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Cover: The crest of St. Xavier's College Mumbai., Designed in 1929 by Fr. T. Molina. Shows an eagle teaching its young ones to fly. Above it, on the left, is the emblem of the Society of Jesus which consists of the Greek initials of the name of Jesus set in a sun; on the right is a chequered moon, taken from the arms of the house of Xavier. The motto in Latin is taken from the bible and refers to the eagle who encourages (its young ones) to soar aloft.

From the Managing Editor's desk

The positive correlation between research and the unraveling of truth is irrefutable, as research re-establishes and reiterates the credibility of scholarly endeavours. Research by reigniting an individual's academic curiosity rejuvenates the pursuit of the ultimate knowledge of a discipline.

The sixth volume, and the first as a separate 'Humanities and Social Sciences edition', this issue of 'Xplore - The Xavier's Research Journal' is in the truest sense an amalgamation of economic, social, political and cultural aspects of humanities. The research articles attempt to put forth the relevance of societal affairs through applied research. This issue contains nine research papers and two talks delivered at the National Conference on 'Efficacy of Indian Economic Policies : A Sectoral Analysis' held in St. Xavier's College, Mumbai in 2015.

Since its inception in 2010, Xplore has fostered collaboration among researchers from various institutions and subject domains, which is also evident in this issue. We have research articles with collaborators from university colleges, state university departments and also from international institutions. Xplore has followed a transparent and ethical system of peer review, which has helped us maintain standards. I acknowledge the efforts of the panel of peer reviewers for their contribution in enhancing the quality of these articles. Finally, I am also grateful for the financial support extended by the University Grants Commission (UGC) for the publication of this research journal as well as for the support given towards the academic enrichment of our faculty under the 'College of Excellence (CE) Scheme'.



Dr. Agnelo Menezes

Managing Editor - Xplore

And

Principal

St. Xavier's College (Autonomous), Mumbai.

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Trade Distorting Support under WTO Regime: Issues and Concerns for India

Sachin Kumar Sharma

Centre for WTO Studies, New Delhi

Abstract

The objective of this paper is to critically examine the domestic support especially Aggregate Measurement of Support (AMS) of Agreement on Agriculture (AOA) and present status of the Doha negotiations on trade distorting agricultural subsidy. This study highlights the observation that trade distorting support in India is below de minimis limit. In case of India, there is no obligation to reduce domestic support to the agriculture sector. India will have more policy space if product-specific support is calculated by considering excessive inflation under Art 18.4 of AoA. Developed countries are giving huge support to the agriculture sector and enjoying artificial comparative advantage in international trade of agricultural commodities. Domestic support in developed countries is mainly concentrated only on a few crops, which is a major concern for the developing countries. In recent negotiations, the developed countries are seeking special provisions to make new reduction commitments redundant so that these countries continue with trade distorting subsidies to the agriculture sector in future. For example, USA is seeking to broaden the definition of Blue Box to undermine the reduction commitments under the Doha negotiations.

Keywords : AMS, AOA Doha negotiations, Domestic Support and Trade Distorting Subsidies.

Section 1: Introduction

The agriculture sector enjoys an important status in both the developed and the developing countries, especially in the context of GATT/WTO negotiations as well as bilateral or regional trade arrangements. Trade liberalisation in agriculture under WTO brings opportunities and challenges to the members. In the case of India, it has created more challenges than opportunities for the Indian farmers. The likely gain from the trade liberalization, among other factors, depends on the competitiveness of the agriculture sector. Export competitiveness of a country in agriculture depends on the trend in the international prices, domestic prices of agricultural commodities and export subsidy given to the agriculture sector. Many scholars predicted a bright future for agricultural exports under WTO regime. Gulati (1994) found that on an average, during 1987-88 to 1993-94, domestic prices of wheat, rice, and cotton were well below prices prevailing in the world market. Debroy (1996) concluded that India's exports can obtain an additional competitive advantage under WTO. Even the study done by Bhalla and Singh (1996) brings out that Punjab is internationally competitive and can profitably export rice and cotton to the rest of the world. India's agricultural export performance since 1995 has not been satisfactory due to external as well as internal factors. Bhalla (2004), Chand and Jha (2001), Vyas (2001) mentioned that India's competitiveness is

adversely affected due to huge export subsidies and domestic support given by the developed nations which cause the international prices to decline. The developed countries continue to protect their agriculture sector. For example, in many developed countries, agriculture production is heavily subsidized by the government, agriculture exports are encouraged through government supported programs and agricultural imports are restricted through various mechanisms like tariff and non-tariff barriers. With this background, the objective of this study is to critically examine the domestic support especially Aggregate Measurement of Support (AMS) of Agreement on Agriculture (AOA) and present status of Doha negotiations on trade distorting agricultural subsidy.

Section 2: AOA AND DOMESTIC SUPPORT

2.1 Provision

AOA provides provisions to estimate domestic support to the agriculture sector. AMS is the annual level of support in monetary terms extended to the agricultural sector. All domestic support measures, except exempt measures, provided in favour of the agricultural producer are to be measured as AMS. The subsidies provided to farmers include:

(a) Non-Product Specific Subsidies such as those provided for irrigation, electricity, credit, fertilizers, seed etc.

(b) Product Specific Subsidies which are calculated as domestic prices minus fixed external reference price. The sum of these two is termed as Aggregate Measurement of Support (AMS) also called Amber Box. The maximum limit for the total AMS is fixed at 5 percent of the value of domestic agricultural output for developed and 10 percent for developing countries. It is noteworthy that reduction commitments are applicable only at aggregate level not at product specific level. All the direct or indirect government support provided to encourage agricultural and rural development, investment subsidies and agricultural input subsidies provided to low income farmers in developing countries are exempted from the reduction commitments. Direct payments under production-limiting programmes (Blue Box) are also exempted from reduction. There are some subsidies, which are required in the long term interest of maintaining natural resources, environmental protection and improving the farmer's income. These are not to be included in the AMS and are grouped in 'Green Box'. However, these should meet the fundamental requirement of having minimal trade distorting effects.

2.2 Domestic Support in India

India has made notifications on domestic support for the period 1995-96 to 2003-04 (see WTO notification G/AG/N/IND/1, G/AG/N/IND/2, G/AG/N/IND/7, G/AG/N/IND/10). Article 7.2(b) of AoA prescribe that Where no Total AMS commitment exists in Part IV of a Member's Schedule, the Member shall not provide support to agricultural producers in excess of the relevant de minimis level set out in paragraph 4 of Article 6. It is to be noted that the AMS for India was below de minimis limit during 1986-88 i.e. there is no final bound AMS. Therefore, the maximum limit to provide AMS is 10 percent of value of production of a specific crop for product-specific support and 10 percent of total value of agriculture production for non-product specific support. India is providing product specific support in the form of Minimum Support Price. Government intervention in the form of price support is a trade distorting support as it gives price incentive to a farmer to cultivate a particular crop and thus encourage production of that crop. Therefore, the minimum support price announced by the Indian government is a product specific amber Box support.

The product specific subsidy was below the de minimis limit for all commodities during 1995-2010. The non-product specific subsidy was also within the de minimis limit (see Table 1 and 2).

Many studies (Bhalla (2004), Gulati (2003), Hoda and Gulati (2007) have also calculated AMS of India and found that India's domestic support is within the de minimis limit. These studies revealed that product-specific subsidies in most agricultural crops are negative. It is important to note that the methodology to calculate product-specific support is illogical as the administrative price of a commodity (current prices) is compared with fixed external reference price (base year 1986-88). Due to this, the product specific support to agriculture sector will increase very steeply as no inflation is considered under this methodology.

However, the calculation of product-specific support by considering excessive inflation under Art 18.4 of AoA would provide the much needed policy space and flexibility to implement minimum support price and food security policy. As per Art 18.4, in the review process, members shall give due consideration to the influence of excessive rate of inflation on the ability of any member to abide by its domestic support commitments. There is still a lot of ambiguity about the definition of excessive inflation.

As per Article 6.2 of AoA, if a developing country provide input subsidy to low income or poor farmers, then it would be exempted from the calculation of AMS. India gives fertilizer, electricity and canal irrigation subsidy to farmers. However, the question arises as to who can be said to be low income farmers or poor farmers in India. As per India's WTO

2.3: Domestic support in developed countries

At the external front, the major concern for a developing country like India is the huge domestic support given by the developed countries to their agriculture sector. Due to this, the developed countries are enjoying an artificial comparative advantage in agriculture trade and also bringing suffering to millions of farmers in the developing countries. However, it is to be noted that while the trade distorting support in developed countries is within the limit of bound AMS,

there is an increasing trend to shift amber Box support to green Box without changing the nature of the programme. Figure 1 shows that amber Box support has declined in recent years whereas green Box support has increased steeply in recent years. The Notifications (G/AG/N/IND/1 and G/AG/N/IND/2), if a farmer has landholdings up to 10 hectares, he would come under the category of low or poor income farmers. About 99 percent of agricultural landholding comes under the above category (see Table 3). Due to this, India's non-product specific support to agriculture sector is positive, but below the de minimis level i.e. 10 percent of the value of production. The Indian government can provide input subsidies like fertilizer, canal irrigation and electricity etc. to agriculture sector. Though India has the flexibility to provide input subsidies to the agriculture sector, there are many constraints and related problems with input subsidies on the domestic front. Overall, the Product and Non-product specific support to the agriculture sector in India is below de minimis limit.

upward trend in international price of agricultural commodities is one of factors for the decline in domestic support to agriculture sector. It is important to mention that the AMS limit applies at the aggregate level and not at the product specific limit. Due to these loopholes, many countries have concentrated domestic support only on a few crops and thus enjoyed artificial comparative advantage in international trade. For example, the competitive advantage of U.S agricultural products in global markets is based on highly domestic support to agriculture sector. In USA, the domestic support is concentrated mainly on a few crops like corn, cotton, dairy, peanuts, soybeans, wheat and rice (Table 4).

These crops accounted for over 95 percent of calculated AMS of USA. These measures of domestic support were one of the causes for the downward trend of international prices of agricultural commodities from 1995 to 2007. USA also underestimated the product specific support to agriculture sector. USA Farm Act 2002 introduced the Counter-Cyclical Payments (CCPs) programme which

provides benefits to producers with eligible historical production of covered commodities like wheat, corn, grain sorghum, barley, upland cotton, oats, soybeans, rice, other oilseeds, dry peas, peanuts, lentils, small chickpeas and large chickpeas. Support to farmers under CCPs is product specific as there are target prices for each crop. USA notified this program as non-product specific support rather than product specific support. This led to underestimation of product specific support to the agriculture sector in USA. It was one of the reasons for a decline in product specific support as CCPs was most important trade distorting programme in USA during 2002 to 2013. Similarly, EU and Japan gives huge support to agriculture sector. Japan gives high support to rice producers and protects this sector by applying high tariff and non-tariff barriers. Table 6 shows that developed countries are giving a very high level of support to farmers.

Section 3: DOHA NEGOTIATIONS AND DOMESTIC SUPPORT

In 2001, the WTO members agreed to launch a new round of multilateral trade negotiations, known as Doha Development Round. The Doha ministerial conference in 2001 recognizes the need for special and differential treatment for the developing and the least developing countries. However, the negotiations in the Doha round have reached a stalemate due to different positions taken by member countries. Interests are varied in several areas, especially in agriculture where wide gaps exist between the developed and developing countries.

3.1 Provisions

During Doha negotiations, new concepts and provisions related to domestic support emerged.

Nine versions of Draft Modalities have been submitted till February 2011. The revised draft (WTO document, TN/AG/W/4/Rev.4) for agriculture was circulated on 6th December, 2008, provides new method/formulas to cut trade distorting support to agriculture sector. About domestic support, Doha negotiations aim at substantial reductions in trade-distorting domestic

support by (1) Setting limits where they do not exist (except for Green Box and Art.6.2 subsidies) for example, overall Blue Box, product specific Blue Box, product specific AMS; (2) Reducing limits where they exist, for example, AMS, de minimis; (3) Establishing a new constraint – OTDS; (4) Clarifying the Green Box criteria. In Doha round, all developed countries would have to substantially reduce trade distorting support and those with higher levels of support have to make deeper cuts from the “bound” or ceiling levels. This includes reductions both in overall current bound levels and separately in Amber Box and de minimis support. Blue Box support will also be capped. If after taking cuts in individual components, the overall support exceeds the ceiling, then additional cuts will have to be made in the individual components. There are also many provisions under which developing countries have to reduce trade distorting support to the agriculture sector. It is to be noted that these modalities are on the negotiating table.

3.2 Doha Negotiations and Domestic Support in India

The developing countries also have to reduce overall trade distorting support as well as Amber Box support. Developing country members would be required to undertake two-thirds of the cuts applicable for developed countries. However, there is no reduction commitment for a developing country with no final bound AMS. For India, there will be no reduction commitment due to the fact that India does not have Final bound AMS commitments under AoA. For the product-specific AMS, de-minimis limit would be the upper limit. De-minimis limit for India would remain the same as that given in AoA i.e. 10 per cent of a Member's total value of production of a basic agricultural product in the case of product-specific de minimis and 10 per cent of the value of a Member's total agricultural production in the case of non-product-specific de minimis. India will have the flexibility to provide Blue Box support up to 5 percent of the value of production during the base period with some constraints on product specific Blue Box support. As per the modality (December 2008), India is

required to schedule their base OTDS and Blue Box support, in monetary terms, in part IV of their schedules. Annex B of revised modality have some provisions related to green Box support. Some of the provisions related to low income or resource-poor farmers under Annex B along with Art 6.2 of AoA will provide enough policy space related to domestic support to agriculture in India and effective implementation of food security policies in developing countries.

3.3 Doha negotiations and Developed countries

On the basis of calculations based on past WTO notifications on domestic support, Table 5 shows that the European Union has to cut OTDS and final AMS by 80 and 70 percent respectively. As per the December text, USA has to cut OTDS and final AMS by 70 and 60 percent respectively. Though it seems that developed countries have to cut trade distorting support substantially, careful readings of agricultural negotiations reveal that developed countries are seeking carve-outs in agriculture negotiations. The developed nations are intended to protect their agriculture sector through various carve-outs. For instance, Para 23, 24, 25, 26, 35, 40, 41, 47 and annexure A of “Revised draft modalities for agriculture: WTO Doha round negotiations” provides special carve-outs related to agriculture sector to USA. Para 35(b) is a new addition to Blue Box for the USA. Para 35(b) has broadened the definition of Blue Box and it will lead to shift amber Box support to Blue Box without the condition of production limitation. USA has given Blue Box support only in 1995, after which no support was given under this Box. USA has not given any Blue Box support (except in 1995) and now with the new text, the definition of Blue Box will be widened only to allow USA to shift its support from Amber Box to Blue Box. The USA has notified its Counter Cycle Payment under Amber Box (Table 6).

Similarly, there are special provisions for EU, Canada, Switzerland, Norway and Japan. Developing countries should carefully examine these special provisions to developed countries and oppose any

provision which leads to Box shifting and therefore undermines the development agenda of Doha round.

SECTION 4: CONCLUSION

It is true that the outcome of AoA has not been as beneficial to the developing countries as was expected due to several reasons. Domestic support measures in developed countries led to artificial comparative advantage for the exporters of these countries in international agriculture trade whereby they could afford to sell goods at a cheaper price than the actual cost of production.

In case of India, there is no obligation to reduce domestic support to the agriculture sector. India will have more policy space if product-specific support is calculated by considering excessive inflation under Art 18.4 of AoA. There is a need to define excessive inflation under AoA. For non-product specific support, India can provide input subsidies to a majority of Indian farmers that would be exempted from the calculation of AMS. Under Doha negotiations, there will be no reduction commitment due to the fact that India does not have Final bound total AMS commitments under AoA. In developed countries, AMS is within schedule bound AMS limit. However, domestic support in developed countries is mainly concentrated only on a few crops, which is a major concern for the developing countries. In Doha round, to check the concentration of support on a few crops, a product-specific limit is proposed. In recent negotiations, the developed countries are seeking special provisions to make new reduction commitments redundant so that these countries continue with trade distorting subsidies to the agriculture sector in future. The developing countries should oppose these special provisions to safeguard the interest of millions of farmers in developing and least developing countries.

References :

Acharya, S.S. (2000), "Subsidies in Indian Agriculture and their Beneficiaries", Agriculture Situation in India, August.

Bhalla, G.S. (2004), "Globalisation and Indian Agriculture", 'State of Farmer: A Millennium Study', Academic Foundation Publication, New Delhi.

Bhalla, G.S. and Gurmail Singh (1996), "Impact of GATT on Punjab Agriculture", Ajanta Book International, New Delhi.

Chand, Ramesh and Dayanatha Jha (2001), "Trade liberalization, Agricultural Prices and Net Social Welfare", in S.S.Acharya and D.P.Chaudri (eds.), 'Indian Agricultural Policy at the Crossroads: Priorities and Agenda', Rawat publication, New Delhi.

Debroy, Bibek (1996), "Beyond the Uruguay Round: The Indian Perspective on GATT", Sage Publications, New Delhi.

Gulati Ashok and Narayanan Sudha (2000), "Demystifying Fertiliser and Power Subsidies in India", Economic and Political Weekly, March 4.

Gulati Ashok and Narayanan Sudha (2003), "The Subsidy Syndrome in Indian Agriculture", Oxford Publication.

Gulati, Ashok and Anil Sharma (1994), "Agriculture under GATT: What is holds for India", Economic and Political Weekly, July 16.

Gulati, Ashok (1989), "Input Subsidies in Indian Agriculture- A State-Wise Analysis", Economic and Political weekly, June 24.

Gulati, Ashok (1990), "Fertilizer Subsidy: is the Cultivator Net Subsidized", Indian Journal of agriculture Economics, Vol. 4s No. 1.

Hoda, A. and Gulati, A. (2007), "WTO Negotiations on Agriculture and Developing Countries", Oxford University Press.

Vyas, V.S (2001), "Agriculture: Second Round of Economic Reforms", Economic and Political Weekly, March 10.

Ratna, R.S., Abhijit Das and S.K.Sharma(2011), "Doha Developemnt Agenda for Developed nations: Carveouts in recent agriculture negotiations" Discussion paper no.8, Centre for WTO Studies Publication.

Table 1: Aggregate Measurement of Support (US \$ Million)

Product	1995-96	1996-97	1998-99	1998-99	1999-00	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2009-10	2010-11
Coarse cereals	-4,530	-2	-	-	-	-	-	-	-85.2	113.03		-13.45	-16.76	-3.09
Cotton	-2,106	-	-64	-64	-72	-147	-94	-140	-150.28	-68.99	-49.39	-6.64	6.95	
Groundnut	-1,809	-	-	-	-	-	-	-	-	-	-	-	-	-
Jute	-388	-	-	-	-4	-10	-56	-46						
Pulses	-1,706	-	-2	-2	-	0	-2	-6	1.44	1.79	-	-	-	-
Rapeseed, Mustard	-1,689	-	-	-	-	-79	-110		-2.7	-268.36	-242.88	-1.59		
Rice	-7,577	-	-	-	-1,685	-2,113	-1,519	-1,883	-1,864	-1,919	-1,421	433	1,724	2,282
Soya bean	-192	-1,321	-1,328	-1,328	-	-	-	-	-	-	-	-	-	-
Sugar cane	184	-	-	-	-	-	-	-	-	-	-	-	-	-
Tobacco	-181	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheat	-9,625	-1,280	-1,682	-1,682	-1,838	-2,764	-2,552	-2,006	-2,050	-1,566	-704	-174	-813	-162
Non-product-specific support	5,772	930	0	0	0	0	0	0	0	0	0	0	0	0

Source: WTO Notification

Table 2: Composition of Domestic Support (million US\$)

BOX	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
AMS	de minimise															
Blue Box	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green	2196	2503	2873	2276	2493	2851	4002	5237	5883	6183	5907	6493	9567	16927	17381	19471

Source: WTO Notification

Table 3: Trend in agriculture land holding

Category of holdings	Percentage of number of holdings				Percentage of area covered			
	1990-91	1995-96	2000-01	2005-06	1990-91	1995-96	2000-01	2005-06
Up to 2 hectares	78.20	80.30	81.90	83.29	32.40	36.00	39.00	41.14
Up to 4 hectares	91.30	92.60	93.60	94.22	55.60	59.80	63.00	65.08
Up to 10 hectares	98.40	98.70	99.00	99.15	82.70	85.10	86.80	88.19
Above 10 hectare	1.60	1.30	1.00	0.85	17.30	14.90	13.20	11.81

Source: Agriculture Census

Table 4: Product Specific Support as a Percentage of Calculated AMS (%)

Product	1995	1998	1999	2000	2003	2004	2005	2006	2007	2008	2009
Dairy	73.7	43.2	27.6	30.0	64.1	37.9	39.5	63.7	77.2	62.3	55.2
Corn	0.5	14.5	15.1	16.5	3.1	24.9	34.4	0.2	0.3	0.3	2.2
Rice	0.2	0.2	2.6	3.7	6.8	1.1	1.0	0.0	0.1	0.1	0.5
Wheat	0.1	4.9	5.8	5.0	1.5	0.7	0.2	0.0	0.0	0.0	7.8
Soybeans	0.3	12.1	16.9	21.4	0.3	4.1	0.5	0.8	0.1	0.1	4.0
Sugar	17.3	10.0	7.1	7.0	16.9	10.4	9.2	16.2	19.0	18.0	22.9
Cotton	0.5	8.9	13.9	6.2	5.9	18.2	12.4	7.3	3.2	17.7	2.7
Sum	92.6	93.7	89.0	89.7	98.7	97.2	97.2	98.3	99.8	98.6	95.3

Source: USA's notifications to WTO

Table 5: Reduction in Domestic Support

Reduction in Overall Trade-Distorting Domestic Support		
Threshold (US\$ billions)	Cuts	Countries
> 60	80%	European Union
10-60	70%	US and Japan
Reduction in Final Bound Total AMS		
> 40	70%	European Union
15-40	60%	US and Japan

Source: Author's calculation based on WTO TN/AG/W/4/Rev.4 and WTO notifications on domestic support

Table 6: Countercyclical payment in USA (Million Dollars)

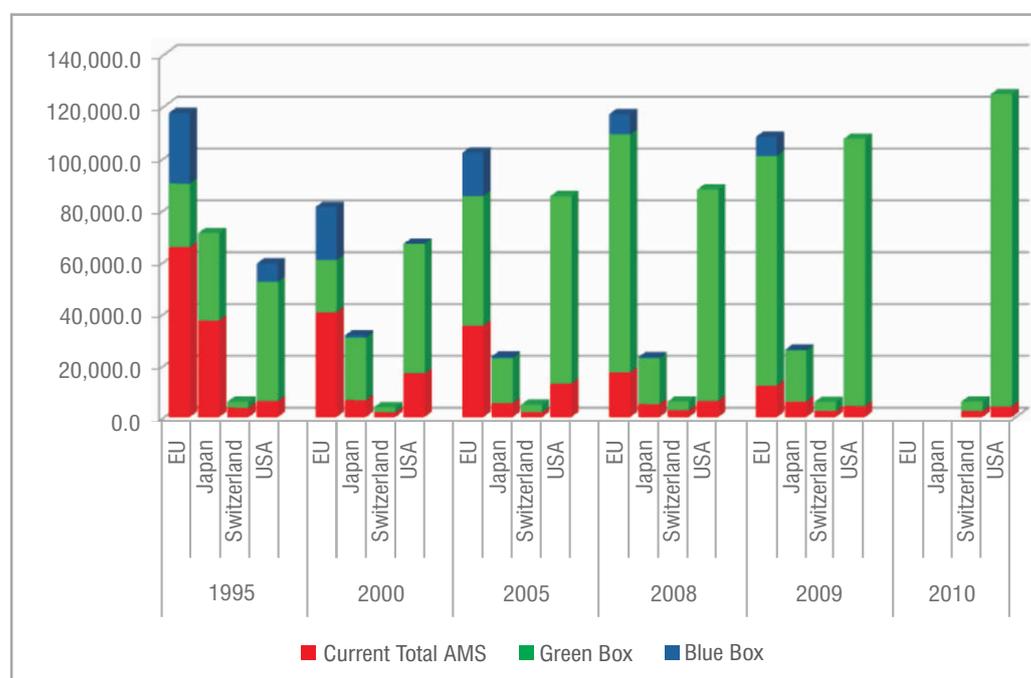
Year	Countercyclical payments
2002	1804
2003	544
2004	4288
2005	4749
2006	1488
2007	893
2008	1220

Source: WTO Notifications.

Table 7: Domestic support per person who is economically active in agriculture sector (USD\$)

Year	EU	Japan	Switzerland	United States of America	India	Brazil
1995	6579	19645	31865	17676	37	378
2000	5409	11614	22957	21491	48	135
2003	6520	10739	30452	24495	61	103
2009	9764	17053	40850	41772	N.A	418

Source: Author calculation based on WTO notifications and FAOSTAT

Figure 1: Trend in Domestic Support to Agriculture sector (US\$ million)

Source: WTO Notification

Table 8: Product Specific Support as a Percentage of Value of Production (%)

Product	1995	1998	1999	2000	2003	2004	2005	2006	2007	2008	2009
Dairy	23.1	18.7	19.9	24.4	22.2	16.9	19.2	21.4	14.1	11.3	12.3
Corn	0.1	8.1	14.9	15.1	1.0	12.6	20.2	0.1	0.0	0.0	0.3
Rice	0.8	1.2	35.3	59.5	30.9	7.7	7.6	0.2	0.2	0.1	0.8
Wheat	0.1	7.6	17.4	14.7	1.4	1.2	0.4	0.0	0.0	0.0	4.0
Soybeans	0.1	9.5	23.4	29.0	0.1	2.8	0.4	0.3	0.0	0.0	0.7
Sugar	51.1	49.6	56.3	57.3	55.1	66.5	61.6	52.8	58.2	54.5	48.7
Cotton	0.4	19.4	53.9	21.3	6.9	39.1	28.5	27.2	4.0	28.4	3.3

Source: USA's notifications to WTO

Renewable Energy Scenario in India: A Review of Policies

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Abstract

The environmental and socio-economic impact of conventional energy sources has necessitated use of renewable sources for meeting the burgeoning energy demand. This paper reviews the renewable energy scenario in the Indian states and the effectiveness of policies in promoting generation of renewable energy in the country. Multiple Linear Regression technique was employed to identify the impact of various policies. The study findings suggest that Renewable Energy Certificate mechanism play a pivotal role in incentivizing energy generation.

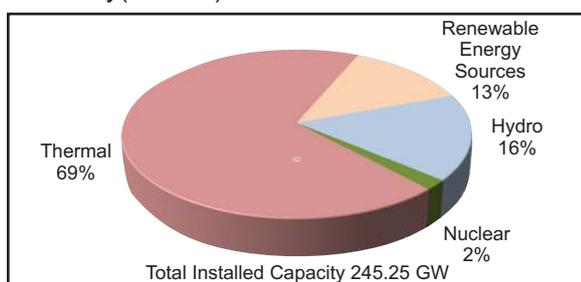
Keywords: *renewable energy, renewable purchase obligations, renewable energy certificates, forbearance price, feed-in-tariff*

1. Introduction

Achieving energy security by lowering dependence on exhaustible fossil fuels, ensuring low carbon growth, promoting efficiency in energy use have become principal policy goals the world over, particularly, in the light of rising concerns over climate change. Renewable energy resources could be harnessed to meet these policy goals. The transition from non-renewable sources to sustainable energy systems has become indispensable because societies with low per-capita energy use tend to have poor human development indicators—low life expectancy, high infant mortality, and low literacy (Reddy and Nathan 2010).

The installed power generation capacity of India in 2014 was 245.25 GW, of which 31.69 GW was produced using renewable sources and 168.25 GW was produced by thermal power plants, 85 percent of which are coal fired.

Figure 1: Installed Generation Capacity of Electricity (Utilities) as on 31.3.2014



Source: Based on Central Electricity Authority of India (CEA) data

*Renewable Energy Sources include small hydro projects, wind power, biomass power, biomass gasifier, urban & industrial waste and solar power.

Solar, wind, geothermal, tidal, and waste-to-energy, all require substantial up-front capital expenditure before any energy is generated, but have no fuel costs. In contrast fossil fuel power stations have significant fuel costs (Heal, 2010). In addition, excessive dependence on fossil fuel based generation has implications for current account and also exposes India to risks related to volatile international crude oil prices and foreign exchange rates since India imports 80 percent of the oil requirements. It must be noted that the power sector in India generates a substantial amount of emissions. On an average, every one gigawatt of additional renewable energy capacity reduces CO₂ emissions by 3.3 million tons a year (World Bank, 2010).

The National Action Plan on Climate Change (NAPCC 2008) envisages, among other things, engineering innovative forms of market, regulatory and market mechanisms to promote sustainable development and deploying appropriate technologies for mitigation of green-house gas emissions. Eight National Missions were at the core of NAPCC, of which the Jawaharlal Nehru National Solar Mission is already operational. Accordingly, the government has provided impetus to renewable energy generation in India through the use of Command and Control measures as well as market-based instruments.

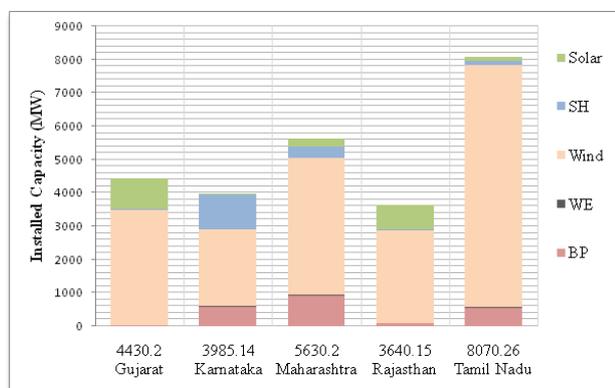
The remainder of the paper is as follows: the next section reviews the distribution of renewable energy sources in various Indian states. Section 3 discusses major legislations and policies that will enable the

transition to renewable energy generation. Section 4 elaborates on the Renewable Energy Certificate market in India. Section 5 presents the results of an empirical analysis conducted to study the impact of various policies on renewable energy generation. The last section presents the conclusions that have emerged from the study and policy implications.

2. Geographical Distribution of Renewable Energy Sources in India

Renewable Energy sources are not distributed evenly across the Indian states. Tamil Nadu had the highest installed capacity of grid connected renewable power (8070.26 MW) followed by Maharashtra (5630.20 MW) and Gujarat (4430.20 MW) as on 31-03-2014. Out of the total installed generation capacity of renewable power, wind power accounted for about 66.69 percent, followed by biomass power (12.66 percent), small hydro power (12 percent) and solar power (8.30 percent) [MNRE, 2014].

Figure 2: Installed Capacity of Grid Interactive Renewable Power as on 30.03.2014 for Five States leading in Renewable Power Generation



Source: Based on the data published in Energy Statistics, 2015, Government of India

*SH- Small Hydro, WE- Waste to Energy, BP- Biomass Power

Wind power plays a very important role in the Indian energy mix. India is one of the largest producers of wind power in the world. It is to be noted that about 70 percent of the wind power is generated in the three states – Gujarat, Maharashtra and Tamil Nadu. Phadke, Bharvirkar and Khangura (2011) have assessed the developable on-shore wind potential in India and found that full development of best quality

wind resources in Tamil Nadu would yield a capacity of 31 GW against the current installed capacity of about 21 GW.

Among the various renewable energy resources, India is enriched with ample potential of solar energy generation due to its geographical location near the Tropic of Cancer (Sharma et. al, 2012). The daily average solar energy incidence over India varies from 4 to 7 kWh/m². Thus, solar power has tremendous potential of meeting the energy demands of areas that are still off the grid. Solar power has registered steep growth in recent years as a result of a favourable policy environment which includes JNNSM. Major Solar plants are located in Gujarat and Rajasthan. Gujarat is the first state to launch its own Solar Policy.

Solar Photovoltaic and Biomass gasifier installations dominate the decentralized renewable energy systems in India. States like Gujarat and Rajasthan lead in installation of off-grid solar powered devices. Even though Assam and Orissa lag in grid connectivity, they have made considerable progress in off-grid installations. In 2014, 1952 and 1495 remote villages in Assam and Orissa respectively were electrified using renewable energy devices.

3. Legislative and Policy Framework

Gupta and Purohit (2013) suggest that the impressive cumulative average growth of 19 percent of renewable capacity installation achieved by India since 2006-07 could be attributed to the many policies and regulatory measures implemented by various governmental organizations during the last few decades. The Electricity Act(2003) mandates State Electricity Regulatory Commissions (SERCs) to promote generation of electricity from renewable sources of energy by providing suitable measures for grid connectivity and also stipulates purchase of a certain percentage of the power procurement by distribution utilities from renewable energy sources at a preferential feed-in-tariff(FIT). The National Tariff Policy (2006) provides guidelines to the SERCs for fixing minimum Renewable Purchase Obligations(RPO) at the state level after taking into account the renewable energy potential in the concerned state and its impact on retail tariff. The Central Electricity Regulatory Commission (CERC)

sets guidelines for feed-in-tariff (FIT) from various renewable energy technologies and the SERCs determine the actual level of FITs.

The RPO compliance is ensured through the Renewable Energy Certificate (REC) Scheme which was launched in 2011. This scheme seeks to address the mismatch between the availability of renewable energy sources and the requirement of obligated entities to meet their renewable purchase obligations. Renewable power has two components: physical electricity plus the green/ environmental attribute. Each REC represents the environmental attribute associated with renewable power and is equivalent to one Mega Watt hour. The sale of green attributes in the form of RECs generates additional revenue for the RE generators. REC trading is carried out on the two power exchanges approved by the CERC- Indian Energy Exchange (IEX) and Power Exchange of India (PXI).

Table 1: Participants at IEX as on 31.08.2015

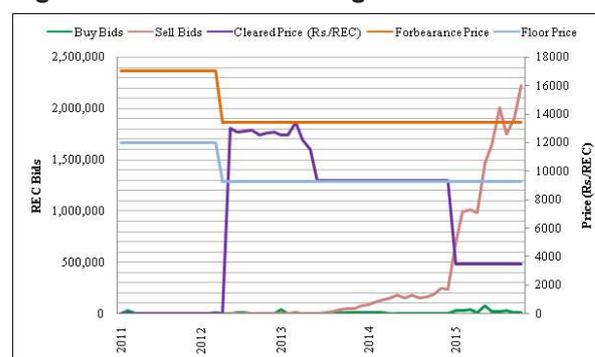
Eligible Entities	RE Generators (781)
Obligated Entities	Distribution Companies (24), Open Access Consumers (1645), Captive Users (94)
Voluntary Entities	Individuals & Corporates (under CSR) (13)

Thus, Renewable Energy generators can a) sell electricity to obligated entities at the preferential Feed-in-Tariff or b) sell electricity to local distribution licensees at Average Power Purchase Cost (APPC) and put the corresponding RECs on power exchanges for trading. The APPC excludes the cost of renewable energy power purchase. Thus, India is perhaps the only country to have two alternate revenue schemes for investors in RE plant - (i) FIT Scheme and (ii) Renewable Energy Certificate Scheme (Singh, Anoop).

4. REC Market Analysis

Solar and non-solar RECs rose staggeringly since 2013, while demand side response has remained stagnant leading to accumulation of RECs. Lack of RPO enforcement has been mainly responsible for the lukewarm response to the REC scheme. Very few states have issued specific guidelines or orders for RPO non-compliance, with the exception of states like

Figure 3: Solar REC Trading on IEX



Source: Based on Indian Energy Exchange (IEX) data

Uttarakhand which has imposed penalties for non-compliance. States like Gujarat have also relaxed obligations for certain utilities. RPO targets vary across states. The obligated entities in high potential states like Tamil Nadu have been able to meet the ambitious target set by the state SERC. However, in most states, RPO targets remained largely unmet. Some states like Uttar Pradesh, Madhya Pradesh, Chhattisgarh have revised their targets downwards post the introduction of the REC mechanism.

The CERC determines the floor price and the forbearance (ceiling) price for certificates to curtail volatility in prices. The Forbearance Price is the difference between Preferential Tariff and the Average Power Pool Cost. The Floor Price is the difference between the minimum requirement for project viability of renewable energy technologies and the Average Power Pool Cost.

The Central Commission while determining the floor price and the forbearance price takes into account several factors like variation in cost of generation of different renewable energy across states, variation in the Pooled Cost of Purchase across states, expected electricity generation from renewable energy sources under preferential tariff and expected generation under the mechanism of certificates and the state specific RPO targets.

The solar PV tariff determined by CERC for FY 2014-15 is Rs.6.91 KWh with accelerated depreciation which is much lower than the solar REC floor price of Rs. 9.3 KWh. Subsequently, the solar forbearance and floor price were revised downwards to Rs. 5800 and

Table 2: Forbearance and Floor Price (Rs./MWh)

	Upto 31.3.2012		1.4.2012- 31.3.2017	
	Solar	Non-solar	Solar	Non-solar
Forbearance Price	17000	3900	13400	3300
Floor Price	12000	1500	9300	1500

Source: Central Electricity Regulatory Commission

Rs. 3500 respectively because higher solar REC prices resulted in cost-efficient solar PV projects that have come in the later years, making windfall profits.

5. Testing the effectiveness of policies

Multiple Regression analysis was used to examine the impact of the Preferential Feed-in-Tariff, the REC mechanism and Renewable Purchase Obligations on Renewable power generation. This study involved organizing data collected from various sources (see Appendix for data), including Ministry of Statistical Planning and Implementation, REC registry and IEX. Upon reviewing the grid interactive installed renewable power capacity of various states, a total of 19 states with installed capacity greater than 100 MW were selected for the analysis. To determine the impact of various policies on renewable energy generation, the following equation is estimated:

$$\ln(IC_i) = \alpha_0 \ln(FIT_i) + \alpha_1 RPOE_i + \alpha_2 \ln(RECR_i) + \varepsilon_i$$

where IC_i represents Grid Interactive Renewable Power Installed Capacity in state i , FIT_i is the Preferential Feed-in-Tariff in state i , $RECR_i$ is the number of RE Generators registered under the REC mechanism and ε_i is an error term. $RPOE_i$ is a binary variable which represents enforcement of RPOs and takes value 1 if states have issued specific orders or imposed penalties for RPO non-compliance. The results of the OLS regression model are presented in Table 3.

The coefficient of $\ln(RECR_i)$ was found to be statistically significant at 5 percent level of significance indicating the positive significant impact of REC mechanism on renewable energy generation. The coefficient of $RPOE_i$ has a small negative coefficient signifying that stringent enforcement orders do not in a

Table 3: Regression Results

	Coefficients	p-value
$\ln(FIT)$	0.326 (0.454)	0.484
RPOE	-0.219 (0.407)	0.599
$\ln(RECR)$	0.77 (0.12)	10.0000121*
Adjusted R ²	0.75	

*p-value<0.05. Standard errors in parentheses.

big way impact the response variable. The small positive coefficient of FIT is indicative of the moderate favourable impact it has on RE generation.

6. Conclusion and Remarks

The bottom line is that renewable energy systems do have the potential to displace fossil fuels. Creation of robust incentive structure can encourage investors to engage in renewable energy ventures. The study findings suggest that, of the two alternative schemes available to RE generators, REC Scheme can play a crucial role in incentivizing renewable energy generation in India. Since RPO's do not in a major way provide a boost to RE generation, the concept of Renewable Generation Obligations may be introduced. However the extent of penetration will also depend on technical aspects- grid integration by creation of a green corridor, balancing and development of adequate wind and solar forecasting infrastructure. According to a report published by the German government, balancing the variable generation from renewable energy poses a major challenge in India due to the limited ability of thermal power plants to back down generation and lack of regional balancing (due to high inter-state transmission charges on renewable energy). Thus, revenue schemes aimed at promoting RE generation combined with grid integration and efficient balancing by creation of an efficient renewable energy and load forecasting system could facilitate realization of renewable energy potential in India.

References

Chatterjee, S., Dwivedi, P., Sengupta, A. (n.d.). Promotion of Wind and Solar Energy through Renewable Energy Certificate System: Lessons from

- Renewable Obligation Certificate, United Kingdom Experience for India. Retrieved from <http://siteresources.worldbank.org>
- Christenson, C. (2013). Renewable Energy across the 50 United States and Related Factors. Retrieved from <http://www.lsu.edu/>
- De, A.(n.d.). Institutional Structures for making Electricity Sustainable. Retrieved from <http://www.brookings.edu>
- Dixit, S., Sreenivas, A. Charting Energy. (2015, January 31). Indian Express. Factors affecting the Adoption of Wind and Solar Generating Systems on US Farms: Experiences at state level. (2013). Retrieved from USFDA website
- Frenkel, D., Yaffe, D. (2012). Renewable Energy Certificates: A Patchwork Approach to Deploying Clean Technologies. *Journal of World Energy Law and Business*, 5(1). Oxford University Press. doi:10.1093/jwelb/jws001
- Gupta, S., Purohit, P.(2013). Renewable Energy Certificate Mechanism in India: A Preliminary Assessment. *Renewable and Sustainable Energy Reviews*, 22, 380 - 392 . <http://dx.doi.org/10.1016/j.rser.2013.01.044>
- Heal, G. (2010). Reflections: The Economics of Renewable Energy in the United States. *Review of Environmental Economics and Policy*, 4, 1, 139–154. Oxford University Press. doi:10.1093/reep/rep018
- Herzog, A., Lipman, T., Kammen, D. (n.d.). Renewable Energy Sources. *Encyclopedia of Life Support Systems*. Retrieved from <http://www.eolss.com>
- Mahajan, S., Krithika, PR. (2014). Governance of Renewable Energy in India- Issues and Challenges. Retrieved from <http://www.teriin.org>
- Ministry of Statistics and Programme Implementation. Energy Statistics. (2015).
- NITI Aayog. Report on India's Renewable Electricity Roadmap 2030. (2015, February).
- Phadke, A., Bharvirkar, R., Khangura, J. (2011). Reassessing Wind Potential Estimates for India: Economic and Policy Implications. Berkley National Laboratory.
- Reddy, B S., Nathan, H S K. (2010). Emerging Energy insecurity—the Indian Dimension.
- India Development Report. New Delhi: Oxford University Press.
- Reddy, S. (2014, July). India's Energy Transition: Pathways for Low Carbon Economy. Retrieved from <http://www.igidr.ac.in/pdf/publication/WP-2014-025.pdf>
- Renewable Energy in India: Growth and Targets. (2015, May 13). Retrieved from <http://www.mnre.com>
- Report on Forecasting, Concept of Renewable Energy Management Centres and Grid Balancing. (2015). Published by GIZ
- Sargsyan, G., Bhatia, M., Banerjee, S., Raghunathan, K., Soni, R. (2010). Unleashing the Potential of Renewable Energy in India. World Bank.
- Sasi, A. Renewable Energy: Green Push needs a Balancing Act. (2015, October 15). Indian Express.
- Sawhney, S. (2013). Renewable Energy Policy in India: Addressing Energy Poverty and Climate Mitigation. *Review of Environmental Economics and Policy*, 7(2), 296-312, Oxford University Press. doi:10.1093/reep/ret010
- Sharma N.K., Tiwari P.K. and Sood Y.R. (2012). Solar Energy in India: Strategies, Policies, Perspectives and Future Potential. *Renewable and Sustainable Energy Reviews*, 16, 933- 941
- Sharma, S. (2012). True Electricity Demand and the Critical Role of Renewable Energy Sources. *Economic and Political Weekly*, XLVII No. 24
- Shrimali, G., Tirumalachetty, S. (2013). Renewable Energy Certificates Market in India – A Review. *Renewable and Sustainable Energy Review*, 26, 702–716. Elsevier. <http://dx.doi.org/10.1016/j.rser.2013.06.034>

Singh, Anoop. (2014). Economics, Regulation, and Implementation Strategy for Renewable Energy Certificates in India. Retrieved from <http://www.idfc.com>

Soonee, S.K., Garg, M., Prakash, S. (2010). Renewable Energy Certificate Mechanism in India. Paper presented at 16th National Power Systems Conference, 2010.

Sukhatme, S. (2014). Electricity for India's Future Growth-The Renewable Energy and Nuclear Energy Options. Retrieved from <http://www.iitg.ac.in>

Thangavel, P., Sridevi, G. (2015). Environmental Sustainability. New Delhi: Springer.

Appendix

	IC	Non-solar RPO target (2015)	Solar RPO Target (2015)	RPOE	FIT (2015)	RECR
Maharashtra	5630.2	8.5	0.5	1	4.7025	401
Gujarat	4430.2	7.5	1.5	0	4.5	52
Rajasthan	3640.15	7.5	1.5	0	5.93	116
Tamil Nadu	8070.26	9	2	0	3.51	271
Karnataka	3985.14	10	0.25	1	4.2	15
Delhi	21.15	5.95	0.25	0	2.49	1
Andhra Pradesh	1530.48	4.75	0.25	0	4.7	21
Himachal Pradesh	638.91	10	0.25	1	3.26	12
Madhya Pradesh	886.63	6	1	1	5.92	94
Uttar Pradesh	827.68	5	1	0	4.96	61
Chattisgarh	324	6	0.75	1	3.56	10
Punjab	322.8	3.81	0.19	1	5.7	9
Arunachal Pradesh	103.93	6.8	0.2	0	0	0
Bihar	114.12	4.25	0.75	0	0	6
J&K	147.53	5.25	0.75	0	3.985	4
Kerala	193.65	4.25	0.25	0	4.52	2
Orissa	115.13	6.25	0.25	1	3.775	4
Uttarakhand	209.87	7	0.075	1	3.99	7
West Bengal	131.45	4.35	0.15	0	4.42	0

Source : Figures Calculated by Author

IC- Installed Capacity in MW (2014), Source: Ministry of Statistical Planning and Implementation.

*RPOE- Binary Variable takes value 1 if states have issued specific orders/ guidelines or imposed penalties or filed cases for RPO non compliance and 0 otherwise.

RECR- Number of RE generators registered under the REC mechanism (2015)

Sectoral FDI Policy Framework: Evidences from Emerging Markets

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Abstract

FDI is considered an important instrument for channelizing the transfer of capital and technology and is therefore a crucial factor in promoting economic growth in the host countries. Moreover, MNCs consider FDI an important means to restructure their production activities across borders in accordance with their corporate strategies and the competitive advantages of host countries. These concerns have been the crucial motivating elements in the evolution and attitude of EMEs towards FDI inflows in the past few decades, particularly since the eighties. Government Policies towards attracting FDI are among the key factors driving investment flows to a country. In addition to underlying economic factors such as market size, inflation rate, and trade openness, the ability of a nation to attract foreign investment fundamentally depends upon its policy regime with regard to FDI flows. This paper reviews the FDI policy frame works in select EMEs to gather some perspective as to where these countries stand at the current juncture.

Keywords : FDI, Corporate Strategies, EMEs

Introduction :

FDI flows are likely to be encouraged by government policies that lead to the establishment of a legal-institutional framework that is conducive to business activity. Such a legal-institutional framework would ensure an adequate provision of economic and social infrastructure in the form of paved roads, ports, airfields, relatively cheap energy supplies, and a well-educated and disciplined work force. According to a 2006 UNCTAD survey, among the policy variables that affect FDI are tax policy, trade policy, privatization policy and macroeconomic policy (UNCTAD 2006).

The stability in policy frameworks and the credibility of policy announcements are also important consideration for business investment. In less developed and emerging market economies the majority of entrepreneurs constantly fear policy surprises and unexpected changes in rules, and so trust in government policy appears to be a major area of concern. Entrepreneurs in Asia have the most trust in government announcements of policy changes and changes in rules (Institutional Obstacles to Doing Business, World Bank 1997). Beside stability in policy frameworks overall economic stability is also a prerequisite for robust investment spending. The inflation rate is often a reliable indicator of overall economic stability. Empirical evidence indicates that foreign investment is lower in countries with higher inflation rates (Naude and Krugell, 2007)."

Investing across Borders in selected EMEs

A factual assessment of the policies could be attempted if the varied policies across countries could be reduced to a common comparable index or a measure. Such a set of indices is available from the World Bank's (2012) publication entitled "Investing across Borders," which presents the results of a 2011-12 survey of 104 economies. In this paper, we analyze the contents of this publication in order to obtain a clearer picture of the FDI-relevant policy frameworks in EMEs at the current juncture.

The survey presents information on four indicators, viz., "Investing across Sectors", "Starting a Foreign Business", "Accessing Industrial Land", and "Arbitrating and mediating disputes." The first indicator measures the degree to which domestic laws allow foreign companies to establish or acquire local firms. The second records the time, procedures, and regulations involved in establishing a local subsidiary of a foreign company. The third evaluates legal options for foreign companies seeking to lease or buy land in a host economy, the availability of information about land plots, and the steps involved in leasing land. The fourth assesses the aspects of domestic and international arbitration regimes in each country: the strength of the legal framework for alternative dispute resolution, rules for the arbitration process, and the extent to which the judiciary supports and facilitates arbitration. In what follows, we consider each of these

indicators in turn, present the EMEs scores for each indicator, and discuss these scores.

Investing Across Sectors in Selected EMES

From the policy perspective it is important to understand the sectoral caps imposed on different sectors in the EMEs because it is generally believed that more open sectors attract more FDI. The "Investing across Sectors" indicators measure the overt statutory restrictions on foreign ownership of equity in new investment projects (Greenfield FDI) and on the acquisition of shares in existing companies (Mergers and Acquisitions). This indicator is based on the text of investment codes, commercial laws, merger and acquisition laws, and other related statutes, and they cover 33 sectors, aggregated into 11 broad sector groups. The World Bank Report (2011-12) gives the foreign equity ownership indices (where 100 = full foreign ownership allowed) for 8 sector groups, two of them belonging to the Primary Sector, one to the Secondary Sector, and the remaining five to the Tertiary Sector.

The restrictions on foreign equity ownership in Brazil are above average among the countries in the Latin America. Compared with other BRIC nations only Russia has less restriction on foreign equity ownership than Brazil. Brazil limits foreign equity ownership in the air transportation sector to a maximum level of 20% and in media industries (Print and Electronic Media) to a maximum of 30%. The health care sector is prohibited for foreign capital participation. In general terms Brazilian policy offers equal treatment to both foreign and domestic companies.

Compared with other economies in Eastern Europe and Central Asia, Bulgaria has the least restrictions on foreign equity ownership. During the past few years, Bulgarian legislation has undergone harmonization with European Union legislation. As a part of this process, various sectors of the economy have been opened for foreign capital participation. Now, Bulgarian policy does not apply any limitations on foreign equity ownership in 31 of the 33 sectors covered by the Investing across Sectors indicators. Like other EU countries, Bulgaria also imposes restrictions on the air transportation sector, via the

Bulgarian Civil Aviation Act, in which foreign ownership is restricted up to 49% only. However, these restrictions are not applied to the investors from the European Economic Area (EEA).

Chile is one of the most liberal countries with regard to foreign equity ownership. With the exception of the oil and gas industry, all 33 sectors are fully open to foreign capital participation. China's restrictions on foreign equity ownership are stringent as compared to other countries in East Asia and the Pacific, and also relative to the rest of the world. The key rules governing FDI are available in the Catalogue of Industries for Guiding Foreign Investment (amended in 2007), which indicates the particular sectors in which foreign investment is encouraged, or prohibited. The rules impose limitations on foreign equity ownership in the majority of the sectors covered by the Investing across Sectors indicators, but particularly in the service sector industries. Sectors like publishing, television broadcasting, newspaper publishing, financial services (banking and insurance) and health care are completely shielded from foreign ownership. In several other sectors, including telecommunications (both fixed line and mobile/wireless), electricity transmission and distribution, air transportation (both domestic and international), and airport operation, foreign ownership is restricted to a less than 50% stake. However, manufacturing sectors, which have been the principal source of FDI inflows into the country, have been kept fully open for foreign equity ownership.

Of the 14 countries in the Latin America and Caribbean region, Colombia is the most open to foreign equity ownership. Foreign capital in TV broadcasting companies is limited to 40% only. However, companies publishing newspapers can have foreign capital investment up to 100%, though there is a requirement for the Director or General Manager to be a Colombian national.

India's restrictions on foreign equity ownership are greater than those of many countries in the South Asian region and also those of the other BRIC (Brazil, Russian Federation, India, and China) countries. India imposes restrictions on foreign equity ownership in many sectors and in particular in the service

industries. Sectors like railway transportation and forestry are dominated by public sector monopolies and are closed to foreign equity participation. Foreign equity in publishing companies and newspapers is limited to a maximum of 26% only. In the financial services sector, foreign capital participation in local banks is limited to 87% and in insurance companies to 26%.

Among the 33 industries covered by the Investing across Sectors indicators are subject to overt statutory ownership restrictions in Indonesia. Presidential Regulations No. 77 and No. 111 of 2007 contain a list of sectors that are closed to foreign equity and impose further limitations on foreign capital participation in additional industries. Sectors like publishing and newspaper businesses are closed for foreign equity ownership. In many other sectors, including fixed line telecommunications, forestry, and transportation, foreign ownership is limited to a less than 50% stake. Sectors such as the pharmaceutical and health care industry, financial services, and construction are subject to foreign equity limits though foreign investors are allowed to obtain a majority stake.

Of the 14 countries covered by the Investing Across Sectors indicators in the Latin America and Caribbean region, Mexico has more stringent foreign equity ownership restrictions than the regional average. The Foreign Investment Law sets out a list of strategic sectors that are either restricted for foreign capital participation or in which foreign ownership is limited. Mexico imposes restrictions not only in the primary sectors but also in the service sector for foreign equity ownership. The oil and gas industry, for example, is closed to foreign equity ownership, as are electricity transmission and distribution, and television channels. The regulations of the Foreign Investment Law and the Electric Energy Public Service Law define certain conditions for foreign ownership in electricity generation companies. Foreign equity participation is limited to a less than 50% share in fixed line telecommunication, newspaper publishing, railway freight transportation, airport operation and ports. Foreign capital participation in the forestry and agriculture sectors is limited to a maximum level of 49%. Most of the 33 industry sectors covered by the Investing Across Sectors indicators are subject to

overt statutory ownership restrictions in Malaysia. Though the manufacturing sector is fully open to foreign equity ownership, foreign capital participation is limited in the primary sectors and also in services sectors like telecommunications and electricity. Foreign ownership in companies operating in telecommunications infrastructure sector (fixed line and mobile/wireless) is limited to maximum of 30%. Further, the government may ask infrastructure operators to transfer their assets to the state after the expiry of their operating license. Foreign capital participation in companies providing telecommunications services (fixed line and mobile/wireless) is limited to a maximum of 61%, with the requirement to reduce the share of foreign equity to 49% within 5 years. In the electricity sector, foreign equity ownership in generation, transmission, and distribution is permitted only up to 30%.

In Pakistan, 27 of the 33 sectors covered by the Investing across Sectors indicators are fully open to foreign equity participation. While the primary and manufacturing sectors are among these 27, Pakistan imposes ownership restrictions on a number of service sectors. According to the Press, Newspapers, News Agencies, and Books Registration Ordinance (2002), only Pakistani nationals may own local newspaper companies, with foreign equity participation in such companies allowed only up to maximum level of 25%. Foreign ownership in national television channels is limited to less than 50%. In the financial services sector a maximum of 49% foreign equity ownership of banks, and a maximum of 51% in insurance companies. In the agriculture sector, the threshold limit for foreign investment is capped at \$300,000.

Peru has opened the majority of its sectors to foreign investors. Among the 33 sectors considered by the Investing across Sectors indicators, 32 are fully open to foreign equity ownership. The domestic air transportation industry is the only exception with a maximum limit of 49% on foreign equity ownership. Companies wishing to offer international passenger air travel services may be fully owned by foreigners but must be domiciled in Peru (i.e., have a permanent local residential address) and have a legal representative with broad powers. Among the 87 countries covered by the Investing across Sectors

indicators, the Philippines impose foreign capital ownership restrictions on more sectors than any other countries. These restrictions apply mostly to the primary and service sectors. Foreign equity participation in the mining and oil and gas industries is limited to a maximum share of 40% by the Philippine Constitution. Relaxation may be provided in these sectors for foreign ownership up to 100% if the investor enters into a financial or technical assistance agreement (FTAA) with the Philippine government. Such agreements are granted for a term of 25 years and require a minimum investment of US \$50,000,000. In the service sectors, foreign capital participation in public utilities (telecommunications, electricity and transportation) is limited to a maximum of 40%. The media industry and publishing sector are completely shielded from any foreign equity ownership.

In Poland, the foreign ownership of companies is limited in only 5 out of the 33 industry sectors measured by the indicators. Like other EU countries, Polish laws impose a maximum limit of 49% for foreign capital in the air transportation sector. Further, foreign capital participation is restricted to 49% in the airport and port operation sectors as well. The perceived difficulties of obtaining necessary operating licenses further hinder FDI in the latter sector. Currently the sector is dominated by publicly owned operators. The media sector is also subject to foreign equity ownership limitations. Pursuant to the Broadcasting Law, the required license to operate a television broadcasting company may only be granted if the voting share of the foreign investor does not exceed 49% and provided the majority of managers are Polish citizens having permanent residence in Poland.

Romanian law (Government Emergency Order No. 92/1997) provides for national treatment of foreign investors with regard to the establishment rights of companies. This means that foreign investors are generally allowed to invest in any sector open to private domestic companies. Thus, with the exception of the domestic and international air transportation industries, all sectors covered by the Investing across Sectors indicators are fully open to foreign equity ownership. Foreign equity participation in the two above mentioned sectors is limited to a maximum of

49%, as is the case in other European Union countries, but this limitation does not apply to investors from countries of the European Economic Area (EEA). The Russian Federation has opened the majority of its sectors to foreign equity investment. These include the primary and manufacturing sectors but not all of the service sector. Foreign ownership in the domestic and international air transportation sectors is restricted to a maximum of 49%. Further, Russian law requires the director of an airline company as well as a minimum of two thirds of the managerial board to be Russian citizens. Most financial services are restricted for foreign capital participation up to 49% while insurance companies are restricted up to 25% for foreign capital participation.

In South Africa, several industry sectors are subject to statutory foreign capital ownership restrictions. Foreign capital participation in the mining sector and in the oil and gas industry is restricted to a maximum of 74% by the Mineral and Petroleum Resources Development Act 28 of 2002. The share of foreign capital in companies owning or operating telecommunications infrastructure or providing telecommunications services should not exceed 30%. In the media industry, foreign ownership of nationwide TV channels is limited to 20%. In addition to these overt statutory ownership restrictions, monopolistic market structures dominated by publicly owned enterprises further inhibit FDI in the electricity industry and in the port operation and railway freight transportation sectors.

Thailand's restrictions on foreign equity ownership are the most stringent among the 87 countries covered by the Investing across Sectors indicators. The Foreign Business Act B.E.2542/1999 sets out a comprehensive list of sectors and business activities in which foreign capital is limited to a less than 50% stake. For some of these sectors, the law offers the option to increase the foreign capital share with prior governmental approval. Further, in the "negative list," certain sector-specific restrictions have also been imposed. For example, foreign ownership in the telecommunications sectors (fixed line and mobile/wireless infrastructure and services) is limited to a maximum of 49% by the Telecommunication Act B.E. 2544/2001. Light manufacturing, pharmaceutical

products, and food products are some of the sectors that are fully open to foreign capital participation in Thailand.

Turkey's FDI policy provides similar treatment to both foreign and domestic investors. The fundamental rights and freedoms of foreigners may only be limited by law in a manner consistent with international law according to Article 16 of the Turkish Constitution. In Turkey, foreign equity participation is restricted in the air transportation sector to a maximum of 49%. The Law on Establishment and Broadcasting of Radio and Television Channels (Law No. 3984) maintains that foreign capital participation in private radio or television channels cannot exceed 25% of the paid-in capital. A foreign investor who is already a shareholder in a private radio or television channel cannot acquire a share in another radio or television channel. Private capital participation, domestic as well as foreign, is prohibited by law in the electricity transmission sector. The Electricity Market Law stipulates that only the state-owned Turkish Electricity Transmission Company may generate electricity. Foreign and domestic investors are not even allowed to establish new electricity distribution companies. However, it is possible to acquire shares in existing distribution companies through privatization, provided that the investor does not acquire a dominant market position in the sector.

Of the countries in Eastern Europe and Central Asia, Ukraine imposes the most stringent restrictions on foreign equity participation. Most industries in the manufacturing and primary sectors are fully open to foreign capital participation but ownership limitations apply in a number of service sectors. Ukraine law prohibits the television and radio broadcasting sector from accepting foreign capital. Further, the private ownership (both domestic and foreign) of newspaper companies is prohibited by law. Foreign capital participation in the domestic and international air transportation sectors is limited to 49%. These restrictions are likely to be abolished soon in accordance with the country's commitments to the World Trade Organization (WTO).

Venezuela imposes relatively stringent restrictions on foreign equity ownership compared to other Latin

America and the Caribbean economies. The National Constitution of Venezuela authorizes the government to reserve for itself those industries and services that are in the public interest and of a strategic nature. The most prominent example is the oil and gas sector, where foreign equity participation is restricted. Several service sector industries are closed to foreign ownership, including railway freight transportation, domestic air transportation and airport and port operations. Foreign ownership in the media sector (television broadcasting and newspaper publishing) is restricted to a maximum of 20%. In addition to these overt legal restrictions on foreign investment, a comparatively large number of sectors are dominated by government monopolies, including, but not limited to, the sectors already mentioned above. For example, publicly owned enterprises dominate the electricity and fixed line telecommunications sectors. Further, the current government has recently nationalized several foreign companies including those operating hotels, banks and retail chains suggesting that Venezuela is less open to (FDI/private capital) than its laws and its scores on the Investing across Sectors indicators would suggest.

Starting a Foreign Business in Selected EMEs

The delay that a foreign company experiences in starting a business in the host country adds to the overall cost of FDI and therefore negatively affects FDI inflows. The Starting a Foreign Business indicators measure the procedural burden that foreign companies face when entering a new market. There are three measures in all: the time (in days) needed to go through each of the procedural steps for establishing a subsidiary of a foreign company, the number of procedural steps required for a foreign investor to formally operate a business, and an Ease of Establishment index that measures the characteristics of the host country's regulatory regime for establishing a foreign-owned subsidiary (the index takes values from 0 to 100 with higher values denoting a startup regime with little or no legal and administrative impediments). World Bank Report (2011-12) lists the scores on these components for various EMEs.

From the World Bank Report (2011-12), it is evident

that Romania, Poland and Ukraine have the highest scores on the Ease of Establishment index for 2010, whereas Venezuela, Indonesia, Philippines, Malaysia and Thailand have the lowest scores. The time taken to startup a foreign business is longest in Venezuela (179 days), followed by Brazil (166 days), Indonesia (86 days), and the Philippines (80 days). On all three measures, India performs better than both Brazil and China.

Accessing Industrial Land in Selected EMEs

The Accessing Industrial Land indicators quantify several aspects of the host country's land administration regime, which are important for foreign companies seeking to acquire land for their industrial investment projects. These indicators include such measures as the strength of land rights, the scope of available land information and the process of leasing land in or near a country's largest business city. The indicators focus both on the legal framework for land administration and its implementation in practice. High scores on the 0-100 indices, and low scores on the time measures indicate predictable, transparent and well-regulated land administration systems that do not overburden investors and provide sufficient protections for both the environment and citizens in the host country."

It is evident from the World Bank Report (2011-12) that with regard to the rights of leasing and ownership, most EMEs have favorable regimes that offer a variety of options as well as security to the foreign investor. EMEs have average index value of 80 for Strength of lease right means strength of land rights is supportive to MNEs in most of the EMEs. China ranks highest in terms of strength of lease index followed by India and Ukraine. Philippines, Venezuela is ranking lower in terms of strength of land rights.

The ownership rights index is 100 in most of EMEs except India (87.5), Malaysia (87.5), Thailand (62.5) and Turkey (87.5). The time to lease private land is highest in Poland at 146 days followed by Malaysia at 96 days and India at 90 days. The time to lease public land is highest in Malaysia at 355 days followed by Bulgaria at 351 and South Africa at 304 days. In China, it takes 59 days to lease private land and 129 days to

lease public land.

Arbitrating and Mediating Disputes (AMD) in Selected EMEs

FDI flows are likely to be encouraged by a legal institutional framework that is conducive to business activity. The AMD indicators quantify three aspects of alternative dispute resolution regimes that are important for companies looking to resolve commercial disputes outside of domestic courts. These three aspects are the strength of an economy's commercial arbitration laws (including adherence to international conventions on commercial arbitration); the ease of process for the parties initiating and conducting arbitration proceedings in that economy; and the extent to which domestic courts assist the arbitration process, both during the proceedings with regard to the enforcement of foreign arbitral awards. World Bank Report (2011-12) lists the average length (in days) of arbitration proceedings and the average length (in days) of recognition and enforcement proceedings for select EMEs.

We observe that India and Brazil are the worst performers on the first measure – the average length of arbitration proceedings is the longest in India (569 days), followed by Brazil (560 days), Chile (496 days) and Malaysia (486 days). On the second measure, Brazil (2325 days) records the second highest average length of recognition and enforcement proceedings, after Pakistan (5610 days), and is followed by India (1654 days) and South Africa (1178 days). FDI Restrictiveness Index

The FDI Restrictiveness Index measures the restrictiveness of a country's FDI rules by considering the four main types of restrictions on FDI: foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel, and operational restrictions (e.g. restrictions on branching and on capital repatriation or on land ownership).

While Figure 1 below indicates that all EMEs have opened themselves to FDI flows – the average index value is 0.3 meaning that around 70% of the segments are open to FDI in the average host country– there

remain differences in the extent of openness between countries. China, India, Indonesia, Malaysia, Mexico and Russia are significantly less open to FDI compared to other countries.

Figure 2, which illustrates the index numbers for the three broad sector groups for different EMEs, indicates that the secondary (manufacturing) sector is most open in all EMEs, followed by the primary sector, and then the tertiary sector (services). Irrespective of sector, China, India, Indonesia, Mexico and Russia are all less open than Brazil, Chile, Colombia, Lithuania, Romania, South Africa, Turkey and Ukraine.”

Conclusion

It is evident from the discussion that FDI inflow in EMEs is growing but there exist disparities in the distribution of FDI inflows at macro level as well as at sector level across EMEs. China, Brazil, Russia, Chile and India are attracting most of the FDI at macro level. There exists a wide inter sectoral variation in FDI inflows that have made the distribution highly skewed towards manufacturing and service sector. Sectoral evidences on the recent trends in FDI flows to EMEs indicate that FDI inflows in recent years have been mainly driven by service sector such as “business and financial services” followed by Manufacturing manufacturing sector particularly in construction and real estate sector. Thus, it is important to understand the major reasons behind disparities in the distribution of FDI inflow and location determinants of FDI in these economies. (Jadhav 2014)

A review of FDI policies across major EMEs suggests that there is substantial difference in policies of these countries. Since fairly liberal government policies of the government attract more FDI and procedure delays add to the overall production cost as time taken to set up a company in another country adds to the cost and affect competitiveness, an assessment of precise impact of these qualitative parameters on the flow of FDI is important. In the present study, as the descriptive analysis is unable to project a clear relationship between FDI inflows and government policy dimensions across EMEs, it is felt that further empirical testing is needed for examining the overall

influence of respective government policies on FDI inflows. Since this assessment is an empirical question, the next chapter makes an attempt to quantify the impact of various factors including government policies that govern the flow of FDI in EMEs.

References:

- Aleksynska and Havrylchuk, (2011)., “FDI from the south : the role of institutional distance and natural resources”CEPII, WP No 2011-05
- Benassy-Quere,A., M.Coupet and T.Mayer (2007), 'Institutional Determinants of Foreign Direct Investment' World Economy, 30(5) 764-782
- Claessens, S. and N.VanHoren (2008), “Location decisions of foreign banks and institutional competitive advantage, DNB Working Papers, 172
- Cuervo-Cazurra, A. (2006), “Who cares about corruption?“, Journal of International Business Studies, 37,807-822
- Darby, J., R. Desbordes and I. Wooton (2009), “Does public governance always matter? How experience of poor institutional quality influences FDI to the South”, CEPR Discussion Paper Series, No. 7533.
- Habib, M. and L. Zurawicki (2002), “Corruption and Foreign Direct Investment”, Journal of International Business Studies”, 33(2),291-307
- Jadhav P.G and Katti V. (2014) “Trend, Determinates and challenges of Foreign Direct Investment in Emerging Markets" in the Fourth IIFT Conference on Empirical Issues in International Trade and Finance organized by the Indian Institute of Foreign Trade (IIFT), New Delhi on December 18-19, 2014.
- Javorcik, BeataSmarzynska and Wei, Shang-Jin, “Corruption and Cross-Border Investment in Emerging Markets: Firm-Level Evidence” (February 27, 2009). HKIMR Working Paper No. 6/2009. Available at SSRN: <http://ssrn.com/abstract=1357206> or <http://dx.doi.org/10.2139/ssrn.1357206>
- Jing-Lin Duanmu, YilmazGuney, (2009) "A Panel Data

Analysis of Locational Determinants of Chinese and Indian Outward Foreign Direct Investment", *Journal of Asia Business Studies*, Vol. 3 Iss: 2, pp.1 - 15

Naude, W. and Krugell, W. (2007). Investigation as determinants of Foreign Direct Investment in Africa using Panel Data. *Applied Economics*. 39.1223-1233.

SufianEltayeb Mohamed &Moise G. Sidiropoulos, 2010."Another Look At The Determinants Of Foreign Direct Investment In Mena Countries: An Empirical Investigation," *Journal of Economic Development*, Chung-AngUnviersity, Department of Economics, vol. 35(2), pages 75-95, June.

UNCTAD. (2006). *FDI from Developing and Transition*

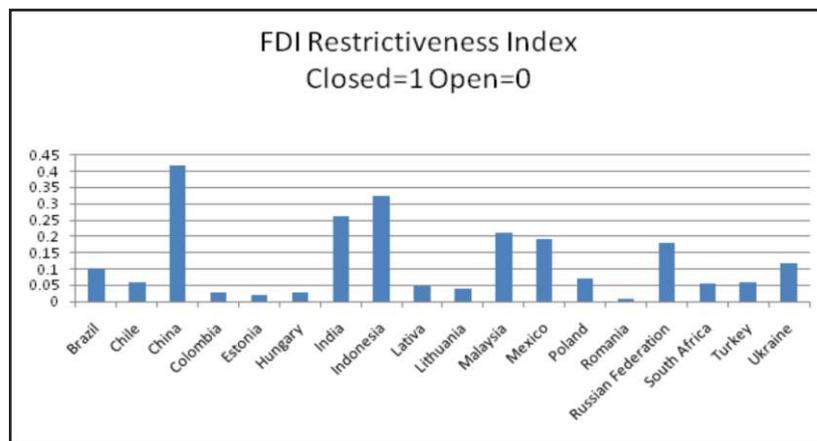
Economies: Implications for Development. World Investment Report 2006, United Nations, Geneva.

Wheeler, David &AshokaMody. 1992. International Investment Location Decisions: The Case of U.S. Firms. *Journal of International Economics*, 33: 57-76

World Bank (2003), *Trade, Investment and Development in the Middle East and North Africa: Engaging with the World*, World Bank, Washington, D.C

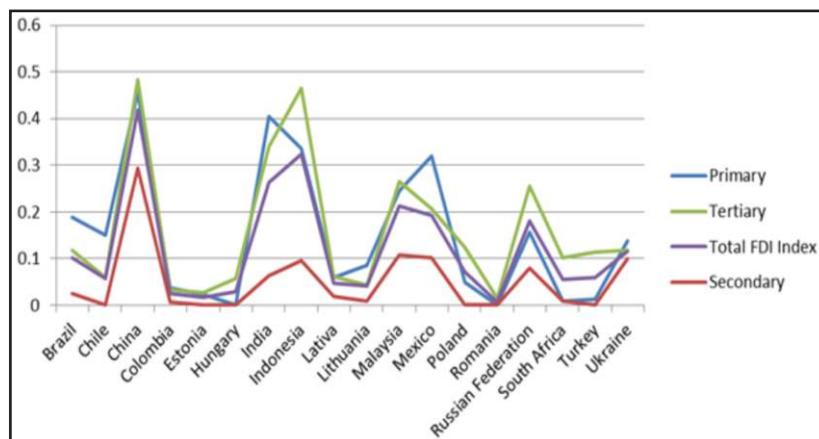
World Bank. (2012). *Trade, Investment and Development in the Middle East and North Africa: Engaging with the World*.

Figure 1: FDI Restrictiveness IndexCite year, please. 2014



Source: OECD

Figure 2: Sector-level FDI Restrictiveness Index 2014



Source: OECD

A Study on Factors Influencing the Demand for Life Insurance

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Abstract

Insurance contracts are typically classified as life and non-life. Life insurance in particular, provides protection to a household against the risk of premature death of the main income earning member of the family. In the face of increasing urbanization, mobility of the population and formalization of economic relationships between individuals, families and communities, insurance has taken increasing importance as a way for individuals and families to manage income risks. Insurance products encourage long-term savings and reinvestment of the sums in the private and public sector projects. As insurance products offer a means of disciplined contractual saving, they also may be regarded as the most effective instruments that encourage substantial amounts of savings.

In spite of great importance that insurance has in managing income risk, facilitating savings, and providing term finance, very few systematic attempts have been made to find what drives its demand in India. Several international studies have proposed a variety of different socio-economic and institutional factors as possible determinants of insurance consumption across countries.

Yaari (1965), Campbell (1980), Beenstock, Dickinson, Khajuria (1986), Lewis (1989), Truett and Truett (1990), Browne and Kim (1993), and Outreville (1990, 1996) have all shown that demand for life insurance is positively related to level of income, urbanization, literacy rate, life expectancy rate and banking sector development.

In this paper an attempt has been made to figure out the determinants of life insurance demand using primary data. Multi Nomial Logit of categorical regression was used and Sex, Educational Qualification, Occupation (service), Frequency of outstation travel for work, Number of Family Members, Number of Dependents and Average Premium Per Policy were found to be statistically significant in explaining the household demand for life insurance.

Keywords: *Life Insurance, Gender, Education, Occupation, Outstation Travel, Premium*

Introduction

Insurance companies play an increasingly important role within the financial sector of an economy. Insurance provides individuals and the economy as a whole with a number of important financial services. Life insurance also covers risk of unexpected longevity, when a person has outgrown all the other sources of income. It is said that in India, life insurance is sold, not bought.

However, after opening up of the life insurance sector in the year 2000, a number of global life insurance giants along with their Indian partners entered the Indian insurance market and began to sell their innovative products. As a result of this there has been growing information and awareness among the buyers as well. Therefore, in order to find out the possible determinants of life insurance demand it will be interesting to understand the theoretical and economic framework that underlies the demand for life

insurance and also go through the empirical studies undertaken by different writers.

Economic Theories of Insurance Consumption:

In contrast to human capital, which is the production potential of an individual, Human Life Value is the measure of the actual future earnings or value of services of an individual—that is, capitalized value of an individual's future net earnings after subtracting self-maintenance costs such as food, clothing and shelter. In 1942, S. S. Huebner proposed the human life value concept as a philosophical framework for the analysis of basic economic risks individuals face. Huebner's contribution proved to be a landmark for the demand for life insurance. He postulated that the optimal sum assured for a life should be equal to the life's displacement cost to its family. This cost, known as human life value, is equal to the discounted present value of income less the life's own consumption over its remaining life time. However it had several limitations too.

Firstly, it explains how much life insurance should be purchased, not what will be purchased. Secondly, it offers no guidance to the kinds of life policies the customer should choose. Thirdly, it gives no consideration to the payment capacity of the customer. Finally it gives no theory of how much of the risk could be self-insured.

These limitations of the human life value approach were recognized and remedied in the later literature by Yaari (1965) and Hakansson (1969). They were the first to develop a theoretical framework to explain the demand for life insurance. Within this framework, the demand for life insurance was attributed to a person's desire to bequeath fund to dependents and provide income for retirement. A consumer maximizes the lifetime utility subject to a vector of interest rates and vector of prices including insurance premium rates. This framework posits the demand for insurance to be function a of wealth, expected income over an individual's lifetime, the level of interest rates, the cost of insurance policies (administrative costs), and the assumed subjective discount rate for current over future consumption. Hakansson (1969) investigated the bequest motive in considerable detail using a dynamic programming model of demand for financial assets. Lewis (1989) extended Yaari's framework by explicitly incorporating the preference of the dependents and beneficiaries into the model. The literature posits other determinants of insurance consumption, namely urbanization, monetary stability, rule of law, government system, banking system development, interest rate, inflation rate and the progress of the financial system at the macro level.

Empirical Evidence on Life Insurance Demand:

The theoretical research on the demand for life insurance has relied heavily on various economic, demographic and institutional parameters. Empirical results found by various researchers support the theoretical hypothesis developed by above-mentioned authors. Beenstock et. al. (1986) found that the wealthy section of the population do not need insurance protection while poorer sections have limited demand because they operate under budget constraints. Truett & Truett (1990) and Browne & Kim (1993) stated that the dependency ratio and level of education are positively related to insurance

consumption. Outreville (1996) pointed out that life expectancy rate and banking sector development were positively related to life insurance consumption.

Sen and Madheswaran (2007) in their study on four SAARC countries, two countries from Greater China Region and six ASEAN countries, analysed the issue that regulatory changes since mid eighties and opening of these markets of the Asia region to private and foreign entry have been luring global heavyweight insurers to enter these economies. They tried to re-examine the factors that can probably elevate demand for insurance products. After reviewing existing theoretical as well as empirical literature, they identified variables determining demand for life insurance and categorized them as economic, demographic, legal and socio-political variables. Using a time series framework they also studied Indian insurance scenario.

Demand for Life Insurance in India :

In India, it is often said that in case of life insurance, often the seller initiates the sales process and makes an effort to convince the buyer who is wholly passive. Whatever the truth of these opinions their effect seems to have been to insulate the study of consumer choice. And that has shown itself in a lopsided development of the literature. The theory of supply, pricing and selling of life products has developed disproportionately as compared to the theory of the demand of life insurance. Therefore, the present study is designed to prove that life insurance is not entirely supply-driven; it also depends on the demand from consumer side. In India, price of life insurance is same throughout the country but life insurance consumption across the country in different states varies greatly.

Methodology for Primary Data Analysis

The regressand or the response variable may not always be quantitative but also can be a qualitative variable. It may be dichotomous (binary) or trichotomous or even polychotomous (of multiple category).

For example, a household owns a car or it does not own a car. in such case the response variable or the regressand can take only two values, say 1 if a household owns a car and 0 if it does not. Such

regressand is binary or dichotomous and is Bernoulli distributed.

The data pertaining to different ways to commute to office (by train, bus, private car or walking); data pertaining to occupational choice (self employed, government servant, employee of a MNC or employee of a small private firm) have to be multinomially distributed and estimated by maximum likelihood.

Multinomial Logit Model (MNL)

When the regressors do not vary over alternatives, the multinomial logit model is used.

$$P_{ij} = \frac{e^{x_i \beta_j}}{\sum_{l=1}^m e^{x_i \beta_l}}, \quad j=1, \dots, m \quad (1)$$

where $\sum_{j=1}^m P_{ij} = 1$, a restriction needed to ensure model identification and the usual restriction

Primary Data: The data has been collected from a sample of 250 households. The sample was selected in two stages. In stage I, ten suburban areas equally spaced over Mumbai city and island were selected and in stage II twenty-five wards were randomly selected from each of the selected suburban areas. From each of the ward one household was selected randomly and the questionnaire was administered to the household. The purpose of buying Life insurance (with four options of Life Cover, Tax Benefit, Investment and Persuasion by Agent) was considered as the dependent variable. Around 223 fully completed questionnaires were included in the study.

As the respondents had opted for more than one category of alternatives given to them in the questionnaire regarding the purpose of buying life insurance, some clubbing of the response had to be done.

Some important observations pertaining to the Primary data inferred from the Descriptive Statistics were, the average age of respondents was 40.4 (Minimum age 23 and Maximum age 56) which was representing a middle age at which an individual has dependent family. The Average Educational level of

the respondent was 3 (Graduation), with (Minimum 1 i.e. SSC and Maximum 5 i.e. Ph D and equivalent) which was an educational level of the average respondent was reasonably good and that correlated very well with the purchase of life insurance policies. Average Frequency of the other statistics were, Out Station Travel 2.31 (Minimum 0 and Maximum 30), Average no. of Members in the Family 4.19 (Minimum 2 and Maximum 15), Average no. of children in families of the respondents- 1.39 (Minimum 0 and Maximum 5) that could be rounded up to 1, the average no. of dependents per Family were 2.59 (Minimum 0 and Maximum 8) and Average Income per Family ₹ 66,443 (Minimum 10,000 and Maximum 1,100,000), was quite high and there was a large income disparity found among the incomes of the respondents.

In addition to this the other results were, the average Savings per Family was ₹15,920 (Minimum 1,000 and Maximum 140,000), No. of policies per Family 2.36 (Minimum 1 and Maximum 7), The Total Sum Assured per Family ₹ 643,072.1 (Minimum 0 and Maximum 90,00,000), and The Average of Total Premium per Family ₹ 33,430.49 (Minimum 0 and Maximum 500,000) correlated well with the large dispersal of the incomes of the respondents.

Multinomial Logit Results:

The purpose of buying Life insurance (with four options of Life Cover, Tax Benefit, Investment and Persuasion by Agent) was considered as the dependent variable. As the responses of the informants to the question on the purpose of buying life insurance were not strictly clear and very often two or even three options were opted for, the responses were put in five categories. Purchase of insurance for the purpose of Only Life was the Base Equation and four equations were estimated relative to the base category of only life.

Life cover as the purpose of buying life insurance, sex, education, occupation as service, outstation travel, no. of members in family, no of dependents, income, average premium paid were found to be the statistically significant determinants of life insurance demand.

Table 1 : Primary Data Multinomial Logit Results

Purpose	Coef.	Std. Err.	z	P> z	95% Conf.	Interval
outstation travel	.0959139	.0466151	2.06	0.040	.0045499	.1872778
average premium	.0000463	.0000199	2.32	0.020	7.22e-06	.0000853
occupation service	-1.019051	.5300654	-1.92	0.055	2.05796	.0198579
sex	1.231653	.6009816	2.05	0.040	.0537511	2.409556
education	-8132223	.3891133	2.09	0.037	.0505743	1.57587
no. of family Immemb	.5826578	.2260547	2.58	0.010	1395987	1.025717
no. of dependents	.5267306	.2653828	-1.98	0.047	-1.046871	-.0065898

References :

Beentstock M., Dickinson G. and Khajuria S. (1986): "The Determination of Life Premiums: An International Cross-Section Analysis 1970-1981", *Insurance, Mathematics and Economics* 5, 261-70

Browne Mark J. and Kim Kihong (1993): "An International Analysis of Life Insurance Demand", *Journal of Risk and Insurance* 60, 616-634.

Hakansson N. H. (1969): "Optimal Investment and Consumption Strategies Under Risk and Under Uncertain Lifetime and Insurance", *International Economic Review* 10, p 443-68

Huebner S. S. (1964): "Human Life Values – Roles of Life Insurance", in *Life Insurance Handbook*, 2nd edition, Richard D. Irvine, Homewood III

Life Insurance Corporation of India: *Yogakshema*, Various Issues, India.

Outreville Francois J. (1994): "Life Insurance in Developing Countries : A Cross – Country Analysis", *UNCTAD Review*, No.93.

Ranade Ajit & Ahuja Rajeev (1999): "Life Insurance in India; Emerging Issues", *Economic & Political Weekly*, Vol. 34, (3 & 4) Jan 1-22/23-29, pp 203-212, Mumbai.

Swiss Re: *World Insurance*, Various Issues, Sigma, Zurich : Swiss Reinsurance Company

Lewis, F.(1989): "Dependents and the Demand for Life Insurance". *American Economic Review*. 79.452-466.

Sen, S. and Madheswarn, S.(2007): "Are Life Insurance Demand determinants valid for Selected Asian Economies and India? Paper for Presentation at Annual Meeting of APRIA.1-27

Truett, D.B. and Truett, L.J. (1990): "Demand For Life Insurance in Mexico and The United States: A Comparative Study. "The *Journal of Risk and Insurance*. 57, 321-328.

Yaari M.E., (1965): "Uncertain Lifetime, Life Insurance and The Theory of The Consumer", *The Review of Economic Studies*, 332(2), 137 - 150

The Impact of British Rule on Indian Forest Wealth

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Abstract

The destruction of the forests of India and the process of alienation of the rural and forest dependent communities have a long history, starting with the initial focus of the East India Company on the teak forests of South India for making use of the timber for the ships of the British navy. The traders gradually became rulers and the plundering of the Indian forest wealth continued for almost two centuries. The communities including the tribals lost their rights to the forests. The brutal attack on India's natural resources by the British continued uninterrupted and a country once known for its wealth and splendor gradually became one of the largest centers of impoverished, landless masses, dying of starvation. For the British the Indian Forests were like private farms. Mixed forests were destroyed to produce trees having market value and wild life destroyed for hunting or export. As Davis (2000) notes: 'If the history of British rule in India were to be condensed into a single fact, it is this; there was no increase in India's per capita income from 1757-1947'. This paper attempts to present an account of the loot and plunder by the British and highlight various impacts of the British forest policies on forest wealth in India, though a study of the National Archival records, research and historical accounts of well known writers.

Keywords : *British Forest Policies, East India Company, Wildlife in India, India's Forest Wealth*

Introduction:

The British came to India as traders and gradually became rulers. It was the wealth of India, both natural and material, which made it attractive to the British. This paper attempts to provide a glimpse of the loot of the forest and wild life wealth of India by the British.

Since ancient times forests in India were considered important and hence not used for commercial purposes. It was the British government which officially started using forests for commercial purposes and took control of all the forest area in the name of conservation. The destruction of the forests of India and the process of alienation of the rural and forest dependent communities have a long history, starting with the initial focus of the East India Company on the teak forests of South India for making use of timber for the ships of the British navy. Due to the growing deficiency of oak in England, in 1805, the British wanted to open a permanent supply chain of teak wood for the King's navy from the Malabar region of South India, (Ribbentrop, 1900). The teak wood from South India thereafter helped to strengthen the British naval fleet in dominating the seas and trade routes. This was achieved through the policy of general

proclamation of the royalty rights in teak trees as vested in the East India Company. During the Anglo-French wars of the early nineteenth century, Indian teak was extensively used by the Royal navy for ship building and further maritime expansion, (Rawat, 1989)

According to the eminent Gandhian thinker, historian and political philosopher Dharampal (2000), "Because of the largeness of the area and population of India, and because of the impossibility of ever adequately colonizing it with people of European stock, and much more because it was realized that India could be a source of great productive wealth to Europe only if it had an immense number of people to labour but under total subjection, the British occupation of India was naturally primarily concerned with the subjection of India through more sophisticated political, legal and economic devices which could serve similar purposes of control and punishment much more effectively and on a far larger scale, and the drawing of the maximum possible tribute from it. To make such subjection prolonged, and relatively easier, it had to smash the earlier framework of Indian society and polity, and give it such new structures which it could neither comprehend nor master. Thus the wiping out of half or

one third of the population of an area as a result of fiscal devices (though initially these may not have been devised for such vast destruction), was found much more effective; and in one or the other part of India this began to occur from about 1750 onwards and lasted for some 150 years. In many areas, such catastrophes perhaps occurred every decade”

It was Dharampal's years of research in British archival records which challenged some of the myths related to the functioning of the East India Company and provided credible archival evidence for the direct role of the British government in using the East India Company as a front for its expansionist agenda as well as for the exploitation of natural resources and raw material. According to Dharampal, even before the decision to establish direct rule, after the 1857 mutiny and appointment of a British cabinet minister as secretary of state for India, the company had the full support of the British naval forces and at times its affairs were also controlled by the British naval commanders who received their instructions directly from the British King or the British Admiralty. These directions and communications during the Company rule actually form the basis of the earlier archival records and provide evidence of the politics of an expansionist state to further its commercial agenda.

Alvares (2000) considers Dharampal's work as the unmaking of English generated history of the Indian society that has grievously undermined the legitimacy of English or colonial dominated perceptions and biases about Indian society. However Alvares is also critical of the inability of the Indian academic traditions to take up the challenge of generating an organized indigenous view to support those evidences and also to highlight the Indian values and views. He questions the very survival and creative potential of a society which propagates in the minds of its future generation the British (or European) sponsored views and creates a different picture of the history. It allows for the propagation of a lopsided view and therefore remains biased towards and influenced by Western perceptions.

From traders to rulers of India

The British connection with India started in 1600 with the creation of a monopoly trading company, East India Company. For almost 150 years it operated

around the Indian coast from bases in Calcutta, Madras and Bombay. Before the death of Aurangzeb and the disintegration of Mughal control it was not possible to challenge the Mughal Empire whose authority and military power were too great. Hence maintaining cordial relations was the need of the hour. Circumstances however changed rapidly and the disintegration of the Mughal Empire started with the demise of Aurangzeb. Delhi, the seat of the Mughal Empire turned symbolic and provincial governors became de facto rulers as nawabs of successor states.

In the year 1739, the Persian emperor Nadir Shah invaded India. He took away so much booty including Shah Jehan's Peacock Throne and the Kohinoor diamond that he was able to remit Persian taxes for three years. He also annexed Punjab and set up an independent kingdom in Lahore. The Punjab was later captured by the Sikhs. In other areas which nominally remained in the Empire, e.g. Bengal, Mysore and Oudh, the power of the Mughal Emperor declined as did its revenue.

The East India Company exploited these internal contradictions skillfully by making temporary alliances and picking off local potentates one at a time. After the military victory at Plassey in 1757, the East India Company operated a dual system in Bengal in which it had control and the Nawab was a puppet. With these territorial conquests, the East India Company changed its role from trading to Governance, (Maddison, 2003).

The income from the territorial revenues was used for buying goods and selling them in Europe for further profits. Mukherjee (2004) observes that in 1764-65, the last year of administration of the last Indian ruler of Bengal, the land revenue realized was £ 817,000 while in the first year of Company's administration, in 1765-6, the land revenue realized in Bengal was £ 1,470,000. By 1771-2, it was £ 2,341,000, and by 1775-6 it was £ 2,818,000. The land revenue was finally fixed under the scheme of Permanent Settlement of Lord Cornwallis in 1793, when it was fixed at £ 3,400,000. Such usage of territorial revenue in buying goods was considered 'investment' in Bengal. Thus the money farmed in Bengal ended up in Europe as a form of tribute. This was profit without any

investment.

The East India Company's campaign of conquest in India, which started in 1757 at Plassey concluded in 1848 with the annexation of the kingdom of the Punjab, and with it British authority extended from Kashmir to Cape Comorin and from the Hindu Kush to Assam. The Great Rebellion of 1857, (recorded as Mutiny by the British) was a desperate attempt led by the former ruling classes, who found themselves dispossessed and bereft of all their power. The Rebellion was put down after fifteen months of fighting. It was the last gasp of an old and dying order. From 1858, till 1947, that is ninety years from the Mutiny, the Union Jack flew over the Moghul fort as the symbol of British authority, (Panikkar, 1993).

Dharampal (2000) asserts that from the very beginning East India Company was endowed by the British State with powers of sovereignty, conquest and rule in the same manner as countless other companies established by England and other States of Western Europe were endowed with such powers, through royal charters. In his comprehensive writings sprinkled with archival references, Dharampal suggests:

To understand the manner of European expansion, it must be realized that, by and large, these companies were instruments of the various European States. Even when the state and a particular company had their inner quarrel, they were under the military and political protection of the state; and when any company, especially the British company, actually began to conquer and rule any area, it was the state which took effectual charge of the conquered territory. The formal rule, in some instances, may have continued through the particular company as it did in India in certain matters till 1858, but the decision-making, and the political and military control was effectively exercised by the British State, and the detailed instructions in all instances had invariably been examined, amended, and approved by the state. In the case of India, it was statutorily so from 1784 onwards, but even from about 1750 no major steps were taken by the British East India Company in India without the instructions or approval of the British State. For instance, the British attack on the Maratha Admiral Angre in the 1750's was based on British State policy

and instruction, and had little to do with any initiative by the British East India Company.'

According to the estimates during the 1st A.D., the Indian economy accounted for the 33 percent of the world economy. India's share was three times the share of Western Europe and was much larger than that of the Roman Empire as a whole by 21.5 percent. This more or less continued till the time of Marathas, whence it rapidly declined during the European rule (Maddison, 2003).

Systematic destruction and usurpation of natural resources of India:

Berthold Ribbentrop, a forester from Germany, who served as Inspector General of Forests to the Government of India and author of the 'Forestry in British India, is critical of the earlier British administration. 'As the Railways spread to facilitate the transport of raw material, like timber and other forest produce, the forests disappeared'. According to Ribbentrop, the true state of affairs was not realized until growing needs and the failure to supply them were felt. The situation however changed in the year 1805, when the Court of Directors of the East India Company inquired about the permanent supply of Teak for the King's navy. The East India Company therefore appointed a forest committee charged with a very comprehensive programme of enquiry regarding the forests and the status of proprietary rights in them. The immediate result was the general proclamation on forests. It was decided to appoint a special officer acquainted with the language and habits of the people and having knowledge of forests. Thus, on 10th November 1806, Captain Watson of the Police was appointed the first conservator of forests in India. Within a couple of years he had succeeded in establishing a timber monopoly throughout Malabar and Travancore and practically annihilated more or less all private rights by assuming their non existence, (Ribbentrop, 1900). Similarly, Rao et al (1961) share the view that the need for conservation occurred only when the British realized that the forests in India were not inexhaustible as they were earlier thought to be. The rapidly increasing demand and problems in sustaining the supply coupled with reports indicating desiccation or drying of the land surface, prompted the Empire to realize the gravity of the situation. In the year 1855, Lord Dalhousie, Governor General of India,

appointed a German botanist Dietrich Brandis as superintendent for the Pegu teak forests, in Burma. Schlich (1922), again a German forester and author of the famous 'Manual of Forestry' for the Empire, terms it as the starting point of systematic forestry in India, which culminated in the establishment of the Indian Imperial Forest Department in the year 1864, Forest Act of 1865 and subsequent comprehensive Act of 1878. His popular 4th edition of the Manual of Forestry published in 1922 reports an area of 100,000 square miles as reserved in India and a 10 times increase in the net revenue from the forests from what it was in 1864. It is interesting to note that the definition of the forests adopted for the Forest Act for India merely stated "the Government may declare certain lands to be forest and as such be subject to the provisions of the Indian Forest Law" (Schlich, 1922)

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Commercialization of Indian forests in the name of conservation:

The Forest Department grew in strength and at the close of 1897- 98 about 93,068 miles of boundaries, out of 141,204 miles requiring artificial demarcation were completed. The area covered by the forest department was so vast that the expenditure also increased multifold. Hence it was decided to constitute

a separate agency for forest surveys and thus the Forest Survey Branch was created on 17th October, 1872, by the government of India Resolution No. 19, under immediate control of the Inspector General of Forests. Captain F. Bailey R E was entrusted with the organization of the Forest Survey Branch and was appointed Superintendent of Forest Surveys and Working Plans, (Ribbentrop, 1900). Soon after World War I, an Imperial Forestry Conference was organized in 1919, to which delegates from all parts of the empire were invited. It is interesting to note the gross statistics of the Forests under the British Empire in the year 1919.

Table 1.1: Area of the Forest under British Empire (1919)

Sr. No	Category	Area in Sq. Miles	% of the total area
1	Forest Marketable	685,130	8
2	Forest unmarketable or inaccessible	1,112,030	12
3	Forest un classed	40,000	-
4	Forest Total Area	1,837,160	20
5	Agriculture Land	1,570,030	17
6	Other Land	5,753,030*	63
7	Grand total of the area dealt with	9,160,220	100

Source : *Schlich (1922), 'Manual of Forestry'

As Per Schlich (1922), the 5 ¾ million square miles of 'Other Land' may be found, on further examination, to contain considerable additions to the now known forest areas

Of the total forest area of 1,837,160 square miles in the British Empire, 1,387,020 square miles or 76 percent of the total forest were classed as State Forests. The lowest percentage of forest under the British Empire was in the United Kingdom with 2.5 percent and the highest in India with 75 percent.

In his 'Manual of Forestry' Schlich (1922) also provides statistics related to timber and forest produce consumption in Europe. Before World War I, the value of timber used in Europe was more than 200,000,000 Pounds annually and by 1922 it increased to more than double. Though Schlich intended to show the

relative importance of the forests from the Empire's perspective by providing values of the timber and forest produce imported to the United Kingdom in 1913, just before the World War I, the figures in the table below are evidence of the outflow of forest resources from India and the rhetoric of conservation and scientific forestry generated by the colonial academics. Further, these figures represent only the outflow of resources; the consumption of forests within India by British needs further research.

Table 1.2: Import of Forest Produce into the United Kingdom in 1913

TIMBER	VALUE IN POUNDS
Unmanufactured	33,789,000
Manufactured	3,583,000
Wood Pulp	4,618,000
TOTAL WOOD	41,990,000
OTHER FOREST PRODUCE	
Caoutchouc	14,000,000
Gutta-precha	500,000
Cork	1,075,000
Dye -stuff	600,000
Mirobolans	1,500,000
Bark for tanning	253,000
Gums of various kinds	1,900,000
Oil of Turpentine	900,000
Rosin	800,000
Galls	80,000
Pitch and tar	140,000
Vegetable Fiber	800,000
Oils and fats of various kinds	4,900,000
Valonia	165,000
Total other Produce	27,613,000
GRAND TOTAL OF ALL PRODUCE	69,603,000

Source : Schlich (1922) 'Manual of Forestry'

Although deforestation was actually the result of British exploitation, it was primitive tribal cultivation that was identified as the main culprit. People living in the forests were depicted as agents of the degradation and exploitation of forests, and this provided an argument for colonial officials to justify state control and intervention.

Cleghorn (1861) provides some authentic statistics on the requirement of timber for the promotion of railways. He estimated that each mile of railway track required 1760 sleepers, measuring three cubic feet of wood each and with an average life span of eight years. In addition to this, the maintenance of a railway track, according to his estimation, required at least 220 sleepers per mile or 22,000 sleepers per hundred miles annually. After 1855, the railway lines steadily expanded. By 1880, the total length of railway tracks in South India was 1521 miles and by 1929 the rail network in the whole of India extended to 41,000 km. It is easy to make an inference as to the change of the forest profile as the railways expanded its network in united India, including Pakistan and Bangladesh. The Railway not only required timber for its track but even for its fuel. Besides it transported huge quantities of timber and minerals to the sea ports. Valuable timber species like teak, pine and deodar were promoted at the cost of mixed forests. The use value of newly introduced tree species were in contrast with the sustenance needs of the local population. Gadgil and Guha, (2000), consider this as an ecological, economic and political watershed in Indian forest history.

Forest for Profits:

While the rural Indian population was devastated by the newly imposed land and forest management regime, the account books of the Forest Department of India started showing profits from day one of its inception. Smythies (1925), in his book 'India's Forest Wealth' reports that in 1864-69 the total revenue from forests was 3.7 million rupees and that profits amounted to 1.2 million rupees. This increased to 37.5 million as revenue and 16 million rupees as profit in the year 1914-1919, showing a tenfold increase (15

million equivalents to 1 million pounds in 1925). This is separate from the estimated figure of £1,000,000 which Smythies quotes as the values of the rights and concessions extended to the villagers every year from His Majesty's forests in British India.

It is interesting to be acquainted with the introductory note to Smythies's book 'India's Forest Wealth', 1925, by P. H. Clutterbuck, the then Inspector General of Forests in India. It opens with a straightforward trader's calculation. Based on the average revenues of 2 annas per acre from the 160 million acres of forest of India and Burma, Clutterbuck highlights the revenue earnings of Rs. 15 per acres/annum from the best forests favorably suited for markets and further states that 'if the average net revenue could be raised to Rs. 3 per acre per annum the total net revenue would amount to 48 crores of rupees, or 32 million pounds sterling. This is not too high an ideal to aim at.' Colonialism's most tangible outcome is reflected in its global control of resources. The average land of 24 acres available to each European at the time of Columbus's voyage soon increased to 120 acres per European. The phenomenon of large scale settlements, the world wide control over mineral, plant and animal resources and rapid industrial growth were complementary to each other. The political hegemony turned the self sustained non European economies into its captive markets by imposing taxes on indigenous goods. Gadgil and Guha's (2000), expression is rather poetic on this issue; 'The British who conquered and unified India were at that time the world's premier omnivores, drawing resources of the entire biosphere to their tiny island kingdom. The men presiding over the British Empire perched on chairs of Burma teak, at tables of African mahogany, consuming Australian beef washed down by French and Italian wines. Their women were decked in Canadian fur and clothes of Egyptian cotton, dyed with Indian indigo, glittering diamonds from South Africa and gold from Peru'.

Most of the land in the north and east was handed over to feudal landlords with peasantry reduced to the status of tenants and sharecroppers. Dharampal (2000) found that for long periods in the late 18th and

the 19th centuries, the tax on land in many areas exceeded the total agricultural production of the very fertile land. This was particularly so in the areas of the Madras Presidency. As a result one third of the most fertile land went out of cultivation. Dharampal quotes a letter of 1804 from the Governor of the Madras Presidency to the President of the Board of Commissioners of the East India Company mentioning the alarming situation of agriculture -

"We have paid a great deal of attention to the revenue management in this country...the general tenor of my opinion is, that we have rode the country too hard, and the consequence is, that it is in a state of the most lamentable poverty. Great oppression is I fear exercised too generally in the collection of the Revenues."

It needs to be highlighted that the British Raj was operated by remarkably few people. There were only 31,000 British in India in 1805 (22,000 of whom were in the army and 2,000 in civil government). In 1931, there were 168,000 (60,000 in the army and police, 4000 in civil government and 60,000 employed in the private sector). They were never more than 0.05 per cent of the population - a much thinner layer than the Muslim rulers had been, (Maddison, 2003).

The question to ponder here is how the British Empire managed to rule and siphon off resources on such a vast scale of economics, geography and diversity. For Gadgil and Guha, (2000), the answer of this puzzle lies in the caste based structure of the Hindu community. It was representatives of the Indian omnivores of the pre-colonial times who assisted in the consolidation of the new system. During the colonial rule the upper strata of the Indian society helped to serve the British objective of appropriating the surplus just as they had earlier collaborated with the any Indian chieftaincies. The task of collecting and transmitting land tax was assumed principally by the warrior and priestly castes who became owners of large tracts of land. The traders became partners of the British while the priestly castes came to man the lower echelons of the bureaucracy that ran the state apparatus.

Thus a hitherto unknown class of people entered the world of tribal and other forest dependent communities and peasantry. The Zamindars, Thekedars, traders and money lenders were brought into the rural and tribal areas to exploit their resources. The tribals responded to their exploitation and oppression in the form of revolts and movements. They identified their enemies in the outsiders (dikus), landlords, money lenders, thekedars and government officials. There were a series of small uprisings or 'fituris' in the different parts of the country. The anger of the tribals was directed both against the British as well as the Dikus. These area specific risings were witnessed in all parts of India. The tribals of Tamar revolted over seven times between 1789 and 1832. The first Rampa Rebellion of 1879 ignited when toddy tapping was made illegal. Those were turbulent periods with tightening of the noose on rural and tribal India, loss of livelihoods taking place on an unprecedented scale, great famines and conversion of Indians as human cargo happening under the guise of indentured labor system, in the background of the Abolition of the Slave Trade Act of the Empire in 1810.

More than thirty million famine related deaths occurred in British India between 1870 and 1910. These deaths occurred at a time when India was experiencing a rapid expansion of agriculture at the cost of the forests. Satya, (2007), provides evidence from the six districts in Central India collectively known as Berar, where the cultivated acreage increased from 45.7 percent to 71.3 percent between 1869-70 and 1902-03 while the standard of living declined with an almost matching pace. One of the inferences which could be justifiably proposed will directly link the taking over of forests as the main cause for the reported decline in the living standards in Berar, culminating in famine and eventual deaths.

The Indian Famine Commission Report concluded that the calamity was caused by natural phenomena with recommendations on fruitfully utilizing the cheap famine labour in modernizing projects such as the railways, road construction, repair of tanks, stone and masonry works. Satya, (2007), however, argues that the famines were caused not so much by the failure of

rains but by artificial price inflations driven by the colonial policies and export trade. 'In an oppressive situation of colonial subjection and imperial domination over forests, grazing lands, and agriculture, the society remained socially and economically involuted. But most significantly it got exposed to droughts and famines that mercilessly decimated millions in the late 19th century.'

From the perspectives of political ecology, Davis (2000) interprets it as a combined impact of the simultaneous restructuring of households and village linkages to regional production systems and world commodity markets that magnified the vulnerability of agriculture to extreme climate events after 1870. In his compelling book titled 'Late Victorian Holocausts', he states that 'the great famines are the missing pages-the absent defining moments, if you prefer - in virtually every overview of the Victorian era. Yet there are compelling even urgent reasons for revisiting this secret history. What seemed from a metropolitan perspective the 19th century's final blaze of imperial glory was, from an Asia or African viewpoint, only the hideous light of a giant funeral pyre.'

Based on her extensive archival research, Currie, (1991) establishes that during the famine years there was food available even at the worst times and in the worst places. Distress resulted from a 'famine of wages' not a famine of grain. The refusal of the Government to intervene in the market despite the accumulated inefficacy of market forces in periods of famine, led to the widespread mortality of both people and animals.

Wildlife of India during the British rule:

The decimation of wildlife in India during the British rule is another chapter in the sordid tale of vandalism unleashed by the euphoric East India Company and their accompanying traders and planters. The emulation of the sports hunting practices of Indian Kings on a grand scale initiated a chase for records in hunting. This gained further momentum with the development of the large bore rifle by Baker in 1840 and the express rifle by Forsyth, (Rawat, 1991).

During the Forest Centenary celebrations in 1961, the Forest Research Institute of India published a voluminous report titled “100 Years of Indian Forestry 1861-1961”. The then Inspector General of Forests in India, V. S. Rao, who was amongst the senior most editors and contributor of this report narrates in detail the story of the destruction of Indian Wildlife under the British empire -

“In Kathiawar, a cavalry officer was reported to have shot 80 lions, while on one occasion 14 lions were shot in Gir forests within 10 days. The situation became so alarming that on a report in 1913 from Mr. Willinger, the then District Forest Officer, Junagadh State, that there were only 608 lions left in an area of 1893 Sq. Km, Mr. Rendall, the Administrator imposed a total ban on lion shooting. In Central India, a particular British 'sportsman' shot over 500 tigers during his 21 years' stay in the country. Again from 1850 to 1854, a railway official killed 100 tigers in Rajputana. In 1862, another 'sportsman' bagged 10 tigers in 5 days on the Tapti river border. It was not long before this urge to shoot and kill wildlife spread to the ruling princes and the leisured gentry in India. One Maharaja is known to have shot 616 tigers, while another holds the record with over 1100 tigers. In Kashmir, a single 'sportsman' accounted for 58,613 wild fowls over a period of 12 years, averaging 4500 birds per annum. In Bikaner, the record for the shooting of Imperial Sand grouse at the Gajner lake was 1100 birds with 35 guns in 2 days.” (Rao et. al. 1961)

Rawat (1991) quotes the following data on the export of Lizard skin from Bengal areas and its deadly impact on human mortality. The Lizard feeds on snake eggs and is a natural agent for controlling the snake population. This was observed and reported by a British Caption in 1870. The lizards were killed on large scale as their skins fetched a good price, as a result of which the population of snakes increased leading to increased incidence of deaths by snake bite. The legislation for the protection of immature Lizards and a close season for mature lizards came only in 1931, by which time it was extremely late.

Table-1.3: Value of Lizard skin exported from Bengal ports

Year	Amount in lakhs
1926-27-	23.50
1927-28	33.54
1928-29-	24.28 l

Source: Rawat (1991) 'Indian Wildlife through the ages'”

Conclusion

The Drain of Wealth theory is a set of perspectives that developed in the latter half of the nineteenth century and reflected the adverse impact of economic colonization of India by British imperialism. This concept was systematically initiated by Dadabhai Naoroji in 1867 and further analyzed and developed by others, most notably by M.G. Ranade, R.C. Dutt and William Digby. This formed an issue of much excitement among the political workers and the different streams of 'anti imperial movements' in India would consider this as the basis and rationale on which they needed to sever their political relations with Britain, (Mukherjee, 2004). As Davis (2000) notes, “*If the history of British rule in India were to be condensed into a single fact, it is this; there was no increase in India's per capita income from 1757-1947.*” All political shades in India generally accept the drain of wealth thesis and there is ample evidence to support this. In order to ensure their control over the forest wealth the British created policies due to which local communities who lived in these forests were often moved out by force, or their access to the resources curtailed in the belief that it was the best for the protection of the forest and wild creatures. The commercial exploitation of the forests introduced by the colonial government did not consider the interrelation between the forestry, agriculture, cattle, folk culture, socio-economic needs and life of the communities. The aftermath of the British Forest Policies is visible even today in India.

References:

- Alvares, C., (2000), 'Making History', preface to Collected Writings, Volume I Indian Science and Technology in the Eighteenth Century by Dharampal, Other India Press, Mapusa, Goa pp 1-15
- Cleghorn, H. (1861), *The Forest and Gardens of South India*, W.H. Allens and Co. London - pp33
- Currie, K. (1991), *British Colonial Policy and Famines: Some Effects and Implications of 'Free Trade' in the Bombay, Bengal and Madras Presidencies, 1860-1900*, South Asia, Vol. XIV, No. 2, pp 23-56
- Davis, M. (2000), *Late Victorian Holocausts: El Nino Famines and the making of the Third World*, Verso London, pp 07,311
- Dharampal (2000), *Collected Writings, Vol. V Essays on Tradition, Recovery and Freedom*, Other India Press, Mapusa,
- Gadgil, M. and Guha R. (2000), 'The Fissure Land- An Ecological History of India'. In Gadgil M. and Guha R. (Eds.) *The Use and Abuse of Nature*, Oxford University Press, New Delhi, pp 86, 218
- Gadgil, M. and Guha, R. (2000), 'Ecology and Equity', In Gadgil M. and Guha R. (Ed.) *The Use and Abuse of Nature*, Oxford University Press, New Delhi, pp 9-13
- Maddison, A. (2003), *The World Economy: A Millennial Perspective, Volume 1, Development Centre Of the Organisation For Economic Co-Operation And Development*, OECD, pp 108-111
- Mukherjee, A. (2004), *Some Thoughts on the Drain of Wealth: Colonial India and Imperial Britain*, World History Bulletin (WHB) Spring 2004, Vol. XX No1, 43-50.
- Panikkar, K. M. (1993), *Asia and Western Dominance: A Survey of the Vasco Da Gama Epoch of Asian History 1498-1945*, The Other Press, Kuala Lumpur, pp 78,79,111
- Rao, V.S., Sagreiya, K. P., Bhadrans, C. A. R. and Venkatramany, P. (1961), *100 Years of Indian Forestry 1861-1961*, Vol. II, FRI, Dehradun, 1-2, 121-122
- Rawat, A. S. (1989), *Commentary on 'Forestry in British India (1900 1st Edition) Reprint*, Indus Publication, New Delhi, pp 1-24
- Rawat, A. S. (1991), 'Indian Wildlife through the Ages', In Rawat A. S. (Ed.), *History of Forestry in India*, Indus Publishing Company, New Delhi, pp 130-150.
- Ribbentrop, B. (1900), *Forestry in British India*, office of the superintendent of Government Printing, Calcutta, 1989, Indus Publishing Company, New Delhi , pp 64-65, 127
- Satya, L. D. (2007), *The British Empire, Ecology and Famines in Late 19th Century Central India*, Paper presented at the 36th Annual Conference on South Asia, Center for South Asia, University of Wisconsin-Madison, October 12 - 14, 2007, Madison,04, pp 17
- Schlich, W. (1922), *Manual of Forestry, vol. 1, 4th edition, Forest Policy in the British Empire*, Bradbury, London, pp 1,7,8, 46-48
- Smythies, E. A. (1925), *India's Forest Wealth, India of Today*, Vol. VI, OUP, Madras, pp 08.

Factors Affecting Inclusion of Girl Students Afflicted by Leprosy in Regular Schools in Mumbai

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Abstract

This paper offers an insight into the academic behaviour of leprosy affected girl students who have now been admitted in regular schools. It chooses to study the effects of disability caused due to leprosy coupled with other factors like age, gender, family, poverty and upbringing on the student's capacity and willingness to study and learn within the structure of a school practising inclusive education. The researcher has employed the case- study method and multiple case study design to conduct an in- depth investigation of seven such individual cases. She has attained real and lived experiences of these students by spending considerable time at the site and holding informal conversations with them. Results suggest that the above mentioned factors play a larger role in the inclusion of these students in a regular school irrespective of the special provisions and modifications that the school might have made for their comfortable inclusion. It creates scope to nullify labels such as able and disabled by asking for a shift of focus from the term 'disability' to 'differences'; differences that emerge out of abilities and inabilities and not a disability.

Keywords: *inclusive education, leprosy, disability, girl students, regular schools*

1 Introduction

“The important thing is not so much that every child should be taught, as that every child should be given the wish to learn” - John Lubbock

The concept of inclusive education as put forth by the United Nations Educational, Scientific, Cultural Organisation (UNESCO) is based on the right of all learners to quality education that meets their basic learning needs. It seeks to develop full potential of every individual and end all forms of discrimination. It therefore acknowledges the diversity present among students and reaches out to the un-served and under-served children.

1.1 Overview

There are many factors like poverty, gender difference, age, physical or mental learning disability or specific preferences of the students which may not be catered to by the system that can be held responsible for the presence of the un-served and the under-served children in our society. This paper chooses to study the effects of the factor of physical disability caused due to leprosy on girl students' capacity and willingness to study and learn within the Indian society and Education system. It focuses on

factors which affect their inclusion in school from outside the structure of school.

Inclusion in the context of education is a practice in which students with special needs share and occupy the same space as that of the so called non-disabled students. It should be noted here that inclusive education differs from the previously held notions of 'integration' and 'mainstreaming' of the children with learning disabilities which mainly depended on the learner's capacity to adapt to the provided educational environment. In contrast to this, inclusion is about every child's right to education from any school irrespective of its varied qualities and differences from other students. The proponents of this system have attempted to maximise the participation of all learners in the community schools of their choice, make learning more meaningful and relevant for all, particularly for those learners who are most vulnerable to exclusionary pressures. They have proposed measures to rethink and restructure policies, curricula, educational practices at schools and the learning environment.

Inclusive education is a process of removing barriers and enabling all students, including previously excluded groups, to learn and participate effectively

within the general school systems. It started with the special school concept wherein imparting special education was separately incorporated as a part of the education system. At present, with an integrated approach, an attempt has been made to include special education into general education.

Thus, inclusive education extends itself to make special education an integral part of the general education system, wherein

- All students have the capacity and the right to learn and benefit from education
- Individual differences between students are a source of richness and diversity, not a problem
- Schools adapt to the needs of students, rather than students adapting to the needs of the schools
- The diversity of needs and pace of development of students are addressed through a wide and flexible range of responses (so long as those responses do not include removing a student with a disability from a regular classroom)

However, the implementation of this practice varies from school to school.

1.2 Need for the study

Inclusive education as a phenomenon has been dealt with in a number of papers and has also been taken up by the Indian Government in collaboration with varied NGOs. The researcher has studied this progressive idea and concept in education. However the researcher felt that the study is predominantly theoretical and that there is a need to study this concept more comprehensively as there are factors other than the mere concrete structure of a school which play a major role in the implementation of inclusive education. The family, community, upbringing, financial status, concept of self, peer group, teacher's behaviour etc. are only some of these factors.

1.3 Operational Definition

i) Inclusive Education: An educational system which does not count on segregation or exclusion but moulds itself to individual differences.

ii) Regular Schools: An institution labelled as a

formal premises for learning on the basis of customary statements of rules believed to be universal.

iii) Leprosy affected students: School going children affected by a bacterial infection called leprosy wherein usually the limbs lose sensation.

2. Researcher's Musings

*A relation of you and me
part me part you,
Kites up in the sky...when strings crossed
Pathways designed*

*How could they call it a destination,
A designation?*

*Language, mere
Connectionism beyond closure, (re)view.
Spirally we all
stand
We are each other or you and me.*

2.1 Researcher's motivation for the study

A point of vagueness is the convenience with which the word 'inclusion' is used without drawing on its precision. Many deliberators have claimed inclusion in education to cater to the differently abled students. It also ensures that here the school shall adapt itself to individual differences rather than work toward the differences being homogenised. But the points of the researcher's confusion are:

- i) Schools are multi-dimensional; have different and varied resources; which school should change what and how?
- ii) If we are not looking at homogenizing individual differences, then are we looking at homogenising schools?
- iii) Even after attaining some uniformity in addressing student's needs, how does one deal with differences of teachers and staff?
- iv) What all is considered synonymous and within the borders of the phrase 'differently abled' and the word 'disabled'? (Does it include the disabled because of a disease also?)
- v) How do textual references to certain diseases affect the learning of disabled students?

vi) To what extent do family, community and peer group affect the learning of the disabled?

2.2 Objectives of the Study

- i) To understand the educational experiences of leprosy affected girl students attending regular schools
- ii) To study factors which affect the inclusion of the leprosy affected girls in regular schools

2.3 Scope of the Study

- i) The study includes leprosy affected girl students aged between 4 and 15 years.
- ii) The study includes leprosy affected girl students residing at Vimla Nursing Home in Andheri (West), Mumbai.
- iii) The study includes State Secondary Certificate (SSC) Board Schools only.

2.4 Limitations of the Study

This case study involves only a few individuals and therefore may not be representative of a group or population. The study relies on descriptive information provided by different people. This leaves room for important details that may be left out. Also much of the information is retrospective data i.e. recollections of past events, and is therefore subject to the problems inherent to memory and perception. Conclusions merely on the basis of cause and effect cannot be drawn from this study as it has not been carried out in a controlled setting. Behaviour cannot be explained completely. The complexity examined is difficult to represent simply. The case is unique and therefore the findings may not have a predictive value.

3. Review of Literature

3.1 Researches on Inclusive education

The DSE (VI) Manual, in an essay titled 'Integrated and Inclusive Education' by Dr. Premavathy Vijayan and Dr. T. Geetha, states that inclusive education is a means to create effective classrooms where the educational needs of all children are met. Hence, Inclusive education is equal to schools for all. The emergence of this concept is explained as an evolutionary process in this Manual, from special school to inclusion:

- In the special school system, special education is

'APART' from general education but recognised in the education system;

- In the integrated approach to education, special education becomes 'A PART' of the general education system
- Inclusive education extends to include special education as an 'INTEGRAL PART' of the whole education system

According to this Manual, a teacher in a regular school until now was trained to handle the average, academically talented as well as slow learners. The difference now would be the inclusion of the sensorial impaired i.e. the hearing and visually impaired into the general stream of education. The teacher shall have the advantage of the similarities in the cognitive abilities of both the disabled and the non-disabled, through which he/she shall hold the class together. Inclusive education makes provision for the disabled to cope with their disabilities by adapting / modifying the environment to accommodate the disability as a mere difference.

It lays down some necessary factors for the success of inclusive education. First and foremost is the need to orient the general classroom teachers with the educational needs of all categories of disabled children. It becomes important, as stated by National Council of Teacher Education (NCTE) to include material on special needs children in the curriculum of the pre-service teacher training courses. The instructional strategies shall be need-based i.e. situational and thus, community and parental involvement is crucial.

The presence of a second, specialist teacher is important and this teacher shall function as an integral part of the school. However, the general classroom teachers should be well informed and equipped to address the special needs of the disabled students in a way that shall minimize the need of assistance of the specialist teacher. The explication by Stainback which calls for a combination of the general and special educational personnel, the curriculum and the instructional procedures to provide wholesome educational experiences, is an apt representation of the idea in the essay.

Another essay in the Manual titled, 'Promotion as Conducive Social Environment for Integration / Inclusion' suggests the creation of a conducive environment at school by holding counselling sessions for parents of the disabled. Hence there is need for continuous interaction between parents and teachers through Parent-Teacher Association Deliberations.

The essay also gives an explanation of the relationship between the concepts of Acceptance, Rejection and Learning which play a major role in the educational experiences of all children and the exercise of which is solely in possession of the class teacher. Johnson and Johnson have been cited here in the essay. They have stated that the teacher can structure either positive goal interdependence by using the dynamics of co-operative learning or negative goal interdependence by exercising the dynamics of competitive peer tutoring or if none of these, then no goal interdependence by way of catering to the individual efforts of the students. One of the most important points in this essay is the stress on child-to-child tutoring or peer-group acceptance and tutoring.

The Manual manages to answer some important questions regarding the execution of inclusive education but it restricts itself to the inclusion of the hearing and visually impaired students only. It overlooks certain physical disabilities which may have been caused due to other factors which might affect their cognitive abilities and inclusion in the general education system.

Another area of ambiguity is the necessity of training the general classroom teacher to an extent that he / she may need minimal assistance of the special teacher. This might result in a distortion of specialisation in special needs education. The mere addition of a unit on special needs education in the general teacher training curriculum cannot be pulled up as a likely solution.

New Frontiers in Education, Vol. 43, July - Sept. 2010, an educational Journal, discusses the concept of education on the basis of enrolment policies and the

profile of those admitted to schools and colleges. It states that only a particular disability is not the criterion for exclusion of a certain number of students but that class and ethnicity are important influencing factors. Here the disability accounted is in the context of monetary, racial and cultural impairment.

In a similar manner, an essay by Mike Adams and Sarah Holland titled 'Improving Access to Higher Education for the Disabled' identifies varied hierarchical barriers which restrict the educational strive for the disabled viz. structural, organizational, behavioural and attitudinal. The essay includes an anecdotal feedback by the National Disability Team (NDT), 2004. One can infer from the feedback that usually the disabled learners focus on short term goals which are outcomes of their impairment. However directly or indirectly, these goals and aspirations are highly influenced by their social environment including school, family and community. The relationship and the extent of the influence of the three decide the educational priority of the child.

Transition in education has been suggested as one of the desirable and feasible solutions. However, the essay clarifies that one faces transitional difficulties even when one is required to use new software packages and information technology or any other material provision for integration. This problem can be dealt with in a better way only when these provisions are linked and chained from the school level to the college to higher education. These shall be directed towards achieving the academic and social independence of the child. It has been argued further in the essay that the disabled or differently abled, regardless of whether they attend regular or special school face isolation in terms of peer groups and general social interaction. Hence integration might not always help but might also hamper their growth.

Todd Fernie and Marcus Henning further this argument in their essay, 'From a Disabling World to a New Vision' with particular focus on stereotypes which discourse the concept of disability. It is principled on the fact that human beings respond to the way they are treated. According to them, "disablism" is when

stereotypes gradually turn into discriminatory behaviour because of societal reaction and labelling. This locks the disabled into a spiral of self devaluation. They state that it is important to place the disabled more than the non-disabled in socially valued positions and situations where they have an opportunity of responsibility and positive management like leaders, initiators, owners, volunteers and presenters in close relation and association to their friends, parents, siblings, neighbours and teachers.

The essay further suggests that in an educational set-up, the disabled students should be made aware of their disability and be given space to discuss and deliberate on the same. There should be a multi-level partnership between the disabled students and the departments / offices which are concerned with developing straightforward strategies, assignments, course objectives and other requirements. This filters out the possibilities of sympathy, pity and a simplistic view as also of the over 'medicalizing' of disability.

Judith Waterfield, Bob West and Melaine Parker present an exploration of the subject in their essay 'Supporting Inclusive practice: Developing an Assessment Toolkit' which is largely based on the feedback received from the concerned disabled students. They have designed an action research approach to combine research and practice in order to improve practice.

They conducted three cycles of research using both quantitative and qualitative tools for each cycle. The samples of the first cycle were composed of only disabled students, the second was a comparative study of disabled and non-disabled students and the last included feedback and opinionated inputs from educational faculty and staff. The questionnaires and interviews were based on and related to a special examination and assessment of the provisions made for disabled students in educational institutions. It was observed that special arrangements like increase in time for submission / completion of papers or projects did not make much of a difference in the performance of the students as they were disturbed and distracted by other factors like the weather conditions on that day,

noise in and outside the classroom etc. which would have distracted any other student in the class. It was also found that not only exams but any time constrained situation made the disabled students feel uneasy.

At the next level of the research, the mode of assignments and assessments were modified to include viva and portfolio submission as a part of examinations for both the disabled and the non-disabled students. The feedback from both these categories of students showed the way to allow alternative modes of assessment which would be suitable for diverse learning and student population regardless of any disability. Assessment and examinations should thus focus more on assessing the student's abilities rather than assessing the effects of their disabilities.

This study not being an end in itself, it talks about the gaps and the obligations which come with responsibilities at institutional, cultural and legislative levels.

The essay ends with a suggestion of a balance of various modes of assessment like Portfolio Submission, Coursework Discussion, Oral Examinations, Multiple Choice Questions and Continuous Assessment of students throughout the academic year. These shall be arranged within formative and summative schedules. This might turn out to be beneficial for all learners and help overcome exclusion.

3.2 Research on the Leprosy Affected

Huib Cornielje, Angelika Piefer, Chapal Khasnabis, Maya Thomas and Johan Velena in their article titled 'Inclusion of persons affected by leprosy in Community Based Rehabilitation (CBR)' in the Leprosy Review, under the Health Publications which is a part of the BNET Business Library, called for the inclusion of the leprosy affected people as a part of the Disabled Peoples' Organisation (DPO). It states that the leprosy affected should be included amongst the disabled so that their impairment is identified and needs addressed accordingly. The article

recommends a twin-track approach to CBR wherein on the one hand, people affected by all kinds of disabilities receive mainstream services and are involved in mainstream development, while on the other hand special programmes are developed for people with particular types of disability where special needs are identified.

Shishir Rao, an Intern at Indian Development Foundation (IDF) writes about Mrs. Uma Narayan in an article in a Quarterly Journal of the same institution (Oct-Dec., 2010) Mrs. Uma Narayan was a teacher at St. Thomas Academy, Goregaon. She decided to teach and provide educational support to children at Vimala Nursing Home, Versova, Andheri (West). Vimala Centre (a project of IDF) takes care of the leprosy and TB affected patients and handles their monetary and other survival needs. It is thus a home to the leprosy and TB affected children especially those coming from the lower strata of society.

Mrs. Uma has worked on identifying individual special needs of these children while teaching them at the centre. She has also identified the need to communicate in the mother tongue of these girls to make them comfortable with the idea of learning and help them overcome their inhibitions. Shishir Rao, by discussing Uma's contribution promoted individual contribution towards inclusion in education.

4. Research Design

4.1 Method of Study

The researcher has chosen the qualitative approach to study the selected area of research. She has employed the case study method, it being an appropriate method for an in-depth investigation of a single individual or group of individuals which ideally forms the basis of the research. Robert K. Yin, a scholar of the case study method has stated that one might use this method "to understand complex social phenomena...to focus on a 'case' and retain a holistic and real-world perspective". Here, there arises the need to employ this method to study the phenomena of inclusion in education.

The researcher has used a multiple case-study design: she has looked at every case individually but since she believes that every case is many-

dimensional takes into account an interdependence of elements and factors which are chained and not chunked. She has tried to understand the concept of inclusion in education from the perspectives of the girl students who were infected by leprosy in their past/near past and have now been fully treated and admitted in regular schools. To understand the social and psychological factors that affect and effect their inclusion there, the researcher has spent sufficient time at the site (Nursing Centre) with the girls and engaged the girls into an informal interview which was reciprocal, conversational and dialogic.

4.2 Method of Sampling

Purposive sampling seemed to be an apt way of sampling according to the researcher as she intended to include the subjective views of seven (07) leprosy affected girl students residing at Vimala Nursing Home only for the purpose of extending her knowledge and research. The Nursing Home is a private institution or an organisation that makes space for the treatment and accommodation of those who are not able or cannot afford to take care of themselves either because of financial or health conditions or aging.

This method of sampling enabled the researcher to collect large amounts of information on a day to day basis, store, reflect and rearrange the data collected. It has also helped her to make use of various techniques to do the same. Hence the research study and analysis was done in phases and over a time period and initiated with a purpose in mind but without a preconceived framework or notions.

The researcher however would refer to and address the interviewees (leprosy affected girl students) as her subjects rather than research samples or research participants as they had no prior knowledge of the research and the purpose of the researcher's presence on the site.

4.3 Tools for Collection of Data

An Observation schedule was created to understand the patterns of behaviour of the leprosy affected girl students at the Nursing Centre, which the researcher feels, affects their inclusion in school. It was used to gather information about the cognitive, affective and

the psycho motor abilities and practices of these girl students. It centred around the following:

- a) Noticing the presence of a new person
- b) Reacting to the presence of a new person (greeting, welcome, etc.)
- c) Responding to the instructions of the caretakers
- d) Reaction to the mention of certain concepts, ideas or things (family, friends etc.)
- e) Style of dressing/ wardrobe/ accessories
- f) Sharing of assets
- g) Participating in ongoing activities/ work (distributing plates, putting the younger girls off to sleep etc.)
- h) Participation having increased or decreased (over the period of the observation)
- i) Hesitating to ask for help when needed
- j) Helping others to carry out their daily chores
- k) Being comfortable in the company of a particular person at the Centre

An interview schedule was designed to know and understand the age, familial background, peer group and preferences in school and at the Centre which also helped confirm some of the non-participant observational data collected by the researcher. Both the schedules were based on the progression of dates and time of arrival of the researcher at the site. e.g. 29th July, 2015, 12:30 pm- Lunch Time

4.4 Data collection method/s

Data was collected over a period of two months. The researcher would visit the site not on a regular basis or at a fixed time but as and when it was convenient for her. However the visit would take place only when the children were active and involved in their daily chores - having lunch, getting ready for school, studying, washing utensils, cleaning their rooms, bathing, etc. This helped the researcher make the residents and the patients of the nursing home comfortable with her presence at the site and around them. With prior permission from the care-takers, the researcher had identified the leprosy affected girls amongst the other patients at the centre.

For a systematic understanding and decoding of the research subjects and an analysis of their personality, the researcher has decided to divide the process of data collection into phases.

In the first phase, it was decided to use non-participant observation centred on the mannerisms, demeanour and conduct research subjects amidst others at the Centre. The researcher focused on only certain aspects of their behaviour like whether they would actively participate in games and activities, whether they would prefer maintaining physical distance from people around them, whether they would willingly defend themselves physically or verbally, etc.

This offered the researcher a hypothetical basis of what could be expected from future interaction with them. However, the researcher would like to confess at this point that there is space for her bias and opinions to intervene in the coming dealings.

The researcher has made rough notes on ruled sheets of paper for the convenience of storage, arrangement and analysis at a later stage of the research. These notes have been mentioned as Non-participant observation notes (NO) throughout the research.

The second phase comprised of a blend of participant observation and an informal interview (dialogues) with the research subjects only. This helped the researcher get information about their lived and actual experiences from the research subjects themselves. It was collected in the form of jottings and points which were noted at random intervals and times, preferably away from the research subjects. The conversations were struck to know the age, family background, peer group at the Centre and in school, their views on learning and studying, ambitions and goals, their likes and dislikes with respect to academic subjects, their preferences to participate in sports and other extra-curricular activities in school, their conceptions of teachers in school and care-takers at the centre etc.

The researcher would be a part of some of their every day routine activities like having lunch together, reading school text-books, selecting clothes to be worn on a particular day and dressing up for school, hugging and shaking hands etc. A simultaneous participant observation at the centre would either prove their inhibitions, fears and views or would sometimes go against them.

The second phase notes have been mentioned as participant observation notes (PO) throughout the research.

Analysis of the Data

Analysis is an arrangement of the huge, collected data so as to separate and to sequence, to select the best course of action. This thus helps an orderly examination and evaluation of the whole matter through a thorough study of its constituent parts.

The data was collected in the form of notes, from the conversations and interaction with the subjects. For the convenience of analysis, the data was rearranged into a more systematic, tabular form. The tables have been based on the social factors which affect the inclusion of these leprosy affected girl students and which are being considered as important parts of the study viz. family, centre, school and idea of self.

The researcher has then attempted to draw out specific patterns of repetition and uniqueness from the general responses of the interviewed research subjects which would help the researcher bring forth certain aspects of inclusive education which might have been overlooked. The patterns laid down shall only be after a thorough consideration of the reactions of the other affecting and effecting factors influencing the educational inclusion of the research subjects in particular and the notion of inclusive education at large.

5 Case Summaries on the basis of NO (phase 01) and PO (phase 02)

i) Case One

She is a 10 year old girl who studies in the sixth standard. Her family resides at Virar, Mumbai and both the parents have a sound income. She has 3 siblings (sisters) at home and she is the youngest. All four girls go to school. She goes to a school near the Centre at Andheri with the other girls of the Centre. She was admitted at the Centre when she was in the third standard and was informed about it by the eldest sister. She is not severely affected by leprosy as it was treated at the Centre in its initial stages but has left a scar/ mark on her left arm. She is aware of having been

treated of leprosy and has been told that the teachers at school know about it but states confidently that the other students in school know nothing about it. She prefers wearing sleeveless tops and well matched clothes. She participates in all the activities including sports and extra-curricular activities at the centre and in school, is an active child, considers herself to be good looking, conducts herself well at the centre among the other kids. She seems to be well informed, confident, calm and secure about herself. Her family comes to meet her on the first Sunday of every month (as per the rules at the Centre). Her father, mother and siblings take turns to meet her. She has no complaints about her upbringing, familial background, family members and the girls and care takers at the centre.

ii) Case two

She is a 5 year old girl, goes to school and probably studies in the first standard. She was admitted at the Centre when she was an infant (as informed by the care takers). She has lost her left hand because of being infected by leprosy but is quite unaware of the effects and the reason for the loss. However, she knows that she is different from the others. She mingles with the other children at the centre, is quite active when studying with the others, playing and running around with the other children in the evenings. She likes participating in other daily chores like distributing lunch plates and cleaning the rooms. When asked about her experiences in school, she states that she doesn't like participating in sports and drawing competitions. She repeatedly prefers talking about a good, close friend whose brother had brought chocolates from America and which were shared with her. She doesn't remember anything about her family (the concept was discussed in the presence of other girls including her) though she understands the concept and idea of family.

iii) Case Three

An 8 year old girl studying in the second standard, admitted at the centre with her father and twin sister. Her mother is no more and her father, having been treated for a severe infection of leprosy, stays opposite her building at the Centre. She and her sister are allowed to meet their father in the evenings. She was

mildly infected by leprosy which was treated in its initial stage. There are remains of the disease in the form of small marks on her right palm which look like boils. She has the habit of keeping her right wrist closed. Her Sister has no health problems. She says that she has been admitted at the centre because her father lives there, hence seems unaware of being infected by leprosy. However she has full knowledge about her medicines but seems to have accepted it as a part of daily routine. She takes medicines with her sister who is also given a health tonic regularly. She speaks of her father having red, deep marks on his chest and strange looking fingers because of which he has been admitted at the Centre. She goes to school, runs around and is playful and mischievous. It is difficult to put her off to sleep in the afternoons. She mingles well with the girls. When asked about school, she says she loves going to school, participates in sports and other activities at school, and doesn't talk about any friends at school but states with great pride and happiness that her sister is in the same class as hers. Even at the Centre she prefers being with her sister. The subject of environmental science is the most difficult and disliked subject because the students have to write long answers for that paper.

iv) Case Four

A 4 year old kid, this small, smiling, playful girl at the KG level in school, loves to talk about her school friends. Her right hand was infected by leprosy at a young age of 2 years and she was then admitted at the centre. She has marks and scars on her hand but is not conscious about it. She loves sharing her food with the others at the centre, mingles well with all but was highly distracted while conversing with the researcher. She likes drawing human figures and accessorizing with bangles, bracelets and earrings. Her hometown is Vasai. She has three siblings and is the second daughter. She seems to be quite happy and content with her life at the Centre. Her father comes to meet her on every first Sunday of the month and she is allowed to go home during her vacations from school. When asked about her reason of being at the centre she takes time to respond and then says it is like a picnic, a place for rejoicing, away from home and adds that all her other siblings are also away from home (the

eldest is at Dahanu at a relative's place and the other two younger ones reside at a 'Balwadi'- as she has been told by her father). She has no complaints against family members, saying that she meets everyone when she visits her home at regular intervals.

v) Case Five

She is a 14 year old girl studying in the fourth standard. She is quiet, non-talkative and passive but a disciplined worker who doesn't question her role at the Centre but does all she is told to do from taking care of the younger girls to cleaning the rooms. She gets dressed for school, packs her bag, studies in time and is responsible for all her work. Two fingers of her right hand were infected by leprosy. They were operated upon two years ago after unsuccessful treatment by way of medication. Now she is fully cured and has some post-operative marks on the fingers that were operated. She says that initially, post operatively, she had problems using her right hand and was told by the care takers at the Centre to get accustomed to using her left hand for daily chores.

However, to the researcher, she very confidently stated that she forced herself to make use of her right hand and now uses both her hands like any other child. The researcher observed her making use of her right hand while having food but it seemed like she was conscious about being subjected to the researcher's observation. She was hesitant to touch the researcher with her right hand while being hugged and when her hands were held by the researcher while playing games with her. When asked about how she was diagnosed with the disease, she said that one of her cousins was admitted at a hospital at Dahanu (where her family resides) for the same reason. She herself was told, while being admitted at the same hospital, that she was infected by leprosy like her cousin and that she would have to spend a few days there. After which someone at the hospital offered to her parents to take her to a Nursing Centre for treatment. She has 5 sisters and 1 brother, she being the 3rd child among them. No sibling has ever come to meet her at the Centre but her father comes occasionally while her mother is a frequent visitor. She goes to school

regularly, but is older than the others in class. She does not like talking about her experiences in school, cries and becomes nervous when asked to speak of them. After a few visits and conversations she told the researcher that she felt that the others in school talk about her 'problem' behind her back and that boys don't talk to her. She also mentioned the name of someone at the Centre who teases her for having ugly hands and that the care takers were not aware of it but that she was unwilling to complain or tell anybody about it. She doesn't like participating in sports and other outdoor activities at the Centre and in school, is reserved and mostly keeps to herself.

vi) Case Six

She is 15 years old and studies in the ninth standard. She comes from Sholapur. Her parents have passed away and she has three siblings. She is the second child among four and the eldest sister got married in the presence of her parents. Nobody comes to meet her at the Centre and she doesn't seem comfortable talking about the married sister but tends to get angry and irritated when asked about her. Her left thigh was infected by leprosy and though it does not show on the outside, she limps and is quite conscious about having been infected at a particular point in time. She is well informed and aware of the details and effects of leprosy in general. She seems to be a responsible sister and is aware of her familial role. When asked about the whereabouts of her siblings she said that she doesn't know who is where but is told that they are all in Mumbai.

The girl is emotionally attached to her family, has a fixed aim of working, earning and getting back to her hometown with her siblings. She says that she goes to school only to be able to get a job that pays her well. Though there is no mention of any friend in school, she has a few selected friends at the Centre. Otherwise she is detached at the Centre, doesn't take any responsibility other than her daily jobs at the Centre which are obligatory for her like taking care of the younger girls and cleaning her room. She knows that the school authorities know about the history of her illness and that she doesn't like this fact. She is aware

of the provisions made for her in school and at the Centre as a special case. Has no particular academic subject preferences and is not a participative student.

vii) Case Seven

She is the quietest and the most reserved girl at the Centre. The researcher had to visit the Centre several times only to build a rapport and strike a conversation with her. She seems to be an adolescent about 12 years of age but does not wish to disclose her age and details of her academic status. Fully knowledgeable of her having been severely infected by leprosy (limbs) for a period of five years with repeated unsuccessful treatment, she has recently been treated off it after which she was allowed to go to school. She therefore knows that she is older than her classmates. The care takers informed the researcher that she does not perform well academically but is highly interested in sports. The girl told the researcher that she likes playing football with the boys in school but does not like participating in sports competitions. She was also seen to be participative in outdoor games which involved running at the Centre. Though she played with the other girls at the Centre she would not talk to most of them. There was no mention of friends in school. Her family resides at Virar. The father comes to see her at the Centre on every first Sunday of the month but she says that she doesn't look forward to meeting him. The mother has not visited her ever since the time of her admission at the Centre.

5.1 Table Interpretation

Interpretation of Table 1

- i) Cases 01, 02, 03 and 04 are aged between 4-10, irrespective of whether they were mildly or severely infected/ affected by leprosy; they like going to school
 - They relate to school as a place of socialization
 - Each one of them has a fixed support system in school- peers, sister etc.
 - However they are consciously or unconsciously aware of their difference from the others at school which makes them either refrain or indulge in certain activities eg. Case 01 likes wearing sleeve less tops, Case 02 does not like participating in sports, Case 03 likes drawing human figures

- ii) Cases 05, 06 and 07 seem to comparatively complicated personalities. This shows that with age and awareness of their disabilities and limitations, these girls are now confronting and dealing with their differences.
 - They have full knowledge of the repercussions of their medical history on their schooling eg. Case 05 and Case 07 know that they are older than their classmates
 - Their actions and preferences in school are strictly purposive.
- iii) Cases 05 and 07 have had a history of unsuccessful course of treatments over a period of time which has added rigidity to their detached personality. They are individualistic and closed in school.
- iv) Both in Case 03 and in Case 05, the girls have a family history of leprosy and both were mildly infected but the age difference between the two does affect their inclusion in school. Case 03 has no specific association with the members of the opposite sex whereas Case 05 experiences differences when she does not get the needed attention from them (symptoms of adolescence)

Interpretation of Table 2

- i) The acceptance closeness (Case 01, 03 and 04) and absence (Case 02) of family has had positive effects on their behaviour and participation in school
- ii) All the girls except in case 05 don't seem to face any discrimination in school but she also seems to have been discriminated and kept away from her siblings.
- iii) Both in Case 03 and in Case 05, the girls have a family history of leprosy and both were mildly infected but the way their family has dealt with them has affected their degree of inclusion and involvement in school (age seems to play a major role here)
- iv) The girls in Cases 06 and 07 don't seem to have fond familial experiences. They are detached in their behaviour in school and schooling is purposive for them
- v) In Case 06 family itself is the motive behind attending school

Interpretation of Table 3

- i) In all the seven cases the Centre directly effects their inclusion and involvement in school and thus affects their inclusion there.
- ii) Case 01 likes getting attention and over protectiveness in school like at the Centre
- iii) Case 03 School and Centre both are comfortable spaces but the presence of her sister is important (family)
- iv) Case 04 Centre is only an exclusive provision for her like for her siblings so attending school is seems like another place for socialisation and knowing new people (likes drawing human figures)
- v) Case 05 the teasing at the Centre directly affects her perception of others in school
- vi) In Cases 06 and 07, attending school and being at the Centre both are purposive. They seem to be working towards a set idea in their mind.
- vii) In Case 02 the subject seems to be more comfortable at the Centre than in school. It seems like being in school in the company of the 'outsiders' makes her realise the absence of her left hand/ difference from the others proves to be the cause of her inability to run there and affects her preferences.

Interpretation of Table 4

- i) All the seven case subjects have low self esteem and self-confidence but each one of them deals with it in a unique way which in turn affects their inclusion in school.
- ii) The subjects in Case 01, 02 and 03 indulge in self pity and have the habit of asking for attention. They make their time in school easier and more pleasant by having somebody in school who gives them the kind of attention which is a result of sympathising with their situation.
- iii) In Case 05, the subject perceives the marks on her right hand as a 'problem'. Ideally it is a problem as it acts as an obstacle to her ability to socialise with boys and puts her down in comparison with other girls. She seems apprehensive to confront this problem of hers which only increases her distance from the others and results in her exclusion in school.

- iv) In Case 06 the self-image of the subject seems to have been injured in the way it has affected the course of her life. At present she strongly guards it against anybody who sympathises with her and restores it for herself by channelizing her thoughts towards another stronger, set goal.
- v) Case 07 being the most incommunicable seems to have turned inwards. Either she has not yet turned towards society or she wants to escape it and so she has chosen to prove herself to herself to keep her self-image and perception in place. Not doing well academically or non-acceptance from society and their comments do not affect her much or have affected her to the extent of hiding in a shell that she has created for herself.
- vi) Case 04 seems to be compensating or covering up for the marks on her hands by accessorizing herself (wearing bangles). She also seems to be juggling with human anatomy and her differences by way of drawing human figures while socialising.
- vii) Ironically, the exclusionary perception of self, most of the time, accounts for their exclusion or for the degree of their inclusion in school, irrespective of the inclusive provisions made by the school.

The factors mentioned in the tables are interdependent and intertwined to affect and effect the inclusion of girl in regular schools.

Conclusion:

One can conclude that inclusion in the field of education is a multi-dimensional and multi-faceted concept. Rules and regulations, provisions and modifications might have been made within the school but every student comes with a background and some baggage. The factors mentioned above would affect the being of any other student in school. Therefore every student is different. In the cases that have been considered in this paper the behaviour of the subjects in school was not only affected and effected by the school environment but factors outside school played an important role. Here, the difference is created by the effects of a disease called leprosy. Leprosy, however has not necessarily disabled them but the degree to which it renders these girl students different

from the other students disables them or reinforces their inability to carry out a task.

The researcher also feels that special provisions and over-protection for disabled students within regular school environment might back-fire and might become a device for their exclusion in itself. There is no way to escape the gap that a disability creates for disabled students but its awareness and knowledge at a proper age and through an appropriate channel or source minus the societal stereotypes might help these students to deal with their inabilities and abilities in a better way. It would be apt to say that varied abilities create differences and one has to count on differences as resourceful in the process of learning. Also, a bipolar division of students into disabled and abled is a simplistic view of individuals. There is thus a dire need to study exclusionary ideas, concepts and barriers in detail to in turn understand inclusion wholly.

References:

- Adams, Mike and Sally Brown. (2006). Towards Inclusive learning in Higher Education: Developing Curricula for Disabled students. New York, NY. Routledge.
- Dr.Vijayan, Premavathy and Dr.T Geetha.(2006) Integrated and Inclusive Education: DSE (IV) Manual. New Delhi. Kanishka Publishers.
- Yin, Robert. (2014). Case Study Research: Design and Methods. Sage Publications.
- Cornielje, H. Piefer, Anjelika. Khasnabis, Chapal. Thomas,Maya.Velena, Johana. Inclusion of Persons Affected by Leprosy. Leprosy Review. Health Publications, BNET Business Library
- Rao, Shishir. (2010). New Frontiers in Education .Quarterly Journal Indian Development Foundation . Vol.43.

Table 1 Effects of Age, Degree of Infection (DOI) on Inclusion

Case No.	Age (yrs), standard	(DOI)-mild/ severe	School
Case 01	10, sixth	Mild, Scar on the left arm	Confident and participative in sports and other activities at school, is fine with the fact that school authorities know about her medical history and is confident that the other children know nothing about it; faces no discrimination in school.
Case 02	5, first	Severe, lost her left hand during the treatment	She mentions one close, rich friend; does not like participating in sports activities and drawing competitions in school.
Case 03	8, second	Mild, marks on her right palm	Likes going to school but there is no mention of friends. Likes being in the company of her sister in school.
Case 04	4, KG level	Severe, was admitted at the Centre when she was 2; has marks on her hands.	Hardly any experience of School. Likes to draw, especially human figures.
Case 05	14, fourth	Mild; 2 fingers of her right hand were infected, medication proved unsuccessful so she had to get her hand operated; has post operation marks on her hand.	She goes to school regularly but is older than her classmates; nervous and uncomfortable when asked about her experiences in school; feels that other children gossip about her 'problem' but nobody has confronted her.
Case 06	15, ninth	Severe, left thigh was infected; limps	The purpose of school is only to get a job. She has no friends at school; does not like the fact that the school authorities know her medical history.
Case 07	12 approx.	Severe, limbs were infected; repeated treatments were unsuccessful over five years, has been cured of leprosy recently	Older than her classmates; loves playing football with the boys at school but does not participate in sports competitions. She does not perform well academically.

Table 2 Effects of Family on Inclusion

Case No.	Age (yrs), standard	(DOI)-mild/ severe	Family	School
Case 01	10, sixth	Mild, Scar on the left arm	Loved and accepted by family, all come to meet her, youngest among her siblings	Confident and participative in sports and other activities at school, is fine with the fact that school authorities know about her medical history and is confident that the other children know nothing about it; faces no discrimination in school.

Case No.	Age (yrs), standard	(DOI)-mild/ severe	Family	School
Case 02	5, first	Severe, lost her left hand during the treatment	No trace of her family after her admission at the Centre but is aware of the idea of a family	A mention of one, close, rich friend. Does not like participating in sports activities and drawing competitions in school but otherwise is okay with attending school regularly.
Case 03	8, second	Mild, marks on her right palm	Mother has passed away; Father was severely infected by leprosy and resides in another building at the Centre. She stays with her twin sister; they are allowed to meet their father on a daily basis. She is aware that her father is unwell.	Likes going to school but there is no mention of friends. Likes being in the company of her sister in school.
Case 04	4, KG level	Severe, was admitted at the Centre when she was 2; has marks on her hands	Father comes to meet her at the Centre and is allowed to go home during vacations from school.	Hardly any experience of School; Likes drawing especially human figures
Case 05	14, fourth	Mild; 2 fingers of her right hand were infected, medication proved unsuccessful so had to get her hand operated; has post operation marks on her hand	Has knowledge of a cousin who was infected by leprosy; she was admitted at the same hospital as the cousin. Siblings (5) don't come to visit her at the Centre; father is a rare and mother is a regular visitor.	She goes to school regularly but is older than her classmates; nervous and uncomfortable when asked about her experiences in school; feels that other children gossip about her 'problem' but nobody has confronted her
Case 06	15, ninth	Severe, left thigh was infected; limps	Parents are no more; younger siblings are scattered over Mumbai; is not fond of talking about an older married sister. Nobody visits her at the Centre but wants to get back and get her family together	The purpose of school is only to get a job. She has no friends at school; does not like the fact that the school authorities know her medical history.

Case No.	Age (yrs), standard	(DOI)-mild/ severe	Family	School
Case 07	12 appox.	Severe, limbs were infected; repeated treatments were unsuccessful over five years, has been cured off leprosy recently	She is not fond of her family; Mother has not visited her since her admission at the Centre, father visits regularly	Older than her classmates; loves playing football with the boys at school but does not participate in sports competitions. She does not perform well academically.
Case 07	12 appox.	Severe, limbs were infected; repeated treatments were unsuccessful over five years, has been cured off leprosy recently	She is not fond of her family; Mother has not visited her since her admission at the Centre, father visits regularly	Older than her classmates; loves playing football with the boys at school but does not participate in sports competitions. She does not perform well academically.

Table 3 Effects of the Centre on Inclusion

Case No.	Age (yrs), standard	(DOI)-mild/ severe	Centre	School
Case 01	10, sixth	Mild, Scar on the left arm	Well settled at the Centre, Active and Participative mingles with the other girls.	Confident and participative in sports and other activities at school, is fine with the fact that school authorities know about her medical history and is confident that the other children know nothing about it; faces no discrimination in school.
Case 02	5, first	Severe, lost her left hand during the treatment	Mingles with everyone at the Centre, active, runs around with the other girls in the evenings, fulfils all her daily chores without much help from the others but needs help while bathing.	A mention of one, close, rich friend. Does not like participating in sports activities and drawing competitions in school.
Case 03	8 second	Mild, marks on her right palm	She is highly active and plays with all the girls at the Centre but is dependent on her twin sister for most of the daily work.	Likes going to school but there is no mention of friends. Likes being in the company of her sister in school.

Case No.	Age (yrs), standard	DOI- mild/severe	Centre	School
Case 04	4, KG Level	Severe, was admitted at the Centre when she was 2; has marks on her hands	Happy at the Centre, The Centre is a place to rejoice away from home. Mixes well with all at the Centre. The Centre is the place chosen for her like different places chosen for her other siblings.	Hardly any experience of School; Likes drawing especially human figures
Case 05	14, fourth	Mild; 2 fingers of her right hand were infected, medication proved unsuccessful so had to get her hand operated; has post operation marks on her hand	Passive resident of the Centre; is only concerned with her day to day responsibilities. She says that someone at the Centre teases her for having marks on her hand but is not willing to complain or name the person	She goes to school regularly but is older than her classmates; nervous and uncomfortable when asked about her experiences in school; feels that other children gossip about her 'problem' but nobody has confronted her
Case 06	15, ninth	Severe, Left thigh was infected; limps	Detached at the Centre; working and fulfilling her duties at the Centre as an obligation; Doesn't like any special treatment or help	The purpose of school is only to get a job. She has no friends at school; does not like the fact that the school authorities know her medical history.
Case 07	12 approx.	Severe, limbs were infected; repeated treatments were unsuccessful over five years, has been cured off leprosy recently	She is not fond of her family. Mother has not visited her since her admission at centre, Father visits regularly.	Older than her classmates; loves playing football with the boys at school but does not participate in sports competitions. She does not perform well academically.

Table 4 Effects of the Idea of Self on Inclusion

Case No.	Age (yrs), standard	DOI- mild/severe	Idea of self	School
Case 01	10, sixth	Mild, Scar on the left arm	Conducts herself well, particular about her looks; the scar on the left arm seems to be her special asset to get attention.	Confident and participative in sports and other activities at school, is fine with the fact that school authorities know about her medical history and is confident that the other children know nothing about it; faces no discrimination in school.

Case 02	5, first	Severe, lost her left hand during the treatment	Innocent and mischievous, she is aware of her difference from the others but it isn't a serious matter for her. Content with herself.	A mention of one, close, rich friend. Does not like participating in sports activities and drawing competitions in school.
Case 03	8, second	Mild, marks on her right palm	She is emotionally dependent on her sister; she mostly keeps her right wrist folded.	Likes going to school but there is no mention of friends. Likes being in the company of her sister in school.
Case 04	4, KG level	Severe, was admitted at the Centre when she was 2; has marks on her hands	Loves to accessorize (wears bangles), Marks on her hands don't affect her personality and behaviour	Hardly any experience of School; Likes drawing especially human figures
Case 05	14, fourth	Mild; 2 fingers of her right hand were infected, medication proved unsuccessful so had to get her hand operated; has post operation marks on her hand	Low self- esteem, doesn't talk much; is not too hopeful about life but her only aim seems to prove that she has no 'problem' and she is not different from the others. Asks for attention from the members of the opposite sex like any other adolescent.	She goes to school regularly but is older than her classmates; nervous and uncomfortable when asked about her experiences in school; feels that other children gossip about her 'problem' but nobody has confronted her
Case 06	15, ninth	Severe, Left thigh was infected; limps	A strong motive at hand outdoes her sense of disability but she is conscious about its effects. Being treated as special or sympathising with her causes harm to self respect and is offensive	The purpose of school is only to get a job. She has no friends at school; does not like the fact that the school authorities know her medical history.
Case 07	12 appox.	Severe, limbs were infected; repeated treatments were unsuccessful over five years, has been cured off leprosy recently	Detached, but she respects herself for what she is. She seems to have set safe boundaries for herself. Is difficult to talk to.	Older than her classmates; loves playing football with the boys at school but does not participate in sports competitions. She does not perform well academically.

Agriculture in India: Issues, Policies and Challenges

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Abstract

Despite being an agrarian country, performance of Agricultural sector has remained far from satisfactory. Policy regime in the pre-reform period laid emphasis on land reforms, increased rural infrastructure and introduction of better technological practices. The post-reform policy was marked by agricultural trade liberalization. Agricultural crisis in India in the post-reform period is a testimony of failure of effectiveness of govt. policies. In order to find the variables that are significant to agriculture, stepwise linear multiple regression analysis is used for two distinct phases of pre-reform and post reform periods. Results indicate that the decreasing size of average land holdings and lack of adequate infrastructural facilities have marred the agricultural performance. This shows that agriculture in India cannot respond to market mechanism, as envisaged by trade liberalization regime in the post-reform period, unless supply-side bottlenecks are removed. Last part of the paper offers recommendations.

Key words: *Agriculture, Land Reforms, Trade Liberalisation, Land Holdings*

1.1 Introduction

Despite growing share of service sector in Indian Economy, India continues to remain an agrarian country in the sense that more than half of the total workers are engaged in agricultural sector. According to Census 2011 figures, 54.6% of the total workers in India are engaged in agriculture. However share of this activity to the total GDP has been continuously decreasing from 41.83% in 1950-51 to 11.87% in 2013-14 measured at constant prices (2004-05). Indian Data Book of Planning Commission (4-8-2014) Similarly, secular growth rate calculated at factor cost at 2004-05 constant prices for the same period shows almost an insignificant annual growth rate of 2.71% CAGR (The Compound Annual Growth Rate) calculated with $Y_t = Y_0 * e^{rt}$. The equation can be converted into linear form as $\ln Y_t = \ln Y_0 + rt$. In e , where, Y_t (GDP of the period t), Y_0 (GDP of the original year), t (time period under consideration), r (growth rate), e (constant). Reason for choosing this formula is that, it takes values of all years into consideration. (Fig. 1 in Appendix) and decline in the share of agricultural sector is at the rate of 1.9% per annum. It was 1.3% between 1950-51 and 1989-90 but has increased to 3.6% in post-reform period viz. between 1990-91 and 2013-14. (Fig. 2, Fig.3 and Fig.4 respectively in Appendix) Percentage annual growth rate of agricultural sector shows great volatility with negative growth rates during many years (Fig. 5 in Appendix). This signifies vulnerability of the sector to monsoon and other factors that would be discussed

later. Yet, this sector continues to be significant in terms of engaging the largest workforce, as a major export earner to the total GDP and agricultural performance is crucial to poverty alleviation.

With this brief introduction to the sectoral performance of agriculture this research study examines agricultural policies/ strategies implemented by the govt. of India and their impact on the sector. The deliberations are divided into two time phases: first, from independence to pre-reform period and second, during the post-reform period. The later part of the paper tries to examine what has impacted the performance of agricultural sector the most, using 'stepwise' linear multiple regression analysis for two time periods viz. 1971-72 to 1989-90 with one set of explanatory variables and another between 1990-91 and 2006-07 with a few additional variables that were significant in the post-reform period. The last part of the paper gives some recommendations as an advancement of the analysis. Some of the other studies that have deliberated on agricultural policy impact are: Rao (1992) has discussed various aspects of agriculture in the pre and post reform, Sawant (2002) has discussed several aspects of Indian Agriculture, Policies and their impact in the pre and post reform period. Bhalla (2004) has dealt, in detail, with many critical aspects of agriculture in India in several volumes and Deshpande (2008) has analysed role of the state policy in rural development and poverty alleviation.

Agricultural policies and their impact in the pre and post reform period, Bhalla (2004) has dealt, in detail, with many critical aspects of agriculture in India in several volumes and Deshpande (2008) has analysed role of the state policy in rural development and poverty alleviation.

1.2 Agricultural Policy in India and its Impact

1.2.1. State of Agricultural Sector: Historic Perspective

Soon after the end of the colonial era, India adopted a macroeconomic framework of economic planning to give a much needed impetus to the economy that was fettered and impoverished for more than a century under the British rule. The most significant economic policy that shaped Indian economy was the Industrial Policy of 1956. However, it is being argued that, throughout the plan period, role of agriculture remained that of supplier of food, and the sector never figured in the basic transformation of the economy.

The agricultural sector stagnated and even deteriorated during colonial period as the British completely transformed agrarian relations that were exploitative and regressive in nature. The British rule established two main types of land tenure systems viz. the Zamindari and the Rayatwari (and the Mahalwari). Although these land tenure systems had certain dissimilarities, the pattern of land relations developed was semi-feudal land ownership that obstructed the development of productive forces in agriculture. Further, Indian agriculture turned as a supplier of raw material to the industries in Great Britain and India as a ready market for the final manufactured goods from Britain. This impoverished the existing handicraft village industries that resulted in the bankruptcy of a large number of peasants and artisans. These two processes had a far-reaching impact on land relations and agricultural development. It led to excessive pressure of population on land as ruined artisans and dispossessed and impoverished peasants had no other employment avenues. Rao (1992) has summarised the state of agricultural sector at the time of independence as, 'Thus, at the time of independence, we inherited a stagnant agriculture with a deficient infrastructure, traditional technology and out-moded and exploitative institutions.'

1.2.1 Agricultural Policy during Pre-reform period:

Therefore, the main policy instruments for augmenting agricultural growth were land reforms, large investments in rural infrastructure and introduction of better technological practices. Thus, in the post-independence period, land reforms were introduced to abolish intermediaries and give protection to the tenants by giving the land to the tiller and also to bring tenants into direct relation with the State and to put an end to the exploitative tenants-landlord nexus and to create conditions for evolving an agrarian economy with high levels of efficiency and productivity. However, land reforms imposed, on the government, large responsibilities and tasks of great complexity, to which many state administrations were not yet prepared. As a result, land reforms met with limited and differentiated success across states.

Introduction of NAS (New Agricultural Strategy popularly known as Green Revolution) that was initiated in 1960s was like a technical package based on new high-yielding variety seeds, requiring heavy doses of water, chemical fertilizers and pesticides. It also called for agricultural credits, subsidies along with remunerative prices and marketing support from the government. However, the package lacked institutional reforms. Hence, the states that had ineffective agrarian and land reforms and poor infrastructure also lost out on the green revolution. Hence, the evidence has shown that there has been an unequal spread of benefits of this strategy. As a result, given the already unequal distribution of farm size-groups, the NAS led to further unequal growth.

Plan outlays from the First Five-Year Plan onwards were directed towards building rural infrastructures like irrigation, rural electrification, rural credit, transportation, ware house facilities etc. Fourth Five-Year Plan gave major emphasis on integrated programmes of rural development such as IRDP (Integrated Rural Development Programme) and a systematic effort to extend the application of science and technology to improve agricultural practices.

These strategies resulted in two main trends in Indian agriculture: (i) There was a marked increase in the marketable surplus and availability of food grains and (ii) There was an increase in the gross capital

formation (public and private combined); although it decelerated later. Despite these efforts a large part of cultivation continued to remain rain-fed hence is susceptible to vagaries of nature. Introduction of NAS has led to great inequalities among farmers and much of the benefits of improved rural infrastructure were enjoyed by large farmers. It also created inter-regional disparities in production and wages along with inter-crop imbalances. It also proved less labour absorbing.

1.2.2. Agricultural Policy in the Post-reform period:

With trade liberalization policy some of the reforms implemented so far in agricultural sector have been globalization of Indian agricultural trade, permission for future trading in all agricultural commodities, introduction of the National Agricultural Policy and liberalization of internal trade and direct procurement of food grains for exports. However, according to Gopinath (2005), "Indian economic reforms since 1991, in the beginning neglected the agricultural sector and measures initiated for agriculture are of recent origin, lacking in cohesiveness."

India was able to record an appreciable increase in agricultural exports during the early 90's mainly due to the steep devaluation of the rupee. But, the growth of exports decelerated and in fact imports of agricultural commodities increased after 1996, on account of East Asian crisis, and also because there was a significant slowdown in international trade in agriculture along with a sharp decline in prices after the East Asian crisis which continued till 2001. There were some signs of revival of international trade in 2002.

Being an agrarian country that is able to produce many agricultural commodities, India should have been able to increase its exports considerably in the context of trade liberalization. However, one of the major distorting factors that eroded India's potential, is large domestic and export subsidies being given to agriculture by the developed countries. Hence, India's potential depends upon its competitiveness. Given the fact that agriculture was largely rain-fed and suffered from conventional methods of cultivation, it is highly debatable whether Indian agriculture was ready for free trade and regime of price mechanism.

Some of the impacts of these reforms would be:

- (i) Indian farmers would be exposed to greater price fluctuations and Indian farmers would not have relative price advantage as domestic prices are higher than international prices.
- (ii) Trade in agricultural commodities is characterized by a high degree of imperfections as world market is oligopolistic in nature.
- (iii) World agricultural trade is heavily subsidized.
- (iv). Price responsiveness of supply of agricultural production is unclear as much of the Indian agriculture is rain-fed.
- (v) Global competitiveness in agriculture lies in the capacity to increase output of the right quality product and the presence of supportive infrastructure.

Agriculture witnessed deceleration of growth in the 1990s and it almost culminated into agricultural crisis with growing farmers' suicide due to declining support of the state governments. Four perilous effects that emerged were: (i) Decline in agricultural production especially that of food grains (ii) Small and marginal farmers were caught in debt trap of money lenders leading to farmers' suicide (iii) Prime agricultural land was being diverted for non-agricultural purposes (iv) Poverty alleviation became a challenge due to poor performance of agriculture.

Hence, agricultural performance never really reflected efficacy of agricultural policy. Therefore this study tries to analyse, in the next section, which factors really impacted agricultural performance the most during the two distinct phases.

1.3 Analysis of Agricultural Performance in India

1.3.1 Data and Methodology

As stated above, policy thrust of agricultural sector in two time -phases was different. Taking those factors into account, the study has used Regression analysis by taking the explanatory variables in the pre-reform period which mainly reflect productivity determining variables. These are: (i) All-India Consumption of Fertilizers in '000 tones (FERTILIZ) (ii) All-India Net Area under Irrigation '000 hectares (IRRIGATE) (iii) Total Cropped Area in '000 hectares (CROP) (iv) All-India Direct Institutional Credit for Agricultural Activity (in Rs. Billion) (LOAN) (v) Average Size of Operational Land Holdings in hectares³ (HOLDING)

(Data available for this variable was discontinuous. Hence, growth rate was calculated, it was -8.9% per annum. Hence data was generated for missing years taking this rate into consideration). Since post-reform period laid emphasis on agricultural trade liberalization, additional explanatory variables included are: (i) Agricultural Exports as percentage of Total Exports (EXPORTS) (ii) Agricultural Imports as Percentage of Total Imports (IMPORTS) (iii) Food-grain production in million tons (FOOD GR) (iv) Non-food grain Production (commercial crops) in million tons (COMM CROP) (v) Electricity Consumption in Agriculture as percentage of Total Consumption (ELECTRICITY). Source of data is Directorate of Economics and Statistics, Ministry of Agriculture. Due to non-availability of the data for all variables till recent years the period of analysis is between 1971-72 and 1989-90 of the first phase and 1990-91 and 2006-07 of the second phase. The dependent variable is GDP from agriculture at factor cost at 2004-05 prices in Rs. Crores. A 'stepwise' multiple linear regression analysis is used to examine which variables have really defined agricultural performance in the last four decades.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \quad \dots\dots\dots (1)$$

Different types of multiple regression are distinguished by the method for entering the independent variables into the analysis. In standard multiple regression, all of the independent variables are entered into the analysis at the same time. In stepwise multiple regression, the independent variables are entered according to their statistical contribution in explaining the variance in the dependent variable. No matter what method of entry is chosen, a multiple regression that includes the same independent variables and the same dependent variables will produce the same multiple regression equation. Stepwise regression is designed to find the most parsimonious set of predictors that are most effective in predicting the dependent variable. Variables are added to the regression equation one at a time, using the statistical criterion of maximizing the R^2 of the included variables. The process of adding more variables stops when all of the available variables have been included or when it is not possible to make a statistically significant improvement in R^2 using any of the variables not yet included. Since variables will not be added to the

regression equation unless they make a statistically significant addition to the analysis, all of the independent variable selected for inclusion will have a statistically significant relationship to the dependent variable. Many a times agricultural sector data collection may not be very accurate due to informal nature of the activity; hence, there is a possibility of presence of multicollinearity in the model. Stepwise regression will include only those variables that improve R^2 .

1.3.2 Results of the analysis

Table 1: Results of Phase 1 (1971-72 to 1989-90)

Variables	Model 1	Model 2
CONSTANT	-647730.46 (-7.35)	-405238.95 (-3.44)
IRRIGATE		
CROPPED	5.106(9.89)	3.952(4.998)
FERTILIZ		
LOAN		296.176(2.592)
HOLDINGS		
R^2	0.899	0.939

Numbers in the parenthesis are t- values

In the pre-reform period variable CROPPED has emerged as the most significant variable followed by LOAN. In the post-reform period (refer to Table 3: results of phase II (1990-91 to 2006-07)) the most significant variables have been HOLDINGS and ELECTRICITY followed by FOOD GR, COMM CROP. It is important to note that both HOLDINGS and ELECTRICITY bear a negative sign. This can be explained by the fact that values of both these variables have been continuously falling through the period of analysis. During both periods availability of infrastructure and size of farm holdings (or land under cultivation) have emerged as important factors. However, trade liberalization does not show any impact on agricultural output. Hence, it is clear that agricultural output is not responsive to the market forces but there are supply side bottlenecks. This shows supply-side stickiness of agricultural production which can hinder the benefits of trade liberalization in the era of liberalization. Therefore, what is of immediate concern is to have a sound agricultural policy that will provide sustainability to

farm production rather than merely opening the sector to the market forces.

1.3.3 Some observations about performance of Agricultural Policy based on the results

The most important point to be noted here, with respect to the pattern of ownership structure demarcated for agricultural and industrial sectors during the planning period was that, capital-intensive industrial sector was to be under public ownership, light consumer goods under private ownership and agriculture to be completely under private ownership. Small and uneconomic agricultural land holdings, since long, have been a major problem in the development of the rural economy. It was thought that through reorganization along the cooperative lines, the rural economy could be reorganized. According to Rao (1997), "Having ruled out any real change in property relation, planning could not envisage any structural break in the agricultural sector. Hence, agricultural planning and policy-making have had to function within the narrow constraints imposed by private property in agriculture."

The agrarian crisis in the post-reform period in various parts of the country is reflected in growing landlessness and casualization of labor in agriculture, unchecked increase of small and marginal holdings and widening rural-urban gap in development. Rao (2009) records that the Naxalite movement, that has affected some of the states of Central India, is a struggle to protect the livelihood of the millions in agriculture who toil yet get pushed to the brink of subsistence. Hence, one of the major factors that has affected the growth of agricultural sector, is lack of adequate measures of land reforms. There still exist huge disparities in land holdings between large and marginal farmers. According to Sengupta Commission Report (2007), average size of large, middle and small holdings have declined and registering the largest proportional decline in small holdings.

Table 2

YEAR	Large	Middle	Small
1962	22.21 acres	7.11 acres	6.0621 acres
2003	18.12 acres	6.65 acres	3.44 acres

Source: Basole and Basu (2011)

According to the report, three factors have influenced decline of average size of land holdings: (i) Land Reforms could not appropriate the lands of the Zamindars completely (ii) Transfer of land through sale to the state or capitalist (iii) Growing demographic pressure. This has great implications for material and social lives of vast majority of rural poor. The anguish of dispossession is reflected in anti-SEZ protests, movement against displacement of Maoist movement apart from poverty.

In the post-reform period, due to fiscal discipline and compression, public investment in agriculture declined from over 4% of agriculture GDP to 2%. Much of this plan expenditure is being used for providing subsidies and not on investment in crucial areas like soil improvement, watershed development, groundwater recharge, surface irrigation and other infrastructure. As stated earlier, ownership in agriculture is solely private, individual farmers greatly depend upon infrastructural support from the state government; if such facilities are not adequate and efficient, individual farmer would not have the sustainability. Agriculture can perform only if adequate rural infrastructures such as irrigation, rural transportation and communication, rural electrification, warehousing and marketing and credit and other extension services are made available to the farmers.

Rao (1992) has stated that "In developing countries like India, the non-price measures of raising agricultural output such as provision of a basic infrastructure like irrigation and power and extension of new technology by providing high yielding seeds and fertilizers are far more important than incentive prices." This could be one reason why trade liberalization did not help agricultural productivity much. Bhalla (2004) has reiterated that in developing country like India, it is not prices but infrastructure and technological factors play a more dominant role in augmenting agricultural output.

1.4 Conclusion and Recommendations

One may conclude the deliberations by saying that, since the beginning of the Planning period the sector never had a well-defined policy framework. It was mostly left to take a course of its own and other policy

measures like price, taxation and wage policy were added as a response to the woes of the farmers. Since agricultural sector comes under state list, each state had differential success rate of land reorganization policy and of infrastructural facilities.

Currently, agriculture in India urgently needs to be revamped by: (i) It is important to have specific agricultural strategy for each agro-climatic region. This can be done by focusing on increasing the productivity per unit of natural resources through efficient use of improved technology. Swaminathan (1988) has suggested steps in each agro-ecological area to promote scientific management practices of land:

- (a) Conservation of areas that need to be preserved for their pristine purity.
- (b) Up-gradation of biological potential of land through regeneration and rehabilitation mechanism.
- (c) Sustainable intensification of areas where productivity can be improved.
- (d) And for water he recommends rain water and groundwater management, wetland management, conservation of coastal mangroves and sustainable use of surface water.

(ii) It is necessary to diversify agricultural activities from production of food-grains to value-added food products such as meat, poultry, fish, vegetables, fruits, flowers and other horticultural crops and processed food such as processed milk, meat, fish, etc. This may become possible only when there is extensive infrastructure available.

(iii) This research study strongly recommends that if Indian farmer is to benefit from world trade in agricultural commodities, there is a need to develop and promote an indigenous processing and collective marketing arrangements that can make participation of small farmers easy.

(iv) To overcome diseconomies of scale caused due to subdivision and fragmentation of landholdings, rising cost of inputs, inability to augment marketable surplus and inadequacies of infrastructure like storage, irrigation etc., this study urges, to incorporate a fresh approach to cultivation pattern on collective basis. If Indian agriculture is to compete and sustain in the imperfect international market, it must receive professional and technological inputs that can give stability and standardization to agricultural products. If the big corporates provide this support either as economically viable initiative or as corporate social

responsibility (CSR) probably agriculture would become stronger and dynamic and could respond to the market mechanism of free trade.

(v) The most important recommendation has come from Dandekar (1992). According to him problem of India's agriculture lies outside the sector, viz., other sectors did not grow fast enough to withdraw sufficient population out of agriculture. According to India Rural Development Report (1999), there are three reasons for limited absorption of labor outside agriculture:

- (a) In some of the semi-arid areas and eastern states infrastructure growth has been slow as a result most non-farm activities become non-viable.
- (b) Agriculture is growing at a dismal rate.
- (c) Quality of human resource in rural areas is poor due to lack of availability and accessibility of educational and training institutions that have an urban bias.

Hence, the study recommends increase in investment in infrastructural facilities in terms of inter-connectivity of towns and villages along with National and State highways. In addition, provision of universal primary education for the rural population is essential. In many East and South East Asian countries universal primary schooling ensured that agricultural labor became more flexible and acquired the basic education necessary to work in regular non-manufacturing jobs and with on-the-job work experience it moved as unskilled labor to the modern organized sector. Hence, if Indian agriculture is to progress the non-farm activities and employment has great significance.

References :

Bhalla G.S., 2004, 'Globalisation and Indian Agriculture', Vol.19 of State of the Indian Farmer, A Millennium Study, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, New Delhi, Academic Foundation, New Delhi.

Dandekar V.M., 1992, 'Forty Years after Independence', in Jalan B. (ed.), 'The Indian Economy: Problems and Prospects', Viking Penguin India, Delhi

Deshpande R.S., 2008, 'State Policy, Poverty and Rural Development', Indian Agriculture: Challenges of Globalisation (ed.) A.Vinayaka Reddy and M.Yadagire

Charyulu, New Century Publications, New Delhi.

Gopinath T., 2005, 'Indian Reforms and Agriculture in a Globalized World: Past, Present and Future', in Tidsell Clem (ed.) 'Globalization and World Economic Policies: Effects and Policy Responses of Nations and Their Groupings', Vol.2, Serials Publication, New Delhi.

M. S. Swaminathan. 1988, 'Challenges Ahead: Time for New Orientation', Survey of Indian Agriculture, The Hindu.

Masarguppi A., 2013, 'Growth and Poverty in India: An Empirical Inter-State Comparison in the Post-Reform Period (1990-2007)' Ph.D. Thesis, Dept. of Economics (Autonomous), University of Mumbai.

National Institute of Rural Development, 'Rural Development Statistics', Hyderabad Various Issues National Institute of Rural Development, 1999, 'India Rural Development Report', Hyderabad.

Planning Commission, 'Statistical Abstracts of India', Govt. of India, Various Issues

Powell B., 1892, 'Land System in British India', Oxford University Press, London

Rao C. H. Hanumantha, 1992, 'Agriculture: Policy and Performance', in Jalan B. (ed.), 'The Indian Economy: Problems and Prospects', Viking Penguin India, Delhi

Rao, J. M., 1997, 'Agricultural Development under State Planning', in T.J. Byres (ed.), 'The State, Development Planning and Liberalization in India', Oxford University Press, Delhi.

Rao V.M., 2009, 'Farmers Distress in a Modernizing Agriculture- The Tragedy of the Upwardly Mobile: An Overview', in D. Narasimha Reddy and Srijit Mishra (ed.) 'Agrarian Crisis in India', Oxford University Press, New Delhi.

Sengupta, A.2007, 'Report on Conditions of Work and Promotions of Livelihoods in the Unorganised Sector', NCEUS. Government of India.

Table 3 : Results of Phase 2 (1990-91 to 2006-07)

Variables	Model 1	Model 2	Model 3	Model 4
CONSTANT	1167238 (24.89)	776953 (9.76)	729238.4 (14.75)	686591.1 (17.11)
IRRIGATION				
CROPPED				
HOLDINGS	-547606 (-15.97)	-422276 (-13.37)	-353048 (-14.86)	-332673 (-17.27)
FERTILIZER			-2661.28 (- 4.97)	-2911.4 (-6.98)
LOAN				
ELECTRICITY				
IMPORTS				
FOOD GR		1127.302 (5.24)	1259.968 (9.42)	1180.134 (11.21)
COMM CROP				117.504 (3.19)
EXPORTS				
R ²	0.944	0.981	0.993	0.996

Numbers in the parenthesis are t- values

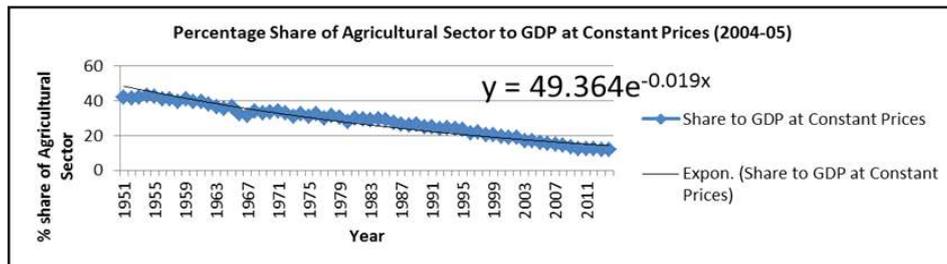
Appendices

Figure 1



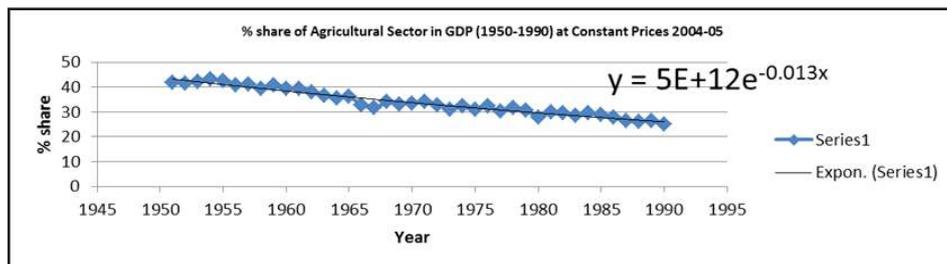
Data Source: Data book for Planning Commission 4th August, 2014

Figure 2



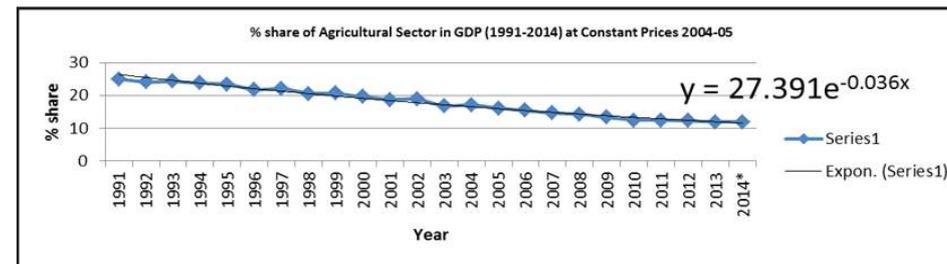
Data Source: Data book for Planning Commission 4th August, 2014

Figure 3



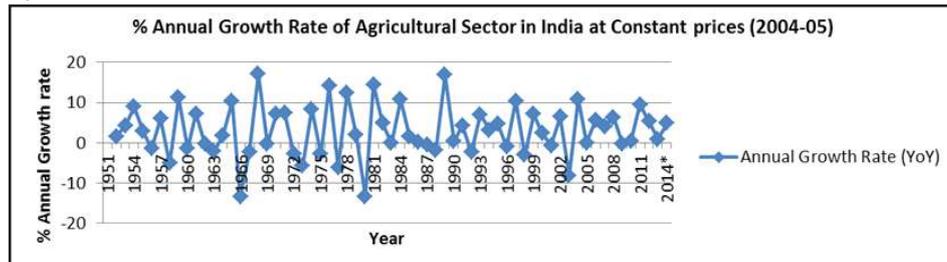
Data Source: Data book for Planning Commission 4th August, 2014

Figure 4



Data Source: Data book for Planning Commission 4th August, 2014

Figure 5



Data Source: Data book for Planning Commission 4th August, 2014

Issues Relating to Foreign Direct Investment in India's Retail Sector

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Abstract

In the era of globalization and market economy involving competition, India is now one of the major economic forces in the world. This is also the time when this economic power is looking for fresh capital and investment for economic growth. For fresh investments, foreign capital is a mandatory requirement - in addition to the capital generated at home. Inflow of foreign capital has been possible in India after economic reforms initiated in the early 1990s. After the success of the LPG policies, 51% FDI in the retail sector in India was announced in September, 2012 by the then Prime Minister, Dr. Manmohan Singh, as a part of the new round of reform process. However, the present government has not yet reversed the notification despite having a different view on the issue.

There are a number of reasons to allow FDI in India's multi-brand retail. Foreign investment in post-harvest and back-end infrastructure, agro-processing and logistics will help to augment the growth process, employment and economic prosperity in rural areas of the country. The 1991 reforms brought FDI into various sectors of the Indian economy like insurance, banking, outsourcing, IT, manufacturing, telecommunication, construction and transportation, which has helped development in all these sectors at a global scale. Now it's the turn of the largest sector - retailing, next only to agriculture, which connects all sections of society – top, bottom, left and right - with manufacturing and the distribution chain. FDI has positive spillover effects on the economy as its ownership advantages get disseminated to locally owned enterprises, enhancing their productivity. All these benefits of foreign direct investment have been well proven in India in sectors such as automobiles, telecom and consumer electronics. The investment from global retail giants would surely benefit the country in many ways but how effectively they would do it, only the future will tell.

Keywords : FDI, Retail Sector, Economic Reforms, Spillover Effects.

1. Introduction

In the era of globalization and market economy involving competition, India is now one of the major economic forces in the world. This is also the time when this economic power is looking for fresh capital and investment for economic growth. For fresh investments, foreign capital is a mandatory requirement - in addition to the capital generated at home. The inflow of foreign capital has been possible in India after economic reforms initiated in the early 1990s. One of the objectives of liberalization was to attract foreign direct investment (FDI) to India. As the policies of liberalization, privatization and globalization have been a great success, 51% FDI in retail sector in India, including a large number of other reforms, was announced by the then Prime Minister, Dr. Manmohan Singh in September 2012, as a new round of the reform process.

However, according to the Commerce and Industry Minister Smt. Nirmala Sitharaman “We are clear that FDI will not be allowed in multi-brand retail trade in line with the position the BJP had articulated in its manifesto on the basis of which we won the elections,” she said. She added, however, that at the moment there was no move to reverse the notification that the UPA government had issued to open up the multi-brand retail sector, allowing up to 51 per cent FDI. If an FDI proposal comes up the Government would do so, she said (The Hindu, Sep. 8, 2014).

There are major retail opportunities available as for the fourth time in five years, India has been ranked as the most attractive nation for retail investment among 30 emerging markets by the US-based global management consulting firm, A. T. Kearney in its 8th Annual Global Retail Development Index (GRDI)

2009. Global players in the retail sector are eager to grab this opportunity.

2. Foreign Direct Investment in India

In the developing countries, domestic funds are often inadequate to meet developmental requirements, and so mechanisms such as foreign direct investment (FDI) are needed to attract capital from abroad. FDI has played an important role in India's growth dynamics. There are several sectors of the economy, which have received the benefits of FDI such as the software and services industry, the two-wheeler, automobile and auto-component industries, and the electronics and telecommunications industries. FDI in these sectors expanded home and export markets, benefitted consumers, generated employment, increased productivity and wages and generated externalities to local firms. Similarly, FDI in the retail sector also can play an effective role in the expansion of this sector and strengthening the economy.

3. Structure of the Retail Market in India: Organized and Unorganized

The organized retail industry is a sunrise sector with huge growth potential. The Indian Retail Industry is the 5th largest retail destination and the second most attractive market for investment in the globe after Vietnam, as reported by A. T. Kearney's seventh Annual Globe Retail Development Index (GRDI), in 2008.

In the year 2012, the Indian retail sector is estimated to contribute around 15 percent to GDP and 8 percent to total employment. The sector is highly fragmented with about 95 percent of the stores in the unorganized sector. The Kirana stores number around 12 million, spread throughout India. These are mostly family owned and employ family labour. At the bottom of the pyramid are millions of pavement stalls. The

unorganized retail sector is the largest source of employment after agriculture, and has deep penetration into the country. India has the highest shopping density in the world with 11 shops per 1,000 people. Organized retail however is at a very nascent stage. India is Asia's third largest retail market after China and Japan. Only 5% of the total sales are being done by organized retailers (Murali, 2012).

Organized retailing refers to trading activities undertaken by licensed retailers, that is, those who are registered for sales tax, income tax, etc. These include the corporate-backed hypermarkets and retail chains, and also the privately owned large retail businesses. Unorganized retailing, on the other hand, refers to the traditional formats of low-cost retailing, for example, the local Kirana shops, owner-manned general stores, paan / beedi shops, convenience stores, hand-carts, pavement vendors, etc.

Both the conventional unorganized and modern organized sectors of retail have their own advantages. Consumers can enjoy a greater bargaining power at kirana stores while large stores have low operating costs and overheads. Kirana shops are located close to consumers while big stores provide a range and variety of goods. Small shops have strong customer relations while large stores offer the conveniences of hygiene, quality assurance and brand-related durability. We can compare the organized and unorganized retail sector in different countries in the Table 1.

4. Drivers of Growth in the Indian Retail Sector

A high rate of economic growth since the 1990's, has led to a greater disposable income for the Indian middle class, which currently comprises 22% of the total population. Disposable incomes are expected to rise at an average rate of 8.5% p.a. till 2015. The number of households with income of over Rs 45,000

per annum has grown from 58 million in 1999-2000 to 125 million by 2011. With rising incomes the purchasing power of Indian urban consumers is growing. As a result, branded merchandise in categories like apparel, cosmetics, shoes, watches, beverages, food and even jewellery, are widely accepted by urban Indian consumers. Educated youth learn of the latest trends and fashion through different media like the internet, television, etc. This has also helped boost demand for the latest products. Besides, 47% of India's population is under the age of 30 and strong growth is expected to continue in this age bracket. A younger population tends to have higher aspirations and spends more as it enters the earning phase. Increasing consumerism among this category, which is pursuing a different lifestyle from that pursued by earlier generations, is writing the consumption story of India. The nuclearization of families has also led to enhanced demand.

5. Rationale for Liberalization in India's Multi-Brand Retail

The main reason for not allowing FDI in the multi-brand retail sector till 2012, was the fear that foreign retailers would first squeeze suppliers, engage in predatory pricing to drive out competition and then take advantage of their monopoly power to drive up prices. As the Indian retail sector generates very high levels of employment, second only to agriculture, the fear of loss of employment opportunities in local retail outlets was also a driving factor. According to Stiglitz, India is an unusual country and different from many other developing and emerging markets. It has a large and very talented entrepreneurial class and also, large quantities of savings and wealth. So that raises the question as to why India needs foreign entrepreneurs in any sector, particularly the retail or the financial sectors (Stiglitz, 2012).

Despite the above fears, there are a number of reasons to allow FDI in India's multi-brand retail. Foreign investment in post-harvest and back-end infrastructure, agro-processing and logistics would help to augment the growth process, employment and

economic prosperity in rural areas of the country. International retailers would bring with them technology and management know-how to improve the entire retail sector through the adoption of best practices. Stabilization of prices and reduction in consumer goods inflation could be achieved by means such as direct buying from farmers, removing supply chain inefficiencies to lower transit losses, through improved storage capabilities to control supply and demand imbalances with better quality, safety standards and yield improvement through up-gradation in agriculture and increased processing of produce. FDI in retailing can boost exports also through greater sourcing from India. With a large middle-class close to 300 million which is continuously growing at nearly 2% a year, organized retail in India is sure to see large returns. These facts have prompted the earlier Indian government to open the retail sector to FDI slowly through a series of steps:

1995: World Trade Organization's General Agreement on Trade in Services included both wholesale and retailing services.

1997: FDI in cash and carry (wholesale) with 100% rights allowed under the government approval route.

2006: FDI in cash and carry (wholesale) brought under the automatic route. Up to 51 percent investment in a single-brand retail outlet permitted.

2011: 100% FDI in single brand retail permitted.

In September, 2012 the most awaited and talked about announcement was made, to allow 51% FDI in multi-brand retail.

The positive effect of FDI in retail depends to a large extent on effective regulation by the government. It would appear from recent announcements by the current government that 51% FDI in multi-brand retail is not likely under the automatic route. It will, however, be possible after Foreign Investment Promotion Board (FIPB) approval on a case-by-case basis. It is mandatory that the minimum investment should be \$100 million, 50% of which should go towards

improving the back-end infrastructure. Also, 30% of all raw materials have to be procured from small and medium enterprises. Permission will be granted to set up retail stores only in cities with a minimum population of 10 lakhs. The government will have the first right to procure material from the farmers.

6. Prospective Effects of FDI in Multi-Brand Retail on Indian Economy

Trans-National Companies that build backward linkages with local firms are more beneficial than those that operate as 'islands' in developing countries. Prior to the 1991 reforms, several Indian large firms had backward linkages with small and medium scale firms through sub-contracting practices. However, the relationship was exploitative with large firms exercising monopsony power (Patibandla, 2012). After the reforms, TNCs such as Suzuki and Hyundai built backward linkages with supplier firms and transferred technology and organizational practices through cooperative arrangements. Subsequently, several Indian firms such as Bajaj, Mahindra and Mahindra and Tata Motors imitated these practices. As a consequence, the Indian auto-component sector has become internationally competitive (Okada, 2009). The issue is that the 1991 reforms, supported by effective local institutions, can benefit larger sections of the stakeholders in the long run.

Allowing FDI and the entry of foreign retail chains into the retail sector may, on the one hand, set up supply chains and logistical capabilities, and improve the infrastructure needed to source, ship, store and deliver products. So improvements can be expected in storage, warehousing, and information-intensive operations. On the other hand, the arrival and expansion of foreign retailing companies may encourage domestic players to themselves invest in infrastructure and logistics and improve product standards. Thus, with domestic players staying competitive, it is not necessary that the retail sector will witness a growth of monopsony buyers and traders. In this way, FDI in the retail sector generates a multiplier effect that goes beyond its direct investment impact. It

is understood that large multi-national retail firms' real competition will be the domestic organized sector multi-brand retailers and not the local Kirana stores. Some studies (Talreja Monika and Dhiraj Jain, 2013) have predicted that after the entry of foreign retail chains the size of organized retail could grow to about 20.8% of the total market from the 5% at present. Still, the remaining 79% of that sector will remain open for the unorganized sector. It does not seem reasonable that the 20.8% organized retailers can drive 79% Kirana stores out of business. This is the reason that Dr. C. Rangarajan, (Ex-Governor, Reserve Bank of India), has claimed that the fear that FDI in multi-brand retail "could result in large scale replacement of small retailers is misplaced".

A. Effect on Consumers

The beneficiaries are the Indian consumers who will choose from a greater variety of products at competitive prices. By keeping prices low, multi-national retailers will possibly reduce their markups but make up for it by greatly increased sales. When Wal-Mart enters a market, prices decrease by 8% in rural areas and 5% in urban areas (Ghemawat and Mark, 2006). The food price savings accrue first to the middle class, but as supermarkets spread into the food markets of the urban poor and into rural towns, they have positive food security impacts on poor consumers. For example, in Delhi, India, the basic foods of the urban poor are cheaper in supermarkets than in traditional retail shops: rice and wheat are 15% cheaper and vegetables are 33% cheaper.

B. Effect on Suppliers

Farmers and other suppliers of products will gain from a competitive environment because they have traditionally been at the mercy of monopsony buyers and monopoly traders. Some argue that there is no evidence to suggest that farmers will earn higher prices after the entry of multi-national retailers as the multinational giants are expected to act as monopsonies. But Bhagwati indicates that Indian farmers typically earn a third - instead of the

international norm of two-thirds - of the final price of their produce because of greater waste and less efficient distribution, and because wholesalers operate as exclusive buyers by the state Agriculture Produce Marketing Committee (APMC) Acts. Moreover, contrary to the claim that multinational retailers will become monopsonies, Bhagwati has argued that farmers should be able to sell to multiple (domestic and multinational) organized retailers as well as to existing wholesalers supplying unorganized retailers (Bhagwati, 2012).

P. C. Reddy, Secretary General of the Consortium of Indian Farmers Association (CIFA), has claimed that the farmers' biggest problem is marketing. He presents as evidence accounts of farmers in Andhra Pradesh declaring a crop holiday because they could not sell, and of farmers in Maharashtra committing suicide for the same reason. FDI in retail will open alternative avenues of sale for farmers, Reddy has added, and this is needed because the mandi system does not favour farmers as it causes them to lose 5% of the value in transportation, 10% in broker commission and 10% in quality parameters. Direct purchases by large retailers will largely ameliorate this problem.

A Bharti Walmart spokesman says (Malviya, Sagar, 2011) that the cash-and-carry wholesaler sources about 90% of its products locally. This helps to minimize costs and pass on the benefits to customers. The joint venture between Walmart and Bharti Enterprises supports SME's in a variety of ways, including sharing information and resources to help raise efficiency standards, improve production techniques, provide technological support and better management skills. Bharti Walmart has built a direct network of 400 SME's in less than three years of entering the country. And more than 40% of its total products are supplied by small and micro enterprises. Future Group, the country's largest retailer, has more than 4,000 SMEs supplying more than 35% of its total requirements. They have become our partners for a decade now and understand the business well, to service us accordingly, says Future Group Chairman

Kishore Biyani (Malviya, Sagar, 2011). He adds that it is important to source from smaller business because the retail business is highly localized.

The SME Chamber of India, which represents more than 45,000 small entrepreneurs, is not in favour of allowing foreign retailers into the country because it fears that foreign retailers will import most of their products, as is the practice among most foreign car manufacturers. In the auto industry, players such as Bajaj and Tata Motors source products from SME members, which have small businesses. Most international firms import most of their products and source just 5-7% of auto parts from these companies.

Suryamurthy, in an article in *The Telegraph*, claims farmer groups across India do not support the status quo and seek reforms in the retail sector, because in the current retail system, the farmer is being exploited (Suryamurthy, 2011).

C. Effect on Supply Chain Intermediaries

As a result of the entry of global players in Indian retail business, the growth dynamics of the sector will change. As farmers' surplus and agricultural productivity increase, people from agriculture would be released. If these agricultural workers possess basic literacy skills, then they can be absorbed into manufacturing, which in turn may grow because of home and export market expansion. If government policies encourage fair competition for balanced growth, FDI may challenge the existing stranglehold of agents and traders. While this may lower the cost of goods in the short term, it will lead to the rapid mass dislocation of workers involved in the supply chain.

D. Effect on Unorganized Retail (Kirana) Shops

The entry of multinational retailers may lower the rate at which sales are presently growing for unorganized retailers, but will not reverse their growth in the near future (Bhagwati, 2012). Some of the wholesalers and small Kirana stores have already adopted innovative practices of procuring and selling goods from large retailers and this will most likely improve the overall

organization of retail markets. The main losers would be the middlemen rather than small traders. The question being raised is whether the traditional kirana stores will survive and co-exist or be displaced by major organized retail players?

The answer could be a co-existence. The major advantages for the smaller players are their size, and the complexity and diversity of Indian markets. Most of the organized retail players have opened shop in the Metros, and Tier 1 and Tier 2 towns. Very rarely are organized players to be found in the rural areas and India has more than 70% of its population living in small cities and rural areas. Thus the reservations against the introduction of Multi Brand retail on the ground that it may adversely affect small retail shops are mostly misplaced. Besides, the technical know-how, global best practices, quality standards and cost competitiveness brought forth through FDI should encourage domestic players to respond creatively to sustain their growth.

7. Arguments in Favour of FDI in Retail Sector

- FDI in the retail sector will attract global players and promote the generation of a world-class supply chain in India, thereby decreasing transaction, information and production costs of business and expanding markets significantly. In addition, FDI can help to remove the following deficiencies in the Indian system (based on Mancheri, 2010):

- There has been a lack of proper infrastructure facilities to link to distant markets, including overseas markets, round the year for perishable horticulture commodities. Although India is the second largest producer of fruits and vegetables, it has a very limited integrated cold-chain infrastructure, 80% of which is used only for potatoes.

- 100% FDI is permitted in cold-chain already through the automatic route, but not much investment has actually occurred, precisely because of the absence of FDI in retailing.

- Intermediaries dominate the value chain. They do

not follow the mandi norms and their pricing has developed a monopolistic and non-transparent character. As a result, Indian farmers realize only 1/3rd of the total price paid by the final consumer, as against 2/3rd by farmers in nations with a higher share of organized retail.

- Due to an improper Public Distribution System (PDS), the bill on food subsidies is rising and yet overall food based inflation has been a matter of great concern. The absence of a proper retail supply system has led to the ultimate consumers paying a higher price due to shortages and wastages.

- The Micro Small & Medium Enterprises (MSME) sector has also suffered due to the lack of branding and the lack of access to world markets. This has largely been due to the inability of this sector to access the latest technology and improve its marketing interface. Apart from this, by allowing FDI in retail trade, India will significantly flourish in terms of quality standards and consumer expectations, since the inflow of FDI in retail sector is bound to pull up the quality standards and cost-competitiveness of Indian producers in all the segments. It is to be noted that the Indian Council of Research in International Economic Relations (ICRIER), a premier economic think tank of the country, which was appointed to look into the impact of big capital investments in the retail sector, has come to the conclusion that investments by large corporations and FDI in the retail sector would in the long run not harm the interests of small, traditional, retailers. (Bakkad, Dinesh, 2012). Huge investments in the retail sector will lead to gainful employment opportunities in agro-processing, sorting, marketing, logistics management and front-end retail. Policy mandates a minimum investment of \$100 million with at least half the amount to be invested in back-end infrastructure, including cold chains, refrigeration, transportation, packing, sorting and processing. This is expected to considerably reduce post-harvest losses and wastage. Sourcing of a minimum of 30% from Indian micro and small industry is mandatory. This will provide the scales to encourage domestic value addition and manufacturing, thereby creating a

multiplier effect for employment, technology up-gradation and income generation.

8. Arguments against FDI in Retail Sector

Arguments put forth against FDI in retail are as follows:

- MNCs retailers, using their big size, are known to displace domestic players. In order to bring down prices to the lowest possible levels for customers, they squeeze the margins of their suppliers. So it is doubtful that suppliers will indeed benefit from FDI in retail. These potential drawbacks need to be combated with strong regulation.
- FDI in retail will lead to large-scale job losses. International experience shows supermarkets invariably displace small retailers. Small retail has virtually been wiped out in developed countries like the US and Europe. For the same reason, South East Asian countries have had to impose stringent zoning and licensing regulations.
- Global retail giants will resort to predatory pricing to create monopoly / oligopoly. This can result in essentials, including food supplies, being controlled by foreign organizations.
- Fragmented markets give larger options to consumers. Consolidated markets take the consumer captive. Allowing foreign players with deep pockets leads to consolidation. International retail does not create additional markets, it merely displaces existing markets.
- Jobs in the manufacturing sector will be lost because structured international retail sources internationally and not from domestic sources. This has been the experience of most countries which have allowed FDI in retail.
- The argument that only foreign players can create the supply chain for farm produce does not appear to be justifiable. International retail players have no role in building roads or generating power. They are only required to create storage facilities and cold chains. But providing this kind of infrastructure could just as

well become the responsibility of the state in India.

- The comparison between India and China is misplaced. China is predominantly a manufacturing economy and the largest supplier to Wal-Mart and other international majors. It obviously cannot prevent these chains from opening stores in China when it is already a global supplier to them. India in contrast will lose both manufacturing and services jobs.

9. Challenges and Attractions for Global Retailers

It is said that opening up of the retail sector for FDI will bring to India, a number of foreign players in the sector, waiting to grab the opportunity. But there are several challenges which the country has to face:

- FDI in retail sector is opposed on various grounds. For example, the entry of large global retailers such as Wal-Mart would destroy the unorganized retail sector which is the largest employer in the Indian economy after the agriculture sector. They would kill local shops and millions of jobs. Besides, the global retailers would exercise monopolistic power to raise consumers' prices and to reduce the prices received by the suppliers. Hence, both the consumers and the suppliers would lose, while the profit margins of such retail chains would go up. It is also argued that the Indian retailers have yet to consolidate their position. The existing retailing scenario is characterized by the presence of a large number of fragmented family owned businesses, who would not be able to survive the competition from global players. In South East Asian countries after allowing FDI, the domestic retailers were marginalized and this led to unemployment. Another apprehension is that FDI in retailing can upset the import balance, as large international retailers may prefer to source a majority of their products globally rather than investing in local products. Moreover, the global retailers might resort to predatory pricing. Due to their financial supremacy and power, they often sell below cost in the new markets. Once the domestic players are wiped out of the market foreign players enjoy a monopoly position which allows them to increase prices and earn profits. Indian retailers have argued that since lending rates

are much higher in India, Indian retailers are at a disadvantageous position compared to foreign retailers who have access to International funds at lower interest rates. High cost of borrowing forces the domestic players to charge higher prices for products.

- Yet another argument against FDI is that FDI in retail trade would not attract large inflows of foreign investment. Goods are bought on credit and sales are made on cash basis. Hence, the working capital requirement is negligible. On the contrary; after making initial investment on basic infrastructure, the multinational retailers may remit the higher amount of profits earned in India to their own country.

- On the other hand, Retailing is being perceived as an attractive commercial business for organized retail business.

- Indian organized retail industry is one of the sunrise sectors with huge growth potential. Organized retail industry accounts for approximately 5%. AT Kearney, the well known international management consultancy, recently identified India as the second most attractive retail destination globally from among thirty emerging markets.

- Foreign companies' attraction to India is its billion-plus population. Also, there are huge employment opportunities in the retail sector in India. According to Associated Chambers of Commerce and Industry of India (ASSOCHAM), the retail sector will create 50,000 jobs in the next few years.

- As per the US Census Bureau, the young population in India is likely to constitute 53 per cent of the total population by 2020 and 46.5 per cent of the population by 2050 - much higher than countries like the US, the UK, Germany and China. India's demographic scenario is likely to change favourably, and therefore, will most certainly drive retail sales growth, especially in the organized retail segment.

- India in such a scenario presents some major attractions to foreign retailers. There is a huge industry with no large players. Some Indian large players have

entered just recently. The transition will open multiple opportunities for companies and investors.

- In addition to these, improved living standards and continuing economic growth, friendly business environment, growing spending power and increasing number of conscious customers aspiring to own quality and branded products in India are also attracting global retailers to enter the Indian market.

- Growth rates of the industry both in the past and those expected for the next decade coupled with changing consumer trends such as increased use of credit cards, brand consciousness, and growth of population under the age of 35 are factors that encourage a foreign player to establish outlets in India. Thus, there is certainly a lucrative opportunity for foreign players to enter the Indian field.

10. Recommendations for Formulation of Policies

In addition to the conditions put forward by the earlier government for foreign investors in India's retail sector, there are some more issues that need to be resolved. Initially the foreign players should be allowed in limited cities, as was the case in China. They should be allowed to expand their business to other cities slowly. The government should encourage a multitude of foreign entrants so that consumers can benefit from price competition among them. Since the establishment of big malls is likely to displace residents as well as workers, the government needs to frame policies for the relocation of affected people. Small retailers should be assisted to improve efficiencies and upgrade themselves through the extension of concessional credit and other proactive measures. Setting-up of a Retail Regulatory Authority and formulation of a model Central Law to look into problems is necessary to regulate the fiscal and social aspects of the entire retail sector. In order to become capable of competing with foreign retailers, local players should be encouraged to become big organizations through mergers, acquisitions and other incentives. While opening the country's market for modern multi-brand retail it is important for the government to put certain regulations in place.

i. In most of the developing countries the initial regulations have mainly restricted the location and hours of modern retail. Very few developing countries have a pro-traditional or pro-small retail policy. But in the advanced stage of supermarket spread, when the sector becomes concentrated, it is important for governments and the private sector to enforce competition policies.

ii. Along with modern retail, traditional retail also should be upgraded and should be competitive. Some countries even train the small operators in business skills, food safety, and hygiene.

iii. The government should take the initiative to upgrade wholesale markets, infrastructure and services to serve retailers and farmers better.

iv. The government needs to supplement farmers' efforts with public investments in improving their access to assets, services, training, and information so that they become competitive suppliers to the supermarkets.

v. In India, so far there is no ceiling on the size or number of retail outlets that may be started in any commercial area. Regulations for the establishment of big retail projects in States Regional Planning documents must be included and it should be ensured that any large retail outlet meets the requirements of urban planning.

vi. For ensuring free and fair competition, possible monopolistic / monopsonistic tendencies of the large retailers should have to be proactively dealt with.

vii. The sources of power of organized retail need to be understood to control the abuses of this power proactively.

viii. Modernization of markets through public-private partnerships should also be encouraged.

ix. Co-operatives and associations of unorganized retailers for direct procurement from suppliers and farmers should be facilitated.

x. Licensing and permit regime must be simplified for organized retail.

xi. There is a need to strengthen the Competition Commission's role for enforcing rules against collusion and predatory pricing.

11. Conclusions

The Indian Council for Research on International Economic Relations (ICRIER) has strongly advocated FDI in retailing since it would speed up the growth of organized formats. The proposed FDI norms will open up strategic investment opportunity for global retailers, who have been waiting to invest in India. The 1991 reforms brought FDI into various sectors in the Indian economy like insurance, banking, outsourcing, IT, manufacturing, telecommunication, construction and transportation, which has helped development in all these sectors at global scale. Now it is the turn of retailing, the largest sector, next only to agriculture, which connects all – top, bottom, left and right sections of the society with the manufacturing and distribution chain. The ICRIER study has shown that hardly 1.7 per cent of small shops have closed down due to competition from organized retail. They have competed successfully against organized retail through adoption of better business practices and technology. FDI has positive spillover effects on the economy as its ownership advantages get disseminated to locally owned enterprises, enhancing their productivity. All these benefits of foreign direct investment have been well proven in India in sectors such as automobiles, telecom and consumer electronics. Retailers entering the Indian market need to ensure that they have considered the opportunity along with the challenges to maximize their returns. The investment from global retail giants would surely benefit the country in many ways but how they can do it effectively, only the future can tell.

References:

- Bakkad, Dinesh (2012), Changing Scenario of Business and E-Commerce, Prashant Publication, Jalgaon, Maharashtra, 2012.
- Bhagwati, Jagdish, Untenable critiques sowing confusion on supposed ill-effects of retail FDI, *The American Interest*, October 16, 2012.
- Ghemawat, P and Ken A. Mark (2006): 'The Real Wal Mart Effect', Harvard Business School Working Knowledge.
- Jain, Mamta And Meenal Lodhane Sukhlecha (2012), FDI in Multi-Brand Retail: is it the Need of the Hour??, *Zenith, International Journal of Multidisciplinary Research* Vol.2 Issue 6, June 2012, ISSN 2231 5780 www.zenithresearch.org.in
- Joseph, Mathew and Nirupama Soundararajan (2009), "Retail in India: A Critical Assessment", Academic Foundation, NewDelhi.
- Kaushik, Rajiv (2012), FDI in Retail and its Implication in India, *IJCEM International Journal of Computational Engineering & Management*, Vol. 15 Issue 3, May 2012 ISSN (Online): 2230 7893 www.IJCEM.org www.ijcem.org
- Malviya, Sagar (2011), FDI in Retail: Do Big Multinational Retailers Really Hurt SMEs in the Country?, *The Economic Times*, ET Bureau, Dec 5, 2011.
- Mancheri, Nabaal (2010), India's FDI policies: Paradigm shift, <http://www.eastasiaforum.org/2010/12/24>
- Mukherjee Arpita and Nitisha Patel (2005), "FDI in Retail Sector: India", Academic Foundation, New Delhi.
- Okada Aya (2009): 'Institutional Change and Industrial Development: The Experience of the Indian Automobile Industry' in Rajesh Kumar and Murali Patibandla (eds), *Institutional Dynamics and Evolution of the Indian Economy*, Palgrave MacMillan, New York.
- P Shivakumar and S Senthilkumar, 'Growing Prospective of Retail Industry in and around India", *Advances in Management*, Vol. 4 (2), 2011.
- Patibandla Murali (2012), Foreign Direct Investment in India's Retail Sector: Some Issues, working paper no: 366, Indian Institute of Management, Bangalore.
- Stiglitz, Joseph E., 21 October 2012, Spoke to Pranay Sharma on FDI in India's Retail, <http://giffenmanmiscellanea.blogspot.in/2012/10/stiglitz-on-fdi-inindias-retail.html>
- Suryamurthy, R (2 December 2011), "Enter, farmer with an FDI in retail query", *Calcutta, India: The Telegraph*.
- Talreja Monika and Dhiraj Jain (2013), Changing Consumer Perceptions towards Organized Retailing From Unorganized Retailing - An Empirical Analysis, *International Journal of Marketing, Financial Services & Management Research*, ISSN 2277- 3622 vol.2, no. 6, Jun (2013) online available at www.indianresearchjournals.com 73.
- The Financial Express (2011), "Farmer Organisations back retail FDI", 2 December 2011.
- The Hindu (2014), "India to Disallow FDI in Multi brand Retail" September 8, 2014, New Delhi.

Table: 1 - Share of Organized Retail in Selected Countries (2009)

Country	Total Retail Sales (US \$ Billions)	Share of Organized Retail (%)
USA	2983	85
Japan	1182	66
China	785	20
United Kingdom	475	80
France	436	80
Germany	421	80
India	322	4
Brazil	284	36
Russia	276	33
South Korea	201	15
Indonesia	150	30
Poland	120	20
Thailand	68	40
Pakistan	67	1
Argentina	53	40
Philippines	51	35
Malasia	34	55
Czech Republic	34	30
Vietnam	26	22
Hungary	24	30

Source: Planet Retail and Technopak Advisors PVT. LTD.

Seven Inspiring Paradigms in the Policy Environment Relating to the Agriculture Sector for 'GenerationNext' Farmers

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A Plenary Session talk delivered at the National Conference on 'Efficacy of Indian Economic Policies; A Sectoral Analysis' (2015) held at St. Xavier's (Autonomous) College, Mumbai.

Abstract

The policy environment for the agriculture sector of our economy must now increasingly focus on the Next Generation farmers. Young farmers can play an important role in ensuring food security if they are encouraged to involve in farming and the challenges they face are addressed. Over the past few years, rural youth have been shying away from agriculture and globally there is an increasing interest in finding ways of engaging youth in agriculture. Thus, a policy for motivating youth to take up farming as a profession is highly relevant. Any policy of the agriculture sector, must taken into account the factor of ensuring safe food for the consumers. There is need to have a policy approach which is innovative and aims to use banks and other financial companies to reach farmers to achieve wider reach and greater development impact. The increased role of women in the agriculture sector rests on social and community infrastructure and technology that support them. It is imperative that the agricultural policy must include the next generation woman farmer and their professional participation in this sector.

Keywords: *Principal, Agent, Agribusiness, Gandhiji Principles, Rural development*

The term Agricultural Policy describes a set of guidelines or even a law, issued by the government, relating to the agriculture sector. Governments usually implement agricultural policies either directly or through agencies associated with the sector. The objective is to achieve a specific and desired outcome in the agriculture sector. Outcomes can involve, for example, organic cultivation, safe food, increase in food production, price stability, product quality, or even land use.

In Economics, we use the word 'incentive' to refer to something that motivates an individual to perform an action. The study of incentive structures is important in the study of all economic activities - both in terms of individual decision-making and in terms of co-operation and competition within a larger institutional structure.

Positive Incentive measures i.e. giving something, include, for instance, offering incentive payments to farmers for organic farming. On the other hand, Perverse Incentive is an incentive that has an unintended and undesirable result which is contrary to the interests of the incentive makers. For example,

policies which encourage rubber cultivation may induce farmers to shift from food crops to rubber cultivation. Negative incentive measures or disincentives i.e. taking something, are mechanisms designed to discourage activities. Examples of disincentives are various types of taxes on undesirable activities.

The theory of incentives as propounded by Jacques Laffont and Eric Maskin, is concerned with the problems that a planner (or the Principal or the Government) faces when his/her own objectives do not coincide with those of the members of society (or the agents). This lack of coincidence of goals is the main issue in this theory. An incentive problem arises due to non-coincidence of goal of the Principal and the Agent. The planner's objective would also depend on what agents know or what they do. The objective function must depend either on agents' information i.e. what the Agents know or on their behavior.

An example of pure informational dependence could be the planner's objective of social welfare, which is a function of the agents' preferences. The incentive problem in this case is typically that of eliciting this

information on the preferences. Pure behavioral dependence happens in an employer-employee relationship in which the employer is interested only in the employees output. In this case, the incentive problem is not eliciting what the employee knows but inducing him/ her to work hard.

Another theory in Economics related to the subject, is The Theory of Public Choice as propounded by James Buchanan and Gordon Tullock. It is the economic theory relating to how much choice the public has in the economic decisions taken by a government. The public does not have a single preference, but many different preferences, all of which cannot be reflected in a government's economic policy.

Public Choice takes the same principles that economists use to analyze people's actions in the marketplace and applies them to people's actions in collective decision-making. Public choice theory is based on the idea that individuals in public positions make decisions according to their own interest rather than voluntarily follow any rules for maximizing social welfare.

Economists who study behavior in the private marketplace assume that people are motivated mainly by self-interest. Although most people base some of their actions on their concern for others, the dominant motive in people's actions in the marketplace-whether they are employers, employees, or consumers-is concern for themselves. Public choice economists make the same assumption-that although people acting in the political marketplace have some concern for others, their main motive, whether they are voters, politicians, lobbyists, or bureaucrats, is self-interest.

The Agriculture and Related Policies in India can be explained as a process from framing of Policies to Schemes, Programmes, Projects and Mission. The National Agriculture Policy 2000 the first ever, was announced on 28th July, 2000 and covered the period upto 2020. This Policy sought to actualise the vast untapped growth potential of Indian agriculture, strengthen rural infrastructure to support faster agricultural development, promote value addition,

accelerate the growth of agro- businesses, create employment in rural areas, secure a fair standard of living for the farmers, agricultural workers and their families, discourage migration to urban areas and face the challenges arising out of economic liberalization and globalization.

The National Policy for Farmers was announced by the Government of India in 2007. The primary focus of this policy was on 'Farmers', which was defined holistically and not merely with reference to agriculture. In that sense, it was more comprehensive than the Agriculture Policy of the year 2000. The objective of the Policy of 2007 was, inter alia, to improve the economic viability of farming through substantially improving the net income of farmers. The emphasis was on increased productivity, profitability, institutional support, and improvement of land, water and support services apart from provisions of appropriate price policy and risk mitigation measures.

We have tried to visualise Seven Inspiring Paradigms in the Agriculture Policy framework, especially while taking into account the fact that by the year 2020, India would be a country with a young population; it is estimated that more than 64% of the population would be between the ages of 18 and 35 years. The aspirations of the youth must be taken into account while formulating the Agriculture Policies in future.

Policy for Motivating Youth: This policy relates to incentives to the youth to take up agriculture in a professional way. According to one estimate, India is losing more than 2,000 farmers every single day; since 1991, the overall number of farmers has dropped by 15 million (Sainath, 2013). This has several implications for the future of Indian agriculture and India's food security. Young farmers can play an important role in ensuring food security if they are encouraged to involve themselves in farming and provided the challenges they face are addressed. Over the past few years, rural youth have been shying away from agriculture and globally there is an increased interest in finding ways of engaging the youth in agriculture (IFAD, 2012; Paisley, 2013).

Thus, a policy for motivating the youth to take up farming as a profession is highly relevant.

A Policy for Promoting Use of Information Technology to Drive the Agriculture Sector could even encourage Startup firms to develop Applications or 'Apps' for increasing the connection between agriculture and technology. There are farmers who use sensors spread out on the soil and watering is controlled through irrigation systems, remotely. Farmers are also now checking on mobile phones for the latest information on prices and other crop related aspects.

The Policy for Safe Food is highly important. Consumers and even the Government ask the question- Are the produce of the agriculture sector safe for us to consume? Safe food and good agricultural practices must go hand in hand. The critical question therefore, is, how to feed a growing population with healthy, safe, fresh and affordable food on competing resources while improving the quality of life, environment, opportunities for farmers, and choice for consumers. What minimum standards of sustainability and safety will be acceptable in order for a product to enter the marketplace? How would these standards be assured? What are the relative roles of government and of private, voluntary initiatives? Any policy of the agriculture sector, must take into account the factor of ensuring safe food.

With regard to the Policy for Providing Required Infrastructure for the Agriculture Sector, expansion of infrastructure for agriculture should be a key goal for both the State and State Governments. The importance of water to farming operations like sugar, where irrigation is essential to assuring a good crop is well-known. Whether the farmer is growing crops or rearing livestock, a reliable water supply is essential. We have seen how severe drought has impacted the farming community and in turn the consumers. It is necessary to ensure that adequate infrastructure is made available to support our farmers; this must cover all the essential requirements, from water supply networks to better roads to marketing facilities.

Policy for Financing the Agriculture Sector -

Providing customized short and medium-term working capital as well as long-term financing is required to provide incentives to farmers. Finance must include credit facilities, risk participation and advisory service. There needs to be a policy approach which is innovative and aims to use banks and other financial companies to reach farmers to achieve wider reach and greater development impact.

Policy for Women in the Agriculture Sector -

The increased role of women in the agriculture sector rests on the social and community infrastructure and technology that support them. It responds to the needs of their families and their communities, and addresses social, cultural and environmental aspects of life and community, as well as economic well-being. To make those changes, women must be present at all levels of policy making, and their concerns and needs given equal weight with those of others. Policies must enhance the inclusion of farm women's concerns, and their participation in agricultural policy.

Policy for Inclusion of Gandhiji's Constructive Programme-

The agriculture sector has a number of social, economic and even political issues which need to be addressed correctly. The Constructive Programme enunciated by Gandhiji, consists of several independent activities which are connected within the context of creating a harmonious society.

Nurturing communal unity, abolishing untouchability, fostering adult education, systematic improvement of villages, uplift of farmers, development of non-violent labour unions, promotion of cottage and small scale industries, eradication of social evils, prohibition of alcohol, promotion of khadi, promotion of basic education, care and respect for women, promotion of education in health and hygiene etc. are some of the components of the Constructive Programme.

In conclusion, the future policies of the agriculture

sector must consider the above-mentioned aspects in order to address the “Generation Next” farmers of our country.

References

Jean-Jacques Laffont and David Martimort. 2002. *The Theory of Incentives: The Principal-Agent Model*. New Jersey. Princeton University Press.

Buchanan, James M. 1986. *The Constitution of Economic Policy*, Nobel Prize lecture. Republished in 1987, *American Economic Review*,

Department of Agriculture & Cooperation Ministry of Agriculture. Government of India. 2000. *National Agriculture Policy*. New Delhi.

Department of Agriculture & Cooperation Ministry of Agriculture. Government of India. 2007. *National Policy for Farmers*. New Delhi.

Sainath, P. 2013. ‘Over 2,000 fewer farmers every day.’ *The Hindu*. May 2, 2013.

IFAD. 2012. *Youth in agriculture-Special session of the Farmers’ Forum Global Meeting*, 18 February 2012. IFAD. Rome.

Paisley, Courtney. 2013. *Engaging youth in agriculture: Investing in our future*. Global Food for thought. The official blog of the global Agricultural Development Initiative.

Gandhi. M.K. 1941. *Constructive Programme (Its Meaning & Place)*. Navajivan Mudranalaya, Ahmedabad.

India's Re-industrialisation at Cross Roads: Developmental Issue Vs Green Challenges

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A Key-note address delivered at the National Conference on 'Efficacy of Indian Economic Policies,
A Sectoral Analysis' (2015) held at St. Xavier's (Autonomous) College, Mumbai

Abstract

India is fast losing its rural population by way of migration to semi-urban areas and towns. This is creating social and economic challenges beyond the contemporary policy solutions. These migratory dynamics require a surgical approach to industrialisation or re-industrialisation, which is also a solution to the hollowing-out faced by India. This could offer a radical approach towards industrialisation with a further emphasis on rural industrialisation directly linked to agricultural activities, so that migration is stemmed at the source itself. The solutions however should be within the framework of World Trade Organisation's global disciplines of trade and one that meets all the modern challenges of climate change and sustainability issues. The article provides some insights on how to recalibrate the India's economy in the direction of finding solutions to the challenges faced.

Key Words: *Urbanisation, Migration, Economic Development, Industrialisation, Rural Economy, Agro-industries, Obsolescence, Issues of Externalisation of Cost, International Trade, WTO, Sustainability.*

Introduction :

The manufacturing sector in India is gaining in significance as a priority. Therefore, I will be focusing on the strategies and policies needed for "Make in India" succeed. To begin with, it is always important for us to have a solid grip on the underlying limitations of India. India is fast losing its rural population by way of migration to semi-urban areas and towns. We need to get on to manufacturing activity or increased role of the services sector to absorb the rural to urban migration which is one of the biggest challenges faced by modern India. This has resulted in many of the social evils in society. Thus in order to avoid any serious social crisis, we have get our act together and get our feet once again on the way to reverse the process of de-industrialisation and hollowing-out.

There are a number of economic and developmental challenges which are faced by India in the present global economy. The efforts being put in the direction of "Make in India" are talked about across the world today and it is certainly a good initiative for job-seeking India, with its so-called demographic advantage. The re-industrialisation of any economy is the health of the global economy. To this end, the first condition is for

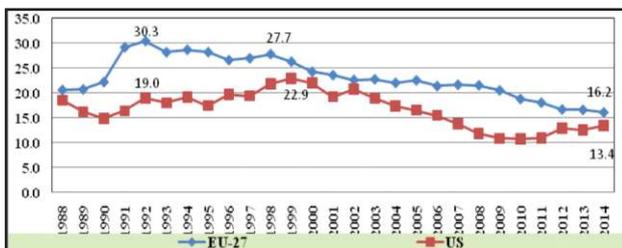
there to be a demand for products, without which all the efforts go to waste. The second adversary is the WTO's disciplines on Non-Agricultural Market Access (NAMA) and Trade Related Investment Measures (TRIMs) and other conditionalities - like the disciplines on the use of subsidies under the manufacturing agreement (NAMA) sector. However, there is some scope in the case of the agricultural sector, as provided under the Agreement on Agriculture of WTO, specifically in the case of "green box" subsidies. The last, if the conditionality should be self-driven-initiatives on all the new industries or investments in India under the banner of "Make in India". India should be committed to maximise the use of green technology and processes, some of which were very much a part of the industrialisation debate around the beginning of the twentieth century in terms of some old thoughts and forgotten ideas.

Demand for Manufacturing as a Factor

Let us first make an assessment of the demand conditions of the global economy. The demand for the manufactured products comes mainly from two broad sources, one internal (domestic) and the other external (by way of exports). In case of India the three

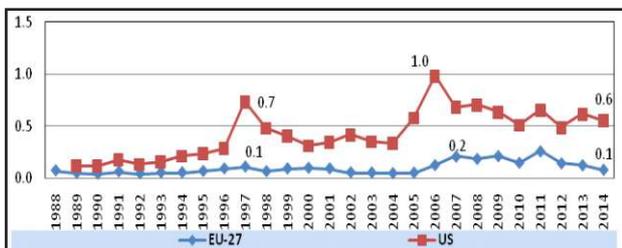
main external drivers are the United States, Europe, and China. In case of exports in present conditions, it would not be successful unless there is a recovery of growth in Europe and the United States – the only ray of hope is in the case of the latter. There has been a continuous decrease in shares of the EU-27 and the US from almost 50 percent of India's exports to the world in 1992 to nearly 30 percent by 2014. Ever since the liberalisation of the economy in 1992, India has seen a continuous drop in its export shares to these two markets, though it still accounts for nearly 30 percent shares (see Figure 1). Therefore, these markets continue to have their dominant role in terms of demand for India's goods exports shares.

Figure 1 : Developed Countries Goods Exports Share for India



Source: WITS Online Database last accessed on 28-02-2015.

Figure 2 : Developed Countries Services Exports Share for India



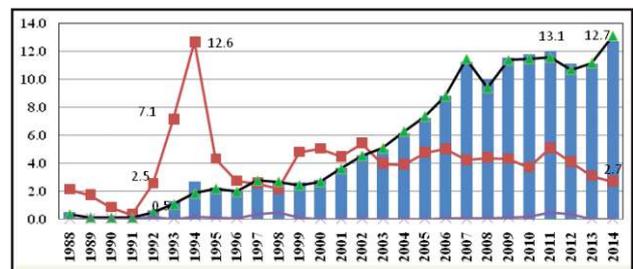
Source: WITS Online Database last accessed on 28-02-2015.

The decrease in the goods trade can be linked to increased use of non-tariff measures after the formation of WTO (Kallummal 2013 and 2015, and Kallummal and Gurung 2015).

In case of exports in the services sector, it may be observed, that both the EU and US together provided less than 1 percent of the demand for total services in these countries. The US did provide a larger market for India, in terms of the average services imports share of 0.5 percent of the total imports of the US, while the EU only provided an average share of 0.1 percent for the period 1996 to 2014, (see Figure 2). Therefore, it is

overwhelmingly clear from the exports of services and goods exports comparison that goods exports dominated in the two markets. However, the later periods did show a decreasing trend in the exports of India's services sector shares. The service sector one can associate to the changing nature of investment activity and the nature of shift in contracting methods. The third demand generator is the Chinese economy. By joining WTO, it has become a significant player and an important driver for India's export demands. India increased its global exports share from 0.2 percent in 1992 to almost 13 percent by 2014, (see Figure 3). With the increased share of China, we can see indications towards the emergence of "Global Value Chain" possibilities in certain sectors like automobile and industrial machinery sectors.

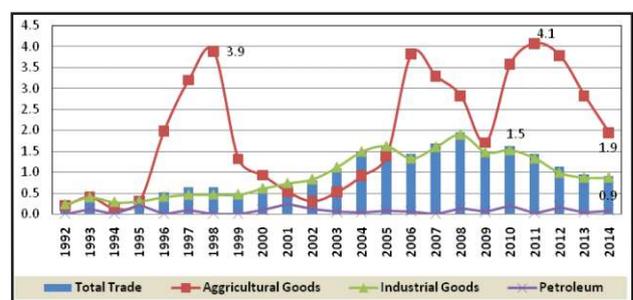
Figure 3 : India's Export to China in comparison to Total Exports (%)



Source: WITS Online Database last accessed on 28-02-2015.

The share of agricultural products exports to China has seen a drastic drop from 12.6 percent 1994 to 4.3 percent and over the years it continued to hold around the same shares till 2011 only to fall to 2.7 percent shares by 2014.

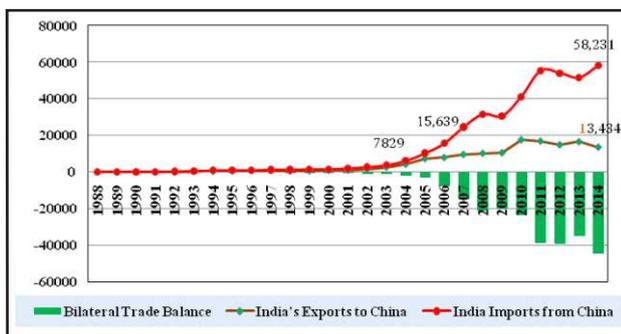
Figure 4 : China's import shares from India in comparison to the total imports from the world



Source: WITS Online Database last accessed on 28-02-2015.

Figure 4 analyses the same information from the point of view of China's total imports and India's share in its total imports. Here too both agricultural and industrial goods shares are significant in China; however the share of agriculture has seen a steeper fall compared to industrial shares. This clearly suggests that as a first step India should be trying to regain the ground lost by the agricultural sector share across the three markets.

Figure 5 : India's Bilateral Trade Balance with China (US\$ millions)



Source: WITS Online Database last accessed on 28-02-2015.

But now, India is faced with a serious negative trade balance which has deteriorated over the years. In case of the bilateral trade of India and China, the exports have virtually stagnated after 2010 while the imports from China have continued to increase, causing this unfortunate scenario (see Figure 5).

India should attempt to increase its agricultural exports share to push for overcoming the trade deficit with China. Also it should build upon the agro-processed products value addition process to communicate the urgency of standards of our products, so that Make in India would happen without exports further, with new and stringent disciplines being introduced by a multilateral body. Thus in the initial few years, primarily, the lack of external demand would be taken care of by the domestic requirements.

Accordingly, we have to devise our policies at least in the beginning (perhaps for five years) putting no conditions on the firms as to where they ultimately sell. But once the global "economy recovers" they should be required to sell in the external markets also. The recovery of global economies should be thoroughly and clearly defined.

Some policy decisions have already been taken in the context of **"Make in India"**. One such effort is the declaration of Reduced Export Obligation (EO) for domestic procurement under Export Promotion Capital Goods (EPCG) scheme - Specific Export Obligation. Under the EPCG scheme, capital goods are procured from indigenous manufacturers (currently 90% of the normal export obligation – 6 times at the duty saved amount – has been reduced to 75%), in order to promote the domestic capital goods manufacturing industry. The second policy declaration under the FTP 2015 to 2020 is a higher level of rewards under Merchandise Export from India Scheme (MEIS) for export items with high domestic content and value addition. It is proposed to give a higher level of rewards to products with high domestic content and value addition, as compared to products with high import content and less value addition.

Changing Global Economy & WTO Conditionality Issues

We have to re-design some policies based on the existing scheme for 100 percent EOU schemes. However a small change may be made by changing it to 100 percent domestic sales on condition that these new investments create sufficient value additions, whether to the tune of 30%, 40% or 50%. This should be defined very clearly. The fine print such as what might be the value addition requirements, etc. would have to be worked out in consultation with each sector. This would lead to the creation of guaranteed employment within India.

Over two decades we have seen radical shifts in the nature of development driven by International trade and investments, e.g. Japan in the 1960's & 1970's came up with radically different solutions. It was the first case of the successful production of miniaturised products (like cars, electronics, household gadgets and office equipment) unlike the bulky ones hitherto produced by US and some of the old European Union countries. The making of small and energy-efficient products was achieved through a radically different approach at the workplace by using the technique of simple offers like a sense of security and ensuring discipline in all areas of management. These methods, widely known as "Japanese management practices", enshrining some of the best techniques, unfortunately, never were globalised.

How, then, would India achieve this “Make in India” by attracting investment both domestic and foreign? It is important to lay the foundations and thought before we move forward. I for one would support the idea of finding and examining solutions that exist – the ones which existed in the 1950's. We also have to innovate as there is an urgent need to come up with radical solutions to work within the existing framework of the WTO disciplines. All this while other constraints like the demand dichotomy are kept in mind. Also this has to coincide with the framework of WTO's three principles of Non-Discrimination, Transparency and Predictability.

I wish to elaborate on only two of the ideas which are widely practiced in all the production activities and products today. These would be picked up and applied on a large scale.

These ideas can be applied all across, using the states' support and without compromising on the WTO disciplines. Active state support is truly critical for all these activities - in the changed scenario states can work as facilitators but I would have them take on more active roles.

The ideas I wish to highlight are Product Obsolescence and the Concept of Externalisation of Cost which are often Practised knowingly or unknowingly across sectors and products from the stage of “drawing board to drawing room” in case of industrial goods and from “farm to fork” in case of agricultural products. This also falls in line with the recent stress on quality issues of the Indian government concerning “ZERO DEFECT AND ZERO EFFECT”.

Obsolescence

I will be discussing the concept and idea of Obsolescence first and later, the practise of Externalisation of Cost. It is important to address these forgotten ideas of the 1950's of the product obsolescence and externalisation of cost practised at every stage of industrialisation of agricultural and industrial products. As India is attempting a second innings in terms of industrialisation, we have to make a conscious effort in the direction of putting the small green ideas into every act of industrialisation and agricultural practices as this would go a long way in

building a sustainable economy. This would also facilitate the process of migration from domestic sales to exporting activity as we would be embarking upon a sustainable path. There should be a clear demarcation of incentive schemes and these should be put in place mainly to encourage innovation and capacity building which support these ideas.

Obsolescence is the state of being which occurs when an object, service, or practice is no longer wanted even though it may still be in good working order. This is applicable in all areas of the economy, whether agriculture or manufacturing or service.

But the problem of obsolescence can be clearly observed in the electronics technologies, wherein the procurement lifetimes for microelectronic parts are often significantly shorter than the manufacturing and support life cycles for the products that use the parts. However, obsolescence extends beyond the electronic components to other items, such as materials, textiles, and mechanical parts. It is therefore critical and important to implement/operate an active management of obsolescence to mitigate and avoid extreme costs to the environment. Ideally obsolescence of any material should be continued as long as the material properties, like wearing, structural integrity, etc., support the full functioning of all the essential activities which are required to be performed. Every product has a life cycle before one would like to part with it or throw it away. Today, one can see many products discarded much before the setting-in of obsolescence or completion of a life cycle.

Planned Obsolescence

A product may intentionally be designed to use a faster wearing component - a form of planned obsolescence. Sometimes marketers deliberately introduce obsolescence into their product strategy, with the objective of generating long-term sales volumes by reducing the time between repeat purchases, e.g. producing an appliance which is deliberately designed to wear out within five years of its purchase, thereby forcing the consumer to replace it within five years. Some electronic products do not function beyond a season or a couple of days. This proves the concept of obsolescence practiced by selected manufacturers of electronic product dangerous for the global economy

as it renders the products obsolete while also exacerbating environmental issues like e-wastage.

Postponement Obsolescence

Postponement obsolescence refers to a situation where technological improvements are not introduced to a product, even though it is possible to do so. One possible example is when an auto manufacturer develops a new feature for a line of cars, but chooses not to implement that feature in the production of the least expensive car in its product line.

This concept of obsolescence goes much before the manufacturing process/service is provided and has to be consciously incorporated at the product-designing stage itself. Obsolescence management, also referred to as "Diminishing Manufacturing Sources and Material Shortages" (DMSMS), refers to the activities undertaken to mitigate the effects of obsolescence, activities which could include last-time buys, life-time buys, and obsolescence monitoring.

Functional and Technological Obsolescence

A product may be functionally obsolete when not functioning in the manner it did when created. This may be due to natural wear, or due to some intervening act. However, some products are rendered technologically obsolete. Due to changes in complementary products these cannot be avoided. Thus, in order to address the issue, we need to intervene at the designing stage itself. India has strength in designing (like Chip design) and we can utilise this edge over the others to achieve fast results.

Externalisation of the Cost

In the context of externalisation of cost we need to understand three concepts and questions pertaining to these: for one, what is the externalisation of cost, secondly how can we avoid this in the present world and lastly why should the externalisation be avoided or reduced. I would be talking about these issues in some detail today.

Speaking of the externalisation of cost, we can trace the cost of a product from the stage of extraction, production, distribution, consumption to disposal - all

of which together is called Material Economy. In the material economy people are involved in all the stages of activity and when they are not properly compensated for their services or when the costs are not recorded in any of the accounts statements of the company, we can say that all the associated costs are externalised.

If at each stage of production the actual cost is not paid by the users, the costs are termed as being externalised. Besides, how can we achieve the avoidance of this in the present world economy? Measures to avoid externalisation of cost have to be adopted in agreement with global partners, only then would we be actually compensating all the factors and actors in the production processes. The point pertains to why the externalisation should be avoided or reduced. The externalisation of cost creates all the perils of an unsustainable way of life, where the industrial products are comparably much cheaper than what is expected to be their true cost or intrinsic cost. One of the biggest challenges faced by any nation is development, growth and equity.

We have to strike a balance between growth which is sustainable, based on relatively cleaner technologies and achieved by avoiding externalisation of cost and growth which does push us to poverty in the environmental sense. Finally, before I conclude, I must say that one of the biggest challenges India is faced with in terms of exports is how our products are viewed. Most often our products are rejected based on quality issues. All these NTMs have the concept of sustainability and balanced development hidden in their individual objectives, one way or the other.

By Way of Conclusion

A focus on the agricultural sector for industrialisation will help us address the developmental issues of nearly 60 percent of the population and bring about a complete transformation of the rural economy which has been completely neglected over a couple of years. All the incentive schemes should be designed to address the issue of product obsolescence and avoidance of externalisation of costs.

Gandhiji's thought on economic activities and trade was very simple. He believed in building a strong nation by creating self-sufficient villages. This in turn

would promote democratic practices with larger participation within the domestic economy. I would like to promote democratic practices with active larger interaction/participation within the domestic economy which is only applicable in a limited sense to agricultural products. I would like to see the encouragement of qualities like stewardship, resourcefulness and thrift as good qualities. Many of his beliefs and thoughts are valid even in the present day.

We also need to look for new approaches towards re-industrialisation. Since the need to make in India has been well recognized and documented, it is worth looking at some innovative ways to attract investments into India under conditions that would facilitate exports at a later stage.

Some additional pointers to be kept in mind are as follows: 1) Local production and local sale should be given more priority as this is minimising the carbon footprint of transportation; 2) Maximising the use of technology across all sectors; 3) Making production processes as compatible with WTO rules as possible; 4) Not losing sight of meritocracy; practising economic espionage – keeping counter intelligence – to protect India's interest in overseas markets; practicing Economic Intelligence – as suggested by Kautilya's *Arthashastra*. 5) Practicing economic Green production processes; 6) To be encouraging ZERO Waste.

References :

Kallummal, Murali, (2013), SPS Measures and Possible Market Access Implications for Agricultural Trade in the Doha Round: The Empirical Evidence of Systemic Issues and Changing Detection Technology, LAP Academic Publishers, ISBN: 978-3-659-40808-3, Germany

Kallummal, Murali, (2015), 'North-South Imbalances in the Doha Round: The Use of Specific Duties as a Trade Policy Instrument', *Agrarian South: Journal of Political Economy*, vol.4 (1), pp.85–124, ISSN: 2277-9760. co-author with Hari Maya Gurung, 2015, India's Agricultural Exports and United States Sanitary and other Regulatory Measures: Special Focus on Exports in Spices and Vegetable Products from Maharashtra and Gujarat", International Conference Indian Agriculture Sector Under Trade Liberalisation and WTO: Issues and Challenges, organised by Centre for WTO Studies, IIFT, International, 5 - 6 December, New Delhi.

web resources, <https://en.wikipedia.org/wiki/Obsolescence>, last accessed on 28-02-2015

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HINDI ARTICLE

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“शोध-पत्र”

मुरदाघर-एक और मुरदाघर

आशा नैथानी दायमा

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शोध-सार

उपन्यासकार जगदंबाप्रसाद दीक्षित का उपन्यास “मुरदाघर” हिन्दी साहित्य जगत का बहुचर्चित उपन्यास रहा है। प्रस्तुत शोध पत्र में शोधकर्ता ने मुरदाघर में चित्रित विभिन्न चरित्रों में मानवीय गुणों को तलाशने का प्रयत्न किया है। लेखिका इस निष्कर्ष पर पहुँची हैं कि ये चरित्र दीक्षितजी की मानवीय संवेदना का जीता जागता स्वरूप हैं। समाज इन चरित्रों को घृणित मान सकता है परंतु उपन्यासकार के लिये ये बिमार समाज का हिस्सा हैं और उपन्यासकार इनका इलाज ढूँढ रहा है।

मैं यह मानकर चल रही हूँ कि आप ने मुरदा-घर उपन्यास पढ़ा है। इसलिए कथा की नहीं कथ्य की बात करूँगी। उपन्यास के पहले ही पृष्ठ में देखिएगा तो लेखक लेखकीय परंपरा को तहस-नहस करता नजर आता है। यहाँ न कथा, न कथ्य, न चरित्र, न शिल्प, न भावभूमि कुछ भी तो परंपरागत नहीं है- लेकिन यह भी तो नहीं कहा जा सकता कि जो परंपरागत नहीं है वह सत्य नहीं है। मुरदा-घर को समझने की ये मेरी अपनी सोच है। दरअसल पिछले अनेक वर्षों में दीक्षित जी को जितना जान पाई हूँ उसी से ये सोच बनी है। तो मुरदा-घर हमारे समाज का वो सत्य है जिसे हम देखना सुनना नहीं चाहते। विषमताओं और विसंगतियों से भरे इस उपन्यास में चित्रित नारी-पात्र ‘दयनीय’ नहीं ‘घृणित’ हैं। संभ्रांत महिलाओं का उनकी तरफ देखना भी त्याज्य है। संभ्रांत पुरुष उनकी तरफ कनखियों से देख लेते हैं। अन्य पुरुष दीदें फाड़कर देखते हैं और बड़ी भद्गी से मुस्कराते हैं। लेखक जगदम्बा प्रसाद दीक्षित ने स्वयं एक जगह कहा है- ‘नारी के संबंध में हमारा दृष्टिकोण ज़्यादातर पुरुषपरक और उच्चवर्गीय रहा है। शरतचंद्र तक और उनके बाद भी नारी सौंदर्य, त्याग और

महानता की प्रतिमा रही है। नारी को प्रेम-तपस्या की प्रतिमा के रूप में देखने का यह तरीका भी उतना ही पुरुषपरक है जितना कि उसे माया या बुराइयों की जड़ समझने का।’¹ मैं यह समझती हूँ कि मुरदा-घर में दृष्टिकोण की इस पुरुषपरकता से छुटकारा पाने की कोशिश की गई है जो शोषित है और अपनी सामाजिक परिस्थितियों का शिकार है। उपन्यास में चित्रित सभी नारियाँ- मैना, पारवती, चमेली, बशीरन, नूरन, रोजी, मरियम (नामों पर ध्यान दे रहे हैं न आप) इनका धर्म नहीं, तन महत्वपूर्ण है। सफ़ेदपोश समाज के लिए ये गंदगी हैं लेकिन दीक्षित जी के लिए ये बीमार समाज का हिस्सा हैं और लेखक इनका इलाज ढूँढ रहा है। यह मुरदा घर हर बड़े महानगर में मौजूद है, गरीबी, दुःख, वितृष्णा, नफ़रत, धिनौनेपन से भरा हुआ, फिर भी महानगरों का अभिन्न अंग। इस सारी गंदगी और विकृति के बीच एक सहज मानवीयता ज़िंदा है। इस सहज मानवीयता की उपस्थिति को देखकर बार-बार यह प्रश्न उठता है कि लेखक इन चरित्रों में इस मानवीयता को कैसे ढूँढपाता है? मुझे लगता है इसका उत्तर लेखक का अपना बचपन है जहाँ एक तरफ उसका अपना शराबी टूक

ड्राइवर पिता है और दूसरी तरफ़ धर्मभीरु माँ, जो कड़के की टंड में शॉल के आधे हिस्से में अपने दोनों बच्चों को लिटाती है आधा शॉल उन्हें ओढ़ाती है और खुद रातभर तेल की डिबरी की उस हल्की सी रोशनी में ज़ोर-ज़ोर से रामचरितमानस का सुंदरकांड पढ़ती रहती है। दिन में लोगों के घरों में खाना पकाती है। प्यार और दुलार से अपने दोनों बच्चों को पढ़ाती-लिखाती है, योग्य बनाती है। ये मानवीयता, कोमलता आपको उपन्यास में चित्रित वेश्याओं में भी मिलेगी और हिंजड़ों में भी। दीक्षित जी स्वयं पक्के वामपंथी विचारों में पगे हुए थे, उनके पात्रों की यह सहज मानवीयता बड़ी मार्मिक लगती है। पेशे में गंदगी के बावजूद स्नेह, सहानुभूमि, त्याग, करुणा आदि मानवीय गुण भरपूर मात्रा में इस उपन्यास में विद्यमान हैं। जन्म से लेकर मरण तक बड़ी अजीब सी दुनिया है इनकी। मरियम जब सड़क के किनारे पड़े बड़े से पाइप के भीतर प्रसव वेदना में तड़प रही है तो हिंजड़े आकर उसकी सहायता करते हैं। दरगाह की तरफ कीमा-पाव बँट रहा है सुनकर कोढ़िन रोज़ी भी रेंगती हुई वहाँ पहुँचती है उस भीड़ और छीना-झपटी में कीमा पाव उसे मिल भी जाता है पर खुद नहीं खाती, तड़ीपार हुए जब्बार को दे देती है। वेश्याएँ हवालात में एक दूसरे के प्रति हमदर्दी से पेश आती हैं, बीमार चमेली को अस्पताल पहुँचाती हैं। कोढ़ी भिखमंगा रोज़ी को अपनी भीख के पैसे उठाने देता है। पोपट की मौत पर बशीरन मैनाबाई का सहारा बनती है। देखकर ऐसा लगता है गंदगी की अपनी विशेषताएँ हैं। समाज ने इन्हें काटकर अलग फेंक दिया है लेकिन इन लोगों ने अपनी अलग दुनिया में अपने अलग जीवन मूल्यों की सर्जना की है जिसे समाज के तथाकथित बड़े लोग बुरा कह सकते हैं, पाप कह सकते हैं लेकिन इनके देखे वही मानवीयता है।

उपन्यास में चित्रित सभी पात्र इतने जीवंत हैं कि लगता है कि हमारे आसपास ही मौजूद हैं। अगर आप दीक्षित जी के पुराने घर, जुहू वाले घर गए हों तो वहाँ इन लोगों की बू आती महसूस होती है। क़ैदखाने का वर्णन भी बड़ा दिल दहलाने वाला लेकिन वास्तविक है। मुझे एक घटना याद आ रही है बात 1970 या 71 की होनी चाहिए। मेरे

पिताजी ने (यानी डॉ. शशिशेखर नैथानी ने 1950 में संत जेवियर कॉलेज में हिंदी विभाग की स्थापना की थी और 1956 में दीक्षित जी को यहाँ अपाईंट किया था)

एक दोपहर घर आकर माँ को बताया था कि जब दीक्षित जी उस दिन कॉलेज से बाहर निकले तो सादे कपड़ों में जो पुलिस वहाँ तैनात थी उन्होंने दीक्षित जी को अरेस्ट कर लिया। दूसरे दिन टाइम्स आफ़ इंडिया में फ्रंट पेज की ये न्यूज़ थी कि बंगाल के नक्सलवादी चारु मजूमदार के आंदोलन के तहत दीक्षित जी को क़ैद किया गया था। हालाँकि बाद में पता चला था कि दीक्षित जी उनके साथी नहीं थे। मार्क्सवाद-लेनिनवाद दीक्षित जी का आदर्श रहे हैं। अमीरी-गरीबी के बीच चौड़ी होती खाई ने उन्हें हमेशा बेचैन किया। जेल में भी बहुत कुछ देखा होगा उन्होंने और चूँकि स्वयं बहुत संवेदनशील थे इसलिए उनका वर्णन, वे चरित्र सभी कुछ जीवंत लगते हैं। सामान्यतौर पर हम आप जिन्हें समाज की गंदगी कह कर भुला देते हैं वे सभी पात्र और परिस्थियाँ इस उपन्यास में मुखरित हैं। मुंबई शहर की ऊँची-ऊँची आलीशान अट्टालिकाओं के समानान्तर सड़क के किनारों पर, गटर के छोरों पर, रेल्वे ट्रैक्स के किनारों पर, फ्लाई ओवर के नीचे, सीलन भरी गलियों के मुहानों पर जीवन जीने वालों का एक ऐसा दस्तावेज है ये उपन्यास जिसे पढ़कर आप एक अलग ही दुनिया में प्रवेश कर जाते हैं। दीक्षित जी के अनुसार 'ये निर्धनता पूँजीवादी सामाजिक व्यवस्था की देन हैं।

व्यक्तिगत बात करूँ तो मैंने दो बार इस उपन्यास को पढ़ने का प्रयास किया। पहली बार केवल पहला पृष्ठ पढ़ा और दूसरी बार चार-छः पृष्ठ पढ़पाई। कारण बड़ा सीधा-साधा था- मेरे मध्यमवर्गीय संस्कार गालियों से भरे उन पृष्ठों को साहित्यिक कृति के रूप में स्वीकार नहीं कर पा रहे थे। जब मैंने संत जेवियर कॉलेज में पढ़ाना शुरू किया और एक बार बस यूँ ही दीक्षित जी से कह दिया कि ये कैसा उपन्यास है, इतनी गालियाँ मैं तो पढ़ही नहीं पा रही हूँ। दीक्षित जी मुस्कराए और कहा- मलाबार हिल और सेंट जेवियर कॉलेज मुंबई नहीं है। तब हम मलाबार हिल रहते थे और मैं यहाँ पढ़ा रही थी। सो एक बार फिर साहस जुटाकर मुरदा-घर उपन्यास पढ़ना शुरू किया। इस बार पूरा पढ़ा और फिर बार-बार

पढ़ा। सारे पात्र जीवंत हो उठे। बस स्टॉप पर खेलते उन आवारा लड़कों में मुझे बहुत से राजू, गोप्या, राम्या, मम्मद, अन्ना नज़र आने लगे। उपन्यासकार कहता “इन आवारा छोकरो की दिनचर्या भी अजीब है। कभी वे बस स्टॉप पर खेल रहे होते हैं, दौड़ते हैं...छिपजाते हैं...निकल आते हैं...खिलखिलाते हैं। बीच-बीच में कहते हैं...साब...एक पाँच पइसा...पाव लेके खाएंगा...भूखा है सुबु से...फिर वही भागदौड़ आँख मिचौली और गाने...फिर एक खिलखिलाहट।”² मैं इसे पढ़ती हूँ और इन लड़कों को जानने लगी हूँ। इनके इस बेफ़िक्र वर्तमान के बाद जो भयावह भविष्य है उससे भयभीत हूँ, क्योंकि उपन्यास में कोई भी पुरुष खुश नहीं है, सम्माननीय जीवन नहीं जी रहा है। न पोपट, न जब्बार न किस्तय्या। पोपट रंगीन, खूब बड़े-बड़े सपने देखता है। वह ‘चानस’ चान्स ढूँढ रहा है। एक स्मगलर के साथ काम करते हुए खूब ऊँची छलाँग लगाता है। छलाँग कुछ ऐसी लगती है कि ट्रेन की पटरियों में हमेशा के लिए बिछ जाता है। उसकी पत्नी मैनाबाई का भी एक सपना है कितना मासूम सपना वो कहती है- ‘मेरा सपना है...मैं सोऊँ...साम सेच सो जाऊँ...रातभर सोऊँ...दूसरा रात फिर सोऊँ रातभर...।’³ लेकिन मैना का यह सपना भी पूरा नहीं हो पाता। यहाँ जब्बार भी है, जो चोरी करता है, तड़ीपार होता है, पुलिस के हाथों निर्ममता से पिटाता है, लेकिन नहीं बताता चोरी का माल कहाँ छिपाया है क्योंकि वह नहीं चाहता हसीना को लोग ‘वही’ बना दें, लेकिन कहाँ रोक पाता है हसीना को। जब्बार पुलिस वालों की मार खाता जाता है, चिल्लाता जाता है, ‘तुम चोर...तुम्हारा सब लोक चोर...तुम्हारा मिनिस्टर लोक चोर...।’⁴ हसीना जब्बार से कहती है- मेरे से झूठ बोल के सादी बनाया- बोला तेरे कू खोली ले के ढूँगा। ‘खोली नहीं’ बनी पर हसीना ‘वो’ बन गई धंदा करने लगी। इन महिलाओं के लिए जिस्म का सौदा करना इनकी मजबूरी है। पुलिसवाले पकड़ते हैं तो खुश भी होती हैं कि कम से कम इतने दिन बग़ैर किसी से शरीर नुचवाए दो वक्रत का खाना मिल जाएगा। कुछ के मन में एक डर भी है- बशीरन कहती है- ‘आगे क्या होगा...जिस्म जवाब दे रया है। मैं बोलती नूरन...दो चार साल के अंदर वो टैम आ जाएगा मेरा...कि हवलदार लोग पकड़ेगा नई मेरे कू। इधर रह

के महीना बीस दिन जो चैन से खाने कू मिलता है बैठ के...वो भी नई मिलेगा। तब क्या होगा?’⁵ जेल में नई छोकरी आई है गुजरात से। अपनी सहेली हंसा की कहानी सुना सुनाकर रोती रहती है। मैना जानती है ये कहानी हंसा की नहीं ‘नई छोकरी’ की अपनी कहानी है। अब उसे रिमांड होम भेजा जाएगा। मैना डरी हुई है कहती है- ‘कोई भी आएंगा और ले जाएगा तेरे कू रूपिया देके...बेच देगा तेरे कू ये लोक...उधर कागज पे लिख देगा...तेरा भाई ले गया...तेरा बाप ले गया...समज गई क्या?’⁵ मजबूर, डरी हुई मैनाबाई का ये कथन हमारे समाज सुधार, नारी उद्धार के नाम पर खेले जाने वाले खेल का पर्दाफाश करता है। अब इन महिलाओं के प्रति घृणा का भाव नहीं जागता, हमदर्दी होती है। कितनी आसानी से हम समाज की इन औरतों पर ‘गिरी हुई औरत’ का लेबल चस्पा कर देते हैं। कभी यह नहीं सोच पाते कि इसने ये काम शौकिया तो नहीं अपनाया होगा। उपन्यास पढ़ने के बाद इन औरतों पर तरस आने लगता है। सड़क के किनारे खड़ी उस औरत की मुस्कान के पीछे की पीड़ा दिखने लगती है। यह तथाकथित ‘गंदे लोग’ उच्च वर्ग से घृणा करते हैं। उनसे दूर रहना चाहते हैं। अपनी अलग दुनिया बसाना चाहते हैं।

कुल मिलाकर देखिएगा तो दीक्षित जी की अपनी जो सोच रही है- दो वर्गों के बीच की खाई की, उच्च वर्ग के कृत्रिम

मुखौटों की, राजनेताओं के झूठे वादों की (एक और किस्सा सुनाऊँ, दीक्षित जी की सुपुत्री सुनीता ने जब बेटी को जन्म दिया तो बड़े खुश हुए थे। मैंने जब बच्ची का नाम पूछा तो बोले प्रियंका। मैंने नाम की तारीफ़ की तो बोले मुझे पसंद नहीं यह नाम, इसमें नेहरू खानदान की झलक है।) खैर, मैं कहना यह चाह रही हूँ कि उन्हें कांग्रेस या जनता पार्टी कोई पार्टी हो उसकी कृत्रिमता से, उनकी सोच से ही कोपित होती थी।

1992 में उन्होंने कॉलेज से वॉलंटरी रिटायरमेंट ले लिया था। काफ़ी समय से कहा करते थे मेरा मन इस सबसे उकता गया है, अब केवल लेखन करना चाहता हूँ। कुछ वर्षों पहले अपना ‘यारी रोड’ वाला फ़्लैट उन्होंने बेटी सुनीता के नाम कर दिया था। फिर एक दिन बता रहे थे, सुनीता ने वो फ़्लैट किराए पर चढ़ा दिया है। उसके हाथ में पैसे रहेंगे,

परिवार उसे हल्के में नहीं लेगा। एक दिन बता रहे थे मैंने अपनी 'पोलिश' बहू से कहा दिया है नौकरी मत छोड़ना और अपने पति से घर काम करवाया करो वरना भारतीय पुरुष घर के कामों में कभी सहयोग नहीं देता। इन बातों का सिर्फ इसलिए उल्लेख कर रही हूँ क्योंकि यह दीक्षित जी के मन में महिलाओं के प्रति आदर भाव को दर्शाते हैं और मुझे यह लगता है कि इसीलिए मुरदा-घर की उन औरतों के प्रति लेखकीय सहानुभूति के कारण हमारा मन भी द्रवित होता है। उनसे नफ़रत नहीं होती, घृणा भाव नहीं जागता।

उपन्यास के आखिर में पोपट की मृत्यु हो जाती है। ज़िंदगी में ऊँची छँलाग लगाकर, सब कुछ एक झटके में पा लेने का सपना देखने वाला पोपट एक ट्रेन से दूसरी ट्रेन में छलाँग लगाते वक्त पटरियों पर गिर जाता है और उसकी मृत्यु हो जाती है। बशीरन के साथ पहले स्टेशन और फिर अस्पताल के मुरदाघर पहुँचती है मैनाबाई। सोचती है पोपट फिर धोखा दे गया, बेटे राजू को पुकार रही है और इसके बाद वह पूरा अंतिम चैप्टर जिस तरह से लिखा गया है पाठक को बेचैन बहुत बेचैन कर जाता है, आप बहुत असहाय अनुभव करने लगते हैं। गले में कुछ फँसा हुआ-सा मामूल होने लगता है, हर बार पढ़ते वक्त पृष्ठ धुँधले पड़ जाते हैं। मैनाबाई के साथ आप मुरदा घर से बाहर आ जाते हैं, उस दुनिया की तरफ जहाँ और भी हैं मुरदे। दुनिया को देखने का आपका दृष्टिकोण दीक्षित जी बदल देते हैं। इस तबके के प्रति आप बहुत नहीं तो थोड़े से संवेदनशील तो हो ही जाते हैं और यही लेखक की कामयाबी है।

संतान का मोह बड़ा बेरहम होता है। पिछले कुछ वर्षों से यही संतान-मोह दीक्षित जी को बार-बार विदेश ले जाता था। वहाँ उन्हें अच्छा भी लगता था। लेकिन किसे पता था कि पिछले वर्ष की जर्मनी की यात्रा उनकी अंतिम यात्रा होगी। हम आप जितने भी लोग दीक्षित जी के परिचित रहे हैं, उन्हें सम्मान और प्यार देते रहे हैं, लगता है काश वे अंतिम समय में यहाँ होते, तो शायद हम कुछ कर पाते। इस महान साहित्यकार का पार्थिव शरीर चाहे किसी कारण से हो परंतु वहाँ तीन दिनों तक अस्पताल के मुरदा-घर में पड़ा रहा- ये बात जब मुझे पता चली तो कलेजा मुँह को आ गया। यह कैसा अंत था मुरदा-घर के लेखक का !!!

पुस्तक सूची :

1. **मुरदाघर - जगदम्बा प्रसाद दीक्षित**
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7. **साक्षात्कार : श्रीमती सत्यवती नैथानी**

