



## MANUFACTURING AND MISSING LINKS IN EDUCATION POLICY

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### Abstract:

The glissando of Make-in-India campaign is perched on rhetorics like Skill India and Ease of Doing Business. It is also a takeoff on the NMP-2011, which seeks to bolster India's manufacturing foot print, encourage FDI, and bolster exports. The paper brings out the genesis of our manufacturing policy and experience and the challenges that confront Make-in-India. It highlights disconnects that manifest in our education policy both at the primary and tertiary level where GER and inclusivity have become the buzzword; clearly discounting the quality dimension. It draws upon the global best practices where local bodies are financially and functionally empowered to provide quality education at the primary level and act as the building block for research and innovation at the tertiary level. The paper makes a powerful plea for evolving a new educational policy where public policy treats the primary and higher education as a merit good in a holistic manner, fosters PPP, quality and eschew ideological obscurantism. It also calls for abnegating the asphyxiating control that shrouds the UGC.

**Keywords:** Make-in-India, NMP, GER, UGC, PPP, Skill India

### Introduction

The Make-in-India campaign of October 2014 is a takeoff on the New Manufacturing Policy (NMP) (2011) and seeks to encourage MNCs, Indian Diaspora and Indian companies to participate in creating manufacturing hubs and pursue an export led growth strategy. A substantial increase in share of manufacturing from a stagnant 16%

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of GDP to 25% is contemplated in a decade's time. One of the major spin offs would be creation of around 10 million additional decent jobs annually, which will take care of nearly 80% of the youth who join every year the employment market. This is in the backdrop of the substantial underachievement of manufacturing growth during the 11<sup>th</sup> Plan (2007-11) (7.7% vs. 11%) target and very little job creation in the organized sector. The 12<sup>th</sup> Plan (2012-17) had accordingly set a target of 12-14% growth in the manufacturing sector.

In contrast, the average growth during **2012-2016 in the manufacturing sector has been of the order of 6.7%, with an average increase in additional employment generation of only 0.5–0.6 million as against 10-12 million planned.** Coupled with this are the rhetorics like Ease of Doing Business, Skill India and Digital India, which are clearly out of sync with the ground reality in terms of skill and education profile.

This paper looks at:

- a. Genesis of manufacturing as the leitmotif of growth;
- b. Myriad challenges that confront the manufacturing sector and Make-in-India campaign;
- c. Education Policy and its tenuous link with these policy initiatives;
- d. The Way forward for a New Education Policy.

## 2. Manufacturing as the Leitmotif of Growth

Nicholas Kaldor (1957) underlined the importance of manufacturing by affirming that *“the more the output of the manufacturing sector grows, the greater is the increase of production in the system as a whole”*. His growth model postulated  $P = a + b g$ ; where P referred to productivity,  $a = 1$ ,  $b = 0.5$ , & g was growth in manufacturing. Simply put, the model averred that 1% increase in manufacturing would increase productivity by 1.5%. Thanks to this model, there has been a significant shift in the composition of exports to manufacturing products (30% - 80%) from the South, decrease in the per capita income gap between the South and the North and significant increase in inflow of FDI to the EMEs from 1980s. An advisor to Government of India (1956), Kaldor was prescient enough to observe that failure to reform agriculture, public administration, tax system were the primary reasons that hold up India's inability to muster adequate revenue for funding infrastructure. He had also advised Nehru to invest more in quality education, as the fundamental key to formation of human capital. Kaldor's growth theory for manufacturing was based on the premise of increasing returns to scale and the significant impact that technology, R&D can bring in through the interface between agriculture and industry.

### 3. India's Experience in Manufacturing

The Industrial Policy Resolution (1956) sadly did not allow the private sector dynamism to run its course in our manufacturing; industries and the public sector undertakings became cesspools of inefficiency by calling them as “temples of modern India”. The subsequent nationalization spree by Mrs. Gandhi (Coal sector, Banking) in the 1970s and protective glue provided to small scale industries through product reservation and price preference clearly scuttled private sector dynamism.

Fortunately the winds of liberalization after 1991 has demolished the License Quota Permit regime and there has been a welcome transition to an open architecture in sectors like automobiles, telecom and pharmaceuticals, which have witnessed significant growth momentum. On the infrastructure front also, the PPP model has worked wonders in developing world class airports and national highways. However, the growth momentum is considerably less, compared to the service sector which has been our shining template during the last decade. The following table brings out these trends.

**Table 1: Trends of Growth: Major Sectors**

Parameter	2012-13	2013-14	2014-15	2015-16	Average Growth
<b>GDP</b>	5.6	6.6	7.2	7.6	6.75
<b>Export</b>	-1.8	4.7	-1.3	-17.6	-
<b>Manufacturing</b>	6.2	5.6	5.5	9.5	6.7
<b>Services</b>	8.0	7.8	10.3	9.2	8.8
<b>Agriculture</b>	1.2	4.2	-0.2	1.1	1.6

Source: Economic Survey

It would be seen, how agriculture has been lagging behind as also exports which show significant decline. This is further aggravated by our inability to create adequate employment opportunity to the humungous numbers that join the unemployment pool every year of particular concern in the asymmetry between employment generation and GDP contribution of our major sector. The following table brings out the inter sector picture.

**Table 2: Sectorial Contribution to GDP & Employment**

Sector	1999-2000		2014-2015	
	Employment	Share in GDP	Employment	Share in GDP
Agriculture & Allied Services	60	23.2	52.9	17
Manufacturing	11	15	10.7	15
Construction	5.3	11.8	12	11
Services	23.7	50	24.4	57
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

*Source: Economic Survey*

It would thus be seen that through services have been our shining stars, their contribution to employment generation is rather wafer thin.

A major policy initiative scaffolding the Make in India initiative is Ease of Doing Business. Though we have moved in global ranking marginally in recent years, a close look at the following table would bring out the innards of the concerns.

**Table 3: Ease of Doing Business: Global comparison**

Parameter	Singapore	USA	Taiwan	India
Rank	1	7	11	130
Starting a Business	10	49	22	155
Construction Permit	1	33	6	183
Getting Electricity	6	44	2	138
Getting Credit	19	2	59	42
Trading Across Borders	41	34	65	133
Enforcing Contracts	1	21	16	178
Resolving Insolvency	27	5	21	136

*Source: World Bank Report*

What is most distressing is the perception that our Contract Act, Arbitration Procedure and Bankruptcy provisions are extremely dilatory and ineffective. But what are clearly doable are removing the cobwebs of delay like construction permits and electricity connection. The states of Gujrat and TN, in particular, show a refreshing picture in this regard.

#### 4. Policy Initiatives in Education

Post 2009, the RTE Act has ensured universal access to primary education as a fundamental right. However, the higher education sector has been marked by greater private sector engagement. Several committees have buttressed such a market oriented

approach to education. Ambani-Birla (2000) envisioned the creation of a knowledge based economic and society, and championed the principle of use pay policy supported by loan schemes and financial grants for economically backward section. Government should support and partially fund centers of higher learning, provide financial guarantee to student loan, ensure uniformity in content and quality and education development planning.

The Sam Pitroda Knowledge Commission (2009) recommended expansion of the number of universities to 1500 in the country. The commission also recommended the establishment of 50 national universities by government or by private sponsoring bodies to be set up by society or trust or section 25 companies. The commission preference was for private universities and establishment of an independent regulatory authority for higher education as independent regulatory authority for higher education (IRAHE). The Narayan Murthy Report (2012) focuses quality deficiency, quantity mismatch and funding gaps and recommended a PPP approach by having centers of excellence.

#### 4.1 Allocation Apathy in Education

The following table brings out the trends both in school and higher education.

**Table 4: Trends in Central Spending on Education (Rs. Cr.)**

Parameter	2014-15	2015-16	2016-17	% increase
School Education	45722	42186	43554	+3
Higher Education	23152	25399	28840	+14
<b>Total</b>	<b>68874</b>	<b>67585</b>	<b>72394</b>	<b>+7</b>

*Source: India's Budget Document 2016-2017*

It would be seen that the overall allocation is **around 3% of GDP** and shows no real increase in the present year's budget. This is much lower than both public allocation by developed and EMEs which is of the order of 6%.

#### 4.2 Quality Concerns in Education

The **Annual Survey of Educational Research (ASER)** Report 2014 flags the myriad concerns that afflict the primary schools run by the government in different states and all India. Tables below bring out both the infrastructural and academic deficit that bedevils this critical sector.

**Table 5: Infrastructure Facilities: Trends**

Parameter	All India	
	2010	2014
Play Ground	62.2	65.0
Library Books Available	62.6	78.1
Drinking Water	72.2	75.6
Girls Toilet	32.9	55.7
Computer Available	15.8	19.6

Source: ASER Report 2014

**Table 6: Academic Progress in Primary School: 2014**

<ul style="list-style-type: none"> <li>• Only 58% of children enrolled in classes 3 to 5 can read a class-1 text</li> <li>• Less than half (47%) are able to do a simple two-digit subtraction</li> <li>• Only 37% of children enrolled in class 4 or 5 can read fluently</li> <li>• Less than half (45%) are able to divide 20 by 5</li> <li>• Reading and Maths skills of class 4 pupils in India's top schools are below the international average</li> </ul>
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Source: ASER Report 2014

It would thus be seen that public initiatives like Digital India, Smart Cities and Skill India are not being realized through the statutory act of RTE 2009. Besides, almost 30% of the students now gravitating towards private schooling, which offer better teaching in terms of English and other facilities.

### 4.3 Impact of Quality in Higher Education

Despite the significant numerical increase in college enrolment through private sector interventions since 2001, the quality of research, patents granted and highly cited articles remain very poor compared to the global standards as the following tables will bring out.

**Table 7: Quality of Research Institution, Industry Collaboration & Patents**

Country	Quality of Research Institutions	Industry Collaboration	PCT Patents Granted/ (Million)	Highly Cited Articles
USA	5.8	5.6	137.9	3137
China	4.2	4.4	6.5	980
India	4.4	3.8	1.2	191

Source: YuXie Chunni Zhang et al at National Academy of Sciences, 2014

## 5. Towards a New Educational Policy

While the Health Ministry has come up with a draft national health policy, the HRD ministry is yet to come up with a credible draft. In the contrast, the vaulted promise of **HRD minister to increase allocation to education to 6% as against around 3% has been given a short shrift by the Finance Minister in the two budgets, barring getting up of a few more IITs, IIMs and Navodaya Vidyalayas. The critical spring board to education in this country would be primary education. Countries like USA, France and Germany, who have become the epicenters of education, have fully empowered their local bodies to handle primary education;** leaving higher education and research to private sector initiative. This can be a very useful template for India. It would need a constitutional amendment to bring education to the panoply of the State List. The Finance Commission should ensure that adequate funding is devolved to the local bodies to take care of education, health care and sanitation. The very fact that increasingly even the poor and lower middle class prefers to send their children to the private schools (30%) is a commentary eloquent enough on the rickety structure that we are trying to propitiate under the rubric of equity and access.

The universities require tie up with the best of global universities, greater CSR commitment by the corporate and a general predilection to pursue quality research which will pave the path of a truly knowledge society. And not merely of education factories that peddle degree. The Chinese authorities have shown remarkable foresight by bringing back Chinese professors working in USA universities with lucrative salary and academic autonomy. This is a lesson that could be factored in an education policy. It's equally important that an independent regulatory authority supplants UGC, which will put a premium on quality improvement and research initiatives.

## 6. Concluding Thoughts

India is on the highway of market fundamentalism; trying to be a second China. Post World War II, every Japanese wanted to be an American; and every Chinese a Japanese. It's an interesting concentric circle in which three Asian powers are traversing; learning bitter lessons in the process as well. For Japan, it was the liquidity trap and economic recession of the dark decade of 1990; for China, it is the massacre of freedom in the Tiananmen square. For India it seems to be the senseless apathy towards quality of public education at the grassroot level and a tendency to polarize communities on religious lines. In USA, 93% of children still go to public school. The RTE Act of 2009 has realized the maxim of universal access to primary education but has lost its way in

the politics of equity and access. This is being further exacerbated by a dialogue of the deaf where the socialism of Prof. Sen gets drowned by the market fundamentalism of Prof. Bhagwati. Economists like Gunnar Myrdal, Raul Prebisch, Solow and Kaldor have bedazzled the globe with their incandescent ideas like spread effect, periphery theory, factor productivity and manufacturing as the springboard of productivity. Their ideas have generally transcended ideological positions like capitalism and communism and brought in a liberal ethos to the public discourse.

It's time we need Tagore's words:

*"Where knowledge is free,  
where the world has not been broken up into fragments,  
by narrow domestic walls".*

And pave the way for making India the epicenter of knowledge and manufacturing.

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