he said. **MM**

More defence procurement from domestic market

India hopes to procure almost 70% of its defence hardware from domestic sources in the next 10 years, up from 30% now, Minister of State for Defence, Mr M M Pallam Raju, said. "India imports nearly 70% of its total defence related requirement. We want to reverse that trend in the next five to 10 years time," Mr Raju said at a CII seminar.

Talking about the country's aerospace engineering segment, he said Indian companies had a lot of potential to cater to the domestic as well as international markets. "Global aerospace companies have started looking at India as an outsourcing hub for technology and development," the minister said.

"Currently, the aerospace industry worldwide spends about \$60 billion globally on engineering, with India accounting for less than one percent of this, as compared to 12 percent offshoring of the overall engineering services."

According to Mr Raju, the value of offshored engineering services in aerospace in India was estimated at \$700-800 million. "This figure is expected to grow to \$3 billion by 2020. If manufacturing is also included, this can also jump up to \$10-12 billion," he said. **MM**

India can break China's monopoly

The National Manufacturing Competitiveness Council's (NMCC) report asserts, India could beat China to become the global manufacturing hub for consumer durables. The recommendations in the report include promoting technology development, increasing the demand base, rationalizing tax policies and developing vendor bases and raw material supplies. Also, as against the 17% of indirect taxes in China, India imposes a whopping 28% cess for consumer durables.

With China becoming less attractive for global investments after recent changes in its tax regulation and currency appreciation, India could end Chinese domination in the sector provided it addresses the issues of infrastructure bottlenecks and high costs of transport.

Chairman of NMCC Dr. V Krishnamurthy, who commissioned the analysis, has called for a sharper focus on Special Economic Zones (SEZs). In India, the SEZs are yet to take off with a critical mass. Though India has about 250 small SEZs, they have not been as successful as the Chinese SEZs in increasing manufacturing related exports, he said. **MM**

Manufacturing Policy: The Key Imperative

India has to possess agility, be nimble and have the flexibility to change. Quality is now a given, rather than a source of competitive advantage. A National Manufacturing Policy is perhaps required to achieve this vision and make the transition successfully.

The image shows a large industrial facility, likely a steel mill, with several tall, dark chimneys and smokestacks. The sky is a mix of blue, orange, and yellow, suggesting a sunset or sunrise. The foreground is dark, with some industrial structures visible in silhouette.

The manufacturing share of India's gross domestic product (GDP) has hovered in the region of 15-16% in the last 15 years, although this sector has a critical role in powering the country's industrial production, employment and export earnings. Now, as the government aims to sustain high single-digit GDP growth in the coming years, increasing attention is being paid to boost the manufacturing sector's global competitiveness. Addressing the recently-held First Conference of State Industry Ministers, Mr Anand Sharma, Union Minister of Commerce & Industry, said there is an urgent need to increase the share of manufacturing in national GDP to 25%.

This could be achieved with due policy support. There is a long-standing industry demand for a National Manufacturing Policy. Perhaps, its need is felt now more than ever, as the Indian economy prepares to step up GDP growth along with inclusivity.

Keeping this very goal in view, Prime Minister Manmohan Singh had set up the National Manufacturing Competitiveness Council (NMCC) in 2004 under the Chairmanship of Dr. V Krishnamurthy, to address the key problems that confront the sector. The broad objectives being to develop a manufacturing policy to counter cheap imports and boost the sector's global competitiveness.

The NMCC was expected to suggest various ways and means for enhancing the competitiveness of manufacturing sector including identification of manufacturing sectors which have the potential for global competitiveness, current strengths and constraints of identified sectors, and recommend national level industry-specific policy initiatives as may be required for augmenting the growth of manufacturing sector.

The Council has since submitted a report which was released in September 2008, wherein it stated that the growth of the manufacturing sector has been stagnating on an average around 7.0-7.5% for the past 20 years. The sector itself has stagnated at around 17% of the GDP during the same period. Manufacturing is the growth engine of any economy. To achieve an average growth rate of the economy of 9-10% in the medium- to long-term, the manufacturing sector needs to grow at about 12-14%. Such growth is also required from the point of view of absorbing the surplus work force now dependant on rural sector.

The report has also made recommendations with respect to macro-economic policies, tax policies, trade policies, technology policy, FDI policy, etc. Recommendations have also been



made in respect of specific sectors for focused action by the Government. These fall into two sets of industry verticals employment-intensive industries and strategically-important industries.

The Council has also recommended the creation of a continuing mechanism suitably empowered to monitor the developments in the manufacturing sector on a regular basis and recommend necessary actions to the Government in line with a manufacturing policy.

A well-defined Manufacturing Policy is also expected to increase the FDI inflows into the sector. Mr Sharma was recently quoted saying that the Commerce & Industry Ministry would try to achieve an annual FDI inflow of \$50 billion by 2012 and \$100 billion by 2017. With due policy support, the manufacturing sector should be able to attract a major part of this inflow.

The minister has also announced the setting up of industrial parks for labour-intensive manufacturing sectors such as gems and jewellery, toys, sports goods, glass and glass products, ceramics, bicycles and invalid carriages, and electronic hardware. However, the results will show quantum improvements only if a national policy is at work.

The general refrain is that the manufacturing sector needs a long-term perspective which can come about only if there is a well-defined national policy that provides the necessary thrust for all growth-inducing initiatives.

In the absence of this policy support, the sector would not be able to increase its exports of finished goods. An IBEF report stated that that rising imports of manufactured and finished goods had emerged as a concern for the NMCC. For instance, 80% of Indian exports to China consisted of raw materials, This sentence does not make sense please rephrase.

Why a separate policy?

The clarion call for a national manufacturing policy is guided by the felt need for government guidelines and directions for extending timely incentives and subsidies for the sector, promoting technology development for the sector, the development of sustainable raw material base, regulatory and procedural reforms; and monetary and exchange rate policies that aid the growth of manufacturing sector.

The need for government support was greatly felt when the global economic slowdown began. Industry had called for strong monetary and fiscal measures to help the manufacturing sector to wade through the cesspool of slowdown and shrinking markets.

Three key areas called for focused attention: availability of raw materials at competitive rates, availability of skilled manpower and availability of finance at competitive rates. The next focus area of the Manufacturing Policy would be improvement in the productivity of Indian manufacturing sector.

Leveraging the growth momentum

Having weathered the vagaries of a global slowdown, the Indian manufacturing sector has staged a comeback in the second half of the current fiscal. With focused policy attention, the sector could gain greater growth momentum and thereby increase its overall share of the GDP.

The CII m-ASCON survey undertaken by the Confederation of Indian Industry (CII) for the period April-September 2009 over April-September 2008 revealed that the growth rates in the majority of the sectors covered showed positive growth trends during April-September 2009 which was an improvement from the trends observed in April-September

2008 and reversal from those observed in April 2008-March 2009.

The report stated that there was a discernible shift in the growth trends from negative and moderate growth category to high and excellent growth category in respect of about 12% of the sectors in April-September 2009 from April-March 2008-2009.

The survey revealed that around 10% of the sectors covered had registered growth rates of more than 20% in April-September 2009 compared to 7% in April-September 2008. Notably, the share of the sectors registering moderate growth rate had significantly declined to 35.8% in April-September 2009 from 42.6% in the corresponding period of the previous year. The share of the sectors recording negative and moderate growth rates had also declined to 64.21% from 66.36% in the previous corresponding period.

The survey further revealed that the buoyant manufacturing growth in the first half of 2009-10 over the corresponding period of the last year was led by rise in production of basic, intermediate and consumer durables.

Importantly, 26 sectors had recorded high growth of 10-20% in April-Sept 2009 compared to 27 sectors in April-Sept 2008. Some of these included aluminum, cement, fertilizers, paints, polymers like PS, circuit breakers, gases like carbon dioxide and hydrogen, refractories, pumps, light commercial vehicles (LCVs), cars, scooters, mopeds, motor cycles, other consumer durables like consumer electronics and home appliances.

Yet, on the exports side, the situation was worrisome as 20 out of 29 sectors had reported negative growth rates in the first half of 2009-10. With the exception of soda ash,

machine tools, cars and multi purpose vehicles all other sectors had reported negative and moderate growth rates.

The survey also identified some general and sector specific issues of concern to the manufacturing industry. The issues highlighted include reduced demand due to general slow-down, infrastructural bottlenecks, higher interest rate, inadequate availability of credit, fluctuations in the exchange rate of rupee against other currencies and cheap imports from China in respect of a number of products.

Ensuring speedier implementation of ongoing and already announced projects, improving regulatory environment, ensuring timely availability of credit and directing banks to provide easier and cheaper credit especially for SMEs were also cited as vital to enable the industry to achieve lower cost, improved quality and better performance for higher manufacturing growth.

These are the imperatives for the growth and competitiveness of the Indian manufacturing sector which could be addressed through policy action.

Policy action

As discussed earlier, for the manufacturing sector, policy action is required on several key fronts, of which building global competitiveness and generating higher employment levels would be high on the agenda.

Underlining the need for an overarching manufacturing policy, the NMCC Report states the four key aspects relating to manufacturing sector are - rapid growth of the sector, job creation for inclusiveness, creat-

ing a strong technology base for the growth of the manufacturing sector and the strategic needs of the country and suggesting a continuing mechanism for translating the recommendations into action.

There are several positive trends which would enable Indian manufacturing to flourish subject to the design of an appropriate Manufacturing Policy.

Firstly, the share of Indian manufacturing in the world Manufacturing Value Added is miniscule. There is vast scope to increase India's share through appropriate actions for improving the price competitiveness as well as quality improvement of the manufacturing products.

Secondly, companies from the United States and other developed countries are also on the look out for alternative locations for their own strategic reasons.

Thirdly, India has recently shown huge appetite for manufacturing goods in the wake of the spurt in domestic growth, which has put more incomes particularly in the hands of younger people. This provides a very attractive expanding market where the companies can expect growth rates of 15 to 20% for some time to come. With appropriate policies, very substantial investments into manufacturing can be expected leading to robust growth of the sector.

Eco-system: need of the day

The need for a national manufacturing policy is particularly felt in regard to the establishment of a robust eco-system for the sector. To take the Indian manufacturing sector to the next level, the focus would have to be on real productivity improvements by introducing global practices and innovation in process sys-

tems, development of robust vendor network clusters, commitment to fugal engineering and integration of manufacturing with service.

This in turn would call for greater competition, increased R&D spending by private enterprises, continued skill development, more early stage funding, information flows between companies, commercialisation of domestically developed knowledge, tapping overseas Indian community, and investment in inclusive innovation.

An eco-system will emerge out of this which will serve as the essential linkage between the different facets of the sector.

Interestingly, the need for a national manufacturing policy is also being stated in the US. A media report says the American industry is asking for a national policy that would encourage business to sell products to willing consumers abroad and incentivise the local students and workers to learn as many new skills as possible to adapt to the changing winds.

The report adds: Pittsburgh's manufacturing revival is generally credited to a collaborative effort that involved industry, government and labor. It represents a model for the rest of the country. With the collapse of the steel industry during the 1970s and 1980s, Pittsburgh did not lose all its manufacturing jobs, and today some 10% of the region's work force, or 100,000 workers, is in manufacturing. With technology-oriented manufacturing, the city is producing products from robotics to surgical implants and metal alloys. America needs manufacturing. Sustained growth cannot come from the high-end services industry alone. **MM**



‘Build deep’ manufacturing capabilities in specific industries for sustainable growth’



Dr. Surinder Kapur
Chairman,
CII Manufacturing Council

Having seen the evolution of the manufacturing sector in India, where do you see the sector in 2025 if we were to look at your aspiration and that of CII, since you are leading the Manufacturing Council of CII?

Indian manufacturing has gone through various phases since Independence, from the license/permit raj era to liberalisation and globalisation. Indian manufacturing industry is at an important juncture today. The last ten years have seen an impressive annual growth rate of around

6.8%, marking a phase of strong performance. This compares favourably with the growth rates in many other fast developing economies. This same period saw the Indian economy grow at around 7%.

Manufacturing is today recognised by government and industry as a critical sector of the Indian economy and as an important driver of India's future economic growth. To drive higher growth in manufacturing and to take India's position to higher levels globally, I believe we need to grow at 11% over the long-term (till 2025), which could lead India to the position of 4th largest manufacturing economy from the current 13th position.

The biggest challenge for all of us would be to generate additional gross fixed assets of Rs 55-80 lakh crore by 2025 and an additional workforce requirement of 50-90 million people in manufacturing.

Is there a case for a debate on scale versus depth as far as the character of the Indian manufacturing sector is concerned? If yes, then, where do you think the answer lies?

As far as I could see, our country's challenge is to continue to capture a large share of the off-shoring space by building scale in assembly and production of some basic parts in relevant industries; and at the same time, to build deeper manufac-

turing capabilities which allow a greater share of the total value chain.

I would like to put it like this that developing strategic depth in select industries will be critical for India however, we also need to build scale. For any manufacturing economy, building deep manufacturing capabilities in specific industries is an important aspect of sustainable growth. For example, in certain industries such as defense and telecommunications, it is important to control and keep the value chain indigenous from the perspective of national security. Also, controlling the upstream value chain in some industries would be critical to safeguard our growth in the downstream segments.

Depth provides with greater value capture along the chain which in simple terms would imply that the greater is the share of economic benefits that accrue to our country.

But we should remember that it is also important to have the right balance between scale and depth across industries. India's current position leaves substantial scope for improvement. By most measures we currently lack depth across several industries. We currently import a large proportion of our capital good requirements, which are the basic building blocks of industry.

Even in strategic areas, like defense, we continue to lack depth and capabilities



as we continue to import most of our defense equipment for modernisation. However, the right policies like the new policy of off-set which has been announced by the government, if implemented properly could go a long way in building depth within the country in many areas of production of defense equipment.

It is important to note that the policy can play an important role in building depth. China provides some pointers. There are several policy themes in China's industrial development that India could draw from, like systematic selection and focus on specific industries, range of policy levers deployed to build depth in these industries and variations by industry in terms of strategy as well as choice of levers used.

India being a country with abundant supply of labour and rather low endowment of capital, what do you think would be the future industrial structure for India? A preponderance of very large capital intensive units or a model of collaborative clustering taking place, where the mix of low capital with high employment is predominant? Or any other structure?

I would say that our country needs to incorporate cluster development as an integral component of manufacturing strat-

egy development. We all are aware of the importance of clusters in promoting greater competitiveness and productivity. The implication of this for India is two fold. Firstly, for Indian companies to drive higher competitiveness, manufacturing networks have to develop in industrial clusters. Secondly, as global companies make decisions on setting up capacities, they will increasingly want to locate their plants in the right clusters. While larger companies may choose to seed new clusters, smaller ones will typically gravitate towards existing clusters.

We in India face a crucial productivity challenge India's current productivity trend combined with likely wage increases that it would need to incur will render it a substantial disadvantage when compared with China and other fast developing economies. However, the situation could look markedly different if the cluster impact is taken into account.

I have seen that development of clusters is happening at a very rapid pace in various rapid developing economies (RDEs). For example, in the main coastal provinces of China, hundreds of industry ecosystems have been built in the last decade which have developed into a successful and mature cluster for the automotive sector. Several of these RDE clusters are outgrowing similar clusters

in developed economies and taking away share of manufacturing.

There is also another aspect to this from the perspective that India's economic growth need to be more inclusive. The collaborative cluster would help last mile costs to reach thousands of small and dispersed communities. This last mile costs are being reduced by companies collaborating with others companies in financial services, telecoms, and consumer goods companies. By combining their competencies and sharing infrastructure they are able to reduce their costs for delivering products and services and thus expand their markets.

How important should global integration be for Indian manufacturing?

Globalisation has been the most important force shaping manufacturing industry globally in the past few decades and it will continue to play a critical role going forward and supply chains will become more globally integrated. We saw that during this phase of globalization, migration of industrial capacity from high cost developed countries to low cost fast developing economies was driven by their low wage rates.

We need to integrate Indian manufacturing to reap the benefits of the new wave of globalisation that will go beyond simple labour cost arbitrage into more



value-added role for plants in RDEs. We have to improve our competitiveness to compete against other developing economies and capture a greater share in the large opportunity created by this shifting of production. With the migration of the manufacturing capacity and restructuring of global supply chains, companies are taking decisions on their manufacturing networks and locations in a more integrated manner and our higher level of global integration would facilitate decision in India's favour.

We need to seize on the opportunity provided by the global companies that look to set up base in the RDEs and position ourselves as an attractive and competitive location compared to other competing nations.

At the same time, many Indian manufacturing companies are globalising their supply chains at a rapid pace through both organic growth and acquisitions. A strong and competitive manufacturing base in our home market will be an important competitive driver for most of the companies.

Rigidities in labour laws are considered as key issues hampering the growth of manufacturing in the country. In your mind, how important is this issue? What is a practical solution in terms of possible government action?

Labour relations have always been one of the most important drivers of industrial performance, not just in India but also

globally. I can say from my personal experience that a productive, effective and engaged labour force can be a critical driver of competitive advantage for industry. On the other hand, disputes or poor engagement can lead to costly disruptions.

In some industries a key competitive advantage comes from the ability to aggregate large numbers of workers at low cost for assembly operations in one enterprise under one roof industries such as garment assembly, shoe assembly, etc. When enterprises in such industries also require the ability to rapidly adjust volumes to demand, they find it difficult to compete if they do not have flexibility to hire and to let go employees in line with demand.

I feel that there is need for greater deliberations on what could be the labour-market solutions for such enterprises that meet the need for fairness to employees as well as competitive ability for the enterprises? Could such fair and flexible labor regulations be applied to clearly identifiable industries only without having to make changes in labour regulations for all industries?


Other issue with laws relating to labour is the plethora of labour-related regulations and agencies resulting in a multiplicity of forms and inspections. We all would agree that there is a definite need to simply labour laws. I believe that managing labour relationships effectively will

become a larger challenge in the years to come and meeting them would need flexibility within the existing labour laws.

Organisations would need to identify and develop new mechanisms for engaging labour in order to ensure smooth and effective operations and continued growth in productivity. In addition, government labour laws need to be harmonised and made more effective so that our companies do not need to adopt sub-optimal labour policies to manage these laws, such as, by keeping a high proportion of contract workers, etc.

Are there specific sectors in manufacturing where you think Indian companies can be world leaders?

India manufacturing has always been at the forefront and lived up to the challenges posed from time to time. I strongly feel that we are capable of being the leaders with enabling environment and policies.

Indian manufacturing has largest number of Deming prize winners outside Japan, reflecting our commitment and leadership in quality. Recently, we have created history by producing the lowest price car, Nano. We are today globally recognised as a manufacturer of economical, high quality bulk drugs and formulations. As said earlier, I aspire to see an India has the capability to be a world leader in manufacturing. 

‘Policies that foster a more liberal export climate will benefit manufacturing’



Jamshyd Godrej

Past President, CII and Chairman, CII Climate Change Council and CII Mission for Sustainable Growth

You have led the movement of transforming Indian manufacturing from being an inward looking, protectionist, uncompetitive sector to that which boasts of having in its midst producers of globally competitive products and in some cases leaders in their sectors or segments. How has this journey been?

For me and for CII, this journey of transformation began in the 1980s. The beginning was made looking at ways to improve quality and standards of manufactured products and processes in India. We had a lot of help from some of the foremost Japanese experts and CII was able to develop internal expertise here in India, which started helping industry to become more quality conscious. That was the beginning of the quality movement in India and today, standards like ISO 9000 are regulation for Indian manufacturing companies.

Then came the 1990s and we started focusing on innovations and new business strategies. Armed with the success of the quality movement, we were confident that Indian manufacturing companies could compete globally and also within India as the markets opened up owing to liberalization.

There was initial fear of opening up among my colleagues in the industry. But very soon it was proved that the fears were misplaced. Companies all around started to adjust and adapt to the changing business realities. Most thrived in the competition and some even went on to become leaders in their fields.

In recent years, we have had a spate of high profile acquisitions by Indian companies of foreign companies. This is an increasingly popular way of inorganic growth and would certainly help Indian manufacturing industry to become global scale companies.

Although there are pockets of excellence, the sector as a whole contributes just about 15-16% to the GDP of India. Do you see this scenario changing?

While 15% of GDP is not an adequate reflection of the importance of this sector, I believe, we should focus more on the absolute numbers at this stage of India's development. This sector must register consistent double-digit growth for a long period carrying us through till the mid twenties. Mind you, such long period growth rates have not been registered anywhere except for China where manufacturing contributes 43% to China's GDP. It is a challenge but we have to achieve it. Our employment imperative necessitates that. We cannot afford to skip the stage of industrialisation as we transition from an agrarian economy to that being dominated by the services sector which already accounts

for close to 60% of the GDP.

I am hopeful that with enabling policy environment and a competitive manufacturing sector in India, this would emerge a strong segment of the economy.

In your mind what are the five or six key issues that need attention to put Indian manufacturing sector in the high growth trajectory for a long period?

While some progress has been made, India's domestic business climate still needs much improvement. The much-discussed problems with infrastructure and still burdensome labour regulations only add to the problematic business climate and are obvious deterrents to accelerated foreign direct investment (FDI) inflows.

Policies that are fostering a more liberal export climate will benefit manufacturing. But the benefits will be muted if a more supportive domestic business environment is not developed.

Few areas which need focused attention and would act as the facilitator for manufacturing growth would be development of strong world class infrastructure (physical & social), creating a right balance between scale and depth, building stronger human capital and speedy implementation of an enabling tax environment through the GST.

There has been talk of having a manufacturing policy for India. In your opinion, what should such a policy entail?

Manufacturing continues to play an integral role in any growing and prosperous economy. While international confidence in India is high, the Indian manufacturing sector faces the key challenges of skill shortage, infrastructure, availability of land and funding for start-ups and small enterprises.

Government can play a vital role in promoting and supporting the manufacturing sector through a comprehensive national policy on manufacturing. CII is playing an important role in this direction and working on the draft policy that could be deliberated among various stakeholders.

In my view the policy should help in creating a more enabling framework for manufacturing businesses to function in India. Multiplicity of regulatory and government interfaces, approvals, clearances, etc should be simplified through this policy.

As part of government's initiative to promote manufacturing in India, do you think the government should exercise discretion in terms of promoting some sectors more than others? In other words, should the government decide which sectors should be promoted and which should not be in the strategic interest of the country?

I feel that it best for government not to promote one sector over others. As a nation we should not have a sectoral approach and we should not focus only on a few sectors as this sectoral approach would not be viable for the growth of Indian manufacturing. In such situations, the markets are the best determinants. Also, India has the advantage of a vibrant software sector, which can be leveraged to the advantage of the manufacturing sector.

Environment and climate concerns are being talked about at all major international fora. Do you think Indian in-

dustry has adopted adequate Green measures? If not, then what should be done?

Climate change and environment related issues are realities which are being recognised by Indian Industry and manufacturing sector in particular. Examples of some pioneering work are being seen within the industry. These are few but gives me encouragement and I think industry is moving in the right direction. CII's own green initiatives and work in the areas of climate change and sustainability are providing leadership to industry in these areas.

The CII Sohrabji Godrej Green Business Centre at Hyderabad has launched an initiative titled Mission on Sustainable Growth (MSG). The core purpose of the Mission is to promote and champion conservation of natural resources in Indian industry, without compromising on high and accelerated growth.

At the Centre we are carrying out various activities aimed to generate awareness on pursuing ecologically sustainable business growth. CII is seeking voluntary commitments from the captains of Indian industry to the CII-Code for Ecologically Sustainable Business Growth. Some of the initiatives include facilitating industry to achieve world class standards in energy efficiency, development of specific energy consumption norms for various sectors, undertaking energy efficiency projects / sectoral studies in partnership with international agencies, performance evaluation and monitoring of energy ef-

iciency projects, etc.

The Indian Green Building Council which is part of CII was formed to usher in a green building movement in India and facilitate India to become one of the global leaders in green buildings. And I am really excited by the progress that is being made on this front.

Adopting cleaner technologies brings with it the promise of enormous green profits to manufacturers. CII has estimated carbon credits earned through emission reduction could generate businesses worth \$ 25 billion (about Rs 1,12,000 crore) to the country by 2020.

Is it too late for India to secure a large share of the global manufacturing exports market?

No, it's not too late. In recent times we could see a shift of production bases from the developed economies to emerging economies like India. These bases would serve the local market as well the export markets. Here is a big opportunity for Indian manufacturing. India needs to present itself as one of the most attractive destinations for relocating production base among the emerging economies. The challenge is to create better infrastructure, low transaction costs, better ports, faster clearance of shipments, etc., all adding up to provide Indian exports a competitive advantage over others.

India has a very low share of manufacturing exports in global trade. The opportunity to grow manufacturing exports is considerable. [www.cii.org](#)



Manufacturing: For a Place in the Sun

The interim CII-BCG report entitled 'Indian Manufacturing: The Next Growth Orbit' defines the aspirational goals and growth path for the Indian manufacturing sector. Here's a snapshot of the key findings



The Indian manufacturing industry is at an important juncture today. Over the last ten years, India has been among the fastest growing manufacturing economies, growing at 6.8% and marking a phase of strong performance and significant contribution to the overall GDP growth. As India looks ahead to the next frontier of growth for both Indian manufacturing and the overall economy, some pertinent questions emerge. What should be the growth aspirations of Indian manufacturing over the next two decades? What will be the impediments to this growth? How can India enhance the competitiveness of

its manufacturing sector to achieve this aspiration?

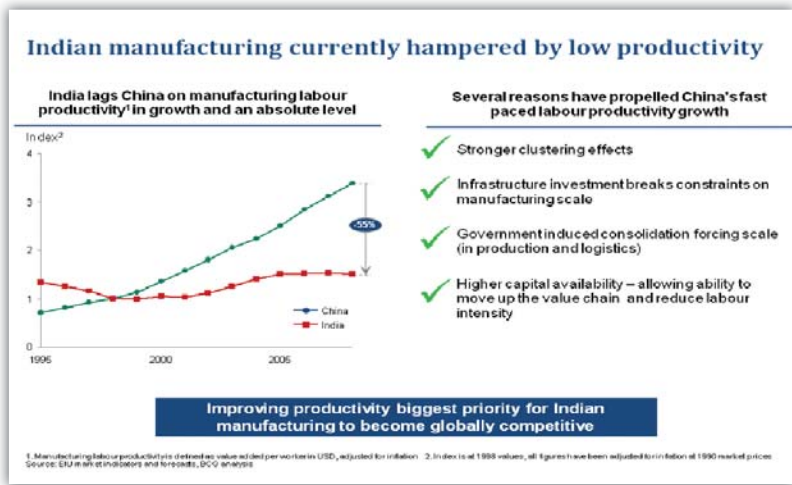
Aspiration for Indian manufacturing

The manufacturing sector plays two crucial roles in economic development driving overall economic growth and generating employment. Given this dual importance, an aspiration for Indian manufacturing should be to achieve the highest possible growth rate for the sector. What should be this target over the next 15 years which is aspirational, but not impossible to achieve?

Over the last decade, China has grown faster than India growing at over 10%,

with growth rates of 11% in several years during this period. Can this be set as the benchmark for India and should Indian manufacturing aspire to grow at 11% for the next two decades? Achieving this aspiration would catapult India to become the 4th largest manufacturing economy by 2025 compared to its 13th position today.

What use is an aspiration if it is not a stretch target? To achieve this, Indian manufacturing will need to transit from a factor cost-driven advantage to a more sustainable investment and innovation-driven model, with significant implications on factor requirements,



cost structures and productivity levels. It will require massive capital injections and workforce additions we estimate the need for additional investments of Rs 12-15 lakh crore and an additional workforce requirement of 20-30 million trained people during 2009-2015 (four times the addition in the last five years).

At the same time, strong efforts will need to be made to continue to enhance labour and capital productivity for India to remain competitive in the global landscape. A concerted policy agenda will be required not only to exploit the huge global opportunities but also address the roadblocks in terms of infrastructure, trained workforce and high transactions costs. And India will have to produce many more world beaters from the manufacturing sector.

Currently there are nearly 25 Indian manufacturing companies with annual revenue in excess of \$1 billion. Achieving

the growth aspirations for 2025 will need this number to grow nearly 3-4 times, with 70-80 manufacturing companies having annual revenue in excess of \$1 billion, and 4-5 firms with annual revenue in excess of \$100 billion. This will call for visionary leadership and management talent of a different order.

While the agenda is extensive, there are four key issues to be focused upon: (i) Exports-led growth; (ii) leadership in innovation; (iii) emerging technologies and opportunities for sustainable development; and (iv) building strategic depth in select industries.

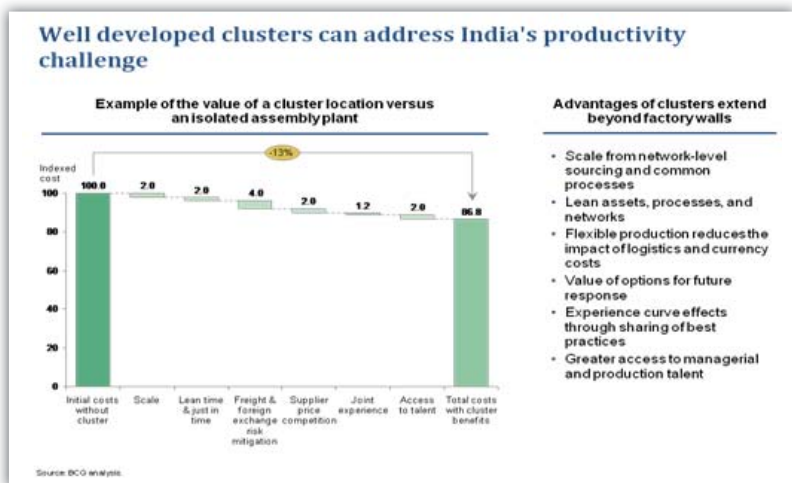
Focus on Exports-led Growth

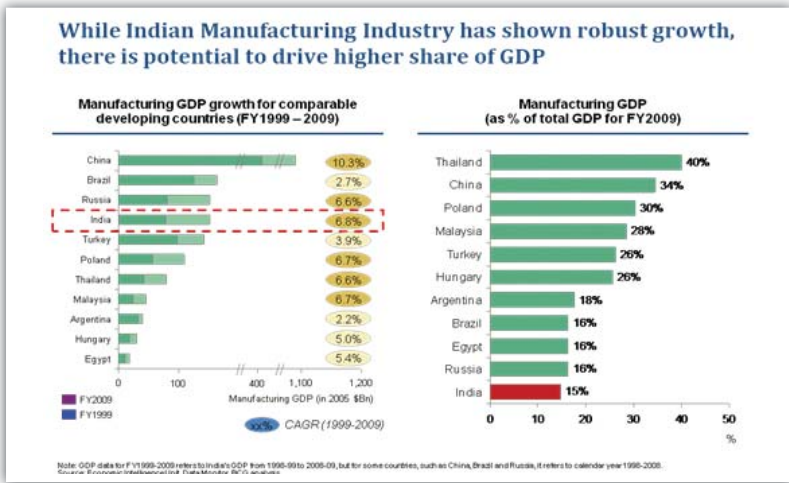
Rapid export growth will be critical for India to achieve its manufacturing aspirations. Cross-country analysis shows that manufacturing growth closely co-relates to overall GDP growth within 0-2% points. The exceptions are countries which have

a significant manufacturing export component like China, which has a higher growth rate of 2-4% greater than GDP growth.

If the Indian economy can grow at 8-10% per annum, to reach a manufacturing growth target of 11%, the exports growth will need to accelerate to 15-20% (in real terms) and get a greater share of the globalising manufacturing value chains. While this seems a stretch target, it is not unachievable. China's manufacturing exports grew at 21% yoy in the last decade. Given continued globalisation of supply chains and migration of industrial capacity to RDEs, and the fact that India's current position in global trade is a low of 1.4% (compared to 8% for China), there is clearly significant room for India to grow exports much faster.

With a concerted push India could increase its share in global offshoring. While India's most important source of





competitive advantage low labour costs will remain over the next few decades, a more comprehensive look at factor costs indicate several areas where India's competitiveness has to be enhanced: of which the four key levers are: (i) attracting and facilitating investments; (ii) faster project implementation including land acquisition (in China, for example, an industrial project can be up and running within 6 months of conceptualisation); (iii) reducing transaction costs to drive competitiveness (31 documents with 87 copies are required to ship goods from India); (iv) simplified indirect taxation (the cascading impact of various taxes like excise, sales tax, and octroi can be as high as 25-30% of the retail price in India); and improving logistics connectivity to ports

Leadership in Innovation
Innovation has the potential to deliver

long-term benefits to a nation and also drive competitiveness. In many competitive industries the only sustainable lever of competitive advantage is the ability to learn, change and innovate faster than competitors. Over time, other players can copy products, services and processes. What is difficult to replicate is the ability for continuous innovation. For many developing economies, new technologies also offer the opportunity to leapfrog into a global leadership position. Today India's R&D investment is only 0.8% of its GDP, while the comparative figure is 4.3% for Israel, 2.6% for US and 1.2% for China. India is constrained by poor collaboration between research institutes and industry with research failing to capture the market perspective of industry; lack of adequate funding for basic research; lack of government policies such as fiscal incentives supporting innovation; and lack

of adequate intellectual property protection.

India needs to harness its twin advantages to focus its innovation efforts. First, it should leverage its leadership and talent in the IT and software space as more and more products ranging from passenger cars to consumer durables and machine tools have embedded software as core elements of the value chain. Second, its next billion customers, the largest unpenetrated market segment in the world, provides it a ready platform to design new, cost effective products which can be world beaters. India needs many create its own el-nano wave.

Opportunities in Sustainable Technologies

Sustainable development is now a global agenda which has important implications for Indian manufacturing and present



"House of Manufacturing": Key levers for Indian manufacturing to achieve these aspirations



unprecedented opportunities. Escalating carbon costs could over time have significant implications on future global supply chains and influence market access for Indian companies. We estimate the potential impact of such a cost could be as high as an additional ~5% of cost in some industries at very conservative carbon price. India continues to be one of the largest carbon emitters across the globe in absolute terms and unless strong steps are taken to address this, Indian companies could face strong erosion in their competitive positions as they seek global markets.

At the same time, the emerging global carbon market and growing demand for green products and technologies will offer significant opportunities for growth in the years to come. The high cost of green technologies in the West provides an opportunity for India to build its leadership in several technologies by either exploiting its natural geographic advantages in areas like solar energy given the high solar irradiance across the country, and thorium reactors for power generation as India has large thorium reserves or developing low cost solutions in areas like green buildings and wind power.

Building Strategic Depth in Select Industries

For any manufacturing economy, building

deep manufacturing capabilities in specific industries is an important aspect of sustainable growth. Depth is defined as capability and expertise in all aspects of a product value chain from R&D, product design to manufacture of components and final products to installation and service where appropriate. Depth is important for two reasons: (i) in industries such as defence and telecommunications, this is important from the perspective of national security; (ii) greater share of value capture, and controlling the upstream value chain in some industries helps safeguard growth in downstream segments, and less exposed to shifting global demand-supply situations and increasing volatility.

India's economic policies over the last two decades have been primarily consumption-led, resulting in building scale in many industries. India still lacks depth across several industries and continues to import a large proportion of its capital good requirements. Mobile phones are one of the best examples of this. With India becoming one of the fastest growing markets with the second largest mobile subscriber base in the world, we have built a truly global scale industry - Nokia's plant in Chennai which assembles mobile handsets in India is a global scale plant. However, we have failed to build depth in the telecom industry India still imports

most telecom equipment requirements, and even for mobile handsets assembled in India, design and core components are imported.

Government policy can play an important role in building depth. China can provide some pointers systematic selection of what they call pillar industries (e.g., power, aerospace, railways) to build depth, focus on building depth in hi-tech industries through cluster development and collaboration with universities, and preferential policies for domestic companies including preferential access in government contracts and pricing, fiscal incentives and preferential access to large funding.

Way Forward

Indian manufacturing has the potential to be a driving force in India's economic development over the next two decades. However, success will require strong commitment, careful planning and willingness to make bold moves.

Governments and industry alike will need to acknowledge the current impediments holding back the sector, and be willing to work closely and take joint responsibility for driving this important agenda. This will enable Indian manufacturing to enter the next growth orbit and squarely place India as a leading force in the global manufacturing landscape. ■■■

Green Manufacturing: Time to Act

Deepak Puri, Chairman & Managing Director, Moser Baer India, provides his insights on how green manufacturing could be broad-based in India



Deepak Puri
Chairman & Managing Director,
Moser Baer India

Green manufacturing occupies the centre-stage of climate change discussions worldwide because the consequences of short-sighted policies and actions with respect to carbon emissions will be borne not just by the emitters but the global population as a whole. To get this equation right, governments and industry will have to orchestrate a process wherein green technologies seamlessly integrate with the mainstream manufacturing systems.

A concerted effort would also be required to ensure the long viability of green manufacturing, which would be come about as a larger number of firms opt for it. Customers are also expected to increasingly assert their choice of products that come out of a green manufactur-

ing environment as more people realise the consequences of unrestricted carbon emissions. At the same time, the financial burden of adopting clean technologies will have to borne equitably by the global society.

India is one of the leading voices in the realms of green manufacturing. But challenges galore. Giving his views on the specific measures needed to promote green growth and green financing in India, Mr Deepak Puri, Chairman & Managing Director, Moser Baer India Ltd, said, Worldover green energy is supported and driven by government policy with appropriate tariff, incentives and subsidies. Importantly, the adoption of renewable energy has been made mandatory through the Renewable Purchase Schemes for utili-





ties and as building integrated schemes. Similarly in India, the renewable energy needs to be promoted actively by Government to attract private sector participation in developing appropriate products and implementation through channels like micro finance and/or NGO community.

He recommended the following measures that would ensure a quicker adoption of green energy products:

- **Policy measures:** Government should make it mandatory for adopting solar energy products in the country through policy measures, for promoting, building integrated photovoltaics, solar street lighting, solar installations in PSU buildings, solar installations in public utility buildings like airports, railway stations, bus stands, hospitals, stadiums, etc.

- **Encouraging rural entrepreneurship:** Solar energy implementation in rural sector can be large employment generation opportunity. This can be developed by including solar entrepreneurs to the National Rural Employment Guarantee Scheme and other rural sector focused entrepreneurship schemes.

- **Financing:** Solar energy should be categorised under the priority sector lending thereby encouraging banks to lend to the entrepreneurs under this scheme under subsidised interest rates.

- **Education:** Specific outreach programs

should be initiated through NGOs and MFIs to encourage solar usage in the rural sector. Benefits of solar energy over conventional fuels like kerosene should also be highlighted in every forum to make it more attractive.

Responding to the query if industrial research in India is geared to develop green technologies for all key segments of the manufacturing sector, Mr Puri said that research is an expensive engagement and time consuming. Traditionally, the technologies are developed in the West and imported into the country for adoption. Given this scenario, Government should support the private sector in accessing advanced technologies through appropriate subsidies till the time the country is capable of generating its own IP.

He added that technology development and innovation constantly evolve primarily for improving the existing processes and technologies and also to invent a newer technology. While there are public research centers which are focused in developing advanced green technologies within the country, it would be important to bring in public private partnerships between these public sector research labs and private sector for better utilisation of funds and infrastructure in developing the right products for market reach, he said.

Commercial viability is one of the key concerns for entities involved in the promotion or adoption of green manufacturing technol-

ogies. On this, Mr Puri said that encouraging domestic manufacturing by way of incentivising companies that set up manufacturing facilities in the country with appropriate incentives and subsidies including renewable energy should be part of the national agenda.

He said that Moser Baer is aware of the options that are available under various schemes for the adoption of green technologies.

Offering his views on how customers can be made a stakeholder in green technology adoption, he said that customers can be made an integral part of the stakeholder's framework by raising their awareness levels through mandatory publishing of product-wise carbon footprint / consumption. Innovative solutions like imposition of green tax for vehicles according to the total distance travelled in a time period (as in Netherlands) will also raise awareness levels.

Talking about the specific steps taken by Moser Baer adopt green technologies, in the context of energy consumption, pollution control and conservation of scarce resources, he said, We are forming an energy policy at Moser Baer which will be a guidance document across our group companies and would include energy savings through green energy adoption in our annual reporting at the earliest.

When asked if IP protection is a barrier to green technology promotion, he said, Yes, considering that green energy is important to ensure sustenance of planet earth, all the IP relating to green technologies are to be made available in the public domain by governments across the world, collectively, donating for such a cause. This would help in bringing down the costs and ensures faster adoption of renewable technologies in the country.

Secular adoption of green technologies in manufacturing would also depend on the training that is extended to the different constituents of the industry. Mr Puri said this could be initiated by mapping energy consumption across the manufacturing process and identifying areas where green energy can substitute traditional fossil fuel generated energy for ex- usage of solar energy for common lighting, solar water heating systems for hot water requirements solar energy based charging stations for charging battery operated tools, etc.

The current developments around the world indicate it is only a matter of time before the entire manufacturing sector adopts green technologies. ■■■

Streamline Project Clearances



A CII study on clearances and approvals for industrial projects has come up with recommendations to address the delays in the grant of clearances

A CII study on clearances and approvals for industrial projects, based on inputs received from the members, has come up with a raft of recommendations to address the delays in the grant of clearances. As such, an industrial project requires clearances at the Central and state levels. The key clearances required at the Central level include: (i) environment clearance under environment impact assessment (EIA) notification of 2006; (ii) forest clearance (Diversion of forest land); (iii) coastal zone regulation (CRZ) clearance under CRZ Notification, 1991; (iv) wildlife clearance under Wildlife (Protection) Act, 1972; (v) stack height clearance - Aircraft Act, 1934; (vi) clearances from the Ministry of Defense; (vii) clearances under Electricity Act, 2003; (viii) clearance from chief controller of explosives (CCE) to use explosives under Explosives Act, 1884 and Explosives Rules, 1973; (ix) clearance to use

groundwater in exploited blocks; and (x) security clearance.

At the state level, the key clearances are for: (i) approval of building plans by municipal authorities; (ii) licenses required from Chief Inspector of Factories under the Factories Act, 1948; (iii) permission to use water and power allocation; and (iv) consent to establish and operate from the Pollution Control Board (PCB).

Key Bottlenecks

Issues galore when it comes to the environment clearances. For instance, while clearances for environment conservation are defined for projects in category A and B, there is lack of clarity with regard to category B1 and B2 projects. In case of change of technology or expansion, the mandatory public hearing (consultation) adds to the delay in getting the environment clearances.

The study says that the emission and

discharge consent from the State Pollution Control Boards (SPCBs) take more than a year to come through. The clearances and NoC for the land and engineering design required for creating the mandatory green belt too adds to project delays.

Mining projects in particular have experienced 3-5 year delay in getting the requisite environmental clearances. Highlighting the lack of clarity in the mining clearances, the reports says that in the mining projects the height and slope of the dump designs are governed by the approval of the mining plans by IBM. A single-stage dump will have a 37 degree overall slope while a two-stage dump will have an overall 27 degree slope. But, the environment clearance letter would invariably mention the overall slope to be 27 degree regardless of the project having a single- or two-stage dump. This leads to confusion at the stage of site inspection and project delays.

The study also says the allotment of

non-forest land for the compensatory afforestation is not uniform across the country. For example, in Jharkhand purchase of non-forest land from private owners is almost mandatory. Although the current guidelines allow compensatory afforestation on degraded forest land, this is yet to be implemented by the state governments. For forest clearance, NPV is chargeable for underground mining even though the forest surface is neither disturbed nor lost due to underground mining.

Power projects are also seen to run into clearance roadblocks, especially with respect to the consent from the SPCBs. Often times, authenticated maps of the eco-sensitive areas as per general conditions of EC notification are not available with regulatory authorities and there is no stipulated timeline is given for the stack height and CGWA clearances.

Recommendations

To fast-track the environmental clearances, the study has recommended the creation of an empowered project clearance authority that will liaise with different state and Central departments to get clearances in a time-bound manner. Standardised terms of reference for specified/repetitive projects will help reduce the time taken for clearances.

The study has recommended wide publicity and liberal use of the provision to have the public hearing conducted by other agencies if the state agency does not complete it within the prescribed time of 45 days. Brownfield expansions shall be exempted from public hearing if there is no additional requirement of land or land acquisition is involved.

Brownfield expansion to a certain extent should be exempted from EIA notification. Clearance under CRZ and EIA notifications should be combined where both the clearances are required and CGWA should be made part of EAC to make it a single window clearance. The EAC shall have members from SPCBs duly authorised to give consent.

Further, applications and submissions of documents/details should be done online for various clearances like CGWB, PESO, EC, etc. The procedure for Importer Exporter Code could be outsourced to make the process faster and simpler.

In respect of wildlife and forest clearances, the study says that reasonable timelines should be prescribed in respect of state authorities as well. A deeming provision may be introduced in respect of the second stage clearance in respect of forestry clear-

ances, where the project proponent has complied with all conditions imposed while according first stage clearances.

Authenticated maps of eco-sensitive areas as per the General conditions of EC notifications should be made available to regulatory authorities for CRZ/NBW clearances.

Among the other recommendations, the study has stated that the grant of environmental clearance should not be mandatory for Prospecting License. Only people belonging to the area should be eligible to participate in public hearing required for environmental clearances.

At the time of renewal of mining lease if no additional area is required then the forest clearance should be automatic rather than following the same process as a new area for diversion.

Categorisation of the forest area into 3-4 categories based on sensitivity of the land and predetermining the conditions for diversion of forest land like NPV, compensatory afforestation, technology for mining and processing, etc., based on the sensitivity, could be done.

No forest clearance should be required for prospecting license if there is no cutting of trees, and only clearing of bushes is required. The State Government may be empowered to grant forest clearance for prospecting. Total time taken for forest clearance should not be more than one year. In case the process is not completed in time, it should be treated as deemed granted.

Necessary guidelines/ notifications for B1 & B2 category of the project are required to make this provision effective. Public Hearing (Consultation) shall remain valid for the entire lease period. It shall not be mandatory for expansion or change of technology as these changes are quite frequent.

Green belt development norms stipulated by SPCB in their NoC and by MoEF in Forest and Environment clearance letters should be more effective and industry-friendly. It has been suggested that the green area is linked with the density of trees preferably the canopy density so that thicker plantation of native species rather than quick rising exotic species are planted by the industries.

The general conditions specified in the EC for mining projects for creation of overburdened dumps with required benching and specific height and slope should be more realistic.

For maintaining a balance between development of mines as well as surround-

ings, the concept of Regional Environment Management Plan is to be adopted on the lines of Regional Wildlife Management Plan.

For waste disposal, a co-operative concept will be needed in future. Therefore, mined out areas of one mine is to be made available for reclamation/back filling to other operating mines in the vicinity.

The study has called for the implementation of the Supreme Court order dated 16 September 2005 that has mentioned the procedure for grant of clearances under the Forest Conservation Act.

Under the ownership of State Government, a land bank should be formed and the project proponent be allowed to purchase non forest land on their own and keep it in the Land Bank. After the approval of Stage-I, user agency should be allowed to transfer and mutate the non forest land in favour of State Forest Department, equivalent to approved forest area.

Allotment of non forest land for the compensatory afforestation is not uniform across the country. Uniform guidelines are required in all states for allotment of non forest land for the compensatory afforestation.

There should be only one Wildlife Management Plan containing all the requirements of Site-specific Wildlife Management (Conservation) instead of two.

On renewal of the mining lease if the lease area and the forest area are already diverted and is not increasing there should not be a separate application for diversion in Form-II. On grant of renewal the forest area already diverted shall remain valid for another term of the lease with the prevailing terms and conditions.

In case of underground mining, it has been seen that even when subsidence takes place arising out of underground mining, forest cover gets disturbed only temporarily and there is no permanent damage. In view of this, forestry clearance for underground mining should be automatic with a provision that project should pay compensation.

The study has also called for a simplified procedure for giving clearance for extraction of groundwater which reduces the time involved in referring the matter between various agencies. The timeline may have a deemed provision, that is, if the approval is not accorded within the prescribed time limit, it may be assumed by the project proponent subject to installation of standard rainwater harvesting/water recharge equipment for exploited and critical groundwater blocks. ■■

Focus: Steel, Construction Equipment & Water Conservation

A summary of the Steel Summit 2009, Excon 2009 Conference on Construction Equipment Industry & National Seminar on Water Equipment & Management 2009



The CII Steel Summit 2009 held in New Delhi in November 2009 examined the impact of issues relating to fierce competitive pressures on performance, productivity, and customer satisfaction, while providing expert insight and practical strategies for the industry to grow.

For the Indian steel industry to grow and prosper, there are major challenges. There will be a strain on infrastructural and natural resources like land, water, power, railways, roads, iron ore and coal. The government needs to step in many of these areas like earmarking large tracts of land as well as formulate policies to allocate iron ore and coal resources to all steel plants.

Capacity Building: India has planned a steel expansion of 65 mt-124 mt by 2011-12 and further to 300 mt by 2020. Approximate investment envisaged in terms of expansion would be Rs 5,000-6,000 crore per mt of steel, which would translate to an investment of Rs 300,000-360,000 crore. Most of the projects are in the backward regions of the country where infrastructure would need to be developed by the project companies. The Government was called upon to consider extending investment-linked incentives to all sectors, which bring in large projects in excess of Rs 4,700 crore.

Raw material security: Government would

be required to facilitate acquisitions of coking coal mines in the international arena by holding government-to-government level discussions, explore avenues for funding and acquisitions of such mines by private sectors as well as government undertakings like Coal India. Ensuring availability of raw materials matching with the requirement of industry is fundamental to raw material security. Though, iron ore is available domestically, in respect of coal, the industry is highly dependent on import of coking coal, also to an extent for non-coking coal.

Environment: Iron and steel production consumes enormous quantities of energy. Significant savings of total primary energy used to produce steel are technically possible in India. Similarly, the technical potential for reducing intensities of carbon dioxide emissions of total carbon dioxide emissions from steel production is immense. The Steel Sector is targeted under the proposed Perform, Achieve and Trade (PAT) Scheme of Government of India a mandatory energy efficiency improvement system being worked out. The industry must look for support on this from the MoS.

Land Acquisition: No industry can be set up without allocation of requisite land. The procedure for acquisition needs innovation which resolves the disputes currently being experi-

enced and at the same satisfies needs of the industry; landowners and the government. A roadmap for land bank in India should be formulated for industrial use, on priority basis.

Consumption: India's current per capita consumption of steel is 47 kg, against the world average of 190 kg. However, this shortfall could be improved upon if our forward linkages of steel were aimed at tapping the rural demand. It was felt that de-reservation of steel related SSI items would assist the sector.

Finance: There is a need for the Government to make investment in infrastructure. The procurement for national projects should be linked to a Buy Indian Provision. This is what the advanced countries are doing to revitalize their sectors. The Buy American provision prohibits the use of funds appropriated for the Recovery Act towards any constructions, alteration, maintenance, or repair of a public work unless all of the Iron, Steel and manufactured goods required / used in the project are produced in the US.

Technology up-gradation and R&D: Create a State of the Art R&D facility at the national level, which could be jointly funded by the Government and the Industry. The above should focus on fuel efficiency; optimum utilisation of the raw material resources and achieving higher productivity besides quality, especially consuming Iron ore fines in the

production of Steel without the application of Coking Coal. The Ministry

Manpower: There is currently a shortage of skilled manpower. Therefore there is a need for Government- Industry joint strategy.

CII National Committee on Steel has proposed to conduct a study in partnership with the Ministry of Steel to identify innovative products made of steel for utilisation in the rural areas. This would be a time bound study and the report of the same would be released along with a media campaign in October 10 during the period of the Commonwealth games during the Steel Summit 2010.

CII National Committee of Steel Proposes to conduct interactive sessions regarding the states expectations and role in allotment of land and other state related issues. The states to be covered are West Bengal, Chhattisgarh, Jharkhand, Orissa and Karnataka. It is proposed that the sessions be organized in the states in consultation with the Ministry of Steel. This will help create a viable echo system and with assist the industry and states to reach at a consensus. The report of these interactions would be shared after each seminar.

CII proposes to conduct a study with NISST (National Institute of Secondary Steel Technology) to create a framework to carry out skill development and conduct a project study with NSDC (National Skills Development Corporation).

CII's initiative of improving productivity and quality of mini steel mills using the cluster approach in Mandi Gobindgarh has found success. This unique initiative is being implemented through the LM Thapar centre for excellence at Chandigarh. CII is keen to take this excellent model to other states with the support and assistance of MoS. ■■■

Regional Export Hub of Earthmoving & Construction Equipment



India will become a regional export hub of earthmoving and construction equipment industry (ECE) for South Asia, Asia and Middle East. It is the market of the future, even as the Chinese market, which accounts for about 40% of global sale, is already showing signs of stabilisation," said Mr David Phillips, Managing Director, Off-Highway Research, a management consultancy that specialises in the research and analysis of international construction equipment markets.

Addressing a session at the Excon 2009 Conference on Construction Equipment Industry organised by the Indian Earthmoving & Construction Industry Association Ltd in association with CII in Bangalore in November, Mr Phillips said that India's ECE sale is expected to double and there will be ten new manufacturers of EC equipment by 2013. He said the market for backhoe will grow to 25,000 units and crawler excavators to 19,000 units by then - there will be an increase in sale of crawlers in the long term.

Mr Phillips said that there will be strong penetration by Chinese OEMs in the product segments of wheeled loaders, mobile cranes, graders and excavators and more inward investment in India by global players. The end-users will become more sophisticated and demanding. They will move away from cheap

machines and look for cost-effective products over full machine life. There will be more specialized and productive equipment such as hydraulic excavators, wheeled loaders, mini excavators and telescopic handlers.

Talking about the Outlook for the Indian construction equipment industry, Mr Sachin Mathur, Head - Research, CRISIL Research, said that the key opportunities for the Indian industry include sustained investments in infrastructure including roads, irrigation and urban infrastructure; likely recovery in residential real estate and increasing industrial investments from 2010-11 onwards.

He said that the construction equipment industry in India is estimated to be over Rs 200 billion in 2008-09. "Earth moving equipments constitute over half of the entire industry while material handling equipments contribute about a quarter - others include concreting equipment, drilling and allied equipment, etc. The order book growth of construction companies in India saw a slowdown through 2008, with a major dip in the December 2008 quarter. Imports have adversely affected growth of the domestic earth moving equipment in 2008-09.

Mr Mathur said that despite the share of imports in material handling equipment has increased, the domestic industry continues to grow. Construction accounts for 70% of demand for earthmoving equipments and mining sector comprising coal, iron ore, minerals, stone & marble, for the rest. "Over the next three years, more than half (55%) of the infrastructure spending is expected in roads (22%), power generation (19%), and telecommunications (15%). Other key sectors include irrigation and railways (~25% over next three years)," he said. ■■■

Bold Steps Needed To Tackle Water Crisis

Speaking at the National Seminar on Water Equipment & Management 2009 in New Delhi, organised by CII, Ms Sheila Dikshit, Chief Minister, Government of National Capital Territory of Delhi, stated, With the climate change agenda in front of us, we do realise that we need to conserve our resources. In her inaugural address, Ms Dikshit highlighted the high per capita consumption of water in Delhi at 50 gallons per day.

Mr Vincent Pala, Minister of State for Water Resources, Government of India focused on the urgent need to take up necessary measures for optimal utilisation of the available water resources with due consideration to sustainability. The minister highlighted the importance of the National Water Policy which gives due importance to the management of water resources with active participation and involvement of the stakeholders at all levels of planning, development and management.

Mr Rajesh Sharma, Chairman, CII Water Equipment and Management Division and Vice Chairman & Managing Director, Ion Exchange India Ltd, spoke about the current water crisis in India. He felt that the primary challenge of the water sector is to innovate, provide corporate management and develop institutional resources. What is also required is a rational tariff. The key ingredients for good water management can be done by transparency, technology, finance availability and training.

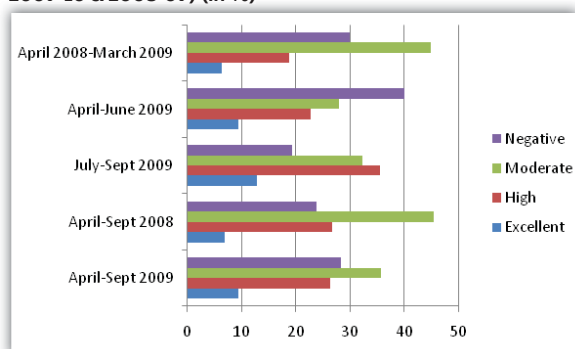
Mr Mukund Vasudevan, MD Pentair Water India, in his address laid emphasis on the importance of water reuse. With India presently experiencing growing industrialisation, rise of multiple power plants, oil refineries and a huge boost in infrastructure leading to huge development of the country, comes problems related to water which are scarcity, shortage and purity. ■■■

Manufacturing Gaining Momentum

India's manufacturing sector was on a higher growth trajectory in the first half of the current fiscal (April-September 2009), revealed the CII m-ASCON survey undertaken by the CII for the period April-September 2009 over April-September 2008.

Comparing the first two quarters of the current fiscal i.e. April-June 2009 and July-September 2009, the survey shows pronounced improvement in the second quarter (July-Sept 2009). This has been reflected in the substantial decline in the share of the sectors recording negative growth rate from 40% in the first quarter to 19.4% in the second quarter. Moreover, the figures indicate greater tempo of growth for the high growth sectors whose share has increased to 35.5% in the second quarter from 22.7% in the first quarter.

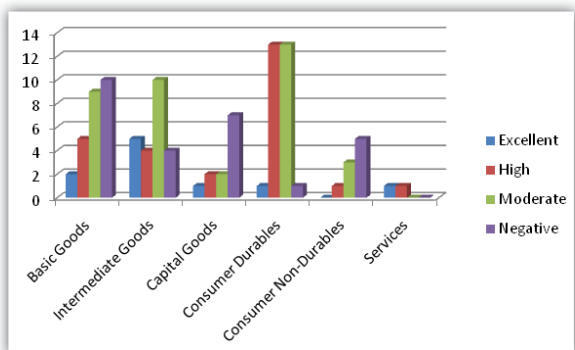
Growth trend of the manufacturing sector (April-September 2009-10 & 2008-09) (in %)



Excellent = more than 20%; High = greater than equal to 10% less than 20%; Moderate = 0-10%; Negative = <0%

The survey further reveals that the buoyant manufacturing growth in the first half of 2009-10 over the corresponding period of the last year is led by rise in production of basic, intermediate and consumer durables. Out of the 100 sectors surveyed, ten sectors have registered excellent growth of more than 20% in April-September 2009 compared to April-September 2008. Sectors reporting excellent growth rates are nitrogen gas, phosphate, motor starters, argon, industrial gasses, nitrogen, oxygen, earth moving and construction equipment and multi purpose vehicles (MPVs), etc.

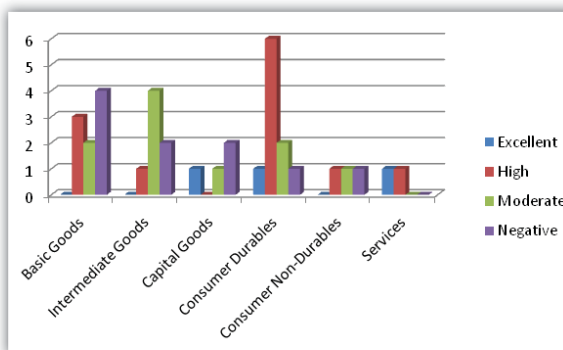
Production (Estimated April - Sept. 2009 over April - Sept. 2008)



Excellent = more than 20%; High = greater than equal to 10% less than 20%; Moderate = 0-10%; Negative = <0%

Sales data have also witnessed improvement between the first and the second quarter of 2009-10. The sectors recording excellent growth rates comprise 19.04% of the total sectors in second quarter compared to 4.16% in the first quarter. High and excellent growth sectors in the second quarter of 2009-10 alone include cement, ceramics, tractors, consumer durables like, three wheelers, cars, LCVs, mopeds, motor cycles, utility vehicles, MPVs, scooters, etc. On the other hand, the moderate and negative growth sectors have declined to 42.8% in the second quarter from a high figure of 58.33% during the first quarter.

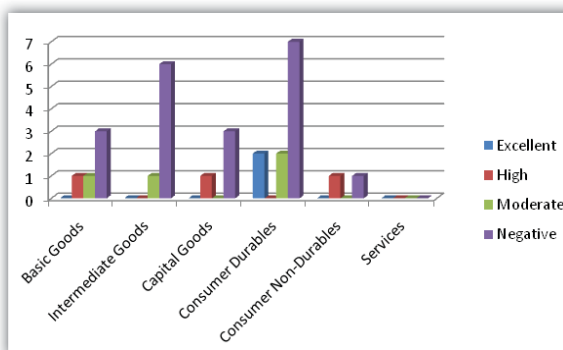
Sales (Estimated April - Sept. 2009 over April - Sept. 2008)



Excellent = more than 20%; High = greater than equal to 10% less than 20%; Moderate = 0-10%; Negative = <0%

On the export side, the situation is still worrisome. 20 out of 29 sectors have reported negative growth rates in the first half of 2009-10.

Exports (Estimated April - Sept. 2009 over April - Sept. 2008)



Excellent = more than 20%; High = greater than equal to 10% less than 20%; Moderate = 0-10%; Negative = <0%

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