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A STUDY ON STATUS AND PROSPECTS OF INDIA - THAILAND FREE TRADE AGREEMENT

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ABSTRACT

India and Thailand signed a free trade agreement in 2004 with an early harvest scheme for 82 items and this was perceived as mainly supporting MNC companies who manufacture TV, Automobile and Refrigerator and does not support other Industry. In this article, we tried to analyse this FTAs current status as well as its effect on Total trade. Current status of this FTA combined with India Asean FTA where Thailand is also a part now is analysed. Thailand from this year extends zero duty on 67% of items and India will reduce to zero level on 64% of item from next year. Indian textiles market in unique and normally Indian producer realises marginally higher prices in domestic market than in export .when we talk of zero duty in Thailand apart from this buyer has to pay only 7% vat over this where as in India still they have to pay 18%.

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KEYWORDS

international trade, free trade agreement, India Thailand free trade agreement, service sector trade, textile trade.

1.0 INTRODUCTION

Majority of the Indian Government policies are protecting Textile industry assuming that, if they are opened up fully, it would be dumped with cheap product from Asia. Today, the only two countries where Textiles can be competitive are China and India. As such every country's competitiveness in each sector needs to be analysed individually, and cannot be generalized. India and Thailand are considered as developing countries with significant differences in geographical areas and population. India has the total land area more than 6 times larger than Thailand i.e. the total land area of India is 3,287,263 sq. km., whereas Thailand has a total land area of 513,114.6 sq. km. According to the latest statistics, Indian population is over 1 billion while the population figure in Thailand is only about 60 Million. Key economic indicators are, GNI per capita for 2010 for Thailand is at USD 4210 where as for India it is 1340, GDP per capita growth for 1990 to 2010 for Thailand was 2.9% and for India it was 4.9% and the inflation for the same period of Thailand was at 3% and India was at 6%. Further to the background information on FTA, comparative accounts of the economic indicators of Thailand & India in the year 2010 have been given in Table 1.0.

TABLE 1.0: THE ECONOMIC INDICATORS

Details	Thailand	India
GNI per capita (US\$), US\$, 2010	4210	1340
GNI per capita (US\$), PPP US\$, 2010	8240	3560
GDP per capita average annual growth rate (%), 1970-1990	4.7	2.1
GDP per capita average annual growth rate (%), 1990-2010	2.9	4.9
Average annual rate of inflation (%), 1990-2010	3	6
% of population below international poverty line of US\$1.25 per day, 2000-2009*	11	42
% of central government expenditure (2000-2009*) allocated to: health	14	2
% of central government expenditure (2000-2009*) allocated to: education	20	3
% of central government expenditure (2000-2009*) allocated to: defense	8	13
ODA inflow in millions US\$, 2009	-77	2393
Debt service as a % of exports of goods and services, 1990	14	25
Debt service as a % of exports of goods and services, 2009	7	5
Population	66,720,153	1,241,491,960
Area in sq km	513120	3,287,263
Density per sq km	132	370

Source: <http://www.unicef.org/sowc2012/pdfs/SOWC-2012-TABLE-7-ECONOMIC-INDICATORS.pdf>

China started negotiating FTA in 2001 with ASEAN and Thailand supported this strongly from beginning. In 2004 China started an early harvest scheme (EHS) of few items for duty reduction and in 2006 duty was reduced to zero for this EHS items. In 2010 the Zero duty was enlarged for all items and brought under FTA. Now it is called as Comprehensive Economic Program (CEP). Compared to China's status India is a late entrant in this area. China is pursuing an FDI-led, labor intensive manufacturing exports strategy (Goodman, 2004). There is a growing body of literature suggesting that India's economic structure is largely complementary (service-oriented) to ASEAN economies (light manufacturing) with significant areas of mutual interest, so India should focus in this area. Thailand's major 2 supplying countries for 35 % of their import items are Japan at 20% and china at 10%. In case of china their price is very competitive where as Japan has the largest FDI in Thailand and the Japan invested companies bring in majority of their items from Japan. India should consider both this option like make their price competitive as well as increase the JV/FDI in Thailand, by which India's trade can be increased. The total trade between India and Thailand for 2012 is at 9 billion USD and it is expected to grow by 2015 to 19.3 billion USD and the trade in textiles is currently at 326 million and it is expected to grow by 2015 to the level of 517 million USD. In service sector Thailand is importing 51 billion USD from world and India is exporting 137 billion USD in 2012 to world. In today's situation when service sector is added with free movement of people and free movement of property rights it is called common economic program. Nevertheless, a Ficci-Deloitte study on the subject confirmed that once the service sector agreement comes into effect between India and Thailand, Indian entrepreneurs would get considerable opportunities in services like telecommunications, radio, television, consultancy, architectural, legal, accounting, education, health and social work.

In this background, the study was conducted to study the status, performance and prospects of total trade, textile trade and service sector trade of both the countries under the free trade regime.

2.0 ABOUT THE STUDY

An FTA is a bilateral trade agreement in which, the signatory members agree to remove tariffs across member states, while continuing to maintain independent tariff regimes on imports from other countries. It is the preferential nature of an FTA, which primarily concerns economists, when analyzing its trade and welfare effects.

Presently, bilateral trade between India and Thailand is at a low level. Both imports and exports between these two countries are small and mainly characterized by intermediate products necessary for the production of final products. In the year 1990, the total bilateral trade was about US Dollar 621 Million. By the year 2000, it increased to about US Dollar 1,169 Million and by 2012 total bilateral trade stands at 9 billion USD and it is expected to grow to 19.3 billion USD by 2015. For 2012 in India's exporting countries Thailand comes at 25th place and in India's importing countries Thailand comes at 24th place. Apart from free trade (the free movement of goods), other issues are worldwide immigration (the free movement of people) and free intellectual property rights (the free movement of ideas and technology), these two are key factors to be considered in today's international trade. While the World Trade Organization agreements and the new generation of bilateral free trade agreements promote free trade, they restrict the movement of people and intellectual property, free movement in these two areas would benefit developing countries. This study focuses on identifying advantage and disadvantage of existing and ongoing current trade agreements between two countries in total trade and with specific reference to Textiles & service sectors

3.0 INDO-THAI FTA – AN OVERVIEW

India Thailand signed a free trade agreement in 2004 and implemented EHS (early harvest scheme) of 82 items based on 6 digit HS code no., which mainly consist of picture tube/ Refrigerator / plastic raw material, semi precious stones, gear boxes, seats etc. The list was covering approximately seven per cent of the bilateral trade at that time and the duty reduction was initiated from 1st march 2004 and by 2006 duty was reduced to zero for all 82 items. In this list only item which was of interest to Textiles were nylon 6 chips, but the main advantage was enjoyed by MNC's who are in Automobile, TV and Refrigerator manufacturing. Subsequently there were so much discussion to expand this list, However the perception and data suggest that due to high import duty from India and market size, when it is reduced, the import growth in India is higher than Thailand and, trade balance is in deficit for India.

Indian textile market is always unique in nature. Normally an Indian textile producer realises higher price in domestic market than in export market, as well as their domestic price is marginally higher than international price. This style of price prevails in many countries including Thailand. However the domestic market size of India is so big that the producer strongly decides to target in domestic market, where he has a comfort level than struggling to export.

With respect to import duty, for India, let us say if the basic value of imported item is 100 means, first we need to add 1% value for landing charge and on this value @101 duty of 12% in lieu of excise duty is added to make it as 113.1 now on this 113.1 value an education cess of 3% resulting to 0.5 level is added to make it 113.6 and 4% vat is added to this value of 113.6 to make it to 118.2 means the additional expenses what an importer has to pay is **18.2%** when the basic customs duty is at zero level, In case of Thailand if import duty is zero percentage means customer has to pay only **7%** vat which is comparatively lower than India.

Further, Thailand has agreed to reduce the peak duty from 5 to 30% to 0 duty level for 67% of items on the HS list from this year, and for another 9% of items, where the duty will be reduced from 18% to 30% level to 5% this year. This will be further reduced to 0% from 2017 onwards. India had agreed to reduce for 63.9% of items (by HS code no.) of peak duty from 10 to 15% level to 2.5% level this year and further it will be reduced to 0 level from next year. WRT fabrics, this comes under 2nd track of 10% items and duty is being reduced to 7% & 4% respectively this year and this will be further reduced to 0 levels from 2016 onwards.

4.0 LITERATURE REVIEW

The relevant and related literatures were gathered on the chosen research area from the available sources. It has been found that not much work has been done on this particular area, due to various palpable reasons. Most data were gathered from The *International Trade Center (ITC) trade map of statistics* http://www.trademap.org/Country_SelProductCountry_TS.aspx. The International Trade Centre is the technical cooperation agency of the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO) for operational, enterprise-oriented aspects of trade development. Data's were collected from various sources, and 10 more sources are listed in the thesis.

The negotiations between India and the ASEAN representatives during the past few years have created considerable interest among researchers across the world. Pal and Dasgupta (2009) studied the tariff schedule of India and made a preliminary evaluation of the India-ASEAN FTA. By analysing India's commitment schedule, and by studying the production structure of the ASEAN members, this study concluded that sectors such as tea, spices, coffee and rubber will be negatively affected. The marine products, textiles and garments, and auto components industries are also likely to face increased competition. The study points out that the net effect of the trade agreement crucially depends on the ability of the Government of India to redistribute some of the increased wealth gained from this trade agreement to those industries negatively affected by the agreement. Pal and Dasgupta (2008) concluded that, on the basis of a similar study, India was unlikely to benefit in the short term from the India-ASEAN FTA. They pointed out that ASEAN was not a natural trading partner of India, and, unlike China, has not established close relations with the region. However, the agreement may make strategic sense in the long term, if India looks at the option of becoming a hub for services exports to the ASEAN region.

5.0 OBJECTIVES AND METHODOLOGY

5.1 OBJECTIVES

Keeping in mind the aim and purpose of the study, the following specific objectives were formulated:

1. To identify the potential of both the countries on **Total trade, Textile trade**, if all items are freed and brought under FTA umbrella and its effect on trade creation, trade diversion, welfare effects and tariff loss.
2. To identify the top 16 items constituting 80% of import & export of both the countries in total trade & textile trade in particular for analysis
3. To analyse the service sector import & export for past 10 years and analysis of service sub-sector for its growth.
4. To analyse the status of trade surplus experienced by India and Thailand under FTA and identification of commodity group for trade expansion and to identify areas to correct this trade surplus/deficit
5. To analyse perception of manufacturers on the existing and ongoing current trade agreements between two countries
6. To identify the emerging challenges & opportunities of FTA agreement between two countries and explore the avenues to enhance trade cooperation in the prospective industrial sectors
7. To find out challenges faced by both countries/entrepreneurs to enhance their cooperation and bilateral trade, identifying other areas for cooperation and to suggest needed measures for strengthening trade between both countries.

5.2 METHODOLOGY

5.2.1 NATURE OF THE STUDY

The nature of the study is Descriptive and Analytical. The state of affairs as it exists in the operation of the free trade agreement between India and Thailand was studied in depth. The qualitative as well as empirical data relating to the performance of various industrial sectors, coming under this specific agreement in both the countries were analysed and the inferences made there from have been presented.

5.2.2 DATA

The primary sources of data used for this study is Secondary in nature. Primary data were collected on a limited scale from the key industrialists of both the countries to get their perception about this agreement. The list of secondary sources explored to draw conclusions has been presented in the bibliographic section.

5.2.3 DATA ANALYSIS**STATISTICAL MODELS/TOOLS USED FOR ANALYSIS**

1. Considering the data availability and relevance of the study, the Partial Equilibrium Modeling tool, based on World bank/UNCTAD **SMART (Software for Market Analysis and Restrictions on Trade developed by WITS)** (World Integrated Trade Solution) was used to analyse the data. These simulation tools are used to calculate the impact of tariff changes on trade flows (trade creation and diversion), tariff revenues, and consumer welfare.
2. For trade forecast we used two forecasting statistical tools like linear **curve fit method** and **compound curve fit method** and the results were compared to make sure the errors are eliminated.

The following analyses were carried out:

1. Calculation of **percentage change** of share now and expected trade growth projection up to 2015 for total trade, textile trade.
2. Predict the export and import in future up to 2015 by linear curve fit method and compound curve fit method
3. Import and Export **ratio** of commodities
4. Top 20 item imported by Thailand to be compared with quantity exported by India to the world to see whether India has potential to export that item with quantity imported by Thailand from world & vice versa .
5. To identify whether there is potential to free above item of point 4 and if freed how much trade will increase between this countries
6. Thailand & India's service import and export data for 10 years were analysed to find Sub-Sector wise growth potential. Data of service sector Import and export by world and analysed to find India and Thailand's status in it.
7. Analysis of general duty, current duty level and expected duties based on FTA.
8. Conducting a perception survey of various stakeholders and consolidating for presentation

6.0 ANALYSIS AND FINDINGS

The findings and conclusions arrived from the analysis of data, have been presented here under for Total trade

With respect to total trade on import & export of Thailand with India and the trade of world countries with these two countries were analysed. It was found that in case full FTA is implemented following effects will be there on total trade:

1. **Effect of FTA- EHS** (Early Harvest Scheme of India- Thailand which was implemented from 2004) reveals that there is a yearly increase in percentage of EHS trade. It has been observed that the implementation of the Indo-Thai bilateral FTA in terms of the EHS led to significant industrial restructuring in the operations of not only Japanese corporations, but also South Korean and Indian MNCs. For instance, Toyota was reportedly restructuring its operations in Thailand and India, under which some models of vehicles would be sourced from Thailand for the Indian market and gear boxes exported to Thailand from India. A similar restructuring was on in Sony's operations in India and Thailand. On the other side, Hyundai was making India a regional and global hub for compact cars and was to source them from here. Honda, which has built up a sizeable capacity in India for two-wheeler production, might use it as a regional base for them while sourcing some models of cars from Thailand. Some Indian companies are also developing their regional production networks across the region. Indian companies are looking at Thailand as an important investment destination both for its domestic market and as a gateway to the other ASEAN countries. Tata Motors, Tata Consultancy, Mittal Group, Tata Steel and Satyam Computers are among the major Indian players in Thailand.
2. **The SMART analysis of trade reveals**, when India reduces its duty to zero level the effect is as follows. Total trade creation effect for India will be in HS code no 84 (37 mil) 57 (7.7 mil) 68 (6.6 mil) 85 (6.3 mil) & 15 (4.4 mil), 40 (4.3 mil) 21 (4.1 mil) & 27 (3.9 mil) with a total trade creation of 1.2 billion USD and the highest trade diversion takes from Sri Lanka on crude palm oil (HS no 15) and second level at Singapore, Korea and Japan on fuel oil (HS no 27) next one on hoist (HS no 84) from China. When Thailand reduces its duty to zero level, major trade creation effect is in HS code 87 (4.6 mil) 23 (1.9 mil) 15 (1.5 mil) 30 (1.0 mil) 84 (0.5 mil) 71, 85 & 62 (each with 0.2 mil) with a total trade creation effect of 10.8 mil USD and the highest trade diversion takes on HS code no 30 medicaments, 85 water turbine generator, 62 cotton shirt & 29 sugar. All 4 HS code trade is diverted from china. Total trade creation effect for India's import from Thailand is 1.4 billion dollar where as for Thailand's import from India, trade creation effect is only 200,000 USD. Apart from this, even after adjusting the duty reduction, there are products which Thailand is buying from china and Fareast at much lower price, so the trade is not getting diverted. For India's import from Thailand, the revenue loss is 0.3 billion USD and welfare creation is 108,000 where as revenue loss for Thailand import from India is 99,000 USD and welfare creation is 17,000 USD
3. **Thailand's import from India analysis** reveals, in 2012 it was at 3.5 billion USD and top 15 items which covers approximately 87% of trade were short listed and analysed. India's export to Thailand, top 5 supplying countries to Thailand are, Japan, China, UAE, Malaysia, USA and top 5 exporting countries for India are UAE, USA, china, Singapore, Hong Kong. In top 5 exporting countries for India, Thailand does not come even in one HS code, as well as India comes only in 3 HS code in top 5 supplying countries for Thailand. Top 5 commodities which has almost 50% of trade consist of HS code no 71 pearls (0.6 billion USD or 17%), HS no 84 machinery, boilers (0.35 billion USD or 10%), HS no 23 residues and waste food (0.25 billion USD or 8%) HS no 87, vehihiles (0.23 billion USD or 8%) HS no 72 iron n steel (0.23 billion USD or 8%). Thailand import from India as a ratio of Thailand import from world is at 1.39% and 1.2% as India's export to world and at a very low level now.

In the below table we analysed the total trade of the products which Thailand Imports from India top 16 items which covers approximately 80% of trade along with top 5 exporting countries for that HS code for India and also top 5 supplying countries for Thailand.

TABLE 6.1: ANALYSIS OF THAI IMPORT FROM INDIA FOR 2012 WITH SUPPLYING AND EXPORTING COUNTRIES

No	Product Code	Product label	Thai Import from India 2012	Top 5 exporting countries for India	Top 5 supplying countries for Thailand
	TOTAL	All products	3237246	UAE, USA, China, Singapore, Hong Kong	Japan, China, UAE, Malaysia, USA
1	'71	Pearls, precious stones, metals, coins, etc	496612	UAE, Hong Kong, USA, Belgium, Buonas Aris	Switzerland, South Africa, Japan, Australia, Hong Kong
2	'84	Machinery, nuclear reactors, boilers, etc	411537	USA UAE, Germany, UK, Singapore.	Japan, China, Malaysia, UAE, Germany
3	'23	Residues, wastes of food industry, animal fodder	250575	Japan, Vietnam, China, Bangladesh, Pakistan	Brazil, Argentina, India, USA, China
4	'87	Vehicles other than railway, tramway	235682	Sri Lanka, USA, South Africa, UK, Italy	Japan, Indonesia, China, Germany, Korea
5	'72	Iron and steel	228793	China, USA, Belgium, UAE, Italy	Japan, China, Korea, Russia, Taipei
6	'29	Organic chemicals	199207	USA, China, Indonesia, Germany, Netherlands	China, Japan, Singapore, USA, Korea
7	'03	Crustaceans, molasses, aquatic invertebrates, Fish,	106513	USA, Vietnam, Japan, China, Spain	Taipei, USA, Indonesia, Japan, Korea
8	'30	Pharmaceutical products	96840	USA, Russia, UK, South Africa, Nigeria	USA, Germany, Switzerland, France, UK
9	'85	Electrical, electronic equipment	94577	USA, UAE, Netherlands, Germany, Nigeria	China, Japan, Malaysia, Taipei, USA.
10	'10	Cereals	90347	UAE, Saudi Arabia, Iran, Indonesia, Kuwait	Australia, USA, India Canada, Ukraine.
11	'52	Cotton	69707	China, Bangladesh, Pakistan, Sri Lanka,	China, USA, Australian, Brazil, Vietnam
12	'39	Plastics and articles thereof	68863	China, USA, Turkey, UAE, Italy	Japan, China, Taipei, USA, Malaysia
13	'02	Meat and edible meat offal	67988	Vietnam, Malaysia, Egypt, Saudi Arabia, Jordan	India, Australia, New Zealand, USA, Denmark
14	'63	Other made textile articles, sets, worn clothing etc	64621	USA, Germany, UK, UAE, France	China, India, Bangladesh, Singapore, Japan
15	'89	Ships, boats and other floating structures	63168	Singapore, UAE, USA, Brunei, Sri Lanka	Singapore, Marshal island, Japan, China, Panama
16	38	Miscellaneous chemical products	63,070	USA, Brazil, China, Germany, Netherlands	Japan, China, USA, Germany, Malaysia
		top 16 item to total Thai imp fm India	2608100		
		percentage of top 16 item to total Thai imp fm India	80.6		

Source; UN Comtrade

4. **Thailand's export to India analysis** reveals, in 2012 it was at 5.5 billion USD and top 5 supplying countries for India are China, UAE, Switzerland, Saudi Arabia, USA, Iraq and top 5 exporting countries for Thailand are China, Japan, USA, Hong Kong & Malaysia. In the top exporting countries for Thailand, India come only in 5 HS code, as well as Thailand comes in only 3 HS code as top supplying country for India. Top 6 commodities which has almost 60% of trade consist of HS no 84 machinery, boilers (1.3 billion USD or 24%), HS no 39 Plastics (0.57 billion USD or 10%) HS no 85 electrical & electronic equip (0.53 billion USD or 10%) HS no 29 organic chemical (0.47 billion USD or 8%) HS no 40 rubber n article (0.44 billion USD or 8%). Major exporting countries for India for 7 HS code is USA and for 3 HS code China and for 2 UAE and for rest each one with Japan, Singapore, Sri Lanka and Vietnam. A major supplying country to India for 10 HS codes is China and balances each one from Indonesia, Myanmar, Switzerland and Korea. With respect to Thailand, Major supplying countries for Thailand is Japan for 6 HS codes followed by China for 4 HS codes and one each with Brazil, Switzerland, India, Singapore, Taipei, Australia. Major exporting countries for Thailand is china for 7 HS codes followed by Australia for 2 HS codes and one each with Hong Kong, USA, Switzerland, Japan, India and Malaysia. Thailand's export to India as a ratio of Thailand's export to world is at 2.4% and at 1.2% as India's import from world and at a very low level now.

In the below table we analysed the total trade of the products which Thailand export to India top 15 items which covers approximately 87% of trade along with top 5 supplying countries for that HS code to India and also top 5 exporting countries for Thailand.

TABLE 6.2: ANALYSIS OF THAI EXPORT TO INDIA FOR 2012 WITH SUPPLYING AND EXPORTING COUNTRIES

Analysis of Thai export to India in 2012 and it is top 5 supplying country to India for that product and top 5 exporting country for Thailand					
No	Product Code	Product Label	Thai export to India 2012	Top 5 suppliers to India	Top 5 exporting countries for Thailand
	TOTAL	All products	5474385	China, UAE, Switzerland, Saudi Arabia, USA, Iraq	China, Japan, USA, Hong Kong, Malaysia
1	'84	Machinery, nuclear reactors, boilers, etc	1299492	China, Germany, Japan, USA, Italy	China, USA, Japan, Hong Kong, Malaysia
2	'39	Plastics and articles thereof	571750	China, USA, Korea, Germany, Thailand	China, Japan, Indonesia, Vietnam, India
3	'72	Iron and steel	541310	China, Korea, Japan, USA, UK	Hong Kong, India, Malaysia, Laos, Indonesia
4	'29	Organic chemicals	447041	China, Saudi Arabia, Singapore, USA, Korea	China, Indonesia, India, Singapore, Taipei
5	'85	Electrical, electronic equipment	431494	China, Germany, Korea, USA, Japan	USA, Japan, Hong Kong, China, Singapore
6	'40	Rubber and articles thereof	403316	Korea, China, Thailand, Japan, Indonesia	China, USA, Malaysia, Japan, Korea
7	'71	Pearls, precious stones, metals, coins, etc	388903	Switzerland, UAE, Hong Kong, Belgium, South Africa	Switzerland, China, USA, Australia, Germany
8	'87	Vehicles other than railway, tramway	291536	China, Germany, Korea, Japan, USA	Australia, Indonesia, Malaysia, Japan, Saudi Arabia
9	'76	Aluminum and articles thereof	100314	China, UAE, UK, Saudi Arabia, Germany	Japan, USA, India, Korea, Philippines
10	'73	Articles of iron or steel	98839	China, Japan, Germany, Italy, Malaysia	Australia, Japan, USA, Norway, Indonesia
11	'32	Tanning, dyeing extracts, tannins, dyes, pigments etc	53932	China, Taipei, USA, Germany, Switzerland	China, Indonesia, India, Hong Kong, Vietnam
12	'59	Impregnated, coated or laminated textile fabric	42093	China, Taipei, Thailand, Korea, Germany	India, Vietnam, Indonesia, China, Japan
13	'44	Wood and articles of wood, wood charcoal	43124	Myanmar, Malaysia, New Zealand, China, Papua New Guinea	China, Japan, Vietnam, Malaysia
14	'15	Animal, vegetable fats and oils, cleavage products, etc	38144	Indonesia, Malaysia, Argentina, Ukraine, Brazil	Malaysia, Germany, Myanmar, Cambodia, Korea
		Top 15 item to Total Thai export	4751288		
		Percentage of top 15 in total exp	87		

Source: UN Comtrade

7.0 RECOMMENDATIONS AND CONCLUSION

Based on the analysis and findings of the study, the following recommendations have been made to improve the performance of total trade, textiles and service sectors under the free trade agreement:

- Total trade & Full FTA** ; Under full FTA expected total trade for 2015 will be 19.3 billion USD and in this Thailand export to India will be 14 billion USD and India's export to Thailand will be 5.3 billion as there is tremendous trade growth we recommend to have this FTA extended to complete trade except few items. For Full FTA both the countries may not accept, as they want to protect their agriculture sector and few other products like palm oil, natural rubber, tea etc. So we propose to allow some 400 products in negative list similar to Singapore & Sri Lanka's FTA and should bring the balance of trade under full FTA.
- EIC cooperation** ; It has been highlighted that Indian exports, especially in food and fishery products are facing stiff barriers in the developed countries on account of WTO agreements. The problem is compounded as the export consignments are not only rejected on the grounds of non-conformity to standards but are also being destroyed. It also throws open another dimension of cooperation whereby Indian institution like the Export Inspection Council (EIC) could enter into an agreement with its Thai counterpart in order to harmonize the standards of the two countries for exporting activities.
- Service sector**; When there is full FTA, excluding above negative list items, as the trade is growing, it was recommended to implement it, as well as during this trade increase trade balance for India comes in deficit, various reasons for the same are discussed in detail. To reduce this deficit, it is good to enlarge the FTA into service sector, as this is India's strength. In case of countries like Malaysia or Philippines, there may be some reluctance, as they have some activities related to IT area, but for Thailand this will be of mutual benefit only. I.e. recommend to open up service sector and extend this FTA into CEC (comprehensive economic cooperation) as Thailand can be considered as a partner/marketing outfit for India to offer its service to other markets.
- Service sector opening up**; The major stumbling block is India's demand for ASEAN to open the service sector widely by including the independent professional services (IPS); Thailand & Asian side is not familiar with this concept. Their objection is because the IPS does not have any limits, "ASEAN countries also want to limit India's contractual service suppliers to the level of directors, managers and specialists, while India demanded full access.
- Textile Sector** ; We also recommend for opening up of textile sector completely, as in this case major trade will be diverted from China to India and can help to support the trade to be positive for India
- Trade creation** ; The major trade creation area what we see based on analysis is automobile sector, refrigerator and air conditioner market which is mainly controlled by MNC who have manufacturing bases in Thailand and India and it makes synergy for them to source from their own organization. As long as this brings in additional welfare/business/job and does not push Indian makers to shut their factories this can be allowed. For India import from Thailand major trade creation happens in HS code no 84, 57, 68, 85 and major trade diversion happens in HS code no 82, 71, 15 & 27 and countries from where trade is diverted is China, Korea & Sri Lanka. In the total trade only 16% is trade diversion and balance 84% is trade creation
- China's FTA**; China has Comprehensive Economic Program (CEP) from 2010 with zero duty, means China's products have already been tested and approved. To dethrone them, new entrant like India has to put a real hard effort. During analysis it is noticed, due to full FTA with China, prices from China are already lower, if India needs to create trade, the price from India needs to be better than China which may be difficult, and that is also one of the reasons for negative balance payment situation. A key point is to create a necessary awareness to the industry for facilities and services available which are better in quality and its availability at a competitive price in both countries including the status of duty reduction
- Investment**; Another key area to concentrate for India is its investment in Thailand. First, the number of Indian investment projects has not picked up in recent times. Second, Indian investment in absolute terms has fallen since 1998. Third, the shares of Indian and Thai investments in Indian projects have

also remained stagnant in recent years. In terms of its sartorial composition, Indian investments have been rather concentrated mainly in manufacturing sector. In the services sector, its presence has been almost insignificant and India's strength is service sector. So this needs to be explored more, as well as efforts are required to diversify the Indian investment in Thailand. In terms of sectoral distribution of Thai investments it is observed that it is quite concentrated, in sectors such as minerals and ceramics and chemicals. Thai investment presence in India is nil. The major sectors in which Thai investment in India has been approved are telecom, tourism, food processing, chemicals and electrical equipment's group has started some activity and few more JVs are being started in infrastructure area.

- 9) **Investors** ; The major Indian groups who have invested in Thailand are the Aditya Birla Group, Ballarpur Industries, Baroda Rayon Group, Usha Martin Industries, Ranbaxy Laboratories, Lupin Laboratories and Indo Rama, although some have since withdrawn (e.g., Ballarpur). At present, there are 26 Indian joint ventures operating in Thailand of which two Indian companies viz. NIIT and APTECH have started their operations more recently in software development and computer education. The potential areas for Indian investment in Thailand are IT services and software, pharmaceuticals, herbal based medicine and cosmetics, dairy development and products, manufacturing of machine tools, and iron and steel products, human resource development, and textiles (value added production of textiles like warp knitting plants and flat bed knitting plants for sweater manufacturing).
- 10) **Paucity of adequate information exchange:** The Office of the Board of Investment of Thailand has launched a joint venture program, which focuses on facilitating foreign investments seeking Thai joint venture partners. Through this program, not even a single joint venture between Thailand and India has been reported till now.

8.0 MAJOR CONSTRAINTS

- a) One major constraint coming in the way of Indian investors is in terms of information gap regarding policy guidelines, potential sectors, prospective collaborators, etc. Indian investors find it difficult to locate a reliable counterpart. Procedural bottlenecks also act as barriers. Recruitment of staff in Thailand has reportedly also not been smooth. Thai government should take initiative to improve this via Board of investment.
- b) Information gap acts as a constraint for Thailand's investments in India too. However, it is worth mentioning that infrastructural bottlenecks have proved to be the main constraint in India in terms of attracting FDI from Thailand. Therefore, steps could be taken to facilitate Thai investment in the infrastructure sector itself.
- c) Lack of standardised procedures: Due to lack of standardised procedures, on certain occasions, different interpretations of rules and procedures occur. This gives rise to procedural delays. This needs to be addressed by Indian side
- d) Lack of intra-and inter-state harmonisation of rules: India is divided into different States and each state has its own authority to introduce investment promotion regimes. Such a situation often results in possibilities of double taxation. This needs to be addressed by Indian side
- e) Difficulty in loan approval for foreign projects: Procedural complexities and lack of standardised banking norms hinder approval of loans for foreign projects. This needs to be addressed by Indian side
- f) Apart from the tariff and non-tariff barriers Indian exports also face tremendous constraints in terms of inadequate information flows, lack of adequate trade finance facilities, procedural delays, there is an urgent need to evolve a grading/rating system for exporters/importers so as to improve the reliability of trade partners.

9.0 SCOPE FOR FURTHER RESEARCH

There is ample scope for further research in the following areas;

- There is a shortage of ex-post modeling analysis of trade agreements in Asia, particularly ASEAN and especially on Thailand, where as there is lot of ex ante models, which sometimes become counter- productive.
- Spaghetti – bowl effect of multiple FTAs; with multiple FTA prevailing in this region there is a Shortage of empirical modeling of the costs of certain components of FTAs and the analysis of costs of the spaghetti-bowl effect can be analysed.
- There is a shortage of research on investment issues in FTAs. In contrast to the large theoretical and empirical literature on the trade effects of FTAs, very little has been done in the area of investment. Given the empirically-verified importance of trade-FDI links and its importance to economy-wide growth and development, such research should be very important.
- When the first extract of study was published in magazine, we were contacted by largest polyester yarn producer in India, who wants us to conduct a similar product specific research on polyester yarn potential in Asean market, and a leading textile machinery manufacturer of India wanted us to do a similar study for textile machineries in South American market. It clearly shows there is a great potential in related area for further research and we are planning to take up this assignment as they are sponsored by industry and is based on industry need.

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MICRO FINANCE TOWARDS GENDER EQUITY AND SUSTAINABLE DEVELOPMENT

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ABSTRACT

Development affects people differently in different parts of the world whether they are male or female. If women are given same access to resources and economic opportunities as men the resulting economic activity is not only good for families but makes significant contribution to community and country. Gender equity and women's empowerment are essential for inclusive growth and sustainable development and providing this leads to faster poverty reduction and accelerated progress towards attaining Millennium Development Goals (MDGs). In developing countries, the growth of microfinance institutions (MFIs) which specifically target low income individuals are viewed as potentially useful for promotion of financial inclusion. With this background the paper aims at two objectives (i) how micro finance activities can lead to inclusive development & (ii) How this inclusive development can bring financial, social and economic empowerment as well as improve gender relation. The paper will be both descriptive and analytical. Both secondary and primary data are used to analyze the progress and impact of SHG's microfinance activities in the rural area. The first part of the paper provides a detailed discussion of SHGs microfinance activity in the national, state and district level followed by a case study in Dakshina Kannada district in the second part. The Findings of the study shows that SHGs through micro finance activities are changing the economic condition of women with indicators like income, saving expenditure and marketing activities showing the improvement. SHGs have created opportunities of promotion of income generation activities and enhanced empowerment of the poor. Because of SHGs large number of the women in rural areas, are not only achieving greater economic independence and security but also are gaining social benefits which lead to sustainable development.

KEYWORDS

Gender Equity, Sustainable development, SHGs, Women empowerment.

INTRODUCTION

ustainable development has been defined in many ways, but the most frequently quoted definition is "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. All definitions of sustainable development require that we see the world as a system—a system that connects space; and a system that connects time. Gender equality and women's empowerment are essential for inclusive and sustainable development. Gender equality needs to be pursued in its own right for a just and equal society, and for better development outcomes - inclusive growth, faster poverty reduction and accelerated progress towards Millennium Development Goals (MDGs) attainment. We recognize that without harnessing the talents, human capital and economic potential of women, India's goals of poverty reduction and sustainable development will not be met. India has made impressive strides over the last decade on narrowing gender gaps in education, health, employment and political participation. Today there are more girls in primary and secondary schools, more girls participating in tertiary education, fewer women dying in childbirth, more women in wage employment outside agriculture and more women in national parliaments and decision making bodies. But, the progress and achievements are not spread widely and evenly across the entire country.

Disparities remain in many areas. Many women are still denied access to basic services and essential assets such as land, and excluded from decision-making. Women still suffer from entrenched gender discrimination and exclusion that diminishes their life expectancy, education prospects, access to clean water, sanitation, and employment, and exposes them to gender-based violence. Empowering women economically and socially and giving them 'voice' is crucial for achieving goals of poverty reduction and inclusive development. "Equality for women is much more than only an ethical issue. A society that leaves girls and women out of the development process is one, that will never reach its full potential," – Rajat Nag, Managing Director General of ADB. Women's financial inclusion occurs when women have effective access to a range of financial products and services that cater to their multiple business and household needs and that are responsive to the socioeconomic and cultural factors that cause financial exclusion in women and men to have different characteristics. Financial inclusion, managed properly, can increase the empowerment of women in a number of ways. Firstly, having access to resources on their own account and to the tools that help them to earn a living can increase women's bargaining power within households and their influence over how money and other resources are used. Secondly, financial inclusion can help increase women's opportunities to earn an income or control assets outside the household. Thirdly, it can reduce women's vulnerability by, for example, allowing them to insure against risk or borrow to meet unexpected expenses, such as medical treatments. These are all key factors for economic empowerment and they can also help to empower women and micro finance is one such approach which leads to financial inclusive sustainable development.

LITERATURE REVIEW

Various studies have been conducted since many years highlighting role of SHGs on women empowerment. Several studies have been conducted by social scientist, financial institutions and agencies, which highlighted the positive trends and impact of SHGs on empowerment, credit accessibility and the social change. The researcher has tried to review the following:

Puhazhendhi and Satyasai(2001) in their paper attempted to evaluate the performance of SHGs with references to social and economic empowerment. The finding of the study revealed that SHGs as institutional arrangement could positively contribute to the economic and social empowerment of rural women and the impact on the later was more pronounced than on the former. K.C. Sharma (2001) maintained that through SHGs women empowerment is taking place, their participation in the economic activities and decision making at the household and society level is increasing and making the process of rural development participatory, democratic, sustain and independent of subsidy, thus micro-finance through SHGs is contributing to the development of rural poor. K.P.Singh (2001) conducted a study in UP comparing the pre and post SHGs situations of women empowerment. He found that the average value of the assets increased by 46.0 per cent and the annual income per household by 20.0 per cent between pre and post SHGs periods. M.S. Kallur (2001) analyzed the impact of SHGs supported by NGOs namely MYRADA on women empowerment in Karnataka. It was found that loans were taken for productive purpose, interest charged were high to cover the expenditure of the group, the new rate was high compared to formal credit and income generation is small. Jothy K and Sunder J (2002) in their study of evaluation of the programme of Tamil Nadu, Mahalir Thittan found that SHGs women are currently involved in economic activities such as production and marketing of agarbhati, candle soap, ready made garment, pickles, coir mat, leather goods etc. A study conducted by NABARD (2002) in 11 states of India elucidated that there has been a positive result in enhancing the standard of living of SHGs members in case of assets holding, savings and borrowing capacity, income generation activity and income level. The housing condition of people is improved. Pattanaik (2003) in her study reveals that SHGs are continuously striving for a better future for tribal women as participants, decision-makers and beneficiaries in the domestic, economic, social and cultural spheres of life. But due to certain constraints like gender inequality, exploitation, women torture for which various Self Help Groups are not organised properly and effectively. Malhotra (2004) in her book has examined how women entrepreneurs affect the global economy, why women start business, how women's business associations promote entrepreneurs, and to what extent women contribute to international trade. It explores potential of micro-finance programmes for empowering and employing women and also discusses the opportunities and challenges of using micro-finance to tackle the feminization of poverty.

Narasaiah (2004) in her study mentioned that the change in women's contribution to society is one of the striking phenomena of the late twentieth century. According to him micro-credit plays an important role in empowering women. Giving women the opportunity to realize their potential in all spheres of society is increasingly important. Cheston & Kuhn (2004) in their study concluded that micro-finance programmes have been very successful in reaching women. This gives micro-finance institutions an extraordinary opportunity to act intentionally to empower poor women and to minimize the potentially negative impacts some women experiences.

Manimekalai (2004) in his article commented that to run the income generating activities successfully the SHGs must get the help of NGOs. The bank officials should counsel and guide the women in selecting and implementing profitable income generating activities. He remarked that the formation of SHGs have boosted the self-image and confidence of rural women. Dutta Neelakantan (2004) in their programmes, micro finance indeed any credit based activity faces certain unusual pre and post contractual problems such as adverse selection and moral hazards, which arise due to informational asymmetric and incompetence, as well as imperfect commitment on the part of contracting parties. Sahu and Tripathy (2005) in their edited book views that 70 per cent of world's poor are women. Access to poor to banking services is important not only for poverty alleviation but also for optimizing their contribution to the growth of regional as well as the national economy. Das Gupta (2005) in his article commented that a paradigm shift is required from "financial sector reform" to "micro-finance reform". While the priority sector needs to be made lean, mandatory micro credit must be monitored rigorously. Simultaneously space and scope have to be properly designed for providing competitive environment to micro-finance services. Extensive database needs to be created by the RBI for understanding micro-finance. Sinha (2005) in his study has observed that micro-finance is making a significant contribution to both the savings and borrowing of the poor in the country. According to him the main use of micro-credit is for direct investment. There is of course some fungibility, depending on household credit requirements at the time of loan disbursement. Naila Kabir 2005 in her study on Micro finance has assessed the impact of micro finance on women empowerment. Micro finance offers an important and effective means to achieve change in a number of different fronts, economic, social, and political. The success of micro finance organization is building up the organizational capacity of the poor women provides the basis for their social mobilization. Singh and Pandey (2007) in their study on empowerment of scheduled caste women have highlighted that impact of Micro finance on social, economic empowerment of scheduled caste women in UP and Uttaranchal. They are of the view that SHGs based on micro finance is an instrument for overall economic empowerment of rural poor women. Prem Chander and Vanguri (2007) highlighted the impact of micro finance programmes on women empowerment in India. They compare Swashakti, Swayamsidha, Swarn Jayanthi Grammen Rozgar Yojana and Rashtriya Mahila Kosh, micro finance programmes for financing poor women in their access to micro credit. Prema Ramachandran (2008) in her study on unleashing the power of SHGs the study of world's largest micro finance programme has highlighted that the SHGs create significant social impact. It is a social mobilization process of poor for economic uplift and not merely a bank loan enabler. Renu Verma (2008) in his study on micro finance and empowerment of rural women highlighted that micro finance is expected to play a significant role in poverty alleviation and rural development, micro finance programmes have in the recent past become one of the more promising ways to use scarce development funds to achieve objective of poverty alleviation. Prof. Neha Patel (2009) highlighted in her study about the history of micro finance in India and role of micro finance in regarding power. Some studies reveal that micro-finance programmes have had positive as well as negative impacts on women. Some researchers have questioned how far micro-finance benefits women (Goetz and Sen. Gupta, 1996). Some argue that micro-finance programmes divert the attention of women from other more effective strategies for empowerment (Ebdon, 1995), and the attention and the resources of donors from alternative, and possibly more effective means of alleviating poverty (Rogaly, 1996).

IMPORTANCE OF THE STUDY

The review of literature pertaining on micro finance and women empowerment simply demonstrate that there has been significant contribution of SHGs based micro finance in the social change and empowerment of the poor. SHGs either non government or government have no doubt created opportunities of promotion of income generation activities and enhanced empowerment of the poor. However most of the studied focuses on specific issues and geographical regions. There is paucity of literature and empowerment data which provide basis of analysis of the impact micro finance activities on women empowerment. Thus present study attempted to assess the impact of SHGs based micro finance activities on rural and urban women in Dakshina Kannada District.

OBJECTIVES

The specific objectives of the paper are

1. How micro finance activities can lead to inclusive development &
2. How this inclusive development can bring financial, social and economic empowerment as well as improve gender relation.

RESEARCH METHODOLOGY

The present paper is both descriptive and analytical. Both secondary and primary data are used to analyze the progress and impact of SHG's microfinance activities in the rural area. The first part of the paper provides a detailed discussion of SHGs microfinance activity in the national, state and district level followed by a case study in Dakshina Kannada district in the second part. The study undertaken in the Dakshina Kannada district of Karnataka State in India for an in-depth analysis of issues related to women empowerment. A total of 300 members were selected representing equally rural and urban (rural 150 and urban 150).

Apart from primary data, the researcher gathered relevant data from various sources such books, journals, reports published by the government of India and Karnataka, financial institution, articles, dailies and internet publications. To capture the empowerment of women as an impact of microfinance activities through SHGs Likert five point range technique is used and later to determine the various components of empowerment and to compare the rural and urban cases index number is used. An index is devised to measure the level of empowerment scaled by target group. In the final ranking of each component that is instrumental in empowerment, was done with the help of an index on a five-point scale (A=80, B=60, C=40, D=20, E=>20). Response from the members of the SHG's was collected through interview, and participant observation method. Ranking was done on a five-point scale based on the response. Empowerment among women members of the SHGs were analyzed in three dimensions

- Personal empowerment,
- Social empowerment and
- Economic empowerment.

Appropriate parameters of these empowerments were identified and measured.

PART I - DISCUSSION

In recent times, microfinance intervention have been increasingly seen all over the world as an effective mechanism for poverty alleviation and improving socio-economic status of rural poor. In India too, Micro finance claimed to be headway in its effort of reducing poverty and empowering rural women. Micro finance institutions in India can be broadly classified in to two categories namely, formal institutions and informal organizations - Commercial banks, Regional Rural banks, Cooperative Bank that provides micro finance services in addition to their general banking activities and are referred to as micro credit service providers. On the other hand, informal organizations include NGOs that under take microfinance services as their as main and also as their allied activities. It should be noted that SEWA (Self Employed Women's Association), a cooperative of women of petty trade groups, established in 1974 in Gujarat was the pioneer informal organization providing microfinance services. The leadership of Ms Ella Bhatt for providing banking services to the poor women employed in the unorganized sector of that region. First official interest in India took shape during 1986-87 on the initiative of the National Bank for Agriculture and Rural Development (NABARD). NABARD sponsored an action research project in 1987 through an NGO called MYRADA (Mysore Resettlement and Development Agency) in Karnataka. Encouraged by the success of MYRADA, NABARAD launched a pilot project in 1991-92 in the partnership with NGOs for promoting and grooming self help groups (SHGs) and making saving from existing banks and within the legal framework. Steady progress of the pilot project led to the main streaming of the

SHGs –bank Linkage programme in 1996 as a normal banking activity of the banks with widespread acceptance. In India formal financial institutions have not been able to reach the poor household and women in particular, in the unorganized sector. Structural rigidities and overheads leads to high cost of making small loans. This gave rise to the concept of micro credit for the poorest segment with a new set of credit delivery techniques. With the support from NGOs an informal sector comprising small self help groups started mobilizing savings of their members and lending resources among the members on micro scale. The potential of SHGs to develop as local financial intermediaries to reach poor has gained recognition due to their community based participatory approach and sustainability, recovery rates have been much higher than those achieved by commercial banks in spite of loans going to poor, unorganized individual without collateral security. Success stories in the neighboring countries, like Grameen banks in Bangladesh, Bank Rakyat in Indonesia, commercial and Industrial Bank in Philippines etc Gave further boost to the concept in India.

SHGs IN KARNATAKA

The history of SHGs promotion in Karnataka started with NGOs taking the lead in the mid-1980s and the lead passing on to the NABARD by the late 1980s. After the SHG-Bank linkage programme was launched in 1991-92, the very first loans to SHGs in the country were given in Kolar district of Karnataka. by the Vysya Bank Bangarpet branch to Venkateshwara mahila sangha of Muduguli on December 9 1991 and by Corporation Bank to Saraswathi Mahila Sangha on January 30 1992. Nabard up scaled the programme in Karnataka by initiating a series of measures that included training of NGOs and bank staff, convening regular meetings of all intervening agencies, analyzing report and providing feed back for changes in operational systems to make them more user friendly and launching the first RRB(regional rural bank) the Cavery Grameen bank of Mysore Districts an SHG promoting institution(1994-95). In the 1990 IFAD with World Bank collaboration, and in partnership with the government of India and six state governments including Karnataka, launched a similar programme titled Swashakti. This experience encouraged Karnataka to launch a state wide programme called Stree Shakti(women power)based on the SHGs strategy. Together the initiatives of various stakeholders, (the government, NGOs Bank) increased SHGs coverage in Karnataka significantly. At recent estimates 40295anganwadi workers (of Department of Women and Child Development) 561 NGOs 8 regional rural banks 20district central cooperative bank and 2 commercial banks are engaged in SHGs promotion. Together they are estimated to have facilitated the creation of close to 1, 95,000 SHGs in Karnataka.

OUT REACH

Today there is scarily a village in Karnataka where an SHG has not been facilitated. The state government is the single largest SHG promoting institution .Broadly; there are three categories of institutions promoting: SHGs the Government, financial institutions and NGOs. The promoting institution plays a significant role in the way an SHG develops and functions. The Stree shakti programme anchored by the department of Women and Child Development , attempt to focus the attention of the members on curbing domestic violence against women, promoting girl child education, preventing child marriage etc. SHGs promoted by financial institutions have focused on credit provision, and investment in the institutional capacity building of SHGs. SHGs promoted by NGOs tend to promote the priorities and agenda of the NGO concerned and to reflect the organizational and financial strengths as well as weaknesses of the NGOs.However though there may be one institution taking the lead in SHG promotion in a given context, yet in most cases other institutions are brought in as the programme progresses. For example, both the government and the financial institutions tend to involve NGOs in the training of SHGs. NGOs and government encourage their groups to link with financial institutions, and NGOs learn both from the government and from the financial institutions the formal system of reporting and financial management .

SHGs MOVEMENT IN DAKSHINA KANNADA DISTRICT

Dakshina Kannada district assumes an important place in the history of micro finance SHGs of Karnataka. Ever since the SHGs bank linkage programme of NABARD launched in Karnataka state in 1992, the movement started to spread soon across the district (Jayasheela et al 2006). The response in the district for SHG movement has been quite rapid due to the presence of good physical infrastructure and literacy rate and wide spread banking network in the district. Besides, there are plenty of NGOs in the district who took boldly the steps to promote and nurture SHGs. The role of state government too cannot be ignored. As a result today Dakshina Kannada district has more than 65000 SHGs in the state. About 70.0 per cent are exclusively women SHGs and remaining are men and mixed SHGs. Promoting agencies of SHGs in the district may be classified in to four categories. (1) NGOs (2) Bank (3) Co operative (4) Government. NGOs promote 50.0 per cent of the SHGs, followed by Cooperative and Bank (RRBs) 35.0 per cent and government 15.0 per cent. Government SHGs are under SGYSY of the central government and Stree Shakti, programme of the state government SGYSY groups are limited in number and are linked with leading NGOs, in the district.

CONDITION OF WOMEN IN KARNATAKA

The condition of women in terms of income, inheritance rights and social status continued to be the matter of concern in all regions of the state. The Karnataka Government brought out Human Development Reports in the year 1999 and 2005 with an exclusive topic on women. These reports too computed Human development Index (HDI) and Gender Development Index (GDI) for all districts of Karnataka's close readings of these indices enable us to understand as to how women continued to be at disadvantages. The report observed the presence of wide disparities in GDI and HDI among the districts of Karnataka. Table-1 shows the HDI and GDI for the districts in the state.

TABLE-1: HUMAN DEVELOPMENT (HDI) AND GENDER DEVELOPMENT INDEX (GDI) IN KARNATAKA

Sl. No.	Districts	2001 (HDI)		2001(GDI)	
		Value	Rank	Value	Rank
1	Bagalkot	0.591	22	0.571	23
2	Banglore Rural	0.653	6	0.640	6
3	Banglore	0.753	1	0.731	1
4	Belgaum	0.648	8	0.635	9
5	Bellary	0.617	18	0.606	17
6	Bidar	0.599	21	0.572	22
7	Bijapur	0.589	23	0.573	21
8	Chamarajnar	0.576	25	0.557	25
9	Chicmaglore	0.647	9	0.636	8
10	Chitradurga	0.627	16	0.618	14
11	Dakshin Kannada	0.722	2	0.714	2
12	Davengere	0.635	12	0.621	13
13	Dharwad	0.642	10	0.626	11
14	Gadag	0.634	13	0.625	12
15	Gulbarga	0.564	26	0.543	26
16	Hassan	0.639	11	0.630	10
17	Haveri	0.603	20	0.596	19
18	Kadagu	0.697	4	0.690	4
19	Kollar	0.625	17	0.613	16
20	Koppal	0.582	24	0.561	24
21	Mandya	0.609	19	0.593	20
22	Mysore	0.631	14	0.605	18
23	Raichur	0.547	27	0.530	27
24	Shimoga	0.673	5	0.661	5
25	Tumkur	0.630	15	0.681	15
26	Udupi	0.714	3	0.704	3
27	UttarKannada	0.653	7	0.639	7
	Karnataka	0.650		0.637	

Source: Government of Karnataka H.D & G.D Report 2005

Table-2 indicates that the HDI for the state has increased from 0.541 in 1990 to 0.650 in 2001, showing a 20.0 per cent improvement. There are wide disparities in the level of development among the districts. The district HDI in 2001 has been found to range from 0.753 in Bangalore urban district to 0.547 in Raichur district. Both HDI (2) and GDI(2) are higher in Dakshina Kannada district compared to the state average. It is widely understood that mere provision of state sponsor facilities to enhance women condition is not sufficient because these facilities are mediated through a complex socio-economic structure which to great extent women exclusive. Micro finance activities have been growing in Karnataka over the years. Various self help groups are playing a key role in promoting micro finance activities.

MICRO FINANCE IN DAKSHINA KANNADA DISTRICT

Dakshina Kannada district is an important coastal district known for commerce, banking, education and rich cultural heritage. As we know from Human development Report of 1991 and 2005 that Dakshina Kannada district is better in terms of economic, human and gender development indicators compared to other districts of the state. In fact this may be only district where we find women heading family tradition are prevailing. The district has made spectacle improvement in all the sectors of social and economic life with rapid modernization. The movement of self help groups and the programmes of micro finance for women empowerment were enthusiastically welcomed in the region hence; the region offers an interesting site for exploring how micro finance schemes through self help groups affects women empowerment. Dakshina Kannada district is divided in to five taluks. There are more 80000 Self help groups sponsored by government and non government agencies working in the district.

Empowerment through micro-credit is one of the components in the development Programmes in Dakshina Kannada of Karnataka. In the district, Non-government Organizations, Voluntary sector, Co-operative sector and the Civil Society Organizations are actively involved in the task of women empowerment through Micro-credit. These organizations have been justifying their presence in the economic development of the region on the basis of their achievements in empowerment of women. For example Sri Kshethra Dharmasthala Rural development Programme (SKDRDP), Shankaranarayana Milk producers Cooperative society, Sthri Shakthi, Netravathi Grameen bank, Nagrika Seva trust, Maitri Trust, Canara Organization of Development and Peace etc. The several studies conducted by research scholars found strong evidences that micro finance institutions contributed to women's empowerment in the district. One consistent finding was increased self confidence, increased self esteem and women's increased participation in economic and political decision making. Various studies have also shown ample evidence of efficient sustainable micro finance institutions whose programmes are intentionally empowering.

Women experienced an increase in their decision making role in the areas of family planning, children's marriage, buying and selling property, and sending their children to school. It is also found that the combination of education and credit put women in stronger position to ensure more equal access for female children to food, schooling and medical care. Other studies also showed increased ability to make purchasing choice, manage household funds, and manage enterprise funds for example SKDRDP has promoted economic empowerment among the poor landless families by introducing various income generating activities both in production and service sectors. Like this many government and non government agencies in the district are successful in bringing desired grass root changes in rural economy and have created awareness so much that almost in all villages in the district women have joined in large number such agencies. But there are studies whose findings show that there is no substantial manifestation of improvement of material conditions in terms of assets, resource allocation, capacity building and income generating activities. As it is claimed that micro finance activities through self help groups have increasingly freed women from the clutches of rural money lenders, although it looks true but such a freedom has not lead to liberation from debt burden of women what has happened is a shift in the source of debt with, of course lesser interest rates. Apart from this, due to multiplicity of membership of poor women in different SHGs promoted by different facilitators in the same village, the women are falling in to a kind of 'proto debt trap'. Therefore the improved condition that micro finance promises is a borrowed and an illusory better world. The largely unaffected material condition of poor and disadvantaged women be corroborated by the evidences from the studies conducted relating to the assets, level of education, occupation, income and autonomy where it matters to the beneficiaries. But it is also a fact that there is also a sizable section of women that is left out of the whole enterprise of micro finance and SHGs movement because thrift is the passport to the entry in the SHG, this group does not possess that, studies also found many defect in management and organizational set of SHGs.

PART II CASE STUDY

Review of the literature on women empowerment indicates that women contribution to the economy is invisible; there work is not accounted however, significantly for the economic development. Ignorance of their contribution is more in rural areas. Efforts were made to empower women through various

planned programmes. In the recent years, SHGs movement through micro finance activities mobilized backward women to come forward. This study makes an attempt to study the role played by SHGs in empowering women both in rural and urban areas in Dakshina-Kannada district and its impact on inclusive growth. The present study has considered certain measurable indicators of women empowerment which are consolidated again as Personal empowerment, social empowerment and economic empowerment. These empowerment indicators are analyzed further, scores of these empowerment indicators are compared across rural and urban cases.

PERSONAL EMPOWERMENT

In the framework of empowerment, psychological empowerment of women by feeling better about themselves, gaining self confidence, believing in their potential is important. It is this, psychological feeling coupled with increased level of awareness that will give them the power to assert themselves or express their needs. Again these parameters of personal empowerment of women is analyzed through the scores given by the sample members of SHGs, Further indicators such as Self confidence, Self image, Leadership quality, Self awareness, Skill development, Problem solving capacity, Positive attitude Communication skill ,Negotiating power ,Risk taken.

TABLE-1: EMPOWERMENT LEVELS AS PER THE EMPOWERMENT INDEX

SL.No	VARIABLES	Rural	Urban
1	Self confidence,	B	A
2	Self image	B	C
3	Leadership quality	A	A
4	Self awareness	B	A
5	Skill development	D	B
6	Problem solving capacity	D	B
7	Positive attitude	B	C
8	Communication skill	C	B
9	Negotiation power	D	D
10	Risk taking capacity		
	Total self empowerment scores	480	640

As far as the personal empowerment of women members in SHGs concerned, urban case shows a slight better compared to rural case. However in case of self confidence rural women scores remarkable higher than the urban sample members. However, in case of rural women risk taking, problem solving capacity, communication skill, and Skill development are scored significantly low. In case of urban women problem solving capacity, risk taking, are scored low. And all other variables are comparatively better scored.

SOCIAL EMPOWERMENT

Social empowerment of women enables them to participate in the decision making, enhancing status of women in the family and community. Women respondents have also experienced improved status and gender relations in the household .Women's financial contribution helped them earn greater respect from their husband and to avoid family quarrels over money. Indicators used to know social empowerment at community level are respect in family, recognition in the society, ability to run the family, participation in public programmes, social awareness, social mobility, decision making, social respect, risk taking ability and entrepreneurial ability.

TABLE-2: SOCIAL EMPOWERMENT LEVELS AS PER THE EMPOWERMENT INDEX

Sl.No	variables	Urban	Rural
1	respect in family	B	A
2	Recognition in the society	B	A
3	Ability to run the family	B	A
4	Participation in public programmes	B	A
5	Social awareness	B	A
6	Social mobility	B	A
7	Decision making	D	C
8	Social respect	D	D
9	Risk taking ability	D	C
10	Entrepreneurial	D	C
	Total social empowerment scores	620	440

When social empowerments scored are compared across rural and urban cases, unlike in personal empowerment, rural case shows better scores than urban case. It is to be noticed that social mobility, scores significantly higher in case of rural women. Further, there are few variables under social empowerment scored significantly low both in rural and urban area.

ECONOMIC EMPOWERMENT

Economic empowerment refers to access to financial resources, decrease of vulnerability of women during crises situations, eliminating the dependency on money lenders, increase in the income o women and the freedom to use that income, financial self reliance and ownership of income generation assets. Women access to saving and credit gives them a greater economic role in decision making through their decision about saving and credit .When women control decision regarding credit and saving, they will optimize their own and the household's welfare. The investment in women economic activities will improve employment opportunity for women and then have a trickle down and out effect. To find out extent economic empowerment has taken place indicators like Income improvement, consumption, saving, economic decision making investment, managing economic activity, employment assets position and standard of living etc are considered Economic empowerment

TABLE-3: ECONOMIC EMPOWERMENT LEVELS AS PER THE EMPOWERMENT INDEX

Sl.no	Variables	Rural	Urban
1	Income improvement	D	E
2	Consumption	C	C
3	Saving	C	C
4	Economic decision making	D	D
5	investment	B	C
6	Managing economic activity	C	D
7	Employment	A	B
8	Asset position	D	D
9	Standard of living	C	D
10	Sense of economic activity	C	D
Total	Economic empowerment scores	420	310

With regard to economic empowerment also rural case scores better than urban case. Here it is interesting to notice that in managing economic activity, improvement in asset position are scored by rural sample women remarkably higher than urban counter parts. This indicates SHGs movements have better impact in rural area in terms of improved capacity of managing economic activity, employment generally and improvement in assets positions. It is also noticed that SHGs movement has helped to improve income level of rural women. However, scores on saving improvement, investment change, economic decision making are significantly low.

TABLE-4: EMPOWERMENT LEVELS AS PER THE EMPOWERMENT INDEX

Empowerment components	Rural	Urban
Economic empowerment	420	310
Personal empowerment	480	640
Social empowerment	620	440
Total	1520	1390

Comparison among the rural and urban cases indicates that SHGs movement empowered rural women more than urban women members. Among the rural women economic empowerment is followed by personal and social empowerment. With regard to economic empowerment SHGs movement through there micro finance activists in rural area is better than urban areas.

GENERAL FINDINGS

The present study found that micro finance activities with Self Help Group movement have experienced women empowerment both in rural and urban areas.

- Compared to urban areas SHGs and their impact on women are found very effective in rural areas, all the indicators used to measure economic empowerment, shows this point oblivious.
- In rural areas awareness about various SHGs is more and in fact every women is a member of one or the other SHG, Whereas in urban areas majority of women living below the poverty line do not know the existence of such agencies, either because of their ignorance or lack of motivation by the staff of SHGs.
- Economic condition of women in rural areas is found to be better than their counterparts in urban areas, because in rural areas poor women are working at a time in multiple jobs in addition to the beedi rolling and agriculture but in urban areas majority of poor women are engaged only in beedi rolling while very few are engaged in other activities because of that they earn less income.
- The study reveals that the respondents had experienced great relief from the burden of debt from money lenders but not completely liberated from debt as they continued to borrow money from different SHGs at the same time.
- In the absences of income generating activities among majority of the respondents, the standard of living continued to be low.
- Very few respondents have taken loan for productive purpose, so it is necessary to sensitize the members about the productive use of loan so that economic empowerment can be achieved.
- There is a sizable section of the women that is left out of the whole SHG movement precisely because thrift is the passport to the entry in to SHGs and they do not posses.
- SHGs run by the NGOs are performing better than SHGs run by the Government.
- The researcher found that women in rural areas are more active and involved in the SHG movement, compared to urban women who shown very limited interest in such movement.
- SHGs have developed awareness among women and are successful in developing their communication skill, leadership quality and also general knowledge. They have created a lot of self confidence among poor women and led to their personality development.
- A very interesting finding of the present study is that women both in rural and urban areas are getting good support from their families' particular from the male members.

SUGGESTION/CONCLUSION

It is proved that Self-help Group is a good strategy associated with micro-finance to empower rural women. It has made rural women to involve in various investment activities and hence, inculcated confidence of engaging economic activities. But Viability of micro finance needs to be understood from a dimension that is far broader- in looking at its long-term aspects too. Very little attention has been given to empowerment questions or ways in which both empowerment and sustainability aims may be accommodated.

SCOPE FOR FUTURE RESEARCH

It is clear that gender strategies in micro finance need to look beyond just increasing women's access to savings and credit and organizing self help groups to look strategically at how programmes can actively promote gender equality and women's empowerment. Moreover, the focus should be on developing a diversified micro finance sector where different type of organizations, NGO, MFIs and formal sector banks all should have gender policies adapted to the needs of their particular target groups and work together to make a significant contribution to gender equality towards sustainable development.

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TEXTILE INDUSTRY: INDIA'S SECOND LARGEST EMPLOYER, BUT WHAT'S REALLY IN FOR THE WORKERS?

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ABSTRACT

The seeds of Indian Textiles were sown early in Indus Valley Civilization and constituting one of the essential needs of human beings, demand for textile and clothing shall never come to a halt. Currently textiles industry is of critical importance to our national economy since it is the second largest after agriculture in terms of providing employment opportunities. Moreover, this sector absorbs a sizable number of people belonging to the weaker sections of the society in general and women in particular. Hence, advancement of this sector has direct bearing on our development and nation building. Notably, a substantial number of firms in this industry cater to the global retail giants. However, in the wake of enormous competition on account of global integration the employers attempt to cut costs wherever possible which in turn affects the overall working environment in this industry. This paper, thus, tries to explore the working conditions of workers engaged in this sector with the help of various studies conducted so far. Consequently, the study concludes that working conditions are inhumane and dismal. Employers prefer contractual labourers who are paid less than legal minimum. Women workers who are majorly employed in this industry fall prey to sexual exploitation, economic discrimination in contrast to their male counterparts and absence of facilities of toilets and crèches. Studies bring out cases of child labour where children are treated like slaves. Overall, the working environment is stressful, over-tiring, unhealthy and hazardous.

KEYWORDS

Textile industry, hrm, working environment.

INTRODUCTION

The legacy of Indian textiles can be traced back to the use of dyes and printing blocks around 3000 BC (Chandra, P. 2006). Also, evidence from the Middle East suggests textiles trade from Indus Valley Civilization existed as early as 2350 BC. The archaeological surveys and studies discovered spindle and cotton stuck to silver vase some 5000 years ago, revealed that the spinning and weaving of cotton was known to the Harappa civilisation.

During the medieval period, the Muslim conquest of India considerably impacted India's culture on one hand and witnessed increased foreign relationships on the other. It was during this time period that India's trade relations with Europe became active. The first mass fashion market in Europe was engendered by the bulk import of Indian cotton cloth after 1660 (Horwell, V. 2004).

By the 17th century India became the world's largest economy and its textiles were celebrated worldwide. In fact, India was the world's chief producer of cotton textiles and the leading exporter of textiles to Britain. The increased desirability of chintz (multi-coloured Indian prints on cotton) in Europe led to the formation of East India Company in 1600 which in turn was mainly responsible for textiles export from India to Europe (Trentmann, F. 2009).

The British textile industry remained small and competitively insignificant against its Indian counterparts throughout the 17th and first half of the 18th century (Broadberry, S. et.al. 2005). The combination of block-printed or hand-painted, yet washable and cheap cloth was unachievable in the West but possible in India due to its organisation of agriculture, sophistication in natural dye chemistry and low but not exploitative wages for skilled craftsmen (Horwell, V. 2004).

Nevertheless, with Industrial Revolution, the productivity of Britain's labour in the production of cotton textiles increased dramatically. Consequently, by the end of the 18th century British textiles increasingly displaced those of India's from their home markets and subsequently took over Indian markets as well.

With the colonization of India, India's textile industry rapidly declined until it became a net exporter of raw cotton. At the end of the 19th century, the once leader in the export of textiles started to import textiles that it needed. British government policies left India technically impoverished. Thus, India's economic decline which corresponded with the collapse of the Mughal Dynasty and the beginning of the British Raj in the mid-19th century not only showed a down fall to its leading textiles production and exports but the downfall of the country as a whole.

INDIA'S TEXTILES INDUSTRY: CURRENT SCENARIO

Textiles and clothing form the basic necessity of life hence its demand will never be out of order. With respect to India, its textiles industry has an overarching presence in the economic life of the country. Presently it contributes nearly 14 per cent to industrial production, 4 per cent to the GDP and 17 per cent to the country's export earnings (Annual Report 2011-12, Ministry of Textiles).

Very importantly, this sector is India's second largest employment provider after agriculture. It employs over 35 million peoples directly which in turn contains a huge number of SC/ST and women.

This sector is comprised of the following major sub-sectors:

- Cotton/Man-Made Fibre Textiles Mill Industry
- Man-Made Fibre/Filament Yarn Industry
- The Wool and Woollen Textiles Industry
- The Sericulture and Silk Textiles Industry
- Handlooms
- Handicrafts
- The Jute and Jute Textiles Industry
- Textiles Exports

The segment of Jute Industry plays an important role in the National economy of India by generating employment for 0.37 million workers in organized mills and about 4.0 million farm families (ibid). Additionally, a substantial number of people are engaged in jute trade. Moreover, India has an overwhelming global presence in terms of production of raw jute and jute products. Evidently, India accounted for 60 per cent of world's production of jute and allied fibres in 2007-08 (ibid).

With regards to Silk, India stands to be its second largest producers in the world. In turn, sericulture and silk industry provides lucrative occupation to about 7.25 million people in rural and semi-urban parts of India (ibid). Moreover, it employs a sizeable number of workers from economically oppressed sections of the society particularly the women.

Coming to the decentralized powerloom sector, apart from meeting the clothing needs of the country, this segment holds an essential position within the textiles industry with regard to production of fabric and generation of employment opportunities. It provides employment to 57.44 lakh persons and contributes 62 per cent to India's gross production of cloth (ibid).

Handloom industry is another extremely important segment of textiles industry where handloom weaving directly or indirectly engages over 43 lakh weavers and allied workers. Strikingly, 95 per cent of world's hand-woven fabric is produced in India (ibid).

Handicrafts industry is yet another segment which apart from generating huge foreign exchange also creates tremendous employment opportunities for artisans and craftsmen in rural and semi-urban areas. Even though, suffering from constraints like being unorganized, this sector is crucial for sustaining not only the prevailing set of millions of artisans spread all over India, but also for the progressively increasing large number of new players in the crafts activities (ibid).

The wool and woollen textiles industry may perhaps be rural based but is export oriented. However, wool is the only natural fibre in which India finds itself to be lacking and consequently India contributes only 1.8 per cent to total wool manufacture of the world (ibid).

Over the years Ministry of Textiles has taken several initiatives in order to improve and enhance the competitiveness of this sector. With the view of giving a boost to the growth in exports and investment in this industry, many schemes have been implemented. For instance, Technology Upgradation Fund Scheme (TUFS) which was launched in April 1999 for five years and extended till March 2007 attempted to ease up the working capital requirements by bridging the gap between the cost of interest and the capital component (ibid). Restructured TUFS was approved to be launched from April 2011. Other schemes such as Scheme for integrated Textile Parks, Development of Mega Cluster, Integrated Skill Development Scheme, and Technology Mission for Technical Textiles etc. were devised (ibid).

Textile Workers' Rehabilitation Fund Scheme which came into force in September 1986 provides for interim relief to textile workers in case they are rendered jobless due to the shut-down of a related unit (ibid). Assistance is extended only to eligible workers so as to enable them to get another job. Assistance continues if workers undertake a self-employment venture, and ceases if he gets a job in another registered or licensed undertaking.

In order to promote gender justice the Government of India in its 11th Plan implemented five schemes for the upliftment of the handloom sector and welfare of the weavers particularly the women (ibid). Also, in the 11th Plan, the Catalytic Development Programme consisting of various sub programmes was implemented by the Central Silk Board (CBS) for the benefit of female workers (ibid).

Now let's look into the working conditions of the labourers in this prestigious industry.

INDIA'S TEXTILES INDUSTRY: WORKING CONDITIONS

As already stated India's textile manufacture is the second largest employer of the country which gives way to gainful employment avenues to millions of workers. Therefore, for all round development and nation building, progress and development of this sector is of crucial importance. Moreover, a substantial number of units operating under this industry are export oriented catering to the retail giants such as that of the US and Europe.

The era of globalization has without a doubt provided tremendous opportunities for human advancement but at the same time it has imposed intense global competition. As a result, employers adopt flexible labour policies, low working standards and less secure forms of employment in order to gain cost advantage and sustain themselves in the cut throat global competition. In fact, in developing economies a large part of the labour force is employed in the informal sectors where despite the hazardous working conditions the scope of security of employment and income is minimal, thus rendering them and the ones dependant on them highly vulnerable to risks. In fact, the early social protection schemes failed to provide a comprehensive national scheme for about 93 per cent of India's workforce which exist as unorganized labourers and in turn contribute about 60 per cent of Indian gross domestic product (Sakthivel S. et al, 2006).

This can be clearly evidenced through the study conducted by SOMO and ICN May 2011, which reported increased flexibilisation of labour in the Indian Textiles and Clothing industry. Nearly 60 to 80 per cent of workers were reported to be temporary in this industry since this gives advantage to employers to deduct costs in salaries and keep these workers away from forming unions.

Tamil Nadu is India's booming cotton manufacturing hub which consists of nearly 43 per cent of large mills and 80 per cent of smaller ones (SOMO, ICN May 2011). The study also reports increased feminisation of workers since female workers are meek and reliable and most importantly, they can be easily exploited economically through payment of lesser wages in contrast to their male counterparts. Notably, females are most attracted by the Sumangali Scheme where the garment producers promise a lump sum amount up-to rupees 40,000 at the end of three years (ibid). The economically backward, illiterate and debt ridden families find it lucrative to arrange for their daughters' marriage through this money. Moreover, three times healthy meal, accommodation, leisure activities and education is also promised during the course of work.

However, the report brings out the realities in contrast to the promises which is too harsh to digest. 10-20 per cent of Sumangali workers were found to be child labourers (ibid). The residential workers under the Sumangali system had to compulsorily live within the factory premises and every measure is taken to restrict them from contacting the NGOs. On the health front, headaches, insomnia, tiredness and stomach aches were found to be common ailments owing to undue excess work and stress that emanates from constant abuse and scolding from supervisors. Work space filled with cotton dust due to hopeless ventilation system and hot and humid weather make the working conditions worse.

Further, in many cases the promised lump sum amount was found to be not paid. On one hand, workers who leave before the contract period were not paid the saved up lump sum money and on the other hand many were fired just before the completion of the contract period to avoid such payment. Women were found to regularly work for 12 hours a day and that too without receipt of overtime payments. Moreover, the per day wage rate which ranged between rupees 60-110 which was way below than the legal minimum of rupees 171 rupees in the textile sector of Tamil Nadu (refer Table 1).

TABLE 1: WAGES PAID TO WORKERS UNDER SUMANGALI SCHEME VS. LEGAL MINIMUM WAGES

Period	Daily Wages	Wages during the period
1-6 months	60	10,800
7-12 months	70	12,600
13-18 months	80	14,400
19-24 months	90	16,200
25-30 months	100	18,000
31-36 months	110	19,800
	81,800	
Food and Accommodation	-15	-16,200
Lump sum on completion 50,000 (between 30,000-50,000)		
Total amount earned in 3 years working under Sumangali Scheme		115,600
Daily minimum wages in Tamil Nadu mills and garment sector	171	
Total earning in 3 years minimum wage, not calculating the extra wage benefits		184,680

Source: "Captured by Cotton: Exploited Dalit girls produce garments in India for European and US markets", SOMO-Centre for Research on Multinational Corporations and ICN-India Committee of the Netherlands, May 2011.

Interestingly, after the release of this report, working condition improved in four firms in terms of rise in wage and final amount paid to women workers under the Sumangali scheme, more freedom in movement, better food at canteen and less workers per dorm in hostels (Kumar, B.A. 2012). However, more serious issues of bonded and forced labour, child labour, overloaded working hours, unsafe and unhealthy working atmosphere and physical and sexual abuse of women were reported to still persist.

Ana van Es - de Volkskrant(2010) investigation brought out two miserable cases of the working conditions at the export oriented KPR Mill plant in Indiampalayam. At the age of 14 years Chitra started working in the spinning mill of this plant. Once employed, she was rarely allowed to leave the factory boundaries. Further, in contrast to 3450 rupees per month wages of girls as stated by the KPR mill administration, Chitra revealed the receipt of a maximum earning of rupees 1300 per month. Also, she worked for 12 hours a day and felt too exhausted to avail any recreational or educational facility arranged by the employers. Nevertheless, shockingly only four computers were available for thousands of girls in the name of arrangement for provision of computer lessons. Even though unbearable heat and humidity made it difficult for Chitra to work but she never gave up. This was because of the amount of rupees 30,000 that was promised to her after three years of her work with which she had planned to pay her dowry. Even though at the end of her contract she received the promised amount but by then she had developed breathing problem due to the cotton fibres she inhaled over the period of time. Those 30,000 rupees were spent on her operation to extract the fibres from her bowl and to add to her misery, her fixed engagement was called off.

The second case is of Lakshimani, who worked as a cleaner in the same mill. But she could not work after 18 month of her service since she could not bend her fingers and became visibly disabled. Even though the cause of disability was unclear but Lakshimani claimed the chemicals used for cleaning to be the culprit. Moreover, she was not paid the amount of 15,000 rupees which she has saved and accumulated till then.

Karnataka is another state which has considerable presence in the textiles and clothing sector. A study conducted by CIVIDEP (2009) in Bangalore's garment industry in factories which cater to apparel giants like Tesco, Wal-Mart and M&S revealed deplorable working atmosphere. More than two third of the labourers were reported to women in Bangalore's garment industry. Further, workers were found to forcibly perform 22 hours of overtime work on monthly average basis in order to meet the production targets (ibid). Awful abuse and terrible shouting from supervisors resulted in case these targets were not met. This in turn created extremely stressful environment. Evidence of various forms of gender discrimination was also noticed during the conduct of the study. Also, female workers, no matter how much insulted they felt, were reported to undergo sexual harassment quietly in order to keep their jobs. Workers were reported with high incidence of job insecurity since most of the interviewed workers had signed no contract during the time of their appointment; and those who did had little knowledge about it. Thus petty mistakes could easily lead to their dismissal. Wages were found to be invariably low which could barely meet a family's regular expenses. Also, backaches, respiratory diseases, piles and anaemia were reported to be common illnesses among these workers.

Further, the Guardian on 28 October 2007 exposed an ironic and horrible case of workings in the textile factory in Delhi where very young children were found working to manufacture apparel for Gap Kids. Shockingly, the conditions of these children were no better than slaves as they were found to be working in filthy condition and dirty sweatshop. Another such instance was reported by the Times of India in 2010 where manifold children were reported to be engaged in the textile markets of Surat. Most of the children worked daily for 10 to 14 hours in unpleasant conditions and earned between 20-50 rupees per day which was much less than the adults. These children belonged to the poor sections and so the opportunity cost of education was too high. Thus, on the face of it, it was a win-win situation for both contractors and children. Late than never, the Apparel Export Promotion Council in 2011 unleashed the programme "Disha" (Driving Industry Towards Sustainable Human Capital Advancement) which aims at eradicating child labour from the garment industry (Mehta, S.G. 2011). The programme is designed to run in a coordinated manner with the Ministry of Textile and conduct supply chain audits along with educating garment exporters to understand global social standards and norms of the International Labour Organization (ibid). But it's a long way to go and auditing and education does not ensure implementation. Also more than 60 per cent of textile and garment production is consumed domestically. So educating only the exporters to avoid cancellation of our shipments abroad will not suffice the purpose.

Also, the Guardian on 15 October 2007 reported death of three workers within a year at Shalini Creations, manufacturer of garments for a US firm. Where Ms Padmavathi who was not granted immediate leave to go to the hospital and rather abused in return collapsed at the factory gate and died on her way to hospital, Ratnamma lost her baby boy while delivering him at the street of the factory gate since she was not granted immediate leave when she went into labour. This raised considerable concern with respect to the working conditions at the factory. Recently, the Tribune highlighted the wretched working and living conditions of the migrant workers working in the factories in Jalandhar. The news highlighted the case of Manoj Bhagat, a migrant from Bihar who worked at the Shital Fibres- a blanket manufacturing unit. Manoj was reported to not receive the minimum wages and in the midst of a disaster that struck at the factory, Manoj's right leg had to be removed, thus bringing forth the units' hazardous working conditions. Similarly, two textile workers were found dead in the water tank in Shalu dyeing and printing firm at Pandesara in Surat (The Indian Express 2012). Though the news did not clarify the cause of death but the post mortem report of the victims revealed no signs of injury or presence of any poisonous matter.

Coming to the silk industry, India being its second largest global producer, this sector is prevalent in North-East India and particularly in Assam since time immemorial (Goswami 2006). Weaving has been a source of life in every Assami household and is in fact a prerequisite qualification for a girl to get married. Consequently, this industry is majorly inhabited by women. However, in comparison to their male counterparts, females occupy the position of ordinary unskilled helpers in the production process of silk. As a result, women receive less remuneration than their male equals. Globalisation has further deteriorated the working conditions in this sector by enhancing the cases of casual labour, flexibility of labour rights and increase in job insecurity.

Further, the case of Tirupur, the largest export centre for knit wear, shows increased feminisation of work. The expansion of exports after 1985 gave way to subcontracting and informalisation of labour and hence miserable working conditions of women who constitute about 60 per cent of the workforce (Padma 2004). Moreover, this knitwear capital was reported to get suicidal with each passing day in 2010 since more than 400 suicides took place in the same year (Thufail, PT 2010). In general, alcoholism, family conflicts, extra-marital affairs were reported to be the causes behind these deaths. But dejected living conditions and low remuneration were the original causes from which other problems emanated. For instance, Goutam who was reported to be working in the garment industry for nearly 15 years worked for 14 hours a day and received only 200 rupees in return (ibid). Similar were the cases of other labourers who could barely meet their family's needs, ultimately resorted to moneylenders and fell in the vicious debt-trap. In fact, the article reported that suicides among men were twice in number than the women victims. Moreover, the conditions at the workplace were highly shameful since the workers who usually work overtime were provided with no facility of drinking water.

Nevertheless, the situation of women in Peenya industrial estate in Bangalore was found to be equally terrible. This garment based industry is export oriented and women constituted over 80 per cent of the total workforce (Padma 2004). Inadequate number of toilets, absence of crèche and rest rooms add to the misery over and above the average 10-12 hours of work and minimal remuneration. Moreover, women are treated nothing less than garbage at the garment factories in Bangalore. In 2007, death of 25 years old Ammu who worked at the Triangle Apparel factory, Bangalore, was declared to be suicide (Krishna, N. 2007). But her co-workers vouched for some other reasons that led to her death. According to them the victim was not only harassed and abused with obscene language but things were thrown at her and she was violently pushed around (ibid).

Workers themselves have time and again raised their voices against the exploitative regime prevalent at the textile units in India. For instance, the 18 months long strike in Mumbai in 1982 joined by nearly 250,000 textile mill workers was a watershed event in the history of labour struggl. Under the leadership of DattaSamant the striking workers pressed for higher wages and bonus and better working conditions. The lacunas of textile mills in terms of use of obsolete technology and low standards of production were out in open as India face competition from China and Pakistan. But, mill owners used this opportunity to occupy the real estate and the then political leaders as well did nothing to relieve the workers because DattaSamant was considered a political threat (ibid). As a result the textile hub in Central Mumbai came to a halt and eventually moved out of Mumbai leaving thousands of mill labourers unemployed. Further, recently reported by the NTUI's labour news, where Reliance Textile Industries in Naroda, Gujarat, witnessed its highest ever revenue and net profit increase to USD 3.6 billion, the company's 5000 labourers went on strike in February 2012 to demand respite from the unfair wage structure and appalling working conditions. In fact according to workers the company's profits expanded ten-folds in the past two decades; however, workers' and artisans' wages remained more or less the same. But to add to the plight of the workers, police force was used to suppress the agitation and the strike was announced illegal thereby putting the workers' leader behind bars. Astonishingly, last year in September when over 2,500 textile workers from 150 textile factories in Ludhiana went on strike to demand rise in wages in wake of rising inflation and implementation of constitution abiding labour laws, the related textile mill owners announced to the Chief Minister of the state that the state was under terrorist attack (Amritpal 2011).

The above evidences depict the gruelling, malicious and hostile conditions of workers in textiles and garment industry of India. Hideous and open crime of child labour in abusive circumstances points towards failure of governments' policy and law to safeguard the future of tomorrow. Moreover, in addition to the disadvantages and exploitation attached to the tag of weaker sex, women workers in these units also face economic disparity, mental trauma and a number of insecurities. Voices, if raised against such spiteful conditions are curbed by the powerful owners through hook or crook. Some argue that these mills have at least aided the jobless, especially those from the wretched segments of the society; but such arguments simply lose their worth in the face of such appalling and atrocious working conditions.

CONCLUSION AND RECOMMENDATIONS

The second fastest growing world's economy's second largest employing sector witnesses to majorly employ women workers belonging to the backward, uneducated and poor segments of the society. Moreover, global integration further enhances the employment capacity of this sector. Thus, on the face of it, India's textiles industry seems to be an important tool for emancipation of women in this male dominated society via empowering them and leading to India's development in the long run.

But, the studies and articles reviewed to understand the working conditions of workers in this industry give a staggering picture of real life situation. Where on one hand employers boast of at least providing employment opportunities to the poor lot of the society; wretched, unhealthy and unsafe working conditions and unreasonably low wages mark the working conditions of workers in general and female workers in particular on the other. Be it the Sumangali system of textiles mills in Tamil Nadu or sexual harassment and gender discrimination in Bangalore's garment industry; women suffer gravely.

Increase in recruitment of casual and unskilled workers as a means to cut cost owing to enhanced global competition leads to huge job insecurity and stress amongst textile labourers. Cases of child labour in garment mills and markets serving in atrocious condition are mind boggling. 12-14 hours of per day workload, wages less than the legal minimum, abuse from supervisors, stress, respiratory and back problems are the common characteristics of the labourers belonging to the firms operational under this industry.

Thus, reasonable and urgent action is imperative to liberate these workers from their inhumane conditions. It is essential to build skills and systems of security, and enhance their bargaining power. But the question is whether our country's policy making will take serious steps towards this cause since better skills and high bargaining power may reduce India's comparative advantage in this sector.

Moreover, female workers should face no wage differentials with respect to their male counterparts and safe working environment along with health insurance benefits are imperative. Awareness and proper implementation of Vishakha Guidelines against Sexual Harassment at the Workplace is of utmost importance. Basic amenities of toilets, accommodation, crèche etc. should be adequately provided. Nevertheless, it is also recommended that the government should adopt social protection policy exclusively for this sector especially targeting the women workers which in turn will help attain the overall developmental objectives for our nation's advancement.

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CORPORATE GOVERNANCE ISSUES IN BANKS IN INDIA**DR. PRITA D. MALLYA****ASSOCIATE PROFESSOR****DEPARTMENT OF ECONOMICS & BANKING****VVM'S SHREE DAMODAR COLLEGE OF COMMERCE & ECONOMICS****MARGAO****ABSTRACT**

The literature on corporate governance covers a range of issues such as protection of shareholders' rights, enhancing shareholders' value, Board issues including its composition and role, disclosure requirements, integrity of accounting practices, the control systems, in particular internal control systems. Banks have some unique features that make their corporate governance different from, and more complicated than, that of other firms. For e.g., their balance sheets are not very transparent, they are highly leveraged, they typically have short-term liabilities and longer-term assets, they are heavily regulated and have access to government safety nets, and they are systemically very critical organizations. This paper seeks to identify the major issues in corporate governance in banks in India and to provide suggestions for possible action by the Reserve Bank of India as banking regulator. These issues relate to the composition of the Board of Directors and the duties of members, the functions of the board, the committees of the board, preventing abusive related party transactions and disclosures. The paper makes some suggestions as to the role of the Reserve Bank of India in strengthening corporate governance in Indian banks in the public as well as the private sector.

JEL CLASSIFICATION

G3, G21, G28

KEYWORDS

Corporate governance in banks, financial crisis, Reserve Bank of India.

INTRODUCTION

Corporate Governance is a voluntary ethical code of business of companies, a system by which companies are directed and controlled. It comprises a set of systems and processes aimed at ensuring that the company is managed to suit the best interests of all stakeholders. Sound corporate governance should provide proper incentives to the board and management to pursue objectives that are in the interests of the company and its shareholders and facilitate effective monitoring (OECD, 2004).

The literature on corporate governance covers a range of issues such as protection of shareholders' rights, enhancing shareholders' value, Board issues including its composition and role, disclosure requirements, integrity of accounting practices, the control systems, in particular internal control systems. The origin of modern corporate governance can probably be traced to a series of scandals and collapses in the UK in the late 1980s and early 1990s, which were widely attributed to poorly managed business practices (Leeladhar 2004). Although corporate governance deficiencies may not have been causal in the strict sense of the term, there can be no doubt that they facilitated, or at the very least, did not prevent, practices that resulted in poor performance. In May 1991, the London Stock Exchange set up a Committee under the chairmanship of Sir Arian Cadbury to help raise the standards of corporate governance and the level of confidence in financial reporting and auditing. The Cadbury Committee Report has since become the basic document for corporate governance all over the world. Corporate Governance is a dynamic concept, in terms of scope, thrust and relevance and should be viewed as an ongoing process subject to changes based on experiences and developments.

SIGNIFICANCE OF CORPORATE GOVERNANCE IN BANKS

As in any organization, good corporate governance in banks regulates the relationships between banks' stakeholders, their Boards and their management. It prevents the abuse of power and self-serving conduct, restricts imprudent and high risk behavior by bank managers, and resolves conflicts of interests between managers and board members on the one hand and shareholders and depositors on the other. The current state of the world economy is in some measure attributable to the fact that bank boards did not properly discharge their duties in exercising oversight on managers engaging in high risk activities.

The corporate governance of the financial sector clearly has important implications for the stability of the whole economy. The Basel Committee on Banking Supervision (under the aegis of the Bank for International Settlement) published guidelines on corporate governance in banks in 1999, but has continuously updated them, the most recent update being in 2006.

REVIEW OF LITERATURE

It is by now almost universally agreed that corporate governance of financial institutions should be studied separately on account of the substantive differences between corporate governance of financial institutions and that of non-financial firms. Caprio and Levine (2002), Macey and O'Hara (2003), Nam (2006) and Claessens (2008) identify some unique features of banks that make their corporate governance different from, and more complicated than, that of other firms.

1. Financial statements of banks are more opaque, a characteristic that makes it difficult for shareholders and depositors to monitor managers, while simultaneously making it easier for managers and large investors to exploit the benefits of control.
2. Although information asymmetries exist in all sectors, evidence suggests that these asymmetries are larger with banks. In banking, loan quality is not readily observable and can be hidden for long periods. Moreover, banks can alter the risk composition of their assets more quickly than most non-financial industries, and banks can readily hide problems by extending loans to clients that cannot service previous debt obligations. The comparatively severe difficulties in acquiring accurate information about bank behavior and monitoring ongoing bank activities hinder traditional corporate governance mechanisms (Levine 2003).
3. The capital structure of banks is unique in that banks are highly leveraged. Bank balance sheets also display an asset-liability maturity mismatch, with liabilities being mainly short-term and assets that on average have longer maturities, thereby exposing them to greater risk.
4. Given the vulnerable position of depositors and the systemic importance of banks, banks all over the world are very heavily regulated, with regulations being very wide in scope, covering activity restrictions (products, branches), prudential requirements (loan classification, reserve requirements, capital adequacy, etc.) and restrictions on concentration of ownership, entry, takeover, etc. These regulations often pose a hindrance to normal corporate governance mechanisms by which shareholders could control the management.
5. Banks in every country have access to government safety nets, which can weaken the incentive of shareholders and depositors to monitor the activities of bank management, a fact that can pose great moral hazard.
6. State ownership of banks presents a problem for corporate governance since it creates a situation of conflict of interest between the state as a monitoring authority and as a regulatory authority. State ownership could also mean that the managing of the bank is handed to bureaucrats rather than professionals.

7. There could be a contagion effect resulting from the instability of one bank, which would affect a class of banks or even the entire financial system and the economy. The current global economic crisis grew out of a financial crisis, which in turn was a result of a banking crisis caused by excessive risk-taking and poor corporate governance.

As stated by Bank for International Settlements (2006) "From a banking industry perspective, corporate governance involves the manner in which the business and affairs of banks are governed by their boards of directors and senior management, which affects how they:

- Set corporate objectives;
- Operate the bank's business on a day-to-day basis;
- Meet the obligation of accountability to their shareholders and take into account the interests of other recognised stakeholders;
- Align corporate activities and behaviour with the expectation that banks will operate in a safe and sound manner, and in compliance with applicable laws and regulations; and
- Protect the interests of depositors."

OBJECTIVES OF THE STUDY

Against the background of the significance of corporate governance in banks, this study has two major objectives:

- 1) To identify the major issues in corporate governance in banks in India
- 2) To provide suggestions for possible action by the Reserve Bank of India as banking regulator

MAIN ISSUES AND PRIORITIES IN CORPORATE GOVERNANCE OF BANKS IN INDIA

Numerous bodies are involved in ensuring sound corporate governance of banks. The primary responsibility for developing and implementing sound corporate governance of banks obviously rests with the individual bank itself. Private bodies such as banking industry associations often play an important role in assisting boards of directors and senior management of banks in fulfilling their responsibilities. Banking supervisors have the responsibility to provide a regulatory framework and guidance in terms of corporate governance of banks; they should also monitor individual banks, taking necessary measures when a bank fails to achieve the minimum corporate governance standards necessary for the banking business. In addition, the corporate governance framework also includes capital market regulators and stock exchanges.

The issues raised below are therefore relevant for a wide range of participants, including banks, Reserve Bank of India (RBI) as the banking sector supervisor, Securities and Exchange Board of India (SEBI) as the capital market authority and regulator, banking industry associations such as the Indian Banks' Association and the Indian Institute of Banking and Finance, and the two main stock exchanges in the country, viz. the National Stock Exchange and the Bombay Stock Exchange. They are also extremely significant for the Government of India as the majority shareholder in the public sector banks, which account for the bulk of banking business in the country.

These issues draw from the principles of sound corporate governance in banks as identified by the Basel Committee on Banking Supervision in 2006, and also from the recommendations made by the Ganguly Committee in 2002.

1. THE RESPONSIBILITIES OF INDIVIDUAL MEMBERS OF THE BOARD OF DIRECTORS

Board members of banks need to be particularly conscious of their fiduciary duties – 'duty of care' and 'duty of trust' – to depositors because banks accept and manage other people's money. These duties cannot be fully, properly and effectively discharged without sufficient skills and personal abilities. It is critical that their skills and knowledge be enhanced and upgraded by ongoing training programs (provided by, for example, Reserve Bank of India, Securities and Exchange Board of India, stock exchanges or professional associations such as Indian Banks' Association, the Indian Institute of Banking and Finance, etc.) that emphasize the professional, ethical and technical demands that the fiduciary duties impose upon a bank's board members.

2. THE COMPOSITION OF THE BOARD

The Reserve Bank of India, in its role as banking supervisor needs to ensure that bank boards have developed and maintained an appropriate level of expertise as banks have grown in size and complexity (OECD 2006). The Ganguly Committee (RBI 2002) had recommended that bank boards be constituted by the blending of 'historical skills' set, (i.e. regulation-based representation of sectors like agriculture, small industries, cooperation etc.) and the 'new skills' set (i.e. need-based representation of skills such as, marketing, technology and systems, risk management, strategic planning, treasury operations, credit recovery etc.). In exercising its duties, the board should be able to exercise objective judgement. This will mean independence and objectivity with respect to management and controlling shareholders (including the Government of India) with important implications for the composition and structure of the board.

The Organization for Economic Cooperation and Development (OECD) Principles stipulate that the review of related party transactions should be undertaken by a sufficient number of non-executive board members capable of exercising "independent" judgement to ensure that such transactions are conducted at arm's length and in the interest of the bank.

This issue is also relevant to Public Sector Banks (PSBs). The boards of PSBs should include a sufficient number of "independent" directors so that the board is able to make decisions independent of the Government's possible day-to-day intervention, while effectively monitoring the management in accordance with the objectives set by the state in its capacity as an owner or a controlling shareholder.

The separation of the posts of Chairman of the board and Chief Executive Officer (CEO) can contribute to a more appropriate balance of power, increased accountability and improvement in the board's capability for decision-making, independent of management (OECD 2006). The chairman should ideally not only be a *non-executive* but also an *independent* director so that the board which he/she chairs can make more objective, independent decisions.

In the matter of 'fit and proper' status of non-executive directors and chief executives, RBI norms only seek to ensure that the candidate should not have come to the adverse notice of the law and regulations or any professional body. In the case of non-executive directors not satisfying the 'fit and proper' criteria, the RBI can disqualify such directors after due processes are followed. In regard to the CEOs of the private sector banks, since RBI approval is required for the appointment of the CEO, it can exercise its judgement on the suitability of the candidates proposed, and may seek removal also. These provisions are broadly consistent with global norms though there is scope for more effective implementation (Reddy 2006).

As of now there is no legal provision for the Reserve Bank to insist on the 'fit and proper' status of the directors nominated by the government or elected by the shareholders to the Boards of the public sector banks. This is a matter to be decided only by the Government of India. The Government does, however, actively consult the Reserve Bank in regard to appointment of CEOs. Thus, by and large, there is *de facto* compliance with many governance requirements in public sector banks.

The Ganguly Committee had also recommended the appointment of a qualified Company Secretary as the Secretary to the Board and a Compliance Officer (reporting to the Secretary) for ensuring compliance with various regulatory / accounting requirements.

3. THE ROLES AND FUNCTIONS OF THE BOARD

The boards are required to be more involved in the broad strategy rather than becoming immersed in management of the routine activities of banks. More specifically, the board should focus on

- (i) guiding and overseeing the bank's strategic objectives, corporate values and policies, an important aspect of which is the development of a code of conduct (or code of proper practice) for the bank employees, management, and the members of the board and
- (ii) setting up of clear lines of responsibility and accountability throughout the bank and strict internal control systems.

This will go a long way in ensuring effective oversight.

4. THE COMMITTEES OF THE BOARD

The Basel Committee also notes that it would be advisable to establish certain specialised committees, such as an audit committee, a risk management committee, a compensation committee and a nomination committee. The Ganguly Committee had further recommended that banks in India, which have issued shares/debentures to the public, may form a Shareholders' Redressal Committee under the chairmanship of a non-executive director. It had also suggested the

constitution of a Supervisory Committee for monitoring of the exposures (both credit and investment) of the bank, review of the adequacy of the risk management process and its upgradation, internal control system, ensuring compliance with the statutory / regulatory framework etc.

5. PREVENTING ABUSIVE RELATED PARTY TRANSACTIONS

Banks should be careful about making decisions concerning related party transactions because it is not always easy to judge whether they are on an arm's-length basis. Moreover, even if such transactions themselves are harmless, the mere appearance of conflicts of interest may undermine the ethical code of the bank.

The Reserve Bank of India must strictly enforce the maximum percentage of lending exposure to a single client mandated by it (15 percent of capital funds in case of single borrower and 40 percent of capital funds in the case of a borrower group). There could also be strong firewalls set up between the controlling ownership of financial and non-financial companies. Related party transactions should be reviewed and monitored by a sufficient number of independent directors. In addition, banks may establish a committee of the board responsible for reviewing related party transactions, whose membership is ideally made up exclusively of independent directors. In accordance with international accounting, auditing and non-financial disclosure norms, banks should disclose material related party transactions. There is also the option of prohibiting banks from engaging in certain specific types of related party transactions, such as personal loans to board members and controlling shareholders (OECD 2006).

6. DISCLOSURE

The importance of co-operation between the RBI, Securities and Exchange Board of India and the stock exchanges cannot be over-emphasized. Even if the primary authority for ensuring proper disclosure of banks rests with the RBI, SEBI is not exempt from its responsibilities; it is required to exercise oversight and enforcement of standards for accounting, audit, and non-financial disclosure. Problems regarding disclosure by listed banks identified by either of the two regulatory bodies should be shared with the other organization as well, for possible corrective actions and sanctions.

ROLE OF THE RESERVE BANK OF INDIA

The Reserve Bank of India needs to place more emphasis on securing sound corporate governance of banks rather than to focus only on regulatory compliance. As the role of the board is crucial in developing sound corporate governance of banks, the RBI should assess the performance of the entire board. This could be done by reviewing minutes of board meetings, by checking the board members' accessibility to necessary information and resources, observing board meetings of banks when it thinks it is appropriate, issuing warnings when necessary, and even asking the bank to reorganize its board framework and operational procedures in the interests of sound corporate governance.

Reddy (2006) points out that there is a basic difference between the private and public sector banks as far as the Reserve Bank's role in governance matters is concerned. The RBI's regulatory framework ensures, by and large, uniform treatment of both types of banks in so far as prudential aspects are concerned. However, since public sector banks are governed by the respective legislations under which they were set up, some of the governance aspects of these banks are exempt from applicability of the relevant provisions of the Banking Regulation Act, although they have a bearing on prudential aspects. In regard to these matters, the Reserve Bank prescribes its policy framework for the private sector banks and suggests that the Government adopt the same for public sector banks.

Corporate governance of banks cuts across the areas of banking supervision and securities regulation. It would be in the interests of all concerned, that the RBI should, in conjunction with Securities and Exchange Board of India, develop and publicize a code of corporate governance of banks, based on which banks could develop their own codes. Furthermore, the RBI could provide incentives for banks to improve their corporate governance. For instance, taking into consideration the suggested code mentioned above, the RBI could develop a rating mechanism for the corporate governance of banks. Such a rating can be designed either as a rating specifically focused on corporate governance, or as a part of a broader rating mechanism within which factors regarding corporate governance play one of the major roles in determining overall ratings. Another example of incentives is the possible differentiated deposit insurance premium reflecting the ratings. The methodology of the ratings of corporate governance of banks should be articulated as clearly as possible and should be announced well in advance in order to provide time for banks to reorganize their framework. SEBI could contribute to developing the criteria by providing its accumulated knowledge and experience about corporate governance.

CONCLUSION

In the years to come, the Indian financial system will grow not only in size but also in complexity as the forces of competition gain further momentum and financial markets acquire greater depth. It is vital that banks, as the major constituent of the financial sector and the country's payment system, be managed as efficiently as possible. The last six years have been a lesson in the widespread damage and misery that can be caused by ill-considered banking decisions. Although the Indian banking system was unaffected by the financial crisis, the reduced trade and investment flows impacted India's growth and impeded progress in the area of employment generation, poverty reduction and human development. Although poor corporate governance was not the cause of the crisis, it was certainly a contributory factor. Tightening corporate governance in banks is in the larger interests not only of the national economy, but the global economy as well.

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ABSTRACT

Today the neo-liberal policies of globalization and commercialization have assumed the dimension of a 'grand narrative' which refuses to share any space with any kind of alternative vision or philosophy. Instead of upholding and celebrating the post-modern philosophic percepts of 'difference' and diversity, the reality of the modern globalized world, founded on the principles of Western ethos of market economy, negates and subverts all kinds of alternative narratives and beliefs which could have ensured a better socio-economic and socio-natural relationships. The contemporary discourse leaves no space for the ecology of languages; the diversity of species; the existence of community living based on its own belief-patterns; the sovereignty of nations and cultures; and so on and so forth. This all works as a constraining force and hinders, in a way, the emergence of more temporarily and spatially focused attempts to reconstruct economic institutional routines and socio-natural relationships. From the dropping of the atom bombs and Chernobyl disaster to the oil spillage and industrial contamination – everything as a consequence of a certain cultural ordering or preferred socio-economic arrangements has to be an essential part of any viable discourse on ecology or economy. Ecological economics provides an adequate answer to this dilemma and moves beyond the dominant global techno-managerial mode of economics and seek to uncover possibilities for alternative trajectories with strong cultural-political and socio-economic underpinnings.

KEYWORDS

neo-liberalism, slowdown, degradation, green, environment, alternative, sustainable.

INTRODUCTION

The 1992 Earth Summit in Rio de Janeiro marks a definitive shift in the entire ecological discourse. The summit underlined the global dimension of the ecological crisis that ferociously looks humankind in the face, with dire consequences. The Summit also hinted, though partially, at the misdirection of the entire human evolutionary discourse which has been instrumental in causing and precipitating this ecological 'problematique' of catastrophic proportion on an existential scale. As for the solution, the summit, after exhaustive deliberations, went on to suggest a new way of seeing and apprehending the reality. This new way or gaze was creatively conceptualised on the basis of the new politico-economic strategy of 'sustainable development' delineated in the 1987 United Nations' Brundtland Commission report "Our Common Future". However to the deep ecologists the conceptual basis of this 'generative metaphor' of 'sustainable development', on which the entire environmental economics is presently founded, seemed to be fallacious from its very inception. Essentially the concept means that 'we can have it all', both further growth and a cleaner environment. They term it as nothing more than a kind of vehicle for a form of "eco-managerialism" or "ecological modernization". Basic to this approach is the insistent reliance on the idea that problems, once recognized and identified, can be solved with the help of these institutions of science, technology and management.

The cynics, especially the cultural critics, have been proved right because, for the last 22 years since the Rio summit, this conceptual framework has not achieved anything concrete in reducing the looming threats of environmental degradation. In fact, all the indicators show that the situation has worsened since then. The concept of 'sustainable development' still continues to serve as a suitable vehicle for the continuation and perpetuation of the same techno-industrial arrangement and socio-cultural relationship, which is, in fact, the primary cause of the ecological crisis (Hajer and Fischer, 2). Neo-classical economics founded on the sacred pillars of sustainable development has failed to realise the critical fact that the present ecological crisis is the unintended consequence of some of neo-liberal capitalism's essential features such as the dominance of scientific rationality and expert knowledge, the strong belief in technological innovations as the agents of progress, the implicit legitimization of the use of violence and the tendency to see nature and 'other' as an exploitable resource or as an externality. Unless these premises are interrogated holistically, the vital question of sustainability will continue to haunt the present and the futures.

DISCUSSION

Since the articulation of the "Washington Consensus" (Serra, 2) in 80's, the neo-liberal paradigm has acquired a global dimension – almost the status and power of religion - crushing mercilessly every other ideological positioning on the way. This model was viewed as the only viable way of meeting human aspirations within a framework of human freedom. Such was the faith in the idea that almost all the countries on the globe readied themselves to embrace this model and willingly surrendered to the dictates of the global agencies like World Bank, IMF and GATT. The messiahs of this new religion even went to the extent of announcing the death of God. Some even felt that it represented "The End of History" (Fukuyama, 1) - that humanity had emerged onto a sunny plateau on which efficient economic organization and the interplay of open markets would generate the wealth needed by society to address whatever social and environmental issues rose in its margins. A priority shifted to just one thing – how to generate wealth. Wealth became the means and end of everything good in life.

However the clear signs of the collapse of this model of greed became visible in 2008 when the Western economies failed and floundered under the weight of their own economic contradictions. Quite ironically the fabulous wealth generated through neo-liberal economies did not empower the governments to address social and environmental issues. Instead it created strange conditions of imbalances which compelled the governments for a cut-back in government spending and services. The neo-liberal model of economics created an unequal world, vertically divided between those benefitting directly from the new wealth and those marginalized from it. For the wealthy greed does not stop anywhere. It continues to impel them to grow even richer through unethical means by subverting democratic institutions and rules of economics, completely unaware of the blood trails left behind on the track. This can be no real economy where generating wealth becomes an end in itself.

As initially realised by the Rio summit in 1992 and from the lessons learnt in view of economic slowdown of 2008 - which still continues to haunt the neo-classical economists - , the contemporary neo-liberal paradigm has left behind many deep holes. Besides many visible ruptures in the socio-cultural ethics of living, it has also caused a hole in the ozone layer, contaminated earth; has polluted air and depleted water sources. This ecological imbalance has rung alarm bells and created shivers down the spinal cord of all the thinking individuals. The ideas generated from the near ruins of the neo-liberal capitalism have been in search of something real, some alternative model of growth which is genuinely sustainable and enduring. Of course this something cannot be radically divergent from the contemporary economic paradigm. But it has to evolve further and acquire a new gaze, a new methodology while rejecting some of the premises of the contemporary model of growth and development to make it really sustainable.

Incorporating all the relevant ideas – social, cultural and even religious – we must make a concerted and strong argument in favour of an economy which makes equity and human well-being as its central and unwavering goals. An ecological economy and its institutional mechanism must make its core focus the wellbeing of people—of all people, everywhere—across present and future generations. That essential idea puts the notion of equity in spatial as well as temporal dimension at the centre of the ecological economy enterprise, bringing to the fore the centrality of consumption questions, and demanding not just "green consumers" but "green citizens." The temporal goal of a ecological economy is the idea of meeting our economic needs without compromising our ecological integrity. That, after all, is the central premise of sustainable development. Therefore, a deep commitment to fairness and social & environmental justice is central to the ecological economy transformation. Something that is significantly different and new in this economic conceptualisation is probably the recognition that an efficient, functioning economy is also a precondition for addressing the issue of sustainability in the broader context of social and

environmental justice. Much of sustainable development activism over the past decades has been a thinly disguised effort to give the environment priority over social and economic concerns, forgetting completely the gains derived from the application of science and technology in the amelioration of many of the ills as stated by the famous economist Julian Simon:

You pick (a) any measure of human welfare – such as life expectancy, the price of aluminum or gasoline, the amount of education per cohort of young people, the state of ownership of television sets, you name it; (b) a country; (c) any future year, and I'll bet a week's or a month's pay that that indicator shows improvement relative to the present while you bet that it shows deterioration. (Simon qtd. in Garrad, 17)

An ecological economy is founded on the promise that any kind of humankind's economic activity must, in the end, address the problems of social marginalization and environmental destruction. In an ecological economy, actions taken to reach economic ends also advance social and environmental ones, just as actions taken to meet social and environmental ends strengthen and develop the economy. This seeking of an alternative model of economic organization that avoids the mistakes of neoliberal economics must underline some critical operational parameters. One essential principle of such an endeavour has to be that it cannot afford to divorce economics from its social and economic underpinnings. Only such an economy can be sustainable in which economic growth leads simultaneously to the creation of employment and livelihoods, and to the gradual elimination of social marginalization. At the same time, it must lead us away from wasteful use of the earth's resources and ecosystems, from the depletion of species, and from air and water pollution toward clean, renewable, and sustainable forms of resource use. All economic initiatives must be screened and tested in the light of their possible impact on employment, social inclusion and justice, and for their environmental footprint. Capacity to generate wealth, competitive efficiency and other traditional tests of economic activities can never be segregated from any economics; but these tests must be augmented by new tests on the social and environmental side of the equation to ensure that a triple win is being pursued and secured.

India and its political economists too realised this bitter lesson after the debacle of BJP and its slogan of 'India shining' in 2004 Parliamentary elections. After that there is a tentative shift towards what is now conceptualised as 'ecological economy'. The Prime Minister Manmohan Singh, the architect of the economic reforms in 1991, has now been frequently bringing into discourse the issues of 'equitable growth' and 'development with a human face'. The legislative initiatives taken in the last couple of years such as Food Security Act, Right to Education Act, increase in allocation on Higher Education, Land Acquisition Act are sharp indicators of this shift in attitudes and practices. Even the Right to Information can be viewed as a reformative measure to improve the structures of governance which are often misused by the wealthy to lay their hands on scarce natural resources. The damning exposures in the Coalgate scandal have been possible due to the information generated through RTI, and then getting into the public and political domain. There is an acute realisation widely shared across intellectual circles today that the neo-liberal, neo-classical model of economy through its trickle-down theory is incapable of addressing the vital issues of equity and social justice. It also does not provide any adequate framework to ensure environmental justice. In the absence of an adequate human and institutional response to the issues of social justice and environmental justice, sustainable growth will be a far cry.

Some important lessons can be learnt and theoretical framework of 'environmental economy' can be envisaged and formulated in the light of 'The Niyamgiri tribals' rejection of the Oriss Government's plans to mine the hills for bauxite. What has played out in the hills since July 18 is an environmental battle of an epic scale - 8000 'primitive tribes' waging a relentless war against the State of Orissa and one of the most powerful multi-national companies in the world, Vedanta. This event also carries a huge significance as it provides us an alternate rethink on the notions of poverty and development. A Supreme Court ruling in April this year, ordered the Odisha government to hold *gram sabhas*, or *palli sabhas* in all the villages that would be affected by the State government's plan to mine the hills for bauxite. From July 18 until August 19, these so-called "primitive" people — who have lived for centuries on the slopes of the Niyamgiri hills, drunk its clear waters, eaten its fruits, hunted some of its animals, grown small crops and merged with the natural resources abundant around them — have been asked to speak (Sharma, *The Hindu*, Aug. 3, 2013). These unlettered men and women unanimously voted against the mining project and stated without hesitation that any mining in the region would disturb what the *Dongaria Kondh* regard as their deity, *Niyamaraja*. Quite amazing were the words of Gata Majhi, a woman of over 70 years from Palber village in Kalahandi district: "We only buy salt and kerosene from outside. Everything else we need is here. My God is spread over all these hills. No one messes with him" (Sharma, *The Hindu*). This statement must make all the proponents of modern economics pause and reframe their definition of "development" and "poverty". The people living in Niyamgiri have more than once stated in clear terms that they do not want the kind of development that gouges out their precious hills for mining. They do not want roads blasted through forests that have survived as repositories of precious biodiversity. They do not want people stomping through their villages and hamlets bringing their "development" plans for them. All of them have testified how the hills, the forests and the land, satisfy all their needs. Their model is founded on the 'culture of need'. They live by rules that ensure that no one hunts more than they need, no one cuts more trees than are needed, no one pollutes the natural springs and streams. These might be "poor" in the ways in which calculations about poverty are made by the Planning commission, but they are richer than most people in the world in their ability to live off the bounty that their natural environment provides. So it is time for all the world famous economists to pause and listen to the wisdom of the people of Niyamgiri. In a world threatened every day by direct consequence of destructive "development", the 'ecological economy' of the inhabitants of Niyamgiri acquires an urgent relevance.

To make the model of a ecological economy more effective, there should be some reshaping and shuffling in the macroeconomic policy arrangements relating to structures and principles for international trade and finance issues. For example, the role of trade in resources is central to a green economy. What is required is a clear shift in trade and financial arrangements to align international markets towards environmental and resource goals. At the same time, current organizations, policies, and practices must be subject to critical evaluation if they stand in the way of the realization of the goals and targets of a green economy. Furthermore, activities and regulations across organizations, states, and issue areas must be coordinated globally and held accountable for their deliberate failings. At the micro-economic level, the institutional challenge is to create individual incentives (including negative ones) to realign consumption and production decisions that can have significant environmental and economic ramifications. A couple of years ago, Himachal Pradesh govt. came out with a policy decision that all construction activities in the hill state can be allowed only if the concerned people take care of the issue of the environmental sustainability by planting trees so as to repair the damage caused to the ecology. This kind of intervention in micro arrangements is direly needed to ensure the passage of green economy.

CONCLUSION

To find an authentic and vibrant discourse on ecological economics, we have to move beyond the culture of greed so as to come to grips with the present day catastrophe glaring us in the face. There is an urgent need to traverse the whole historical and philosophical heritage of mankind and then, after careful consideration, re-discover the right course of coexistence on the face of earth. The humanity must open a 'dialogic discourse' to look at various sources of wisdom contained in different philosophies, cultures and traditions. Man needs to regain the capacity of 'listening to' and 'listening from' nature and other human beings. Man must rediscover better modes of socio-economic organizations and deeper realm of values and beliefs that allow man to survive with nature. My main argument in this paper is that "Ecological Economy" will be more appropriate to meet the environmental challenges of the twenty first century. I think that the time is ripe for new ideas, new thinking, and new approaches to find alternatives to the discredited neo-liberal economic paradigm. The world is also ripe for the adoption of the basics of the ecological economy as its chosen form of economic organization. I am confident that social and environmental issues can be set on a firm course toward a positive solution, within the framework of a robust and vibrant 'ecological economy' sweeping aside the "effluence of affluence" (Hajer and Fischer, 7).

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DEALING WITH SEASONALITY: MODELLING TOURISM DEMAND IN CROATIA

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ABSTRACT

The aim of the paper is to analyse tourism demand in Croatia and emphasise its seasonal patterns. The Croatian tourism is pronouncedly seasonal sensitive. Due to this fact, in modelling Croatian tourism demand, is necessary to implement quantitative methods that capture its seasonal character. Among the methods that can be used in analysing seasonal data, in this study the ratio-to-moving average method is used. After isolating the seasonal component of tourism demand several extrapolative methods were used with the purpose to model the number of tourist arrivals in Croatia; Naïve 1, Naïve 2, single moving average, weighted moving average, single exponential smoothing, Browns double exponential smoothing and the autoregressive method. The monthly tourist arrivals in Croatia in the period from January 2003 to December 2013 are used as a commonly measure of tourism demand. The analysed data indicate the seasonal character of Croatian tourism demand. Taking this into account, the authors first isolated the seasonal component and emphasised the residual effects on the movement of the tourist demand. The-ratio-to-moving-average method is explained in detail and implemented to tourist arrivals data obtained from the secondary data sources. After modelling the seasonally adjusted values of tourist arrivals, chosen methods were evaluated by forecasting accuracy measure, the mean absolute percentage error – MAPE. Finally, at the end of the paper, the authors point out the importance of analysing seasonal phenomena, such as tourism demand, with the appropriate methods which take into account the seasonal component of the phenomenon itself.

JEL CODE

C22, C53, L83

KEYWORDS

croatian tourism, ratio-to-moving-average, seasonality, tourism demand modelling, extrapolative methods, MAPE.

INTRODUCTION

The tourism turnover growth, experienced in the last few decades, confirms that Croatia is on the path towards making tourism an active generator of its economic development. In order to increase the economic significance of tourism, it is essential to adopt and implement a development tourism strategy focussed on more detailed and systematic both, qualitative and quantitative tourism demand analyses. When analysing tourism, it should be kept in mind that, Croatian tourism, now traditionally, has a pronounced seasonal character.

The aim of this study is to show the seasonal character of Croatian tourism demand. The seasonality is observed through the realized number of tourist arrivals in the period from January 2003 to December 2012. Generally, seasonality as a systematic intra – year fluctuation in data, often occurs in the economic cycle, and given the hypothesis, that it carries mostly negative than positive consequences, it requires to be analysed systematically and more in detail. According to the importance of tourism for the Croatian economic development, it is necessary to conduct systematically and comprehensive researches of tourism demand that take into account its seasonal character.

REVIEW OF LITERATURE

As seasonality is one the main characteristics of tourism demand, it has been and still is the issue of a wide range of studies and researches. The most of them agree that seasonality is a systematic and regular movement caused by changes of weather, calendar and timing of decisions, directly or indirectly through the production and consumption decisions made by the agents of the economy (Lim and McAleer, 2001). Christine Lim and Michael McAleer (2001) discussed monthly seasonal variations, saying that the seasonality, or intra-year fluctuations in the tourist arrival data, is a widely known but relatively unappreciated facet of tourism time series data. They applied the moving average methods for estimating components of time series of monthly tourism arrivals to Australia.

Nicole Koenig and Eberhard Bischoff (2004) analysed seasonality in Welsh room occupancy data, and made two contributions. Firstly, they demonstrated that the principal component analysis to mean and trend corrected data, provides a valuable insight into various forces shaping the seasonal patterns embedded in the time series. Secondly, they demonstrated that in their area of research, at least in the service accommodation segment, the seasonality of demand is a much more complex phenomenon, than simply a large difference between tourist numbers in summer and winter.

Erdogan Koc and Galip Altiny (2006) in their analysis of seasonality in monthly person tourist spending agreed that seasonality in tourism activity is not a particular feature of a single destination or country, as it is experienced in almost all countries in the world. Starting from that, they founded that there is pronounced seasonality in per person tourist spending data.

R. Cannas (2012) in a paper about key concepts and policies, explored the main characteristics of seasonality, and focused the attention on policies and strategies in order to highlight, how and in which ways tourism destinations can modify tourism seasonality's feature.

The problem of seasonality in Croatian tourism was discussed by Kožić, Krešić and Boranić - Živoder (2013). They analysed Croatian tourism seasonality using the method of the Gini coefficient. They concluded that the seasonality of Croatian tourism increased with the emergence of global economic crisis, but also that domestic tourism recorded less seasonality than foreign.

IMPORTANCE OF THE STUDY

The importance of the study can be manifested in the attempt of delineating the lawfulness of the tourism demand behaviour, as a dynamic phenomenon, and predicting future trends based on known past conditions and present observations. The role of tourism in Croatia is undoubtedly great. According to Croatian Bureau Of Statistics in 2012 was achieved 12,3 million arrivals and 70,3 million overnight stays, which makes share of tourism in GDP of almost 20%. Tourism is a significant source of profit for a wide range of activities in Croatia. According to data from the Croatian Bureau of Statistics in the first three months of 2013, the Croatian tourism sector registered an income of 306,9 million of Euro, which is 3,1% of the total Croatian GDP. According to the Croatian Ministry of Tourism in

2012 there were 62.7 million of tourists nights registered and among these 57.5 million were realized by foreign tourists. Since 2009 the number of foreign tourist nights reveals a slightly upward trend with a growth rate of 4.5%. Foreign tourists account for a total of 85% of the total Croatian tourist activity. Table 1 gives an overview of the number of tourist nights, according to the country of residence.

STATEMENT OF THE PROBLEM

The significant role of tourism for the entire Croatian economic development imposes a constant need for monitoring and analysing tourism demand and its characteristics. It also imposes an analysis of seasonality in Croatian tourism demand. Although, there are other economic activities, Croatia's economy is largely based on tourism. Tourism represents a significant source of profit for the Croatian economy. Due to the significance of the tourism sector for the entire Croatian economic development systematic quantitative analyses are the *condicio sine qua non* for future Croatian tourism development and improvement and its international competitiveness enhancement. Tourism modelling has to take into account the main patterns and the core determinants of the Croatian tourism demand. Among the most significant features of the Croatian tourism demand, is certainly its pronounced seasonal character. It is necessary therefore, in modelling Croatian tourism demand, to use proper quantitative methods that capture this seasonality.

OBJECTIVE OF RESEARCH

There are several objectives in this paper:

- to indicate the seasonal character of Croatian tourism
- to use the-ratio-to moving-average method to isolate the seasonal component
- to emphasize the meaning of residual distortion index
- to model Croatian tourism demand using several chosen extrapolative models

HYPOTHESES

The main hypothesis in this study is that Croatian tourism demand is seasonal sensitive and has therefore a pronounced seasonal character. Such a phenomenon requires the implementation of appropriate methods of adjustment in order to enable detail and systematic research of its patterns and determinants.

CONCEPT OF SEASONALITY IN TOURISM AND ITS IMPACT

The monitoring of tourism economic aspects is based on the analysis of the most important tourism demand characteristics, which are: (Pirjevec, 1998)

- demand and supply dislocation
- demand heterogeneity
- demand elasticity
- seasonal character

One of the most dominant characteristics of tourism demand is certainly its seasonal character, and in the literature on seasonality, it is commonly referred as the most important characteristic of the modern tourism market. According to Cannas (2012) seasonality in tourism is a temporal imbalance in the phenomenon of tourism, (which) may be expressed in terms of dimensions of such elements as number of visitors, expenditure of visitors, traffic on highways and other forms of transportations, employment, and admissions to attractions.

Generally, seasonality is the systematic, not necessarily regular, intra – year movement usually caused by weather or calendar influence.

There are two types of seasonality; natural and institutional. The first one is related to regular and recurring temporal changes in natural phenomena at some destination, which are often associated with climate, season of the year, precipitation, day length. The other one, institutional, is result of some religious, cultural and social factors. Well known type of this kind of seasonality is school vacations in the winter and summer.

Considering that seasonality is intra-year movement, there are many negative impacts which are associated to it. Some of them are (Čorak, 2009):

- seasonality of tourism demand affects the occupancy rates
- general tourism infrastructure realizes too low utilization rate out of season;
- to cope with the top of the season, the public sector is faced with high operating business costs;
- in many tourist areas seasonality leads to seasonal employment, and working hours are often extended;
- travel consumers are faced with high prices, an excessive concentration of tourist traffic, traffic jams and often poor service, which negative affect on their satisfaction;
- concentration of demand in a short period of time, usually causes environmental consequences or lead to exceeding of natural or cultural attractions capacities.

The goal of all participants on tourism supply side is to reduce seasonal fluctuations in business, or extend the tourist season in order to achieve better economic effects, in terms of specific tourism forms development that are using a certain resource. The tourism demand analysis and its seasonality researching help emissive and receptive tourist countries to critically analyse their own position in the tourism market. It also helps to realize that changes on tourism market evolve as fast as they can adjust to these changes and allows better cope with the competition.

Taking into account the mentioned above, in this study the tourism demand in Croatia, is analysed using ratio – to – moving – average method, as a useful and comprehensive quantitative decomposition method for seasonal occurrence measuring.

THE ANALYSIS OF SEASONAL EFFECTS ON TOURISM DEMAND IN CROATIA

Historically, seasonality of the Croatian tourism market is a significant problem; as it is evidenced by data from Croatian Bureau of statistics 94% of overnight stays and 86% of tourism revenues are generated from April to September. The analysis of seasonal effects on tourism demand in Croatia will be shown through data, research methodology and empirical results.

DATA AND RESEARCH METHODOLOGY

Tourist arrivals and tourists' overnight stays are the most commonly used measures and indicators. In this paper, the realized number of tourist arrivals was used for analysing the presence of the seasonal pattern. Secondary data sources were used; data on the number of tourist arrivals were collected from Croatian Bureau of Statistics data (Firs Release). Data are organized chronologically, in the time series of 120 observations (from January 2003 to December 2012). Each observation represents the realized number of arrivals during the month. Figure 1 shows the trends in the total number of realized tourist arrivals in Croatia from January 2003 to December 2012.

FIGURE 1: MONTHLY TOURISM ARRIVALS IN CROATIA (January 2003 – December 2012)

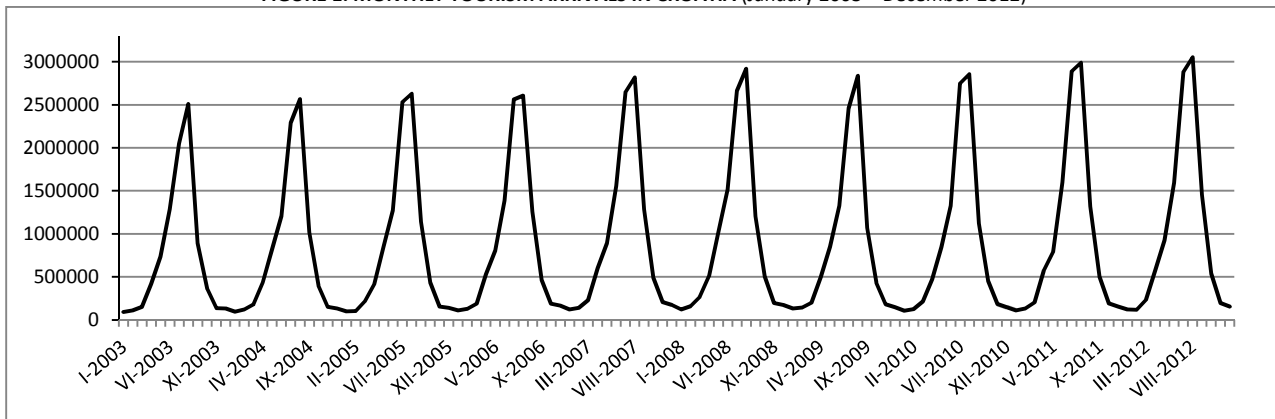


Figure 1, shows that the majority of tourist arrivals, realized in Croatia, are concentrated in the summer months, and that this pattern repeats throughout the whole observed period. It can be concluded that Croatian tourism is characterized by pronounced seasonality, resulting in numerous negative effects on the economy. This fact points out the necessity of further detailed and comprehensive analysis.

EMPIRICAL RESULTS

There are different approaches for dealing with appearance of seasonality. Some forecasters quantify relatively stable recurring pattern in time series, and remove it. Starting from the seasonal character of the empirical tourism arrivals time-series it is necessary to use a method that takes into account the seasonal influences. Therefore, in this study, the-ratio-to-moving-average method, as one of the seasonal adjustment methods, is used to analyse the empirical time-series. In using the-ratio-to-moving-average method, the values of the tourist arrivals time series will be cleared of seasonal influences.

As mentioned above, data have a strong seasonal character, and the analysis is based on the multiplicative model:

$$A_t = T_t \cdot C_t \cdot S_t \cdot I_t \quad (1)$$

where

A – the actual value in time series

T – the trend component

C – the cyclical component

S – the seasonal component

I – the irregular component

T – some time periods less than one year 1

The challenge of the-ratio-to-moving-average method is to distinguish these components, and isolating the seasonal one. The-ratio-to-moving-average method is implemented in several steps:

1. Developing a moving average series as long as the number of data point's time series has in a year

Time series to be analysed is monthly, so a twelve – month moving averages are calculated. Such moving averages represent the trend – cycle component of the equation under (1) (they contain no effects by definition). The twelve – month moving averages need to be transformed to centred moving averages. The seasonal and error components are averaged out, leaving a series containing mostly the trend and cycle:

$$CMA(12)_t = T_t \cdot C_t \quad (2)$$

2. Calculating the adjusted seasonal factor

First step in calculating adjusted seasonal factors is calculating of seasonal ratios. Seasonal ratios are calculated by dividing each actual value of tourist arrivals by the twelve- month centred moving average, concretely:

$$S_t \cdot I_t = \frac{A_t}{CMA_t} \quad (3)$$

The meaning of components is the same as in equation (2). This way the seasonal – irregular component is isolated. After calculating seasonal ratios, raw seasonal factors can be calculated as averages for each month in time series. These seasonal ratios are "raw" in the sense that they do necessarily sum to even number of observations they are calculated for (in this case twelve because the observed data are monthly). They are forced to sum to twelve by dividing their raw sum into twelve and multiplying the resulting "adjustment factor" by each of the raw seasonal factors. This way the adjusted seasonal factors are calculated.

3. Calculating the seasonal adjusted series

In this step each of the monthly values of time series were divided by appropriate adjusted seasonal factors, and series stripped of its seasonal component is obtained. Here is important to highlight that by averaging the seasonal ratios (in step 3) not only seasonal pattern was isolated, but also irregular component as well. Since this component is assumed to be random, its mean is zero. In averaging the seasonal ratios, we assume the irregular pattern approximates this mean (Frechtling, 76)

4. Calculating the residual factors

Residual factors are determined by dividing seasonal adjusted series values by centred moving averages as estimations of trend. Residual factors are used in calculating of the residual distortion index which is obtained by multiplying the residual factors by 100.

Previously described procedure is applied to the time series of realized tourist arrivals in Croatia in the period 2003 (January) -2012 (December). The results are shown in the table below.

1 More about four constituent parts: trend, cycle, seasonal and an irregular component see in Frechtling, 69.

TABLE 1: PRODUCING SEASONALLY ADJUSTED TIME SERIES OF TOURIST ARRIVALS IN CROATIA (JANUARY 2003 – DECEMBER 2012)

Observation	Tourist arrivals	Centred Moving Averages (12)	Seasonal Ratios	Adjusted Seasonal Factors	Seasonally Adjusted Series	Residual Factors	Residual Distortion Index
I-2003	90622	*	*	0,1252	723562	*	*
II-2003	109550	*	*	0,1438	761818	*	*
III-2003	151439	*	*	0,2354	643266	*	*
IV-2003	420251	*	*	0,5597	750800	*	*
V-2003	735684	*	*	0,9515	773170	*	*
VI-2003	1285366	*	*	1,5518	828295	*	*
VII-2003	2049213	739950,71	2,7694	3,1465	651259	0,8801	88,01
VIII-2003	2511454	740532,75	3,3914	3,1075	808192	1,0914	109,14
IX-2003	890474	742168,63	1,1998	1,2884	691135	0,9312	93,12
X-2003	364029	743893,33	0,4894	0,5049	720933	0,9691	96,91
XI-2003	137260	748180,92	0,1835	0,2154	637170	0,8516	85,16
XII-2003	132636	748688,42	0,1772	0,1696	781892	1,0443	104,43
... ²	...	...	...	...	...	...	...
I-2006	111133	849468,50	0,1308	0,1252	887330	1,0446	104,46
II-2006	127609	849578,00	0,1502	0,1438	887401	1,0445	104,45
III-2006	189341	853314,79	0,2219	0,2354	804262	0,9425	94,25
IV-2006	529900	859314,25	0,6167	0,5597	946694	1,1017	110,17
V-2006	804076	861938,00	0,9329	0,9515	845047	0,9804	98,04
VI-2006	1387747	864436,17	1,6054	1,5518	894269	1,0345	103,45
VII-2006	2560938	865970,13	2,9573	3,1465	813890	0,9399	93,99
VIII-2006	2605066	866950,83	3,0049	3,1075	838316	0,9670	96,70
IX-2006	1254370	869076,17	1,4433	1,2884	973570	1,1202	112,02
X-2006	464653	873639,13	0,5319	0,5049	920212	1,0533	105,33
XI-2006	187196	880298,75	0,2127	0,2154	868976	0,9871	98,71
XII-2006	164387	891114,96	0,1845	0,1696	969065	1,0875	108,75
... ³	...	...	...	...	...	...	...
I-2012	119765	967432,63	0,1238	0,1252	956251	0,9884	98,84
II-2012	117325	969684,92	0,1210	0,1438	815886	0,8414	84,14
III-2012	232981	977781,79	0,2383	0,2354	989632	1,0121	101,21
IV-2012	575333	984754,83	0,5842	0,5597	1027862	1,0438	104,38
V-2012	923520	986339,25	0,9363	0,9515	970577	0,9840	98,40
VI-2012	1594451	986378,63	1,6165	1,5518	1027470	1,0417	104,17
VII-2012	2882654	986263,33	2,9228	3,1465	916135	0,9289	92,89
VIII-2012	3051943	*	*	3,1075	982123	*	*
IX-2012	1452988	*	*	1,2884	1127726	*	*
X-2012	536148	*	*	0,5049	1061802	*	*
XI-2012	195203	*	*	0,2154	906145	*	*
XII-2012	152849	*	*	0,1696	901048	*	*

Table 1, shows the adjusted tourist arrival seasonal time series values in Croatia in the period from January 2003 to December 2012. The first column in the table is the name of each observation in the year (for example, I – 2003 means January in 2003). The second column shows original data of tourist arrivals in mentioned period. There were 120 observations of tourist arrivals. For calculating each of the adjusted values firstly centred moving averages (twelve – month) needed to be calculated (column 3). The calculated centred moving averages enable the calculation of seasonal ratios (column 4). The seasonal ratios were used for the calculation of seasonal factors and adjusted seasonal factors (detailed calculation is in Table 2.). The calculated adjusted seasonal factors (column 5) were used in the computation of seasonally adjusted series (column 6). The last two columns show the residual factors and residual distortion index.

The distortion index allows to the estimation of the residual effects, and the determination of the value for which is the observed phenomenon lower or greater due to the residual effects. Namely, the residual distortion index in July 2003 is 88,01, which means that the seasonally adjusted value of tourist arrivals in July 2003 is for 11,9% smaller because of residual influences.

As described, when implementing the-ratio-to-moving-average method, the adjusted seasonal factors have to be calculated. The following table shows monthly seasonal ratios which were used in calculation of seasonal factors and adjusted seasonal factors.

TABLE 2: SEASONAL FACTORS AND ADJUSTED SEASONAL FACTORS

	January	February	March	April	May	June	July	August	September	October	November	December
2003	*	*	*	*	*	*	2,7694	3,3914	1,1998	0,4894	0,1835	0,1772
2004	0,1237	0,1572	0,2316	0,5543	1,0530	1,5400	2,9186	3,2732	1,2986	0,5024	0,1907	0,1679
2005	0,1215	0,1249	0,2639	0,5023	1,0236	1,5282	3,0422	3,1520	1,3661	0,5195	0,1827	0,1636
2006	0,1308	0,1502	0,2219	0,6167	0,9329	1,6054	2,9573	3,0049	1,4433	0,5319	0,2127	0,1845
2007	0,1348	0,1539	0,2458	0,6490	0,9608	1,6766	2,8446	3,0284	1,3757	0,5273	0,2231	0,1836
2008	0,1301	0,1683	0,2831	0,5408	1,0853	1,6186	2,8404	3,1129	1,2886	0,5431	0,2131	0,1884
2009	0,1475	0,1643	0,2282	0,5770	0,9894	1,5492	2,8731	3,3247	1,2560	0,5063	0,2100	0,1732
2010	0,1240	0,1436	0,2421	0,5332	0,9596	1,5004	3,1095	3,2307	1,2704	0,5114	0,2088	0,1646
2011	0,1184	0,1420	0,2154	0,6030	0,8306	1,6738	3,0257	3,1316	1,3812	0,5244	0,1990	0,1608
2012	0,1238	0,1210	0,2383	0,5842	0,9363	1,6165	2,9228	*	*	*	*	*
Total	1,1546	1,3254	2,1704	5,1606	8,7715	14,3087	29,3036	28,6499	11,8799	4,6556	1,8236	1,5638
Seasonal Factors	0,1283	0,1473	0,2412	0,5734	0,9746	1,5899	2,9304	3,1833	1,3200	0,5173	0,2026	0,1738
Adjusted Seasonal Factor	0,1285	0,1475	0,2415	0,5743	0,9761	1,5923	2,9348	3,1881	1,3220	0,5181	0,2029	0,1740

² Due to the large number of data intermediate data are omitted.

³ Due to the large number of data intermediate data are omitted.

In order to compare original and adjusted data of tourist arrivals, data are shown graphically (Figure 2).

FIGURE 2: MONTHLY TOURISM ARRIVALS IN CROATIA – ORIGINAL AND ADJUSTED VALUES (JANUARY 2003 – DECEMBER 2012)

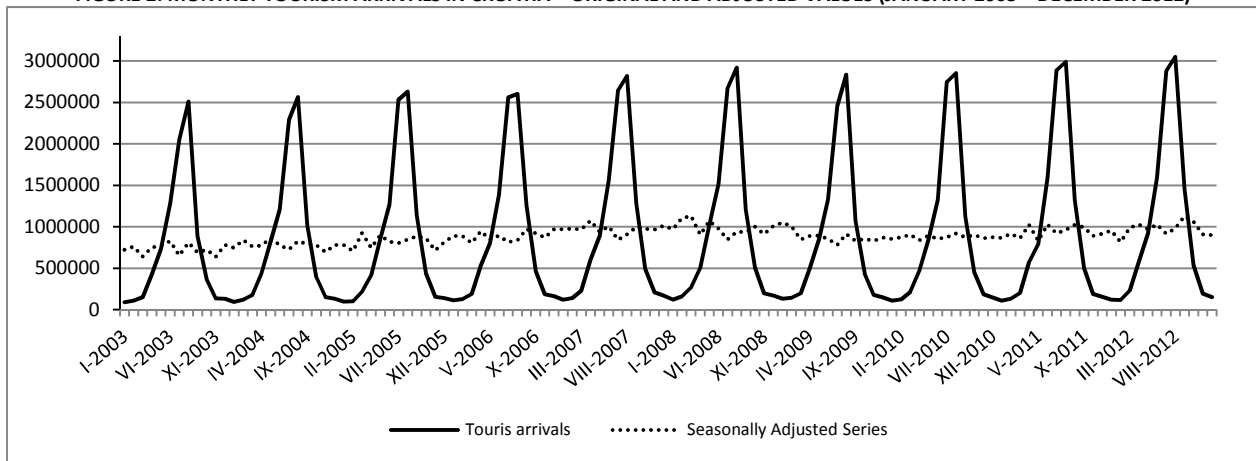


Figure 2, shows the original and adjusted data on tourist arrivals. The curve of seasonally adjusted values indicates that the original values are cleared of seasonal effects. After obtaining the seasonally adjusted values, the empirical time-series can be used in modelling the number of tourist arrivals. The methods used in this paper are as follows:

- Naïve 1
- Naïve 2
- Single moving average
- Weighted moving average
- Single exponential smoothing
- Browns double exponential smoothing
- An autoregressive method

The basic theoretical concepts of the chosen techniques used in this study are described below.

The Naïve 1

According to the Naïve 1 method the value for the period to be forecast is equal to the actual value of the last period available. This method is also called “no change method”, and it’s calculated as follows:

$$F_t = A_{t-1} \tag{4}$$

Where

- F – forecast value
- A – actual value
- T – some time period

The Naïve 2

This method as also one of the “no change method.” We can define the Naïve 2 forecast value as the current value multiplied by the growth rate between the current value and the previous value, or:(Frechtling, 66)

$$F_t = A_{t-1} \cdot \frac{A_{t-1}}{A_{t-2}} \tag{5}$$

The meaning of the components is the same as in equation (4).

The Single Moving Average

This method averages any number of periods to produce a forecast. The general equation of this method is as follows:

$$F_t = \frac{A_{t-1} + A_{t-2} + A_{t-1}}{n} \tag{6}$$

Where

- F – forecast value
- A – actual value
- T – some time period
- N – number of past periods

The Weighted Moving Average

In modelling time series trend or some other principle weights can be used. The stronger weight emphasis that data are fresh and for older data (which are considered as less important) weight is smaller. According to Weighted moving average method to each data is given different weight, and these multiplied factors are averaged. The equation for calculating Weighted moving average is:

$$F_t^* = \sum_{s=-m}^m W_s A_{t+s} \tag{7}$$

Where

- F – forecast value
- A – actual value
- W – weight
- T – some tome period

The Single Exponential Smoothing

This method is very similar to Single moving average, but instead of creating simple average it gives more weight to the most recent measurement. This method is used in tourism often, as good short-term forecast. Equation for calculating single exponential smoothing values is:

$$F_t = F_{t-1} + \alpha(A_{t-1} - F_{t-1}) \tag{8}$$

Where

- F – forecast value
- α – smoothing constant (between 0 and 1)
- A – actual value
- T – some tome period

The Browns Double Exponential Smoothing

Double exponential smoothing technique should be used when time-series data has only trend and no seasonality. The following equations are used in double exponential smoothing with Brown’s method (Baldigara, 2013):

$$\begin{aligned} \text{Level } \alpha A_t + (1 - \alpha)(L_{t-1} + b_{t-1}) \\ \text{Trend } b_t = \alpha(L_t - L_{t-1}) + (1 - \alpha)b_{t-1} \end{aligned} \tag{9}$$

$$\text{Forecast } F_{t+h} = L_t + hb_t$$

Where

L – level of the series

α – level and trend smoothing constant (between 0 and 1)

A – actual value

B – trend of the series

T – some time period

H – number of time periods ahead to be forecast

The Autoregressive Method

Autoregression is best applied to seasonally adjusted series (Frechtling, 2001). This is an application of regression, but independent variables are lagged. An autoregressive model follows the form:

$$F_t = \alpha + \beta_1 A_{t-1} + \beta_2 A_{t-2} + \dots + \beta_n A_{t-n} \tag{10}$$

Where F – forecast value

α – estimated constant

β – estimated coefficients

A – actual value in time series

t – some time period

n – number of past values included

After the short overview of the used methods, the modelling results are given.

TABLE 3: SELECTED MODELS COMPUTING RESULTS

	Seasonally Adjusted Series	Naive 1	Naive 2	Single Moving Average	Weighted Moving Average	Single Exponential Smoothing	Browns Double Exponential Smoothing	Auto-regression
I-2003	723562	*	*	*	*	*	761818	*
II-2003	761818	723562	*	*	*	723562	800074	*
III-2003	643266	761818	*	*	*	742690	720724	*
IV-2003	750800	643266	*	709549	696166	692978	742335	784119
V-2003	773170	750800	*	718628	716792	721889	772034	749598
VI-2003	828295	773170	*	722412	744063	747529	828511	751979
VII-2003	651259	828295	*	784088	797004	787912	723919	798087
VIII-2003	808192	651259	*	750908	730590	719586	771158	827994
IX-2003	691135	808192	*	762582	759232	763889	716242	775753
X-2003	720933	691135	*	716862	723508	727512	704857	777839
XI-2003	637170	720933	*	740087	725543	724222	640361	784867
XII-2003	781892	637170	*	683079	674085	680696	715857	756473
...
I-2006	887330	813648	564050	796240	788176	800127	838131	812261
II-2006	887401	887330	914257	804673	833721	843729	885089	801352
III-2006	804262	887401	961012	862793	875086	865565	846791	865724
IV-2006	946694	804262	887473	859665	845820	834914	923834	891175
V-2006	845047	946694	721123	879452	889334	890804	891835	857734
VI-2006	894269	845047	1089125	865334	872132	867925	901055	886381
VII-2006	813890	894269	743400	895337	886599	881097	843685	894609
VIII-2006	838316	813890	943492	851069	845876	847494	825871	879351
IX-2006	973570	838316	733511	848825	839500	842905	921515	863980
X-2006	920212	973570	862743	875259	901872	908237	942332	846078
XI-2006	868976	920212	1108823	910699	924348	914225	908784	908949
XII-2006	969065	868976	866854	920919	903487	891600	957125	934138
...
I-2012	956251	917360	783982	933373	920625	928603	919914	928536
II-2012	815886	956251	945805	920842	932065	942427	831819	903781
III-2012	989632	815886	995143	896499	879587	879157	914098	929251
IV-2012	1027862	989632	675520	920590	926153	934394	1002793	886169
V-2012	970577	1027862	1163378	944460	979789	981128	1010445	907675
VI-2012	1027470	970577	1066092	996024	992848	975852	1046973	983012
VII-2012	916135	1027470	913292	1008636	1008571	1001661	976860	973144
VIII-2012	982123	916135	1084364	971394	962320	958898	976113	976280
IX-2012	1127726	982123	804799	975243	967685	970510	1086444	951094
X-2012	1061802	1127726	1048110	1008661	1043926	1049118	1102488	939242
XI-2012	906145	1061802	1273328	1057217	1070497	1055460	983595	1020619
XII-2012	901048	906145	995879	1031891	994961	980803	900964	1044321

After modelling seasonally adjusted tourist arrivals, it was necessary to examine the forecast accuracy of the chosen techniques. For this purpose, the Mean Absolute Percentage Error was used. The Mean Absolute Percentage Error is expressed in generic percentage terms and it is computed by the following formula: (Baldigara, 2013)

$$MAPE = \frac{1}{n} \sum_{t=1}^n \frac{|A_t - F_t|}{A_t} \cdot 100 \tag{11}$$

MAPE is measure which permits the comparison of different models, with different time periods and number of observations.

⁴ Due to the large number of data intermediate data are omitted.

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TABLE 4: MAPE AND FORECASTING ACCURACY

MAPE	Forecasting accuracy
Less than 10%	Highly accurate
10 – 20%	Good
20 – 50%	Reasonable
Greater than 50%	Inaccurate

Source: Baggio, R, and Koblas, J. (2011)

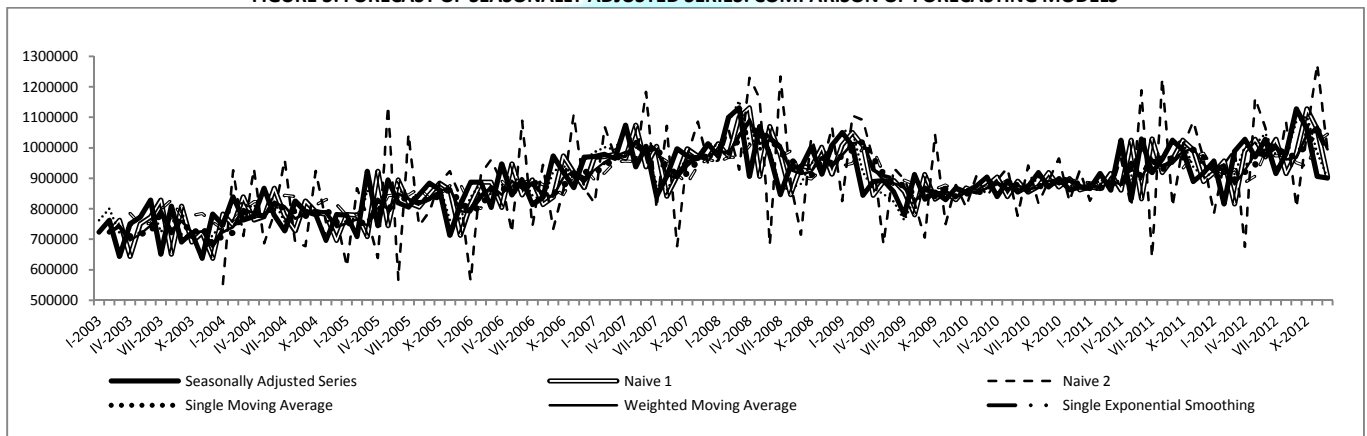
The calculated MAPE values for the used models are given in table below.

TABLE 5: MAPE OF SELECTED MODELS

	MAPE
Naive 1	8,5673
Naive 2	14,3285
Single Moving Average	6,6054
Weighted Moving Average	6,6999
Single Exponential Smoothing	6,6924
Browns Double Exponential Smoothing	3,2570
Autoregression	6,4731

According to the computed MAPE values, represented in the table above, it can be concluded that almost all of used models are highly accurate (six of seven models have MAPE less than 10%). One model, naïve 2, has good forecasting accuracy (with MAPE \approx 14%).

FIGURE 3: FORECAST OF SEASONALLY ADJUSTED SERIES: COMPARISON OF FORECASTING MODELS



The model which best fits the seasonally adjusted series of tourist arrivals in period from January 2003 to December 2012 is Browns Double Exponential Smoothing (calculated MAPE is the smallest, MAPE = 3,25%).

CONCLUSIONS

Due to the growing importance of the tourism sector worldwide, recently there has been an increasing interest in researching tourism demand determinants and its modelling. One of the primary challenges facing tourism management and development is to produce systematic, prompt and accurate tourism demand forecasts. Accurate forecasts should be considered a tool for explaining, researching and forecasting tourist demand in Croatia. The paper investigates the application of time-series based quantitative methods in Croatian tourism demand modelling and forecasting. The aim of the paper is to model and analyse tourism demand in Croatia. For this purpose the ratio-to-moving-average method is applied in order to capture the essence of tourists' arrival patterns in Croatia. The time-series of tourist arrivals from January 2003 to December 2012 was seasonally adjusted using the-ratio-to-moving-average method. The-ratio-to-moving-average method is a powerful tool which allows the isolation of the seasonal component, but also indicates the extent of the residual factors influencing the observed values of the analysed tourism demand. After seasonal adjustment, seven basic quantitative extrapolative methods were chosen, and seasonally adjusted tourist arrivals were modelled and evaluated with the MAPE forecasting accuracy measure. The obtained results showed that Browns double exponential smoothing fits the best the seasonally adjusted values. The analysis of tourism demand patterns should be considered crucial for forecasting and modelling, decision-making and all other activities that support tourism development.

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SOCIO-ECONOMIC DETERMINANTS OF TELECOMMUNICATION DEVELOPMENT IN INDIA: AN INTER-STATE ANALYSIS

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ABSTRACT

The paper investigates various socio-economic factors that determine the growth performance of telecom sector across the major 18 states in India. Panel data has been used over a period of 1991-2010. The study has deployed factor analysis at three points of time i.e., 1991, 2001, 2011. Coefficients of variation and growth rates have been calculated for measuring the growth performance of the telecom sector across the major states in India. The results of the compound annual growth rate and coefficient of variation indicate that telecom sector is growing rapidly in all the major states and specifically in the poor states. The higher value of CAGR in case of poor states indicates convergence in telecommunication development. The results of factor analysis revealed that during 1991 social factors like literacy, population density, number of villages electrified, proportion of urban population were more significant in terms of their contribution to the development of telecom services. The results of factor analysis 2001 as well as that of 2011 have shown the role of both social as well as economic factors in development of telecommunication. Step-wise regression analysis has identified the most significant factors have taken up most significant factors in telecom development in major states of India. These include Per Capita NSDP, Per Capita Electricity Consumption, Per capita NSDP generated from Transport, Communication and Storage Services, Per Capita NSDP generated from Trade, Hotels And Services.

KEYWORDS

Telecommunication, Economic Development, Telecom Services.

JEL CLASSIFICATION

L96, O10, O14

INTRODUCTION

Telecom services have been recognized the world-over as an important tool for socio-economic development of a nation. Telecommunication is one of the prime support services needed for rapid growth and modernization of various sectors of the economy. It has become especially important in recent years because of enormous growth of information technology and its significant potential for the impact on the rest of the economy. (Government of India:2008-09). The spill-over effects and externalities generated by telecommunication infrastructure investment are transmitted throughout the economy. There is need to determine the inter-sectoral linkage impact of telecommunications infrastructure on the economy. This is because infrastructure, apart from serving as a direct input, can also be an intermediate input in the production process. Thus, activities of the real and monetary sectors (manufacturing, industry, banking etc) of the economy and even those of services are influenced by infrastructural investment and consequently their contributions to economic growth are also influenced. (Tella et.al:2012).

Telecommunications is one of the few sectors in India, which has witnessed the most fundamental structural and institutional reforms since 1991. The end of the restrictive domestic and external policies in 1991 led to the broad policy changes, the most important of which was the liberalization of the industrial policy. The main objective was to introduce competition in some industries that had been previously served by government-owned monopolies. Telecom was one of those sectors which grew tremendously due to policy changes in Indian economy. This rapid growth has been possible due to various proactive and positive decisions taken by the government and contribution of public and the private sector. With the liberalization measures, Indian telecommunication sector has emerged as a strong growth engine for the Indian economy. India has the second largest network in the world after China with its 965.52 million telephone connections in 2012. Teledensity has increased from merely 2 percent or so in 1999 to around 76.86 percent in 2012. Wireless has been the principal engine for telecom growth in the country. The wireless subscriber base has grown from 0.88 million in 1999 to 687.71 million in 2010-11 and further to 965.52 million in 2012. (Government of India:2011)

The relationship between services sector and telecom sector has wide implications in the era of liberalization and globalization. Within the services sector, the telecom sector has been the major contributor to India's growth, accounting for nearly 3.6 percent of total GDP in 2010. (Earnest & Young and FICCI: 2011). It has reshaped both social and business contacts. Telecom services have revolutionized the business of entrepreneurs. It sets and structures their daily life routine with wake-up rings, agenda alerts, 24-hours calls, tricky uses in business bargaining, performing business management tasks, self-management, SMS and news feeds. The features available on mobile handsets, such as caller identification, voice mail, call forwarding, call waiting and the facility of receiving and transmitting short text messages, data, and graphic with nominal charges is very much relevant. (Chaudhry.et.dl:2009). In order to promote equitable and sustainable development as well as political and social cohesion, narrowing access gaps and removing barriers to information dissemination are prerequisites. Therefore, increasing connectivity is highly instrumental in improving governance, business communication, security, response to emergencies and in the overall strengthening of the socio-cultural ethos of the country. (Earnest & Young and FICCI:2011)

Therefore, not only telecom sector is contributing to the growth of other sectors but also sectors like industry, manufacturing, hotel and tourism services, financial services are contributing to the growth of telecommunication itself. As the usage of telephones is crucial in all such services and sectors mentioned above.

The present study has two main objectives

1. To measure the growth and performance of telecom sector across the major states in India.
2. To identify various factors which contribute to the telecom sector development across the major states in India.

DATABASE AND METHODOLOGY

Panel Data has been used for the study over a period of 1992-2010 in order to analyze the growth performance of telecom sector across the states. For the purpose of factor analysis, data has been used at three points of time i.e., 1991, 2001, 2011. Data for the study has been collected from the various sources like CMIE Report On Infrastructure, Census Of India, Statistical Abstract Of India, Annual Reports Of TRAI, Handbook Of Indian Economy, RBI, Planning Commission Reports.

Growth rate

To explain the growth performance of telecom sector across the states in India, compound annual growth rates have been calculated for periods 1996-97 to 2003-04 and 2004-05 to 2010-11. The growth rates were computed using the following formula:

$$Y_t = ab^t e^{u_t}$$

Under the logarithmic transformation the above equation can be expressed as:

$$\text{Log} y_t = \text{log} a + t \text{log} b + u_t$$

Where y_t is the value of dependent variable in the year t , and t is trend variable, u_t is disturbance term and a and b are constants. From the estimated value of regression coefficient b the growth rate r can be calculated as:

$$R = \text{antilog}(b-1) \times 100$$

Coefficient of variation

In order to examine the nature of change in the degree of disparity in telecom development among the States in India, coefficient of variation as a measure of disparity is used.

$$\text{CoV} = \frac{\sigma}{\bar{x}} \times 100$$

Factor analysis

To examine the contribution of various factors to the telecommunication growth across the states in India, factor analysis has been used. For the purpose of analysis, 18 major Indian states have been selected. These variables with high inter-correlations could well measure one underlying variable, which is called a 'factor'. In factor analysis, a given set of n variables are grouped into p number of groups called factors which are less in numbers than original variables. The variables within a group or (factors) are of the same nature or are complimentary with respect to phenomenon under study but between two groups or 'factor' variables are independent. Thus, factors f_i and f_j orthogonal.

The data was normalized using Nagar-Basu(2002) methodology. The selected variables were normalized by subtracting the minimum value of particular variable from its actual value and dividing it by the range, which is the difference between maximum and minimum value of the selected variables. The given formula is ;

$$\text{Actual value}_{ij} - \text{Minimum value}_{ik} \\ \text{Maximum value}_{ik} - \text{Minimum value}_{ik}$$

Where, Z_{ij} = normalized value of i th variable for j th state

i = variables

j = state

k = specific value

The technique of factor analysis as used in the present study is as under:

$$X = LF + U$$

Where X is vector of all the original variables.

$$X' = [X_1, X_2, X_3, \dots, X_n]$$

F is the vector of factors derived

$$F' = [F_1, F_2, F_3, \dots, F_p]$$

U is the vector of error terms

$$U' = [E_1, E_2, E_3, \dots, E_n]$$

X' , F' and U' are respective transposes

L is the matrix of factor loading (loading coefficient matrix)

$$\begin{matrix} a_{11} & a_{12} & a_{13} & \dots & a_{1p} \\ a_{21} & a_{22} & a_{23} & \dots & a_{2p} \\ a_{31} & a_{32} & a_{33} & \dots & a_{3p} \\ \dots & \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & a_{n3} & \dots & a_{np} \end{matrix}$$

The coefficient (factor loadings) a_{ij} belongs to i th variable and j th factor which is similar simple correlation coefficient and shows the extent to which the variable X_i is related to F_j factor. "A salient loading is one which is sufficiently high to assume that a relationship exists between the variable and the factor. In addition, it usually means that relationship is high enough so that variable can aid in interpreting the factor and vice-versa.

The sum of square of factor loadings of X_i original variables under the derived p factors is called the communalities for X_i variables.

$$(a_{i1})^2 + (a_{i2})^2 + (a_{i3})^2 + \dots + (a_{ip})^2 = (C_i)^2$$

Communality in factor analysis is something like R^2 in the regression analysis and it shows the extent to which the derived factors explain the i th variables.

Derived communality value should be larger generally (more than 70 percent) to be sure that each variable has been explained well. By definition, the communality of a variable is that proportion of its variable which can be accounted for the common factor. The principal component (factor analysis) produces components (factors) in descending order of their importance and factor loadings which explain the relative importance of different variables in explaining variance in the phenomenon.

COMPOSITE INDEX

The statistical technique employed to develop the weighted composite index involves finding out the 'principal components of the groups consisting of these selected 17 variables and derive the implicit weights based thereon. The composite index is then constructed by combining various indicators whose implicit weights are already determined through the technique of 'principal component analysis'.

$$\text{Composite Index of } i\text{th State} = \frac{\sum W_i Z_{ij}}{\sum W_i}$$

Where, Z_{ij} is the normalized value of the i th variable for the j th country

W_i is the weight of i th country (Field: 2000)

STEP-WISE REGRESSION

In order to decide the "best" set of explanatory variables for a regression model step-wise regression is used. The decision to add or drop a variable is usually made on the basis of the contribution of that variable to the ESS (Explained Sum of Squares) as judged by the F-test. (Gujrati:2004). At each step, independent variables not in the equation that has the smallest probability of F is entered, if that probability is sufficiently small. Variables already in the regression equation are removed if their value of F becomes sufficiently large.

$$Y = \beta_0 + \beta_1 X_1 + \mu$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 + \mu$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu$$

Where,

Y = dependent variable

$x_1+x_2+x_3...x_i$ are independent variables

μ is the disturbance term

RESULTS AND DISCUSSION

GROWTH PERFORMANCE OF TELECOMMUNICATION ACROSS THE STATES IN INDIA

With its 926.55 million Telephone connection, it is the second largest network in the world after China. It is also the second largest wireless network in the world. (Government of India:2012) The phenomenal growth of the Indian telecom industry during the past few years has been backed by a confluence of factors such as progressive regulatory regime, favorable demographic features and conducive business environment. Mobile phones today have moved beyond their fundamental role of communications. Its applications are being used by the business class with the coming of value added services and 3G. Nowadays, customers use their cellular phones to play games, read news headlines, surf the Internet, keep a tab on astrology, listen to music or check their bank balance. Thus, there exists a vast world beyond voice that needs to be explored and tapped. (ASSOCHAM: 2006) Across the board, reduction in telecom tariff has been one of the primary factors behind the exponential growth experienced by the Indian telecom industry. The competition within the various segments of the telecom sector has intensified in the past few years and has led to a price war between the operators. (Government of India: 2007-08). Indian telecom rates are the lowest in the world at 1 cent per minute. The average revenue per user (ARPU) has declined from a high of US\$ 30 per month to US\$ 5 per month. (Ghosh and Prasad: 2012).

TABLE 1 (a): STATE-WISE TELEDENSITY 1991- 2000

States	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	CAGR% (1990- 2000)
Andhra Pradesh	0.51	0.56	0.64	0.72	0.89	1.08	1.26	1.56	2.21	3.13	20.25288
Assam	0.18	0.21	0.26	0.31	0.36	0.43	0.49	0.63	0.84	1.06	20.1616
Bihar	0.13	0.15	0.18	0.22	0.26	0.29	0.34	0.41	0.53	0.65	18.92837
Gujarat	1.08	1.17	1.33	1.5	1.74	2	2.32	2.81	3.41	4.26	15.47224
Haryana	0.69	0.77	0.89	1.1	1.34	1.59	1.89	2.27	2.79	3.36	19.77305
Himachal Pradesh	0.65	0.77	0.89	1.07	1.44	1.94	2.46	3.12	3.56	4.32	24.20455
J & K	0.37	0.40	0.42	0.49	0.54	0.59	0.75	0.95	1.14	1.31	14.65229
Karnataka	0.74	0.82	0.93	1.07	1.09	1.58	1.93	2.47	3.01	3.76	19.44576
Kerala	0.89	1.03	1.26	1.44	2.09	2.19	2.7	3.45	4.38	5.6	21.84833
Madhya Pradesh	0.32	0.41	0.51	0.64	0.74	0.84	0.92	1.04	1.25	1.54	18.62212
Maharashtra	1.33	1.49	1.67	1.92	2.29	2.71	3.26	3.92	4.63	5.4	16.76875
Orissa	0.21	0.25	0.29	0.35	0.40	0.48	0.56	0.75	0.97	1.21	20.56892
Punjab	1.00	1.10	1.23	1.47	1.89	2.48	3.09	3.79	4.74	5.67	21.46867
Rajasthan	0.35	0.41	0.51	0.65	0.81	0.99	1.19	1.47	1.80	2.11	22.23547
Tamil Nadu	0.81	0.87	0.96	1.11	1.34	1.66	2.16	2.75	3.56	4.52	20.28201
West Bengal	0.47	0.49	0.53	0.58	0.66	0.79	1.01	1.30	1.68	2.09	17.15047
Uttar Pradesh	0.24	0.27	0.33	0.36	0.43	0.52	0.64	0.86	1.08	1.33	20.65856
Delhi	5.53	6.17	6.74	7.65	8.72	10.11	12.64	14.1	14.14	15.4	13.06481
Mean	0.861111	0.963333	1.087222	1.258333	1.501667	1.792778	2.200556	2.647222	3.095556	3.706667	
SD	1.214064	1.352375	1.472488	1.667115	1.906309	2.206775	2.765113	3.076336	3.079974	3.366545	
CV	140.9881	140.3849	135.4358	132.486	126.9462	123.0925	125.6552	116.21	99.49664	90.82405	

Source: Department of Telecom, Statistical Abstract of India (various issues)

TABLE 1 (b): STATE-WISE TELEDENSITY 2001- 2011

States	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	CAGR% (2001-11)
Andhra Pradesh	4.1	4.93	5.66	7.85	9.48	13.45	19.62	28.25	39.59	57.23	74.35	35.50217
Assam	1.33	1.67	1.94	2.13	2.79	5.67	9.74	14.74	20.65	29.99	38.98	44.71514
Bihar	1.15	1.08	1.32	1.67	2.36	5.34	7.32	12.64	22.18	37.96	42.32	51.79611
Gujarat	5.37	6.37	7.77	10.14	12.73	16.98	24.14	33.63	45.16	58.46	81.90	32.32251
Haryana	4.25	5.08	6.21	8.38	10.83	14.47	23.11	30.39	43.75	59.70	82.59	36.07307
Himachal Pradesh	5.31	7.48	8.5	10.14	13.12	18.78	28.67	41.16	55.50	79.35	111.11	36.05007
J&K	1.72	2.15	2.48	3.01	5.09	12.18	16.08	21.84	32.76	49.91	50.90	46.99278
Karnataka	4.7	5.58	6.67	9.46	12.19	17.06	25.05	34.53	45.21	67.81	87.76	35.81819
Kerala	7.51	9.51	11.33	14.87	18.77	25.54	33.54	45.34	54.48	80.36	100.01	30.16923
Madhya Pradesh	1.81	2.49	3.02	3.99	5.21	7.12	12.22	20.29	30.08	45.23	48.88	42.6558
Maharashtra	6.6	5.14	6.08	8	10	13.1	18.78	27.42	37.90	50.30	68.97	30.68781
Orissa	1.52	1.88	2.29	2.95	3.96	7.57	9.51	15	23.30	39.3	56.37	45.58414
Punjab	6.95	9.15	11.76	17.33	21.91	27.61	37.05	47.89	58.25	75.49	104.09	30.55886
Rajasthan	2.57	3.02	3.47	4.50	6.12	9.65	15.49	23.74	37.15	52.7	65.35	42.53242
Tamil Nadu	5.91	5.37	6.22	8.54	11.37	14.70	22.55	35.09	50.46	74.3	97.73	36.62571
West Bengal	2.67	1.52	1.85	2.18	3	5.53	8.63	14.36	22.51	34.8	52.97	43.57429
Uttar Pradesh	1.66	1.86	2.15	2.96	4.06	6.87	10.77	16.19	24.91	38.5	53.43	45.435
Delhi	17.66	22.11	27.38	41.19	50.94	65.40	86.85	110.05	140.18	172.4	225.26	29.39067
Mean	4.59944	5.355	6.45	8.84944	11.3294	15.9455	22.7288	31.80833	43.55667	61.32167	80.165	
SD	3.88359	4.92938	6.12112	9.22629	11.3269	13.9600	18.2004	22.35167	27.04741	31.88796	42.505	
CV	84.4362	92.0520	94.9011	104.258	99.9775	87.5483	80.0760	70.26986	62.09706	52.00113	53.022	

Source: Department of Telecom, Statistical Abstract of India (various issues)

While India has made considerable progress in the telecom sector, there are wide disparities in the penetration of telecom facilities across the states. States such as Delhi, Tamil Nadu, Kerala, Himachal Pradesh and Punjab have relatively high teledensity. However, states such as Assam, Bihar, Madhya Pradesh, UP, Jammu and Kashmir have relatively low teledensity. Delhi has the highest teledensity in India throughout the study period. During the period 1991 to 2000 Himachal Pradesh has registered the highest growth rate, followed by Rajasthan, Kerala, Orissa, Uttar Pradesh, Tamil Nadu, Andhra Pradesh, Haryana. On the other hand, during the same period, Delhi has registered the lowest growth rate (13.06%) followed by the J&K, Gujarat, West Bengal, Maharashtra. The results

revealed that not only the states having higher income level have better telecom infrastructure but the poor states also have shown growth in teledensity during this period as shown in Table 1(a). During the period 2001-2011, Bihar, J&K, Orissa, Uttar Pradesh, Assam, Madhya Pradesh, West Bengal, Rajasthan, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, Punjab, Himachal Pradesh, Madhya Pradesh, Rajasthan, Tamil Nadu, Haryana, Himachal Pradesh, Karnataka, registered the highest growth rate. During the same period, again Delhi, Kerala, Punjab, Maharashtra registered the lowest growth rate as these states already had higher teledensity (Table 1(b)). The results also indicate that growth of telecom sector is not only the factor of income level but it also depends upon the availability of mobile handsets at affordable prices, low tariff level and introduction of new technologies like 3G, Wi-Max. The overall results indicate convergence in telecommunication as poor states are growing at greater pace comparatively during both the time periods. Further, most of developed states have registered almost same growth rate with little difference. The coefficient of variation across the states has been quite high during the year 1991. The value of coefficient of variation has decreased throughout the period which indicates convergence in telecom sector across the states. It was 140.38 percent in 1991 which was decreased to 84.43 percent in 2001 and further decreased to 53.02 percent in 2011.

TABLE 2 (a): STATE-WISE DELS (000') 1991-2000

States	1991-1992	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	CAGR%(1991-92 to 1999-2000)
Andhra Pradesh	49	60	74	87	107	125	162	212	273	338	24.24921
Assam	132	166	203	247	280	333	399	502	627	892	21.89976
Bihar	497	576	658	781	916	1079	1292	1548	1922	2399	19.39249
Gujarat	130	153	195	242	295	355	428	525	642	794	22.30817
Haryana	41	48	59	80	110	142	182	225	285	347	28.85064
J&K	380	443	509	647	797	951	1167	1572	2227	2838	26.30945
Himachal Pradesh	32	34	42	47	53	69	89	108	130	174	22.34949
Karnataka	375	434	508	644	784	973	1228	1465	1829	2257	23.22535
Kerala	306	378	437	527	681	854	1084	1355	1705	2162	25.05145
Madhya Pradesh	278	351	453	541	623	698	801	941	1096	1263	16.43696
Maharashtra	432	503	611	767	985	1242	1530	1875	2332	2977	24.93752
Orissa	81	96	117	135	166	199	266	334	423	526	24.07435
Punjab	234	267	326	427	571	725	890	1084	1292	1543	25.13876
Rajasthan	184	234	309	394	494	608	756	927	1109	1326	24.00424
Tamil Nadu	313	354	418	524	671	881	1166	1523	1927	2477	28.51644
West Bengal	390	483	542	659	810	1027	1341	1682	2101	2629	24.64972
Uttar Pradesh	69	79	92	117	164	228	314	416	541	741	33.76677
Delhi	605	689	814	967	1167	1370	1551	1642	1818	1980	14.21823
Mean	175.0651	202.900	235.678	286.412	349.518	424.054	513.536	617.020	773.933	963.976	
SD	240	283.6842	337.7368	415.3684	513.1053	629.0526	776.9474	952	1182.842	1468.842	
CV	72.94378	71.5233	69.7817	68.9537	68.1183	67.4115	66.0966	64.8130	65.42997	65.6283	

Source: CMIE reports, various issues on infrastructure

TABLE 2 (b): STATE-WISE DELS (000') 2001-2010

States	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	CAGR%(2001-02 to 2009-10)
Andhra Pradesh	421	490	513	533	520	502	430	378	300	-4.1559
Assam	757	921	963	1042	1037	987	978	950	895	1.240182
Bihar	2834	2969	2899	2700	2614	2446	2277	2154	2103	-4.46047
Gujarat	984	1133	1234	1147	1098	1025	954	900	845	-3.16065
Haryana	436	474	477	492	479	457	418	400	389	-2.14882
Himachal Pradesh	223	264	289	308	303	295	259	245	200	-1.52461
J&k	3141	3521	3469	3667	3156	2970	2711	2567	2376	-4.50921
Karnataka	2587	2813	2949	2766	2695	2888	2844	2785	2719	0.233109
Kerala	2691	3021	3295	3514	3576	3679	3673	3634	3611	3.378513
Madhya Pradesh	1146	1483	1604	1362	1324	1589	1473	1456	1432	1.375723
Maharashtra	3643	4171	4057	4048	3992	3922	3643	3564	3456	-1.53722
Orissa	641	734	787	832	787	774	773	754	745	0.961106
Punjab	1923	2116	2189	2017	1999	1857	1694	1478	1406	-4.75715
Rajasthan	1591	1819	1917	1832	1889	1827	1757	1743	1678	-0.15341
Tamil Nadu	2780	2985	2949	2932	2766	2734	2502	2435	2378	-2.68722
West Bengal	2822	3054	3029	3014	2735	2582	2488	2367	2234	-3.67623
Uttar Pradesh	993	1146	1220	1296	1244	1211	1123	1034	1012	-0.77407
Delhi	2066	2273	2292	1720	1652	2273	2423	2487	2450	2.261465
Mean	1111.998	1213.955	1196.823	1198.54	1141.884	1136.21	1095.682	1081.782	1064.098	
SD	1682.526	1879.789	1920.737	1874	1801.421	1809.526	1724.316	1665.421	1606.105	
CV	66.09099	64.57933	62.31064	63.95624	63.38797	62.79045	63.54301	64.95546	66.25333	

Source: CMIE reports, various issues on infrastructure

States have shown lower growth rates of direct exchange line during 1991-2000 and most of them have registered negative growth rate during 2001-2010. This is because of the introduction of mobile telephony in 1995, which has replaced the wireline technology and dominates the market. Nowadays mobile phones account for nearly 96.6 percent of total telephone subscriptions as on dec. 2012 (TRAI: 2012). During the later period negative growth rates can be attributed to popularity of mobile phones with cheaper handsets. Table 2(a) shows that during the period 1991-92 to 1999-2000, Uttar Pradesh has registered the highest growth rate of direct exchange lines followed by the Tamil Nadu, Haryana, J&K, Punjab, Kerala, Maharashtra, West Bengal, Andhra Pradesh, Orissa, Rajasthan, Karnataka, Himachal Pradesh. On the other hand, during the same period, Delhi has registered the lowest growth rate followed by the Madhya Pradesh, Bihar. Table 2(b) shows that during the period 2000-01 to 2009-10 most of the States have registered negative growth rate. Kerala has registered the growth rate of 3.37 percent followed by the Delhi, Madhya Pradesh, Assam, Orissa, Karnataka. During the same period, Punjab has registered the negative growth rate (-4.75%) followed by the J&K, Bihar, Andhra Pradesh, West Bengal, Kerala, Gujarat, Tamil Nadu, Haryana, Maharashtra, Himachal Pradesh. The coefficient of variation throughout the period has been quite high. The value of coefficient of variation has shown mixed trend for all the years. But overall results show that value of coefficient of variation has decreased which further indicates convergence in telecom sector across the states. It was 72.94 percent in 1992 which decreased to 64.81 percent in 1998-99 but further increased to 66.23 percent in 2010

CORRELATION MATRICES

Keeping in view the various social, economic and demographic factors contributing to the telecommunication growth, 17 variables are used in partial correlation analysis. Correlation matrices of the 17 variables are given in the tables 3, 4 and 5 for the years 1991, 2001 and 2011 respectively.

1. Teledensity (no. of telephones per 100 population)
2. Number of villages electrified (%)
3. Proportion of urban population (%)
4. Literacy (%)
5. Population(in millions)
6. Per capita electricity consumption(KWh)
7. Per Capita NSDP
8. No. of persons below poverty line (%)
9. Population density(per square km)
10. Per capita NSDP generated by Transport. Communication and Storage Services
11. Per capita NSDP generated by Fishing
12. Per capita NSDP generated by Industry
13. Per capita NSDP generated by Trade, Hotels and Restaurants Services
14. Per capita NSDP generated by Banking and Insurance Services
15. Per capita NSDP generated by Real Estate ,Business Services
16. Per capita NSDP generated by Public Administration
17. Per capita NSDP generated by Other Services.

Table 3 shows correlation coefficient of teledensity with sixteen variables for the year 1991. The correlation coefficient of teledensity is highest with proportion of urban population. The correlation coefficient is higher with per capita electricity consumption, literacy, population, per capita NSDP generated from services of Trade, Hotels and Restaurants. On the other hand, coefficient of correlation of teledensity is lower with the variables including per capita NSDP generated from Industry, per capita NSDP generated from Real Estate, Business Services , per capita NSDP generated from services of Banking and Insurance, per capita NSDP generated from Public Administration, per capita NSDP generated from Fishing, per capita NSDP generated from Other Services, No. of persons below poverty line(%), Per capita NSDP. Therefore, results of correlation matrices indicate that economic factors are contributing less to the telecommunication growth in comparison to the social and demographic factors in pre- reform period.

Table 4 shows that for the year 2001, correlation coefficient of teledensity is highest with per capita NSDP generated from services of Trade, Hotels and Restaurants followed by Per capita NSDP, Literacy, per capita electricity consumption, proportion of urban population, per capita NSDP generated from transport communication and storage, number of villages electrified,. On the other hand, coefficients of correlation of teledensity is lower with number of persons living below poverty line , per capita NSDP generated from Public Administration, per capita NSDP generated from Fishing, per capita NSDP generated from Industry, per capita NSDP generated from Real Estate ,Business Services and Other Services. Therefore, the results indicate that various socio-economic variables are responsible for the telecommunication growth during this period.

Table 5 shows that for the year 2011, correlation coefficient of teledensity is highest with the variables including per capita NSDP generated from Banking and Insurance, per capita NSDP generated from Real Estate and Business Services , Per capita NSDP generated from Transport, Communication and Storage, Per capita NSDP generated from Other Services, Per capita NSDP, per capita electricity consumption. On the other hand, coefficient of correlation of teledensity is lower with per capita NSDP generated from Industry. The results indicate that most of the socio-economic variables are highly significant and responsible for telecommunication development.

TABLE 3: CORRELATION MATRIX OF 17 VARIABLES: DATA FOR 18 MAJOR STATES FOR 1991

Variables	Teledensity no. of telephones per 100 of persons	Number of villages electrified	Literacy (in %)	Population (in millions)	Per capita electricity	PCNSDP	BPL(in %)	Population density(per square km)	Proportion urban population	Per capita NSDP generated from fishing	Per capita NSDP generated from industry	Per capita NSDP generate from Transport, communication and storage services	Per capita NSDP generate from Trade, Hotels and restaurants services	Per capita NSDP generate from Banking and Insurance services	Per capita NSDP generate from Real estate, Business services	Per capita NSDP generated from Public Administration	Per capita NSDP generated from other services
Teledensity (no.of telephones per 100 persons)	1.000	.412**	.313**	.311***	.409**	.109	-.159	.239	.755*	.032	.073	.241	.391***	.073	.058	.041	-.094
Number of villages electrified		1.000	.521**	-.326	.821*	.519*	-.528	.951*	-.038	-.217	-.059	.962*	.920*	-.062	-.058	-.081	-.115
Literacy (%)			1.000	-.500	.416**	.545*	-.495	.426**	-.170	.200	-.254	.380	.640*	-.254	-.076	-.266	-.221
Population (in millions)				1.000	-.416	-.592	.518**	-.264	.831*	.432*	.691*	-.297	-.372	.689*	.628*	.684*	.107
Per capita electricity					1.000	.554*	-.648	.676*	-.075	-.425	-.154	.708*	.820*	-.154	-.187	-.176	-.039
Per Capita NSDP						1.000	-.409	.386***	-.373	-.154	-.135	.418**	.436**	-.135	-.143	-.148	-.176
No.of persons below poverty line (%)							1.000	-.386	.205	.089	.173	-.398	-.704	.170	.124	.174	.195
population density (per square Km)								1.000	-.097	-.115	-.019	.991*	.848*	-.025	-.020	-.037	-.099
Urban population (in millions)									1.000	.325	.481**	-.117	-.067	.480**	.424**	.459**	.069
Per capita NSDP generated from fishing (crores)										1.000	.529*	-.204	-.143	.527*	.631*	.534*	-.228
Per capita NSDP generated from industry (crore)											1.000	-.043	-.111	1.000	.962*	.999*	-.080
Per capita NSDP generate from Transport, communication and storage services												1.000	.840*	-.048	-.061	-.061	-.070
Per capita NSDP generate from Trade, Hotels and restaurants services													1.000	-.111	-.051	-.127	-.108
Per capita NSDP generate from Banking and Insurance														1.000	.964*	.999*	-.080
Per capita NSDP generate from Real estate, Business services															1.000	.964*	-.097
Per capita NSDP generated from Public Administration																1.000	-.079
Per capita NSDP generated from other services																	1.000

*indicates significance at 1%, **indicates significance at 5%

TABLE 4: CORRELATION MATRIX OF 17 VARIABLES: DATA FOR 18 MAJOR STATES FOR 2001

Variables	Teledensity no. of telephones per 100 of persons	Number of villages electrified	Literacy (in %)	Population (in millions)	Per capita electricity	PCNS DP	BPL(jin %)	Population density(per square km)	Proportion urban population	Per capita NSDP generated from fishing	Per capita NSDP generate from industry	Per capita NSDP generate from Transport, communication and storage services	Per capita NSDP generate from Trade, Hotels and restaurants services	Per capita NSDP generate from Banking and Insurance	Per capita NSDP generate from Real estate, Business services	Per capita NSDP generated from Public Administration	Per capita NSDP generated from other services
Teledensity (no. of telephones per 100 persons)	1.000	-.358	.483*	.0948*	.483**	.483**	-.432	.356**	.495**	-.402	.595*	.609*	.742*	.534*	.681*	.537*	-.053
Number of villages electrified		1.000	-.313	-.358	-.313	-.313	.474*	-.193	-.140	.319	-.046	-.134	-.336	-.189	-.237	-.515	.016
Literacy (%)			1.000	.483**	1.00*	1.00*	-.599	.405**	.706*	-.280	.716*	.726*	.629*	.594*	.538*	.621*	-.119
Population (in millions)				1.000	.483**	.483**	-.432	.356**	.495**	-.402	.595*	.609*	.742*	.534*	.681*	.537*	-.053
Per capita electricity					1.000	1.00*	-.599	.405**	.706*	-.280	.716	.726*	.629*	.594*	.538*	.621*	-.119
Per Capita NSDP						1.000	-.599	.405**	.706*	-.280	.716	.726*	.629*	.594*	.538*	.621*	-.119
No. of persons below poverty line (%)							1.000	-.220	-.390	.224	-.259	-.361	-.495	-.305	-.405	-.650	.290
population density(per square Km)								1.000	.842*	-.287	.291	.747*	.836*	.925*	.816*	.636*	-.045
Urban population(in millions)									1.000	-.256	.576	.915*	.833*	.937*	.858*	.630*	-.015
Per capita NSDP generated from fishing(crores										1.000	-.128	-.375	-.442	-.305	-.416	-.291	.053
Per capita NSDP generated from industry(crore)											1.000	.589*	.523**	.562*	.405**	.535*	-.102
Per capita NSDP generate from Transport, communication and storage services												1.000	.871*	.883*	.910*	.591*	-.147
Per capita NSDP generate from Trade, Hotels and restaurants services													1.000	.886*	.917*	.746*	-.103
Per capita NSDP generate from Banking and Insurance														1.000	.903*	.725*	-.078
Per capita NSDP generate from Real estate, Business services															1.000	.650*	-.077
Per capita NSDP generated from Public Administration																1.000	-.268
Per capita NSDP generated from other services																	1.000

*indicates significance at 1%, **indicates significance at 5%

TABLE 5: CORRELATION MATRIX OF 17 VARIABLES: DATA FOR 18 MAJOR STATES FOR 2011

Variables	Teledensity no. of telephones per 100 of persons	Number of villages electrified	Literacy (in %)	Population (in millions)	Per capita electricity	PCNSDP	BPL(jin %)	Population density(per square km)	Proportion urban population	Per capita NSDP generated from fishing	Per capita NSDP generate from industry	Per capita NSDP generate from Transport, communication and storage services	Per capita NSDP generate from Trade, Hotels and restaurants services	Per capita NSDP generate from Banking and Insurance	Per capita NSDP generate from Real estate, Business services	Per capita NSDP generated from Public Administration	Per capita NSDP generated from other services
Teledensity (no. of telephones per 100 persons)	1.000	.484**	.623*	-.407	.684*	.377	-.442	.837*	.833*	-.254	.334	.801*	.805*	.888*	.878*	.624*	.812*
Number of villages electrified		1.000	.499*	-.308	.534*	.143	-.735	.232	.577*	-.199	.432**	.616**	.505**	.375**	.435**	.469**	.505*
Literacy (%)			1.000	-.372	.437**	.392**	-.341	.344***	.578*	-.387	.450**	.827*	.688**	.518**	.530**	.392***	.655*
Population (in millions)				1.000	-.490	-.375	.544*	-.190	-.187	.273	-.221	-.337	-.277	-.222	-.187	-.461	-.520
Per capita electricity					1.000	.415**	-.532	.344**	.551*	-.270	.798*	.545*	.593*	.536*	.481**	.499*	.557*
Per Capita NSDP						1.000	-.353	.069	-.095	-.043	.276	.144	.121	.134	.058	.270	.296
No. of persons below poverty line (%)							1.000	-.150	-.309	.133	-.343	-.403	-.319	-.233	-.228	-.566	-.493
population density(per square Km)								1.000	.794*	-.138	-.025	.618*	.703*	.924*	.882*	.610*	.816*
Urban population (in millions)									1.000	-.244	.340	.850*	.872*	.903*	.934*	.590*	.797*
Percapita NSDP generated from fishing(crores)										1.000	-.119	-.194	-.118	-.145	-.146	-.244	-.244
Percapita NSDP generated from industry(crore)											1.000	.436**	.529*	.270	.230	.127	.201
Per capita NSDP generate from Transport, communication and storage services												1.000	.921*	.752*	.826*	.472**	.816*
Per capita NSDP generate from Trade, Hotels and restaurants services													1.000	.844*	.887*	.471**	.760*
Per capita NSDP generate from Banking and Insurance														1.000	.957*	.688*	.858*
Per capita NSDP generate from Real estate, Business services															1.000	.586*	.837*
Per capita NSDP generated from Public Administration																1.000	.711*
Per capita NSDP generated from other services																	1.000

TABLE 6: RESULTS OF FACTOR ANALYSIS 1991, ROTATED FACTOR LOADINGS

Variables	Factors				Communalities	Weights
	1	2	3	4		
Teledensity	0.981				.945	6.864
Literacy(%)	0.481				.976	4.995
Per capita electricity consumption	0.645				.786	6.812
Per Capita NSDP	0.430				.962	5.131
population density(per square Km	0.948				.806	6.34
Proportion of urban population(in millions	0.832				.555	4.14
Per capita NSDP generated from transport, communication and Storage	0.987				.555	6.39
Per capita NSDP generated from Trade, Hotels and restaurants	0.888				.861	6.90
Population(milllins)		0.840			.984	6.64
Percapita NSDP generated from fishing(crores		0.661			.730	5.62
Percapita Component of NSDP of real estate ,buisnass services(crore)		0.971			.981	2.82
Percapita Component of NSDP of public administration(crore)		0.975			.898	4.93
Number of persons living BPL(%)			0.356		.916	6.81
Percapita NSDP generated from Industry			0.907		.980	4.85
Percapita Component of NSDP of banking and insurance(crore)			0.937		.958	4.09
Number of villages electrified(%)				0.696	.982	1.54
Per capita Component of NSDP of other services(crore				0.757	.427	1.44
Percentage of variance	45.04	16.92	10.91	7.64		
Percentage of commutative variance explained	45.04	61.96	72.87	80.52		

TABLE 7: RESULTS OF FACTOR ANALYSIS 2001

Variables	Factors				Communalities	Weights
	1	2	3	4		
Population density (per square km)	.954				.926	9.55
Proportion of urban population(%)	.835				.656	9.09
Per capita NSDP generate from Transport, communication and storage services	.778				.960	8.75
Per capita NSDP generate from Trade, Hotels and restaurants services	.767				.926	8.85
Per capita NSDP generate from Banking and Insurance	.907				.960	9.65
Per capita NSDP generate from Real estate, Business services	.837				.960	9.15
Percapita Component of NSDP of public administration(crore)	.513				.755	6.70
Literacy(in %)		.879			.940	5.05
Per capita electricity consumption		.879			.942	5.05
Per capita NSDP		.478			.408	5.05
Numberof villages electrified(%)		.811			.789	4.25
Per capita NSDP generated from Industry		.493			.909	1.63
Teledensity			.844		.948	4.69
Population (in millions)			.844		.970	4.69
Percapita NSDP generated from fishing			.610		.931	3.34
BPL(in %)				.696	.785	2.98
Per capita NSDP generated from other services(crore)				.585	.366	1.59
Percentage of variance	56.40	10.72	8.92	7.05		
Percentage of commutative variance explained	56.40	67.12	76.05	83.11		

TABLE 8: RESULTS OF FACTOR ANALYSIS 2011

Variables	Factors					Communalities	Weights
	1	2	3	4	5		
Teledensity(no.Of telephones per 100of persons)	.850					.933	9.10
Population density(per square km)	.955					.855	9.22
Proportion of urban population(%)	.883					.748	9.40
Per capita NSDP generated from transport, communication and storage	.753					.666	8.29
Per capita NSDP generated from oTrade,hotels and restaurants(crore)	.814					.781	8.50
Per capita NSDP generated from banking and insurance(crore)	.962					.867	9.38
Per capita NSDP generated from real estate ,buisnass services(crore)	.962					.907	9.39
Per capita NSDP generated from public administration(crore)	.588					.944	7.29
Per capita NSDP generated from other services(crore)	.837					.975	9.07
Number of villages electrified		.754				.908	5.12
Per capita electricity consumption		.618				.901	5.44
Per capita NSDP generated from Industry		.923				.875	3.38
Per capita NSDP			.901			.928	3.63
Population			.534			.961	2.40
Number of persons living BPL(%)			.674			.966	2.02
Literacy				.455		.770	1.71
Per capita NSDP generated from Fishing					.943	.929	1.51
Percentage of variance	54.22	13.50	7.93	6.09	5.96		
Percentage of commutative variance explained	54.22	67.72	76.66	81.75	87.72		

The results of factor analysis with varimax rotation for the year 1991 are shown in the table 6. According to Eigen value criteria, all the factors with Eigen values larger than 1 should be retained in order to guarantee that each of them comprised at least variance of a single variable. So, four factors are retained based on the criteria .Factor 1 included variables like teledensity, Literacy, per capita electricity consumption, per capita NSDP, population density, proportion of urban population, per capita NSDP generated from Transport, Communication and Storage, per capita NSDP generated from Trade, Hotels and Restaurants. Factor 2 includes population, per capita NSDP generated from Fishing, per capita NSDP generated from Real Estate and Business Services, number of persons living below poverty line. Factor 3 includes per capita NSDP generated from Industry, per capita NSDP generated from Banking and Insurance Services, number of villages electrified. Factor 4 includes per capita NSDP generated from Other Services. Factor 1 explained 45.05 percent of variance, Factor2 explained 18.85 percent variance, factor 3 and 4 explains 15.26 and 11.23 percent of variation respectively. The four factors together explained 84.99 percent of variation. Communality values of all the variables were high and varied largely between 0.975 percent and 0.616 percent. Such high values indicate high quality results.

Table 7 shows the results of factor analysis with varimax rotation for the year 2001. Factor 1 included variables like population density, proportion of urban population, per capita NSDP generated from Transport, Communication and Storage, per capita NSDP generated from Trade, Hotels and restaurants, per capita NSDP generated from banking and insurance, per capita NSDP generated from Real Estate and Business Services and per capita NSDP generated from Public Administration. Factor 2 included literacy, per capita electricity consumption, Per capita NSDP, per capita NSDP generated from Industry, number of villages electrified. Factor 3 included teledensity, population, per capita NSDP generated from Fishing. Factor 4 included number of persons living below poverty line and per capita NSDP generated from Other Services. Factor 1 explained 56.40 percent of variation, Factor 2 explained 10.72 percent of variation, and Factor 3 and 4 explained 8.92 and 7.05 variation respectively.

Table 8 shows the results of factor analysis with varimax rotation for the year 2011. Five factors are retained based on the Eigen criteria. Factor 1 included teledensity, population density, proportion of urban population, per capita NSDP generated from Transport, Communication and Storage, Per capita NSDP generated from Trade, Hotels and Restaurants, Per capita NSDP generated from Banking and Insurance, Per capita NSDP generated from Real estate and Business services, Per capita NSDP generated from Public Administration .Factor 2 includes variables including number of villages electrified, per capita electricity consumption, per capita NSDP generated from Industry. Factor 3 includes variables per capita NSDP, population and number of persons living below poverty line. Factor 4 and Factor 5 includes literacy and per capita NSDP generated from Fishing. Factor 1 explains 54.22 variation, factor 2 explains 13.50 percent variation, factor 3 explains 7.15 percent variation and four and five explains 6.09 percent and 5.96 percent variation respectively. The five factors together explain 87.72 percent variation. Communality values of the variables were high and varied between 0.975 and 0.666.High values of communalities shows high quality results.

Table 9 shows the composite indices and corresponding ranks of 18 major States of India, as derived from factor analysis for the years 1991, 2001 and 2011 respectively. In 1991, Delhi was ranked no. 1 followed by Maharashtra, Kerala, Gujarat, while J&K, Rajasthan, Orissa and Himachal Pradesh were ranked at the bottom. In the year 2001, there was improvement in the ranks of 9 states (Punjab, Tamil nadu, Gujarat, Rajasthan, Andhra Pradesh, Haryana, Uttar Pradesh, Himachal Pradesh)and deterioration in the rest of the states .In 2001 again Delhi has scored the first rank followed by Tamil nadu , Gujarat and Punjab while Bihar, J&K, Assam and Rajathan were ranked at the bottom .In the year 2011, ranks have changed only a few positions in comparison to the position of ranks from 1991 to 2001. Results of 2011 indicates that again Delhi was ranked first followed by Maharashtra, Kerala, Tamil nadu while Bihar, Assam, Uttar Pradesh and Rajasthan have scored bottom positions in 2011.

TABLE 9: COMPOSITE INDEX DERIVED ON THE BASIS OF FACTOR ANALYSIS FOR 1991, 2001 AND 2011

States	Composite Index (1991)	Rank	Composite Index (2001)	Rank	Composite Index (2011)	Rank
Andhra Pradesh	0.163	11	0.247	8	0.281	9
Assam	0.149	14	0.121	16	0.115	17
Bihar	0.151	13	0.069	18	0.069	18
Gujarat	0.265	4	0.363	3	0.327	5
Haryana	0.159	12	0.282	7	0.326	6
HP	0.148	15	0.211	12	0.282	8
J&K	0.065	18	0.108	17	0.193	12
Karnataka	0.147	5	0.242	9	0.263	10
Kerala	0.272	3	0.297	6	0.390	3
MP	0.178	9	0.218	11	0.155	13
Maharashtra	0.318	2	0.360	5	0.391	2
Orissa	0.154	16	0.195	13	0.144	14
Punjab	0.190	8	0.362	4	0.310	7
Rajasthan	0.114	17	0.173	14	0.134	15
Tamilnadu	0.236	6	0.363	2	0.352	4
Uttar Pradesh	0.482	10	0.1700	15	0.137	16
West Bengal	0.229	7	0.219	10	0.239	11
Delhi	0.512	1	0.593	1	0.886	1

Source: Author's calculations

TABLE 10: STEP-WISE REGRESSION ANALYSIS WITH TELEDENSITY AS A DEPENDENT VARIABLE 1991

Steps	Constant	Per capita NSDP generated from Transport, communication and storage services	Per capita NSDP generated from Trade, Hotels and Restaurants services	Number of villages Electrified (%)	Per capita NSDP	R ²	Adjusted R ²	F-Statistics
Step1	0.557	14.00(0.000*)	-	-	-	.925	.920	196.26
Step2	0.021	7.68(0.000*)	4.52(0.000*)	-	-	.968	.964	227.90
Step3	-0.176	6.22(0.000*)	2.82(0.014*)	2.36(0.031**)	-	.977	.972	200.25
Step4	-3.83	7.71(0.000*)	2.91(0.04**)	3.49(0.005*)	3.421(0.005*)	.988	.984	267.96

Note: Values in parenthesis are p-values of t-statistics

TABLE 11: STEP-WISE REGRESSION ANALYSIS WITH TELEDENSITY AS A DEPENDENT VARIABLE 2001

Steps	Constant	Per capita NSDP generated from Trade, Hotels and Restaurants services	Per capita NSDP generated from Banking and Insurance	Proportion of urban population (in%)	Per capita NSDP generated from Transport, communication and storage services	R ²	Adjusted R ²	F-Statistics
Step1	-1.54	13.22(0.000*)	-	-	-	.916	.911	174.80
Step2	0.000	4.85(0.000*)	2.78(0.000*)	-	-	.945	.937	128.30
Step3	0.120	2.83(0.013*)	2.832(0.013*)	2.32(0.036**)	-	.960	.952	112.38
Step4	-0.22	-2.24(0.043**)	3.906(0.002*)	3.381(0.005*)	-2.243(0.043**)	.971	.971	109.81

Note: values in parentheses are p-values of t-statistics

TABLE 12: STEP-WISE REGRESSION ANALYSIS WITH TELEDENSITY AS A DEPENDENT VARIABLE 2011

Steps	constant	Per capita NSDP generated from Banking and Insurance	Per capita NSDP	Per capita Electricity consumption	R ²	Adjusted R ²	F-statistic
Step1	0.808	8.893(0.0008)	-	-	0.832	0.821	79.08
Step2	-0.269	7.052(0.000*)	2.33(0.034**)	-	0.877	0.860	53.28
Step3	1.424	2.845(0.013*)	3.44(0.004*)	2.89(0.012**)	0.923	0.906	55.81

Note: values in parentheses are p-values of t-statistics

The step-wise regression analysis has been conducted at three points of time i.e., 1991, 2001, 2011 in order to identify those variables which are most significant to the growth of telecom services. At each step, the independent variable not in the equation that has the smallest probability of F is entered, if that probability is sufficiently small. Variables already in the regression equation are removed if their probability of F becomes sufficiently large. The method terminates when no more variables are eligible for inclusion or removal. All variables must pass the tolerance criterion to be entered in the equation, regardless of the entry method specified. The default collinearity tolerance level is 0.0001. Also, a variable is not entered if it would cause the tolerance of another variable already in the model to drop below the tolerance criterion. In step-wise analysis, teledensity is taken as a dependent variable. The analysis has been applied on cross-section data which comprise 18 major Indian states.

Table 10 shows the step-wise regression analysis 1991 with four independent variables i.e., per capita NSDP generated from Transport, communication and Storage services, Per capita NSDP generated from Trade, Hotels and Restaurant services, number of villages electrified, and per capita NSDP. Results indicate that in the 1991, when per capita transport, communication and storage was alone taken as independent variable, the results indicate a positive and significant (at 1% level) relationship between teledensity and per capita NSDP generated by transport, communication and storage. When the variable per capita NSDP generated by trade, hotels and restaurants was added as an independent variable in the second step the relationship is positive and significant (1% level) between the two variables. In the third step, number of villages electrified are added having significant (5% level) and positive relationship with the teledensity. Finally, in the fourth step, per capita NSDP was added and result indicate significant at (5% level) level relationship with teledensity. Higher value of R-square suggest us that model fit is good. Also F-statistic which is a measure of overall significance has been found significant.

Table 11 shows the step-wise regression analysis 2001 with four independent variables i.e. Per capita NSDP generated from Trade, Hotels and Restaurant services, Per capita NSDP generated from Banking and Insurance services, proportion of urban population and per capita NSDP generated from Transport, communication and Storage services. At the first step, when Per capita NSDP generated from Trade, Hotels and Restaurant services was alone taken as independent variable, the relationship was significant (1% level). In the second step, Per capita NSDP generated from Banking and Insurance services was added the relationship was significant (1% level). Further in the third step, when proportion of urban population was added as a third independent variable, the relationship was significant (at 5% level). With the addition of per capita NSDP generated from Transport, communication and Storage services as a fourth independent variable, the relationship of this variable with teledensity was significant (at 5% level). Higher value of R-square suggest us that model fit is good. Also F-statistic which is a measure of overall significance has been found significant for all variables.

Table 12 indicates the results for step-wise regression analysis for 2011, with three independent variables i.e., Per capita NSDP generated from Banking and Insurance services, per capita NSDP and per capita electricity consumption. At the first step, relationship between per capita NSDP generated from Banking and Insurance and teledensity was found significant (at 1% level). In the second step, when per capita NSDP was added as another independent variable, results revealed a significant relationship between the two variables. With the addition of third variable, relationship was significant (at 5% level). Higher value of R-square suggest us that model fit is good. The F-statistic is significant at 1 percent for all variables. The overall result of step-wise regression indicates that there are certain factors which are highly significant to explain the growth of telecom services.

CONCLUSION

Telecommunications can improve the efficiency and effectiveness of various economic, commercial, and administrative activities. Telecom services distribute the social, cultural and economic benefits of the process of development more equitably throughout the country. Telecommunications is thus considered to be both a cause and a consequence of economic growth. The results of the compound annual growth rate and coefficient of variation indicate that telecom sector is growing rapidly across the states and specially in poor states. The higher value of CAGR in case of poor states indicates convergence in telecommunication. The results of factor analysis revealed that during 1991, social factors like literacy, population density, number of villages electrified, proportion of urban population were more significant in terms of their contribution to the development of telecom services, but various services (including finance, hotel, tourism, banking and insurance) were non-significant. Reason being that it was just the beginning of liberalization and these services sectors had not grown much. The results of factor analysis in 2001 have shown the role of both social as well as economic factors in development of telecommunications. During the period 2011 also various socio-economic factors are contributing to the growth of telecommunication services. The most important factors identified by the step-wise regression during the 1991 includes Per capita NSDP generated from Transport, Communication and storage services, per capita NSDP generated from Trade, Hotel and Restaurant services, number of villages electrified and Per capita NSDP. Similarly, in 2001, the most significant factors identified includes NSDP generated from Trade, Hotel and Restaurant services, Per capita NSDP generated from Banking and Insurance, proportion of urban population and Per capita NSDP generated from Transport, Communication and storage services. The results of 2011 step-wise regression include the Per capita NSDP generated from Banking and Insurance, Per capita NSDP and Per capita electricity consumption.

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INTEREST RATE AND UNEMPLOYMENT NEXUS IN NIGERIA: AN EMPIRICAL ANALYSIS

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ABSTRACT

The present study investigates that rise in interest rate (lending rate) is most likely to cause new unemployment. It is also well known that a rise in interest rates will benefit savers at the expense of borrowers. The converse applies when interest rates fall, meaning that there is a dichotomy between savers and borrowers. Since it has been evident that interest rates have significant effect on unemployment in opposite direction, it will be wise for the regulatory authorities, mostly the CBN, to step up its efforts to reduce lending rates and raise deposit rates to a reasonable level that will encourage savings, thereby making fund available for investment in the economy. Change in interest rate will only be effective if businesses and consumers match the government's confidence in future economic prospects. Investors do consider the inflation rate before depositing or borrowing fund which affects the real lending and savings rates. The government, through its relevant authorities should combat inflation to less than 5% as obtainable in America (1.4%) and Republic of China (2.1%). This will go a long way in restoring the lost confidence into the Nigerian financial sector.

KEYWORDS

Unemployment, lending rates.

INTRODUCTION

Reduction of unemployment is one of the most important macroeconomic objectives as every economy wants to achieve this objective. Countries over the centuries have used different methods to solve this economic menace that causes a lot of psychological, economical and most especially social and security threat as obtainable presently in Nigeria.

Accordingly, interest rates have been considered as vital ingredients for both capital accumulation and formation and very crucial in enhancing output growth in Nigeria, due to the relative under development of the domestic capital market and the paucity of direct foreign investment in the non-oil sector of the economy. Consequently, over the years, interest rates channel per se, have been expected to play a significant role in determining the rate of expansion or contraction of private sector investment and output growth. Against this background, the stance of monetary policy in Nigeria has remained a major focus of public interest especially since the commencement of financial sector liberalization in the 1980s, which culminated into the deregulation of the interest rate regime in 1993.

Historically, the Central Bank of Nigeria via its monetary policy circulars had directly controlled the volume and cost of credit in the economy, until the era of financial liberalization in the mid-1980s. During the direct control regime, the CBN prescribed interest rates and quantum of credit which banks must allocate to the various sectors of the economy. The prescription of these ceilings was strictly enforced and therefore, was very binding while they lasted despite its inherent inefficiency and moral hazard. It has been argued by economists like Kashyap and Stein (1993) that banks make money by making loans, and not by banks pay on deposits. The paradox of the Nigerian situation is that, it actually pays the banks to lend to the government than to firms and sundry borrowers because of the prevalence of high risk premium.

In the America's economy in late December 2007, most economists realized that the economy was slowing. However, very few predicted an outright recession. Like most professional forecasters, the Federal Open Market Committee (FOMC) initially underestimated the severity of the recession. In January 2008, the FOMC projected that the unemployment rate in the fourth quarter of 2010 would average 5 percent. But by the end of 2008, with the economy in the midst of a deep recession, the unemployment rate had risen to about 7.5 percent; a year later, it reached 10 percent. (Kevin 2010)

Also in the words of Kevin, the Federal Reserve Bank of St. Louis (Fed) employed a dual-track response to the recession and financial crisis. On the one hand, it adopted some unconventional policies, such as the purchase of \$1.25 trillion of mortgage-backed securities. On the other hand, the FOMC reduced its interest rate target to near zero in December 2008 and then signaled its intention to maintain a low-interest rate environment for an "extended period."

Uchendu (1993) asserted that interest rate policy is among the emerging issues in current economic policy in Nigeria in view of the role it is expected to play in the deregulated economy in inducing savings which can be channeled to investment and thereby increasing employment output and efficient financial resources utilization.

NEED FOR THE STUDY

Investment in Nigeria is very important and it is one of the most important macroeconomic variables used to resuscitate the economy from recession and depression. Economists like Anderton (2001), Sloman and Wride (2009) and Bamford and Grant (2010) have explained the relationship between interest rates and investment/savings that as interest rate rises, so investment will fall (making unemployment to increase) and savings will rise, *ceteris paribus*.

The idea of this paper is to see how interest rates could be used to solve the problem of unemployment in the country as being used in many advanced countries. Thus, this paper establishes the relationship between unemployment and interest rates.

The essence of the study is to investigate empirically, the relationship between interest rates and unemployment. Thus, this study should answer the following questions: Is there any empirical relationship between interest rates and unemployment rate? To what extent do interest rates affect unemployment rate? Which of lending rate or deposit rate affects unemployment more? Do previous interest rates have any significant effect on unemployment? What is the response of unemployment to change in interest rates?

The rest of this paper is organised as follows: in section two, we provide a brief overview of the theoretical linkages between interest rates and unemployment as well as examine the evidence, review literature on determinants of interest rates and unemployment behaviour and offer some suggestions. Section three presents the econometric models and the methodology to be employed. Section four presents the results and section five bears conclusion and policy implication with recommendations.

LITERATURE REVIEW**CONCEPT OF INTEREST RATE**

According to research department of the Central Bank of Nigeria (CBN), interest rates are the rental payment for the use of credit by borrowers and return for parting with liquidity by lenders. Like other prices, interest rates perform a rationing function by allocating limited supply of credit among the many competing demands on it.

There are various rates of interest in the financial system. These are generally classified into two categories: deposit and lending rates. Deposit rates are paid on savings and time deposits of different maturities. Lending rates are interest rates charged on loans to customers and they vary according to perceived risks, the duration of loans, the costs of loanable funds and lending margins etc. Other rates of interest in the financial system include treasury bill rate, the inter-bank and minimum rediscount rates. (CBN, 1995).

The primary role of interest rate is to help in mobilization of financial resources and to ensure the efficient utilization of such resources in the promotion of economic growth and development. Interest rates affect the level of consumption on the one hand and the level and pattern of investments on the other. This

could invariably affect the level of employment in a chain relation. Interest rates are very crucial in financial intermediation which involves transferring funds from surplus units in an economy to deficit units. World most developed countries use interest rates to rescue their economies from recession and depression most especially the one that hit the West in the recent past.

According to Sheng (2010), there are two reasons why advanced countries may want interest rates to be near zero. The first is that after a crisis, zero interest rates imply that central banks do not fear higher inflation. The second is that zero interest rates subsidise the borrower, which is especially pertinent nowadays when advanced economies are all highly in debt.

Economists, most especially Monetarists and Keynesians, disagree over what determines interest rates. To the Monetarists, interest rate is determined by the demand and supply of loanable funds i.e. the Loanable Funds Theory. The Keynesians argue that the rate of interest is not determined by anything other than the demand and supply of money i.e. Liquidity Preference Theory. (Anderton, 2008).

A number of factors influence the behavior of interest rates in an economy. Prominent among these are: savings; investment; inflation; government spending, monetary policy stance and taxation.

Soludo (2008) asserted that interest rates are regarded as "high" or "low" relative to some economic fundamentals, namely: The level of inflation rate; the degree of uncertainty and risks economic agents face; and how developed and deep financial markets are; the structure of the banking system how competitive it is; the cost of funds to the banks including deposit rates.

CONCEPT OF UNEMPLOYMENT

According to National Bureau of Statistics, employment is one of the most important social and economic issues in every country. As a result, measures of utilisation and non-utilisation of labour are usually of considerable concern to researchers and policy makers. The stock of unemployment usually attracts smaller attention than the flow; that is, how the rate of unemployment is moving. It is not easy to measure the rate of unemployment because of the conceptual problems of defining who is employed, unemployed or underemployed. Employment refers to the number of people who work for pay in cash or kind, work on their own account or are unpaid family workers. Unemployment figures include those out of work, able to work and looking for a job through recognised channels. This definition should be extended to include those unemployed persons who give up job-seeking out of frustration and retrenched or laid-off persons. The subsistence economy of the rural sector often creates the impression that unemployment is wage unemployment and that it is an urban phenomenon. All these call for caution in wording questionnaires to be used in labour force surveys. (NBS, 2011).

The question many people ask is then "who should be included in the statistics? Could it be everybody? The clear-cut answer is No because we would not commonsensically want to include children and pensioners. We would possibly also not want to include those who were not looking for job, such as parents choosing to stay at home to look after their children as house-wives.

Economists measure both the level and rate of unemployment. Level of unemployment is the number of people who are unemployed while the rate of unemployment measures the number of unemployed people as a percentage of the number of people in the labour force. (Bamford and Grant, 2010). This is why Sloman and Wride (2009) said that unemployment could be expressed either as a number like 1.6 million (number of unemployed people) or as a percentage like 6 per cent (rate of unemployment).

According to the Nigerian Labour Force Survey under NBS, unemployment rate is defined as the proportion of Labour Force who was available for work but did not work in the week preceding the survey period for at least 39 hours.

Bamford et al (2008) explains that the natural rate of unemployment which is usually referred to as the Non-Accelerating Inflation Rate of Unemployment (NAIRU), is largely a monetarist concept. It is the level of unemployment which exists when the aggregate demand for labour equals the aggregate supply of labour at the current wage rate and so there is no upward pressure on the wage rate and the price level. Nairu can change over time through supply-side factors, though the monetarists argue that it can not be reduced in the long run by expansionary monetary or even fiscal policy.

In the submission of Bamford and Grant (2010), when explaining the relationship between monetary policy and unemployment, said that if an economy has high unemployment or if there is a substantial risk of unemployment increasing, the obvious monetary policy response is to cut interest rates. They asserted that the response to this cut action is that: firms may increase investment as the cost of borrowing has fallen; consumers may save less and spend more as the return from holding money in commercial banks has been reduced; consumers may also decide to borrow more money for financing large purchases such as a new house or car; the exchange rate may depreciate leading to a rise in exports.

WHAT BENEFITS COME FROM LOW INTEREST RATES?

Economic growth, economic development and favourable current account balance among others, are the great dividend of low interest rates. According to FRBSF (2011), a decrease in real interest rates lowers the cost of borrowing, that leads businesses to increase investment spending and it leads households to buy durable goods, such as autos and new homes. In addition, lower real interest rates and a healthy economy may increase banks' willingness to lend to businesses and households. This may increase spending, especially by smaller borrowers who have few sources of credit other than banks, thus a shift of aggregate demand to the right.

Furthermore, increased aggregate demand and for the country's goods through these different channels leads firms to raise production and invariably employment, which in turn increases business spending on capital goods even further by making greater demands on existing factory capacity. This will further boost consumption because of the income gains that result from the higher level of economic output.

Commercial real estate construction faltered during the 2007 recession and has improved only slowly during the recovery. However, low interest rates have led to higher property valuations and are clearly benefiting the sector. The recovery of commercial property prices has been notable. Some measures suggest that, in some segments of the market, prices are close to their pre-recession highs. Valuation measures do not suggest that current prices are excessive. (Krainer, 2013)

Lower real interest rates also make common stocks and other such investments more attractive than bonds and other debt instruments. As a result, common stock prices tend to rise. Households with stocks in their portfolios find that the value of their holdings is higher, and thus, this increase in wealth makes them willing to spend more. Higher stock prices also make it more attractive for businesses to invest in plant and equipment by issuing stock. This will go a long way in translating to increase in the level of employment as more workers will be needed to operate these plants and equipments. Lower interest rates could also reduce the foreign exchange value of the Naira which lowers the prices of the locally produced goods she sells abroad and raises the prices she pays for foreign produced goods. This situation will encourage export and discourage import leading to a favourable current account balance. This also leads without doubt to higher aggregate spending on goods and services produced in the country.

Another benefit of low interest rates is improving bank balance sheets and banks' capacity to lend. During the financial crisis, many banks, particularly some of the largest banks, were found to be undercapitalized, which limited their ability to make loans during the initial stages of the recovery.

By keeping short-term interest rates low, the Fed helps recapitalize the banking system by helping to raise the industry's net interest margin (NIM), which boosts its retained earnings and, thus, its capital. Between the fourth quarter of 2008, when the FOMC reduced its federal funds target rate to virtually zero, and the first quarter of 2010, the NIM increased by 21 percent, its highest level in more than seven years. Yet, the amount of commercial and industrial loans on bank balance sheets declined by nearly 25 percent from its peak in October 2008 to June 2010. This suggests that perhaps other factors are helping to restrain bank lending. (Kevin, 2010).

During times when economic activity weakens, monetary policy can push its interest rate target (adjusted for inflation) temporarily below the economy's natural rate, which lowers the real cost of borrowing. This is sometimes known as "leaning against the wind."

Advanced countries, emerging economies and top industrialised countries are reducing interest rates towards zero per cent because they want to boost their investment which will mean many things like increase in the level of employment, increase in Gross Domestic product (GDP), increase national income and per capita income and invariably lead to enhanced standard of living. The Bank of England cut interest rates to as low as 0.5% in 2009- a fresh all-time low and says it will now boost the money supply to help revive the economy. Presently, the United State of America has put its interest rate at 0.25% still in order to encourage investment which, among others, has led to increased employment. In fact unemployment in U.S.A. has recently dropped to 8.3%.

It is deplorable to note the practice of deposit money banks in Nigeria offering as low as one per cent on savings deposits and its negative implications on capital accumulation, investment and then economic growth. These are extremely low returns paid to savers and depositors as they pose a major dis-intermediation risk and are inconsistent with the development goals of financial inclusion.

Certainly, at between 0.25 and 4 per cent, savers and depositors, even time depositors, have been having a raw deal in the last two years from the banks that cite the global meltdown, liquidity squeeze, bad loans and recapitalization issues. What risks stakeholders, however, is that, while the banks discourage savings by paying so little on deposits, lending rates remain stubbornly high, reaching as much as 21-23 per cent.

According to official rates published monthly by the CBN, demand deposit rates in the 24 banks in January, 2011, ranged from 0.01 per cent to 1.25 per cent while savings were 1-3 per cent. Average rates paid on time deposits were one per cent to six per cent. By contrast, prime lending rates in the same period ranged between 12 and 19 per cent. Many customers swear that even the official figures do not always reflect the reality with deposit rates rarely exceeding four per cent, while the most common lending rate is within the 21-23 per cent band. Bank customers also complain of high bank charges outside of the borrowing rates which add to the cost of doing business, thereby discouraging savings, borrowing and investment. It is not financially ideal and even should not be acceptable for any bank to borrow at 1-5 per cent or 6.5 per cent from the CBN and lend at 22 per cent, though banks have different reasons that could lead to these differences in their interest rate charges as pointed out by Anderton (2008) that many factors which can cause interest rates to differ in the same market could include: time; expectations; risk; administrative costs and imperfect knowledge by borrowers and lenders.

ANY DRAWBACK?

Just as everything has benefits and costs, there are costs associated with keeping interest low (below natural level of interest rate). Some argue that low interest rate interest rate is not a problem within a short period but it does become an issue when the period is extended.

When interest rate is low, saving is discouraged. Households and firm will prefer holding their money in ways other than saving. This will result to low saving (low capital accumulation). Investors who want to borrow money from banks will find it difficult to obtain, thereby constraining investment. People will hold more money which could even make their demand to shoot up. If this is not backed up with increased production level, it could cause scarcity which would roll into inflation in the long run.

Without a strong commitment to control inflation over the long-run, the risk of higher inflation is one potential cost of the Federal Reserve Bank of St. Louis keeping the real federal funds rate below the economy's natural interest rate. Some point to the 1970s, when the Fed did not raise interest rates fast enough to prevent what became known as the Great Inflation (BIS 2010).

SUMMARY OF LITERATURE

Explicitly, the role which interest rates play in banks' lending habit has been discussed extensively in literatures. Greene and Villanueva (1991) have established a strong negative relationship between real interest rate (lending rate) and private investment. While Gelb (1989), also found no relationship between growth in aggregate investment and real interest rate. Between these two counter findings, Calve and Gwidotti (1991) provided ample explanation. According to the authors, very low and negative real interest rates could cause financial disintermediation, with consequence on output reduction as asserted by Mckinnon-Shaw hypothesis. They further argued that artificially low interest rate may create an excess demand for funds, such that investors may have to be rationed. This would lead banks into facing problems of excess demand for fund. Generally, they conclude that very high real interest rate that do not reflect improved efficiency in investment, but rather, a lack of credibility of economic policy or various forms of country risk, are likely to result in lower level of investment (which means lower level of employment). Nnanna (2001) tend to subscribe to this synthesis because it describes the Nigerian condition. Thus, given the significant influence of real interest rate in the credit market, we shall include this as part of the variables in the analytical framework of this paper.

ANALYTICAL MODEL: DATA AND METHODOLOGY

The unsuitable foreign investment environment, most especially in the non-oil sector and the relatively developing nature of the capital market, imply that the banking system shall remain the major provider of capital to the private sector investment in the Nigerian economy for now. Presently, private sector of the economy is dominated by the manufacturing and agriculture sectors. Thus, these two sectors are the major recipients of credit. On this, the agriculture sector gets credit through the government while manufacturing sector obtains loans from banks which are affected by interest rates of the system. Against this background, we hypothesize that all things being equal, the higher the level of lending rate for investment, the higher the rate of unemployment and vice versa since more investment will mean more employment.

In addition to exploring the impact of interest rate on aggregate unemployment rate/level, we also evaluate the explanatory power of the following exogenous variables:

- i. The deposit interest rate (r_d). This is the amount paid by banks for funds withdrawable after seven days' notice though this restriction is however seldom applied. Theories have shown that savings is equal to investment. That the amount saved (in bank) will equally be borrowed for investment. It means there is the need to encourage economic agents to consume less and save more. This could only be done through increase in deposit interest rate in order to guarantee enough funds for investment. Thus, the higher the deposit interest rate, the more the quantity of funds available for investors to borrow and the lower the unemployment rate. Hence, there is negative relationship between deposit rate and unemployment.
- ii. Lending interest rate (r_l). As earlier said, it is the cost/price of borrowing money i.e. for investment. When price increases, *ceteris paribus*, demand for loanable fund (investment) drops. Literatures on investment point out this fact. When investment goes down, fewer workers are employed meaning more unemployment rate. Thus, high lending rate reduces investment and increases unemployment. Hence, there is positive relationship between lending rate and unemployment.

Finally, a precise description of interest rates and unemployment relationship should necessarily reflect the role which expectation plays in obtaining investment loan. Typically, investors' behaviour is influenced by their past experience. This also applies to depositors. The effect of interest rates on unemployment, proxied by investment, will definitely be felt not immediately, but at a later period. As loan is obtained and investment made, employment is consequentially and continuously made though depending on the rate of growth in the investment. To capture this adaptive expectation behaviour, we have constructed a subsidiary model to cater for this expectation.

To summarise it, the interest rates (lending and deposit) and unemployment relationship could be written as:

$$U = f(r_l, r_d, + \mu) \dots\dots\dots(1)$$

Where:

- U = unemployment rate
- r_l = lending interest rate
- r_d = deposit interest rate

To ascertain the extent of effect real interest (lending) rate has on unemployment, real interest rate is added giving us a second equation as:

$$U = f(r_l, r_d, Rr_l, + \mu) \dots\dots\dots(2)$$

Where:

- Rr_l = real lending rate

Lastly, in order to empirically find out the influence of expectation of interest rates on unemployment, proxied also by investment, we have lagged the interest rates. Thus we could have this equation:

$$U = f(r_l, r_d, Rr_l, r_{l-1}, r_{d-1}, + \mu) \dots\dots\dots(3)$$

Where:

- r_{l-1} = lagged value of r_l
- r_{d-1} = lagged value of r_d
- μ = standard error

Annual time-series data used in this study was gotten from CBN Statistical Bulletins of various years, and National Bureau of Statistics (NBS). The study covers a period of 1982-2012. Ordinary Least Square (OLS) method was used for the analysis.

EMPIRICAL RESULTS

The models specifications as equations 1-3 were estimated using ordinary least squares procedure. The estimation results alongside the relevant statistics are presented as below:

TABLE 1: RESULTS FROM OLS

	1	2	3
Constant	13.212 (3.299)	13.159 (3.346)	13.264 (3.802)
r_d	-1.095** (0.152)	-1.045** (0.179)	-0.985** (0.189)
r_l	0.306* (0.187)	0.291* (0.191)	0.284* (0.217)
Rr_l		0.028* (0.052)	0.030* (0.053)
r_{d-1}			-0.098** (0.085)
r_{l-1}			0.050* (0.194)
R-squared	0.671	0.675	0.693
Adj. R-squared	0.646	0.636	0.626
D.W	0.815	0.812	0.888
Prob. (F)	26.499	17.286	10.370

*(**) Significance at 5 (10) per cent

In general, though The F-statistics result is not significant, the regression results show that there is more than average positive relationship between interest rates and unemployment within the said period, as the explanatory power accounted for by the coefficient of determination (R^2) was above 50%. Thus interest rates are responsible for 63% variation in unemployment rate in Nigeria. Previous interest rates (eq.3) did not have a stronger explanatory power (62.6) compared with 63.6 and 64.6 per cent of the actual interest rates (eqs.1 & 2).

The coefficients of all the interest rates used are correctly signed. Lending rate and real lending rates are significant at 5% while others are significant at 10%. The values in parenthesis are their standard errors. Also from the coefficients of r_d and r_l , it shows that lending rate has more significant effect on unemployment than deposit rate and they both affect unemployment in an opposite direction

However, the D-W statistics are not significant therefore indicating the presence of residual correlation and thus inconclusive.

POLICY IMPLICATION AND CONCLUSION

A rise in interest rate (lending rate) is most likely to cause new unemployment. It is also well known that a rise in interest rates will benefit savers at the expense of borrowers. The converse applies when interest rates fall, meaning that there is a dichotomy between savers and borrowers. Since it has been evident that interest rates have significant effect on unemployment in opposite direction, it will be wise for the regulatory authorities, mostly the CBN, to step up its efforts to reduce lending rates and raise deposit rates to a reasonable level that will encourage savings, thereby making fund available for investment in the economy. Change in interest rate will only be effective if businesses and consumers match the government's confidence in future economic prospects.

Investors do consider the inflation rate before depositing or borrowing fund which affects the real lending and savings rates. The government, through its relevant authorities should combat inflation to less than 5% as obtainable in America (1.4%) and Republic of China (2.1%). This will go a long way in restoring the lost confidence into the Nigerian financial sector.

Bamford and Grant (2010) rightly said that a more general problem facing any government is that of lack of up-to-date, accurate information on the present state of the economy and forecasts of future prospects. This is particularly acute in many developing economies where the quality of statistical information available to the government is inadequate or too poor compared with most developed economies. Although the quality has much improved in recent years through the efforts of the World Bank and regional trade blocs such as CARICOM, it remains an obstacle to more effective economic management. (Pg. 287-288).

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CORRELATION BETWEEN CORPORATE GOVERNANCE PRACTICES AND FINANCIAL PERFORMANCE OF THE COMPANY: CASE OF 5 INTERNATIONALLY ACCLAIMED INDIAN FIRMS

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ABSTRACT

Corporate Governance exists today at an intricate crossing of law, uprightness, and commercial proficiency. Aspect of corporate governance influence on the firm's valuation has become one of the emerging issues in the field of management today. It is known since long and almost imperative that a corporate unit will acquire a life of its own which eventually leads to a gap between the ownership of the enterprise and its management, giving rise to governance issues. Corporate Governance is needed to create a corporate culture of consciousness, transparency and openness. It enables a company to maximize the long-term value of the company's performance. In this context, an attempt is made in this paper to study various Corporate Governance practices followed by 5 companies in India. Various studies in diverse domains like accounting, economics, finance, law and management (Mishra et al. 2001; Kwak, 2003; Black et al. 2003) have been conducted as to whether corporate governance has any impact on the determination of firm's value and performance. A sample of five multinational companies of Indian origin is studied based on the Corporate Governance practices that are being followed by them. This will include factors like Composition of the Board, Board Configuration, Formation of Committees, Number of Independent Directors and jobs carried by them, Conflict of interest and System of information dissemination. The paper aims to objectify and conclude if a relationship exists between corporate governance and firm performance. It is found in the study that corporate governance practices have limited impact on both the share prices of the companies as well as on their financial performance.

KEYWORDS

corporate governance, dissemination, firm performance, information, multinational.

INTRODUCTION

 Good corporate governance supports effective decision-making. The growth of a company will be possible only through virtuous business practices in the long run. Organizations with good corporate governance have the capacity to maintain high-quality services and to deliver improvement. Businessdictionary.com defines corporate governance as "The framework of rules and practices by which a board of directors ensures accountability, fairness, and transparency in a company's relationship with all its stakeholders/shareholders (financiers, customers, management, employees, government, and the community)."

Companies have a choice to follow either of the two models:

- Stakeholder model – Where the company takes care of all its stakeholders especially the public, or
- Shareholder model, whose scope is limited in nature as it focuses only on shareholder benefits,

Corporate governance is gaining prominence for all companies lately. Past decade and half has seen a rise in corporate scams that have led to increased awareness among investors about their rights to more transparent and professionally managed company business. The legal and legislative arena has also witnessed various changes due to these corporate scams. Whenever anything goes wrong within the company, it is the corporate governance mechanism that faces investigation.

HISTORICAL BACKGROUND OF CORPORATE GOVERNANCE

Most of the Asian countries did not have any legislation regarding corporate governance till the early 1990's. Corporate governance has been hotly discussed in the USA and Europe over the past two decades. It was only with the introduction of reports like the Cadbury report in UK and the COSO internal control framework in US that Corporate governance gained momentum. The corporate governance code proposed by the Confederation of Indian Industry is modeled on the lines of the Cadbury Committee (Cadbury, 1992) in the United Kingdom. On account of the interest generated by Cadbury Committee Report, the Confederation of Indian Industry, the Associated Chambers of Commerce and Industry (ASSOCHAM) and the Securities and Exchange Board of India (SEBI) constituted Committees to recommend initiatives in Corporate Governance. The Code of Corporate Governance in India in 1999 and similar developments on this front in other Asian countries. In India, Clause 49 of the listing agreement was introduced as a result of the recommendations of the Kumarmangalam Birla Committee on Corporate Governance. The Securities Exchange Board of India constituted the committee in 1999 but the agreement was actually implemented in 2006. Examples of other South Asian countries like Japan and South Korea also witnessed new governance laws like Japan Corporate Governance Forum in 1998, the Korea SE Act and the Commercial code in 1999. Further frauds like Enron and World Com gave birth to the Sarbanes Oxley Act 2002 in US which laid down very stringent rules regarding auditor's independence, composition of the board and audit committee. In Japan also, in June 2006, J-SOX was passed. It contains certain provisions of the securities legislation (Financial Instruments and Exchange Law) with provisions being quite similar to US SOX.

All these developments had a common objective - To cultivate and endorse a code for Corporate Governance.

In the Indian context, the need for corporate governance has been emphasized because of the scams occurring frequently since the advent of the notion of liberalization from 1991. We had the Harshad Mehta Scam, Ketan Parikh Scam, UTI Scam, Vanishing Company Scam, Bhansali Scam and so on. Probably, the CWG scam didn't attract as much international attention as the Satyam Scandal. It would be fair to say that, in India, corporate governance gained prominence more or less after the Satyam scandal. Lot of research work has been done to discover the reasons that led to these scams. Some research works revealed that lack of transparency and independent management were one of the reasons for the Asian crisis whereas some of the articles mentioned that the crisis exposed such problems. Organizations like the IMF stressed on having good governance practices to prevent such crisis from happening in future.

It is generally accredited that solidifying the Board of Directors of a company is the best defense versus inadequate governance. Specialists are of the belief that a watchful pairing of various factors, including sufficient communication to directors; answerability; proficiency and activism from promoters may aid in applying effectual corporate governance in India.

INDICATORS/PARAMETERS OF GOOD GOVERNANCE

It is believed better the governance model; more efficient would be the asset utilization. An investor looks for return in a company while investing. To analyze the safety of his investment, the investor studies the following set of parameters with which governance can be measured both quantitatively and qualitatively.

- Existence and Composition of the board (including the number of executive and non-executive directors namely independent directors and affiliated/nominee directors),
- Remuneration to the board members,
- Relations with shareholders (including participation in the AGM) ,
- Accountability and audit,

- Formation of committees to oversee critical procedures
- Factors like independence of the directors or independence of the auditor are measured from the qualitative aspects and not quantitative.
- Investors rely heavily on financial statements and reports prepared and published by the company for any information about it. One of such reports is the annual report.

REVIEW OF LITERATURE

Corporate Governance is not a new topic in research. Sufficient financial disclosure has always been expected of the firms in the market. It is also considered as a prerequisite for Efficient Market Theory. But in reality that has not always been the case. Singhvi and Desai (1971) did an empirical analysis of the quality of corporate financial disclosure. In the study, they determined that inadequate corporate disclosure in annual reports will lead to wide-ranging instabilities in the market price of those securities.

Corporate Governance term came into limelight with the Cadbury Committee Report (1992), which was a committee, formed in UK due to a large spate of financial scams and corporate failures in the 1980s. The London Stock Exchange, the Financial Reporting Council and the accountancy professionals formed it. The main aim of the committee was to discuss about financial aspects of Corporate Governance. This report was followed by Greenbury Report (1995) which was a study on Director's remuneration; Hampel Report (1998) was a committee on Corporate Governance and Turnbull Report (1999) which talked about obligations of directors.

Zahra and Pearce (1989) in their study propose specific links among four board attributes (composition, characteristics, structure and process) and three critical board roles (service, strategy and control). The study integrates research findings on the impact of boards of directors on corporate financial performance and an integrative model of board attributes and roles is presented.

Birla, K. (1999)- In India's case also, in 1999 SEBI constituted a committee under Kumarmangalam Birla to recommend corporate governance measures to be followed by Indian companies. SEBI felt a need to regularise the disclosures by the companies in wake of scams like MS Shoes etc. The committee came out with a report in 2000 but it was not implemented immediately. The recommendations were considered to be too strict in Indian context. But after the Enron scam in 2002, another committee was formed under Narayan Murthy (2003) to come up with concrete measures to implement corporate governance. The recommendations of these two committees took the form of Clause 49 of the listing agreement and finally implemented in 2006.

Mark S Beasley (1996) in his study did an empirical test to determine that inclusion of large number of outside members in the board of directors led to a significant reduction in the likelihood of financial statement fraud.

Charreaux and Desbrières (2001) discuss a very crucial point of difference between stakeholder value and shareholder value.

Lacker, Richardson and Tuna (2007) in their working paper series on Corporate Governance, Accounting Outcomes, and Organizational Performance, examine the relation between a broad set of corporate governance factors and various measures of organizational behaviour and managerial performance. Through their empirical research they find that typical structural indicators of corporate governance have very limited ability to explain managerial behaviour and organizational performance.

Afsharipour, Afra. (2009) in her article on Corporate governance in India, examines recent corporate governance reforms in India as a case study for evaluating the competing claims on global convergence of corporate governance standards. India's reform efforts demonstrated that while corporate governance rules may converge on a formal level with Anglo- American corporate governance norms, local characteristics tend to prevent reforms from being more than merely formal. India's inability to effectively implement and enforce its extensive new rules corroborates the argument that comprehensive convergence is limited, and that the transmission of ideas from one system to another is highly complex and difficult, requiring political, social and institutional changes that cannot be made easily.

DATA AND METHODOLOGY

As India is among the top four countries in Asia on the basis of GDP in 2010, therefore study of governance led issues and achievements are all the more relevant. For the purpose of this study, five multinational companies of Indian origin have been chosen. The benchmarks for picking them was that they have a global existence, are famous brands and belong to the top companies in India on the basis of turnover. A deliberate effort has been made to choose companies belonging to diverse industries that are a blend of manufacturing and service sector. All of the chosen are listed companies on major stock exchanges and in some instances on other countries' stock exchanges as well.

Major sources of data collection were:

- websites of the companies,
- published reports, and
- annual reports of the companies.

Data for five comprehensive years ranging from FY 2005-06 to FY 2009-10 was used from prominent financial websites including the data for share price of each company which was taken from the time period Jan 1 2006 to 30 September 2011. All the data collected was secondary in nature.

It would be apparent at this stage to introduce few formulae's and mention the parameters used:

- Return on Assets = Net Income / Total Assets. It is expressed as percentage. Return on asset measures company's earnings in relation to all the funds it has at its disposal.
- Return on Equity = Net Income / Shareholder's Equity. It is also expressed in percentage terms. Return on Equity measures how much return the company on the money invested by the shareholders is generating. It is one of the most important parameters for the investors in the company.
- The data for Return on Assets and Return on Equity is taken from Jan 1 2006 to June 2011 from the annual reports of the companies and their respective websites.
- Factors specific to Corporate Governance were measured and data for all the five companies was composed for the period FY 2005-06 to FY 2010-11. Following were the factors chosen:
 - **Composition of the Board and Board Configuration**– This factor talks about total number of directors, number of executive, non-executive and independent directors. This shows how independently the board functions
 - **Formation of Committees and their details** – This factor details the number of committees related to corporate governance that each company has and their constitution. This shows how committed the companies are towards fulfilling their corporate governance obligations.
 - **Procedure and Sources of Information Dissemination**– This factor talks about how open the company is regarding disclosures such as board compensation, related party transactions, implementation of corporate governance principles, linking of senior management's remuneration with profits of the company and an internationally recognized independent auditor.

The paper attempts to define a co-relation between good governance practices of a company and its performance in the stock market and its subsequent financial performance.

CORPORATE GOVERNANCE IN INDIA

Corporate governance is a way of directing and controlling the company. In India, Corporate governance is restricted to Clause 49 of the listing agreement which forms part of the corporate governance initiatives in India that are dictated mainly by the Companies Act 1956, Securities & Exchange Board of India (SEBI) and Department of Public Enterprises (DPE). The Corporate governance norms are very stringent and disclosures are obligatory. Clause 49 of listing agreement provides for the composition of Board of Directors, the remuneration of the non-executive directors, composition and functions of the Audit Committee, role of the Board of Directors and Audit Committee of the holding company vis-a-vis the subsidiary company, Disclosure and Compliance reports etc.

Like corporate governance norms in United States and United Kingdom, India's corporate governance norms follow a fiduciary and agency cost model. With a focus on agency model of corporate governance, Clause 49 includes detailed rules regarding the role and structure of the corporate board and internal controls. These norms lay criterions for:

1. Appointment of independent directors in board
2. Appointment, composition and Powers of Audit Committee
3. Functioning of Remuneration Committee, Investor Grievances Redressal Committee
4. Compensation that can be paid to non executive directors
5. Adherence to internal code of conduct by board of directors and other top executives.
6. Disclosure of Accounting policies, Contingent Liabilities, Related Party Transactions, IPO Proceed Utilization.
7. Certification by CFO/CEO on efficacy of Internal Control System, correctness of reported financials
8. Whistle Blower Policy

Source: <http://www.iica.in/images/SEBI.pdf>

Keeping the norms in mind , the following table gives the corporate governance disclosures in the five companies selected from India. These five companies were selected as they have worldwide presence, a noticeable brand name and are from varied businesses including both manufacturing and services sector. As all five of these are listed companies in India, they have to strictly follow the guidelines given by SEBI regarding corporate governance.

TABLE 1: CORPORATE GOVERNANCE REPORT OF INDIAN COMPANIES

PARAMETERS OF EXCELLENCE	INDICATORS OF SUCCESS	BHARTI	INFOSYS	LARSEN & TOUBRO	TATA MOTORS	VIDEOCON
Area of Expertise		Telecom	Software	Manufacturing & Engineering	Automobile	Electronic Appliances
Year of Establishment		1995	1981	1938	1945	1987
Head Office		New Delhi, India	Karnataka, India	Mumbai, India	Mumbai, India	Mumbai, India
Exchanges Listed		India	India/US	India	India/US	India
Board Composition	Executive Directors	2	6	8	2	2
	Non Executive Directors	8	Nil	9	4	Nil
	Independent Directors	8	9	Nil	6	8
Constitution of Committees	Audit Committee	Yes	Yes	Yes	Yes	Yes
	Remuneration Committee	Yes	Yes	No	Yes	Yes
	Investor Grievance Committee	Yes	Yes	Yes	Yes	Yes
	Nomination Committee	No	Yes	Yes	Yes	No
	Other Committees	ESOP	Risk Management	Nil	Ethics	Finance
Disclosure Guidelines	Board Compensation	Disclosed	Disclosed	Disclosed	Disclosed	Disclosed
	Related party Transaction	Disclosed	Disclosed	Disclosed	Disclosed	Disclosed
	CG Report	Full	Full	Full	Full	Full
	External Auditor	Batliboi	BSR	Sharp & Tannan	Delloite	Khandelwal Jain & Co.

The norms do not define or limit companies on the number of committees that should be formed. The guidelines hold provision for each company to set up their corporate governance committees according to its own needs and requirements. All the Indian companies have internationally well-known external auditors. In addition, Table 2 below depicts the financial performance of Indian companies in terms of their share prices which is reflected in the data ranging from the year 2006 till 2011.

TABLE 2

SHARE PRICES OF THE CHOSEN INDIAN COMPANIES					
Period	infosys	Videocon	Tata Motors	Bharti	L&T
02-Jan-06	2978.85	429.88	141.86	169.75	306.52
02-Jan-07	2272.45	454.61	175.55	316.5	488.77
02-Jan-08	1749.4	802.8	141.23	483.4	1386.93
02-Jan-09	1130.95	127.67	29.93	352.4	551.14
02-Jan-10	2614.25	239.67	138.87	328.8	1125.2
02-Jan-11	3445	216.8	261.26	358.4	1325.96

Source: www.moneycontrol.com

FIG. 1

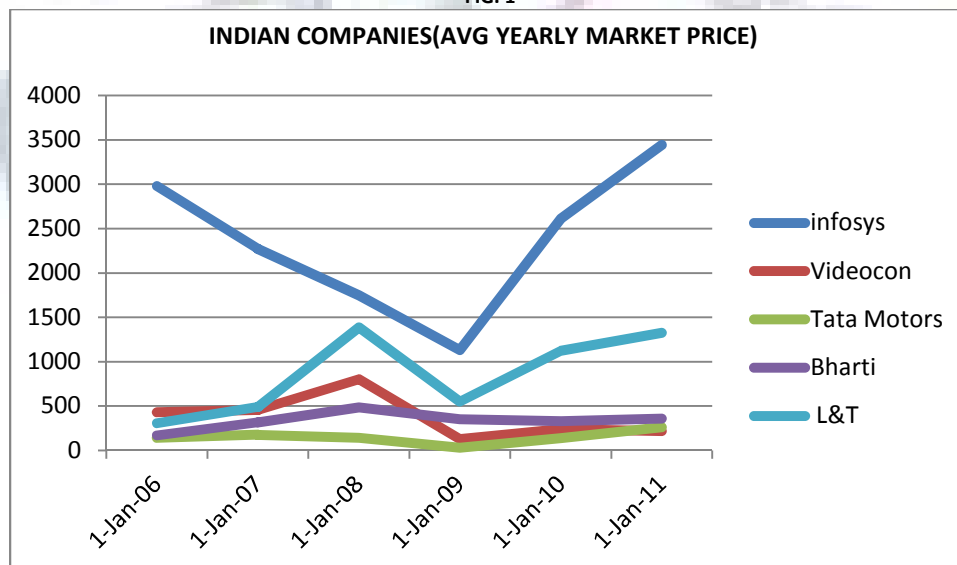


TABLE 3: AVERAGE FINANCIAL PERFORMANCE OF INDIAN COMPANIES

AVERAGE FINANCIAL PERFORMANCE OF INDIAN COMPANIES					
	Bharti	Infosys	L&T	Tat Motors	Videocon
Return on Assets	19.2%	32.88%	14.88%	11.44%	5.92%
Return on Equity	28.33%	32.88%	26.15%	20.90%	12.35%

FINDINGS FROM THE STUDY

1. Infosys has consistently performed well financially followed by Bharti Airtel, Larsen & Toubro, Tata Motors and Videocon.
2. It seems that both in case of Infosys and Videocon, the financial performance is related to the governance practices followed. Infosys is the world leader in disclosure. Its Board exercises its fiduciary responsibilities in the widest sense of the term. It has won numerous awards for being one of the most transparent and has stretched itself beyond the mandatory disclosures. Among the Indian firms, it is a trendsetter for voluntary disclosure of lot of items. Infosys has always enjoyed high market capitalization as it follows the best corporate governance practices in the world. It discloses both mandatory and non-mandatory information in its published reports. Disclosure of non-mandatory information by companies is rarely seen. The result of such unconventional practices is reflected its share price which has always performed well.
3. The only exception in this case is seen in case of Bharti Airtel. The governance practices over the last six years are more for show but financially the company has done well.
4. Despite very less or no independent directors on board, both companies -Tata Motors and Larsen & Toubro, have still managed decent share prices.
5. But in case of Bharti Airtel and Videocon, at the outset they seem to be following all the governance norms set by the government but in reality looking at their five year history of corporate governance, it does not seem that the corporate governance rules of the country are being followed in letter or spirit. The same can also be said for their share prices that have been weakening for the same time period.
6. The better the governance practices better is the financial performance.

CONCLUSION

Each country's model for corporate governance is based on the rules and practices of their own country. In the study, it was seen that India follows stringent corporate governance practices based on the shareholder model (followed in US). In this paper an attempt has been made to analyze and study whether any relation exists between corporate governance and various return parameters considered important by investors such as Return on Assets, Return on Equity and the movement in share prices. Increase in returns can be analyzed by the rise in share price. Based on the consideration that investors want to gather an insight into the company's functions, for which they rely on annual reports which carries financial information and other related information including corporate governance.

Due to local legislations and requirements, it has been observed that annual reports of most of companies have a separate section on corporate governance. This section covers most of the mandatory disclosures like board functioning and its independence, shareholders rights, conflict of interest, details of the various committees, their constitution and frequency of meetings.

It is seen in the study that corporate governance practices do have an impact on the share prices of the companies as well as on the financial performance of the companies as there is a strong relationship between stock price and the corporate governance practices of the company. But it is a very limited impact and should not be seen in isolation of other factors affecting the share price and the financial performance. If a company is open for scrutiny and is willing to share all information with the shareholders, its stock price is expected to do better as compare to a company which does not disclose all information. Corporate Governance practices though are only one of the factors affecting the share prices.

Similarly, financial performance of the company is also expected to be better if the company follows better governance practices.

In the Indian corporate scene, there is a need to induct global standards so that at least while the scope for scams may still exist, it can be at least reduced to the minimum.

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FINANCIAL CAPACITY AND ITS EFFECT ON IMPULSE BUYING BEHAVIOUR: AN ON-FIELD STUDY AT LULU INTERNATIONAL SHOPPING MALL, KOCHI

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ABSTRACT

This paper is an attempt to find the variables/factors that effects customer impulse buying behaviour in India. The impact of various impulse buying factors like Advertising, sales and promotions, packaging, effective pricing strategy, financial capacity of the customers, standard of living etc. behaviour has been analyzed. The study is based on the primary data collected from Lulu International Shopping Mall, Kochi with the help of structured questionnaire.

KEYWORDS

Consumer behaviour, Impulse buying, Income level.

INTRODUCTION

The purchase patterns of Indian customers have changed due to the changes in market as well as economic condition. Now consumers can choose from a wide variety of international products from their local markets. The change in the financial position of the people in India has made a drastic change in their consumption pattern too. With a lot of choices at hand and a chunk of disposable income, consumers still ensure quality and specification even in their impulse purchases.

This research suggests that the presence of other persons in a purchasing situation is likely to have a normative influence on the decision to make a purchase. The nature of this influence, however, depends on both perceptions of the normative expectations of the individuals who exert the influence and the motivation to comply with these expectations. Peers and family members are the two primary sources of social influence, often have different normative expectations.

IMPULSE BUYING BEHAVIOUR

Impulse buying is in fact making a decision on the spur of the moment, unplanned decision to buy, made just before a purchase. Research findings suggest that emotions and feelings play a decisive role in purchasing, triggered by seeing the product or upon exposure to a well crafted promotional message. Such purchases ranges from small (chocolate, clothing, magazine) to substantially large (jewellery, vehicle, work of art) and usually (about 80 percent of the time) lead to problems such as financial difficulties, family disapproval, or feeling of guilt or disappointment. Financial position has an important role on impulse buying behaviour. This study is all about to find out the role of financial position in impulse buying behaviour.

CONSUMER BEHAVIOUR

The term consumer behaviour is defined as the behaviour that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs. Consumer behaviour focuses on how individuals make decisions to spend their available resources (time, money, effort) on consumption related items. That includes what they buy, why they buy it, where they buy it, how often they buy it, how often they use it, how they evaluate it after the purchase, the impact of such evaluations on future purchases, and how they dispose of it.

ADVERTISING

Advertising is a powerful communication force, highly visible, and one of the most important tools of marketing communications that helps to sell products, services, ideas, and images, etc. Advertising is an indicator of growth of civilisation and a pointer of attempts at the betterment and perfection. It is part of our social, cultural, and business environment. Advertising reaches large, geographically dispersed audiences, often with high frequency; low cost per exposure, though overall costs are high. Advertisements may be designed to emphasize the rewards of impulse buying.

SALES PROMOTION

Sales promotion is the only method, among all the available promotional methods, that can make use of a combination of pull-push strategy to motivate consumers, trade people and the sales force simultaneously in transacting sales. The range of tools and techniques of sales promotion includes discounts, coupons, free samples, contests, games, premiums, sweepstakes, special packs, allowances, trade fairs, co-operative advertising, continuity programmes, demonstrations, exchange offers and many others. Sales promotions add value to the product or service, which is extra and not built into the product or service.

RETAILING FORMATS IN INDIA

SHOPPING MALLS

Shopping Malls are the largest form of organized retailing today. The concept is based on constructing centrally air-conditioned malls and renting the floor space out to individual shops. Malls inspire fashion-based shopping; as distinct from the need-based shopping inspired by super-markets and discount stores. They lend an ideal shopping experience with an amalgamation of product, service and entertainment; all under a common roof. Examples include Oberon Mall, Gold Souk Grande Pantaloons, LuLu International Shopping Mall.

SPECIALTY STORES

Specialty store is a small retail outlet that focuses on selling a particular product range and associated items. Most specialty store business operators will maintain considerable depth in the type of product that they specialize in selling, usually at premium prices, in addition to providing higher service quality and expert guidance to shoppers.

CONVENIENCE STORES

A convenience store is a well-located store. The ease of shopping and personalised services are the major reasons for its patronage, even when it charges average to above average prices, and carries a moderate number of items. It stays open for long hours and provides an average atmosphere and customer

services. It is often also called the "mom-and-pop" stores. It is useful for fill-in merchandise and emergency purchases. Many customers shop at least two to three times a week at these stores.

CONVENTIONAL SUPERMARKET

A conventional supermarket is a self-service food store offering groceries, meat, produce with limited sales of non-food items, such as health and beauty aids and general merchandise at low prices. They are large in size and carry 9,000 to 11,000 items. They are chosen due to volume sales, self-service, low prices and easy parking. The self-service nature allows supermarkets to cut costs, as well as increase volume.

DISCOUNT STORES

Discount stores are those stores that sell merchandise, especially consumer goods, at a discount from the manufacturer's suggested retail price. They are also called as discounter and discount house. They usually have many name-brand products and offer a wide price range of the items. The product category can range from a variety of perishable or non-perishable goods.

DEPARTMENT STORE

A department store is a large retail unit with an extensive assortment (width and depth) of goods and services that are organised into separate departments for purposes of buying, promotion, customer service and control. It has the greatest selection of any general merchandise retailer and often serves as the anchor store in a shopping centre or district. Department Stores are unique in terms of the shopping experience they offer, the services they provide and the atmosphere of the store. They offer a full range of services from altering clothing to home delivery. Over its history, the department store has been responsible for many innovations, including advertising prices, enacting a one-price policy (whereby all shoppers pay the same price for the same good or service.), developing computerised checkouts, offering money back guarantees, adding branch stores and decentralised management.

HYPERMARKETS

A hypermarket is a very large retail store offering low prices. It combines a discount store and superstore food retailer in one warehouse like building. Hypermarkets can be up to 300,000 square feet and stock over 50,000 different items. Hypermarkets are unique in terms of store size; low operating margins, low prices and the size of general merchandise assortment. The store sells a broad variety of basic merchandise ranging from food to consumer electronics. All hypermarkets are based on three concepts of: one stop shopping, ample free parking and a discount pricing strategy. The main limitation of hypermarkets is that many consumers find that shopping in stores over 200,000 square feet is too time consuming. It is hard to find merchandise and checkout lines can be very long.

MBOs

Multi Brand Outlets (MBOs), also known as Category Killers, offer several brands across a single product category. These usually do well in busy market places and Metros. Now-a-days such stores are making their ways into less metropolitan cities also because of their popularity and utilitarian ranges they are received very well by the consumers.

COMPANY PROFILE

In the present research paper, the study has been focused on LuLu International Shopping Mall to know the impulse buying behaviour of the consumers. The brief profiles of the company are as follows:

LuLu International Shopping Mall is India's largest shopping mall in gross leasable area and second-largest shopping mall in gross floor area. It is located in the Edapally neighbourhood of Kochi, Kerala. It is built on an area of 17 acres, with the gross floor area of the mall alone at 2,500,000 square feet. The mall is run, managed and set up by the EMKE Group, a business group with interests in the Middle East, Africa and Asia.

REVIEW OF LITERATURE

Impulse buying has been a topic of interest for researchers of the past sixty years (Clover⁵, 1950; Stern¹⁶, 1962; Rook¹⁵, 1987; Hausman⁹, 2000; Peck and Childers¹³, 2006; Chang⁴, et al., 2011). According to Engel and Blackwell⁸ (1982) impulse buying is an action undertaken without previously having been consciously recognised or a buying intention formed prior to entering the store.

The descriptions of impulse buying before the study of Rook (1987) were focused on the product while determining an impulse purchase. Rook (1987) argued that during impulse buying, the consumer experiences an instantaneous, overpowering and persistent desire. He characterised the impulse buying as unintended, non-reflective reaction, which occurs soon after being exposed to stimuli inside the store.

Abratt and Goodey¹ (1990) found that the examination of impulse buying in supermarkets could be of much interest to the manufacturers as well as retailers worldwide. Piron¹⁴ (1991) attempted to define the impulse buying by reviewing the past research works and found that the earlier studies revealed impulse buying to be very similar to unplanned purchasing (Clover 1950, West¹⁷ 1951), and forwarded his findings with managerial interests in mind. Rook and Gardner (1993) defined impulse buying as an unplanned behavior involving quick decision-making and tendency for immediate acquisition of the product.

Beatty and Ferrell² (1998) described that Impulse buying refers to immediate purchases which are without any pre-shopping objective either to purchase the specific product category or to fulfill a specific need. They explained that the impulse buying behavior occurs after experiencing a buying desire by the shopper and without much reflection. The buying of an item which is out-of-stock and reminded during encountering the product are excluded from the purview of impulse buying.

Biyani³ (2007) describes that we are on the cusp of change wherein a huge, multicultural India is transforming from a socialist economy to consumption-led, creative economy. The scope and depth of change is taking place due to the revolutionary retail market with a gigantic opportunity for marketers and retailers, not only in large cities but also in small towns.

Dobbin⁷ (2011) says that shopping behavior has changed and malls have become the landmark of urban shopping. In India, malls have transformed shopping from a need-driven activity to a leisure time entertainment.

Marketers should promote a good store layout to maximize the convenience of the consumer (Crawford and Melewar⁶, 2003). A well-trained salesperson can decrease frustration by guiding and aiding the consumer in the purchase process and activate impulse buying behavior (Crawford and Melewar, 2003). Store atmospherics is important to stimulate impulse purchase (Crawford and Melewar, 2003). Store managers can look at a number of environmental design variables to increase stimulation in their shops. Impulsiveness sometimes depends on store type (Wong and Zhou¹⁸, 2003).

The availability of money is a facilitator in the impulse buying process (Mai¹² et al., 2003), since it increases the purchasing power of the individual. If the individual does not have enough money, he or she will avoid the shopping environment altogether. Consumers have propensity to buy impulsively (Jones¹⁰ et al., 2003).

Presence of others increases the likelihood of impulse purchase. For example, when individuals are in a group, they tend to eat more (Luo¹¹, 2004). Individuals who perceive self-discrepancy try to use material goods to compensate the discrepancy, have impulse buying tendencies (Luo, 2004).

RESEARCH OBJECTIVES

The Research Objectives are as follows

- i. To investigate the influence of gender on factors affecting impulse buying behaviour.
- ii. To investigate the influence of age on factors affecting impulse buying behaviour.
- iii. To determine the influence of occupation on factors affecting impulse buying behaviour.
- iv. To determine the influence of occupation on factors affecting impulse buying behaviour

HYPOTHESES

- i. There is no association between gender and the factors influencing impulse buying behaviour.
- ii. There is no association between age and the factors influencing impulse buying behaviour.
- iii. There is no association between occupation and the factors influencing impulse buying behaviour.

iv. There is no association between income and the factors influencing impulse buying behaviour.

RESEARCH METHODOLOGY

The study is based on the primary data collected from LuLu International Shopping Mall from the area of the city of Ernakulum with the help of structured questionnaire on Likert scale. Data analysis has been done using SPSS software.

SCOPE OF THE STUDY

The scope of the study is confined to impulse buying behaviour of customers. Regarding the respondents, customers of Agra city were selected randomly. The geographical area of the study was restricted to Ernakulum City only.

DATA COLLECTION

The data was collected from potential customers of the existing outlets of LuLu International Shopping Mall. The primary data collection has been done by rendering a questionnaire to the customer and seeking their responses for the study.

RESEARCH DESIGN

This is an empirical study based on survey method. This study was based mainly on primary data. The primary data was collected from Ernakulum city. A pilot study was conducted with 10 respondents. The information contained in the questionnaire has been tested and the necessary changes were incorporated in the revised questionnaire in the light of experience gained in the pilot study. The questionnaire used in this study was constructed on Likert Scale Method

SAMPLE DESIGN

A convenience sample of 100 potential customers of LuLu International Shopping Mall, Kochi was taken for the study.

RESULTS AND DISCUSSION

After going through the data analysis it has been revealed that various pattern with respect to the respondents has been received. The first table shows the results of Chi-square test of independence between gender and the factors influencing impulse buying behaviour. The second table is the result of the chi-square test of independence of age and the variables. The third table is the test of independence of occupation and the various variables followed by the test of independence of income and the factors affecting impulse purchases.

TABLE 1: CHI-SQUARE ANALYSIS OF GENDER WITH RESPECT TO VARIOUS VARIABLES

Variables	Chi-square Value	Significance Value	Null Hypothesis
Low cost*	13.419	.009	Rejected
Promotional Schemes	3.406	.333	Accepted
Waited and made available	8.262	.082	Accepted
By seeing others	4.245	.236	Accepted
Willingness to try unusual*	10.284	.016	Rejected
Seen first time and picked up	3.800	.284	Accepted
The person with whom you are going for Shopping influences buying behaviour	8.036	.045	Accepted
By watching recent ads*	23.194	.000	Rejected
Attractive price of products	6.139	.105	Accepted
Discount offers regarding product*	19.802	.001	Rejected
Display of products in store	7.391	.117	Accepted
Packaging of product	4.525	.210	Accepted
Changing trend in society*	13.980	.007	Rejected
Requirement of product	3.896	.273	Accepted
Financial capacity	5.565	.135	Accepted
Standard of living has a role to play in buying Products	5.089	.165	Accepted

* Chi-square value statistically significant at 0.05

The above table clearly indicates that gender impulse buying behaviour differs with respect to availability of low cost products, discounts offered, new and unusual products, advertisements and changing trends in the society. Female consumers indicated a preference for low cost products and discount offers. Whereas males showed an interest to try unusual products, advertisements related to new offerings and a need to follow the changing trends. This is indicative of the fact that male consumers tend to try new and innovative products whereas female consumers can be moved to make impulsive purchases only by offering cost benefits.

TABLE 2: CHI-SQUARE ANALYSIS OF AGE WITH RESPECT TO VARIOUS VARIABLES

Variables	Chi-square Value	Significance Value	Null Hypothesis
Low cost*	59.452	.000	Rejected
Promotional Schemes*	18.005	.006	Rejected
Waited and made available*	39.354	.000	Rejected
By seeing others*	103.523	.000	Rejected
Willingness to try unusual	8.543	.201	Accepted
Seen first time and picked up*	27.146	.000	Rejected
The person with whom you are going for Shopping influences buying behaviour*	39.257	.000	Rejected
By watching recent ads*	37.818	.000	Rejected
Attractive price of products*	27.150	.000	Rejected
Discount offers regarding product*	20.059	.010	Rejected
Display of products in store	13.807	.087	Accepted
Packaging of product*	37.560	.000	Rejected
Changing trend in society*	76.975	.000	Rejected
Requirement of product*	15.663	.016	Rejected
Financial capacity*	36.882	.000	Rejected
Standard of living has a role to play in buying Products	9.412	.152	Accepted

* Chi-square value statistically significant at 0.05

The test of independence of age indicated a significant influence on almost all factors affecting impulse buying behaviour except the factors such as display of products in store, willingness to try unusual and the standard of living. The younger crowd (Below 25 years) showed a preference on promotional activities and recent advertisements. They also showed a preference for trying new products. Respondents falling in the age- group 25-35 showed preference for packaging of the product, changing trends and their financial capacity. The age group of 35-45 years on the other hand seemed price sensitive giving preference for low cost products or those with attractive discount offers. Unlike the other age-groups, they also seemed to be influenced by the accompanying person's opinion and the utility value of the product they require.

TABLE 3: CHI-SQUARE ANALYSIS OF OCCUPATION WITH RESPECT TO VARIOUS VARIABLES

Variables	Chi-square Value	Significance Value	Null Hypothesis
Low cost*	92.202	.000	Rejected
Promotional Schemes*	44.360	.000	Rejected
Waited and made available*	95.183	.000	Rejected
By seeing others*	26.452	.002	Rejected
Willingness to try unusual*	73.651	.000	Rejected
Seen first time and picked up*	50.114	.000	Rejected
The person with whom you are going for Shopping influences buying behaviour*	51.473	.000	Rejected
By watching recent ads*	58.992	.000	Rejected
Attractive price of products*	88.471	.000	Rejected
Discount offers regarding product*	33.675	.001	Rejected
Display of products in store*	55.368	.000	Rejected
Packaging of product*	68.955	.000	Rejected
Changing trend in society*	123.481	.000	Rejected
Requirement of product*	31.934	.000	Rejected
Financial capacity*	42.286	.000	Rejected
Standard of living has a role to play in buying Products*	52.026	.000	Rejected

* Chi-square value statistically significant at 0.05

Occupation of the respondent seemed to have a strong influence on impulse buying behaviour. Those respondents with a high profile career such as business persons and professionals gave more importance for promotions, changing trends and new and innovative products. Whereas the regular income category showed a sensitiveness to price variables such as low cost products discount offers.

TABLE 4: CHI-SQUARE ANALYSIS OF INCOME WITH RESPECT TO VARIOUS VARIABLES

Variables	Chi-square Value	Significance Value	Null Hypothesis
Low cost*	150.272	.000	Rejected
Promotional Schemes*	38.524	.000	Rejected
Waited and made available*	49.341	.000	Rejected
By seeing others*	32.198	.000	Rejected
Willingness to try unusual*	36.120	.000	Rejected
Seen first time and picked up*	51.819	.000	Rejected
The person with whom you are going for Shopping influences buying behaviour*	55.206	.000	Rejected
By watching recent ads*	67.708	.000	Rejected
Attractive price of products*	90.492	.000	Rejected
Discount offers regarding product*	33.434	.001	Rejected
Display of products in store*	46.394	.000	Rejected
Packaging of product*	67.358	.000	Rejected
Changing trend in society*	119.812	.000	Rejected
Requirement of product*	29.434	.001	Rejected
Financial capacity*	74.860	.000	Rejected
Standard of living has a role to play in buying Products*	27.177	.001	Rejected

* Chi-square value statistically significant at 0.05

Income variable also showed a similar result to that of occupation. The high income group indicated a preference for promotions, trying unusual products and changing trends. The middle income group evolved as the price sensitive category.

CONCLUSION

The study pragmatically reveals that almost every individual resorts to an impulse buying behaviour for at least a few purchases, if not all. Financial capacity plays a key role in defining the type of products purchased impulsively. Regular income groups showed price sensitiveness and preference for discounts and low priced products. Higher income groups, on the other hand, indicated a keen interest to follow the fashion and upcoming market trends. Younger crowd showed least importance to value for money.

From an organisational point of view, integrated marketing communications to build awareness and association of customers with the product would help brands capture a part of the disposable income. Prudent placing of products attracts the customers towards frequent purchases.

Choosing a prime location for providing a complete shopping experience helps in augmenting impulse purchases. Ambience attracts young crowd to the malls providing them a space for leisure with family and friends. This research suggests that the presence of other persons in a purchasing situation is likely to have an influence on the decision to make a purchase. Friends and family members are the two primary sources of social influence.

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INCREASING AND CHANGING ROLE OF MANAGEMENT ACCOUNTING IN CAPTURING THE VOICE OF CUSTOMERS

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ABSTRACT

Today market environment demands changes in product according to the desires and need of customers because markets have been transformed from sellers oriented market to buyers oriented market. This paper describes the increasing and changing role of management accounting to capture the voice of customers in market. After briefly describing about the orientation of market the paper presents the importance of management of cost and competitive advantage which can be taken by a firm with proper changes and use of management accounting. The paper presents in detail the history of change in the role and scope of management accounting also the enables of change in management accounting have been discussed in the paper.

KEYWORDS

management accounting, market orientation.

INTRODUCTION

The development of today's international markets and the fast spreading use of the internet or computer technology have created a highly competitive and transparent market environment. The present business environment is characterized by global competition, the high rate of automation, environmental and safety issues, short product life-cycle and consumers' need for innovative and high quality products at sound prices. In today's time of fast technological change, strong global and domestic competition, for manufacturing companies especially total cost management is essential to maintain corporate profitability and competitiveness. "In today's environment, nothing is constant or predictable - not market growth, customer demand, product life cycles, the rate of technological change, or the nature of competition" (Hammer & Champy 1993). Today the management mantra for a company is conquer the costs before the costs conquer you and cost refers total cost to the customer. The cost leadership strategy does not suggest compromise in technology, quality or product differentiation. Low costs of product have no advantage, if the customers are not ready to buy the low cost product of company. Hence management of cost must be driven with customer as the focus. The survival triplet in current environment for any company is how to manage the cost of product/service, quality and performance.

CHANGES IN MARKETS AND FOCUS ON CUSTOMERS

Expansion of international markets and trade is like a key of development that drives the extensive changes in the current business environment. The growing number of multinational firms shows that there are opportunities for growth and profitability in global markets. As a result of globalization of markets competition is increasing and this has changed the markets from sellers to buyers markets. According to Fralix (2001) in the early years the mass production was produced and could be sold in markets because supply was low and comparatively demand was high. The mind-set of most manufacturers was: this is what we make - if you want it, buy it (Johnson 1992). In other words, the manufacturing companies focused only increasing output and their attitude was that they could sell whatever they build. Therefore the manufacturing firms produce products according to their own specifications not to customer specifications. In recent years demand exceeding supply and customers are more sophisticated, more knowledgeable and less loyal than in the past. Lynch (1999) argued that now customers demand products or services that meet their expectations like delivery on time, defect-free and low prices products. Nonaka (1994) recognized that current society become a "knowledge society" necessitating business organizations to think about innovation like technical innovation and product innovation.

COST CHALLENGE

Dealing with today's competition is a big challenge for companies enough even when they have all the right information and if they respond to the wrong information then it could be the situation of loss. If a firm fails to reduce costs as speedily as its competitors then its existence will be in danger and profit margins will be squeezed. The customers demand high quality products/services at low prices and the shareholders demand a high return on their investment therefore costs has become a residual. Today the challenge for a manufacturing company is being able to provide services within the predetermined cost framework. Thus cost management has become an ongoing continuous improvement area for every company. Today the market leaders want to stay ahead of the competitors in market through continuously finding the gap between their product cost and that of their competitors and then try to redeploy their resources for profitable growth. The cost challenge is one of the most serious tasks facing by manufacturing companies from the last decades. In such a testing environment a company's survival depends on innovative products that satisfy levels of quality and price expected by market (Bonzemba & Okano 1998). Manufacturers face trouble to match the low prices with global competitors and still offer the highest quality products to customers (Helms et al. 2005). This situation has created fierce and rising cost pressures on manufacturers. The success of manufacturing companies depends on the methods and techniques that are adopted by them to manage costs. Availability of vehicles at competitive low price is a key performance indicator for automobile manufacturing companies. Pretorius et al. (2003) suggested that costs and the way in which costs affect pricing and the profit margin should be closely considered. Attentiveness of the cost system and cost manners in cost management together with awareness about market help firms to perform well with competitive pressures than merely to lower its prices. If company does not have able managers who can manage well the production cost the cost of product will increase and increasing production cost is a big problem for any company because it will decrease profit of company. The inability to apply competent cost management systems remains the most important source of all business problems. The challenge in managing costs is to categorize the activities that cause them and then manage the activities that cause them. According to Garrison et al. (2006), from last two decades business environment is characterized by terrific change and the rate of innovation in products and services has increased. Many managers realized the requirement of new ways of working.

FOCAL POINT MANAGEMENT OF COST

The concept of cost management is taking more and more popularity in today's increasingly competitive business environment. In competitive markets product prices are decided by the market because a large number of competitors can provide similar or substituted products at keen or reasonable prices and consumers expect higher value for their money. Increasing global competition in the industrial environment forces a company to focus the continuous improvement about the quality and functionality of product or services offered by the company and also improve their competitiveness. Consumers are rational and can compare quality, durability and prices of a product from one market with other markets, therefore companies should focus customer's demands directly to design the right products. In recent times mostly organizations management think that their organizations will not succeed if they fail to regularly offer goods or services at the right time and in the right place (Cooper & Slagmuldar 1997, Ansari et al. 2007). To face this situation a producer like to sell their products at a price that market expects and which is right for the continuing survival and growth of the company and also desires by producer to make a financial return on the products sold. Consistent development of low cost and high quality products that meets the market's expectations and makes a profit for company is a key to a company's survival. Growth of a firm in such a challenging environment depends on its capacity to produce innovative products that satisfy both the aspects of quality and price expected by the market. In this competitive environment customers demand low price but high quality products and to meet customers' demands at low prices companies are taking further steps to reduce price of products either by cutting profit margins or by lowering costs, however stockholders want high dividend, therefore to realize this a more mature cost-conscious culture should be established. Reducing a firm's product cost is the only basis of increased earnings because selling price and profit margin are set by competitive pressures and management policies. Today selling prices of products or services are non-controllable for any company, therefore company's profitability depends more on effectiveness of cost management. The long-term financial success of any company depends on whether the prices of their products or services exceed their costs by enough to finance growth.

COMPETITIVE ADVANTAGE

Today for sustainable competitive advantage costs must be managed both aggressively and wisely. The long term survival of a company requires a sustainable competitive advantage. Competitive advantage is normally taken by developing new products and services that satisfy the customers and it can also be developed by improving business processes to obtain better quality and cost reduction by adding value. Today customers want more value products from their money, thus according to their demands product they are buying should be better, cheaper and faster. To manage this company must have harmony between design and the production process. Therefore it is required to identify new ways or methods to find more qualitative ideas to decrease the cost of product. There are many ways for a company to face competition in the market like company can offer a high quality product, low price product, shortening the production line and free of defective product. In order to satisfy customers, a firm requires maximizing its efficiency throughout the entire value chain. Different organizations in competitive surroundings for saving their existence and competitive power should be aware about their products costs, competitor's product cost and also well presents their products in competitive world in relation to costs (Cooper & Kaplan 1999). From this point of view the continuous reduction of the costs may involve five main areas for the overall management of product costs of organization are: (1) taking into consideration the environment or markets & competition, (2) integration of the skills or involvement of all departments, (3) role of supply chain partners, (4) full concentration on viewing effects of the current decisions about product of firm on its future results or outcomes and (5) creation of some connections or techniques to manage or control the current activities of the firm. If there are few competitors of a firm and if demand of their products exceeds supply then firm has chance to simply mark up costs and prices to get a sufficient profit but in opposite situation when competition increases and supply of products exceeds demand then market forces to set low prices. Through cost management, managers can take decisions that will enable the firm to achieve a strategic competitive advantage (Buckingham & Loomba 2001). In taking a strategic competitive advantage cost management focuses the long-term competitive success of the firm.

HISTORY OF CHANGE IN MANAGEMENT ACCOUNTING

1. ACCOUNTING

In general accounting is the process of identifying, measuring and communicating economic information to users of the information for their decisions. Horngren & Foster (1991) stated that: the accounting system is the principal quantitative information system in almost every organization and should provide information for three broad purposes:

- (1) Internal routine reporting to managers.
- (2) Internal non-routine or special reporting for strategic decisions.
- (3) External reporting through financial statements to outside parties.

Drury (1992) claimed that traditionally management accounting is interested in providing internal routine reports and internal special reports to managers or to people within the organization while financial accounting provides information to parties outside the organization. Garrison (1982) mentioned that management accounting focuses on relevance and flexibility of data. Accounting information is vital in determining the most suitable strategic direction for the company. It directs managerial actions, motivates behaviors and creates the cultural values which are necessary to obtain an organization's strategic objectives (Ansari & Bell 1997).

2. COST ACCOUNTING

Management accounting was first recognized as cost accounting (Wilson & Chua 1988). Cost accounting is a result of the industrial revolution (Johnson 1981). Cost accounting is defined as the equivalent of direct costing designed to provide financial information for management decision-making and control (Johnson 1981). Cost accounting offers knowledge for both at strategic and operational level. The first indication of cost accounting was the job order costing in a company of Italy (Abs et al. 1954). Cost accounting continued to develop as a result of greater industrialization and the increasing size of firms further in the nineteenth century and through the middle of twentieth century (Garner 1947). Caplan (2006) stated that in the early decades of the twentieth century industrial engineers establish methods to control production which focused the standards for materials, labor and machine time through which actual results could be compared. As a result standard costing systems was developed which is still widely used by manufacturing companies for planning and control (Caplan 2006). Later in the twentieth century cost accounting started to change into management accounting. Horngren et al. (1999) explained the difference between cost accounting and management accounting. According to Horngren et al. (1999), cost accounting refers mainly getting as accurate or precise costs as possible while management accounting focuses different costs for different purposes. The factor that changes the costing to a managerial term was the development of new corporate structures such as multinational enterprise, multidivisional organization and the growth of industries (Wilson & Chua 1988). These new structural forms required extra information that led to a development of the narrow costing systems (Wilson & Chua 1988). With these changes the term cost accounting could no longer satisfactorily described the accounting function within an organization and gradually management accounting term was adopted. In 1972 The Institute of Cost and Works Accountants even changed its own name to the Institute of Cost and Management Accounting. Literature shows that after nineteenth century the attention changed from cost accounting to management accounting. According to Johnson & Kaplan (1987) in the nineteenth century the scope of cost accounting became more than just a tool for monitoring internal conversion processes.

3. MANAGEMENT ACCOUNTING

The American Institute of Management Accountants defines management accounting as the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of financial information used by the managers to plan, evaluate and control within an organization. Management accounting helps in best utilization of resources. Drury (1992) agreed that the management accounting system provides information for management activities such as decision-making, planning and control. Cost information is needed for decision making and managers use relevant cost information for both strategic and operational decisions like for determining the selling price and for measuring product profitability etc. The decisions of managers are concerned with future events, therefore cost information are important for planning and control functions. Kaplan & Atkinson (1998) explained two specific purposes of management accounting, they said management accounting is a system that collects, classifies, summarizes, analyses and reports information that will assist managers in their decision-making and in their control activities. It shows that management accounting has two main purposes (1) to

support managers in decision-making which is called accounting for managers or management decisions and (2) to support in planning and control activities which are called accounting for management control. Traditionally, accounting for management decisions involves terms such as process costing, job order costing, marginal costing, cost-volume-profit analysis, standard costing and variance analysis etc. Accounting for management control is more likely to deal with terms such as responsibility, budgeting and performance measurement. There is also little confusion in literature between management accounting and cost accounting. Cost accounting and management accounting are two different terms. Some authors define both in same way. However, Horngren & Foster (1991) and Drury (1992) said that cost accounting is just a part of management accounting and it deals solely with the determination of cost of goods sold and gathering cost information for stock valuation for external reporting. Emmanuel et al. (1990) highlighted that employees may not take interest in organization due to lack of three basic reasons: (1) lack of direction, (2) lack of motivation and (3) lack of abilities. Management accounting system plays a central role in organization to solve these problems. Hiromoto (1991) stated that current management accounting systems are considered continuous innovation and the new aspects such as behavior influencing focus, market-driven management and dynamic team-oriented approach. Management accounting must build a regular awareness environment of strategic messages in all parts and departments of the organization to involve employees in innovative activities. Workers are important and presently called knowledge workers because they dealing with production process and machines. Today other support activities such as quality control, supply chain management, information technology, customer service and new product development have risen extensively. Johnson & Kaplan (1987) stated that western firms have realized that, to sustain in competitive market it is necessary to start looking at new management accounting tools. All this necessitates a far greater approach of management accounting and also a need to improve the flow of non-financial information. Literature states that management accounting is not recently developed; it was established in the 1920s for providing the basis for management control, effective cost management and performance measurement.

4. EVOLUTION OF MANAGEMENT ACCOUNTING

Mostly popular cost and management accounting techniques were developed during the nineteenth century and first quarter of the twentieth century (Johnson & Kaplan 1987). Managerial accounting systems developed during the nineteenth century and that time these were only used to examine the output of internally directed processes. In late nineteenth and early twentieth century the new cost management techniques were developed for analyzing productivity and increasing profits to firms. According to International Federation of Accountants Committee (IFAC 1998) the evolution of management accounting includes four main stages. These four stages cover the trends of management accounting from earlier 1950 to 1995 as described with figure below:

STAGE 1: PRIOR TO 1950

The main focus of management accounting was on cost determination and financial control by the use of budgeting and cost accounting technologies.

STAGE 2: BY 1965

The main focus of management accounting was on information for management planning and control due to the rising importance of the availability of information technology through the use of decision making analysis and responsibility accounting.

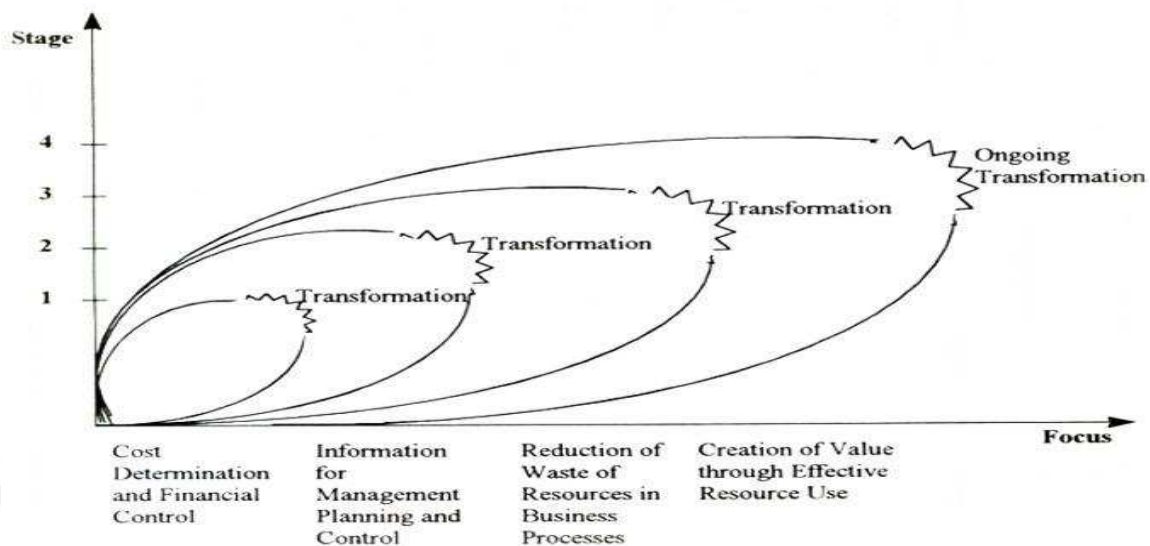
STAGE 3: BY 1985

Attention was turned to the reduction of waste of resources used in business processes by the use of process analysis, strategic management and cost management technologies.

STAGE 4: BY 1995

Consideration had shifted to the creation of value through the use of new technologies and the effective use of resources which examine the link among customers, shareholder and organizational innovation.

FIGURE 1.1: EVOLUTION OF MANAGEMENT ACCOUNTING
Evolution of Management Accounting



Source: Adapted from (IFAC 1998)

It is clear that management accounting has radically evolved within the last decades in response to the change in the business environment and companies have to reformulate their strategies in order to survive and remain competitive in the market. Largely management accounting has been shifting or changed from a narrow to broader activities and functions.

5. CHANGE IN MANAGEMENT ACCOUNTING PRACTICES

Management accounting practices may develop skills that enable a firm to handle its organizational business more competitively and it can enhance competitive advantage. Modern management accounting practices have built the skills of innovative costing methods. In last few decades many philosophies and principles were developed as new management accounting tools to manage cost or cost management to meet intense competition. Bastl et al. (2010) included activity based costing, lifecycle costing, target costing and kaizen costing mainly as the innovative methods. Many management accounting techniques have developed in order to respond to the increasing challenges in the competitive market. The traditional costing techniques have been used widely by the different companies and the contemporary costing techniques are being adopted at a slower rate (Adler et al. 2000). The modern management accounting techniques are being adopted by mainly big manufacturing companies. Sulaiman et al. (2004) grouped the management accounting techniques into traditional and contemporary techniques as presented in table 1.1.

TABLE 1.1: TRADITIONAL VERSUS MODERN/CONTEMPORARY MANAGEMENT ACCOUNTING TECHNIQUES

Traditional techniques	Contemporary techniques
<ul style="list-style-type: none"> • Absorption costing • Variable costing • Standard costing • Transfer pricing • Budgeting 	<ul style="list-style-type: none"> • Activity-based costing • Benchmarking • Target costing • Theory of constraints • Kaizen costing • Activity-based management • Economic Value Added • Strategic planning • Balanced Scorecard

Source: Adapted from (Sulaiman et al. 2004)

Literature shows that the majority of existing management accounting techniques has been developed after the 1950s. After 1950s the perception behind the recent management accounting techniques development was the attention to the working people and customers of organizations. Since 1950, above 30 cost and management accounting techniques have been developed (Smith 1999). Soutes et al. (2005) classified the management accounting techniques into different evolution stages of management accounting, (explained by International Federation of Accountants Committee) and these are:

- **Stage 1:** absorption costing, financial and operational control, variable costing and the annual budget.
- **Stage 2:** standard costing, activity based costing, capital budgeting and decentralization.
- **Stage 3:** value-based management, life cycle costing, transfer pricing, responsibility centers, target costing and kaizen costing.
- **Stage 4:** strategic planning, balanced scorecard, economic value added, market value added and performance measurement method.

Literature states that during 2000 the focus of management accounting was on controlling inventory and distribution costs with the integration of supply chain management. Each evolution stage of management accounting is established according to the changing conditions in the management environment. Kaplan (1994) outlined that the 1980s and 1990s were recognized as revolution regarding the innovation in management accounting procedures. Bjornenak & Olson (1999) also supported this observation by saying that in 1980s and 1990s many management accounting innovations or methods were supplied in the literature during the past three decades. However some management accounting innovations or methods received adequate attention by users. The management accounting covers various planning and control tools and concepts such as: costing systems such as job order costing, process costing, overhead allocation method, activity based costing, budgeting, target costing and target pricing, value engineering, standard costing and variance analysis as important managerial control tools (Horngren et al. 2006). Approaches such as activity based costing, activity based management, total quality management, target costing, kaizen costing and some other concepts emerged as modern cost management tools (Bonzemba & Okano 1998). Bjornenak & Olson (1999) identified the latest management accounting techniques which were as follows: activity-based costing, activity-based management, local information systems, balanced scorecard, life cycle costing, target costing and strategic management accounting. However, there is no universal consent in literature about constitution of techniques as recent management accounting innovations or methods (Cadez & Guilding 2008). The most popular developed techniques adopted by the Australian practitioners were activity based costing, activity based management, balanced scorecard, benchmarking, strategic management accounting and target costing (Chenhall & Langfield 1998). Different authors grouped management accounting techniques into traditional and modern techniques differently. Literature shows many management accounting techniques, finally some of these can be categorized into traditional and contemporary management accounting techniques as: (1) traditional management accounting includes techniques such as standard costing, absorption costing, normal costing, job order costing, process costing, transfer pricing and budgeting etc. (2) advanced or contemporary management accounting includes techniques such as activity-based costing, total-life-cycle costing, value chain analysis, target costing, kaizen costing and balanced scorecard etc. New management accounting methods have replaced earlier cost management procedures (Johnson & Kaplan 1987).

DRIVERS OF CHANGE IN MANAGEMENT ACCOUNTING

Horngren (1989) observed that in the late 1950's management accounting focused on advocating better practices in organization and relevant costs for special decisions and in the late 1980's the recent emergence of production and operations has increased the field of management accounting. During the last years a significant change had made in the cost accounting and management (Maher & Deakin 1994). This change was the result of many factors such as increasing competitive environment, the growth of worldwide markets, information technologies, the focus on the customer and change in the forms of organization (Blocher et al. 1999). Wu & Boateng (2010) discussed some factors that may be reasons of changing role of management accounting practices such as awareness of senior managers and employees, the size of an organization and foreign partners. In 1980s and 1990s innovations or new methods in management accounting had been identified (Kaplan 1994). Literature shows that the main motivation behind the introduction of innovations in management accounting as new methods can be linked with the criticisms of traditional cost and management accounting practices (Horngren 1995). The innovations in manufacturing processes, technology and information systems require essential innovations in cost and management accounting techniques and practices (Kellett & Sweeting 1991). Burns & Scapens (2000) observed that competitive economic situation of the 1990s or the global competition was the major driver of change in management accounting. In the changing business environment the traditional management accounting was not adequate to meet the business environment changes hence updated and modified managerial accounting systems were needed to provide different informational needs (Allot 2000). Lobo et al. (2004) pointed out both environmental and organizational factors that force change in management accounting as: (1) environmental factors included globalization of markets, increased competition, advances in information and production technologies and (2) organizational factors included core competencies, customer and supplier relationships, flatter organizational structures and team work. The traditional accounting techniques had failed to adapt these changes and these factors have changed the nature of management accounting. According to Allot (2000), the concept of management accounting includes its role is mainly to provide what managers need and want. Today management accounting has moved with wider issues in management.

CONCLUSION

Global market environment has changed the manufacturers' orientation regarding customers growing needs. Management accounting techniques and the scope of it are continuously increasing and changing in order to respond to the market environment changes and challenges faced by the organization. Management accounting plays very important role in the decision-making process of the company in several aspects. This paper concludes that nowadays management accounting is incorporated in the routine management practices of organisations. Management accounting has wide scope and it is helpful in cost management. The old techniques of management accounting have limited area of work but with the changes and passes of time new management accounting techniques have been developed to capture the voice of customers or to satisfy the needs of customers. The paper also suggests that to remain competitive in market companies should change their working thinking and should use new management accounting techniques to satisfy their customers because arrangements according to customer perspectives may help organisations in their survival.

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GENDER BUDGET STATEMENT: IS THE BIG BEAUTIFUL

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ABSTRACT

With the aim to use budget as an instrument to empower women Government of India integrated Gender Responsive budgeting (GRB) with its budgetary process and institutionalized this instrument through two prime strategies of Gender Budget Statements (GBSs) and Gender Budgeting Cells (GBCs). Consequent to this the final figure recorded under GBS each year has been treated, at least by the common man as proxy variable to assess Government commitments towards women issues. With this figure recording third highest place in latest budget of 213-14 following allocations of Ministry of Finance and Ministry of Defense common perception is that enough is being done on this front by public authorities. This paper goes in to details of composition of Gender Budget Statements and explains components that inflate this figure, without significantly contributing towards women empowerment, resulting in a wrong notion. Paper concludes with the result that if same methodology is followed in GRB then what appears big may not be necessarily beautiful.

KEYWORDS

Budget and Women, Gender Budgeting, Gender Budget Statements, Women Empowerment, Gender Equity.

INTRODUCTION

The realisation that inclusive growth will be elusive unless women are brought in the ambit of development provided necessary impetus for making our budgets Gender responsive. As such the globally accepted budgetary tool of Gender Responsive Budgeting (GRB) was adopted in India and for the first time in the History of Indian Budgeting Gender Budget Statement (GBS) appeared in union budget 2005-06. (Budget 2005-06) This statement that culminates into a one figure format culls out in monetary terms the efforts of various Ministries/Departments towards women development and consequent improvement of some development indicators pertaining to this fair but neglected sex. Its institutionalisation deserves appreciation as before this we had no simple measure to assess the sensitivity of union budget towards women issues even in broader sense. To make it more meaningful, since 2006-07 budget, figures are presented separately under part A and Part B to separate allocations exclusively meant for women from those benefitting women partially. The final figure obtained as sum of allocations under Part A and Part B has turned out to be a proxy variable, at least for a common man, lobby groups and various women activist groups to gauge gender sensitiveness of a budget. Consequent to this magnitude of GBS becomes a topic of discussion soon after budget for any particular financial year is presented because a big figure is perceived as beautiful as far as women issues are concerned. Perhaps for this reason critics were silent when total allocations under GBS were presented to be 97134 crore rupees in our latest budget 2013-14 (Budget 2013-14). Is it that figure was really beautiful? This paper tries to answer this question by going in to details of composition of this final figure and also exposes some flaws associated with the GBS format and Architecture of GRB as adopted in India.

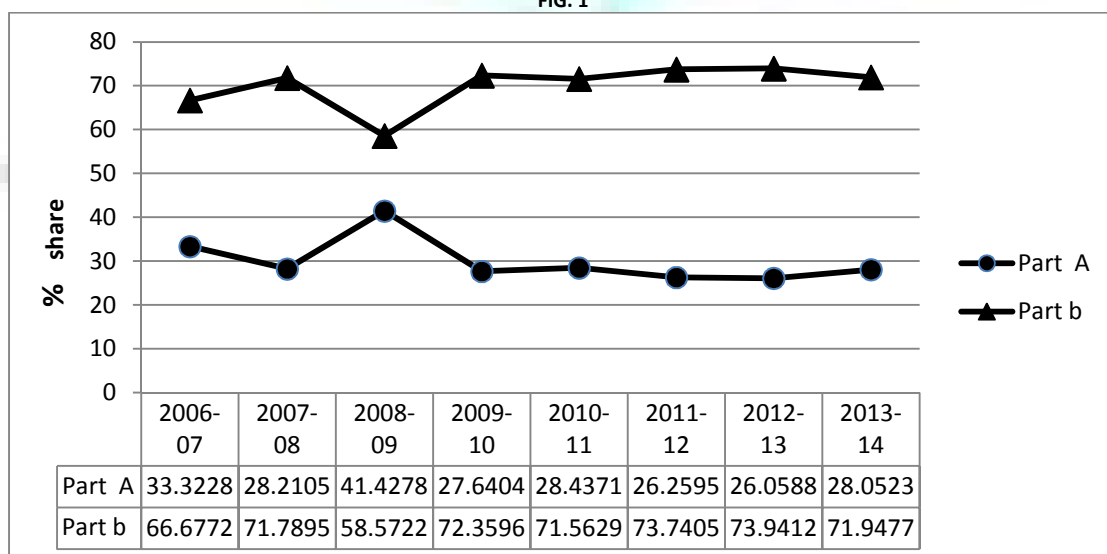
PLAN OF THE PAPER

This paper is divided in to two parts. Part A discusses the components of Gender Budget Statement (GBS) and explains that a Big total Presented under GBS may not necessarily be Beautiful in context of women empowerment. Part B explains some lacunae associated with design of GBS format and Structure of Gender Budgeting Cells (GBCs) as are in vogue at present in India.

PART A

At the very outset this points merits a mention that the total under GBS has maximum portion from Part B which is not Exclusively for women as such treating higher magnitude of GBS as indication of higher Gender Responsiveness is wrong and could have negative implications. Figure-1 gives a clear idea about the composition of this statement.

FIG. 1

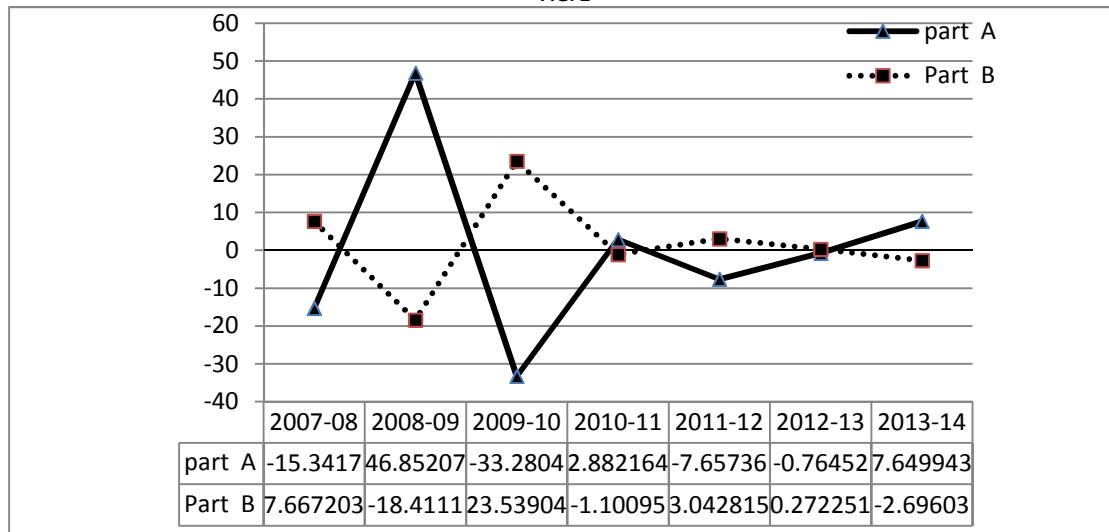


Source: Union Budgets since 2005-06

From graphic analysis it is clear that line depicting percentage share of allocations under part A had always been below the corresponding line for allocation under Part B. The average of all figures reveals that since 2005-06 on average 70% of allocations are from Part B and only 30% is from

Part B. This implies that actually only 30% of allocations represented under GBS is exclusively meant for women. Applying same reasoning to latest figure of 97134 crore Rupees one would accept that it was not as beautiful as it appeared in the first instance when it assumed the third highest position in budgetary allocation following allocations of Ministry of Finance and Defence. So whenever any such figure is presented this thing needs to be kept in mind that only 30% of his figure is Exclusively for women and for remaining 70% allocations there is ambiguity about their contribution towards women Development.

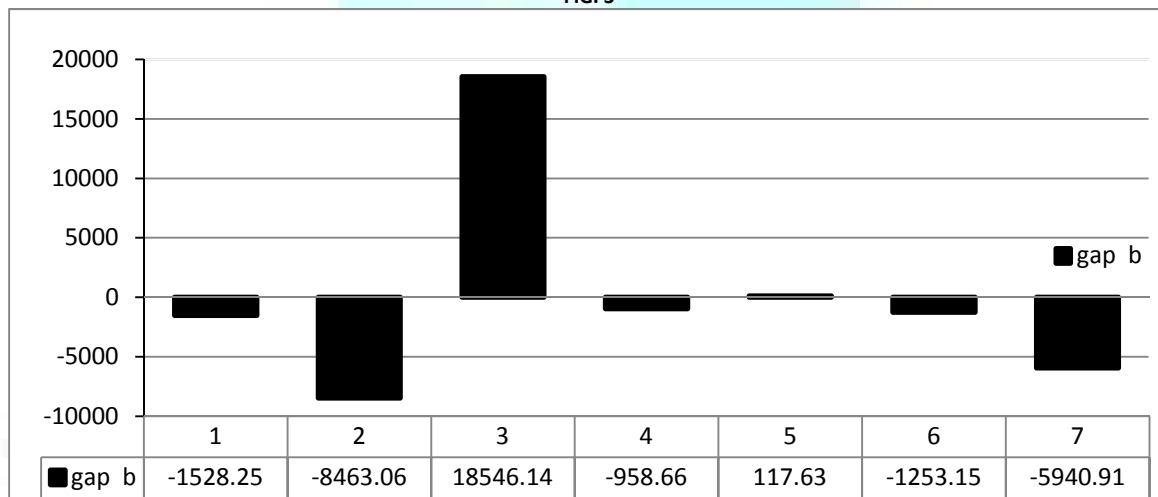
FIG. 2



Source: Union budgets since 2001 (GOI)

Another important revelation from data available so far is with regard to growth rate in the percentage shares of two parts. Graph in Fig. (02) shows that although in budget years 2008-09, 2010-11, 2013-14 growth rate had entered positive quadrant for allocations under Part A but every time it had fallen in to negative range in following year. Graphs of growth rates in percentage shares for both the Parts has been hovering around Zero implying no significant improvement as far as share of Part A allocations is concerned. More dismal revelation of analysis is that mean of growth rates for part A allocations so far is 0.0486% compared to 1.76% for part B thereby implying that if by any means there is some sort of improvement in mean percentage share then it is for Part B and not for Part A which is improvement in which is more desirable as far as Women issues are concerned. Once adding to the magnitude of GBS the problem of wrong notion of big beauty is further aggravated when one looks at the Revised Estimates (RE) of these figures usually available at the end of year. The graph in figure (03) reveals that for most of the years since the inception of this concept, Revised Estimates had turned out to be lesser than Budget estimates implying that a portion of what was earlier promised had really turned out to be just swelling factor for GBS total and was not actually spent even though they were not full meant for women. Out of seven year figures available so far, for five years (RE-BE) is negative and in budget year 2012-13 rupees it is 5940.91 crore Rupees which is a big amount in itself. This amount was promised, had swelled the GBS and were not spent finally during the financial year.

FIG. 3



Source: Union Budgets (GOI)

Further the figures under part B have a lot of ambiguity associated with them as no ministry comes forward with any definite methodology by which they compute that a minimum of 30% benefits of allocations reported under part B accrue to women (Yamini and Subrat, 2006). Some demands which are overwhelmingly ambiguous are presented for reference in table I.

TABLE I

Demand/Department	Policy /Programme	Allocations
Demand no. 30 , Ministry of Earth sciences	1.Ocean science and services 2.Atmospheric pressure and modelling services	91.00 79.00
Demand no. 48, Department of AYUSH	Central council for research in homeopathy	54.00
Demand no. 60 , Department of Higher Education	Grants for promotion of Indian languages	93.97
Demand No. 69, Ministry of New and Renewable Energy	1. solar cooker 2. Biogas programme	5.00 123.00

Source Budget Document 2013-14 (GOI)

How is it that grants used for promotion of Indian languages are depicted as allocations for improving the lot of women especially the ones who are at the bottom of the development ladder. Similarly how the allocations for oceanic services and atmospheric pressures bring poor and destitute women in the ambit of development. Suppose there is some logic behind then going by that logic shall we treat all Expenditures in space technology as women empowerment expenditures. These are some things that one should ponder over before we mention them under GBS resulting in its rather unnecessary swelling. Similarly under Part A an allocation of 11075.00 crore rupees have been shown to be meant exclusively for women under IAY scheme. The fact of the matter is that neither all the houses made available so for under this scheme have been allocated to female only nor the benefits of such houses are solely enjoyed by women. As such mentioning these allocations under part A is again doubtful. Thus with part B forming Major proportion of GBS and ambiguity surrounding the composition of this part and some Expenditures under Part A also not benefitting women alone one should think twice before accepting a big GBS figure as beautiful, at least in the context of women issues.

PART B

Though the glaring differences in the various welfare indicators pertaining to men and women in sectors like Education and health necessitate adoption of GRB as a budgetary tool to alleviate these figures for population as whole the heterogeneity within this sex needs to be factored in in order to make this tool more effective and meaningful. In this context some facts from Census 2011 merit a mention; for population aged 7 and above the total number of illiterates in India is 272950015 among which 17,63,81664 (64.62%) are women and 96568351(35.38%) are males. This surely justifies the adoption of GRB .however, equal attention should be placed on the fact that literacy rate among rural women is 58.75% compared to 79.92% among urban women. similarly among the marginal women workers (3-6 months) 88.72% are from rural areas whereas just 11.28% are from urban areas (*Census 2011*). These figures make it clear that as deprivation of women contributes towards the poor welfare indicators on the whole, in a similar way some particular groups of women contribute towards overall dismal figures for women as a group. So need is there to incorporate a targeted approach in GRB so as to have better results with minimal resources. In this context following demands in GBS need to be considered:

TABLE II

Ministry/Department	Policy/Programme	Allocations
Demand no. 14, Department of telecommunications	Amenities to staff	0.10
Demand No. 55, Police	Day care centre , washing drying/ women laundry	0.04

Source Budget Document 2013-14 (GOI)

These allocations are for women who are already cared for through salaries ,laundry facility to a women officer should not be treated as an effort towards inclusive growth in a country where we have destitute Dalit women. As such one important weak thing in our GRB is that it is more general in character. some particular groups of women need to be identified like Dalit women, widows, Destitute, women rescued from trafficking, differently abled women, illiterate and marginal women workers and allocations should be channelled towards schemes and programmes whereby they will be benefitted specifically. Thus heterogeneity should be factored in our approach of implementing GRB.

The format of GRB as adopted in India is Quantitative in character and as such demands an introspection too. It presents allocations in absolute terms with no corresponding assessment of previous years allocation with regard to its impact and without any corresponding targets for current year allocations. In absence of these qualitative features it seems more as a statistical exercise than a budgetary tool. As such there is a need to impart qualitative character to its format through a five step framework (*Budlender and Mahub, 2007*) that should be integrated with GRB. The five steps are:

1. Analysis of situation of men, women, boys and girls in a given sector.
2. Assessment of extent to which policies address the gender issues.
3. Assessment as to whether allocations are adequate in order to implement Gender Responsive policies.
4. Assessment of short term output of expenditures in order to evaluate how resources are actually spent and policies and programmes actually implemented.
5. Assessment of long term outcomes or impact these expenditures might have. Unfortunately Indian format seems to start at step three and end also at step three which may lead to mere wastage of resources. In this context following two formats as are in vogue in Indonesia and Punjab province of Pakistan may be considered for reference for imparting qualitative character to our own format.

Format of GRB (Punjab province of Pakistan)
Sub-programme name (where relevant)
Gender issue
Planned activities
Budget for previous and current financial year
Inputs (including target sand actual progress on ground)
Outputs (including targets and actual progress on ground)
Overall achievements

Indonesian GRB format
Name of ministry
Activity
Output
objective
situation analysis
Action plan
Budget allocation for activity output
Impact/result of activity output

Again GRB as is in vogue in India concentrates on Expenditure side only and it needs to be improved by adding revenue dimension to it. As such a Gender Disaggregated revenue analysis should be associated with it whereby various revenue collecting Ministries/Departments will assess how men and women are affected by different kind of revenues raised by them. At the same time they should explore any possibilities of differentiation in treatment towards men and women for revenue raising that may ultimately help in bringing about Gender Equity. For instance impact of different fee levels for boys and girls on female Enrolment and impact of subsidisation of women specific health facilities on health indicators, impact of lesser tax on women entrepreneurs etc. This would surely widen the concept of GRB and as such could help in many other ways to attain the ultimate goal of Gender Equity.

The analysis of flaws in GBS as mentioned above in no way implies that only this pillar of GRB in India needs some Renovation, in fact the other pillar of GRB ie Gender Budgeting Cells (GBCs) is also presenting the story of Weak architectural design of GRB in India. The As per the charter issued by Ministry of finance , with regard to its composition it was stated ;

“.....the gender budget cell should comprise a cohesive group of senior/middle level officers from the plan, policy, coordination, budget and accounts division of the ministry concerned. This group should be headed by an officer not below the rank of Joint Secretary. The functions an working of GB cell may be reviewed at least once a quarter at the level of secretary/additional secretary of the department.”(GOI,2007)

The main drawback with this guideline is that it had no provision for separate additional manpower to be associated with this exercise which had ultimately resulted in lesser working hours for this exercise by concerned officials and this lacunae had been experienced in many other countries also. Although this exercise was articulated as a priority in policy circles ,but as it was relegated as an additional charge upon people already associated with Government machinery for whom priority may be in some other issues this accounted for poor Gender Budgeting.

Secondly many officials from different sections of a Ministry/ Department were associated with this exercise with no clear mention of individual responsibilities leading to non seriousness of concerned people towards this exercise. However, assigning the task to a single person may not be suggested as a solution because experience of many countries has shown that if this exercise is made individual centric so has to have benefits of individual commitments then problems may get aggravated if concerned official is transferred or leaves the position for some other reasons. As such a separate technical group with clearly defined roles should be given a top priority with regard to composition of GBCs.

Further with regard to these GBCs it was provided that:

....influencing and effecting a change in Ministry's policies , programmes in a way that that could tackle gender imbalances, promote gender equality and development and ensure that public resources through ministry budget are allocated and managed accordingly. (GOI 2007).

Besides these three important functions outlined for GB cell in the charter are

- 1) To identify a minimum of three and maximum of six largest programmes (in terms of quantum of funds) in the concerned ministry for assessing its gender responsiveness.
- 2) To carry out performance audits for reviewing the actual physical/financial targets of the women oriented progammes, identify the constrains in implementation and finding out measures for strengthening delivery system, infrastructure/capacity building etc.
- 3) To organize meetings/discussions/consultations with Gender Budgeting cells of related Departments/Ministries for exchanging ideas and taking suggestions.

Further the success of GRB will be Determined by the extent of cross sectional work across various sectors and as such requires a coordination between different Ministries and departments as well. But GRB as adopted in India so far does not have any institutionalised mechanism to ensure such mechanism. So some central body is needed that will on one side ensure proper working of GBCs of different ministries and on the other hand coordinate their activities after framing a proper Gender Responsive Plan. In this context suggestions of Ashok Lahiri committee needs to be reviewed wherein it was recommended that an inter departmental steering Committee (ISC) be formed in addition to GBCs in Individual Ministries/departments. As per this report they should be involved in identifying and sharing “the issues of gender Budgeting which cut across departments for instance ,for instance the issues of Budgetary allocations related to domestic violence ,microfinance, homelessness etc” (GOI 2004:12). In this context some women related ministries need to come forward which will take a lead role in organising and coordinating the activities of GBCs as has been done in many other countries .In Cambodia for instance, Ministry of Women affairs convenes a technical group on gender every six weeks Which brings together all the gender focal points from different Ministries and Departments .In Indonesia Ministry of Finance ,women's Ministry ,planning agency along with Ministry of Home Come to constitute a steering committee and have taken a lead as drivers of GRB in Indonesia. In Nepal within Ministry of finance a Gender Responsive Budget committee with representatives from National Planning Commission, Ministry of Women, children and social Welfare and Ministry of local development had been assigned the task of coordinating such activities. So, in India also some women related Ministry preferably Ministry of Women and Child Development should take lead in this direction so as to coordinate activities of GBCs of various Departments /Ministries and frame a mechanism for carrying out Gender Responsive Planning that should precede formulation of Gender Budget of any Ministry /Department. In this context there is also need to organise training programmes and workshops for officials of the different Ministries/Departments so as to develop Technical expertise for this exercise. The interdepartmental discussions over Gender Budgeting as was envisaged in the functions of GBCs are also no where in report and such discussions need to be encouraged so as to reactivate these GBCs for better results.

CONCLUSION

Integrating GRB with our budgetary process was a good beginning as an effort to bring women in the ambit of development and head towards inclusive growth. However, in India stress has been on just enlarging the final figure under GBS as a result of which some demands mentioned under this statement need to be re-examined which otherwise gives a wrong notion about government efforts towards women issues, at least to a common man for whom this figure is a proxy for women oriented allocations. Further , the format needs to be improved by imbining qualitative features in it so as to assess allocations against achievements. The GBCs also need to be restructure as far as the composition and its activities are concerned with a special thrust on developing the necessary technical manpower for this exercise.

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CREATING AN OPTIMAL PORTFOLIO ON S&P BSE SENSEX USING SHARPE'S SINGLE INDEX MODEL

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ABSTRACT

This is an attempt to construct an optimal portfolio consisting of securities of S&P BSE SENSEX using Sharpe Single index model. Taking S&P BSE SENSEX as market performance index and considering daily indices along with the daily prices of 30 securities of the S&P BSE SENSEX for the period of April 2008 to March 2013, variance of the market index and variance, beta, systematic risk and unsystematic risk of each security is calculated. In arriving at optimal portfolio, the emphasis of Sharpe model is on Beta and on the Market Index. The securities are selected on the basis of unique cut-off rate. The optimal portfolio consists of those securities whose excess return to beta ratio is greater than the cut-off rate. Once the choice of securities is made, the proportion of investment in each of the selected securities is computed on the basis of beta value, unsystematic risk, excess return to beta ratio and cut-off rate of each of the securities concerned. The study finds that optimal portfolio consists of securities of nine companies namely Dr Reddy's Lab ,Bajaj Auto, Hero MotoCorp, Hindustan Unilever, TCS, Sun Pharma, Cipla, Infosys, and ITC with maximum suggested investment in Dr Reddy's Lab followed by Bajaj Auto, Hero MotoCorp, Hindustan Unilever, TCS, Sun Pharma, Cipla, Infosys, and ITC respectively.

KEYWORDS

Beta, Market variance, Residual variance, Optimal portfolio, Single index model.

JEL CLASSIFICATION

G11

INTRODUCTION

The objective of every rational investor is to maximize his return and minimise the risk. Portfolio is the combination of sets of assets of financial nature. Securities carry different degrees of expected risk. Most investor hope that if they hold several assets, even if one goes bad, the others will provide some protection from an extreme loss. By constructing a portfolio, investors attempt to spread risk by not putting all eggs into one basket. The goal of portfolio construction would be to generate a portfolio that provides the highest return at a given level of risk or lowest risk for a given level of return. Such a portfolio would be known as the optimal portfolio .It is an efficient portfolio most preferred by an investor because its risk/reward characteristics approximate the investor's utility function.

Markowitz model had serious practical limitation due to the rigours involved in compiling the expected returns, standard deviation, variance, co-variance of each security to every other security in the portfolio. Sharpe model has simplified this process by relating the return in a security to a single market index.

OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1. To construct an optimal portfolio using Sharpe's Single Index Model i.e. to find out the type of scrips on S&P BSE SENSEX in which investment is to be made and to find out the proportion to be invested in a particular selected scrip in the portfolio.
2. To find out the scrips that gives the maximum reward to risk in comparison to other scrips.
3. To guide investors to find out the company that gives the maximum return with minimum risk.

DATA AND METHODOLOGY

The data taken for the study is secondary in nature. For this purpose S&P BSE SENSEX is taken as the market performance index. The data has been collected from the official website of Bombay Stock Exchange (BSE), namely www.bseindia.com. The study is conducted with the price data of 30 scrips of S&P BSE SENSEX for the past five years from April 2008 to March 2013. For determining daily return of S&P BSE SENSEX, daily indices data for the period of April 2008 to March 2013 are taken into consideration. Similarly for determining the daily return of 30 securities of S&P BSE SENSEX, daily prices of each security for the period of April 2008 to March 2013 are taken into consideration. On the basis of computed return, variance of market index, variance of each security, beta (β) value , systematic risk and unsystematic risk of each security is calculated. Ranking of the stocks are done on the basis of their excess return to beta ratio from highest to lowest. The cut off rate (C_i) for each security is also calculated. Those securities whose 'Excess Return-to-Beta Ratio' is greater than the cut off rate are selected. Then to arrive at the optimal portfolio, the proportion of investment in each of the selected securities in the optimal portfolio is computed on the basis of beta value, unsystematic risk, excess return to beta ratio and cut-off rate of each of the securities concerned. Different Statistical and financial tools and techniques, and charts have been used for the purpose of analysis and interpretation of data.

1) RETURN

The daily return on each of the selected stocks is calculated with the following formula.

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

Where,

P_{it} , P_{it-1} are the share price at time t and t-1 for security.

2) RISK

The essence of risk in investment is the variation in its returns. The total variability in returns of a security represents the total risk of that security. Systematic risk and unsystematic risk are the two components of total risk.

The variance of securities has two components namely, systematic risk and unsystematic risk or unique risk. According to Sharpe, the variance explained by the market index is referred to as systematic risk. The unexplained variance is called residual variance or unsystematic risk. It follows:

Total risk of a security = Systematic risk + unsystematic risk

$$\text{Systematic Risk} = \beta^2 \times (\text{Variance of index})$$

$$\text{Systematic Risk} = \beta_i^2 \times \sigma_m^2$$

$$\text{Unsystematic Risk} = \text{Total variance} - \text{Systematic risk}$$

$$\sigma_{ei}^2 = \sigma_i^2 - \text{systematic risk}$$

Thus, the total risk = systematic risk + unsystematic risk

$$= \beta_i^2 \times \sigma_m^2 + \sigma_{ei}^2$$

From this, the portfolio variance can be derived.

$$\sigma_p^2 = \left[\left(\sum_{i=1}^N X_i \beta_i \right)^2 \times \sigma_m^2 \right] + \left[\sum_{i=1}^N X_i^2 \sigma_{ei}^2 \right]$$

Where,

$$\sigma_p^2 = \text{Variance of portfolio}$$

$$\sigma_m^2 = \text{Expected variance of index}$$

$$\sigma_{ei}^2 = \text{Variation in security's return not related to the market index.}$$

$$X_i = \text{Proportion of stock 'i' in the portfolio.}$$

3) SHARPE'S OPTIMAL PORTFOLIO

The optimal portfolio selection technique used by Sharpe is called 'Single Index Model'. As per this model the desirability of a stock to be included in optimal portfolio is directly related to its excess return to beta ratio:

$$(R_i - R_f) / \beta_i$$

Where,

$$R_i = \text{Expected return on stock i}$$

$$R_f = \text{Return on risk free asset}$$

$$\beta_i = \text{Percentage change in the rate of return on stock i associated with one unit change in the market return.}$$

The excess return is the difference between the expected return on the stock and the risk less rate of interest such as the rate offered on the governmental securities or treasury bills. The excess return to beta ratio measures the additional return on a security per unit of systematic risk or non-diversified risk. This ratio provides a relationship between potential risk and reward.

Ranking of the stocks are done on the basis of their excess return to beta. The selection of the stocks depends on a unique cut off such that all stocks with higher

ratios of $\frac{(R_i - R_f)}{\beta_i}$ are included and the stocks with lower ratio are left off. The cut-off point is denoted by C^* .

The steps for finding out the stocks to be included in the optimal portfolio are given below:

- i. Find out the "excess return to beta" ratio for each stock under consideration.
- ii. Rank them from the highest to the lowest (in descending order).
- iii. Proceed to calculate C_i for all the stocks according to the ranked order using the following formula.

$$C_i = \frac{\sigma_m^2 \sum_{i=1}^N \frac{(R_i - R_f)\beta_i}{\sigma_{ei}^2}}{1 + \sigma_m^2 \sum_{i=1}^N \frac{\beta_i}{\sigma_{ei}^2}}$$

Where,

$$\sigma_m^2 = \text{variance of the market index}$$

$$\sigma_{ei}^2 = \text{variance of a stock's movement that is not associated with the movement of the market index i.e. stock's unsystematic risk.}$$

- iv. The cumulated values of C_i start decline after a particular point and that point is taken as the cut-off point and that stock ratio is cut-off ratio C^* . Once we know which securities are to be included in the optimum portfolio, we must calculate the percentage invested in each security.

The percentage involved in each security is:

$$X_i = \frac{Z_i}{\sum_{i=1}^N Z_i}$$

Where,

$$Z_i = \frac{\beta_i}{\sigma_{ei}^2} \left(\frac{(R_i - R_f)}{\beta_i} - C^* \right)$$

ANALYSIS AND FINDINGS

TABLE 1: DATA NEEDED TO CONSTRUCT OPTIMAL PORTFOLIO USING SHAPE'S INDEX MODEL

SR No.	Company Security (i)	Mean Daily Return (R _i)	Variance (σ _{ei} ²)	Standard Deviation (σ _i)	Beta (β _i)	Systematic Risk (β _i ² σ _m ²)	Unsystematic Risk (σ _{ei} ²)
1	Dr Reddys Lab	0.10587	3.552094	1.8847	0.395038	0.462892	3.089201
2	Bajaj Auto	0.134083	7.53156	2.744369	0.658242	1.29689	6.23467
3	Hero MotoCorp	0.083699	4.114386	2.028395	0.454113	0.61169	3.502695
4	Hindustan Unilever	0.068432	2.871017	1.694408	0.404926	0.486356	2.384662
5	TCS	0.094169	7.556629	2.748932	0.852284	2.154628	5.402001
6	Sun Pharma	0.051847	8.700109	2.949595	0.35899	0.382267	8.317842
7	Cipla	0.060821	3.310053	1.819355	0.470215	0.655836	2.654217
8	Infosys	0.078726	4.291539	2.071603	0.736648	1.609621	2.681918
9	ITC	0.06261	5.21863	2.284432	0.539926	0.864712	4.353917
10	Maruti Suzuki	0.062163	5.141974	2.267592	0.71372	1.510982	3.630992
11	Mahindra & Mahindra	0.073629	9.268295	3.044388	0.994635	2.934476	6.33382
12	ICICI Bank	0.074216	9.658521	3.107816	1.552099	7.145656	2.512865
13	SBI	0.052181	6.548902	2.559082	1.132718	3.805806	2.743096
14	Tata Motors	0.051384	15.6269	3.953088	1.267735	4.767167	10.85973
15	Wipro	0.041025	6.665128	2.581691	0.870694	2.248714	4.416415
16	HDFC Bank	0.027695	9.681016	3.111433	0.946455	2.657073	7.023943
17	HDFC	0.010552	11.58279	3.403351	1.140069	3.855365	7.72743
18	Hindalco Inds	0.00029	9.841144	3.13706	1.273923	4.813818	5.027325
19	Gail India	0.006389	5.468865	2.338561	0.730116	1.581198	3.887667
20	Tata Steel	-0.011443	9.947348	3.153942	1.367515	5.54712	4.400228
21	L&T	-0.013242	8.463252	2.909167	1.152134	3.937398	4.525854
22	Jindal Steel	-0.022365	14.33763	3.786506	1.16981	4.059135	10.27849
23	Coal India	-0.001661	3.091509	1.758269	0.577636	0.40177	2.689739
24	NTPC	-0.009163	3.343628	1.828559	0.678299	1.364724	1.978904
25	ONGC	-0.017813	9.200504	3.033233	0.779678	1.803157	7.397347
26	RIL	-0.043432	8.012813	2.830691	1.179131	4.124082	3.888731
27	Sterlite Inds	-0.066347	14.87481	3.856788	1.321674	5.181458	9.693357
28	Bharti Airtel	-0.03729	7.920908	2.814411	0.819532	1.992209	5.928698
29	Tata Power	-0.059658	12.12656	3.482322	0.910252	2.457687	9.668876
30	BHEL	-0.095619	11.10009	3.331679	1.037096	3.190372	7.909714

Variance of Market Index (σ_m²) = 2.966218

R_f = 8% p.a. = 0.02192% Per Day (Based on approximate Return on Central and State Government Securities.

Return is calculated from Daily share prices of securities and daily market index (Period: 1 April, 2008 – 31 March, 2013) & the Data Source is www.bseindia.com)

Source: Own Compilation with Excel,

TABLE 2: RANKING OF SECURITIES ON THE BASIS OF EXCESS RETURN TO BETA VALUE

Company	R _i	R _f	β _i	R _i - R _f	$\frac{R_i - R_f}{\beta_i}$	Ranking
ITC	0.06260997	0.02192	0.539926	0.04068997	0.07536212	9
RIL	-0.043431757	0.02192	1.17913106	-0.0653518	-0.0554237	26
Infosys	0.078726269	0.02192	0.73664841	0.05680627	0.07711449	8
HDFC Bank	0.027695477	0.02192	0.94645546	0.00577548	0.00610222	16
HDFC	0.010552333	0.02192	1.14006919	-0.0113677	-0.009971	17
ICICI Bank	0.074216076	0.02192	1.55209932	0.05229608	0.03369377	12
TCS	0.094169305	0.02192	0.85228447	0.07224931	0.08477135	5
Hindustan Unilever	0.068431506	0.02192	0.40492574	0.04651151	0.11486429	4
L&T	-0.013241878	0.02192	1.15213428	-0.0351619	-0.0305189	21
ONGC	-0.017813352	0.02192	0.77967783	-0.0397334	-0.0509612	25
Tata Motors	0.051384108	0.02192	1.26773548	0.02946411	0.02324153	14
SBI	0.052181238	0.02192	1.13271791	0.03026124	0.0267156	13
Bharti Airtel	-0.037289929	0.02192	0.81953202	-0.0592099	-0.0722485	28
Sun Pharma	0.051846863	0.02192	0.35898982	0.02992686	0.0833641	6
Mahindra & Mahindra	0.073628827	0.02192	0.99463493	0.05170883	0.05198774	11
Dr Reddys Lab	0.105870079	0.02192	0.39503767	0.08395008	0.21251158	1
NTPC	-0.009163233	0.02192	0.67829853	-0.0310832	-0.0458253	24
Bajaj Auto	0.134082926	0.02192	0.65824186	0.11216293	0.17039774	2
Wipro	0.041025065	0.02192	0.87069399	0.01910507	0.02194234	15
Cipla	0.06082074	0.02192	0.47021466	0.03890074	0.08272975	7
Maruti Suzuki	0.062163443	0.02192	0.71372036	0.04024344	0.05638545	10
Coal India	-0.001660912	0.02192	0.57763615	-0.0235809	-0.0408231	23
Hero MotoCorp	0.083699191	0.02192	0.45411336	0.06177919	0.13604354	3
Gail India	0.006388705	0.02192	0.73011559	-0.0155313	-0.0212724	19
Tata Steel	-0.011442531	0.02192	1.36751539	-0.0333625	-0.0243965	20
Tata Power	-0.059657737	0.02192	0.91025225	-0.0815777	-0.089621	29
Hindalco Inds	0.000290436	0.02192	1.27392338	-0.0216296	-0.0169787	18
BHEL	-0.095619005	0.02192	1.03709636	-0.117539	-0.1133347	30
Sterlite Inds	-0.066347329	0.02192	1.32167425	-0.0882673	-0.0667845	27
Jindal Steel	-0.02236496	0.02192	1.16980963	-0.044285	-0.0378566	22

Source: Own Compilation with Excel

From Table-2 it is clearly seen that the security of Dr Reddy's Lab, having the highest excess return to beta ratio (0.21251158), occupies the first place. The security of Bajaj auto, having the second highest excess return to beta ratio (0.17039774), occupies the second place. In this way, Hero MotoCorp is third and Hindustan Unilever is fourth and so on. The security of BHEL occupies the last place within the data set.

TABLE 3: CALCULATIONS FOR DETERMINING THE CUT OFF RATE (C_i), WHERE, $\sigma_m^2 = 2.966218$, $R_f = 8\%$ p.a. = 0.02192% PER DAY

Rank	Company	$\frac{R_i - R_f}{\beta_i}$	$\frac{(R_i - R_f)\beta_i}{\sigma_{ei}^2}$	$\sum_{i=1}^N \frac{(R_i - R_f)\beta_i}{\sigma_{ei}^2}$	$\frac{\beta_i^2}{\sigma_{ei}^2}$	$\sum_{i=1}^N \frac{\beta_i^2}{\sigma_{ei}^2}$	C_i
1	Dr Reddys Lab	0.212512	0.010735	0.010735	0.050516	0.050516	0.0276935
2	Bajaj Auto	0.170398	0.011842	0.022577	0.069496	0.120012	0.0497179
3	Hero MotoCorp	0.136044	0.008009	0.030587	0.058874	0.178886	0.0592746
4	Hindustan Unilever	0.114864	0.007898	0.038485	0.068758	0.247644	0.0658109
5	TCS	0.084771	0.011399	0.049883	0.134467	0.382111	0.0693557
6	Sun Pharma	0.083364	0.001292	0.051175	0.015494	0.397605	0.0696511
7	Cipla	0.08273	0.006892	0.058067	0.083302	0.480907	0.0709829
8	Infosys	0.077114	0.015603	0.07367	0.202337	0.683244	0.0721988
9	ITC	0.075362	0.005046	0.078716	0.066956	0.750199	0.0723936
10	Maruti Suzuki	0.056385	0.00791	0.086626	0.140291	0.890491	0.0705642
11	Mahindra & Mahindra	0.051988	0.00812	0.094746	0.156193	1.046684	0.0684674
12	ICICI Bank	0.033694	0.032301	0.127047	0.958672	2.005355	0.0542362
13	SBI	0.026716	0.012496	0.139543	0.467738	2.473093	0.0496556
14	Tata Motors	0.023242	0.00344	0.142983	0.147992	2.621085	0.0483342
15	Wipro	0.021942	0.003767	0.146749	0.171657	2.792742	0.0468867
16	HDFC Bank	0.006102	0.000778	0.147528	0.127532	2.920274	0.0452899
17	HDFC	-0.00997	-0.001677	0.145851	0.168201	3.088475	0.0425766
18	Hindalco Inds	-0.01698	-0.005481	0.14037	0.322812	3.411287	0.0374477
19	Gail India	-0.02127	-0.002917	0.137453	0.137118	3.548405	0.0353755
20	Tata Steel	-0.0244	-0.010369	0.127084	0.425	3.973405	0.0294823
21	L&T	-0.03052	-0.008951	0.118133	0.293296	4.266701	0.0256598
22	Jindal Steel	-0.03786	-0.00504	0.113093	0.133138	4.399838	0.0238746
23	Coal India	-0.04082	-0.005064	0.108029	0.124051	4.523889	0.0201758
24	NTPC	-0.04583	-0.010654	0.097375	0.232497	4.756386	0.0191174
25	ONGC	-0.05096	-0.004188	0.093187	0.082178	4.838563	0.0180047
26	RIL	-0.05542	-0.019816	0.073371	0.357533	5.196096	0.0132601
27	Sterlite Inds	-0.06678	-0.012035	0.061336	0.180208	5.376305	0.0107354
28	Bharti Airtel	-0.07225	-0.008185	0.053151	0.113285	5.48959	0.009122
29	Tata Power	-0.08962	-0.00768	0.045471	0.085693	5.575283	0.0076908
30	BHEL	-0.11333	-0.015411	0.03006	0.135981	5.711264	0.0049699

Source: Own Compilation with Excel

All the stocks with $(R_i - R_f) / \beta_i > C^*$ are selected. The cumulated values of C_i start declining after a particular C_i and that point is taken as the cut-off point.

The highest value of C_i is taken as the cut-off point that is C^* . From the Table 3, it is seen that stock of ITC has the highest cut-off rate of $C^* = 0.0723936$. For the

$$\frac{(R_i - R_f)}{\beta_i}$$

securities having the rank of 1 to 9, $\beta_i > C^*$. Hence the optimum portfolio consists of securities ranked 1 to 9 i.e. Dr Reddy's Lab, Bajaj Auto, Hero MotoCorp, Hindustan Unilever, TCS, Sun Pharma, Cipla, Infosys, and ITC.

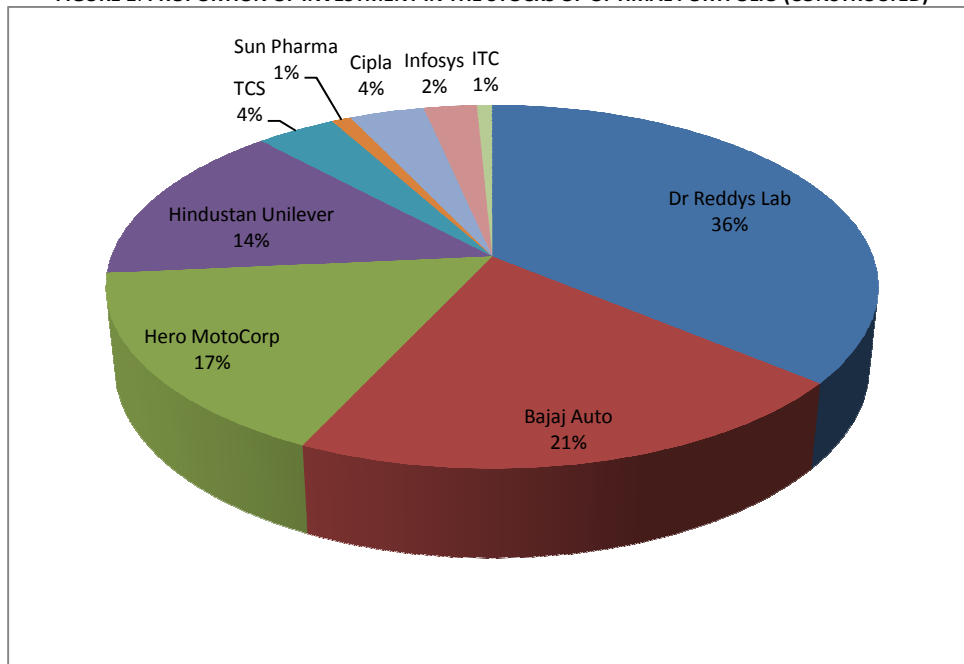
TABLE 4: CALCULATION OF Z_i AND X_i FOR THE SELECTED SECURITIES IN THE OPTIMAL PORTFOLIO

Company	$\frac{\beta}{\sigma_{ei}^2}$	$\frac{R_i - R_f}{\beta_i}$	Z_i	X_i
Dr Reddys Lab	0.127876956	0.212512	0.0179178	36.08795
Bajaj Auto	0.105577666	0.170398	0.010347	20.83973
Hero MotoCorp	0.129646835	0.136044	0.008252	16.62014
Hindustan Unilever	0.16980426	0.114864	0.0072116	14.52483
TCS	0.157771987	0.084771	0.0019528	3.933099
Sun Pharma	0.043159011	0.083364	0.0004735	0.953585
Cipla	0.177157603	0.08273	0.0018311	3.687899
Infosys	0.274672219	0.077114	0.0012966	2.611436
ITC	0.124009243	0.075362	0.0003681	0.741333
			$\sum Z_i = 0.0496504$	$\sum X_i = 100$

From Table-4 it is seen that the proportion of investment to be made for each of the nine securities in the optimal portfolio of stocks viz. Dr Reddy's Lab ,Bajaj Auto, Hero MotoCorp, Hindustan Unilever, TCS, Sun Pharma, Cipla, Infosys, ITC are 36.09%, 20.84%, 16.62%, 14.52%, 3.933%, 0.954%, 3.688%, 2.611%, 0.741% respectively. Among nine securities selected for the investment, three companies viz. Dr Reddy's Lab, Sun Pharma, and Cipla belongs to pharmaceuticals sector, two companies viz. Bajaj Auto, Hero MotoCorp belongs to automobile sector, two companies viz. Hindustan Unilever, TCS belongs to FMCG sector and two companies viz. TCS and Infosys belongs to IT sector.

The proportion of stocks in the composition of optimal portfolio can be shown in the following Pie diagram (Figure 1):

FIGURE 1: PROPORTION OF INVESTMENT IN THE STOCKS OF OPTIMAL PORTFOLIO (CONSTRUCTED)



CONCLUSION

By constructing a portfolio, investors attempt to spread risk by not putting all eggs into one basket. Sharpe model has simplified the process of constructing portfolio by relating the return in a security to a single market index. Out of the 30 stocks that are included in S&P BSE SENSEX, nine stocks namely Dr Reddy's Lab, Bajaj Auto, Hero MotoCorp, Hindustan Unilever, TCS, Sun Pharma, Cipla, Infosys, ITC are included in the Optimal Portfolio constructed in this study with maximum suggested investment in Dr Reddy's Lab followed by Bajaj Auto, Hero MotoCorp, Hindustan Unilever, TCS, Sun Pharma, Cipla, Infosys, ITC respectively. The portfolio is well diversified consisting of securities from pharmaceuticals, automobile, FMCG and IT sectors.

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INNOVATION IN RURAL MARKETS: A CASE STUDY OF PROJECT SHAKTI BY HUL**CHIRAG V. ERDA****ASST. PROFESSOR****GYANYAGNA COLLEGE OF SCIENCE & MANAGEMENT (ATMIYA INSTITUTE)****RAJKOT****ABSTRACT**

Most marketers realize that India is passing from incredible change. The economy is vibrant, incomes are rising; and the habits, preferences, and attitudes are changing rapidly. But nowhere is this more evident than in rural India. There is, thus emerging need to build expertise in rural marketing. There are main three challenges of rural marketing first one is challenge of reach, second is challenge of awareness and the third one is challenge of influence. Number of organizations now uses innovative strategies to overcome these challenges. Project Shakti by Hindustan Unilever Limited (HUL) was initiated to reach the massive un-served and under-served markets that cannot be economically and effectively serviced through traditional methods. HUL identifies underprivileged women in villages and these women are trained to become Shakti Entrepreneurs (SEs) i.e. distributors of HUL products in villages to earn a sustainable income through this business. The present case explores how innovative developmental marketing initiatives undertaken by the organization are not only benefits to themselves but also changes the lives of people in a very positive manner with reference to social, economical and psychological impact. The concept of fortune at the bottom of pyramid is also very much pragmatic from this case.

JEL CODE

M31

KEYWORDS

Bottom of Pyramid, Developmental Marketing, Innovative distribution Model, Micro entrepreneur, Rural Marketing.

INTRODUCTION

Rural market potential in India is so huge that a mere one percent increase in India's rural income translates to Rs. 1,00,000 million of buying power (Dobhal, 2002). Trends indicate that rural markets are growing twice as fast as those in urban India (Vaishali, 2007). Infact, rural is already a bigger market than urban in case of FMCG (53 percent) and durables (59 %) (NCAER, 2003). Rural consuming class is growing at an annual rate of 3 to 4 percent, which translates into 1.2 million new consumers every year (Financial Express, 2002). The number of middle income and high-income households in rural India is expected to reach 111 million by 2007 from the current 80 million (NCAER, 2003). Money available to spend on FMCG products by urban India is Rs. 495,000 million as against is Rs. 635,000 million in rural India (Kannan, 2001).

INNOVATIVE DISTRIBUTION MODELS

Reaching rural market with products and services is an enormous task because of the geographical spread of the market and the widely dispersed population. The distribution of products and services to this market therefore involves high cost and effort. The marketers of consumer non-durables use the fixed location retail shop to reach the rural consumer. The high costs for marketers in servicing the rural retail shops and the non-availability of fixed location retail shops have necessitated many marketing organizations to explore alternative channels to reach rural consumers. The alternative channels that marketers use include the haats (periodic markets), Self-help groups (SHGs), IT-kiosks, mobile traders, network marketing/agents etc (Velyudhan, 2007).

With the entry of new players in rural markets, marketers are innovating new cost-effective approaches to reach these markets. Looking at the bottlenecks of rural distribution, the solution is likely to centre on maximizing the existing infrastructure and ensuring the participation and economic sustainability of all the stakeholders. The SHG distribution model (Project Shakti), satellite distribution, syndicated distribution, the NYKS model (Project Disha), use of IT kiosks (e-Choupal), PDS, cooperatives, petrol pumps, agricultural input dealers and other unconventional channels of distribution are recent initiatives in this direction.

PROJECT SHAKTI – BACKGROUND

By the late 1990's, though the company had a vast reach and was the market leader, it was looking for the next big opportunity. The aim was to get to really small villages not reached by their distribution network.

India is the second largest country in terms of population size after China and over 70% of its more than one billion people live in rural areas. While the business rationale was clear, setting up a distribution channel to reach remote parts of India was less straightforward. We were tapping into some of the rural populations through tools such as van road shows, but a large share remained outside its reach.

Hence we came up with an interesting solution: build a distribution system through a network of women micro-entrepreneurs to get the product directly to consumers. The solution also aimed to assist rural entrepreneurs to start businesses and improve living conditions in their regions. The business objective was to extend our direct reach into untapped markets and to build brands through local influencers. The social objective was to provide sustainable livelihood opportunities for underprivileged rural women. The model proved to be an excellent way of tapping the fortune at the 'bottom of the pyramid'. (www.hul.co.in/sustainable-living/)

THE WIN – WIN DEVELOPMENTAL MARKETING MODEL

Hindustan Lever's Project Shakti was targeted at strengthening the company's FMCG rural distribution drive, as HUL saw several opportunities in this field. Initiated under the umbrella of New Ventures division of the company, the project sought to stimulate demand and consumption through the direct-to-consumer approach. Since its inception and pilot in 50 villages of Andhra Pradesh in 2001, Project Shakti has spread over 260 districts across 12 states.

A strategic combination of micro credit and training in enterprise management leads to the transformation of women members of Self Help Group (SHGs) into direct-to-home distributors of HUL products. Women members of thrift-credit groups (SHGs) organized by the government can avail micro credit from rural bank to promote income-generating activities aimed at poverty eradication and women's empowerment. They were identified as a potential channel of distribution, due to their widespread presence (there are 4.36 lakh such groups in Andhra Pradesh alone) across rural areas.

Interested women from SHGs were appointed as Shakti entrepreneurs; they borrow money from their group corpus and provide services to 6-10 villages, covering a population of 6,000-10,000. They receive stocks from HUL rural distributors and make sales to both retailers and direct consumers in villages. HUL and MART, the implementing agency of the project, countered the initial problems of high dropout rates by carefully choosing stable SHGs that had existed for more than three years, ensuring a minimum of three visits by Shakti animators, hosting Shakti days for enhanced awareness about the program, as well as developing scalable, simple and easily understandable modules on enterprise training and health/hygiene. Capacity building of the women is an important component of Project Shakti; they are provided support till they enhance their entrepreneurial abilities.

Project Shakti is often described as a win-win initiative with multiple players, as it has proven to be useful for all stakeholders. It has meant increased penetration into the rural market for HUL and the ability to reach out to small villages that are often left out of the distribution circuit. HUL earlier had only

70,000 villages in its ambit, but after the launch of Project Shakti this number has more than doubled. Small villages below 2,000 population size are most common in rural areas, according to the Census of India 2001, but ironically these get left out in conventional distribution channels due to their poor approachability or scattered nature. Project Shakti, however, was able to counter this problem and succeeded in penetrating into small villages as well. The creation of this one-to-one sales channel that reaches the final consumer is unique; it has created credible and effective brand endorsers at the grass-root level, an achievement that is beyond the scope of most media. In the first phase of the experimentation itself, the company saw incremental sales of 8-10 per cent in rural Andhra Pradesh. This innovative distribution channel has been able to reach rural markets at the bottom of the pyramid, while achieving double digit savings in costs as compared to using independent rural sales agencies.

ECONOMIC AND SOCIAL BENEFITS

For the rural consumer, this has meant the procurement of authentic and quality products at appropriate pricing. The biggest beneficiaries are the Shakti entrepreneurs, who in some cases have been able to augment their income up to Rs. 1,000. Rural women who were underprivileged until very recently today beam with confidence, thanks to their newly acquired entrepreneurial skills, financial empowerment and enhanced self-esteem.

SHAKTI ENTREPRENEUR

Sales \$250/month & \$3,000/year

Earnings about 7%, after 3% goes towards principal (250) and interest

Improves her per-capita income by about 50% to 100%

So, Social Benefit equals \$20 to \$30 million

HUL

Sales Turnover of about \$250 million

If all goes well, Net Margins of about \$25 million

PERFORMANCE & TARGET

Under the project Shakti 45,000 entrepreneurs – Shakti Ammas were selling products to over 3 million households in 1,00,000 Indian villages in 2011. The target is to increase the number of Shakti entrepreneurs from 45,000 in 2010 to 75,000 in 2015. (www.hul.co.in/sustainable-living/)

FUTURE INITIATIVES

With Project Shakti running successfully in many parts of India, two new initiatives have been included under its umbrella. i-Shakti is ushering rural communities into the age of information, offering them access to information on a variety of subject through kiosks and interactive websites and making available answers to queries provided by experts; this initiative heralds the age of techno-friendly rural masses in India. The success of the pilot in Andhra Pradesh has encouraged plans to set up 3,500 i-Shakti kiosks in three states by the end of 2005. Shakti Pracharini, the other initiative, appoints a rural communicator for disseminating information on health and hygiene through village meetings in cluster of villages using IEC material. This is projected to reach out to 40 lakh people by 2005.

Project Shakti has been able to and will continue to, create access and awareness, influence attitudes and bring about affluence through these three programs. These initiatives bolster and support attempts to change the face of rural India through ventures that are not only socially beneficial, but also make business sense.

CONCLUSION

UNILEVER TO TAKE PROJECT SHAKTI GLOBAL

Unilever has begun replicating Hindustan Unilever's (HUL) rural micro-enterprise [in India], led by women-entrepreneurs, Project Shakti in several international markets.

The project has emerged as a successful low-cost business model and enhanced HUL's direct rural reach in the so-called media-dark regions. Armed with micro-credit, rural women become direct-to-home distributors of Unilever brands in rural markets. Overall, around 50% of Hindustan Lever's revenues came from the rural markets in India.

The effort is expected to help Unilever tap fresh growth avenues in emerging markets [which now contribute around 44% to global revenues] up in the face of recessionary trends in the US and Europe [and] the saturation of urban markets.

The project is being customized and adapted in other Unilever markets such as Sri Lanka, Viet Nam and Bangladesh. It is being considered for other Latin American and African markets. In Bangladesh and Sri Lanka, it is being promoted as Joyeeta and Saubaghya, respectively. There is a similar initiative in Viet Nam as well. (The Economic Times, 16th Jan. 2009)

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TEA INDUSTRY IN INDIA: AN OVERVIEW**DR. R. SIVANESAN****ASST. PROFESSOR****ST. JEROME'S COLLEGE OF ARTS & SCIENCE****ANAADHANADARKUDY****ABSTRACT**

The discovery of indigenous tea in Assam in 1823 led to the origin of the tea industry in India. However, the Kolkata Agricultural Society differs from the above opinion. It has consistently held that in the early 1700's, the ships of the East India Company frequently brought the tea plants in the country by way of curiosity. Col. Kyol, a resident of Kolkata and a famous botanist, saw tea plants growing in his garden in 1780. This information was sent to Sir Joseph Bank and in 1782 his garden as handed over to Botanical Garden of Kolkata. In 1788, Sir Joseph Bank recorded the existence of indigenous tea growing wild in Coochbehar and Rangpur districts of Bengal and suggested the cultivation of this plant. The wild teas of Coochbehar confirmed the first discovery of indigenous tea in India.

KEYWORDS

Tea, Cultivation, Yield, Industry, Tea Board, Replantation.

INTRODUCTION

The discovery of indigenous tea in Assam in 1823 led to the origin of the tea industry in India. However, the Kolkata Agricultural Society differs from the above opinion. It has consistently held that in the early 1700's, the ships of the East India Company frequently brought the tea plants in the country by way of curiosity. Col. Kyol, a resident of Kolkata and a famous botanist, saw tea plants growing in his garden in 1780. This information was sent to Sir Joseph Bank and in 1782 his garden as handed over to Botanical Garden of Kolkata. In 1788, Sir Joseph Bank recorded the existence of indigenous tea growing wild in Coochbehar and Rangpur districts of Bengal and suggested the cultivation of this plant. The wild teas of Coochbehar confirmed the first discovery of indigenous tea in India.

BIRTH OF INDIAN TEA INDUSTRY

The birth of Indian tea industry was marked by the discovery of indigenous tea plant in Assam in 1823 by Robert Bruce. This received momentum when the East India Company in 1833 lost the tea trading monopoly in China. In 1835, a scientific deputation was sent to Assam to report on prospects of the tea industry and the team saw tea plants in many parts in the hills between Assam and Burma. In 1836, C.A. Bruce was made the superintendent of Tea Forests. Among others, he formed the Bengal Tea Company at Kolkata with the objective of purchasing the produce from the East India Company's tea plantations in India. A similar company was also established in the same year in London with the same objectives.

In 1839 the first consignment of tea from India (eight chests) was shipped to London and it was auctioned at a price ranging from six to thirty four shillings per pound. In 1840, two thirds of experimental teas were handed over to new company. In 1852, the first tea company in India paid its final dividends. The second limited company in 1859 was formed in Assam called Jorhat Company. During 1862-67, tea cultivation started in Chittagong and Chotta Nagpur. Ultimately tea cultivation was commissioned in many districts in India wherever there was some hope of a success. Within a few months, India along with Sri Lanka dominated the world tea trade/ market.

BIRTH OF TEA TRADE IN INDIA

In 1874 the land located in the east of Teesta River was explored with the foreign liability of growing tea plants. By 1876 as many as 13 gardens had started cultivating tea. In 1878 the first two Indian tea gardens by name Megaltek Tea Estate and Indian Tea Company Ltd. were established though the company actually received a grant of 741 acres on 19 March 1981. The first tea auction started on May 26, 1841 in London under the pioneering leadership of Lyal & Co., Mincing Lane, London was the centre of world tea activities prior to World War II. The first tea auction in Kolkata in December 27, 1861 and the second in Cochin in 1947 for South Indian teas were held. Subsequent many tea auction centres were opened in Coonoor, Guwahati Amritsar and Siliguri.

TEA INDUSTRY IN INDIA

Tea is one of the oldest industries in India and today it enjoys the status of one of the best organized industries in the country. Although tea has been known since 2737 B.C. and consumed as a beverage for 1250 years⁸, its cultivation in India commenced very recently.

The weakening of trade relations between China and Britain during 1780 led to the initiative of the East India Company to raise the commodity in India. In 1778, Sir Joseph Banks was asked to prepare a series of notes for the company. He recommended the cultivation of tea in India. He gave priority to tea as an article of greatest national importance to Britain. The first recorded mention of tea in India was in 1780 when Robert Kyol experimented with tea cultivation with imported seeds. Warren Hastings had some interest in tea cultivation.

- ❖ The discovery that the tea plant grows wild in the upper part of the Brahmaputra Valley was made by Robert Bruce in 1823 and the rise of the industry in India owes its origin to the momentous discovery of this indigenous tea plant.
- ❖ India is considered as one of the native homes of the tea plant. "The indigenous tea plant growing in a wild condition in Assam was first discovered about 1820"⁹.

The inception of the tea industry in India can be associated with the refusal of the Chinese Government in 1833 to renew the agreement as granting the East India Company the rights of monopoly of British trade with China. This removal of the monopoly of the China trade in 1833 'quickened their perceptions to the advantages likely to accrue to India by the establishment of a new industry'¹⁰. Subsequently, in 1834, Lord William Bentinck, the then Government – General, appointed a committee, called Tea committee with Dr. N. Wallich as head "to study a plan for the accomplishment of the introduction of tea culture in India and for the superintendence of its execution". The committee recommended that G.J. Garden should be directed to proceed to China to obtain more knowledge about the cultivation. In 1835, the secretary of committee dispatched the seeds from China which reached Calcutta later in the same year. A Governmental experimental garden was opened at Chabua planted with Assam indigenous seed. Experiments were also conducted in South India under the auspices of the Tea Committee.

The first commercial sample of Assam tea of eight chests, weighing 488 lbs., was sent to London and sold on January 10, 1838 at a fancy price. The Assam Company with a capital of 200000 pounds was formed in that city in 1839. The Assam Company had a virtual monopoly of tea production during the first decade; but its management was so ineffective that it did not pay dividends out of earnings for thirteen years and at one time had dissipated all its capital¹¹, but, later on, it began paying handsome profit; this led to a great extension of a tea planting.

8. Ukers, W.A., - "All About Tea", The Tea and Coffee Trade Journal, Vol. 1, New York, 1935, PP. 1-4.

9. Gadgil D.R., "The Industrial Evolution India in Recent Times", Fifth Edition, New Delhi, P. 50.

10. Buchanon, Daniel H, "Development of Capitalist Enterprise in India", CTC Reporter, Autumn. p-30

11. Parliamentary papers, 1874, XLVIII, Cd, 982, P. 36.

“There was a frenzied rush for opening up tea gardens and in fact, tea became a favourite topic”¹². Tea was first planted in Darjeeling (West Bengal) in 1839, in Sylhet and Cachar (Assam) in 1855, in the Terai (West Bengal) in 1862 and in the Dooars (West Bengal) in 1874. The foundation of the present tea industry was laid between 1856 and 1859¹³. In 1852, a private garden was started and then, the number of gardens began to increase. From the latter date, the rate of growth was, indeed, amazing both in the number of estates and the outturn of tea.

IMPORTANCE OF TEA INDUSTRY

The importance of the tea industry in the nation’s economy and its role in our planned economic development has been widely recognized. Except the public utility services like the Railways, it is the largest organized industry which comprises more than a million workers employed both in plantation and manufacturing industry. Till recently tea had been the largest foreign exchange earner for India but for the last few years’ jute has taken the first place and tea remains as the second largest foreign exchange earner.

OBJECTIVES OF THE STUDY

- The objectives of the study are stated as follows
- To analyse the tea cultivation areas in India.
 - To analyse the tea production of tea in India.
 - To analyse the yield of tea in India.

PERIOD OF THE STUDY

The present study covers the periods from 1970 to 2007.

FRAME WORK OF ANALYSIS

The collected data are processed with the help of appropriate statistical tools like Trend analysis and Compound Growth Rate in order to fulfill the objectives of the study.

TEA CULTIVATION AREA IN INDIA

Area is the important factor for tea cultivation. The following Table 5.3 reveals the tea cultivation area in India.

TABLE 1: TEA CULTIVATION AREA IN INDIA

Year	Area (in Hectares)	Index of Growth
1970	3,54,133	100.00
1975	3,63,303	102.58
1980	3,81,086	107.61
1985	3,99,936	112.94
1990	4,16,269	117.55
1995	4,27,065	120.60
1998	4,74,027	133.85
1999	4,90,200	138.42
2000	5,04,366	142.42
2001	5,09,770	143.95
2002	5,11,940	144.56
2003	5,19,598	146.72
2004	5,21,403	147.23
2005	5,55,611	156.89
2006	5,67,020	160.12
2007	5,78,458	163.35

Source: Statistical Report of Tea Board

It is clear from Table 1 that the tea cultivation area in 1970 was 354133 hectares. In 1980 it increased to 381086 hectares and then it increased to 416269 hectares in 1990. It assumes a gradual increase and reached to 578458 hectares in 2007.

The growth rate of tea cultivation area is analysed through trend analysis and the details of it are stated in Table 11 as follows:

TABLE 1.1: TREND IN TEA CULTIVATION AREA IN INDIA (in Hectares)

Year	Areas (in hectare) y	Deviation x (2002.5)	x ²	xy	Trend Value (yc)
1998	474027	-4.	20.50	-2133121.50	475083.90
1999	490200	-3.5	12.25	-1715700.00	485785.10
2000	504366	-2.5	06.25	-1266915.00	496486.30
2001	509770	-1.5	02.25	-764655.00	507187.50
2002	511940	-0.5	00.25	-255970.00	517888.70
2003	519598	0.5	00.25	259799.00	528589.90
2004	521403	1.5	02.25	782104.50	539291.10
2005	555611	2.5	06.25	1389027.50	549992.30
2006	567020	3.5	12.25	1984570.00	560693.50
2007	578458	4.5	20.50	2603061.00	571394.70
	Σy=5232393		Σx² = 83	Σxy = 888200	

$$a = \frac{\sum y}{N} = \frac{5232393}{10} = 523239.3$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{888200}{83} = 10701.20$$

12. Nanporia, J.J. (Ed.) – The Times of India Directory and Year Book Including Who’s Who, 1965-66, P. 393.

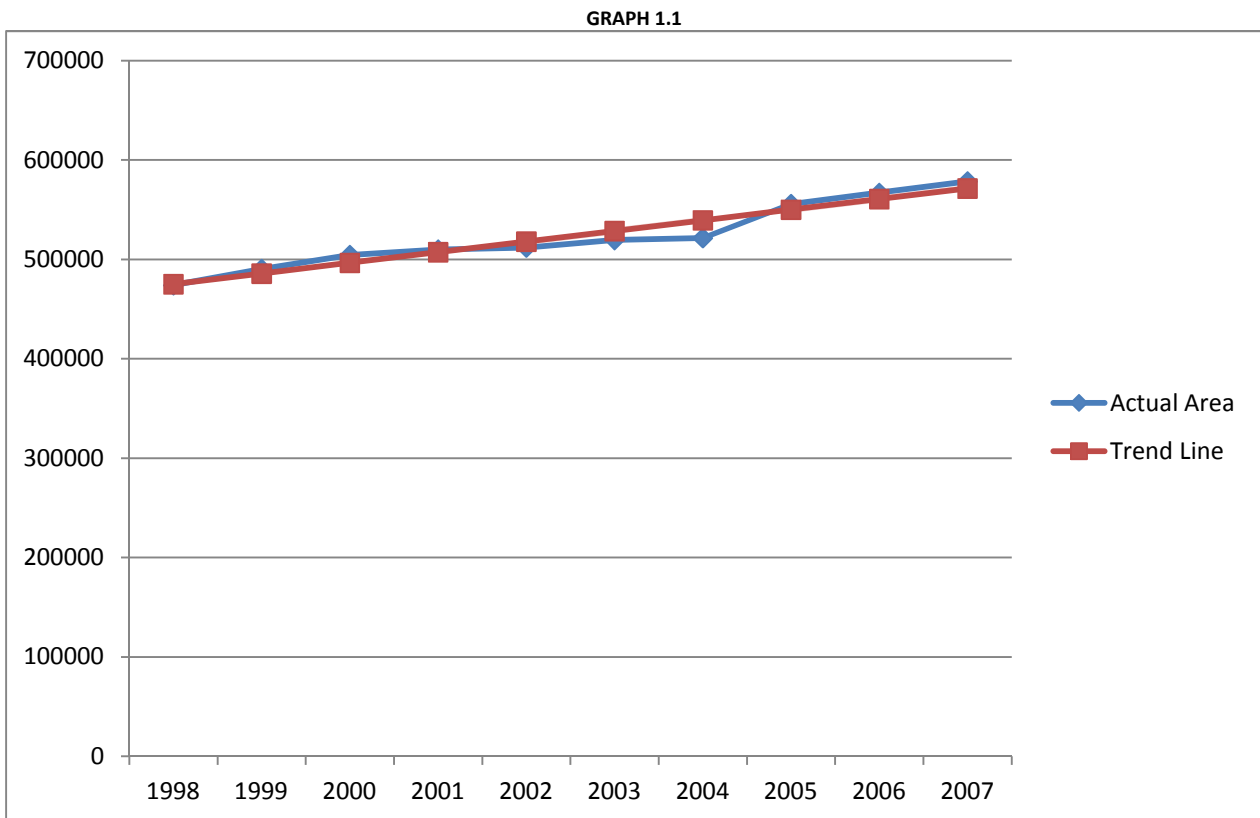
13. Edgar., “Note on the Tea Industry in Bengal” – Papers regarding the Tea Industry in Bengal (1873), P. 7.

Trend equation $Y_c = a + b(x)$

Hence $Y_c = 523239.3 + 10701.20(x)$

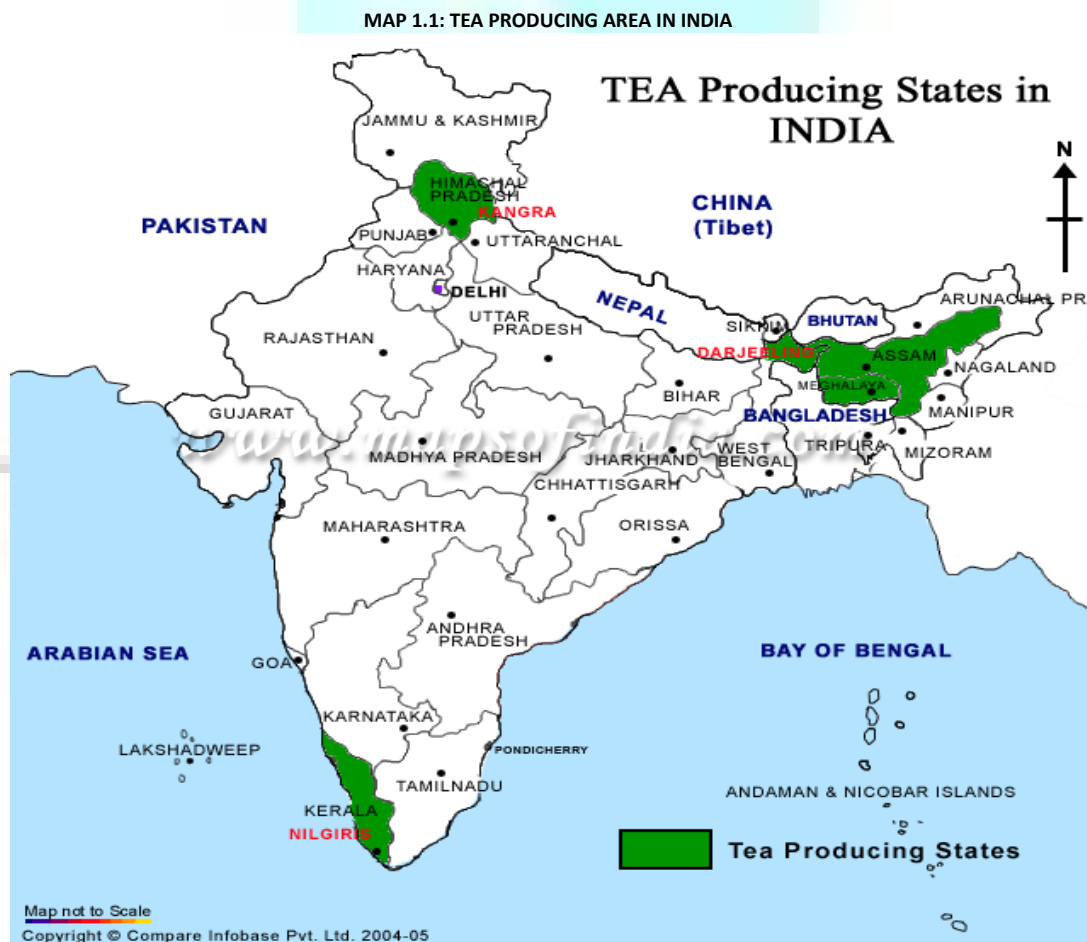
$Y_c = 2015 = 523239.3 + 10701.20(12.5) = 657004.3$

According to the trend analysis, the tea cultivation area in 2015 would be 657004.3 hectares. Trend values are shown in Graph 1.1 as follows:



It is clear from Graph 1.1 that Trend Values are increasing every year.

The tea producing areas in India can be known through Map 1.1



It is known from the Map 1.1 that the important tea producing areas in India are Assam, West Bengal, Tamilnadu and Kerala.

TEA PRODUCTION IN INDIA

Tea production is the important factor for the development of tea industry in India. The details of tea production in India are shown in the following Table 2

TABLE 2: TEA PRODUCTION IN INDIA

Year	Production (m.kgs)	Index of Growth
1970	418.517	100.00
1975	487.137	116.40
1980	569.172	135.99
1985	656.162	156.78
1990	720.338	172.12
1995	756.016	180.65
1998	874.108	208.85
1999	825.935	197.34
2000	846.922	202.36
2001	853.923	204.03
2002	826.165	197.40
2003	857.055	204.78
2004	892.970	213.36
2005	945.970	226.02
2006	981.800	234.59
2007	986.430	235.69

Source: Statistical Report of Tea Board

It is clear from Table 2 that in 1970 the tea production in India was 418.517 m.kgs, and 1980 it increased to 569.172 m.kgs. It further increased to 720.338 m.kgs in 1990 and in 1998 the tea production increased to 874.108 m.kgs. It decreased to 825.935 m.kgs in 1999 and then increased to 846.922 in 2000. In 2001 tea production was 853.923 m.kgs and then it assumed an increasing trend and reached to 986.430 m.kgs in 2007.

The Table 2.1 shows the annual changes in production of tea in India from 1970.

TABLE 2.1: ANNUAL CHANGES IN PRODUCTION OF TEA IN INDIA

Year	Production (m.kgs)	Annual Change	Percentage of change
1970	418.517	-	-
1975	487.137	68.620	14.086
1980	569.172	82.035	14.413
1985	656.162	86.990	13.257
1990	720.338	64.176	08.909
1995	756.016	35.678	04.719
1998	874.108	118.092	13.510
1999	825.935	-48.173	-05.832
2000	846.922	20.987	02.478
2001	853.923	07.001	00.819
2002	826.165	-27.758	-03.359
2003	857.055	30.890	03.604
2004	892.970	35.915	04.022
2005	945.970	53.000	05.603
2006	981.800	35.830	03.649
2007	986.430	04.630	00.469

Source: calculated value

It is clear from Table 2.1 that in most of the years the change in tea production is positive. The change is very prominent in the year 2005 with an increase of 53 compared to previous year. The changes are high for years from 1970 to 1998 than what was in 2005 since they were calculated for a span of 5 years and 3 years.

TEA YIELD IN INDIA

Yield of tea is the important factor for the development of tea industry in India. The Table 3 shows the average yield of tea in India.

TABLE 3: AVERAGE YIELD OF TEA IN INDIA

Year	Average Yield (kgs per hectare)	Index of Growth
1970	1174	100.00
1975	1340	114.13
1980	1450	123.50
1985	1640	139.69
1990	1730	147.35
1995	1770	150.76
1998	1844	157.06
1999	1685	143.52
2000	1679	143.01
2001	1675	142.67
2002	1625	138.41
2003	1690	143.95
2004	1713	145.91
2005	1703	145.05
2006	1732	147.52
2007	1705	145.23

Source: Statistical Report of Tea Board

It is clear from Table 5.5 that the average yield of tea in India, in 1998 was 1844 kgs., and it decreased to 1685 kgs in 1999. It marginally decreased to 1679 kgs, in 2000 and the average yield was 1675 kgs. in 2001. It gradually increased to 1732 kgs, in 2006 and it decreased to 1705 kgs in 2007.

COMPARATIVE ANALYSIS OF TEA CULTIVATION AREA, TEA PRODUCTION AND AVERAGE YIELD OF TEA IN INDIA

The following Table 4 describes the area of tea cultivation, production of tea and yield of tea in India from 1970 to 2007.

TABLE 4: COMPARATIVE ANALYSIS OF TEA CULTIVATION AREA, TEA PRODUCTION AND AVERAGE YIELD OF TEA IN INDIA

Year	Area (in Hectares)	Production (m.kgs)	Yield (Kg. per hectare)
1970	3,54,133	418.517	1174
1975	3,63,303	487.137	1340
1980	3,81,086	569.172	1450
1985	3,99,936	656.162	1640
1990	4,16,269	720.338	1730
1995	4,27,065	756.016	1770
1998	4,74,027	874.108	1844
1999	4,90,200	825.935	1685
2000	5,04,366	846.922	1679
2001	5,09,770	853.923	1675
2002	5,11,940	826.165	1625
2003	5,19,598	857.055	1690
2004	5,21,403	892.970	1713
2005	5,55,611	945.970	1703
2006	5,67,020	981.800	1732
2007	5,78,458	986.430	1705

Source: Statistical Report of Tea Board

It is clear from Table 4 that area and production in India are gradually increasing every year from 1970 to 2007 but average yield of tea in India was differing from 1970 to 2007.

FINDINGS OF THE STUDY

The following are the important findings of the present study.

The tea cultivation area in 1970 was 354133 hectares. In 1980 it increased to 381086 hectares and then it increased to 416269 hectares in 1990. It assumes a gradual increase and reached to 578458 hectares in 2007. According to the trend analysis, the tea cultivation area in 2015 would be 657004.3 hectares. The important tea producing areas in India are Assam, West Bengal, Tamilnadu and Kerala. Most of the years the change in tea production is positive. The change is very prominent in the year 2005 with an increase of 53 compared to previous year. The changes are high for years from 1970 to 1998 than what was in 2005 since they were calculated for a span of 5 years and 3 years. The average yield of tea in India, in 1998 was 1844 kgs., and it decreased to 1685 kgs in 1999. It marginally decreased to 1679 kgs, in 2000 and the average yield was 1675 kgs. in 2001. It gradually increased to 1732 kgs, in 2006 and it decreased to 1705 kgs in 2007. Tea cultivation area and tea production in India are gradually increasing every year from 1970 to 2007 but average yield of tea in India was differing from 1970 to 2007.

SUGGESTIONS OF THE STUDY

Tea cultivation area and tea production was increasing every year but average yield of tea in India was varying from year to year because of replantation of tea is not effective and rehabilitation of tea cultivation area was not effective. So the Tea Board may provide Special assistance to the tea producers in India. Tea Board may take necessary steps to increase the quality of Tea plants. Government may arrange the special education program to tea growers and tea manufacturers in India.

CONCLUSION

The tea industry is a labour intensive industry providing gainful employment to a large number of people. It has its specific importance in India where unemployment is one of the serious economic problems. The tea plantation and manufacturing industry provides direct employment about one million workers in India. A large number of ancillary industries have been started to fulfill the requirements of the tea industry where thousands of persons have been employed in different jobs. The business and trade, associated with tea industry have also provided enough opportunities for employment to a large number of persons.

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IMPACT OF WOMEN EDUCATION ON CHILD HEALTH

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ABSTRACT

The Indian economy has experienced remarkable economic growth in the past few years along with emerging as a global player and achieving most of its Millennium Development Goals. Despite this, child malnutrition in India is still among the highest in the world and India's effort towards reducing child malnutrition has been rather slow. There are various factors contributing to child malnutrition in India such as lack of education, gender inequality etc. Various studies done so far have shown that education in general and female education in particular plays an important role in reducing malnutrition among children and thereby have a strong influence on reducing child morbidity and mortality. Using time series data starting from year 1991 to 2007-08, this paper examines the impact of women education on child health in India and shows that women education does play an important role in improving health and nutritional status of children. Thus efforts should be made towards strengthening literacy programmes, especially female literacy programmes in India for achieving sustainable development.

KEYWORDS

Economic Growth, Malnutrition, Millennium Development Goals, Sustainable Development, Women Education.

I. INTRODUCTION

Since its independence, India has made immense progress towards economic growth (achieved a growth rate of 8.6 per cent and 9.3 per cent respectively in 2009-10 and 2010-11 as per Economic Survey of India 2012-13 estimates), emerged as a global player with the world's fourth largest economy in purchasing power parity terms, and made progress towards achieving most of the Millennium Development Goals (World Bank: "India Country Overview 2011"). But even after so many years of economic development and industrialization, child malnutrition in India is still among the highest in the world. As per Braun et. al (2008), "India is home to 40 percent of the world's malnourished children and 35 percent of the developing world's low-birth weight infants. Every year, 2.5 million children die in India due to malnutrition, accounting for one in five deaths in the world. More than half of these deaths could be prevented if children were well nourished". The National Family Health Survey in 2005-06 (NFHS-3) reported that around 48 percent of children under age of five years were chronically malnourished while more than half that is 54 percent of the total deaths before the age of five years in India were found to be related to malnutrition. Apart from this, women with little or no education tend to have children whose nutritional status is lower than that of children whose mothers are more educated, even after controlling for other demographic and socioeconomic variables, suggesting that women's education and literacy programmes could play an important role in improving children's nutritional status (Mishra and Retherford, 2000). Various empirical studies done by IFPRI (International Food Policy Research Institute) have shown that the low female status in South Asian countries is partially resulting into low birth weights and high levels of child malnutrition in comparison with other countries. This is because the low female status prevents them from taking important decisions about their children's health and education along with their own health. This in turn implies poor nutritional status of women resulting into higher risk of delivering malnourished children and hence high child malnutrition.

Increasing women's access to education and reducing the gender inequality in education have been important targets in both academic and policy making. Higher educational attainment benefits women in terms of their autonomy, rights, labor market outcomes, and social status. These improvements take place due to increased human capital in the form of knowledge and skills which in turn contribute not only to greater labor market productivity but also to higher women's empowerment. An educated woman in turn benefits the society as a whole by taking appropriate decisions during pregnancy and child rearing which have positive impact on the nutritional status and survival of children (Miller and Rodgers, 2009). In fact various demographic studies which took place have shown that education in general and female education in particular greatly helps in reducing child morbidity and mortality (Govindasamy and Ramesh, 1997). Thus this paper aims at showing that women education plays a key role in determining nutritional status of child and hence child mortality reduction in India using a time series data starting from year 1991 to 2007-08 and taking female elementary gross enrollment ratio (GER) as an indicator of women education and under-five child mortality rate as an indicator of child health. Since women education is expected to have positive effect on child health and hence a negative relationship with malnutrition and mortality of child, the study emphasizes role and importance of educating women to improve child's nutritional status. This paper is organized as follows. Section II consists of the literature review. Section III analyzes nutritional status of children in India. Section IV presents the analytical framework of this paper. In this section, the methodology, data and variables used for this study are described. Section V contains the regression results and section VI concludes.

II. LITERATURE REVIEW

Caldwell in 1979 brought into focus the importance of women's education for child health and survival. Caldwell pointed out that women's education is a crucial factor in determining child survival even after controlling for a number of other factors, such as education and occupation of the husband. As per Caldwell, there are several routes through which women's education might enhance survival of a child, which are: appropriate use of simple health knowledge; an increased interaction with medical personnel; and allowing the educated woman to take better and suitable health decisions for her children.

Apart from this, the World Fertility Survey (WFS) program and a United Nations study conducted during 1980s, which used both survey and census data, showed that higher levels of women's education were linked with greater probability of child survival in a wide range of developing countries. Similarly studies done by Hobcraft et al. in 1984, which covered 28 WFS surveys, and by Mensch et al. in 1985, which covered 15 countries, also confirmed this association between education of women and child survival, keeping other socio-economic variables such as education and occupation of husband constant.

A number of studies such as Hobcraft 1993, Boyle et al. 2006, Miller and Rodgers 2009, using data at household-level, have found that female's education is directly proportional to infant and child health and nutritional status. Yip et al. (1992) found that poor growth of children in Asia—as measured by low birth weight, low height-for-age, and low weight-for-height— was mostly due to poor nutritional status rather than genetic factors indicating that educating women in developing countries might help in reducing child mortality by improving their nutritional levels. According to Miller and Rodgers (2009), "Empirical work has also shown that education can serve as a means of adopting new health beliefs, gaining general knowledge, and applying specific knowledge about health and nutritional practices that promote child health (Glewwe 1999)". Another factor through which women education helps in improving child health is improved household income which comes with educated women working outside their homes thereby strengthening the financial ability of their households which in turn imply better nutritious food and health services for their children. This shows that the socioeconomic determinants such as income and household's wealth affect child health and nutritional status through some intermediary mechanisms that encompass household composition, dietary intake, medical treatment, and environmental contaminants (Miller and Rodgers, 2009).

Apart from socio-economic determinants there are demographic determinants of Child Health which constitutes the number of children in a household, female headed household and the age of woman at the time of first birth. Women who are less-educated generally have more children on average and are younger at the time they first give birth. Specifically, greater the number of children in a household the greater is the competition for scarce resources, which could badly affect children's dietary intake, reduce their access to medical treatment, and increase their chances of getting exposed to infectious diseases (Heaton et al. 2005).

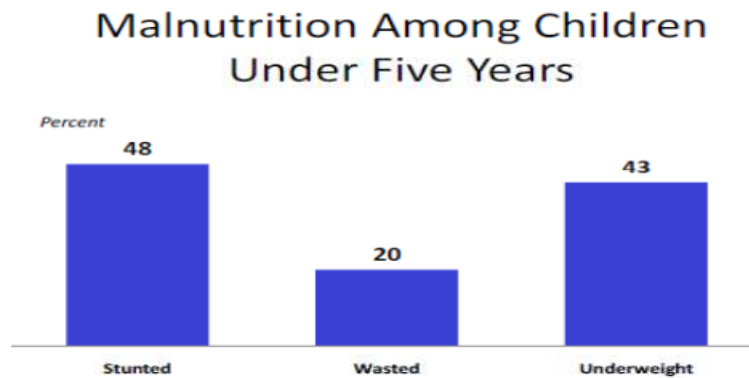
Lastly there are proximate determinants of child health which includes the biological mechanisms such as dietary intake, infectious diseases, and exposure to environmental hazards. Higher education for women operates through this mechanism since households with higher socio-economic status have greater chances to have better and improved facilities that can prevent or reduce the transmission of infectious diseases through these routes (Pongou et al. 2006).

Child nutrition and health has become an important indicator of economic development. Among the eight Millennium Development Goals (MDGs) which were adopted by the United Nations (UN) members in 2000, at least four are directly linked to child health or nutritional status. An idea about how the women education can affect the child health will help us to evaluate an important development policy which is the improvement of women's education. In fact, two goals of the MDGs directly target the education of women. Raising the education of females is also the priority of the World Bank. According to the World Bank, one primary reason for this priority is that raising the education of women can greatly improve the health of the next generation. Therefore with regard to the past literature, this paper uses child mortality rate (under age five) as a measure of child health and female elementary gross enrollment ratio (GER) as a measure of women education.

III. NUTRITIONAL STATUS OF CHILDREN IN INDIA

According to National Family Health Survey (NFHS-3) in India, 2005-06, almost half of children under age five years (48 percent) were chronically malnourished. In other words, they were too short for their age or stunted. A stunted child has a height-for-age z-score that is at least 2 standard deviations (SD) below the median for the WHO Child Growth Standards. Chronic malnutrition is an indicator of poor child health that results from not receiving adequate nutrition over a long period and may be from recurrent and chronic illness. Acute malnutrition, measured as wasting, results in a child being too thin for his or her height. A wasted child has a weight-for-height z-score that is at least 2 SD below the median for the WHO Child Growth Standards. Wasting again shows inadequate intake of nutrition and may be affected by diseases such as diarrhea and other acute illnesses. As per this survey, twenty percent children in India under age five years were wasted. Forty-three percent of children under age five years were underweight for their age. An underweight child is defined as one with a weight-for-age z-score which is at least 2 SD below the median for the WHO Child Growth Standards. All this is shown in following figure 1.

FIGURE 1



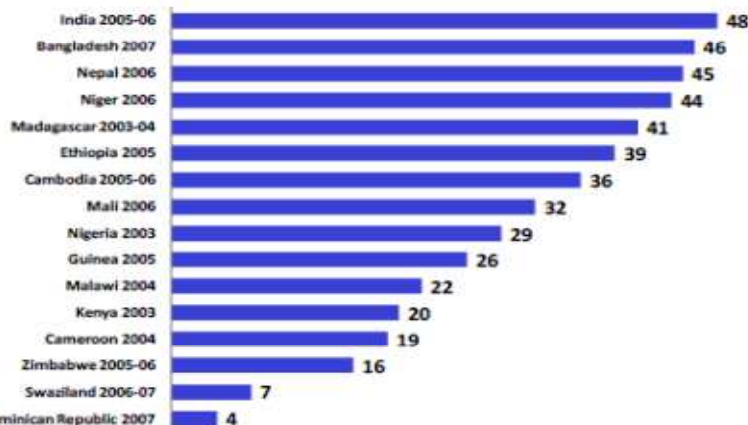
Source: National Family Health Survey (NFHS-3), India 2005-06

The Demographic and Health Surveys during 2003 and 2007 also measured the nutritional status of children under five years of age in 41 developing countries and it was found that the prevalence of underweight in children was higher in India than in any of the other 40 countries, but was only slightly higher than the prevalence in Bangladesh and Nepal (figure 2 as shown below). The prevalence of underweight in children in India (48 percent) was almost twice as high as the average prevalence for the 26 sub-Saharan African countries that had similar data (25 percent). Thus all these figures indicate that the level of child malnutrition in India is rather high.

FIGURE 2

Undernutrition Among Children Under Five Years in Selected Countries

Percent underweight, based on the NCHS/WHO Growth Reference

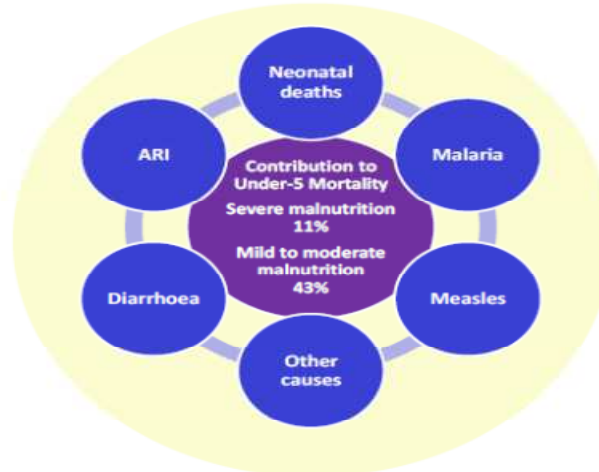


Source: National Family Health Survey (NFHS-3), India 2005-06.

Note: U.S National Center for Health Statistics (NCHS) and World Health Organization (WHO).

In India, two factors that are infectious diseases and neonatal deaths were found to be largely responsible for under-five child mortality. Under nutrition is an important factor contributing to the death of under-five aged children. If a child is malnourished, the mortality risk associated with acute respiratory infections (ARI), diarrhoea, malaria, measles, and other infectious diseases is increased. According to NFHS-3, more than half (54 percent) of all under-five child deaths were related to malnutrition and because of its extensive prevalence in India, mild to moderate malnutrition contributed to more deaths (43 percent) than severe malnutrition (11 percent) as shown in figure 3.

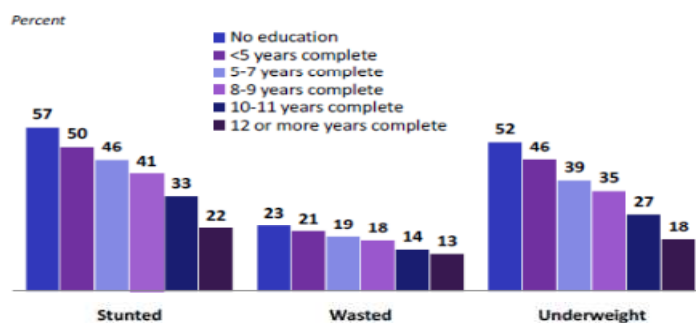
FIGURE 3
Poor Nutrition as a Contributing Factor to Under-Five Mortality



Source: National Family Health Survey (NFHS-3), India 2005-06.

This shows that if nutritional status of the child can be improved then this will contribute towards reducing the high child mortality in India. As already discussed, one of the factor that affect child nutritional status and hence child malnutrition is female education as educated females adopt better practices to improve their child health. As per NFHS-3, 49 percent of mothers of children of under five years of age had never attended school and only 9 percent have completed 12 or more years of schooling in India. Children whose mothers had less than five years of education were less likely to be stunted, wasted, or underweight than were children whose mothers were illiterate that is with no education (Figure 4). Children whose mothers had completed middle school or higher education were even less likely to suffer from malnutrition. The results presented in Figure 4 shows that as women’s years in education increases, the nutritional status of children improves and hence child malnutrition and child mortality declines. Thus women education has a strong inverse relationship with all three measures of nutritional status. For every measure of nutritional status, nutritional deficiencies decrease steadily with rising education of the mother. The percentage of children who were underweight is almost three times as high for children whose mothers had no education than for children whose mothers had completed at least 12 years of education, same holds for stunting.

FIGURE 4
Stunting, Wasting, and Underweight Among Children Under Five Years by Mother’s Education

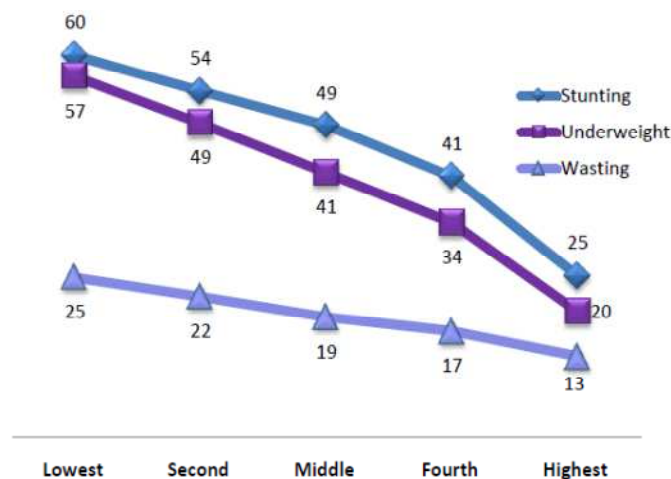


Source: National Family Health Survey (NFHS-3), India 2005-06

Also NFHS-3 shows that a strong direct association exists between mother’s education and children’s immunization and vaccination coverage. As per this survey, only 26 percent of children of mothers with no education were fully vaccinated while 75 percent of children of mothers who had completed 12 or more years of education were fully vaccinated, and the percentage of vaccinated children increased steadily with increasing levels of mother’s education. This could imply that mother’s education have a strong impact on child mortality.

Apart from mother’s education, there are other factors also that influence child nutritional status. According to NFHS-3, household wealth have a significant impact on child’s health, that is there is a negative association between malnutrition in children and the level of wealth of the households that they live because greater is the household income and assets, greater will be the household ability to purchase sufficient quantities of nutritious foods, clean water, clothing, adequately-ventilated housing, fuel for proper cooking, safe storage of food, personal hygiene items, and health services which helps in improving nutritional and health status of the child. This is shown in following figure 5.

FIGURE 5
Stunting, Wasting, and Underweight Among Children Under Five Years by Household Wealth

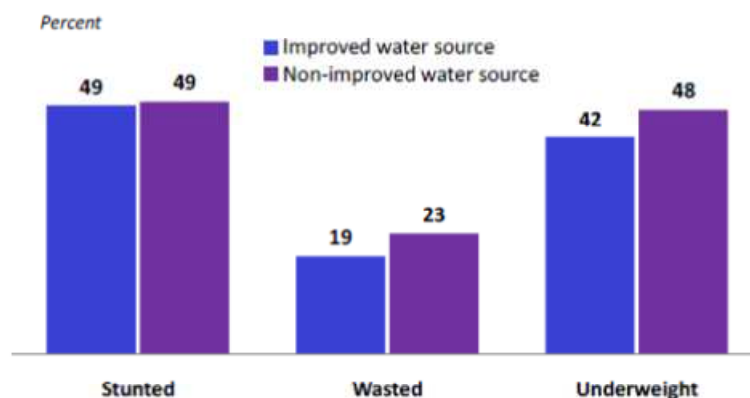


Source: National Family Health Survey (NFHS-3), India 2005-06

In the above figure it can be seen that six out of every 10 children living in the poorest (lowest wealth quintile) households were stunted and almost as many were under weight. However, even in the wealthiest (highest wealth quintile) households, one-fourth of children were stunted and one-fifth were underweight. The NFHS-3 survey also identified environmental factors which influence the child growth and development. For example, a household’s source of drinking water is often linked to its socioeconomic status. Poor households are more likely to obtain their drinking water from contaminated water sources such as surface water or unprotected wells where the children are at higher risks of food contamination, infectious diseases, and malnutrition as compared to children of a household which have access to an improved source of water (figure 6). As figure 6 shows children whose drinking water is from a non-improved water source are more likely to be underweight and wasted than children with access to an improved water source. However, the level of stunting does not change with respect to water source which may be related to the fact that stunting is an indicator of the long-term effects of malnutrition and so it does not change according to recent dietary intake or diarrhoeal disease (NFHS-3).

Thus, child malnutrition is a serious problem in India and women education does influence child malnutrition and therefore helps in reducing child mortality. This finding suggests that women’s education and literacy programmes could play an important role in improving children’s nutritional status and so efforts should be made towards strengthening women’s education and literacy programmes in India. The following sections of this paper shows analytical and empirical framework that substantiate the above argument.

FIGURE 6
Stunting, Wasting, and Underweight Among Children Under Five Years by Source of Drinking Water



Note:
Improved water source: piped into dwelling, piped into yard or plot, public tap or standpipe, tube well or borehole, protected dug well, protected spring, rainwater
Non-improved water source: unprotected dug well, unprotected spring, tanker truck, surface water

Source: National Family Health Survey (NFHS-3), India 2005-06

IV. ANALYTICAL FRAMEWORK

The main argument in this paper can be summarized as follows: women’s education have been crucial in improving the nutritional status of children across India, and this in turn has played an important role in reducing malnutrition among children, and consequently reducing child morbidity and mortality. Thus, argument is based on the following asserted relationships:

- A positive relationship between women’s education and children’s nutritional status in India;
- A negative relationship between children’s nutritional status and malnutrition among children ;
- A positive relationship between malnutrition and child mortality.

Thus there will be a negative relationship between women's education and child mortality and this paper is concerned to establish plausibility of this relationship.

DATA AND VARIABLES USED

This paper uses a time series data starting from year 1991 to 2007-08 to estimate relationship between women's education and child mortality in India using the following variables:

- Women's education (female_educ): It is measured by Female Elementary Gross Enrolment Ratio (GER) which is defined as the percentage of the enrolment of girls in the Primary/elementary school (classes I-VIII) to the estimated girl child population in the age groups 6 to below 14 years in India. This variable is the independent variable in the study. The source of this data is Selected Educational Statistics (SES), Ministry of Human Resource Development (MHRD), GOI.
- Child mortality rate (CMR): This variable is taken as an indicator of child health and is the dependent variable in this study. Under-five Child Mortality Rate is measured in terms of deaths of number of children in age group 0-5 years taking place per 1000 children (0-5 year's age) in India. The source of this data is Sample Registration System, Registrar General, India.
- Access to improved drinking water (drinking_water): This variable is measured by estimated percentage of households having access to improved source of drinking water (piped water, tubewell, etc.) and it is one of the explanatory variables in this study. The source of this data is World Health Organization (WHO) and UNICEF.
- Household wealth (HH_wealth): This variable is another regressor in this study. It is measured by Household final consumption expenditure (current US \$) because greater is the household wealth greater is its expenditure and this is defined as the market value of all goods and services, including durable products (such as cars, washing machines, and home computers), purchased by households. It excludes purchases of dwellings but includes imputed rent for owner-occupied dwellings. It also includes payments and fees to governments to obtain permits and licenses and source of this data is World Bank.

The purpose of the paper is to see whether women education in the period 1991-92 to 2007-08 is associated with lower child mortality rate *at the end of the period*, controlling for other variables that may affect child mortality or child health.

METHODOLOGY

This paper examines the relationship between child health and the women's education by using the following child health equation:

$$CMR_t = b_1 + b_2 * female_educ_t + b_3 * X_t + e_t$$

Where CMR is Under-five child mortality rate, female_educ is the women's education and X are other control variables that may affect child mortality (household wealth and access to improved drinking water in this case). In this equation, b_1 , b_2 and b_3 are the corresponding regression coefficients, and e is the residual. The subscript t denotes particular time period t . This study hypothesizes that b_2 is less than zero, or the female's education has a positive effect on child health.

V. WOMEN EDUCATION AND CHILD HEALTH: REGRESSION RESULTS

In this section, the regression result of the empirical model is reported. The estimates of the empirical model are shown in **table 1**. When an Ordinary Least Square (OLS) regression of CMR on other explanatory variables was run, it was found that serial correlation among residuals was present. But by including a one year lag in CMR in the OLS regression removed this serial correlation and so $CMR(-1)$ is used as an additional explanatory variable in the model in order to counter the problem of serial correlation (as can be seen from the value of Durbin-Watson statistic in table 1). Also while carrying out white's heteroscedasticity test, it was found that there was no heteroscedasticity in the data.

In column (1) of table 1, results of an Ordinary Least Square (OLS) regression of child mortality rate on female elementary GER is shown. The results show a significant negative effect of female education on child mortality, i.e. if female education increase by 1% then child mortality rate falls by 0.128%. Female education alone explains 93.2% of variation in child mortality rate. Also a significant and negative coefficient of square of female education shows that rising female education reduces child mortality rate but at a diminishing rate. This result is obvious in the sense that after a certain level of education is achieved, further increase in female education will not have greater effect on child mortality rate and hence on child health.

In column (2), drinking_water is also added. Coefficient on access to improved drinking water is statistically significant at 5% with expected negative sign which suggests that children are indeed healthier in better environments. The adjusted R-square is 94.1% which is very high and so these two explanatory variables explain a high proportion of variation in child mortality. The coefficient of square of female education is again negative and significant. The zero probability of F-statistics indicates that these two variables are jointly significant also. These results together suggest that it is true that better educated mothers raise their children in more hygienic environments and thus have healthier children which in turn reduces mortality rate among children.

Finally in column (3), Household wealth is included as an additional explanatory variable and an OLS regression of child mortality rate on female elementary GER, access to improved drinking water and household wealth is done. Coefficient on all the variables have the expected negative sign and all these coefficients are significant at 5%. The adjusted R-square is also very high which is 94.4% and this means that all these explanatory variables explain a high proportion of variation in child mortality. Again the coefficient of square of female education is negative and significant at 5%. The zero probability of F-statistics indicates that these explanatory variables are jointly significant also. The estimated coefficient of female education in this regression decreases only marginally, which suggests that the main effect of the female's education on child health is not through income.

It is interesting to note that in all these additional regressions, the coefficient on female education remains negative and significant at 1% in column (1) and (2) and 5% in column (3). This implies that female elementary education in the period from 1991 to 2007-08 had a strong significant negative impact on child mortality rate at the end of the period which is 2007-08.

To summarize, we find that the mother's education has a negative effect on child mortality and hence a positive effect on the health of the child. This effect is robust to different regression specifications that control for other variables that affect child mortality and hence child health. The findings suggest that the mother's education has an important influence on child health. Also it can be said that this effect of mother's education may also be attributed to more income of the household and better environments (improved drinking water here).

TABLE 1: ORDINARY LEAST SQUARES ESTIMATES OF THE EFFECT OF WOMEN'S EDUCATION ON THE HEALTH OF CHILDREN [DEPENDENT VARIABLE: UNDER-FIVE CHILD MORTALITY RATE (CMR)]

Regressors	(1)	(2)	(3)
Constant	15.614* (8.452)	108.4259* (60.235)	102.0528* (58.256)
female_educ _t	-0.128*** (0.0352)	-0.0397*** (0.0117)	-0.0359** (0.0112)
female_educ _t ²	-0.012** (0.0048)	-0.033** (0.013)	-0.054** (0.024)
drinking_water		-0.846** (0.323)	-0.954** (0.376)
HH_wealth			-0.00031** (0.000115)
CMR(-1)	0.908*** (0.18)	0.600** (0.24)	0.549** (0.239)
R-square	0.941	0.953	0.959
Adjusted R-square	0.932	0.941	0.944
Durbin-Watson statistic	2.360	1.846	1.985
F-statistic	104.321	82.077	64.379
Prob (F-statistic)	0.000	0.000	0.000
No. of observations	17	17	17

Note: parentheses in the table reports standard errors which are robust to serial correlation. * Significant at the 10% level, **significant at the 5% level, ***significant at 1%.

VI. CONCLUSION

This study examined the effect of the female's education on the health of children under five years of age in India using a time series data starting from year 1991 to 2007-08. The OLS regression showed that female's education has a significant negative effect on child mortality and hence a positive effect on the health of the child. This is because preventive health services are used to a greater extent by females with higher education than those with little or no education. Also, more educated women are more likely to have initiated immunization and even more likely to have ensured that their children are fully vaccinated. This implies that female's education is an important determinant of the health of children even after we control for household wealth, sanitation, and other socioeconomic variables. Child malnutrition is a serious problem in India and since women education has a strong influence on child malnutrition, the results of this analysis add emphasis to the many other arguments in favor of strengthening women's education and literacy programmes in India as this could play an important role in improving children's nutritional status in India.

From the development policy point of view, the conclusion reached in this paper certainly emphasize greater and continued investments in female education, which will not only help in reducing infant and child mortality and morbidity but will also help in improving children nutritional status, thereby implying a better quality and healthier next generations. However, public policies should not only focus on education alone, this is because there are other factors such as access to health care facilities, which also affect health-care utilization. In a scenario where female illiteracy is high, improving access to health facilities should go together with educating the women.

LIMITATION AND SCOPE FOR FURTHER RESEARCH

A limitation of this study is that the data pertains to till 2007-08. The results would be more accurate with the findings of the next survey which is NFHS-4. Apart from this, other factors influencing under-five child mortality rate apart from household wealth and access to safe drinking water could be included to examine their impact on child health which is left for further research.

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ABSTRACT

European Union is an economic and political union of 28 nations that are located principally in Europe. This union has a combined population of approximately 500 million i.e. 7.3% of the total world population. European Union since its inception has developed itself as a single market through legal system and this applies in all the 28 member states. It is also worth noting that the Schengen Area having 22 EU and 04 non-EU (Norway, Iceland, Switzerland, Liechtenstein) States have abolished passport controls. EU guidelines ensures free movement of people, goods, services, common trade policies, regional development as well as tourism development. EU Bloc comprises both the inbound as well as outbound tourism centric nations with considerable amount of disposable income for tourism activities. According to UNWTO European Union is the world's largest tourism market with more than half of the global market share. Tourism is an integral part of EU as tourism's contribution to the overall GNP of European Union is approximately 6%. European Union was very quick to catch upon tourism's role in employment generation, regional development as well as international understanding. European Union has recognized tourism's role in creating new jobs and regional development until 1990's, however, EU did not follow a sectoral approach. EU has tried to promote tourism with other connected sectors as well as Small and Medium Enterprises and as a single Market although it hasn't set up any tourism policy on a general level. However, in the beginning of late twentieth century, with the pressure of institutional organizations, EU has started to follow a sectoral approach. The European Commission, the Council, the European Parliament play an important role in tourism activity. At the moment EU does not have a mandatory tourism policy in a legitimate manner. The regulations, decisions, directives and recommendations on tourism are made by the EU execution body. This paper focusses on the sustainability and viability of European Union in light of the tourism industry and tourism policy and the progresses made in the last two years i.e. 2010 and 2011. By conducting research on EU tourism policy, the demand for tourism in Europe is examined. Suggestions and recommendations have been made according to the tourism industry and the tourism policy of the European Union.

KEYWORDS

European Union, Tourism Policy, Tourism Industry.

INTRODUCTION

1. TOURISM INDUSTRY IN THE EUROPEAN UNION

Tourism plays a very vital role in integrating the economies of most of the European countries. European continent was devastated by both the world wars as it was the centre stage of both the wars. Tourism has contributed immensely in the reconstruction and development of European Continent. Tourism is a growing and ever-changing industry post World War II.

European Union is a major economic and political bloc and accounts for almost one-fifth of the world trade. European Union commands the unique distinction of one of the most exotic tourism regions of the world. The European Union commands a market share of more than half of the total global arrivals. The prime reasons for this growing demand are increase in the individual and independent travel as well as sudden expansion of the low cost carriers.

European citizens also relish their leisure time in extending their annual regular vacations. In general terms, the development of the Schengen area comprising of 26 nations and the common European Monetary Unit i.e. Euro in the 17 countries of Europe, evolving resources, growth in international businesses have supplemented the development of tourism in the EU.

Tourism can prove to be a major tool in the economic development, employment generation in the European Union. The Present day European Union has grown from six to at present twenty seven nations who have joined in phases spreading from 1952 to the last expansion in 2007. 1952 saw the joining of 06 nations i.e., France, Italy, Germany, Belgium, Netherlands and Luxembourg. The next set of the nations came together in 1973 with the Northern European nations of United Kingdom, Republic of Ireland and Kingdom of Denmark joining the Bloc. The next accession was in 1981 by the joining of Greece. 1986 was a phenomenal year for the Iberian Peninsula by the accession of the neighbours i.e. Kingdom of Spain and Republic of Portugal.

In 1995 Austria, Finland and Sweden joining the bloc. 2004 was a monumental achievement for EU by the accession of 10 more nations i.e. Poland, Hungary, Slovenia, Czech Republic, Slovakia, Cyprus, Malta and 03 Baltic states of Latvia, Estonia and Lithuania. 2007 saw the accession of Romania and Bulgaria. Tourism contributes to approximately 4% to the GDP of European Union with great degree of variation in the new member states such as the Baltic nations of Estonia, Latvia, Lithuania as well as Malta. Tourism also provides 12 percent of the jobs in the European Union. EU Nations account for approximately one-third of the world's total accommodation facilities and include both the top inbound and outbound countries of the world.

In terms of International tourist arrivals, France continues its Numero Uno position (2011 UNWTO World Tourism Barometer) followed by Spain (4th), Italy (5th), U.K (7th), Germany (8th) in the top ten rankings of World Tourism. In terms of International Tourism Receipts rankings Spain (2nd), France (3rd), Italy (5th), Germany (6th), U.K (7th) features in the top 10 list. Tourism is the backbone of most of the European nations in the EU and supports the Gross National Product between 3% and 7%. Spain has the maximum tourism market share earning approximately 60 billion USD (2011) from tourism alone. Central European Nation of Austria also commands a high tourism market share. Kingdom of Denmark has negligible contribution to the Gross National Product. Austria commands a rich variety of accommodation facilities and possesses highest number of hotels and restaurant facilities. Hellenic Republic of Greece, Grand Duchy of Luxembourg and France are next in line whereas Kingdom of Denmark have meagre accommodation facilities. Recent trends indicate an upward trend in the EU with an increase of approximately 3.5% in 2011 over 2010. Spain was the biggest gainer followed by Poland.

TABLE I: INTERNATIONAL TOURIST ARRIVALS IN 2010 & 2011 IN THE EUROPEAN UNION

NATIONS OF EUROPEAN UNION WITH THE YEAR OF JOINING THE EU DEPICTED IN BRACKET	INTERNATIONAL TOURIST ARRIVALS (2010) (MILLION)	INTERNATIONAL TOURIST ARRIVALS(2011) (MILLION)
1.FRANCE (1952)	77.1	79.5
2.GERMANY (1952)	26.8	28.3
3.ITALY (1952)	43.6	46.1
4.BELGIUM (1952)	7.2	7.45
5.NETHERLANDS (1952)	10.8	11.3
6.LUXEMBOURG (1952)	0.79	0.54
7.UNITED KINGDOM (1973)	28.2	29.2
8.DENMARK (1973)	8.74	8.9
9.IRELAND (1973)	6.5	7.1
10.GREECE (1981)	15.0	16.4
11.SPAIN (1986)	52.6	56.6
12.PORTUGAL (1986)	6.8	7.4
13.AUSTRIA (1995)	22.0	23.0
14.FINLAND (1995)	3.6	4.1
15.SWEDEN (1995)	4.9	5.0
16.CZECH REPUBLIC (2004)	8.6	8.7
17.CYPRUS (2004)	2.1	2.4
18.SLOVAKIA (2004)	1.3	1.4
19.SLOVENIA (2004)	1.8	2.0
20.MALTA (2004)	1.3	1.4
21.POLAND (2004)	12.4	13.3
22.HUNGARY (2004)	9.5	10.2
23.ESTONIA (2004)	2.1	2.4
24.LATVIA (2004)	1.3	1.4
25.LITHUANIA (2004)	1.5	1.7
26.BULGARIA (2007)	6.0	6.3
27.ROMANIA (2007)	1.3	1.5
28.CROATIA(2013)	9.1	9.9

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TABLE –II: INTERNATIONAL TOURIST ARRIVALS IN EUROPEAN UNION AS PER MARKET SHARE IN 2010 & 2011

Nations/Blocs/World	International Tourist Arrivals in 2010 in Millions	International Tourist Arrivals in 2011 in Millions	Market Share(%) 2011	Percentage Change
Advanced Economies	499	523	53.2	4.9
Emerging Economies	441	460	46.8	4.3
Europe	475	504	51.3	6.2
EU	365	385	39.2	2.3

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FIG. 1

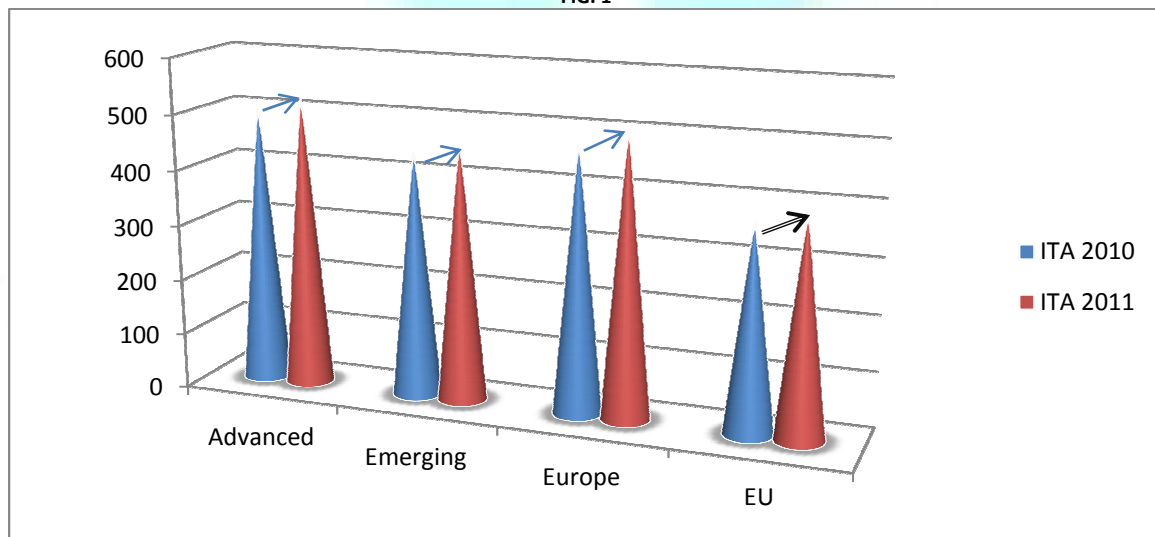


TABLE III: INTERNATIONAL TOURISM RECEIPTS IN 2010 & 2011 IN THE EUROPEAN UNION

NATIONS OF EUROPEAN UNION WITH THE YEAR OF JOINING THE EU DEPICTED IN BRACKET	INTERNATIONAL TOURISM RECEIPTS (2010) (USD BILLION)	INTERNATIONAL TOURISM RECEIPTS(2011) (USD BILLION)
1.FRANCE (1952)	46.5	53.8
2.GERMANY (1952)	34.6	38.8
3.ITALY (1952)	38.7	42.9
4.BELGIUM (1952)	10.3	11.3
5.NETHERLANDS (1952)	12.8	14.4
6.LUXEMBOURG (1952)	4.1	4.5
7.UNITED KINGDOM (1973)	32.4	35.9
8.DENMARK (1973)	5.7	6.1
9.IRELAND (1973)	4.0	4.6
10.GREECE (1981)	12.7	14.6
11.SPAIN (1986)	52.5	59.8
12.PORTUGAL (1986)	10.0	11.3
13.AUSTRIA (1995)	18.5	19.8
14.FINLAND (1995)	2.9	3.6
15.SWEDEN (1995)	11.0	13.8
16.CZECH REPUBLIC (2004)	7.1	7.6
17.CYPRUS (2004)	2.1	2.5
18.SLOVAKIA (2004)	2.2	2.4
19.SLOVENIA (2004)	2.5	2.7
20.MALTA (2004)	1.0	1.2
21.POLAND (2004)	9.5	10.7
22.HUNGARY (2004)	5.4	5.6
23.ESTONIA (2004)	1.0	1.2
24.LATVIA (2004)	0.6	0.8
25.LITHUANIA (2004)	1.0	1.3
26.BULGARIA (2007)	3.6	3.9
27.ROMANIA (2007)	1.1	1.4
28.CROATIA(2013)	8.2	9.2

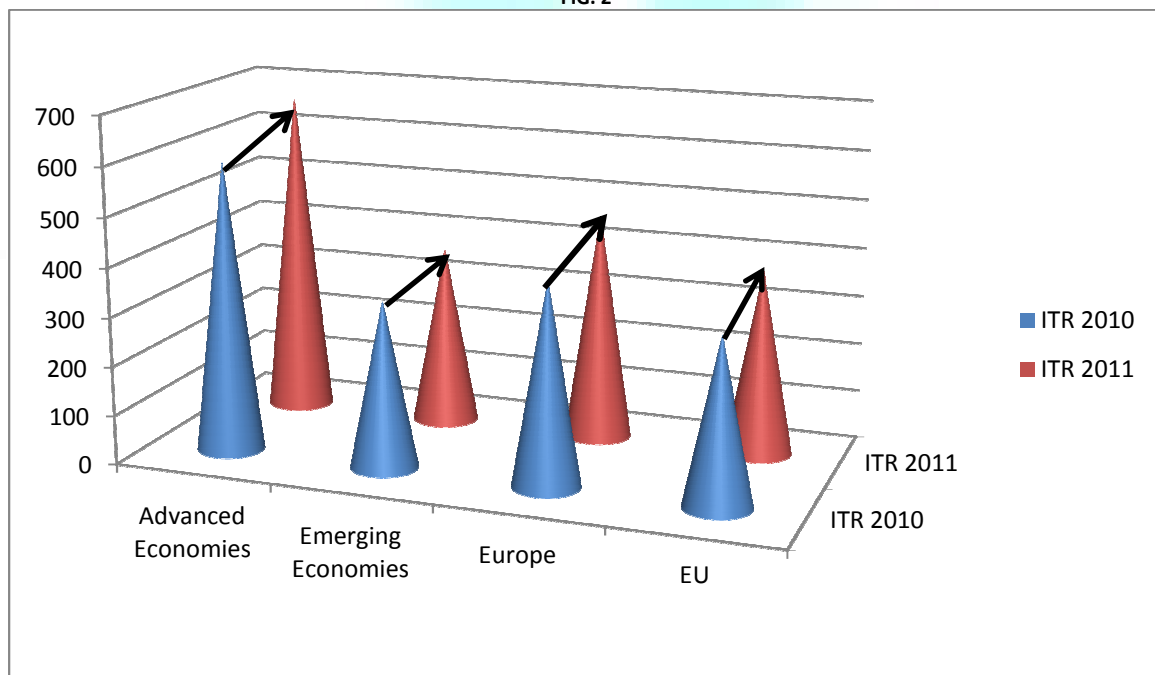
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TABLE –IV: INTERNATIONAL TOURISM RECEIPTS IN EUROPEAN UNION AS PER MARKET SHARE IN 2010 & 2011

Nations/Blocs/World	International Tourism Receipts in 2010 in Millions	International Tourist Receipts in 2011 in Millions	Market Share(%) 2011	Percentage Change
Advanced Economies	589	664	64.5	4.8
Emerging Economies	338	366	35.5	2.2
Europe	409	463	45.0	5.2
EU	335	377.5	36.6	4.3

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FIG. 2



2. OBJECTIVES

1. To investigate and review key issues related to the tourism policy of the EU.
2. To analyse the impact of Tourism Policy on tourism industry in the EU.
3. To study the prospects of Tourism as a major engine for the economic development of the EU.
4. To foresee the trends in terms of both the global tourist indicators i.e. ITA and ITR in 2010 and 2011 in the EU in comparison to the developed and emerging economies.
5. To analyse the EU Tourism Policy and the Tourism Industry in the EU.

3. RESEARCH METHODOLOGY

The methodology includes collecting secondary data from various sources like internet, reference material, visiting website of the European Union, magazines, online journals etc. so that a complete picture can be drawn regarding the Tourism industry in the European Union and to analyse the pros and cons of the post impact of Tourism Policy of the European Union on Tourism Industry in this major economic and political bloc. The study will also include the data collection of the last two years i.e. 2010 and 2011 from the official website of United Nations World Tourism Organization and analysing its current on-going stature post Euro Zone Crisis and their standing against the developed and emerging economies of the World. It is proposed to study the viability and sustainability of this economic and political bloc.

4. ANALYSIS OF THE EUROPEAN UNION'S TOURISM POLICY

In the 1900's Europe's share in world population was 25% but the two world wars i.e. WWI (1914-1918) and WWII (1939-1945) devastated the European Continent. The phenomenal growth being witnessed in the European Continent in the last six decades at the economic, political, trade fronts is a successful case study to be pondered upon. The integration of the EU began by the joint efforts initially by the European Coal and Steel Community (ECSC) and further creation of the European Economic Community (EEC) in 1957 following the Rome Treaty. The signatories were France, Germany, Italy and the Benelux nations of Belgium, Netherlands and Luxembourg. Ever since the Rome Treaty was signed and implemented in 1958, European Union is trying to develop common policies on certain key areas. Ever since the enlargement of the Union from 1952 to 2007 tourism's importance is unlike in member nations as their economic status also varies i.e. the stronger economies of France and Germany will have a different perception and importance for tourism in comparison to the new members such as Latvia and Lithuania. Tourism was recognized as an industry in the EU in the 1980's in collaboration with the European Council, European Parliament, European Economic and social Committee and Committee of the Regions.

1986 was an eventful year with the establishment of the Tourism Advisory Committee for assisting, imparting information and cooperation on tourism promotion in the EU. European Year of tourism was celebrated in 1990. Action Plans for promoting tourism were established in 1992. A blue print was prepared in 2001 to investigate the potential of the European Union's Tourism sector. Tourism in the EU was studied in greater details for critically analysing the sustainability of the European Tourism. Latest studies reveal that the people above the age of 65 are rising in the European Union and this will greatly influence the tourism trends in the years to come. The citizens also enjoy higher disposable income, higher longevity. The niche segments of Medical tourism, cultural and heritage tourism is expected to witness a noticeable growth. A competitive and sustainable tourism industry needs to be created in order to sustain and maintain Europe's position as Numero Uno tourist destination in the six tourist generating regions of the world.

5. SUGGESTIONS AND RECOMMENDATIONS:

1. A structured and legally bound Tourism Policy is the need of the hour to integrate all the member states of the EU.
2. The Tourism Policy should aim towards building stronger alliance for European Tourism
3. The tourism policy should act as a guiding light for the overall reconstruction and development of the European continent post WWII and on going Euro Zone Crisis.
4. Tourism policy should focus on supplementing the tourism sector of Europe both competitively as well as sustainably and generate better employment opportunities through the tourism sector

EUROPEAN REGIONAL DEVELOPMENT FUND

European Regional Development Fund aims to reduce the differences among the nations and help them economically and socially. It was proposed that the projects pertaining to the promotion and development of tourism will be supported and financed by the developmental fund. European Social Funds will help and finance the tourism development in the EU. European Commission has development Agenda 21 for tourism. Sustainable tourism focusses on preservation and protection of the cultural and natural sites and sites listed as World Heritage. European Union will see an expansion in the years to come with the accession of few more nations from the European Continent i.e. Croatia, Turkey, Macedonia, Iceland, Albania, Bosnia and Herzegovina, Montenegro and Serbia are officially recognized as potential candidates. Kosovo is also considered to be a potential candidate but the European Commission does not list it as an independent country because not all member nations recognize it as an independent nation separate from Serbia.

The Motto of European Union is United in Diversity as the bloc has managed to attract even the enemy nations who have come together for a common purpose i.e. reconstruction and development of the European Continent. The sense of belongingness have been created and instilled throughout Europe. The pristine ambience, excellent infrastructure, world class accommodation facilities, brilliant connectivity through the railway network and road networks, maximum unesco world heritage sites, world class tourist attractions which includes mountain ranges such as Alps in the eight nations of Switzerland, France, Italy, Germany, Austria, Slovenia, Monaco, Liechtenstein out of which 05 nations are in the EU. The longest mountain ranges i.e. Scandinavian Mountain Ranges stretching approximately 1700 Kms is another spectacular feature in the Nordic Region. Beautiful rivers, country side, unspoiled nature with the maximum forest cover conserving the bio-diversity is the Unique Selling Proposition of Europe as a major tourist destination.

It has been witnessed off-late that fierce competition is coming from the Oriental nations especially China, South Korea, Japan, Hong Kong, Macau. These destinations are cost effective as compared to most of the European nations and they have also developed their infrastructure as per world standards and have branded themselves in such a manner that there has been a widespread transition of people from the occident to orient. EU in order to compete with East Asia and Pacific as well as South East Asian Region has to change its strategy in implementing the tourism programmes by integrating all the nations which form the part of the European Union.

European Union was established by the Treaty of Maastricht in 1993 upon the foundations of the European Communities. It has developed as a single market through a uniform system of laws which apply in all the 27 member states which ensures free movement of people, goods, services and capital including the abolition of the passport controls by the Schengen Agreement between 26 nations. EU maintains common trade policies in various sectors such as trade, agriculture, fisheries and regional development. Seventeen member nations have adopted a common European Monetary Unit i.e. Euro constituting the Eurozone. The last nation to join the Eurozone was Estonia which joined the Eurozone on 01st January 2011.

6. SUSTAINABILITY AND VIABILITY OF THE EUROPEAN UNION

European integration is the need of the hour to hold the European continent together. The on going Euro Crisis has taken a serious toll on the viability and sustainability of the European Union. Many of the bigger economies are feeling the heat as a result of the after effects of the Euro Crisis but the union has stood united and has helped the economies of the Balkans such as Greece and Cyprus, Iberian nations of Portugal and Spain and the Northern European nation of Republic of Ireland with a bailout economic package to revive their debt ridden economy. European Union in the larger perspective has helped the citizens of the member nations to live, work and travel anywhere in Europe. Sense of belongingness needs to be developed within the Union so that the member nations start working towards European integration. The initiatives such as United in Diversity has been adopted as the motto of the EU and 09th of May is made the Europe

Day. Some symbols that share the European identity are the common currency i.e. the Euro that has been adopted by 17 nations out of the present 27 nations of the EU. Many other member nations are in process of adopting the Euro as their official currency, European anthem (Beethoven's 'Ode to Joy') and European Union Flag (A circle of 12 gold stars on a blue background) as well as EU driving licences issued in all EU countries since 1996.

European Union is a pact between the sovereign nations that work together for common purposes such as stabilising world peace, economic and physical wellbeing, social solidarity, sustainable development, international security and developing tourism. For majority of the products, EU nations have adopted the principle of mutual recognition of national rules. It has been possible to liberalise the services sector such as banking, insurance and tourism as a result of mutual recognition or coordination of national rules among the member states of the European Union. All the border controls within the EU on goods have been abolished together with customs control on people. Random checks as a part to curb crime and drugs are carried out by security officials when necessary.

The Schengen Agreement which was signed in 1985 in the town of Schengen in Luxembourg and extended to 26 nations (22 EU and 04 Non EU) till date governs police cooperation and a common asylum and immigration policy to completely abolish checks on persons at EU's internal borders i.e. to promote freedom, security and justice for the EU nationals.

European Union as an economic and political bloc should strive towards European integration, higher unity and European brotherhood without losing their distinctive sheen and glorious past and combining its history with its geography. It is also worth noting that half a billion people have started living under the rule of common law and in accordance with values centred around humanity and dignity. Long term priorities should be the prime focus rather than short term interests. European Union should speak with one voice on global issues such as global economic crisis, poverty alleviation, regional and social development, measures to promote growth, job creation, single market, globalization as well as sustainable development.

7. CONCLUSION

European Union does not have a structured tourism policy. It follows the guidelines in the EU's treaties pertaining to environment, employment competitiveness, regional development and various research oriented documents. Tourism policy of the EU follows the guiding principles of the commissions and committees related to tourism. EU supports public private partnerships and supports the Small and Medium Enterprises with prime focus on developing young entrepreneurs who can integrate the tourism activities in the European Union. EU is blessed with both the natural tourism resources as well as attractive and breath taking manmade resources.

The commendable work of the EU in integrating the European Union have received accolades from across the globe and its phenomenal contribution has won the Noble Peace Prize for the European Union in 2012 which is a remarkable achievement for the continent which is still struggling with the Euro Zone economic crisis. Many nations have been severely hit by this economic downturn. The nations who are severely affected are Hellenic Republic of Greece, Republic of Ireland. The economic cloud has also reached the borders of the Iberian peninsula and has taken the nations of Portugal and Spain in its claws. Italy is also severely affected by this severe economic recession. Even the bigger economies of France and Germany are also not spared by the Euro Zone Crisis. It needs to be seen how these 27 nations face this economic turbulence. Tourism is a glimmer of hope for most of the nations of the EU where tourism plays a significant role in the overall GDP of the member nations. Tourism is a major source of foreign exchange in Greece and Ireland who were the first in the line to face the economic turbulence. The turbulence has affected almost all the nations of the European Union. Tourism can prove to be a saviour for the European Continent as it has immense potential for the economic development as it is a major economic engine for economic revival in the difficult times of the euro zone crisis. Tourism can also help in poverty alleviation, foreign exchange generation and can emerge as a major tool for regional and international understanding among the member nations of the European Union.

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AUTHENTIC LEADERSHIP PRACTICES AND TRUST

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ABSTRACT

Using 49 responses from teams of different public and private organizations I have compared the relationship between authentic leadership and employees' trust in different team environments, and how this relationship is affected from one team to another as the team structure and requirements vary. The results show that for a specialist and close knit team the leadership is authentic and a high degree of trust is generated among the employees, while a team with structured tasks, high risk, high work pressure, low dependence and low understanding results in low authentic leadership and an absence of employees' trust.

JEL CODE

L00

KEYWORDS

authentic leadership, public and private sector, trust.

I) INTRODUCTION

Different organizational settings give birth to different leadership styles and the resultant followers' behaviors. This cannot be truer than for the organizations in India where the organizational climate, structure, employees' priorities and values are completely differently for public and private sector organizations.

A recent phenomenon in the direction of leadership is the Authentic leadership. Fred O. Walumbwa al. (2008) define authentic leadership as a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development.

Employees' trust in their leaders has been shown to positively affect productivity and output, quality of communication and problem solving, rate of employee turnover, discretionary effort, organizational commitment and organizational citizenship behavior. (Dirks and Ferrin, 2002). Trust towards leader also affects relationships in a team and is found to increase team performance (Dirks, 1999, 2000). Trust ultimately also affects the most visible indicators of organizational performance, sales levels and net profits (Davis et al., 2000; Rich, 1997).

The purpose of my study is to compare the relationship between authentic leadership and the followers' trust in different team environments. For this purpose I decide to choose teams from both public and private enterprises in India. In my study I am not only taking into consideration that leadership styles and their effects would vary for public and private organizations, but also that within these sectors, different forms of organizations with different requirements and structures would also have a varying effect on the authentic leadership and employees' trust relationship.

II) REVIEW OF LITERATURE

A. AUTHENTIC LEADERSHIP

Fred O. Walumbwa al. (2008) proposes authentic leadership to be composed of following: Self-awareness, Relational transparency, Balanced processing and internalized moral perspective. Self awareness implies one's understanding about self strengths and weaknesses, and being cognizant of one's impact on followers (Kernis, 2003). Leaders who possess relational transparency present their true self to others hence building trust among them (Kernis, 2003). Leaders having balanced processing analyze objectively all the relevant data to reach a decision (Gardner, Avolio, Luthans, et al., 2005). Finally, internalized moral perspective refers to the self regulation which results from one's moral standards and values which results in expressed decision making consistent with such values (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, et al., 2005).

B. TRUST

Newell and Swan (2000, pp. 1295-1296) proposes 'trust' to be composed of commitment, companion and competency trust. Commitment trust results from the contractual agreements between a leader and follower who expect mutual benefits from such relations. Companion trust results from personal emotions among group members, which is developed overtime. Competence trust is based on the perceptions of followers to have faith in leader's abilities to successfully complete the job at hand.

C. AUTHENTIC LEADERSHIP AND TRUST

This study assumes based on the results of many other studies (Bruce J. Avolio, et al. 2010, Rachel. C. Smith et al. 2009, Arménio Rego et al, 2011, Ioannis Nikolaou and Ioannis Tsaousis 2002, A.J. McMurray et al. 2009) that there is a positive relationship between Authentic Leadership and Trust. Hence, I will not use my analysis to depict this relationship; rather I will use the scores of the authentic leadership and different trust variables to show how authentic leadership affects different trust variables in different team situations. In fact, using a regression analysis in this study will only mislead the results as in different team situations values of different trust variables may vary drastically, and the overall regression result will not be of any help in the analysis.

III) HYPOTHESIS DEVELOPMENT

In my study I have analyzed the teams from both public and private organizations in India. In order to maintain the anonymity agreements with these organizations, I will not reveal their names; instead use a single capital letter to represent them. Within the public organizations, I analyzed one team from "A" and the second team from "B". "A" is a major transport operator in Delhi, while "B" is a reputed multinational bank with hundreds of branches all over the India. The data was taken from "B"'s Delhi branch. The reason for choosing teams from these two organizations is the difference between the nature of the organizations and the teams. "A" is the major transport operator of Delhi. It operates buses on many bus routes. In "A" the team members are involved with more physical and strenuous work, who receives orders on daily basis from their supervisors which may vary each day. The nature of the work is such that a slight mistake on the part of supervisor or the subordinate may impact a lot of people. This means that a supervisor in "A" must feel a great deal of responsibility and the leadership is expected to be less authentic and more authoritative in nature. The employees would also be more willing to accept orders from their supervisors without questioning. This means that even with a less authoritative leadership, the team members in "A" would still have high levels of competency trust, but should lack companion trust. It is expected that there would be low level of commitment trust because promotions and rewards are usually structured in "A" and are usually temporal based, hence the employees would not feel a high level of mutual agreement with their supervisors. Hence, I propose the following hypothesis.

H1: Supervisor in a "A" team would demonstrate low authentic leadership and the subordinates would have a high level of competency trust, while a low level of companion and commitment trust.

Contrary to a team in "A", the team in "B" has highly structured finance and accounting related tasks. Being an office job such team do not face physically strenuous tasks and as all the team members are highly educated it allows them to understand the tasks provided with little direct supervision (as contrary to the members of "A"'s team), their supervisor is more inclined to show traits of authentic leadership, and would have a more understanding for the employees. Moreover, the employees would deliver a strong companion trust in return. Competency trust is expected to be high because team members trust the competence of their leader for the education and the experience he holds. In "B" employees trust the abilities of their team leader to complete the task successfully but the reward system in "B" is somewhat structured and even though the employees are rewarded after the successful completion of the task, only a handful employees receive extra reward than normal for only an exceptional performance. Hence, the commitment trust is expected to be high to moderate. Hence I propose the following hypothesis:

H2: Supervisor in "B" would demonstrate high authentic leadership and the subordinates would have a high level companion and competency trust and a high to moderate level of commitment trust.

For the analysis of the relationship between authentic leadership and trust in private sector organizations, I choose two multinational companies, "C" Ltd. and "D" Ltd. The reason for taking these two companies for private sector is the different nature of teams in these companies. In "C" Ltd. the team I analyzed was an ERP (Enterprise Resource Planning) implementation team. Such team is a project team whose members are highly dependent on each other. Each team member acquires a unique set of skills and is an integral part of the team success. The team leader for such team is especially trained for establishing a close relation with his subordinates and affecting their emotions positively. Also such leaders are carefully chosen by their managers because an ERP implementation has a lot of valuable resources at stake. Hence, such leaders are highly qualified, educated and well experienced. The members would hence share a high level of companion and competency trust in the supervisor. The team members trust the abilities of their leader to complete the project successfully, and during and upon the completion the employees are rewarded for their performance. This results in a high commitment trust in the employees. Hence I propose the following hypothesis:

H3: Supervisor in "C" Ltd. ERP functional team would demonstrate high authentic leadership and the subordinates would have a high level of commitment, companion and competency trust.

In "D" Ltd. I analyzed the Risk and Governance team. The team handles the outsourced transactions of very high value, hence the team leader and the members are under a constant pressure of doing the work right and on time. This team faces a lot of work pressure and responsibility and is constantly called for overtime even on weekends. The job is structured and direct orders from supervisors are felt less often but such orders are of great importance. Thus we expect the leader to be authentic to persuade the members to do the work right, but also to be authoritative for the risky nature of the job involved. The employees are hence expected to experience less companion trust. As the nature of work is risky, the team leaders are high ranked professionals in the area of work involved. Hence, employees are expected to have a high level of competency trust in their leaders. Employees realize that their team leader is highly qualified and committed to complete the project successfully and in return the employees get generously rewarded. Hence, the subordinates are expected to experience a high level of commitment trust in their leader. Hence I propose the following hypothesis:

H4: Supervisor in "D" Ltd.'s Risk and Governance team would demonstrate moderate to low authentic leadership and the subordinates would experience a high level of commitment and competency trust while a moderate level of companion trust.

IV) RESEARCH METHODOLOGY

In order to analyze the relation between authentic leadership and employees' trust in different organizational teams I got team members fill questionnaires representing authentic leadership and trust in their supervisors under a non-disclosure agreement. A total of 49 responses from all teams (A: 13, B: 8, C: 17, D: 11) were received. These responses were analyzed by a psychology professor of University of Delhi, along with me, and we subsequently rated authentic leadership for self-awareness, relational transparency, balanced processing and internalized moral perspective, and trust for commitment, companion and competency trust, all on a 5-point scale. Later, mean of the ratings were calculated, which are mentioned below.

MEAN OF THE RATINGS

	A	B	C Ltd.	D Ltd.
Self-awareness	1.5	3	4.75	2.75
Relational transparency	1.5	3.25	4.25	3
Balanced processing	3.25	2.5	3.75	4.25
Internalized moral perspective	1.75	3.75	4.25	2.75
Authentic leadership total/20	8	12.5	17	12.75
Commitment	2	2.25	4	3.25
Companion	1.5	4	4.75	2.75
Competency	3.5	4	4.75	4
Trust total/15	7	10.25	13.5	10

V) RESULTS

In order to test my hypotheses I ran T-Tests on the mean ratings mentioned above and Correlation analysis on the scores of each authentic leadership and trust variables derived from the responses using IBM SPSS V.20 statistical software. Results from T-Test gave primary proof for my hypotheses while Spearman's rho correlation tests analyzed the relation between authentic leadership and trust factor for each variable to give a secondary support for my hypotheses.

As per T-Tests, for cumulative scores of authentic leadership of separate teams, at 90% confidence interval of the difference, the lower limit was 8.2366 while the upper limit was 16.8884, with $t=6.834$. For values of individual Trust variables for all teams the lower limit was 2.8447 while the upper limit was 3.9470, with $t=11.065$. For cumulative scores of trust of separate teams the lower limit was 7.0616 while the upper limit was 13.3134, with $t=7.670$.

"A"

T-TEST RESULTS

At 90% confidence level authentic leadership and cumulative trust and companion trust for "A" team is significantly lower, while competency trust is higher than other trust measures. This supports my first hypothesis.

CORRELATION ANALYSIS RESULTS (SIGNIFICANT AT THE 0.05 LEVEL (2-TAILED))

"A"		Self-awareness	Relational transparency	Balanced processing	Internalized moral perspective
Log of Commitment	Correlation Coefficient	0.115	0.385	0.247	0.122
	Sig. (2-tailed)	0.107	0.194	0.215	0.243
	N	13	13	13	13
Log of Companion	Correlation Coefficient	0.396	0.577	0.478	0.396
	Sig. (2-tailed)	0.181	0.098	0.039	0.181
	N	13	13	13	13
Log of Competency	Correlation Coefficient	0.343	0.253	0.859	0.137
	Sig. (2-tailed)	0.118	0.205	0.045	0.355
	N	13	13	13	13

The correlation analysis of the scores related to "A" shows a significant positive relation between balanced processing and competency. This suggests that the employees in "A" trust their supervisor for their competency because the supervisor is capable of considering all the relevant data before reaching a decision. This is in lines with the discussion above that the decision making in "A" is very critical because a slight mistake in decision making may lead to huge consequences. Hence, the manager takes a balanced decision and the employees have faith in their leader for such decision. It can also be seen that the companion trust that is generated among employees is attributed more towards balanced processing of the leader than the relational transparency.

"B"

T-Test Results

For the "B" team, the authentic leadership is close to upper significance level. While companion and competency trust measures are significantly high, commitment trust is actually closer to lower significance level. This does not fully confirm to my second hypothesis where I expected commitment trust to be moderate to high, though it does not rule it out either.

CORRELATION ANALYSIS RESULTS (SIGNIFICANT AT THE 0.05 LEVEL (2-TAILED))

"B"		Self-awareness	Relational transparency	Balanced processing	Internalized moral perspective
Log of Commitment	Correlation Coefficient	0.452	0.19	0.381	0.833
	Sig. (2-tailed)	0.26	0.151	0.152	0.01
	N	8	8	8	8
Log of Companion	Correlation Coefficient	0.333	0.381	0.119	0.286
	Sig. (2-tailed)	0.04	0.042	0.179	0.393
	N	8	8	8	8
Log of Competency	Correlation Coefficient	0.238	0.295	0.771	0.736
	Sig. (2-tailed)	0.17	0.223	0.037	0.043
	N	8	8	8	8

The correlation analysis of the scores related to "B" shows that the companion trust generated in employees is attributed to self awareness and relational transparency of the employer. At the same time employees believe their leader competent of leading them on a project because the manager takes a balanced approach in decision making and also because of his internalized moral perspective whereby he applies his moral principals in decision making. It is also seen that whatever commitment trust is generated in the employees, it is also attributed to the employer's internalized moral perspective which prompts us to think that the manager probably takes morality into account while executing the mutual contracts, whereby he does justice to employees to give them the reward for the share of their work.

"C" Ltd.

T-TEST RESULTS

For the "C Ltd." team, authentic leadership is significantly high. Also, every measure of trust is significantly high, supporting my third hypothesis.

CORRELATION ANALYSIS RESULTS (SIGNIFICANT AT THE 0.05 LEVEL (2-TAILED))

"C" Ltd.		Self-awareness	Relational transparency	Balanced processing	Internalized moral perspective
Log of Commitment	Correlation Coefficient	0.086	0.835	0.105	0.506
	Sig. (2-tailed)	0.143	0.019	0.037	0.228
	N	17	17	17	17
Log of Companion	Correlation Coefficient	0.35	0.438	0.266	0.66
	Sig. (2-tailed)	0.077	0.048	0.101	0.031
	N	17	17	17	17
Log of Competency	Correlation Coefficient	0.135	0.365	0.343	0.282
	Sig. (2-tailed)	0.106	0.149	0.036	0.273
	N	17	17	17	17

The correlation analysis of the scores related to "C Ltd." team shows that the commitment trust in the employees is generated because of relational transparency and balanced processing of their leader. This means that the leader is transparent about his relations and feelings to his employees and probably treats and rewards everyone equally thus generating trust in the employees. At the same time the employees are familiar that he takes a balanced approach in decision making, also attributing to some extent to the commitment trust. Employees feel companion trust mostly for their leader having relational transparency and having strong internalized moral perspective. Employees trust their leader for being competent in decision making for his balanced approach of decision making.

"D" Ltd.

T-TEST RESULTS

For the "D Ltd." team, authentic leadership turns out to the moderate. The companion trust for "D Ltd." team is significantly low while the competency trust is significantly high. Commitment trust is close to upper significance level for "D Ltd." team. This supports my last hypothesis.

CORRELATION ANALYSIS RESULTS (SIGNIFICANT AT THE 0.05 LEVEL (2-TAILED))

"D" Ltd.		Self-awareness	Relational transparency	Balanced processing	Internalized moral perspective
Log of Commitment	Correlation Coefficient	0.627	0.382	0.373	0.455
	Sig. (2-tailed)	0.139	0.041	0.021	0.16
	N	11	11	11	11
Log of Companion	Correlation Coefficient	0.655	0.464	0.082	0.382
	Sig. (2-tailed)	0.029	0.033	0.311	0.147
	N	11	11	11	11
Log of Competency	Correlation Coefficient	0.382	0.391	0.564	0.418
	Sig. (2-tailed)	0.411	0.235	0.051	0.201
	N	11	11	11	11

In "D Ltd." team commitment trust in employees is generated in the same manner as it did in "C Ltd." team, which is positively correlated with leader's relational transparency and balanced processing. In the generation of the companion trust, self awareness and relational transparency of the leader has a great role to play. This implies that the leader probably has open relation with all of his team members and values everyone equally, which is valued by the team member in return. Though not highly significant, but there is some evidence that team members trust their leader's competency for decision making for his balanced approach of decision making.

VI) DISCUSSION

In this study I compared the relation between authentic leadership and employees' trust in the supervisor in different team conditions. My assumption was that for teams in different organizational climate and team requirements, leadership styles and the type of employees' trust originating thereof would be different. For a specialist and close knit team like that from "C Ltd.", the leadership was found to be authentic and a high degree of trust was generated among the employees. At the same time, work pressure and high risk and structures job like that in "D Ltd." team decreased the authentic leadership and companion trust. In the "A" team the job is mostly of physical nature rather than mental. The supervisor gives orders and the subordinates follow without giving it any thought process. Rewards are in form of promotions which depends on duration of service. These situations result in a team which shares no emotions with each other and the job is highly mechanical. As a result, climate for authentic leadership is found to be very negative and subordinates don't lay much emotional based trust in their supervisors.

Future researchers are advised to analyze the cognitive process that takes place during authentic leadership and trust transaction. It would also be interesting to study the demographic effects on such relationship.

VII) CONCLUSIONS AND IMPLICATIONS

In my study I used teams from different organizations and different team settings, any of which would probably be similar to teams in any other organization. By comparing the team settings used in this study to the team settings managers/team leaders have in their organizations, they should be able to identify the team structures they have, the leadership style that they follow and its implication on the trust of the followers. They should accordingly check whether which team setting and organization climate variable should be changed to favor an authentic leadership style and hence improve followers' trust. For example if a team is like that of "A" used in this study, the team leaders should offer secondary benefits and perks to their employees for an above average performance, and should not rely only on the fixed benefits and promotions that are entitled to. This would significantly improve the companion trust in their employees. In another example, if the team is like that of "D Ltd." the team leader should device methods to relieve the stress of his employees and himself. This would reduce the pressure on the team and would improve the performance and hence the leader may not have to be so authoritative which would result in an increase in companion trust.

The secondary implication of this study in practical business environment would be that team leaders in different team settings should first realize the components of authentic leadership (Self-awareness, Relational transparency, Balanced processing, Internalized moral perspective) and should adopt such practices because as suggested by many studies authentic leadership shows a positive relation to building trust in the followers. Secondly, they should also realize the components on the basis of which the followers' trust is measured (Commitment, Companion, Competency) so that they can realize whether which of these aspects is lacking in their team and work towards building it.

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FOSTERING MUTUAL COEXISTENCE AMONG ETHNO-RELIGIOUS GROUPS IN NIGERIA TOWARDS SUSTAINABLE DEVELOPMENT BY THE YEAR 2020

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ABSTRACT

Numerous development plans aimed at achieving the country's objectives have been put in place by the government right from the independence for the purpose of improving the socio-political and economic development of the country. In spite of the natural and mineral resources with which the country is endowed, coupled with numerous governmental policies and programs to foster peaceful co-existence among the multi ethno religious entities which make up Nigeria, the country has virtually become a battle field where incessant ethno-religious crises are staged. The crises do not spare any part of the country as ethno-religious crises have become the order of the day in every parts of the country. Thus the instrument, which is supposed to be used for sustainable development, is conversely being used for destruction and vandalization purposes. The big questions are: can any development be attained in an atmosphere of crises? What are the causes and effects of ethno-religious crises on sustainable development in Nigeria? What steps should government take to address the issue of ethno-religious crises? How can religion assist in checking the menace of crises in the country? These, and some other questions, shall be answered in the course of this paper.

JEL CODE

O1 ECONOMIC DEVELOPMENT

KEYWORDS

Coexistence, Ethno-religious crises, Sustainable development, Vision 20:2020.

INTRODUCTION

As a nation-state, Nigeria is a mixture of diverse and heterogeneous ethnic, linguistic, religious and cultural groups. This was made inevitable by the British Colonial Policy of amalgamation of 1914, which brought the southern and northern protectorates together as one national entity for administrative conveniences, though some say it included economic purpose. After several constitutional conferences of the country between the Nigerian nationalists and British Colonialists, Nigeria gained her independence on 1st October 1960. The decolonization and ascent to nationhood of the country over 50 years ago was heralded within and beyond the country as a symbolic event of hope. For one reason, Nigeria, which is endowed with abundant human and material resources, was seen as the most populous black state on earth and, therefore, the pride of the African race in the ultimate search for self-actualization, especially political and economic self-determination.

Considering the polyglot nature of the Nigerian state, which makes it comparable to well-known multi-national political entities like the former Soviet Union and Yugoslavia, China, India, Pakistan and Indonesia, many social analysts saw the country as a test-case of how to engender national unity, peaceful coexistence and mutual forbearance in plural national states in the developing world, despite social differences. Immediately after Nigeria's independence, centrifugal forces of ethnic chauvinism, religious bigotry and regional rivalry reared their ugly heads and posed a serious threat to the crucial task of nation-building and national integration (Adebayo, 2010). These centrifugal forces not only orchestrated and unleashed the bloody coup and counter-coup of 1966 in the country but also metastidised into the devastating civil war of 1967-70 in which about a million people and properties worth millions of naira were lost. However, the ugly chapter of the fratricidal war was closed by the regime with somewhat healing policies of "no victor no vanquished" and three Rs of Reconciliation, Rehabilitation and Reintegration.

Regrettably, more than forty years after the end of the Nigeria civil war, it is clear that the task of nation-building has become a Sisyphean task in the policy. It is not surprising that micro or ethnic nationalism (Niger Delta Militancy, Movement for Actualization of sovereign State of Biafra (MASSOB) and Oodua People Congress (OPC) and recurrent communal pogroms in Jos, Bauchi and Kaduna), religious fundamentalism (Boko Haram phenomenon) and regional antagonism (as currently presented by zoning or no zoning conundrum) are, more than ever before, spreading across the federation nowadays like the dreaded bubonic plague and culminating in intermittent communal clashes and the attendant bloodbath and carnage of unprecedented proportions. Some of these identity-propelled conflicts have presented us with a de Javu of bloody ethnic turmoil of the 1960s' like the Wild Wild West in the former Western Region, the Tiv revolt in the then middle belt and the Isaac Adaka Boro –Led Izon insurrection and the secessionist struggle by the Igbos in the distinct Eastern region.

Against this background, one of the major challenges facing the attainment of Vision 20 :2020 of the administration of President Good luck Jonathan is how to engender a real Nigerian nation that will withstand the test of time. This is possible through the efforts towards the nation-building, which requires bringing together of all ethnic groups and cultures in the polity (both the majority and minority) into one people with a common destiny as a precursor to state-building by means of political, economic and social transformation, consolidation and advancement.

CONCEPTUAL AND THEORETICAL PERSPECTIVES

In order to conceptualize the dialectical relationship between ethnicity and national integration, it would be theoretically expedient to name the different theories of ethnicity viz: the structural-functional theories which underline assumptions that groups in society behave according to shared beliefs, system, ideologies and communal norms and values.

The structural-functional theory explains ethnicity by looking at how the shared values and traditions held by some groups determine their special features, which inform their differential ranking within a given social formation. Theories of ethnic segregation and stratification are good examples of the structural-functional theory (Levine, 1966). Also, the conflict theory uses the existence of socio-economic political and psychological issues of ethnic conflict and strife in multi-ethnic societies. It is a scarcity of cherished values and differential opportunities or rather access to acquisition of these resources among the competing group in a plural society that intensifies the ethnic question. In societies like Nigeria and other developing countries, there is tendency for ethnic struggles and

acrimony to become more acute and pronounced because of the peculiar nature of the state of our federation where component units depends almost exclusively on subventions or grants from the central government for survival (Lemuel,2009).

The conflict theory therefore contends that it is the aforementioned reasons more than anything else that explains the persistence of ethnicity (Dahrendarf, 1959). On the other hand, the socio-psychological theories under which such middle ranged theories like identity theories, role theories, traits theories, needs theories or achievement motivation theories attempt to explain ethnicity from the propoundence of some personality features or characteristics and the disposition of individuals (Levine, 1966).

Although, in theoretical analysis or exposition, a way of viewing social reality may not necessarily be the same way it is in real life. Some of these theories claim some merits or utility in the analysis of ethnicity. There seems to be a strong correlation between the character of a society's mode of production, the level of group animosity and consequently integration or lack of it. It is a known fact that ethnic rivalries and conflicts arise from desire of one group to dominate another with the dominated seeking independence and self determination of which the dominant is surely not disposed to grant thereby making conflicts inevitable.

Arguably, the desire of major ethnic groups in Nigeria to subordinate the minority groups is what Alabi (2005) termed "internal imperialism". Alabi (2005) argued that the minorities should be given more access to the political space in Nigeria since peripheral powers of the state are limited because of the immense over-concentration of power at the centre stage. Although, issues of creation of more states and local governments by successive governments have greatly empowered the minorities but it is not without its attendant problems. The idea of rotational presidency as advocated by critics may seem palliative measures which could create a sort of psychological pleasantness and assurance for the oppressed groups. This, interestingly, can hardly solve the problem of ethnicity or even the national question if the prudent management of resources for the benefit of every Nigerian no matter the tribe or creed is not relentlessly pursued.

Lemuel (2005) further posited that to attain national interest in a heterogeneous society like Nigeria, much effort is needed on government's part so as to ensure equal opportunity and access. This is seen in the scheme of things, politically, economically, educationally and socially. The citizens on the other hand are obligated to pledge total loyalty to the state supremacy over and above any ethnic and cultural sentiments. In the face of all these, ethnicity or ethnic pride should be sacrificed not on the altar of prejudice or self interest but for the general good and well being of all sundry in Nigeria.

In furtherance to this argument Lemuel (2005) posited that a nation desirous of national integration in the face of ethno-religious differences, should apply herself to the vigorous quest for justice and equity, prosperity, development, unity and greatness. In addition, equal access to resources for all citizens will enhance the commitment of the people towards the state's programmes and foster a greater sense of belonging and acceptance among the people. Lemuel summarizes that the media in Nigeria has a major role to play in this because many conflicts and hostilities were allowed to fester through the process of socialization. The media should ensure the avoidance of ethnic sentimentality in carrying out their duties so that they can achieve their true potentials of fostering unity among the diverse ethnic groups in the country.

The contention of this paper is that despite our differences and diversities, we have been drawn together to share the same fate and common destiny therefore Nigerians should begin to see themselves as siblings and take a new national identity notwithstanding the sectional differences which have often times divided us. Ibrahim (1995) on his part advocated the transformation of social and moral values of Nigerians. His opinion is predicated on the decay in Nigeria's leadership which in turn was mediated by several factors, i.e. colonial rule, prolonged military dictatorship and massive deprivations suffered by the masses. Colonial rule as a system was fundamentally immoral and based on ruthless military conquest and deceit. It was undemocratic, unaccountable and anti-people, what mattered was only the interest of the British imperialist whose fulfillment meant a colossal deprivation for the indigenous people. Therefore, the British imperialism and its exploitative annexation method were largely devoid of any positive moral values bequeathed to the succeeding local ruling class and the masses in general.

Military intervention in Nigerian politics also added in no small measure to the nations woes, official corruption and flagrant abuse of office became the order of the day, thus this forceful takeover of power only resulted in official recklessness, mismanagement of resources and promoted the emergence of a dominant class of people, not necessarily on the basis of hard work or excellence in any field but largely as a result of massive looting of the national treasury. Corruption in the society has greatly eroded the values of hard work, honesty, selfless service and patriotism in the citizenry.

This deliberate deprivation of the masses has also impacted negatively in the national values of the people. The emergence of questionably rich elite eroded the value of hard work and honesty and has ushered in a desperate survival policy and thus discarded moral etiquette in pursuit of comfortability.

ROOT CAUSES OF ETHNO-RELIGIOUS CONFLICTS IN NIGERIA

According to Ekenna Nwafor (2009), most of the violent conflicts that have rocked Nigeria over the years and intensified in recent times are "part of the consequences of a failed development process". If Nigeria had realized the potential of its huge human and material resources, much of the discontent that has resulted in violent conflicts would have been avoided. The following factors have been identified as the root causes ethno-religious conflicts in Nigeria.

LAND OWNERSHIP AND RESOURCE AVAILABILITY

Communities and ethnic groups within and across the boundaries of states and local government council areas lay claim to land as original owners (settlers) or 'aboriginals' and on this basis, those regarded as intruders are fought against. It is nothing new that farmers and pastoralists, fishermen and pond owners, foresters and timber loggers clash throughout Nigeria often over disputed uses and exploitation of land and water resources. Commenting on the above resource based conflicts, Otite (1999:20) writes:

And since 1960s, and particularly from the 1990s, communities in Nigeria's deltaic areas have clashed with one another over claims in territories in which oil exploration companies operate and for which royalty and amenities and development projects are expected.

Ekenna Nwafor (2009:3) in corroboration with Otite (1999) has opined that: Some of the worst violent (conflict) has been between neighbouring communities and ethnic groups over claims of land ownership. Land disputes have fuelled most of the inter-communal and inter-ethnic conflicts in the southern oil region, where land ownership attracts compensations, payments and amenities from oil multinationals. Similar conflicts are also common in most developing countries around the world.

DISPUTED JURISDICTIONS OF TRADITIONAL RULERS AND CHIEFS

When a king of one ethnic or sub-ethnic group claims ruler-ship over peoples belonging to another ethnic group, his action often generates conflicts. The town of Warri is an example. Here, the Olu (king) of the Itsekiri ethnic group is labelled Olu of the whole of Warri in Delta State, owned and inhabited by members of Ijaw, Itsekiri and Urhobo ethnic groups. The situation arose when the Delta State government enacted edict no1 of 1999 (Traditional Council and Chiefs Edict 1998 vol. 9) and appointed three other Traditional Rulers of equal status in Warri, two for the Urhobo Kingdoms of Okere and Agbassa (Agbarha-ame) and the third for Ijaw of Warri. Violent conflicts followed and many people lost their lives. Otite (1999:20) further observes that: In the case of Ile-ife in Osun State, the Modakekes' claims to the ownership of their settlement and farmland have been strongly resisted by the Ooni (king) and people of ife. In these cases, many people have been killed due to violent conflicts.

POWER

Power is also a main source of conflict in societies since it has the ability to achieve something successfully. It is also the ability to cause things to happen rapidly. It is the capacity to reward complaints, persuade recalcitrant, coerce intransigents and punish offenders. Thus, power gives the ability to control the behaviour of others even against their will such as deviants, sociopath, delinquents, dissenters and rebels. By using power one can also control economic resources, political processes, social institutions, cultural institutions and development. Thus, power decides and chooses those who will gain and those who will lose in any given situation (Ekpenyong, 2011). Power is always in limited supply. Hence, the gains for one individuals or group are often associated with the losses for the other individual or group. This is why power has become a major source of conflicts not only in Nigeria but also in many other nations (Dzurgba 2006: 4).

PRESTIGE AND JEALOUSY

It is a common phenomenon that prestige of one individual or group is often followed with the loss of prestige of one other individual or group. In the same vein, individual or group that has great reputation is often a victim of jealousy. This is because other persons or groups need not be prestigious, honourable, powerful or feared as rivals in the same society. The consequence is that, either they must be destroyed or absorbed or weakened or made useless. This is why

Dzurgba (2006:4) posits that, these jealous and selfish tendencies give rise to conflict between two or more prominent persons in a given community. In this conflict, the society is torn apart each time the important office falls vacant in a given traditional institution, social institution or political constituency. It is in this context that prestige and jealousy are major sources of conflict.

CORRUPTION

Corruption is a complex issue that involves society, politics and economy. Years of misrule, massive corruption and squandering of development opportunities by successive governments have pauperized large segments of the population. They have also left frayed nerves, forcing frustrated Nigerians to bare fangs against erstwhile peaceful neighbours at the individual and communal levels (Ekenna 2009:3). For Theophilus Okeke, corruption is understood as "all actions that temper with or compromise justice and fairness (qtd in Charles 2005:1). The end result or product of all actions that temper with or compromise justice and fairness are conflict. And this is why corruption is one of the major causes of conflict in Nigeria.

ENVIRONMENTAL DESTRUCTION

Environmental pollution induces conflict, especially in the communities where the explorative and exploitative of natural resources such as crude oil are carried out. In these communities, the means of livelihood are destroyed by industrial activities. Farmlands, water resources and forests are polluted, depleted, degraded and wasted. In such communities, ecological benefits are altogether damaged or destroyed and thereby making the people in such communities to suffer from lack of good water, housing, clothing, food, health services, education and other necessities of life. Lending credence to the above assertion Dzurgba (2006:5) observes that, it is in this context that there are frequent agitations and clashes between the communities and business corporations as well as between the communities and government agencies. Niger Delta crisis is a perfect example in this case.

COMPETITION FOR SCARCE RESOURCES

Obviously, the creation of states and local government councils means the availability of more political and administrative positions such as state commissioners, special advisers and local government chairmen and councilors. It is also true that these positions are limited, that is they cannot go round. Therefore, the contestants mobilize members of their wards, ethnic groups or communities for support in the competition to hold such positions either through election or appointment. This always gives rise to conflicts and killing of the opposing groups or opponents.

We can comfortably agree with Dzurgba (2006:21) that naturally, divergent interests and inter ethnic or sub-ethnic and town conflicts occur. It is generally assumed under such circumstances that the winner in any competition, and thus incumbent of any high office, represents, and promotes the interests of his people. He is expected to bring political goods home and promote the interests of his people in matters of conflict and contested local development programs.

PREJUDICE, HATRED AND DISCRIMINATION

This is also a major source of conflict. These tendencies of division and separation are seen in all racial relations in cultural, social, economic, political and religious institutions. These often result in conflict between major racial groups and minor ethnic groups, each crying against discrimination and marginalization in economic and political affairs. Putting it in the word of Dzurgba (2006:6), one racial group clashes with another racial group over territorial boundary or area, therefore, there have often been border clashes between racial groups or countries. In politics, the highest office in the land is contested for, but emphasis is on a racial group's ambition for the presidency. This creates division among the numerous racial groups in the country. From there, a normal political contest turns into a political conflict between two or more racial groups in the country. We can therefore agree that the interests of a racial group cause and create most of the conflict in Nigeria.

NIGERIA'S MICRO AND MACRO SOCIAL STRUCTURE

Nigeria is a segmented society with varieties of conflicting cultural interests, values and to national political positions and economic resources, as well as the divergent perceptions of coexistence in the same country-setting provide grounds for conflict. The opposing views which ethnic groups have of one another, such as the views Jukun has of the Tiv and vice versa, also predispose people to conflicts. The exploited co-existence of cultural and religious differences amongst people in the same polity is itself inherently conflictual (Adeyemi, 2005). We can also see that ethnic group perception, that is the way one ethnic group views or see another ethnic group, provides grounds for conflict.

RELIGIOUS RIVALRY AMONG CHRISTIANS AND MUSLIMS

Religion is one of the main sources of conflict in Nigeria. Religious conflict occurs over religious beliefs, doctrines, practices or interpretation of scriptures between individuals or groups. Rivalry between Muslims and Christians has obviously ignited violence in Nigeria, especially with regard to the adoption of strict Islamic law (*Sharia*) by states in the predominantly Muslim North like Zamfara State and others. Some Christians, who are in the majority in the South, have perceived this as a threat of Islamization, and in flashpoints such as Kaduna in the North and Jos in Central Nigeria this has been a source of Christian – Muslim violence (Dogarawa, 2002).

IDEOLOGY

Ideological conflict occurs between two or more ethnic groups, or countries competing for supremacy in power, prestige, wealth, prosperity, culture or cultural heritage, science and technology (Dzurgba 2006:4). The conflict between Hausa/Fulani and Yorubas is not basically based on resources but on ideology. Hausas are basically conservative in their political posture while Yorubas are typically progressive in their political orientation. This explains the constant conflicts between the two groups before and after independence. Thus, ideology plays a big role in the generation of conflict. The conflict between Christians and Muslims is also a good example of ideological conflict in Nigeria.

THE CONCEPT OF SUSTAINABLE DEVELOPMENT

The concept of sustainable development is the efforts at improving the socio-economic and ecological status and at exploiting and processing the environment or natural resources for the purpose of improving the quality of human life in such a way that the needs of the future generations are not jeopardized. The 'World Conservation Strategy', published by the World Conservation Union, publicized the concept of sustainable development in the 20th century. The term became more pronounced and received greater attention in the report of the Brundtland Commission, which the United Nations General Assembly assigned to propose long-term environmental strategies for achieving sustainable development by the year 2000 and beyond (Sulaiman, 2002). The report spells out the definition of the term, sustainable development, its nature, scope, objectives, and approaches, among others. Most of the definitions given to the concept 'development' see it as a process of change in the social structure, attitude, institution, and general acceleration of economic growth through reduction of inequality and poverty. Going through the multifarious definitions of the concept, Mohammed (2002) identifies three important facts on it, namely: Increasing the availability and widening the distribution of basic life sustenance, such as food, shelter, and protection; Raising the level of living in addition to higher income, provision of jobs, better education, and greater attention to cultural and humanitarian values, all of which serve to enhance material well-being, but also to generate greater individual and national self esteem, and; Expanding the range of economic and social choice to individuals and nations by freeing them from servitude and dependence.

From the above, some indices of development, which are no doubt prerequisites to sustainable development, are identified. According to Adedeji (1997), the level of human development could be measured by the Human Development Index (HDI), whose components are health, education, and income. To Aliyu (1999), the Gross Domestic Product (GDP), which is the total output of the economy, is a major determinant of development. Other indices of development, identified by Mohammed (2002) include: improved standard of living in terms of availability of decent accommodation, improved nutritional standards, qualitative health care and education services to the majority; life expectancy which is mainly influenced by the standard of living, availability of health services, literacy level, and income of the people. From this, it could be observed that all the identified indices of development could hardly be attained in an atmosphere of crises and consequently rendered the attainment of vision 20:2020 a mirage. The health, education, and income of Nigerians are jeopardized and adversely affected during any of the ethno-religious crises.

The summary of this is that development could not be attained in an atmosphere where religion is used as an instrument of vendetta. In another dimension, one can attribute the discovery of crude oil in Nigeria as well as the refinery companies there as an element of development. However, this blessing has been

threatened by various agitations, protests and demonstration by the oil producing communities who considered themselves cheated in the sharing formula of the proceeds from the resources.

IMPLICATIONS OF ETHNO-RELIGIOUS CRISES FOR SUSTAINABLE DEVELOPMENT

It is an undeniable fact that a nation that witnesses ethno-religious crises almost on an annual basis could not be said to be stable politically. The problem of ethnicity, which dichotomized the country's armed forces, was said to have been responsible for the outbreak of the 1967 civil war, which lasted for thirty months leaving thousands of lives dead including "soldiers and civilians that would have done the country proud" (Ajimotokin, 2003). It is also observed by Adebayo, (2003) that religion has no place where ethnicity is dominating. He attributed the annulment of the June 12, 1993 election, which was believed to have been the most peaceful, free, and fair election in the political history of the country, to ethnicity where both the acclaimed winner of the election and the then military President that annulled the election were Muslims but from different ethnic background. In essence, ethno-religious crises breed unstable governments, which is very crucial to the attainment of vision 20:2020.

Education is very vital in any sustainable developmental program. The nation is striving to put in place amenities for the purpose of elevating the education standard of the country. This is, however, hampered by incessant closure of schools and institutions in places where ethno-religious crises are holding. Apart from this, schools are not spared in the destructive tendencies of those participating in crises of any nature. Many schools had been burnt down while many were forced to close down for months. The education of innocent youths was equally disrupted under tumultuous situations created by ethno-religious crises, as many were forced to emigrate from the crisis area. Imam (2004) identified two patterns of emigration in such a situation, namely temporary and permanent emigration. He observed:

Those who emigrated on temporary basis came back after several weeks or months in exile to come back and contend with relics of their abandoned residences and properties. However, those who opted for permanent emigration were mostly non-indigenes who suffered losses and felt their continued stay in the crises areas is like casting one's life into perdition (p. 38).

Whichever the case was, the crises destabilized everything, including the education of students whose parents were forced to relocate consequent of the crises. Such people became refugees elsewhere and would take time for them to settle down in their new settlements to practice their profession and for children to adjust to their new environment.

It needs to be mentioned, as well, that no remarkable development could be recorded in an atmosphere of BDR (build, destroy, and rebuild) as it amounts to cycling within the circle. In essence, it gulped the government millions of naira or dollars to put in place numerous amenities which were destroyed during crises. Resources, which could have been used to improve these amenities and embark on other developmental projects, would have to be used on restructuring and replacing what had been damaged during the crises. In most cases, government compensated victims of these crises and this gulped millions of naira, which could have been used for other developmental projects.

Incessant crises are also inimical to sustainable economic development of the nation. This is because, apart from the fact that many virile men of the nation are seriously affected in the crises which consequently led to their death, the country's source of revenue is equally affected. Crises in the Niger Delta, for example, had shaken the country to her root, as the source of the 'goose' of the country was greatly affected. Virtually all steps taken to check crises are not economic-friendly. For instance, imposition of curfew brings every economic activity to a halt as it becomes difficult to move freely from place to place. The whole area of crisis, therefore, becomes desolated and remains a ghost city until normalcy is reinstated. Since no economic development could take place in an atmosphere of fear, anarchy, and insecurity, it, therefore, implies that ethno-religious crises are bane to economic sustainability. Looking at it internationally, incessant ethno-religious violence has added to the fear foreign investors is having of Nigeria. Cases of kidnapping of expatriates in Nigeria are no more news. One wonders how foreign investors could decide to establish in the 'war zone.' Apart from the fact that the image of Nigeria has been dented globally as a country which breeds social miscreant and criminals, Nigerians have also become the first suspects in any scene of crime. They are also exposed to thorough screening before they are allowed to enter other countries.

STRATEGIES FOR ENSURING MUTUAL COEXISTENCE AND DEVELOPMENT IN NIGERIA

There is no single solution for the issue of ethno-religion conflicts and the challenge of nationhood. However, this does not preclude this paper from positing suggestions of strategies and policy options towards the process of ensuring mutual coexistence. These among others include the following:

Conflict management institutions lack the capacity to resolve conflicts using the strategy of political socialization and dialogue. The process of acquiring social learning is known as socialization. It is through the process of socialization that individuals or groups acquire knowledge, skills and dispositions that enable them to participate as responsible members of ethnic groups and the entire society (Adebisi, 2008). The process of creating social order is essentially one of devising means whereby man's innate drives can be controlled for the sake of harmony in the society. This process should assist the Nigerian society like any other society to curb potentially disruptive drives by channeling them in socially acceptable directions. The various institutions involved in conflict management should empower citizen for political participation, which are essential indicators of nationhood and stability.

A forum for political participation from the grass roots to national and central levels is essential. Political participation as a virtue of its own right is a fairly recent phenomenon among the Nigerian citizens. It may be difficult to sustain a proposition to the effect that Nigerians actually do display high rates of political participation and interest, even at general elections. The leadership should provide the opportunity for voluntary activities by which members of this country share in, the election of leaders and directly or indirectly, in the formation of public policy (Adeweg, 2000).

Nigeria like other plural societies has multi-ethnic and multi-cultural characteristics, which pose a great challenge in the articulation of public interest. Each ethnic group has its own basic interests or expectations, which may or may not conflict with those of other ethnic communities. For the sake of nationhood, the leadership organizes resources and rewards in such a way that each ethnic group has increasing expectations of gains. The basic needs of each group should be identified and harmonized within the national needs. This should be taken as an affirmative action to equitably re-distribute the resources.

Our leaders should encourage ideologies and policies that transcend the ethnic conglomeration. Such ideologies and policies should be instruments of public education as opposed to being instruments of political propaganda and mouthpiece of accusations and counter-accusations. Leaders must be open-minded, nationalistic and committed to the democratization process in Nigeria which is both a responsibility and an obligation.

CONCLUSION

So far, attempts have been made to discuss the magnitude of ethno-religious crises in Nigeria and the factors responsible for these crises. There is no doubt that a nation who focuses on developmental projects without addressing the issue of security is only planting corn on the rock, as no serious development can take place in an atmosphere of crisis. On this note, we suggest the diversification of Nigeria economy to address the problems of poverty and unemployment, which are strong backbones for ethno-religious crises. We equally found out that ethno-religious crises could be checked should their perpetrators are adequately brought to book and made to face the wrath of the law. Sustainable development could also take place where justice and other moral virtues are allowed to reign. The al-Manjiri factor in ethno-religious ethnic crises could also be averted if the products of the system are entrenched in the mainstream of the nation's employment scheme. If not, the case will be worse than that of a father who decided to train some of his children and left the rest untrained. Those who were not trained would, however, not allow the trained ones to enjoy the fruit of their training. In such a case, no development could be sustained.

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THE EFFECT OF CLIMATIC SHOCKS ON AGRICULTURAL PRODUCTION AND FOOD SECURITY IN TIGRAY (NORTHERN ETHIOPIA): THE CASE OF RAYA AZEBO WOREDA

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ABSTRACT

This study set out to explore the effect of climatic shocks on agricultural production and food security in the Raya Azebo woreda of Tigray region in Northern Ethiopia. In this study, an econometric method is employed to estimate the effect of climatic shocks using rainfall variability as a proxy on the level of per hectare farm output and food security status of the households. The result obtained shows that climatic shocks have a significant adverse effect on the level of agricultural production and food security status of the households. Based on this it is recommended that there should be encouragement of the various indigenous ways of coping with the effect of climate change. There should also be introduction of various new coping mechanisms from which expansion of irrigation is an important one.

JEL CODE

Q12

KEYWORDS

agricultural output, food insecurity, rain variability, Ricardian Approach.

1. INTRODUCTION

The sharp increase in food price in 2008 has led to a come back to the issues of concern on food security at the global level (Wiggins, 2008) and its impact on prospects for achieving the first Millennium Development Goal (MDG), namely, to end poverty and hunger. In relation to this, there will be a need to look in to not only the short term causes that lead to volatile food prices but also the longer-term negative impacts of climate change.

The United Nations Development Programme (UNDP) warns that the progress in human development achieved over the last decade may be slowed down or even reversed by climate change, as new threats emerge to water and food security, agricultural production and access, and nutrition and public health. In fact this report claims that the impacts of climate change such as sea level rise, droughts, heat waves, floods and rainfall variation could, by 2080, push another 600 million people into malnutrition and increase the number of people facing water scarcity by 1.8 billion (UNDP 2008).

Agriculture constitutes the backbone of most African economies. It is the largest contributor to GDP, the biggest source of foreign exchange, accounting for about 40% of the continent's foreign currency earnings; and the main generator of savings and tax revenues. In addition, about two-thirds of manufacturing value-added is based on agricultural raw materials. Agriculture remains crucial for pro-poor economic growth in most African countries, as rural areas support 70-80% of the total population. More than in any other sector, improvements in agricultural performance have the potential to increase rural incomes and purchasing power for large numbers of people to lift them out of poverty (NEPAD, 2002; Wiggins, 2006).

Climate change, however, is considered as posing the greatest threat to agriculture and food security in the 21st century, particularly in many of the poor, agriculture-based countries of sub-Saharan Africa (SSA) with their low capacity to effectively cope (Shah et al., 2008;). African agriculture is already under stress as a result of population increase, industrialization and urbanization, competition over resource use, degradation of resources, and insufficient public spending for rural infrastructure and services. The impact of climate change is likely to exacerbate these stresses even further.

Rural households tend to rely heavily on climate-sensitive resources such as local water supplies and agricultural land; climate-sensitive activities such as arable farming and livestock husbandry; and natural resources such as fuel wood and wild herbs. Climate change can reduce the availability of these local natural resources, limiting the options for rural households that depend on natural resources for consumption or trade. Land may become less fertile; there may be less local fuel wood for cooking. Of course, shifts in climate will bring different changes to different regions. Some areas may see greater natural resources because of increased rainfall, for example. But on balance, the poorest regions are most likely to suffer because they are least able to adjust to new conditions.

2. LITERATURE REVIEW

2.1 ISSUES IN CLIMATE CHANGE

The issue of climate change and its different impacts has been quite a significant concern throughout various fields of science since the 20th century. The concern has been more of whether it is happening and to what extent its impact can be ascertained. The debate is still continuing as to whether indeed climate change is happening and whether the causes are factors which are frequently associated with carbon emission. But the intergovernmental panel on climate change (IPCC) reported that the global temperature has increased by 0.6°C during the 20th century and since 1950 there appears to be a decline in the frequency of low temperatures while there looks to be a modest rise in the frequency of high temperatures. The IPCC also estimates that precipitation increased during the 20th century by 0.5% to 1% every ten years in most of the high and middle latitudes of the continents in the northern hemisphere and from 0.2% to 0.3% in the tropical land areas (10° north to 10° south). Concerning rains however there has been a decrease in the subtropical land areas of the northern hemisphere (10° North to 30° North) during the 20th century by about 0.3% every ten years.

Regarding the impact of climate change, various authors (Mandelson et al, 2000; Sultz et al, 1993; Kurukulasuriya&Rosenthal 2003,) have argued that climate change has had a visible effect on the physical and biological systems of the globe. The biological effect does not simply mean it affects human beings but also – agriculture, forestry, fishing and so on – will be affected as well. One of the economic activities that are severely exposed to the effects of climatic changes is agriculture (Kabubo-Mariara and J.Karanja, 2007). So the climate change that has been taking place over the years is argued to have a significant effect on agricultural production. Agriculture is expected to suffer the most because climatic conditions set the limits for agricultural methods. Therefore, any change will obviously affect the agricultural ecosystems and the average outputs (in time and space) (Kabubo-Mariara and J.Karanja, 2007)

2.2 APPROACHES TO ANALYSE EFFECT OF CLIMATE CHANGE ON AGRICULTURE AND FINDINGS

According to (Kurukulasuriya & Rosenthal 2003) climate affects agriculture fundamentally in four ways. Firstly, changes in temperature and precipitation directly affect crop production and can even go as far as the pattern of the distribution of agro-ecological zones. Secondly, the expected rise in carbon dioxide which is associated with climate change is believed to have a positive effect on agricultural production due to greater water use efficiency and higher rates of plant photosynthesis. Thirdly, availability of water and runoff which are critical for crop production are expected to be influenced by climate change. Lastly, climate variability is expected to affect agricultural losses since it can lead to increased frequency of droughts and floods.

A large body of literature has developed to analyze the various effects of climate change on agriculture taking developed and developing countries particularly as of the early 1990s. In all these body of literature, two methods of analysis are clearly observed. One is what is known as the Ricardian approach which tries to measure the impact of climate change by trying to quantify the effect of it on net revenue from land which of course is supposed to represent value of land. The other is what is known as the production function approach which tries to measure the effect of climate change on agriculture by taking climate variables as additional determinants of agricultural output besides the usual factors of production. In what follows then a review of such studies is made initially on those that use the Ricardian approach and next those that used the production function approach.

To begin with a study of the effect of climate change on agriculture in Burkina Faso using the Ricardian approach by Ouedraogo et al (2010) has shown that temperature and precipitation have a significant effect on agricultural output.

Mendelsohn et al. (2003) used the same approach as the above study to analyze the relationship between climate and rural income based on country data for two US states and municipios from Brazil. Their findings show that agricultural net revenue increases when there are favorable climate increases agriculture net revenues and thus per capita incomes. They conclude that climate is an important determinant of household welfare and therefore that providing new technology and capital may be an ineffective strategy for increasing rural incomes in hostile climate regions.

Mendelsohn et al. (2000) explore climate change impacts on African agriculture using the

IPCC (Intergovernmental Panel on Climate Change) forecast of future CO₂ levels in the atmosphere by 2100. Because of the lack of African studies that calibrate climate sensitivity, the authors rely on studies of climate sensitivity for the US. Their results show that the most pessimistic forecast implies that African countries may lose 47% of their agricultural revenue because of global warming, while a cross-sectional forecast suggests losses of only 6% of agricultural GDP. With the expected fall in the contribution of agriculture to GDP over time, the authors conclude that the damage from climate change to African agriculture may be expected to range from 0.13% to 2% of GDP by 2100. They further argue that every region in Africa will experience some negative climate change impacts. They caution that their findings may be quite optimistic given that they are based on US climate response functions, and they call for African countries to estimate the climate effects and to understand adaptation options for Africa.

Seo et al. (2005) employ the Ricardian approach to measure the impact of climate change on Sri Lankan agriculture, focusing on four major crops. The authors find that global warming is expected to be harmful to Sri Lanka but increases in rainfall will be beneficial. They also find that with warming the already dry regions are expected to lose large proportions of their current agriculture, but the cooler regions are predicted to remain the same or increase their output. They conclude that climate change damages could be extensive in tropical developing countries but will depend on actual climate scenarios. Tol (2002) assesses the impacts of climate change on agriculture, forestry and other aspects of human welfare using GCM (Global Circulation Model) based scenarios of climate change. This study is based on a number of countries. The results show that a 1°C increase in the global mean surface air temperature would have a positive impact on the OECD, China and Middle East countries but a negative effect on others. The author further argues that the distributional aspects of climate change and the uncertainty about the impacts can be extremely large.

Kumar et al. (1998) use farm level data to examine and the agricultural impacts and adaptation options of climate change in India. They find that adverse climate change would lead to huge losses in agricultural revenues, even if farmers were to adapt their farming practices to climate change. Molua (2002), in an analysis of the impact of climate on agriculture in Cameroon, finds that increased precipitation is beneficial for crop production and that farm level adaptations are associated with increased farm returns. Etsia et al. (2002) find that a combination of increasing CO₂, temperature and rainfall is likely to have adverse effects on agricultural production in Tunisia. These results support findings by Rosenzweig and Parry (1994) who find that increased CO₂ and temperatures reduce rice production in India.

Turpie et al. (2002) analyze the economic impact of climate change in South Africa. Their study addresses impacts on natural, agricultural, man-made and human capital. They use the production function approach to measure the natural capital lost from global warming. They predict the impact of climate change on rangelands will be positive, with the fertilization impact of CO₂ outweighing the negative effects of reduced precipitation. However, they find the impact of climate change on maize production will be negative both 'with' and 'without' CO₂ fertilization. They found estimates of impact of climate change for other crops were not reliable.

Other studies that use the production function approach argue that climate change may have beneficial effects on agriculture, especially in more arable lands, but adverse effects on more arid zones (for example Downing 1992). The positive impact of CO₂ fertilization effects and rising temperatures may however be determined by the adaptation measures adopted by farmers. Studies that support this argument include Inglesis and Minguez (1997), Mohamed et al. (2002) and Schulze et al. (1993). Inglesis and Minguez (1997) report that with a combination of different adaptation strategies in Spain, farmers not only derived higher crop yields with increased temperatures but also used water and land more efficiently. Mohamed et al. (2002) argue that climate change factors are significant determinants of millet productivity in Niger and predict a huge fall in crop productivity by 2025 as a result of global warming. Downing (1992) argues that potential food production in Kenya will increase if increased temperatures are accompanied by high rainfall, while marginal zones will be adversely affected by decreased rainfall. Fischer and Velthuis (1996) (as cited by Kurukulasuriya & Rosenthal 2003) note that food productivity in Kenya may well increase with higher levels of atmospheric CO₂ and climate change induced increases in temperatures accompanied by some increases in precipitation, as predicted by several GCMs. These arguments are also supported by Makadho (1996), who argues that maize production in Zimbabwe is expected to fall as a result of increased temperatures that shorten the crop growth period. Downing (1992) also shows that shifts in agro-climate potential would affect national food production and land use in Zimbabwe.

Deressa et al. (2005), use the Ricardian model to analyze the impact of climate on South African sugarcane production, using time series data for both irrigated and dry land farming.

The authors show that climate change has significant non-linear impacts on net revenue with higher sensitivity to future increases in temperature than precipitation. Further, they find that doubling CO₂, which leads to rises in temperatures by 2°C and precipitation by 7%, would have a negative impact on sugarcane production. They also find that irrigation in sugarcane production does not provide an effective option for reducing climate change damages in South Africa. Gbetibou and Hassan (2005) also use the Ricardian approach to analyze the economic impact of climate change on major South African field crops. They find that crops are quite sensitive to marginal changes in temperature compared to changes in precipitation.

Contrary to findings by Deressa et al. (2005), they argue that irrigation would be an effective adaptation measure for limiting the harmful effects of climate change, and that the impact of climate change is agro-ecological zone specific and therefore that location is important in dealing with climate change issues.

Schulze et al. (1993) in a study of South Africa, Lesotho and Swaziland find climate change to be associated with potential increases in maize production, though they argue that it is likely to have little effect in marginal areas where yields are already low. Sivakumar (1992) in a study for Niger argues that climate has significant implications for agriculture because farmers tend to change their farming patterns with climate change and this is likely to have adverse environmental consequences. Onyeji and Fischer (1994) in a study for Egypt find that adverse climate change will lead to a decline in agricultural production and in GDP.

However, they argue that large instruments in adaptation are required to make significant gains in avoiding the adverse impacts of climate change on the economy. Yates and Strzepek (1998) argue that global warming is likely to have adverse consequences for the Egyptian economy. Benson and Clay (1998) in a study involving a number of African countries argue that developing countries in Africa may be less prone to climate change shocks than industrial countries.

Frank Millard (2005) shows that climate change had a significant effect on commercial navigation in Canada and the effect on the cost of shipping is estimated to be in millions of dollars

The recent food-price crisis exposed the fragility of the global food system. A paradigm shift is underway, caused by the deepening integration of agricultural, energy and financial markets in a resource-constrained world made more vulnerable by climate change (Wise and Murphy 2012).

3. IMPORTANCE OF THE STUDY

A recently released intergovernmental panel on climate change(IPCC¹) report, as quoted in Iglesias(2006), suggests farmers in warmer and drier conditions in

the Sahelian region of Africa have already curtailed their cropping seasons. Yields from rain-fed agriculture are expected to fall as much as 50 percent in some poor African countries. Fisheries production will likely also decline, according to the report. Rural regions in Latin America are also expected to be affected. In the region's drier areas, climate change is expected to lead to increases in the saline content of the soil, which reduces crop productivity. As previously productive lands become more arid, Latin America could also see greater desertification.

The situation is the same, not to say further accentuated, in Ethiopia. The country has been exposed to frequent climatic shocks mostly in the form of intermittent decline and total absence of rain in the usual rainy seasons of the country. These shocks have resulted in not only a consequent decline in agricultural production and food shortage and even famine but they have also led to a degeneration in the house hold level capability to produce food and attain food security. Climate change affects food security through a reduction in food production, by destabilizing food supplies, by limiting access to food due to a rise in food price and by crippling food utilization since climate change may initiate a vicious circle where infectious diseases, including water-borne diseases, cause or compound hunger, which, in turn, makes the affected population more susceptible to those diseases. (Schmidhuber and Tubiello, 2007).

4. STATEMENT OF THE PROBLEM

There have been quite numerous studies on many issues as related to food security and agricultural production in Ethiopia and quite some in Tigray (Tsegu, 2006; Devereux, 2000 and WFP, 2006.) which focused on the determinants of food security and impact of various interventions made by the government and other stake holders on the issue of food security. As related to climate change and food security some studies have been made for Ethiopia (Assefa et al, 2009; UNDP, 2007 and Temesgen, et al, 2008;) which mostly focused on farmer perceptions and adapting strategies in the face of climate change. This shows that the study of effect of climate change on food security in Ethiopia has not been that much delved in to while in Tigray it is almost untouched and this study tries to contribute its part in filling this gap.

5. OBJECTIVES OF THE STUDY

The overall objective of this study is to investigate the effect of climatic shocks on agricultural productivity and food security in Raya Azebo woreda of the southern zone of Tigray.

The specific objectives are:

- To assess the effect of climatic shocks on agricultural production
- To assess the effect of climatic shocks on food security
- To draw some recommendations

6. HYPOTHESIS

This study tries to test the following two hypotheses

- Climatic shocks as represented by rain failure have an important negative effect on agricultural output of farm households
- Climatic shocks as represented by rain failure have an important positive effect on the food insecurity level of farm households

7. DATA AND METHODOLOGY

Data for this study is mainly primary which collected using questionnaire is. A representative sample of 103 households is interviewed from whom 97 are found to be useful. This sample is generated from four rural districts (Tabias) in Raya Azebo woreda of the southern zone in Tigray. The sampling technique used is random sampling based on the list of residents of the districts obtained from administration offices of the districts (Tabias).

This study employs what is usually known as the Ricardian method as developed by Mandelson et al (1994) to measure the value of climate in US agriculture. This method enables accounting for the direct impact of climate on crop yields as well as the indirect substitution among different inputs including the introduction of various activities, and other potential adaptations to a variety of climates by directly measuring farm prices or revenues.

The value of land reflects the sum of discounted future profits, which may be derived from its use. Any factor that influences the productivity of land will be reflected in land values of net revenue. Therefore, the value of land or net revenue contains information about the value of climate as one attribute of land productivity. By regressing land values or net revenue on a set of environmental inputs, the Ricardian approach makes it possible to measure the marginal contribution of each input to farm income as capitalized in land value.

Following Mandelson et al (2000) the Ricardian approach involves specifying a net revenue function of the following form.

$$R = \sum P_i Q_i(X, F, G, Z) - \sum P_x X \dots \dots \dots 1$$

Where R is net revenue per hectare, P_i is the market price of crop i, Q_i is output of crop i, X is a vector of purchased inputs, F is a vector of climate variables, G is a set of soil variables and Z is a vector of household characteristics.

8. RESULTS AND DISCUSSION

8.1 DESCRIPTION OF THE STUDY AREA

Tigray is one of the regional states in the Ethiopia which is located at 12°15' -4°57' longitude and 36°27' - 39°59' latitude. The region of Tigray shares common borders with Eritrea in the north, the State of Afar in the east, the State of Amhara in the south, and the Republic of the Sudan in the west. According to the 2007 CSA census Tigray has a population of 4,314,456, out of which about 80% are living in rural areas with their livelihoods strongly tied with agriculture. The profile of Tigray posted on Tigray online, states that from the total land area in the region 1.5 million hectares of land is cultivable, of which one million hectares is being cultivated, while 420,877 hectares of land is terraced. The region is also known for its export items of cotton, incense, sesame and minerals. Administratively, the region is divided in to seven zonal administrations, namely, Western, North western, Central, Eastern, South eastern, Southern and Mekele special zones.

For this purpose of this study the Southern Zone which has a population of 1,085,959 will be taken. From this zone one woreda; namely, Raya Azebo woreda whose population is 147,063 is taken. This woreda has a vast plain land which is suitable for crop production and animal husbandry as well. However, this woreda has been exposed to frequent rain failures. The recent rain failure had almost a spell of three consecutive years. The frequency of the rain failures is said to have increased somewhat in recent years compared to the situation before two three decades. A lot of people feel that this could be associated with global warming.

The tabias of focus in this woreda are Genetie, Worebaye, Hade Alga and Tsigea. The total population of this tabias is around 25, 000. The tabias are more or less similar in livelihoods since almost completely they depend on agriculture. The type of agriculture practiced is subsistence which makes it completely dependent on the vagaries of nature.

8.2 DESCRIPTION OF HOUSEHOLDS IN THE SAMPLE

A total of 103 households are interviewed with a questionnaire from the four tabias that are chosen for this study. But only 97 questionnaires are found to be useful while the rest 6 turned out to be incorrectly filled.

TABLE 3.1: SAMPLE DISTRIBUTION BY SEX OF HH HEAD AND TABIAS

Name of tabia	Female headed	Male headed	Total
Genetie	9	22	31
Tsigaa	7	19	26
Worebaye	5	13	18
Hadealga	7	15	22
Total	28	69	97

Source own survey 2011

The above table shows that in the sample the proportion of female headed households is quite large since they constitute almost 30 percent (29.9) of total households in the tabias.

The classification of households according to family size and level of education gives the following picture.

TABLE 3.2: HOUSEHOLD SIZE AND EDUCATION LEVEL OF SAMPLE HOUSEHOLDS

Tabia	Household size			Level Education			
	≤ 2	< 4	> 4	illiterate	literate	primary	Above primary
Genete	7(22)	16(51.6)	8(25.8)	23(74.2)	5(16.1)	3(9.7)	0
Tsigaa	7(31.8)	15(57.7)	4(30.8)	16(61.6)	5(19.2)	3(11.5)	2(7.7)
Worebaye	5(27.8)	10(55.5)	3(16.7)	11(61.1)	5(27.8)	2(11.1)	0
Hadealga	8(36.4)	11(50)	3(13.6)	14(63.6)	5(22.7)	3(13.6)	0

Source own survey 2011 (figures in parenthesis are percents)

From the above table it is pretty obvious that household size is mostly in the range up to four while in terms of education most of the households are illiterate which makes success rate of various programs and projects to be low.

8.3 RAINFALL VARIABILITY AND AGRICULTURAL OUTPUT

In order to quantify the effect of climatic shocks on agricultural output, the Ricardian approach as explained in the previous two sections of this document is used. Since this approach demands the computation of net revenue per a hectare of land that will be used a measure of the rent value of the land data on farm yield, output prices, inputs used and their cost is collected. Data on a set variables that determine net revenue are also collected this set included household characteristics, soil variables, farm inputs, labour and livestock. Climatic shocks as represented by variability in rain fall and frequency of droughts are included as additional determinants of net revenue. This is then supposed to represent the effect of climatic shocks on food production and hence by extension on food security since the availability of food to agricultural households has a lot to do with own food production.

In the following we present the summary of the statistics of data collected with a view to see the dispersion of data around the mean which can be good representation of data normality.

TABLE 3.3 SUMMARY STATISTICS ON VARIABLES OF INTEREST

S.N	Variable	Obs	Mean	St.D	Min	Max
1	Yield value	97	6122.526	6458.108	275	33700
2	Education of HH head	97	1.072165	2.227889	0	13
3	HH size	97	3.927835	3.093163	1	18
4	Marital Status	97	0.7216495	0.4505152	0	1
5	Fertilizer use	97	18.93814	50.24416	0	356
6	Oxen day used for production	97	33.25773	28.01684	5	115
7	Hired labour for production	97	19.5567	27.0343	0	185
8	Soil type (fertility)	97	0.3298969	0.4726179	0	1
9	Land ownership	97	0.8350515	0.373062	0	1
10	Size of land tilled	97	1.595361	1.806183	0	12
11	Live stock owned	97	3.309278	4.106298	0	20
12	Rain failure	97	0.6185567	0.4882643	0	1

The above statistical table shows the mean and standard deviation of the data collected from the study area. From the table we can see that the value of average production in the area is around six thousand birr which can be judged to be very small. But when we look at this value per hectare of land it becomes 3826 birr per hectare (6122.5/1.6). It can also be observed that average household size is found to be around four which is almost equal to the national average household size in Ethiopia. Another important observation we have is on average about 61% the households have reported a rainfall which is less than what they think is normal. So this shows that the variable which we took as a sign of climatic shock is quite important in the area.

The next thing we do will be estimating the effect on our set of explanatory variable on the value of agricultural output using econometric approach. First let's put present the list of variables used in this study and expected signs of variables in each regression based on theory and prior established researches.

TABLE 3.4: LIST OF VARIABLES IN THE NET REVENUE REGRESSION AND EXPECTED SIGNS

Variable shorthand	Expected sign
Yield value	Dependent variable
Education of HH head	+
HH size	+
Marital Status	+
Fertilizer use	+
Oxen day used for production	+
Hired labour for production	+
Size of land tilled	+
Live stock owned	+
Rain failure	-

Now we estimate the value of yield per hectare of land (taking its log) on a set of household related and land related features including rainfall variability as one determinant variable. The result we obtained is given by the following table.

TABLE 8.5: REGRESSION OF LOG YIELD PER HECTARE ON A SET OF EXPLANATORY VARIABLES

Variable	Coefficient	S.E Robust
Education of HH head	0.0233465	0.320724
HH size	-0.0245727	0.284018
Marital Status	-0.1573	0.174469
Fertilizer use	-0.002871**	0.0011471
Oxen day used for production	0.0269658***	0.0026394
Hired labour for production	0.0079736*	0.0046848
Size of land tilled	0.0492043	0.0510072
Live stock owned	0.0439366*	0.0236947
Rain failure	-0.3609131**	0.1742326
Constant	6.918086	0.1995965

Number of obs = 97 F (9, 87) = 17.98 Prob > F = 0.0000 R-squared = 0.5892 Root MSE = .74832

**** = significant at 1% level, ** = significant at 5% level and * = significant at 10% level

The result shows that oxen day used for production, hired labour and livestock owned have a positive and statistically significant effect on the value of agricultural output. This finding is not only intuitive but also in tandem with previous findings of studies on similar topics. This result also shows those household related features are not significant determinants of agricultural output in the area. The result as regards the effect of rain variation from the normal on agricultural output is found to be negative and significant. This finding is in consonance with previous similar studies on the subject.

8.4 RAIN FALL VARIABILITY AND FOOD INSECURITY

Agricultural production in the context of the study area is tantamount to food production since farmers in this area are mostly subsistence farmers. The climatic shocks as measured by respondents' assessment of the rain that they get compared to what they may call best. Respondents were asked to reply wither the negative deviation of the rain they got in this season is large or small. So it becomes a dummy variable which takes one when they say the variation is large – which means the rain they got is very small compared to the so called best- and zero when they say the rain they got is not that smaller from the so called best rain.

In order to see how rain fall variability as measured in the above way affects the food security status of the households, households were asked to tell themselves whether they feel food secure or insecure by their own judgment. So the dependent variable namely food insecurity is a binary variable which is one when the household responded food insecure while it takes the values of zero when the household responds food secure. The result of this logit regression is given by the following table.

TABLE 8.6: LOGISTIC REGRESSION OF FREQUENCY OF FOOD SHORTAGES ON A SET OF EXPLANATORY VARIABLES

Variable	Coefficient	S.E
Education of HH head	-0.959756	0.1181021
HH size	0.998167	0.1173479
Marital Status	0.1294658	0.5812322
Fertilizer use	-0.0049874	0.0048689
Land ownership	-0.783277	0.9003972
Size of land owned	-0.0094699	0.2289707
Live stock owned	-0.0073185	0.0632274
Value of Agri. Asset	0.0006192	0.0004348
Loan taking/not	0.0359832	0.5675511
Rain failure	0.7698322	0.5720356
Constant	0.8745111	1.088051

The result shows that the explanatory variables are with the correct sign but are not significant. And as such it can be said that use of fertilizer, land ownership, livestock ownership and level of education of the household head are factors that work against food insecurity. On the other hand, household size and rain failures and marital status that looks to contribute to increased food insecurity. The variable of interest which is rain failure appears to have a positive link to the probability of becoming food insecure.

9. CONCLUDING REMARKS

This study has indicated that climatic shocks as represented by rain fall variability have a significant adverse effect on the level of agricultural production. The impact on food insecurity is also found to be plausibly that of accentuating food insecurity. Thus the main recommendation that can be drawn is that there is a need to encourage and help farmers in developing coping up mechanisms. The government can also think of expanding irrigation schemes in this area as various studies have shown that the area is rich in underground eater.

10. LIMITATIONS

The main limitation of this study is the inability to get data on temperature and rainfall which is peculiar to the study sites which are tabias. These are the lowest administrative levels in the context of Ethiopia. As a result of this, the study is forced to resort to the perception of the rain level by farmers' which is used as a proxy for climatic shocks.

11. SCOPE FOR FURTHER RESEARCH

The issue of climate change and its effect on various things is still an area that needs to be explored in further detail and with much more rigorous approaches. So in relation to the topic that this study tried to explore we foresee further research mainly in relation to the effect of climate change on agricultural productivity by employing data over a relatively large area and longer time span. Therefore, study of this topic using a vast cross sectional, time serious and/or panel data together with more advanced research methodologies will be worth doing.

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A NOTE TOWARDS FINDING A BUYBACK CONTRACT PRODUCING CLOSE RESULT TO A GIVEN QUANTITY FLEXIBILITY CONTRACT

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ABSTRACT

The current paper finds the conditions so that for a given quantity flexibility contract an equivalent buyback contract can be designed either from the retailer's or from the manufacturer's perspective. Using the buyback rates derived from the two conditions the study also suggests the method of finding another buyback rate by extrapolation. This newly derived buyback contract with the help of this extrapolated buyback rate provides a close result to the given quantity flexibility contract and may be used as an alternative.

KEYWORDS

Buyback contract, quantity flexibility contract.

INTRODUCTION

The current study assumes a two stage supply chain consisting of a manufacturer and a retailer. The manufacturer designs the contract parameters and depending on that the retailer places its order quantity if he accepts the contract.

Buyback contract and quantity flexibility contracts are two contracts used as a mechanism to achieve supply chain coordination. The coordination achieved through quantity flexibility contract is dependent on the nature of the demand distribution faced by the retailer. Therefore, in a supply chain consisting of a single manufacturer and multiple retailers, the coordination varies from retailer to retailer and needs right information from the downstream player about the demand pattern. In case of a buyback contract the coordination is independent of the demand distribution faced by the retailer. This provides advantage to the manufacturer to design uniform contract parameters in case of all the retailers to achieve coordination.

This phenomenon gives rise to the necessity for obtaining an equivalent buyback contract for a given quantity flexibility contract. Since, it is not possible to have a buyback contract equivalent to a quantity flexibility contract with respect to both the parties in the supply chain, the current study derives the conditions to have an equivalent buyback contract either from the perspective of the retailer or from the perspective of the manufacturer. From this two conditions another buyback rate is derived by the method of extrapolation which produces a close result compared to the given quantity flexibility contract.

REVIEW OF LITERATURE

Pasternack (1985) introduces the concept of buyback contract which is proven to be a coordinating supply chain contract. He discusses the contract in context of a newsvendor problem. He proposes a model where unit credit is allotted to the newsvendor for each unsold item. Moreover, Cachon and Lariviere (2005) prove that revenue sharing contracts and buyback contracts are equivalent from the view point of achieving equivalent channel coordinating solution in case the retail price is given although the above two contracts are not equivalent in case of a price setting newsvendor.

Quantity flexibility contracts have come up as a combating mechanism to certain supply chain inefficiencies (Lee et al., 1997) and its variety of uses have been discussed in the literature. The basic difference between a buyback contract and a quantity flexibility contract is that while in a buyback contract a retailer is partially protected for its entire leftover inventory whereas in case of a quantity flexibility contract he gets full credit for a portion of the leftover inventory. In a special case of quantity flexibility contract the retailer gets partial credit for a portion of the leftover inventory. This situation is sometimes referred to as backup agreement. Tsay (1999) discusses supply chain coordination with respect to quantity flexibility contract. Lariviere (2002) discusses quantity flexibility contract where the supplier designs it in a manner to incentivise the retailer for better forecasting. However, there is no literature regarding the design of the contract parameters so that one can obtain a buyback contract producing a close result compared to a given quantity flexibility contract.

NOTATIONS

- w : wholesale price per unit
- c_m : Manufacturer's production cost per unit
- c_r : Retailer's procuring cost per unit
- v : salvage value per unit
- p : retail price per unit
- q : no of units ordered
- b : the buyback rate at which the manufacturer buys back the unsold units from the retailer.
- α : the fraction such that the manufacturer gives full credit to the retailer up to αq no of unsold units.
- $S(q,x)$: Expected sales
- x : Demand of the product
- X : random variable of demand
- f : Probability Density Function (Pdf) corresponding to the demand distribution
- F : Cumulative distribution function (Cdf) corresponding to the demand distribution.

SEQUENCE OF EVENTS

The sequence of events is as follows:

- The manufacturer as the Stackelberg leader offers the terms of contract to the retailer by setting the buyback rate and wholesale price and in case of buyback contract or fraction α and wholesale price in case of quantity flexibility contract.
- The retailer either accepts or rejects the contract. The retailer places the order quantity, if he accepts the contract.
- The manufacturer produces the required no of units and supplies it to the retailer at the rate of pre-specified wholesale price.
- Demand is realised and the retailer sells the products.
- Unsold products, if any, are returned to the manufacturer in case of buyback contract or at most αq number of units are returned to the manufacturer with full credit in case of quantity flexibility contract.
- Unsold items are salvaged by the respective parties.

Let q_1^* be the optimal order quantity corresponding to the buyback rate. Retailer's profit function for buyback contract is given by

$$\begin{aligned} \pi_r &= pS(q_1^*, x) + bI(q_1^*, x) - wq_1^* - c_r q_1^* \\ &= pS(q_1^*, x) + b[q_1^* - S(q_1^*, x)] - wq_1^* - c_r q_1^* \\ &= (p - b)S(q_1^*, x) + (b - w - c_r)q_1^* \\ &= (p - b)[q_1^* - \int_0^{q_1^*} F(x)dx] + (b - w - c_r)q_1^* \\ &= (p - w - c_r)q_1^* - (p - b) \int_0^{q_1^*} F(x)dx \\ \therefore \frac{\partial \pi_r}{\partial q} &= (p - w - c_r) - (p - b)F(q_1^*) \\ \therefore q_1^* &= F^{-1}\left(\frac{p - w - c_r}{p - b}\right) \end{aligned}$$

Let q_2^* be the optimal order quantity for a given α for a quantity flexibility contract
Retailer's profit function for quantity flexibility contract is given by

$$\begin{aligned} \pi_r &= pS(q_2^*, x) + w[q_2^* - S(q_2^*, x)] + S\{q_2^*(1 - \alpha), x\} - q_2^*(1 - \alpha) - wq_2^* - c_r q_2^* + v[q_2^*(1 - \alpha) - S\{q_2^*(1 - \alpha), x\}] \\ &= (p - w)S(q_2^*, x) + (w - v)[S\{q_2^*(1 - \alpha), x\} - q_2^*(1 - \alpha)] - c_r q_2^* \\ &= (p - w)[q_2^* - \int_0^{q_2^*} F(x)dx] - (w - v) \int_0^{q_2^*(1 - \alpha)} F(x)dx - c_r q_2^* \end{aligned}$$

Therefore, the required condition for the two contracts to be equivalent from the retailer's point of view is

$$(p - w - c_r)F^{-1}\left(\frac{p - w - c_r}{p - b}\right) - (p - b) \int_0^{F^{-1}\left(\frac{p - w - c_r}{p - b}\right)} F(x)dx = (p - w - c_r)q_2^* - (p - w) \int_0^{q_2^*} F(x)dx - (w - v) \int_0^{q_2^*(1 - \alpha)} F(x)dx$$

For normal distribution the condition becomes

$$(p - w - c_r)F^{-1}\left(\frac{p - w - c_r}{p - b}\right) - (p - b)\eta\left(F^{-1}\left(\frac{p - w - c_r}{p - b}\right), \mu, \sigma\right) = (p - w)[q_2^* - \eta(q_2^*, \mu, \sigma)] - (w - v)\eta(q_2^*(1 - \alpha), \mu, \sigma) - c_r q_2^* \dots\dots(1)$$

Where,

$$\eta(q, \mu, \sigma) = \int_{-\infty}^q F(x)dx = (q - \mu)\Phi\left(\frac{q - \mu}{\sigma}\right) + \sigma\phi\left(\frac{q - \mu}{\sigma}\right)$$

Manufacturer's profit function for buyback contract is given by

$$\begin{aligned} \pi_m &= (w - c_m)q_1^* - (b - v)I(q_1^*, x) \\ &= (w - c_m)q_1^* - (b - v)[q_1^* - S(q_1^*, x)] \\ &= (w - c_m - b + v)q_1^* + (b - v)[q_1^* - \int_0^{q_1^*} F(x)dx] \\ &= (w - c_m)q_1^* - (b - v) \int_0^{q_1^*} F(x)dx \\ \text{Where, } q_1^* &= F^{-1}\left(\frac{p - w - c_r}{p - b}\right) \end{aligned}$$

Manufacturer's profit function for quantity flexibility contract is given by

$$\begin{aligned} \pi_m &= (w - c_m)q_2^* - (w - v)[q_2^* - S(q_2^*, x)] + S\{q_2^*(1 - \alpha), x\} - q_2^*(1 - \alpha) \\ &= (w - c_m)q_2^* + (w - v)[q_2^* - \int_0^{q_2^*} F(x)dx] + (w - v) \int_0^{q_2^*(1 - \alpha)} F(x)dx \\ &= (w - c_m)q_2^* - (w - v) \int_0^{q_2^*} F(x)dx + (w - v) \int_0^{q_2^*(1 - \alpha)} F(x)dx \\ &= (w - c_m)q_2^* - (w - v) \left[\int_0^{q_2^*} F(x)dx - \int_0^{q_2^*(1 - \alpha)} F(x)dx \right] \end{aligned}$$

Therefore, the condition for the two contracts to be equivalent from manufacturer's perspective is

$$(w - c_m)F^{-1}\left(\frac{p - w - c_r}{p - b}\right) - (b - v) \int_0^{F^{-1}\left(\frac{p - w - c_r}{p - b}\right)} F(x)dx = (w - c_m)q_2^* - (w - v) \left[\int_0^{q_2^*} F(x)dx - \int_0^{q_2^*(1 - \alpha)} F(x)dx \right]$$

For normal distribution the required condition is

$$(w - c_m) \left[F^{-1}\left(\frac{p - w - c_r}{p - b}\right) - q_2^* \right] - (b - v)\eta(q_1^*, \mu, \sigma) + (w - v)[\eta(q_2^*, \mu, \sigma) - \eta(q_2^*(1 - \alpha), \mu, \sigma)] = 0 \dots\dots(2)$$

Where,

$$\eta(q, \mu, \sigma) = \int_{-\infty}^q F(x)dx = (q - \mu)\Phi\left(\frac{q - \mu}{\sigma}\right) + \sigma\phi\left(\frac{q - \mu}{\sigma}\right)$$

Numerical Example:

Assuming that the demand faces a normal distribution with mean $\mu=250$ and standard deviation $\sigma=50$. Let us assume that the cost of production $C_m=100$, wholesale price $w = 140$ and retail price $p=180$ per unit. Let us also assume that the cost of procuring per unit for retailer is 0 i.e. $C_r=0$ and salvage value of the product is 0 i.e. $v=0$.

TABLE 3.1: DIFFERENT VALUES OF ALPHA AND CORRESPONDING EQUIVALENT BUYBACK RATES FROM RETAILER'S PERSPECTIVE

Alpha	Equivalent buyback rate	Retailer's Profit in both the contracts	Manufacturer's Profit for the equivalent buyback contract	Supply chain profit for equivalent buyback contract	Supply chain profit for QF contract	Difference in Profit
0.05	43.43	7651.77	8509.91	16161.69	16129.99	31.69
0.10	73.86	7984.54	8406.59	16391.14	16356.00	35.14
0.15	95.08	8310.70	8125.64	16436.35	16443.94	-7.58
0.20	109.83	8622.18	7643.09	16265.27	16374.13	-108.85
0.25	120.05	8910.92	6951.97	15862.90	16132.93	-270.02
0.30	127.07	9169.69	6064.19	15233.88	15713.16	-479.28
0.35	131.85	9392.82	5006.99	14399.82	15113.92	-714.10
0.40	135.04	9576.97	3815.49	13392.46	14339.93	-947.46
0.45	137.12	9721.39	2524.73	12246.13	13400.18	-1154.05
0.50	138.42	9828.22	1162.17	10990.40	12306.46	-1316.06
0.55	139.19	9901.98	-255.35	9646.62	11070.94	-1424.33

TABLE 3.2 DIFFERENT VALUES OF ALPHA AND CORRESPONDING EQUIVALENT BUYBACK RATES FROM MANUFACTURER'S PERSPECTIVE

Alpha	Equivalent buyback rate	Manufacturer's Profit in both the contracts	Retailer's Profit for the equivalent buyback contract	Supply chain profit for equivalent buyback contract	Supply chain profit for QF contract	Difference in Profit
0.05	60.08	8478.22	7819.23	16297.45	16129.99	167.45
0.10	78.12	8371.46	8041.81	16413.26	16356.00	57.26
0.15	94.73	8133.24	8304.26	16437.50	16443.94	-6.45
0.20	107.41	7751.95	8563.91	16315.86	16374.13	-58.27
0.25	116.84	7222.00	8811.04	16033.05	16132.93	-99.88
0.30	123.80	6543.47	9040.89	15584.36	15713.16	-128.80
0.35	128.92	5721.10	9249.99	14971.09	15113.93	-142.83
0.40	132.65	4762.96	9435.42	14198.39	14339.93	-141.55
0.45	135.32	3678.79	9594.66	13273.45	13400.19	-126.74
0.50	137.18	2478.24	9725.74	12203.98	12306.46	-102.48
0.55	138.42	1168.97	9827.79	10996.75	11070.95	-74.19

TABLE 3.3 DIFFERENT VALUES OF ALPHA AND CORRESPONDING BUYBACK RATES OBTAINED BY EXTRAPOLATION AND EXPECTED PROFITS OF MANUFACTURER, RETAILER AND TOTAL SUPPLY CHAIN

Alpha	Extrapolated buyback rate	Retailer's Expected Profit	Manufacturer's Expected Profit	Expected Supply Chain Profit	Expected Supply chain profit for QF contract	Difference in Profit
0.05	39.55	7616.64	8511.83	16128.47	16129.99	-1.52
0.10	67.11	7900.00	8448.57	16348.56	16356.00	-7.44
0.15	92.72	8268.60	8173.62	16442.22	16443.94	-1.72
0.20	104.61	8500.64	7859.94	16360.58	16374.13	-13.55
0.25	114.95	8756.59	7354.80	16111.39	16132.93	-21.54
0.30	122.60	8997.32	6688.18	15685.50	15713.16	-27.67
0.35	128.19	9217.26	5865.45	15082.72	15113.93	-31.21
0.40	132.23	9412.64	4895.49	14308.13	14339.93	-31.80
0.45	135.10	9580.28	3790.27	13370.55	13400.19	-29.64
0.50	137.07	9717.74	2563.50	12281.23	12306.46	-25.23
0.55	138.37	9823.98	1227.55	11051.53	11070.95	-19.42

Let b^1 and b^2 respectively be the solutions obtained by solving Eqs. (1) and (2) for some given α . For a particular value of α , it is first determined which is a better solution by obtaining the difference of total supply chain profit for the quantity flexibility contract and derived buyback contract. If b^1 is a better solution' the same is used to obtain another buyback rate by the method of extrapolation with respect to the difference in total supply chain profit.

LIMITATION OF THE STUDY AND FUTURE SCOPE

The study is based on the assumption that manufacturer is the powerful player and leader in the supply chain considered. The case may be otherwise also. Future research may consider examining equivalence among other supply chain contracts practiced for achieving channel coordination.

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DIRECT TAX CODE IN INDIA: A MAJOR TAX REFORM FOR THE EMERGING ECONOMY

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ABSTRACT

In India, Tax is one of the major sources of revenue to the Government. In view of federal structure of governance in India, there is a multiplicity of taxes on both direct taxes and indirect taxes. Besides these, there is plethora of taxes like cesses, surcharges, stamp duty, entertainment tax, road tax etc. This shows the rigidity and complexity of Indian tax system. So in order to avoid this rigidity and complexity the Central Government is focusing towards changing some of the tax methods. Among them, the Direct Tax Code is one. The present tax system is facing with the problem of uniformity in all the phases which brings to more complexity to assessee. So in order to wash these complexities, the Central Government is spotlighting to introduce the Direct Tax Code system in India. This major direct tax reforms helps to boost up the Indian Economy as best much as possible. Here an attempt is made to analyze in detail about the major issues in Direct Tax Code and its relationship between developments of the Indian Economy. Along together, the study covers few other relevant aspects of Direct Tax Code.

KEYWORDS

Direct Tax Code, Direct Tax System, Economy, and Economic Growth.

INTRODUCTION

The code is not an attempt to amend the Income Tax, 1961, nor is it an attempt to improve upon the present Act. It is an all new exercise in which assumption which has held the grounds for many years have been discarded.”

CBGA

India's emergence as a global economic power has helped inward investment and domestic business activity to soar. Cumulative foreign investment topped \$169bn in the last decade – investment which came despite the country's dated and complex tax system. Indeed, India's tax legislation has caused much concern for domestic and foreign business. In an effort to address this, the Government of India has initiated a significant overhaul with the creation of the Direct Tax Code (DTC).

Scheduled for introduction in April 2012, the DTC will replace the 1961 Income Tax Act (ITA), and has been designed to provide a tax code which is more in step with the needs of India's growing economy. One aim of the new tax code is to provide a system which takes into account the increase in cross-border mergers and acquisitions undertaken by Indian companies over the last few years. In addition, while lowering corporate tax rates, the DTC aims to remove the administrative burden on foreign companies and investors for whom the country is now a leading target for investment. By implementing the new code, the Government of India also intends to streamline and simplify legislation, as well as iron out many ambiguities in the current system. However, the professional community is divided over the logic and scope of some of the Code's provisions and some experts are anxious about the impact such legislation will have on business and investment activity. The need to maintain a balance between reaping tax rewards under the new legislation and maintaining the interest of businesses and investors is of utmost importance. There is some anxiety as to whether the DTC achieves this balance, especially given the Government of India's reputation for enforcing tax legislation.

CBGA- Centre for Budget and Governance Accountability Publishers, "Direct Tax Code-A Discussion Paper", March-2013.

AN OVERVIEW ON DIRECT TAX CODE (DTC)

The compatibility and conduciveness of a taxation system plays an important lubricating role in the overall growth and direction of an economy. Tax laws are often seen not as a mere framework for the government to collect revenues, but as an effective tool to direct and propel the economy to higher levels, more so in a developing economy like Indian Economy. The government of India proposed several changes in the tax system from time to time. The new Direct Tax Code (DTC) seeks to bring about a paradigm shift in the direct tax system. The objective of the new code is to improve the efficiency and equity of Indian tax system by eliminating distortions in the tax structure, introducing moderate levels of taxation and expanding the tax base. A good tax system should minimize the cost of collection, compliance cost and the cost to the economy in terms of the distortions it creates while generating revenues. Three considerations should govern any tax proposal: *Efficiency, Equity and Simplicity*. That is, a tax should promote economic efficiency and provide incentives for desirable behaviour; it should aim for vertical equity (rich folk should pay more) and horizontal equity (some sorts of gains should not get preferential treatment over others); and it should be simple to administer, reducing litigation and evasion.

MAJOR HIGHLIGHTS OF DTC**HIGHLIGHT I: IN GENERAL**

1. Earlier Income Tax Act and Wealth Tax Act (Covering Income Tax, TDS, DDT, FBT and Wealth Taxes) are abolished and single code of Tax, DTC in place.
2. Concept of Assessment year and previous year is abolished. Only the 'Financial Year' terminology exists.
3. Only status of 'Non Resident' and 'Resident of India' exits. The other status of 'resident but not ordinarily resident' goes away.
4. Earlier the terminology of assess was meant for the person who is paying tax and/or, who is liable for proceeding under the Act. Now it has been added with 2 more definitions namely a person, whom the amount is refundable, and/or, who voluntarily files tax return irrespective of tax liability.
5. No changes in the system of Advance Tax, Self Assessment Tax and also TDS. Amendment of TDS goes in line with earlier Notification 31/2009 which speaks of Form 17/UTN/etc
6. In TDS, a new return, if found required, will be introduced for Non TDS payments.
7. Government assess is covered in Direct Tax Code. Even though they are not liable for Income Tax/Wealth Tax, Government Assesses.

HIGHLIGHT II: TAX INCENTIVES

1. Earlier terms Deductions under Chapter VI-A will be treated as Tax incentives.
2. 80C gets a major hit by introduction of EET methodology (Exempt-Exempt-Tax). The investment is exempted when invested. The investment is exempted till it is remained invested. The investment is Taxed when it is withdrawn:
 - (a) Also, investments are considered only of those invested through savings intermediaries approved by PFRDA (Pension Fund Regulatory & Devp. Authority).
 - (i) Such savings intermediaries may in turn invest in ELSS mutual funds, government securities, public sector securities, etc.
 - (ii) Such investments are also exempted to the maximum of Rs. 3 lakhs.
 - (b) All such savings will be governed directly by government by an appointed depository (an independent agency).
 - (c) Other than this, Tuition fees for children will be allowed as deductions.
 - (d) No maximum limit for this, as savings is charged once they are withdrawn.
 1. Medical treatment, higher education loan interest, donation and rent paid by self-employed individual are deductible.
 2. New provision comes for Handicapped individuals to get deductions up to 75,000.

APPLICABLE DEDUCTIONS FOR INDIVIDUAL UNDER TAX INCENTIVES

1. Investments through PFRDA approved agencies (Max. Of 3 Lakhs)
2. Payment of tuition fees
3. Medical treatment.
4. Health insurance
5. Donations
6. Interest on loan taken for higher education
7. Maintenance of a disabled dependant

HIGHLIGHT III: SALARIES DEDUCTIONS:

1. Allowed are only, PT, Transport Allowance (limit prescribed) and special allowances given exclusively to meet duties (to the extent actually incurred.)
2. Also deduction is allowed for PF as tax incentives.
3. And last, deductions are allowed for Voluntary retirement, Gratuity on retirement and pension received.
4. No deductions on HRA, Medical reimbursements, etc.
5. Employer part of PF paid will be exempt from tax as Tax Incentives under EET methodology (to employees).

HIGHLIGHT IV: HOUSE PROPERTY

1. No deduction for Housing loan repayment of Self-Occupying property. This includes interest as well as part of principal.
2. Only Let out properties are considered and the Gross rent and specified deductions are taken with simple calculations.

HIGHLIGHT V: RESIDUARY SOURCES (OTHER SOURCES)

1. Earlier things follow almost.
2. Any amount exceeding 20,000 taken/accepted/rapid as loan or deposit, otherwise by an account payee cheque/draft shall be added to the income.

HIGHLIGHT VI: COMPUTATION OF TOTAL INCOME

1. Incomes are broadly divided into 2 sources, namely Special Sources and Ordinary Sources.
2. Special sources are given no deduction and what is earned is taxed directly (generally at a lower rate).
3. Ordinary sources are divided into further categories, namely:
 - Income from employment.
 - Income from House Property.
 - Income from Business.
 - Capital gains.
 - Income from Residuary Sources (Similar to other sources, with some minuses).

HIGHLIGHT VII: COMPUTATION OF TOTAL INCOME UNDER DTC

1. Income from Lottery or Crossword puzzle, Race, Gambling or Betting.
2. Investment income earned by NRIs.
3. Income of Non-resident Sportsman through participation in games or through advertisement or writing articles relating to games in print media.
4. Guarantee money received by Non-resident association or institution.

HIGHLIGHT VIII: ORDINARY SOURCES

1. The 5 categories of Ordinary sources can have multiple sources under each head (e.g., Multiple employer, Multiple Business, multiple Properties, etc.).
2. The income will be computed in 2 steps procedure for each head:
 - (i) calculate for each source under each head of Income.
 - (ii) Aggregate the total under each head and arrive a total profit or loss under such head.
 1. Then aggregate all the 5 heads and arrive the figure of 'Current Income from Ordinary Source'.
 2. Then this value has to be aggregated with 'unabsorbed losses as of immediate preceding financial year'. Such aggregated income will be treated as 'Gross Total Income from Ordinary Sources'.

SALIENT FEATURES OF DIRECT TAX CODE (DTC)

TABLE 1.1 SHOWS FEATURES OF DTC

Features	Description of Features
Single code for direct taxes	All the direct taxes have been brought under a single code and compliance procedure unified. This will eventually payee the way for a single unified taxpayer reporting system.
Use of simple language	With the expansion of economy, the number of taxpayers can be expected to increase significantly. The bulk of these taxpayers will be small, paying moderate amounts of tax therefore it is necessary to keep the cost of compliance low by facilitating voluntary compliance them. This is sought to be ached, inter alia by using simple language in drafting so as to convey, with clarity, the intent scope and amplitude of the directions and mandates.
Flexibility	The structure of the states has been developed in a manner which is capable of accommodating the changes in the structure of a growing economy without resorting to frequent amendments therefore to the extent possible. The essential and general principal has been reflected in the status and the matters of details are contained in the rule.
Reducing the scope for litigation	An attempt has been made to avoid ambiguity in the provisions that invisibly give rise to rival interpretations. The objective is that the tax administrator and the tax payer as ad idem on the provisions of the law and the assessment results in a finality to the tax liability of the tax payer.
Elimination of regulatory functions	Traditionally, the taxing statute has also been used as a regulatory tool. However with regulatory authorities being established in various sector of the economy, the regulatory function of the taxing statute has been withdrawn. This has significantly contributed to the simplification exercise.
Consolidation of Provision	In order to enable a better understanding of tax legislation provisions relating to definitions, incentives, procedures and rates of taxes have been consolidated.

Table: Authors Developed

COMPARISON BETWEEN PROPOSED DIRECT TAX CODE AND PRESENT DIRECT TAX SYSTEM

TABLE 1.2: SHOWS THE COMPARISON BETWEEN PROPOSED DIRECT TAX CODE AND PRESENT DIRECT TAX SYSTEM

DIRECT TAX SYSTEM	DIRECT TAX CODE
At present there are two legislation i.e. Income Tax Act,1961 and Wealth Tax Act, 1957	Single code for Income Tax Act and Wealth Tax Act. The code consists of 285 sections.
There is three kind of Residential status i.e. 'Resident', 'Non Resident' and 'Resident but not Ordinarily Resident'.	Residential status of "Resident but not ordinarily resident" has been done away with.
There are 'previous year' and 'assessment year'	To eliminate confusion only 'Financial Year' will prevail.
The corporate tax rate of domestic company is 30% and for foreign company, it is 40%. Business losses can be carrying forward for 8 yrs. Dividend distribution is at 15%	The corporate tax rate of all companies reduced to 25%. Business losses can be carrying forward for unlimited period. Dividend distribution tax remains at 15%.
MAT at 15% is levied on 'Book Profit'. Further MAT tax credit is allowed to be carried forward up to ten assessment year.	Basis for levy of MAT is 2% on gross asses. Carry forward of such MAT tax credit has been denied.
Tax incentives were based on location or an export turnover up to a specified period. Further capital investment was not allowed to amortize.	Export and Area/profit based exemption to be discontinued without affecting currently enjoying such incentive. Under the DTC all capital investment and revenue expenditure(except land, goodwill and financial instruments) allowed to be amortized indefinitely and the period of such amortization will be called as 'Tax Holiday'
Income from Salary includes all perquisites such as house rent, leave travel assistance, children education allowances, encashment of unraveled earned leave on retirement and free/concessional medical treatment paid/provided etc. is exempt up to a certain limit	All such exemption withdrawn.
As per section 80C certain investment/savings up to Rs.1 lakh were deductible from taxable income.	Exempt-Exempt-Taxation (EET) method of taxation of savings/investment will be applied on new contribution after commencement of the code. Limit for investment raised to Rs.300000 p.a. However deductions on investment in tax-saving mutual funds and fixed deposits have been abolished.
Self-occupied house property whose gross rent is taken as NIL, used to get deduction of interest on loan. Deduction for repair based on annual value in case of rented house property is 30%	Self-occupied house property whose gross rent is taken as Nil, will not get deduction of interest on loan. Deduction for repair on annual value in case of rented house property is proposed to reduce to 20%
Short term capital gain which attracts STT is taxed at 15%, Short Term Capital Gain which does not attract STT attract normal rate of tax. Long Term Capital Gain, which attracts STT, is exempt from tax. Long Term capital Gain which does not attract STT is subject to a tax rate at 10% without indexation or 20% with indexation. Unabsorbed capital loss allowed to be carried forward up to 8 assessment years.	Since STT proposed to abolish, short term and Long term capital gain will from part of income, therefore all capital gain or transaction of equity shares/unit will attract normal tax. However indexation benefit of long-term capital gain will remain. Unabsorbed capital loss will be allowed to be carried forward indefinitely.
There is no such provision for upfront determination of the arm's length pricing or pricing methodology.	Transfer Pricing matter will be well settled under proposed APA under which an agreement between the taxpayer and the tax authorities for the upfront determination of the arm's length pricing/pricing methodology of an international transaction will be made but shall not be effective for more than five consecutive years.

Source: <http://www.taxpointindia.com>

REVIEW OF LITERATURE

DrSanjibbandyopadhyaya (2011), he analyzed that the budget proposes various tax reforms which include working towards on early enactment of the much awaited DTC bill. Introduction of General Anti Avoidance Rule (GAAR) to avoided counter aggressive tax avoidance scheme. The much awaited Advance Pricing Agreement (APA) Programmed is proposed to be introduced from 1st July 2012. A small yet major step made by making suitable amendment, i.e. international transactions to specifically introduce business restricting intra group financing arrangements¹. **S.Rajaratnam (2012)**, he opines that Income tax law has a number of provisions encouraging scientific research. The finance bill 2012 has extended the concession under section 35 (2AB). This provision grants weighted deduction at 200% for expenditure on scientific research in the business of bio-technology. Current expenditure including capital expenditure on scientific research is allowed under 35(1) (iia), and (iii). There are number of decisions pending further adjudication from the Supreme Court unless the view favorable to taxpayer is accepted by the central board of direct taxes.² **Manaskumar Thakur (2012-13)**, he expressed that the expectation that GDP growth would revert to the pre global financial crisis level at around 9% was dashed as the economy disappointedly grew only by 6.9% mainly due to declaration in industrial growth. GDP growth was salvaged by the services sector which grew at 9.4% from 9.3% in last year and is now about 56% of India's GDP. Indian industry struggled under the twin burdens of persistent high inflation which escaped input costs.³ **K P C Rao (2012-13)** he expressed that Many of the proposals in the finance bill are required to be reviewed or differed in the light of the standing committee report, since the parliament cannot speak in two voices one through standing committee report and the other through the finance bill. There is considerable uncertainty as to the incidence of tax trade and industry consequent on these proposals, which have been prompted without only prior consultation with the profession or trade and industry.⁴ **Anirbanghosh (2012)** he analyzed about the revised DTC was published in august 2010 and finally placed before parliament on august 30-2010. This bill contains 319 sections divided in to 20 chapters there are 22 schedules and 297 definitions. The new DTC aims at improving efficiency and equity of the tax system which will distortions in the tax structure as well as broadening the base for smooth transition by the tax laws. The new code will completely overhaul the existing tax laws and structure for not only individual tax payers but also corporate houses and foreign residents.⁵

OBJECTIVES OF THE STUDY

1. To study changes in consideration of individual status under Direct Tax Code in various situations.
2. To know about the probable and expected effects of direct tax code on Indian economy.
3. To identify the level of relevant relationship between Indian Economic Development and taxation system.
4. To suggest suitable measures based on findings.

METHODOLOGY

In order to meet the objectives of the study, the required data is collected from both the primary and secondary sources. Primary data is collected through the personal interviews and structured questionnaire from the selected professionals (i.e. Auditors, Tax Consultants, Tax lecturers and tax specialization students etc) and the secondary data is meant for various sources like newspapers, budget reports, DTC bill reports, magazines, articles and I-sources etc.

ANALYSIS AND INTERPRETATION
RESPONDENTS PROFILE

	Variables	No of respondents	%
Gender	Male	38	76
	Female	12	24
Age Group	20-30	26	52
	31-40	17	34
	41-50	4	8
	> 51	3	6
Profession	Auditors	19	38
	Tax Consultants	14	28
	Tax Lecturers	10	20
	Tax Specialization students	7	14

Source: Field Survey

TABLE 1.3 NEED OF DTC IN PLACE OF DIRECT TAX SYSTEM

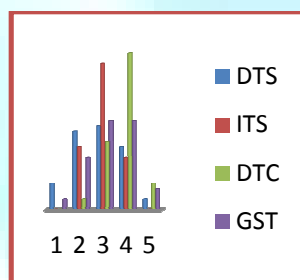
Description	No. of respondents	(%)
Yes	43	86
No	7	14
Total	50	100

TABLE 1.4 DTC MAY SOLVE PROBLEMS

Description	No of Respondents	(%)
Yes	41	82
No	9	18
Total	50	100

TABLE 4.4: OPINION ABOUT INDIAN DIFFERENT TAX SYSTEMS INCLUDING EMERGING CONCEPT
[EXCELLENT=5, VERY GOOD=4, AVERAGE =3, POOR=2, VERY BAD =1]

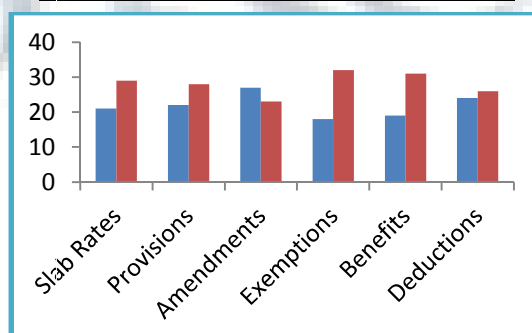
Tax System	Respondents Ratings					Total	Total (%)				
	1	2	3	4	5		1	2	3	4	5
DTS	05	15	16	12	02	50	10	30	32	24	04
ITS	00	12	28	10	00	50	00	24	56	20	00
DTC	00	02	13	30	05	50	00	04	26	60	10
GST	02	10	17	17	04	50	04	20	34	34	08



Source: Field survey

TABLE 4.5: RESPONDENTS PREFERENCE TO THE BELOW DECISIVE FACTORS

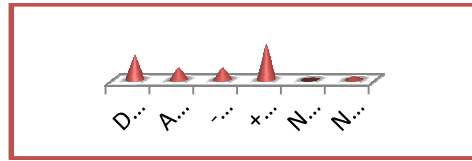
Description	DTS	DTC	Total	Total (%)	
				DTS	DTC
Slab Rates	21	29	50	42	58
Provisions	22	28	50	44	56
Amendments	27	23	50	54	46
Exemptions	18	32	50	36	64
Benefits	19	31	50	38	62
Deductions	24	26	50	48	52



Source: Field survey

TABLE 4.6: OPINION ABOUT RELEVANT RELATIONSHIP B/W TAX SYSTEM AND ECONOMIC DEVELOPMENT

Variables	Directly affect	Adversely affect	-ve impact	+ve impact	No change	No relevance
Opinion	14	07	07	20	00	02



Source: Field Survey

STUDY FINDINGS

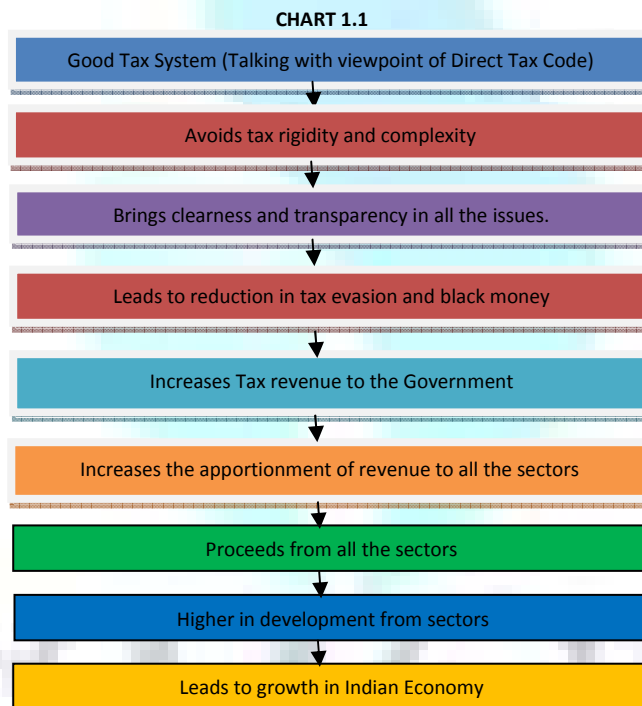
The overall analysis of the study is mainly based on the taxation structure and clarity of present scenario of taxation in India. The major data is extraction from 3 years annual budget; this has made the old act complicated and difficult to interpret, leading to many disputes and court cases. The government, wished to have a modern tax code in step with the needs of an economy so, major findings are based on the respondent’s opinion and direct tax code is impact on calculation under various situations.

- The proposed direct tax code system can also put an end to the concentration of the industrial units in a particular area of low tax and incentives and this direct tax code system in effect can bring a new face to the Indian economy.
- Direct tax code bill is now pending with a parliament committee to take final shape. The implications of the changes in the bill have not all been understood, there is additional liability for almost all category of assessee.
- The new DTC aims at improving efficiency and equity of the tax system which will distortions in the tax structure.
- More than 86% of respondents are accepted that implementation of direct tax code indicates that the present DTS is associated with many problems.
- Implementation of direct tax code is ultimate effect on companies’ profits, i.e. DTC makes companies to pay more tax like MAT.

RESULT AND DISCUSSION

Here an effort is made to show the relevance between the good tax system which helps to raise the growth in economy. Here, it is assumed that only tax factor is considered to show the ways for economic growth with few more assumptions.

The below **chart 1.1** shows the relationship between good tax system (DTC) and way for economic growth through that good tax system;



Source: Authors Developed

LIMITATIONS OF THE STUDY

- The study area is confined to selected respondents and in the selected area only and it is considered that DTC as one and only factor for the economic growth. It ignores few other emerging tax systems like GST etc.
- It is not possible to assure when higher in the apportionment of funds to sectors may leads to perform more and more. It means, the sectors growth may not only depends on the fund apportionment. But, in the study fund apportionment is considered as a key factor to higher the performance in the sectors. So this is another kind of limitations of the study.

CONCLUSIONS

The current system of tax is fraught with complexities owing to many amendments over the years. The direct tax code has done a good job of removing unnecessary complications in the tax laws, the definitions and provisions have been modified, thereby keeping pace with the times the direct tax code would not have any long term impact on individuals. The direct tax will probably not have any long term impact on individuals, the corporate income tax rates have been slash down, but keeping deductions in mind, the effective tax rate is unlikely to be affected drastically . The calculation of the minimum alternative tax based on the assets needs to be relooked at, especially for those companies which are working on projects with long gestation periods. While the proposal is put forth for public debate, its implementation would not happen until 2011. All most all the pros and cons of these proposals, the noteworthy fact is that an initiative has been taken to bring in simpler direct tax regime that can facilitate higher consumerism. The survey reveals that several positive aspects in relation to survey, more than three –fourth of the people or super majority feel that law is simple, easy to understand; it will avoid litigation, which we tend to slightly disagree with because there are certain aspects in the law that could lead to litigation.

This was just an analysis of the proposed DTC and how the changes can impact if it is approved. But for now, it is just a proposal so don't panic. Lot of debates and discussion will happen on this and this can take totally new direction are may be it does not happen at all we continue with current tax system.

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PERFORMANCE OF INDIVIDUAL BOREWELL PROGRAMME IN KARNATAKA: WITH SPECIAL REFERENCE TO SCs AND STs

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ABSTRACT

Scheduled Castes (Scs) Scheduled Tribes (STs) are the most disadvantaged groups of the Indian society. The Corporation has been providing irrigation facilities for the benefit of SC/STs small and marginal farmers under the Individual Borewell Irrigation Scheme. The scheme is implemented with effect from 1984-85, SC/ST person to improve their economic condition by taking up gainful economic activities. In this context, the present study to find the most benefited community under the IBP for SC/ST Corporation in Karnataka. The study shows that The Individual Borewell Irrigation Scheme helped the beneficiaries to aquaria assets. There income creating assets so it implies that the asset creating and capability building empowerment programme for SC /ST are both productive and welfare augrumenting. Hence, the SC/ST development programmes constitute a beginning and not a complete attempt to tackle the problems of underdevelopment and human poverty of the SC/ST population of India and Karnataka.

KEYWORDS

farmers Development, SCs, STs, weaker section.

INTRODUCTION

cheduled Castes (Scs) Scheduled Tribes(STs) are the most disadvantaged groups of he Indian society. Due to socio-historical and geographical isolation since a long time, socio-economic development has bypassed them. Al most of the SCs were practicing low and menial occupation, they were treated as untouchables and were low in caste hierarchy. There are many constitutional safeguards for the welfare, development and protection of SCs and STs in the country. The two statutory commission's viz. National commission for SCs and National commission for STs have an important role in safeguarding the rights, interests and welfare of 5th and 6th schedule for the protection and administrative dispensation of tribal's in the Central Indian States and north-Eastern Region States.

The state government executed self employment, land purchase and irrigation plans for the economic development of SC/STs. The Schedule castes and Schedule Tribes Development Corporation plays catalytic role in developing programmes for income, employment generation and financing pilot programmes which can be taken up by the state government. The present study to find out the most benefited community under the ISB for SC/ST Development Corporation Scheduled in Karnataka during the period from 2001-02to2010-11.The present study is based on secondary information, which was gathered from publication of reputed journals, books, websites and state level SC/ST Corporation.

INDIVIDUAL BOREWELL PROGRAMME

The Corporation has been providing irrigation facilities for the benefit of SC/ST small and marginal farmers under the Individual Borewell Irrigation Scheme. The scheme is implemented with effect from 1984-85.

GENERAL INFORMATION OF THE PROGRAMME

50 percent of the funds released under Gangakalyana scheme can be utilised for Individual Borewell Programme. As per the allocation of funds, target is fixed district wise and constituency wise. The district managers have to select the beneficiaries through the taluk section committee and bore wells are to be drilled. As per the circular No. 11/A SWD 22/SPC 2000/4.9.2001 under the chairmanship of member of legislative assembly (MLA) approval for the proposal has to be taken in August. Care should be taken to select beneficiaries from the area / taluk where the progress is poor. If the target is less and the applications are more and if there is no chance of considering the application, the beneficiaries are to be selected as per the following priority.

ELIGIBILITY

1. Lands sanctioned from the Govt. under Darkasth land
2. The lands restored to SC/ST persons as per PTCL Act.
3. Lands purchased under LPS scheme of the Corporation.

Unit cost as per GO. No. SWD-170 SDC 01 22-3-20

02 100 percent subsidy subject to a maximum of Rs. 65,000 in each case if the unit cost exceeds Rs. 75,000. The beneficiaries have to organize to pay the loan amount Rs. 10,000 by way of loan.

Project cost which includes drilling cost pump set lost and YMD to KPTCL should not exceed Rs. 75,000/-.

Based on the geophysical survey it is easy to assess the probable cost of the borewell and estimate the total cost.

INDIVIDUAL BOREWELL PROGRAMME (I.B.P. NO. 2)

Personal core that the estimated unit cost should not exceed Rs. 75,000/-. Necessary action should be taken to mortgage the land of the beneficiaries for the loan amount of Rs. 10,000/-.

EXECUTION OF WORK

As explained under Gangakalyana Scheme, the same procedure has to be followed while drilling of borewells and execution of other works.

Taluk Development Officers should be present on the spot while drilling the borewells and record the yield by 'V' notch method.

After drilling, pump erection and exercitation, information should be sent to Head office in the prescribed formats.

SECOND YIELD TEST

Under Gangakalyan as well as under Individual Irrigation Programmes the second yield test has to be conducted in the presence of Department of Mines and Geology Officers before the installation of pumpsets. Hence necessary action has to be taken by the district managers to conduct yield test.

ENERGISATION

The energisation of borewell is one of the important aspects under this programme. Therefore, immediately after drilling, the application is to be registered in KPTCL. Efforts should be made to get the wells energized by keeping regular contact and close follow up with the KPTCL officers and under Gangakalyana Scheme necessary YMD/MSD to KPTCL should be borne by the Corporation. As per Govt. order if the amount payable to KPTCL is within the project cost of Rs. 75,000. The KPTCL amount will be borne by the Corporation under individual irrigation bore well scheme. Before depositing KPTCL amount the beneficiary's land should be mortgaged to Corporation.

EMPIRICAL ANALYSIS

In the study is evaluation the programme of the basis of secondary data collected from SC/ST development Corporation by employing statistical tools like AGR, CGR, and Average the results are given the table.

TABLE 1: THE PERFORMANCE OF IBP FOR SC/STs IN KARNATAKA DURING 2010-2010 (in lakhs)

	No. Beneficiaries				Financial Achivement				each benefit for	each Benefit for
	SC	AGR	ST	AGR	SC	AGR	ST	AGR		
2000-2001	1000	0	250	0	450	0	190	0	0.45	0.76
2001-2002	2714	171.4	1045	318	1612.71	258.38222	239.88	26.252632	0.59	0.23
2002-2003	2170	-20.044215	292	-72.057416	1067.88	-33.783507	240.22	0.1417375	0.49	0.82
2003-2004	830	-61.751152	59	-79.794521	1217.38	13.9997	52.86	-77.995171	1.47	0.9
2004-2005	5692	585.78313	1000	1594.9153	2572.69	111.33007	1625.44	2974.9905	0.45	1.63
2005-2006	10000	75.685172	5359	435.9	166283	6363.3905	5382.15	306.06516	16.63	1
2006-2007	8598	-14.02	5048	-5.8033215	6144.82	-96.304601	4938.13	-8.249863	0.71	0.97
2007-2008	5169	-39.881368	4049	-19.790016	6887.4	12.08465	5026.75	1.7945992	1.33	1.24
2008-2009	5543	7.2354421	3121	-22.919239	5803.83	-15.732642	3433.27	-31.700005	1	1
2009-2010	6924	24.914306	4702	50.656841	5082.54	-12.427828	3723.28	8.447049	0.73	0.79
Total	48640		24925		197122.25		24851.98		23.85	9.34
Average	4864		2492.5		19712.225		2485.198			
CGR	23.12922		45.822474		34.682414		57.946669			

Source: Action plan SC/ST Development Corporation Mysore District various issues. Karnataka Economics Survey 2011-12.

Note: AGR-Annual growth rate; CGR-Compound growth rate

The Table 1 gives detailed information about the performance of land purchase programme in Mysore. This Table consist the data for years 2001 to 2010. The table reveals that the physical performance as well as the financial performance has shown positive sign over the period. The number of beneficiaries has been increased from 1000 to 6924 during the period 2001 and 2010. The compound growth rate of number of SC beneficiaries is quite high compared to ST beneficiaries which were 23.12 and 45.82 respectively.

The average SC beneficiaries of the IBP during the reference period were 4864 and their average benefit was Rs 19712.2 lakhs respectively. The average ST beneficiaries of the IBP during the reference period were, 2494.5 and their average benefit was Rs 2485.19 lakhs. Comparatively, SC people have benefited more from the IBP than STs in terms of absolute values.

The annual growth rate (AGR) of number of beneficiaries in both cases that is SC and ST has not shown consistent performance. For SCs it was quite high in the year 2005 with 585.78 percent and it was with 61.75 in the year 2004. For STs it was quite high in the year 2006 with 5359 percent and it was with 59 in the year 2004.

In the reference period 48640 SC beneficiaries have obtained benefit and the amount of loan received under the programme was 197122.25 lakh rupees. During the period 2001, 1000, SC beneficiaries have received the loan amount of rupees 450 lakhs. In other words, each beneficiary has received the loan amount of rupees 0.45 lakh. During the period 2010, 6924 SC beneficiaries have received the loan amount of rupees 5082.54 lakhs. In other words, each beneficiary has received the loan amount of rupees 0.73 lakh. It is clear from the analysis that each beneficiary's loan amount has been increase from 0.45 rupees to 0.73 rupees. Therefore, the number of beneficiaries and the total amount has been increased for unit benefit of loan has also increased indeed, it has been increased. In the reference period 24925 ST beneficiaries have obtained benefit and the amount of loan received under the programme was 24851.98 lakh rupees. During the period 2001, 250, ST beneficiaries have received the loan amount of rupees 190 lakhs. In other words, each beneficiary has received the loan amount of rupees 0.76 lakh. During the period 2010, 4702 ST beneficiaries have received the loan amount of rupees 3723.28 lakhs. In other words, each beneficiary has received the loan amount of rupees 0.79 lakh. It is clear from the analysis that each beneficiary's loan amount has been increase from 0.76 rupees to 0.79 rupees. Therefore, the number of beneficiaries and the total amount has been increased for unit benefit of loan has also increased indeed, it has been increased.

CONCLUSION

The study shows that Individual Borewell Programme is positive, which could be observed in both cases of SC/ST beneficiaries. The numbers of beneficiaries and the total amount have been increased for unit benefit of loan has also increased, instead it has been increased. Individual Borewell Programme is implemented by SC/ST Development Corporation in Karnataka State. Overall the analysis revealed that there is difference in the development of SCs and STs in SC/ST Development Corporation in Karnataka. The Government efforts to empower SC/ST population are very comprehensive and well planned. It includes economic empowerment programme for self employment. In words, the development programme for SCs/STs intends to fulfil the goals of economic growth and social justice. This aspect of impact may be termed as economic empowerment of SCs/STs population groups. The financial resource allocation for different SC/ST economic empowerment programmes is not need- based. It is based on availability of funds with the Government. Thus, the SC/ST development programmes constitute a beginning and not a complete attempt to tackle the problems of underdevelopment and human poverty of the SC/ST population of India and Karnataka.

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EMPLOYMENT IN HARYANA: WHAT DOES THE LATEST DATA SHOWS?

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ABSTRACT

National Sample Survey (NSS) 68th Round on "Key Indicators of Employment and Unemployment in India" paints a grim picture of a limited creation of employment between 2009-10 and 2011-12 in Haryana. There has been a significant decline in employment opportunities in Haryana. There is a widespread withdrawal from work force and labour force especially by women in Haryana during 2009-10 and 2011-12. The most emerging challenge for the State is to provide gainful employment to all its inhabitants. The present study focussed on the employment trends in Haryana during 2009-10 and 2011-12.

KEYWORDS

Employment, Haryana, Worker-Population Ratio (WPR), Labour Force Participation Rate, Category of Employment, Average Wage.

INTRODUCTION

Employment is a right to participate in the production process. Improvement in the quality of labour, productivity, skills, working conditions and provision of welfare are crucial elements for quantitative and qualitative enhancement of employment opportunities. It has been experienced over time that the best way to reduce unemployment and poverty is to generate employment opportunities.

The most emerging challenge for the State is to provide gainful employment to all its inhabitants. As a result of economic development, structural changes in the economy occur and the relative importance of different sectors in contributing to the State income changes. These changes are translated in good measure into employment changes as well so that percentage shares of primary, secondary and tertiary sectors change. Tertiary sector tends to become an increasingly predominant employment provider. This changing pattern has been observed both at the all-India level and at the level of most of the States, though in varying degrees. One of the most important roles of the State is to create conditions in which people can find right kind of employment according to their skills and knowledge. The income earning of the people depends upon their basic abilities, acquired skills, knowledge and education and experience and employment.

NSSO collected comprehensive data on employment through its quinquennial surveys, the latest being the 68th round survey conducted in 2011-12. The NSSO has recently released the preliminary data of the large sample round of 2011-12. This latest data reflects a disquieting situation vis-à-vis the employment problem in Haryana. The present paper focussed on the employment trends in Haryana during 2009-10 and 2011-12.

OBJECTIVE OF THE STUDY

The main objective of the present study is to study the employment trends in Haryana during 2009-10 and 2011-12.

RESEARCH METHODOLOGY

The present study is exclusively based on secondary data. These data have been taken from NSS 66th Round (2009-10) on "Employment and Unemployment Situation in India" and NSS 68th Round (2011-12) on "Key Indicators of Employment and Unemployment in India".

EMPLOYMENT IN HARYANA**TABLE-1: WORKER POPULATION RATIO (WPR) IN HARYANA ACCORDING TO USUAL STATUS (PS+SS) (in percent)**

NSS Rounds	Rural			Urban			All		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
66 th (2009-10)	52.2	25.0	39.6	55.7	13.0	36.1	53.9	14.0	37.8
68 th (2011-12)	51.8	16.2	35.6	51.4	9.7	31.8	51.7	14.1	34.4

Source: Self calculated from NSS 66th Round (2009-10) and 68th Round (2011-12) on Employment and Unemployment Situation in India.

From Table-1, it is seen that WPR for rural person has declined from 39.6% in 2009-10 to 35.6% in 2011-12 and WPR for urban person has declined from 36.1% in 2009-10 to 31.8% in 2011-12 in Haryana. WPR for all the persons (rural and urban) has declined from 37.8% in 2009-10 to 34.4% in 2011-12.

TABLE-2: LABOUR FORCE PARTICIPATION RATE IN HARYANA BY DIFFERENT DEFINITIONS (in percent)

Approach	Male		Female		Persons	
	66 th (2009-10)	68 th (2011-12)	66 th (2009-10)	68 th (2011-12)	66 th (2009-10)	68 th (2011-12)
Rural						
Usual (ps)	52.4	52.9	13.8	6.5	34.6	31.8
Usual(ps+ss)	53.3	53.2	25.2	16.4	40.3	36.5
Cws	52.4	53.0	21.8	14.5	38.3	35.5
Cds	51.7	52.7	17.1	10.1	35.7	33.3
Urban						
Usual (ps)	56.5	53.4	11.2	9.0	35.7	32.5
Usual(ps+ss)	56.9	53.5	13.5	10.2	37.0	33.1
Cws	56.4	53.4	12.9	10.2	36.4	33.1
Cds	56.1	53.2	11.9	9.6	35.9	32.7

Source: Self calculated from NSS 66th Round (2009-10) and 68th Round (2011-12) on Employment and Unemployment Situation in India.

The most interesting observation from Table-2 is that there has been a drastic decline in LFPR for women workers both in the urban and rural areas in Haryana. The reasons for such a huge decline in LFPR for women need to be explored. The LFPR for rural males increased marginally in 2011-12, as compared to 2009-10, while for urban males it is actually declined. There is also a decline in LFPR for persons in rural and urban areas.

TABLE-3: PERCENTAGE DISTRIBUTION OF USUALLY EMPLOYED IN HARYANA BY CATEGORY OF EMPLOYMENT

RURAL									
NSS Rounds	Category of Employment as per Usual Status (PS+SS)								
	Self employed			Regular wage/salaried employees			Casual labour		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
66 th (2009-10)	54.9	75.4	60.9	20.0	71.0	16.3	25.1	17.5	22.9
68 th (2011-12)	58.2	75.2	61.7	16.5	4.2	13.9	25.3	20.6	24.3
Urban									
NSS Rounds	Category of Employment as per Usual Status (PS+SS)								
	Self employed			Regular wage/salaried employees			Casual labour		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
66 th (2009-10)	35.5	39.5	36.2	51.8	48.4	51.3	12.6	12.1	12.5
68 th (2011-12)	42.7	27.8	40.5	46.3	67.5	49.4	11.0	4.7	10.1

Source: Self calculated from NSS 66th Round (2009-10) and 68th Round (2011-12) on Employment and Unemployment Situation in India.

Table-3 depicts that the proportion of self-employment has decreased for female in both rural and urban areas, but it has increased for male both in rural and urban areas in Haryana. There is decline in regular-salaried employment in 2011-12 for persons in rural-urban areas. Casual labours have increased in the rural areas and decreased in urban areas in 2011-12 as compared to 2009-10.

TABLE-4: AVERAGE WAGE RECEIVED BY WORKERS OF AGE 15-59 YEARS IN HARYANA (Rs. 00)

NSS Round		Rural			Urban		
		Male	Female	Person	Male	Female	Person
Regular Wage /Salaried Employees	66 th (2009-10)	299.11	202.04	287.36	316.91	330.10	318.96
	68 th (2011-12)	396.44	357.28	394.35	810.93	635.59	776.85
Casual workers	66 th (2009-10)	104.84	110.40	107.40	154.27	70.58	142.97
	68 th (2011-12)	202.38	151.85	196.89	206.67	165.75	204.46

Source: NSS 66th Round (2009-10) and 68th Round (2011-12) on Employment and Unemployment Situation in India.

Table 4 shows that there has been an improvement in the wages in Haryana for all categories of workers in 2011-12 as compared to 2009-10. Daily wage earning of a regular wage/salaried person in the rural areas is, on an average, Rs. 394.35; it is Rs. 776.85 in the urban areas in 2011-12. While wage earning of a casual worker in rural areas is, on an average is Rs. 196.89 as compared to Rs. 204.46 in urban areas in 2011-12.

TABLE-5: SHARE OF EMPLOYMENT IN VARIOUS INDUSTRIES IN HARYANA (IN PERCENTAGE)

	Rural Persons		Urban Persons	
	66 th Round (2009-10)	68 th Round (2011-12)	66 th Round (2009-10)	68 th Round (2011-12)
Agriculture and Allied	59.8	57.8	5.3	6.2
Mining and quarrying	0	0.1	0	0
Manufacturing	9.3	9.8	30.8	22.1
Electricity, gas, water etc.	0.5	0.1	1.1	1.2
Construction	10.9	14.3	11.6	10.7
Trade, hotel and restaurant	6.9	7.1	21.9	18.7
Transport, storage and communication	4.2	3.6	6.3	6.8
Other services	8.4	7.2	23.0	34.3
All	100	100	100	100

Source: Self calculated from NSS 66th Round (2009-10) and 68th Round (2011-12) on Employment and Unemployment Situation in India.

From Table 5, it is seen that 57.8% of the people in rural areas and 6.2% people in urban areas are dependent on agriculture and allied activities in Haryana. There has been a decline in the proportion of people employed in agriculture and allied sectors in the rural areas. More importantly, along with a decline in the share of employment in agriculture, there has also been a decline in the share of employment in electricity, gas, water, transport, storage communication and other services in rural areas. There has also been a decline in the share of employment in manufacturing, construction, trade, hotel and restaurant in urban areas.

CONCLUSION

There has not been any significant increase in employment opportunities in Haryana. This almost jobless growth of Haryana economy is accompanied by a significant decline in the WPR for male and female both in rural and urban areas of Haryana. The situation with regard to average daily wage of the workers in Haryana has improved in 2011-12 as compared to 2009-10.

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ALGERIAN SMEs AMIDST ECONOMIC REFORMS AND GOVERNMENT SUPPORT

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ABSTRACT

It is widely recognized that SMEs play an important role in nations' economies. Nowadays, in most of the world countries, SMEs seize a major proportion among all businesses, however, due to their comparative small size and low competitiveness, they show a vulnerability to economic changes while they are in continuous need for assistance. This paper tries to position Algerian SMEs within their broad influencing context and seeks to report on the support received from government and how they are affected by economic reforms. The socialist ideology adopted after the independence in 1962 focused establishing large corporations and tightly limited competition of private sector. The transition to the market economy in the after 1988 allowed for more recognition of the SMEs with multiple assistance programs aimed to regain the delay and make of SMEs an alternate to the failing public firms and the profit-seeking multinationals within nowadays rapidly globalizing world.

KEYWORDS

Algeria, Economy, Development, Government, SMEs.

INTRODUCTION

It is agreed among both economists and policy makers that SMEs can spur the process of decentralization at the inter and intra-regional levels, and may become an appropriate countervailing tool against the economic power of large firms (Quartey and Abor, 2010). Indisputably, the development of SMEs is seen as cornerstone to the achievement of economic and socioeconomic objectives, including the alleviation of poverty. More generally, SMEs are considered as essential driver for creating job, social cohesion, innovation and growth in both advanced industrialized countries, and emerging and developing economies. They represent the seeds of big businesses and the fuel of national economic engines. Their encouragement has proven to be an effective way of increasing productivity which results ultimately to a much better living standard, while it has been recognized during the G20 Summit held in Seoul that SMEs, especially in developing economies, could contribute more to the economies than they currently do (G20 Summit, 2010).

Interest in the important role of SME and their development process continue to be at the heart of policy debates across the world. Realities show that governments in the four corners of the world have undertaken initiatives to promote the growth of SMEs at all levels (Feeney and Riding, 2004). The United Nations Commission for Africa (UNECA) has indicated, in its 2010 report about the role of SME in maintaining sustainable development in North Africa, that the new challenges of SMEs in the region are centered towards the need for greater commitment by the state (UNECA, 2010). Authorities in Algeria have realized that entrepreneurship and innovation are the main vehicles for economic development and for achieving competitiveness in the globalized world markets (Merzouk 2009, Hanafi 2010 and Datoussaid 2011). The announcement made by the government on April 2010 to launch a presidential program for the creation of 200,000 SMEs (Hanafi, 2010) is just one example of this orientation.

This descriptive article seeks to look into three components of the broad context through which Algerian SMEs has evolved. The first relates to the economy of the country and stresses the move from planned to market economy and also highlights efforts to integrate the local economy. The second sheds light on the roles played by the state in developing SMEs through support and upgrading programs and infrastructure building; both of which are supposed to provide a plenty of opportunities for SMEs to grow through. The rest of this article structure goes as follow; reviewing the definition of Algerian SMEs will be highlighted in the first section. The second section focuses on the evolution of the institutional framework governing SMEs and the next one deals with the programs designed to upgrade them. The fourth section focuses on the regional and global partnership projects aimed to integrate the local economy while generating opportunities that SMEs can tap to be internationally competitive. In the fifth section we focus on infrastructures' building. Last two sections conclusion.

DEFINITION OF SMEs

No official definition of SMEs was used in Algeria before 2001. However, the definition of the National Office of Statistics (NOS), which takes in consideration the number of employees as only criterion, was used to certain extent. This definition recognizes SMEs as businesses producing goods and services and employing 1 to 250 workers (Atil, 2009). In 2001 Algeria has signed a partnership with the European Union. A new law guidance on SMEs has emerged soon and led to the adoption of the European definition of SMEs which was decided by the European Union in 1996. Under this definition, SMEs are defined as "any business producing goods and services and employing no more than 250 persons, with annual turnover not exceeding DZD 02 billion⁶ or total balance sheet not exceeding DZD 500 million. This definition explicitly distinguishes between micro, small, and medium enterprises. *Micro enterprises*: are businesses employing 1 to 9 people with annual turnover less or equal to DZD20 million, or with total assets not exceeding DZD10 million. *Small enterprises*: are business employing 10 to 49 people with annual turnover less or equal to DZD200 million or with total assets not exceeding DZD100 million. *Medium enterprises*: are businesses employing 50 to 250 people with annual turnover between DZD 200 million and DZD 2 billion or with balance sheet total between DZD 100 and DZD 500 million

SMEs UNDER THE STATE'S MERCY: THE INSTITUTIONAL FRAMEWORK

Scholars use to look into the post independence development of Algerian SMEs from different perspectives. Authors like Gharbi (2011) et Benmessaoud (2009) focus on change of the government role in recognizing SMEs as the main component of private sector, while others like Ayad et Al. (2009) look to SMEs development as influenced by economic changes. Here, we combine both perspectives with special focus on economic reforms to better highlight the way through which SMEs evolved. Though main reforms have only started at the end of 1980s where Algeria witnessed a unique experience characterized by political, economic and social reforms underpinning transition to the open market, the beginning of the 1980s saw the appointment of a new president who started some reforms to develop the economy which was based on communism principles. There are three main phases in the implementation of economic reforms; the period of 1980s to 1994 saw the progressive implementation of many reforms but still within the planned economy and under the control of the government.

⁶As for beginning July 2013, 1 US\$ = 79 DZD (Algerian Dinar)

The period of 1994 to 1997 saw the implementation of the structural adjustment plan under the assistance of international financial organizations. The post 1997 period (called also post - structural adjustment) saw greater willingness towards the market rules with more encouragement of private sector.

The independent Algeria had chosen to follow a planned economy. Private sector - which currently maintain a major part of SMEs (Khalil 2006)- was not recognized under this economic model for almost three decades while the hydrocarbons sector was the backbone of the economy. The scant attention given to SMEs can be summarized in the the investment codes of 1962, 1966 which tried to give a greater role to the private sector to contribute to the economic development. The National Investment Commission (NIC) was established and assigned a role of issuing approvals for private investors and entrepreneurs. The two four-year plans (1970-1973 and 1974-1977), which framed a special program for the development of national industries, saw the creation of 594 SMEs. Despite this interest, SMEs were still considered as complement to the public sector. As result, private investors were usually concentrating in services and trade niches which didn't provide favorable and supportive environment due to the rough laws, heavy tax and the closure of foreign trade. The investment cod of 1982 required private investors to go through a mandatory licensing procedure. A second code issued in 1988 allowed private investment to be engaged through a simple statement.

The fall in oil prices in 1986 with its severe economic repercussions, along with the fall of the communism in the end of 1980s led Algeria to opt for the market oriented economy and recognize the private sector as strategic catalyst for the development of the country. Starting from 1990s, Algeria initiated a process for opening up to the market economy. The first wave of reforms took place under the Structural Adjustment Program with the technical assistance and financial support of international organizations such as IMF, the World Bank, and the European Community. The investment code of 1993 granted significant benefits to private investments (tax exemptions, tariff reduction and improvement of credit rates) and for the first time the law on money and credit of 1990 gave equal interest to this sector as the public sector. Finally, in August 2001, a new law on investissement further allowed the creation of a single point in each of the 48 provinces of the country to fasten new businesses start up. The second wave of reforms targeted integration into the global economy, reform of the public sector, privatization process, reform of the financial sector including banks, building infrastructures, development of agriculture sector, promotion of national and international investment, improvement of the regulatory and institutional framework, and improvement of the corporate environment.

INITIATIVES TO SUPPORT AND UPGRADE SMEs: A CONTINUOUS NURTURING PROCESS

Algerian government showed more interest and determination about reforming the economy and opening up its markets. This situation led to SMEs development being at the top of policy makers' agendas (Maaradj, 2009). The cash abundance and the huge revenues received after the increase of the oil price during the last years (more than \$205 billion in December 2012) are helping the government in its commitment to the development and the strengthening of the SMEs sector. These revenues are reported by IMF (2006) as being used in the improvement of the overall business climate.

Various initiatives have been formulated to speed up the development of SMEs and upgrade their competitiveness. Reforms were undertaken to facilitate business creation and improve the environment within which businesses operate. This includes; simplifying business registration procedures, revising commercial code, providing tax relief for businesses, amendment relative to legislation on land access and development of industrial zones in order to facilitate investments. Hence, A National Investment Agency aimed at facilitating the creation of companies was established and specific measures were taken to encourage the creation of SMEs, including; launching a program of modernization for industrial enterprises, establishing investment and guarantee funds, reducing the number of documents required to start up a business, reducing the cost of land, real estate transactions and the time needed for reviewing cases, and enhancing conditions of issuing building permits (ADB, 2011).

The First Upgrading Program was introduced by the United Nations Industrial Development Organization (UNIDO) in collaboration with the Ministry of Industry and Restructuring in 1998. It was tailored to the specific needs of Algerian manufacturing and meant for improving competitiveness and supporting the industrial restructuring process. It included the upgrading and improvement of 48 Algerian companies. Starting from January 2000, a monitoring program was implemented by the Algerian authorities to improve the competitiveness of 1000 SMEs for the period 2000 – 2006, help them maintain their market shares and go international. The Fund for Promotion and Industrial Competitiveness (FPCI) was used to finance projects related to the promotion of the competitiveness.

Euro Development Program for SMEs (EDPME) extends in two phases with the first phase from 2002 to 2007. It was funded by the European Commission and the Ministry of SMEs and Craftsmanship under the Euro-Mediterranean partnership, the amount allocated to this program exceeds 60 million Euro. The objective of the program is to significantly improve the competitiveness of SMEs according to international standards of management. Here SMEs are classified into three types, survival SMEs, growing SMEs and those in incompetitive situation. The last category is consistent with the visions and practices of this program and are the most. Three different strategies were followed in this program; A strategy of penetrating that means operating throughout all the country, in all sub-sectors and all business functions. An expansion strategy through extensive prospection for companies, and a building strategy through follow-up actions and support. 445 SMEs were supported during the first phase while the second phase focuses on upgrading craftwork and service enterprises in terms of ICT.

The National Program for Upgrading SMEs is a complementary program initiated by the Ministry of SMEs and Craftsmanship. It takes in account SMEs as defined in the 2001 law Guidance; including those small enterprises (with less than 20 employees) which were neglected by the previous programs. This program was officially launched in 2007 for a period of six years with the aim of upgrading 6000 SMEs. One billion dinars per year was allocated to this program while the National Agency for Development of SMEs (ANDPME) was established by the government to manage it. This program aims to assist SMEs during the upgrading process, it also aims to develop the capacity of the assisting associations and professional organizations to better understand the concept of upgrading. The focus is on the following areas: Sectoral operations (analysis by industry), regional activities (identification of priority actions by wilaya) actions related to the creation of conducive institutional environment of the SMEs, and finally actions for the benefit of SMEs themselves.

Support to ICT skills program, commonly known as SMEs II program, is a new support program signed between the Ministry of Small Business and Craftsmanship and the European Commission in and launched 2009. This new program continues the previous works but in a more targeted way. Indeed, this program, which runs over a period of 4 years, aims to support 150-200 SMEs operating in high value-added sectors such as food industry, building materials, mechanical engineering, metal processing, chemical and pharmaceutical industry as well as electricity, electronics and ICT. His program is also intended to enable SMEs regain the domestic market and expand internationally through opportunities offered by regional and international agreements. The program includes three components: (i) direct support to SMEs /SMIs in selected areas (general upgrading, upgrading in terms of quality and skillful usage of ICT), (ii) support to the supporting institutions (Ministry of SMEs and its agencies and departments, and organizations representing SME), (iii) support for the establishment of a quality system, including the structures in charge of standardization, metrology, accreditation, inspection and certification as well as support for technical centers. The total amount is €44 million, with a contribution of 40 million Euros from Europe, 3 million from the Algerian side and one (1) million from the beneficiary SMEs.

The Multi-faceted program is a very ambitious and challenging program announced by the government in 2010 and aims to upgrade 20.000 others SMEs over a 5 years period. This new upgrading program is run by National Agency for Development of SMEs (ANDPME) and will cost 386 DZD billion (around 4 billion Euros). if successfully completed, SMEs sector in Algeria will be able to add more to the economy in the short term and compete in regional and global levels while boosting exports outside the hydrocarbons sector. Generally, this program target SMEs themselves and the environment surrounding them.

INTEGRATION OF THE ECONOMY: OPPORTUNITIES TO TAP INTERNATIONAL MARKETS

Since the end of 1980s, efforts were intensified to foster regional and international cooperation and diversify trade with the external world. Therefore, many cooperation projects were signed including; the Arab Maghreb Union (AMU), Arab Free Trade Area (GAFTA), New Partnership for Africa's Development (NEPAD), and the process is ongoing to join the World Trade Organization (WTO). These projects are not only assumed to lead to an economic recovery but also to boost the development of local SMEs through opportunities to access into new markets while learning from the increasing world competitive environment. SMEs will have real opportunities to tap these markets. First time-export and labor intensive enterprises may chose to export to neighbouring AMU countries and also sell ethnic products to the wide GAFTA zone until they develop their competitive advantages; necessary to compete globally. Capital intensive and high competitive SMEs face real opportunity to tap the European market.

In line with the shift towards the market economy and the encouragement made for SMEs and private sector in general that started at the end of 1980, a trade agreement called *Arab Maghreb Union (AMU)* was signed in 1989 between five North African countries namely Algeria, Libya, Mauritania, Morocco, and Tunisia. This agreement targeted economic integration and future political unity and has set a plan for a common market by 2000 somewhat similar to the European Union model. The progress toward its real implementation was slow though many cooperative agreements were concluded in areas of customs, taxation, and central banking. The AMU formation in late 1980s made the Algerian policy maker obliged to further release obstacles already impeding the development of SMEs. It was estimated that AMU integration would allow specialization to stimulate economic development and growth and also yield the bargaining power needed for negotiating with other countries and trading blocs (Hanafi, 2010). First cooperation between Algeria and Europe goes back to 1969 when an agreement - essentially commercial- was signed for a period of five years. In 2001, an *Association Agreement with the European Union* was concluded, however, a wider association agreement between the two parties was signed in 2005 replacing earlier cooperation agreements and aiming to establish a free trade zone while constituting the framework for political, economic and scientific cooperation within the Euro-Mediterranean Partnership. In its trade component, the agreement dictates a tariff reduction scheme which is expected to lead eventually to the free movement of goods between Algeria and the EU by 2017. This partnership is supposed to help Algerian SMEs gain profit from low labour cost and lower environmental and social restrictions to compete with their European counterparts (Calza et al., 2010).

One ambitious program designed to support SMEs under this partnership is the MEDA program which is the principal instrument of economic and financial cooperation in the Euro-Mediterranean Partnership. It was launched in 1996 (MEDA I) and amended in 2000 (MEDA II). It allows the European Union (EU) to provide financial and technical assistance to the countries of the southern Mediterranean. This program aims to achieve four objectives; 1) strengthening political stability and democracy; 2) taking into account human capital and cultural dimensions; 3) supporting economic transition in southern Mediterranean countries and; 4) establishing an Euro-Mediterranean free trade Area and developing economic and social cooperation with special focus on SMEs and creating jobs; opening markets; encouragement of private investment, upgrading of economic infrastructure including financial and tax systems and creating an environment conducive to faster growth. In the period between 2002 and 2007 alone, 445 Algerian enterprises has benefited from this program whose allocated 57 Euros⁷ to Algerian SMEs.

The *Great Arab Free Trade Area (GAFTA)*, which is supposed to be the cornerstone towards the economic integration among Arab nations, has been in force since 1998 to support efforts towards the establishment of an Arab common market targeting intra-regional free trade and economic unity. A 10% reduction in customs fees is to be implemented each year as well as the gradual elimination of trade barriers. Currently 18 of the 22 Arab League states signed on to this agreement with Algeria joining it in 2005. In March 2001, member countries have decided to speed up the liberalisation process, therefore, the elimination of most tariffs among the GAFTA members was enforced starting from January 2005, but this does not apply to all goods. According to Abedini and Péridy (2008) The economic benefits expected from this integration for each country are numerous and well-known. This includes the increase of intra-regional trade due to the removal of trade barriers, improve production efficiency via exploitation of comparative advantages and scale economies, increase of competitiveness among firms from different countries, and achieve economic growth. According to ALGEX (2013), exports of non-hydrocarbons to GAFTA have increased by 21% in 2012 and imports decreased by 7%. SMEs seized good share of the total export to GAFTA, hence, this positive impact allows them to exploit opportunities from neighbouring countries and take advantage of cultural similarities shared along the GAFTA zone.

New Partnership for Africa's Development (NEPAD) is an economic program introduced by African Union in 2001 and aims to provide a comprehensive vision and policy framework for boosting economic co-operation and integration among African nations. Many projects are being established under this program and Algeria appears as one of the key players for the achievement of many of these projects including the Trans-Saharan Highway that connects six countries (Algeria, Tunisia, Niger, Mali, Chad and Nigeria), the 1,200 km-long Trans-Maghreb Highway linking Tunisia to Morocco which was completed few year ago, and the optical fibre cable project between Abuja (Nigeria) and the Beni Saf Port (Algeria), passing through Niger, the Algeria-Nigeria pipeline project. Talks to join *World Trade Organization* have started in 1987. Since then, ten rounds of negotiations with the organization and 93 meetings with 21 countries were achieved up to the end of June 2010. Despite the long lasting negotiation process, authorities in Algeria say that we are not in the hurry to join the organization, The accession to the (WTO) will consolidate the ongoing economic reforms, lead to better integration into the global economy and open new markets to SMEs to go through. However it also poses threats to the economy since most of the businesses are not armed with the necessary competencies and capabilities to compete with multinational firms. As a matter of fact, this is one reason why desire of the government to secure and conclude terms that safeguard the economic interests of the country.

BUILDING INFRASTRUCTURES: ANOTHER PUSH TO STRENGTHENING SMEs

A part from the aforementioned public agencies to provide financial support to SMEs, efforts are also done for the development of a foundation in information and communication technology (ICT). The technology center Sidi Abdallah, which was developed under the ICT Development Support Project, was launched in cooperation with the World Bank and comprises three technology parks. A cyber park was also established, along with a "Technobridge Incubator" in the technology park to support start-up of new companies and innovative SMEs and while provide development support to the Ecole Centrale des Postes et Télécommunications and the Institut National des Télécommunications (INT) to deliver courses on cyber entrepreneurship and ICT management. The aim is to increase wealth through promoting competitiveness and innovation culture in both small and large businesses (MEPI, 2009).

It was announced in January 2013 that a Technology Transfer Office (TTO) will be established soon with the support of World Intellectual Property Organization (WIPO). This office will operate as facilitator of technology transfer into the country and regulate mechanisms for the protection of intellectual property. In this context, the National Institute of productivity and industrial development (INPED) will be equipped with appropriate means. Similarly, it is expected in the short term the creation of two business schools for the training of senior business executives, a national school of industrial economy and a higher institute of logistics (ISLA). Aims of the government are also to strengthen national capacity of consulting and engineering, modernize the structures of management training; including the creation of specialized centers for training and development of business managers and develop the SMEs incubators (MoF website).

In terms of exportation, OPTIMEXPORT, which is a program to consolidate export capacity of Algerian SMEs, was established in 2007 in collaboration with French development Agency. This program provides International commerce information to SMEs, train them about techniques of selling internationally, and accompany them in their conquest of foreign markets. Furthermore, Three export consortiums were launched in 2012 with the collaboration of United Nation Industrial Development Organization (UNIDO) to enable SMEs food industry SMEs export their products especially to Europe, and MENA region. According to the ministry of Finance, new actions will be implemented soon to modernize customs department in order to facilitate international trading (MoF website).

The national Agency for Research and Technologic Development (ANVREDET) is the national innovation agency whose objective, beside working with universities' incubators, is to distribute subsidies to inventors and promote all sort of efficient partnership enterprises, between universities, and research labs. In addition, two new bodies were born in 2010 to assist SMEs; National Center for Outsourcing Development and SMEs National Observatory. The role of the latter is more in assisting the government with proposals about the development of SMEs and monitoring the overall environment of SMEs.

ASSESSING THE SITUATION: REVIEW OF THE LITERATURE

The realities of increased globalization and competitiveness in international markets during the last decade pushed towards more assistance in favor of SMEs sector in order to decrease public spending and lower dependence to the less-efficient government companies. Hence, authorities have allocated huge budgets, multiplied initiatives, created funds, and continued reforms related to the institutional framework; all aimed to develop SMEs. GDP growth was positive during the last decade, with much of this growth being driven from hydrocarbons and agriculture, and also from the dynamism of sectors that largely depend on government spending such as service and construction. However, progress in leaving the planned economy and creating a conducive market economy has been running slow. For instance, private banking system is underdeveloped and usually government agencies in Algeria are the most important supporting financial

⁷European Institute of Research at: <http://www.medeas.be/en/countries/algeria/eu-algeria-relations/>

entities for SME, therefore, the effectiveness of their programs in supporting SME development is mixed and not encouraging (Emine, 2012). Significant progress was achieved since the start of these reforms with the emergence of a more dynamic private sector and successful stabilization of financial and economic indicators such as positive economic growth and low inflation (Hanafi, 2010). However, despite some progress in improving the business environment, significant impediments to economic development and entrepreneurial activity still persist (heritage, 2013). The Euro Mediterranean Enterprise Policy Assessment made by European Commission (2008), reports that Algeria has shown a average strength of institutional framework for enterprise policy compared to other arab mediterranean countries.

After more than two decades of reforms and support, private sector is still under-developed and SMEs face various issues especially; high mortality rate, high tax rate, less effective trainings, average quality of infrastructures, and lack of innovation. These issues can be further depicted by the very low share in terms of export, therefore, the economy continues to be dependent on the hydrocarbons sector which alone generates more than 95% of total exports. This signifies that, despite the growth of SMEs sector, its contribution to the economy is not yet up to the expectations. It also implies that resumption of growth outside this sector remains a serious challenge for Algerian authorities which seems to have focussed on increasing the number of the enterprises in order to create more jobs in the short term instead of supporting the existing SMEs and strengthening their competitiveness in both local and international levels (Ayad et al., 2009). It has been reported that the number of the benefiting enterprises at the end of some upgrading programs is far less than what had been precendently announced in the beginning like in the case of the first upgrading program which ended in 2006 (Azouaou, 2009) and also some of the ongoing programs where - according to the National Association of Algerian consultants' vice president - the number of the upgraded SMEs at the end of the 5 years term in 2014 will be around 2000 rather than 20.000 enterprises; that is just 10%⁸. According to him, two reasons lie behind this failure; the first is that the National Agency for Development of SMEs (ANDPME) doesn't have enough managerial capacity and funds to upgrade all the scheduled enterprises due to the under-estimated cost of upgrading, whereas the second reason has more to do with the lack of enthusiasm from enterprises' owners themselves due to complexity in the upgrading procedures.

Furthermore, it is worthy of note that Algerian SMEs didn't take full advantage of the partnership projects concluded since the opening of the economy. Through employing synthetic control methods, Hosny (2012) found that Algeria's trade with nine GAFTA countries - which cover more than 96 % of Algeria's pre-treatment trade- would have been better if Algeria had signed the agreement in 1998. This scenario is likely to be repeated with WTO. In the same context, the UN's (2008) report on private sector's institutional response to NEPAD indicates that participation of the private sector in most NEPAD projects and programmes has been limited. The MENA-OECD Working Group on SMEs and Entrepreneurship (2011a) confirm that the limited development of entrepreneurship and small businesses in MENA is explained by at least three reasons: First, high barriers to doing business, particularly for smaller firms (e.g., high taxes, rigid labor laws, corruption, unfair competition, and complex licenses); second, cultural norms in which young graduates consider entrepreneurial activity less attractive compared to working in the public sector where a better job security is provided; last, low participation of women in entrepreneurial activity. However, this last factor is not relevant for Algeria because female self-employment reached 30.6% (O'Sullivan, 2011).

It is clear that an important role has been done by the state so far to develop SMEs but without much success. This may be attributed to the nature of business climate which is not conducive to the flourishing of SMEs. In its 2006 country report about Algeria, IMF indicated that business climate is not supportive for SMEs to operate. Business taxes system, financial services (access to credit), and enforcement contracts registering property are the main areas that needs enhancement. The same report indicated that compared to the neighbouring countries, the gap in business climate is wider in labor-intensive SMEs and in the tax burden. Furthermore, in the "Doing Business Classification" issued by the World Bank Algeria was ranked 150 in 2012 and 152 in 2013⁹. The main weaknesses has to do with the unstable regulatory framework. However, according to the World Economic Forum (WEF) 2010, the most problematic factors for doing business in Algeria are: access to financing, inefficient government bureaucracy, corruption, inadequately educated workforce, and tax rates¹⁰. This situation would impede the development of SMEs and private sector in general, and undermine their role in the growth of the country's economy.

A disagreement exists between the government and the forum of business leaders in terms of reforms, strategies and means of work. The first wants to create an environment conducive to upgrade the businesses. while the latter think it is question of resources first, i.e ensure material investments (equipment) and human capital necessary for any upgrade. The forum calls for a general upgrading of the economic system and criticizes the archaic attitudes and the stagnating situation of the banking system (Azouaou, 2009). This view was recently summarized by Mr Bensaci - the of president of National Advisory Council (CNC) for SMEs - when he declared to the media that "there should be a suitable environment if we want to strongly develop our SMEs"¹¹

CONCLUSION

SMEs in Algeria have shown a high vulnerability to the economic conditions. Although Algeria has managed to diversify its economy, this diversification is still very low with the productive fabric remains largely concentrated in oil and gas industry and the labor-intensive SME sector is under-developed (IMF, 2006). Therefore, the creation of a meaningful and comprehensive policy that addresses all the issues facing SMEs must be rapidly put in place, while taking in consideration cooperation with professional organizations and trade union associations. The focus should be on deepening and further expanding measures of support benefiting the private sector such as: reduction of taxes and other costs, further facilitation of financing, fighting against fraud, and strengthening competitiveness. In same time, more efforts and focus is needed to enable SMEs to develop links between GLCs and MNCs, comply with international standards, adopt new technologies and develop innovative capabilities. Financial sector modernization should be accelerated and the establishment of private banks should be allowed urgently in order to create competitiveness. Public banks also need to be upgraded in order to serve the economy. IMF (2012) recommends that they should continue modernizing their risk information and assessment operating systems, particularly to ensure that new incentives to grant loans to SMEs will not create additional default risks.

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CORRUPTION WITHIN EDUCATION SECTOR: A TYPOLOGY OF CONSEQUENCES

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ABSTRACT

The aim of this paper is to focus on the variety of corrupt practices that may develop within the education sector and to explore their associated consequences. Given the fact that most previous studies dealing with the costs of corruption put emphasis only on corruption from public officials, we propose a typology of consequences that allows a comprehensive understanding of the effects related to corrupt practices that could thrive in the education sector. The typology of consequences presented in this paper distinguishes three types of consequences: those related to the achievement of the main goals of access, quality and equity, those related to the demand for education and school performance and, those related to the achievement of broader objectives of the education sector and the development of the society as a whole.

JEL CLASSIFICATION

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KEYWORDS

Corruption, Education, Education sector.

1. INTRODUCTION

The increasing recognition of the central role of education for social and economic development of countries has been accompanied by the necessity to identify factors that would impede the effectiveness and the performance of the education sector. Despite the overwhelming number of studies developed in this area, the existing literature has not paid much attention to analyzing the various forms of corruption that would thrive within the education sector. In this respect, Hallak and Poisson (2007) denoted that "corruption in education has been carefully ignored for several decades and remains so". This issue has been recently tackled by a smaller but growing literature aimed at diagnosing and evaluating corrupt practices in education and at identifying factors lying behind the development of corruption in the educational field. Studies developed in this direction were completed by a considerable number of reports and analysis concluding invariably that education, like other sectors, is not immune from corruption. This seems refuting the general perceptions that consider the education sector as relatively free from corruption. For instance, the Global Corruption Barometer elaborated by Transparency International in 2007 for sixty countries indicates that education is rarely considered to be among the most corrupt sectors (Transparency International 2007, p. 6). However, such perceptions do not seem to be supported by the knowledge gathered during past years. Indeed, there is some evidence that the education sector is particularly vulnerable to many forms of corruption which would hamper its effective functioning and, therefore, would constitute a major obstacle to the successful achievement of the various goals often assigned to this sector. Although many studies have investigated the incidence of corruption in education, a conclusive picture on the consequences that would result from corrupt practices thriving within education sector is still lacking. This is mainly explained by the fact that most past studies have tried to explore the consequence related to a single form of corruption. In this respect, this paper aims at providing a more comprehensive understanding of the incidence of corruption in the education sector. The rest of the paper is organized as follows. Section 2 recalls the principal forms that corruption could take within the education sector. Section 3 presents a typology of consequences related to corrupt practices in the educational field. On the basis of a detailed review of the existing literature dealing with the issue of corruption in education, we conclude that the consequences of corruption in education are diversified and can be divided into three main categories: those related to achieving the three main education goals of access, quality and equity; those related to the demand for education and school performance and; those in relation with the achievement of broad goals of education and the overall development of the society. Finally, section 4 concludes.

2. CORRUPTION WITHIN EDUCATION SECTOR: DEFINITIONS AND FORMS

The last few years have shown a considerable progress in the analysis of corruption in education, leading to an unprecedented international commitment to the issue of corruption in the educational field. In this respect, we recall the research project on "Ethics and Corruption in Education" launched, in 2001, by the International Institute for Educational Planning (IIEP-UNESCO) to which are added the significant efforts made by some scientific associations (International Academy for Education), international organizations (World Bank) and nongovernmental organizations (Transparency International). Among the broad range of definitions of corruption in education, both scholars and practitioners often retain a characterization similar to that proposed by Hallak and Poisson (2002). These authors define corruption in education as: "the systematic use of public office for private benefit whose impact is significant on access, quality or equity in education"¹². Such characterization has the advantage to integrating general aspects of corruption that can be applied to other public sectors (the use of public office for private gain), as well as those more specific to education sector (access, quality and equity). In order to offer a reliable picture on the forms of corruption in education, table 1 recalls the main forms of corruption as enumerated by Amundsen (1999) and provides some examples from the education sector.

TABLE 1: FORMS OF CORRUPTION IN THE EDUCATION SECTOR

FORM OF CORRUPTION	DEFINITION	EXAMPLES FROM THE EDUCATION SECTOR
Embezzlement	Theft of public resources by public officials	Educational funds used for political Campaigns; School funds diverted for private interest
Bribery	Payment (in money or in kind) given or taken in a corrupt relationship	Bribes paid to be recruited as a teacher; Bribes paid to be admitted to university
Fraud	Economic crime that involves some kind of trickery, swindle or deceit	Ghost teachers; Paper mills and diploma mills
Extortion	Money and other resources extracted by the use of coercion, violence or threats to use force	Illegal fees collected to be admitted to school; Sexual harassment for promotion
Favouritism	Mechanism of power abuse implying 'privatization' and a highly biased distribution of state resources	Recruitment of administrators based on their membership of a political party; Good marks obtained due to favouritism

Source: Adapted from Hallak and Poisson (2007, p. 58)

¹² Hallak and Poisson (2002), p. 17.

As shown in table 1, corruption in the education sector covers all the habitual forms of this phenomenon. In addition to these main forms that may occur in any other sector, there is a wide variety of corrupt practices more specific to the educational field. With the aim of providing a better understanding of the corrupt practices that would develop within the education sector, various typologies of forms of corruption in education have been proposed over the past years. One typology has been developed by Tanaka (2001) who focused on corrupt practices at school and classroom level and distinguished three possible areas where corruption may appear, namely:

- Corruption in procurement including procurement of buildings, equipment, textbooks, uniforms, meals, etc. In this area, corrupt practices can result in the procurement of bad quality goods and services, or increased procurement costs. It is important to note that students will ultimately be harmed by this kind of corrupt practices since they are the end users of such sub-standard goods and services.
- Corruption in school administration which may occur in career promotion, entrance/ graduate examinations, teacher recruitment, facilities utilization, etc. Corrupt behavior may involve not only the school, but also parents, local community, municipal offices and even education ministries.
- Teachers' corruption in the classroom which constitute is a matter for concern since students are directly involved. This type of corruption can occur when teachers tend to make abusive use of powers they have over students. The most obvious forms of corruption in this area include the demand for illegal and unauthorized fees, behaviors developed by teachers to increase the demand for private tutoring, as well as sexual harassment of students.

For Heyneman (2004) corruption in education covers all practices involving the abuse of authority for personal gain as well professional misconduct. Five main forms of corruption in education were listed by the author including corruption in selection; corruption in accreditation; corruption in procurement; corruption in educational property and taxes; and professional misconduct. In a similar vein, Rummyantseva (2005) distinguishes educational-specific corruption from that common to any public sector by identifying corruption that directly and indirectly involves students. Two principal categories of educational corruption are identified by Rummyantseva (2005) and can be summarized as follow:

- Education-specific corruption including all corrupt practices that involve students as agents and have a direct effect on their values, beliefs, and life chances. This includes, on the one hand, academic corruption dealing with potential exchanges that can be established between students and teachers or between students and administrators and, on the other hand, corruption in services which covers the exchanges between students and administrators, or between students and staff.
- Administrative corruption which refers to corrupt practices that do not involve students as agents and have limited direct affect on them. Examples of administrative corruption in the educational field include corruption in procurement, corruption in hiring and, the misuse of public funds for private purposes.

In a related issue, Hallak and Poisson (2007) denoted that opportunities for corruption are likely to occur in all areas related to the planning and management of the education sector, as illustrated in table 2.

TABLE 2: OPPORTUNITIES FOR CORRUPTION BY AREA OF EDUCATIONAL PLANNING/MANAGEMENT

Areas of planning/management	Major opportunities for corrupt practices
Finance	Transgressing rules and procedures / bypass of criteria; Inflation of costs and activities; Embezzlement
Allocation of specific allowances (Fellowships, subsidies, etc.)	Favouritism / nepotism ; Bribes ; Bypass of criteria; Discrimination (political, social, ethnic)
Construction, maintenance and school repairs	Fraud in public tendering (payoffs, gifts, favouritism); Collusion among suppliers; Embezzlement; Manipulating data; Bypass of school mapping; Ghost deliveries
Distribution of equipment, furniture and materials (including transport, boarding, textbooks, canteens and school meals)	Fraud in public tendering (payoffs, gifts, favouritism); Collusion among suppliers; Siphoning of school supplies; Purchase of unnecessary equipment; Manipulating data; Bypass of allocation criteria; Ghost deliveries
Writing of textbooks	Fraud in the selection of authors (favouritism, bribes, gifts); Bypass of copyright law; Students forced to purchase materials copyrighted by instructors
Teacher appointment, management (transfer, promotion), payment and training	Fraud in the appointment and deployment of teachers (favouritism, bribes, gifts); Discrimination (political, social, ethnic); Falsification of credentials/use of fake diplomas; Bypass of criteria; Pay delay, sometimes with unauthorized deductions
Teacher behaviour (Professional misconduct)	Ghost teachers; Absenteeism; Illegal fees (for school entrance, exams, assessment, private tutoring, etc.); Favouritism/nepotism/acceptance of gifts; Discrimination (political, social, ethnic); Private tutoring (including use of schools for private purpose); Sexual harassment or exploitation; Bribes or favours during inspector visits
Information systems	Manipulating data ; Selecting/suppressing information ; Irregularity in producing and publishing information; Payment for information that should be provided free
Examinations and diplomas Access to universities	Selling information ; Examination fraud (impersonation, cheating, favouritism, gifts); Bribes (for high marks, grades, selection to specialized programmes, diplomas, admission to universities); Diploma mills and false credentials; Fraudulent research, plagiarism
Institution accreditation	Fraud in the accreditation process (favouritism, bribes, gifts)

Source: Hallak and Poisson (2007, pp. 63-64).

Overall, the general picture that emerges from table 2 is that corrupt practices in the educational field could be identified in all planning and management areas of the education sector. Although people attitudes and the tolerance towards some corrupt behaviors can vary considerably from one society to another, it is not unrealistic to affirm that corruption in the education sector is a global phenomenon that involves all education stakeholders, including students, parents, teachers, administrators, suppliers, as well as educational policy-makers and politicians. The extent of corruption within the educational field and the potential costs that might result from corrupt practices raise important questions about the performance of the education sector and its ability to achieve education goals. In the next section, we discuss the challenges that corruption is likely to pose for the education sector.

3. CONSEQUENCES RELATED TO CORRUPTION IN THE EDUCATION SECTOR

A number of studies have tried to analyze the consequences associated with corrupt practices that may develop within the education sector. Drawing on the available literature, we can classify these consequences into three principal categories (see figure 1). The first category focuses on the supply-side consequences and considers the impact that corruption may have on the achievement of the main education goals, particularly the provision of an equal access to high-quality educational services. The second type of consequences emphasizes the effect of corruption on the demand for education and its impact on school performances. The third category of consequences questions the capacity of a corrupt educational system to achieve broader education goals, namely the transmission of universal and civic values to the young generations, as well as its ability to contribute to the development of the society as a whole. These categories of consequences are closely interconnected and can be identified at all levels of education, from primary to tertiary. Taken together, they invariably lead to recognize the inability of a corrupt educational system to meet the wide range of challenges that education sector is often facing.

3.1. SUPPLY-SIDE CONSEQUENCES

The first category of consequences highlights the effects that corruption may have on various aspects of educational provision. This includes the education system's ability to provide an equal access to free and high-quality education services and its contribution to create an educational environment conducive to learning. Several forms of corruption have a direct impact on the availability and quality of services delivered by education sector. In the same way as for corrupt

practices that may develop in any other public sector, corruption in the educational field would certainly contribute to decreasing the resources available for education while increasing the diversion and the misappropriation of education funds and, therefore, would lower the quantity as well as the quality of educational supplies. In this sense, two main forms of corruption should be highlighted: embezzlement of education funds and fraudulent practices in the educational procurement process including construction, maintenance and school repairs, textbook procurement, meal provision, etc. In many countries, these malpractices resulted in the leakage of a significant part of education resources. In this context, Uganda's experience seems to be highly instructive as illustrated by the results from the public expenditure tracking survey (PETS) conducted in 250 Ugandan primary schools, in 1996, in order to diagnose and analyze the magnitude of leakages in education resources. The main conclusion from the PETS implemented in Uganda shows that during the 1991-1995 period, the majority of schools did not receive a large part of the funding to which they are entitled. More specially, the survey results confirm that schools received only 13 percent of the central government's allocation for the schools' nonwage expenditures. Similar findings have been suggested by public expenditure tracking surveys implemented in other countries. For instance, the PETS study covering 45 Tanzanian primary schools found that, in 1998 an average of 57 per cent of all nonwage spending were subject to capture whereas the leakages in education resources in Ghana were at around 49 per cent of nonwage funds, as reported by the PETS study implemented the same year in 126 primary schools from this country (Reinikka and Smith, 2004, pp. 36-37). In a related matter, financial losses related to teacher absenteeism, as calculated by Patrinos and Kagia (2007), seem to provide further evidence on the magnitude of educational wastage due to corrupt practices. These authors have estimated the direct financial cost of teacher absenteeism in primary education in some countries and reported that it ranges from \$16 million a year in Ecuador to \$2 billion a year in India (Patrinos and Kagia, 2007, p. 69). All these examples suggest that when educational resources are used for corrupt purposes, it will be more difficult for the educational system to provide high-quality education services for all children.

Other corruption forms that thrive in the educational field are likely to undermine education quality. These mostly concern corrupt practices related to teacher management and behaviour. First, corruption in teacher appointment may favor the recruitment of teachers on the basis of subjective considerations, irrespective of their merit and competence, which could result in lower quality education. Second, excessive teacher absenteeism which constitutes a widespread phenomenon in many countries of the world, tends to reduce instructional time and raises important concerns regarding the professional and ethical commitments of teachers that adopt such behaviour. Given the fact that teachers are the most important element in enhancing quality education, high levels of teacher absenteeism should cast considerable doubt on the schooling system's ability to improve educational quality and learning outcomes. Third, malpractices adopted by some teachers in order to increase the demand for private tutoring could lead to a negligible attention to the quality of classroom instruction and, sometimes, may lead them to cover only part of the mainstream education program. In this respect, some researchers denoted that private tutoring constitutes a serious threat to teacher performance and could result in decreased teacher time and energy during regular classroom hours [Dang et Rogers (2008, p. 182) and, Hallak and Poisson (2007, p. 259)]. Furthermore, a recent empirical study provide evidence that teacher absenteeism increases significantly with the likelihood of providing extra tutoring sessions after school (Benveniste, Marshall and Araujo, 2008, p.70). In addition, private tutoring is likely to distort the curriculum in the mainstream system, disrupting the sequence of learning planned by mainstream teachers and exacerbating diversity in classrooms (Bray, 2007, p. 18). Finally, corrupt practices in the teacher-pupil relationship can also strengthen the segregation within the educational field and could lead, therefore, to an inequitable educational system. In this vein, malpractices in teacher behaviour, including the acceptance of gifts or favours, may impair their professional judgment (Hallak and Poisson, 2007, p. 161). When the relationship between teachers and students is based primarily on unethical and corrupt behaviour such as favoritism, nepotism, bribery or penalization of the pupils who do not attend private tutoring, it becomes even harder to attain an equal treatment for all students, regardless of social class, race, gender, language, religion, or ethnicity.

3.2. CONSEQUENCES RELATED TO THE DEMAND FOR EDUCATION AND SCHOOL PERFORMANCE

The second category of consequences deals with the incidence of corruption on two key aspects of the educational process: the demand for education and school performance. The effect of corruption on the demand for education is mainly transmitted through its impact on the ability of parents, especially those with low income, to invest in the education of their children. A vast array of corrupt practices is likely to work negatively to parents' income and, therefore, to the demand for education, including illegal fees for school entrance or for admission to universities, the demand to purchase textbooks supposed to be provided for free, and pressure exerted by teachers on parents to send their children for private tutoring or to purchase materials copyrighted by instructors. Many studies and surveys provide evidence that these corrupt practices are rampant within the education sectors of many countries around the world. For instance, according to the results of a recent study carried out in 2008 by Transparency International in seven African countries within the framework of Africa Education Watch¹³, an average of 44 percent of parents in the surveyed countries reported paying a registration fee to ensure the enrolment of their children in primary education (90 % in Morocco, 79% in Senegal and, 62% in Sierra Leone), with an average amount at around US\$ 4.16 per child for one school year while such fees have been abolished by law in all countries under study¹⁴. Similar results have been reported by another study conducted in 2003 by Transparency International's chapter in Mexico on the issue of corruption in the provision of public education. The main conclusion of the biennial National Survey on Corruption and Good Governance implemented in 2003 throughout Mexico's 32 federal states reveals that during the 12 months prior to the survey, the sums paid by Mexican households in bribes to secure access to public education (a compulsory and free public service) are over 102 million pesos (US\$10 million), which correspond to an average amount of 300 pesos (US\$30) paid by every household in exchange for a legally free education service (Transparency International, 2005, p. 48). Besides the abusive demands for fees that by law have been abolished, parents are often forced to devote a considerable part of their income in order to respond to various kinds of pressure imposed by teachers to enroll their children in private supplementary tutoring. These additional and undue fees constitute a heavy burden for parents, particularly the poorest, to afford their own children's schooling that, in turn, could translate into lower enrollment and completion rates. That said, the demand for education tends to decrease as costs that parents have to pay for the education of their children raise, due to corrupt practices.

Regarding the impact of corruption on school performance, it constitutes to a large extent the combined effect of those mentioned above. In fact, when corruption tends to undermine the capacity of the education system to provide a high-quality education services, in particular a good quality classroom instruction and, when parents, because of some corrupt practices, are facing supplementary costs for schooling their children, it is students and their school performance who suffer the consequences. In this sense, academic success or failure, as well as the quality of the cognitive and social skills accumulated by students can be considered to a large extent as the product of the educational system itself. In addition, corruption may lead to lower school performance through two interrelated modalities: school participation and students' motivation. Indeed, various forms of corruption that thrive in the educational field could affect the key features of school participation: attendance and retention, and constitute a serious threat to students' motivation and their commitment to learning and, hence, would have a negative impact on the quality of knowledge and skills they are supposed to acquire. In this respect, high levels of teacher absenteeism and unethical behaviors developed by some teachers are likely to result in the development of negative attitudes among pupils towards school that in turn, would undermine their engagement to learning. Some empirical studies conducted over the past years have clearly emphasized that teacher absenteeism is negatively associated with student attendance [Benveniste, Marshall and Santibañez (2007, p. 95) and, Benveniste, Marshall and Araujo (2008, p. 85)]. Moreover, there is some evidence that teacher absenteeism tends to go along with lower school performance [Duflo and Hanna (2005), Clotfelter, Ladd and Vigdor (2007), Das, Dercon, Habyarimana and Krishnan (2007) and, Miller, Murnane and Willett (2007)].

Other corruption forms, especially malpractices in the teacher-pupil relationship, are major impediments that can have a negative impact on students' motivation and would contribute to lower attendance and retention rates. One should recall in this respect the detrimental effects of some corrupt and unethical behaviors such as favoritism and nepotism, sexual harassment and discrimination on grounds of race, gender, religion or ethnic origin. It is noteworthy

¹³ Africa Education Watch (AEW) is a three year programme (2007-2010) implemented by Transparency International that focuses on governance in the management of public funds in the primary education system of seven African countries (Ghana, Madagascar, Morocco, Niger, Senegal, Sierra Leone and Uganda). In each country, four types of respondents were interviewed: households, head teachers, heads of Parent-Teacher Associations (PTAs) and local governments (district education officers).

¹⁴ Transparency International (2010), Africa Education Watch: Good Governance Lessons for Primary Education.

that other corruption forms, including academic fraud and malpractices during examinations and the accreditation process, can lead to the decline of meritocratic values and, in the long-term, can constitute a strong disincentive for students to learn (Hallak and Poisson, 2007, p. 233). From this perspective, a corrupt educational system would obviously result in students that are less motivated and less engaged in school and, more prone to attendance problems, particularly when they are beginning to recognize that success is based more on bribery, favoritism and manipulation than on merit, capacity and personal effort.

3.3. CONSEQUENCE ON THE DEVELOPMENT OF THE SOCIETY AS A WHOLE

The first two categories of consequences show that corruption in the educational field impedes the achievement of the main education goals (access, quality and equity) and reduces the demand for education, as well as school participation and learning performance. The importance of education for the economic, social and political future of nations suggests that the widespread presence of corruption within the education sector is likely to compromise the development of the society as a whole. Without an education system free of corruption, it becomes harder to any country to create human resources that are necessary to its economic, social and political development. In fact, it is unrealistic to consider that *"in a corrupt education system, students do not acquire the skills and knowledge that will enable them to contribute meaningfully to their country's economy and society. They learn from a young age to value corruption, accepting it is a norm for them and society"*¹⁵. In this sense, corruption can put at risk the achievement of wider educational policy goals, including the learning and the transmission of civic, ethical and universal values to the future generation, the development of a well-informed electorate and the generation of qualified future leaders. Therefore, as denoted by Hallak and Poisson (2006), *"lack of integrity and unethical behaviour within the education sector is inconsistent with one of main purposes of education; that is, to produce 'good citizens', respectful of the law, of human rights and fairness (it is also incompatible with any strategy that considers education as one of the principal means of fighting corruption)"*¹⁶. In this respect, malpractices and unethical behaviors adopted by some teachers seriously undermine the schooling system's ability to impart the desired civic education and, thus, its capacity to promote the transmission of integrity and honesty values to the future generation. According to this vision, Tanaka (2001, p. 160) acknowledges that prolonged corruption in an educational environment will create a reproductive process that produces corrupt students. Similarly, as indicated by Chapman (2002, p.3), corruption in the educational field is harmful to the society as a whole and to its future particularly when entire generations of youth begin to believe that personal success comes not through merit and hard work, but through favoritism, bribery and fraud. In addition, academic fraud can endanger the credibility and usefulness of the assessment systems in place and the value of academic degrees, promoting distrust about the academic enterprise at large (Hallak and Poisson, 2007, p. 234). Furthermore, corruption in higher education has also a strong influence on the selection of the elite and, therefore, the nation's future leadership and, can be detrimental to public health and safety by allowing incompetent doctors, teachers and other professionals who have purchased their grades or licenses to practice (Rumyantseva, 2005, pp. 84-86).

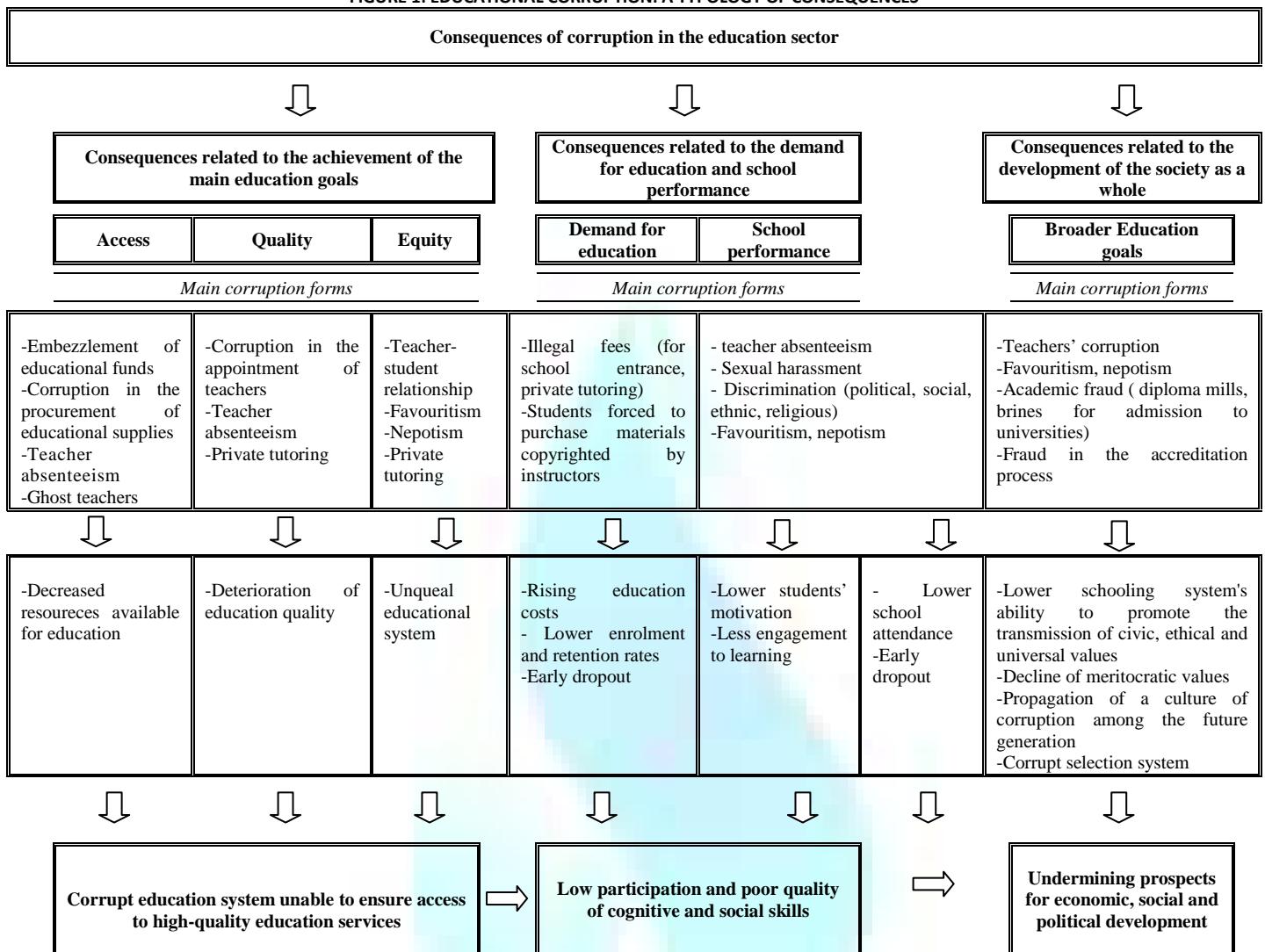
4. CONCLUSION

The aim of this paper was to put emphasis on the various forms of corruption that may flourish within the education sector and in particular, to explore their associated consequences. Despite the fact that little attention has been paid to the issue of corruption in education, the available literature seems to provide sufficient insights on the magnitude of the problem in the education sector of many countries around the world and acknowledges that corrupt practices can be related to the more specific aspects of the educational field. In this respect, early studies indicate that corruption in education is a worldwide phenomenon that may occur at all areas related to the planning and the management of the education sector and show that corrupt practices are likely to involve all education stakeholders of any country, regardless of its level of development. This is illustrated by the findings of many studies conducted in various regions of the world, underlining the magnitude and the diversity of corrupt practices in the educational field. The main conclusion of past studies dealing with the issue of corruption in education suggests that the vulnerability of the education system to corruption can only lead to disastrous consequences. Drawing on the past literature, we have tried to provide a classification of the consequences that would result from the various forms of corruption thriving within the education sector. The typology of consequences presented in this paper makes a distinction between three types of effects: those related to the supply of education and the achievement of the main education goals of access, quality and equity; those related to the demand for education and school performance and; those related to the achievement of broader education goals and the development of the society as a whole. These three categories of consequences are obviously interrelated and enable us to constitute a better understanding of the costs and implications of corruption in the educational sector. Taken together, they suggest that the development of corruption within the education sector tends to curtail incentives to invest in education, both individually and collectively. The extent of malpractice in the educational field suggests also that the desired education objectives cannot be achieved in the presence of a corrupt educational system. In this sense, a great deal of attention on the issue of corruption in the educational field and a radical education reform are often needed to make the system free of corruption, more competitive and hence, more likely to play a better role in empowering individuals and transforming societies.

¹⁵ Transparency International (2009), p. 2

¹⁶ Hallak, J. and Poisson, M. (2006), Governance in Education: Transparency and Accountability, p. 6.

FIGURE 1: EDUCATIONAL CORRUPTION: A TYPOLOGY OF CONSEQUENCES



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GROWTH EVALUATION OF SELECTED COMMERCIAL BANKS IN PALESTINE

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ABSTRACT

Banks are Financial Institutions which act as pillars of the economic system as they are the main source of finance. The present study analyzes the Growth and Development of selected commercial banks in Palestine. The Growth has been analyzed through Assets, Liabilities, Credit facilities, Customer Deposits, Net profit, Number of Employees, and Number of Branches during the period 2008-2012. Least square method and coefficient correlation are applied as statistical tools to analyze the Growth and Development of selected banks in Palestine. The r^2 of branches and number of employee more than 0.5 It indicates very bright in selected banks.

KEYWORDS

Palestine Banks, Growth, Total Assets, Net Profits, Customer Deposits, r^2 , Credit facilities.

1. INTRODUCTION

Banks in Palestine is like a heart in the economic structure and the capital provided by it is like blood in it, hence if the finance is not provided to the sectors like agriculture and industrial sector it will destroyed. The role of banking system in Palestine economy has increased dramatically. Banks reforms since 1994 have played an important role in the development of lending agriculture and international trade. In developing country like Palestine, The banking system as a whole plays a vital role in progress of economic development. Banks are financial institution that accept deposits and channel these deposits into lending activities either directly by lending or indirect through capital market. A bank links together customers that have capital deficits and customer with capital surplus.

In the present scenario economic development is impossible without banking services. A number of recent studies indicates that the banks sector play a more important role than it was believed earlier (world bank, 1996 Almedyda). The motivation of conducting this study is that only a few studies have analyzed the Growth of Palestinian Banks.

2. REVIEW OF LITERATURE

Though not much work has been done on the growth and development of commercial banks in Palestine. Some of the work conducted by eminent scholars are deliberated her with in order to have a glimpse and also to bring about the research gape that exist between their thoughts and the present work. **Sangami, m.u and tabssum nazir,(2010)**. Made an effort to evaluate the financial performance of the two major banks operating in northern India by using CAMEL Parameters.. Through this model, it is highlighted that the position of the banks under study is sound and satisfactory so far as their capital adequacy, asset quality, Management capability and liquidity is concerned. **Jass and Xiaofeng hui(2012)** attempted to compare the financial performance of different ownership structured commercial banks in Nepal based on their financial characteristics and identify the determinants of performance exposed by the financial ratios, which were based on CAMEL Model. Eighteen commercial banks for the period 2005 to 2010 were financially analyzed. In addition, econometric model (multivariate regression analysis) by formulating two regression models was used to estimate the impact of capital adequacy ratio, non-performing loan ratio, interest expenses to total loan, net interest margin ratio and credit to deposit ratio on the financial profitability namely return on assets and return on equity of these banks. The results show that public sector banks are significantly less efficient than their counterpart are; however domestic private banks are equally efficient to foreign-owned (jointventure) banks. **Furthermore, Ho and Zhu (2004)** have reported that the evaluation of a company's performance has been focusing the operational effectiveness and efficiency, which might influence the company's survival directly. **Raza et al., 2011 and Tarawneh, 2006** explained that a company, which has better efficiency, it does not mean that always it will show the better effectiveness. **Alam et al. (2011)** study concludes that ranking of banks differ as the financial ratio changes. **Bakar and Tahir (2009)** in their paper used multiple linear regression technique and simulated neural network techniques for predicting bank performance. ROA was used as dependent variable of bank performance and seven variables including liquidity, credit risk, cost to income ratio, size and concentration ratio, were used as independent variables.

3. OBJECTIVES OF THE STUDY

The objectives of the present research paper is to

1. study and analyze the growth and development of selected commercial banks in Palestine
2. to suggest measure in improving financial performance of sample bank who have indicate negative growth in term of assets, deposits, credit facilities, net profit, number of employee and number of branches.

4. NEED OF THE STUDY

Commercial bank in Palestine play an important role in the economic development in the age of cut throat competition these banks face stiff crisis in the financial management. Hence the present study has been undertaken to study their financial performance in respective of deposits, credit facilities, number of employee, number of branches, net profit and total assets so as to analyze the growth and indicate their weaknesses.

5. METHODOLOGY AND RESEARCH DESIGN

The present study has been carried out to evaluate the growth of selected commercial banks in Palestine. The selected banks in Palestine are Bank of Palestine, Palestine Commercial Bank, Palestine Investment Bank, Quds Bank. The study has been based on secondary data source. These data collected from annual reports of selected commercial banks, Palestinian stock exchange and from relevant articles.

The present study evaluate the Growth for the period 2008-2012 of selected commercial banks in Palestine through various statistical measures like compound annual Growth rate, trend equation (least square method, and square correlation coefficient.

6. PROFILE OF SELECTED COMMERCIAL BANKS IN PALESTINE**6.1 BANK OF PALESTINE**

Bank of Palestine (BOP) is the first and largest bank with a well-diversified branch network of 48 branches in Palestine, and a paid up capital of USD 150 million and assets of over USD 2 billion. Established in 1960, BOP has successfully expanded its presence and operations throughout the country and now has around 1,200 employees serving 600,000 customers. BOP has around 23% market share of deposits and loans in Palestine. Operating as a universal bank, BOP is

engaged in retail, corporate, SME and Micro, and Diaspora banking operations, with the largest card processing operations in Palestine. BOP is the sole agent for issuing and acquiring Visa and MasterCard in Palestine with over 5,000 Point of Sale merchant terminals nationwide

6.2 PALESTINE COMMERCIAL BANK

Palestine Commercial Bank was established in 1992 by a number of Palestinian businessmen, who realized the urgent need for establishing a banking institution that supports and boosts the birth of a viable Palestinian economy. The Bank started to provide its banking services through its main headquarters based in Ramallah in August 1994, with a capital of U.S. \$ 11,255 million, to become one of the first Palestinian banks operating under the Palestinian National Authority.

6.3 PALESTINE INVESTMENT BANK (PIB)

The PIB was established by a group of elite Arab and Palestinian Bankers which are known for their banking superior experience that was gained from their global banking exposure. Palestine Investment Bank P.L.C. was established in Gaza City in Palestine on August 10, 1994 as a public shareholding company with a share capital of U.S. Dollar 20 million, in accordance with the Company's Law of 1929.

PIB started operations during March 1995, and is currently operating through its Head Office in Al-Bireh and its eight branches and five offices located in Ramallah, Nablus, Hebron, Gaza, Jericho, Bethlehem, Bythoni, and Jenen. The capital of PIB has grown incrementally over the past two decades and has reached U.S. Dollar 53 million in outstanding capital and U.S. Dollar 100 million in authorized capital as of Jan 1, 2012.

6.4 QUDS BANK

On April 2nd, 1995 Quds Bank was established as a public share holding company, with a capital of US\$ 20 million divided into 20 million shares, for US\$ 1 a share. On 26/07/2006, the bank's general assembly voted to increase its capital to US \$50 million, with the same nominal value, paid in full. The bank practices its business activities through its headquarter located in Ramallah, Al Massiyoun, as well as its various branches and offices spread all over the country.

7. GROWTH EVALUATION OF SELECTED BANKS IN PALESTINE

Table one: show the Growth of Total Assets of selected banks. The highest growth in Total assets Bank of Palestine 21%, the lower growth Quds bank 2.8%. And the second highest growth in total assets Palestine Commercial Bank 10%, and the second low growth in total assets Palestine Investment Bank 6.2%

Table two: indicates the growth in credit facilities of selected banks in Palestine .the highest growth in credit facilities bank of Palestine 35% and the second highest Palestine Commercial bank 31% and the lower growth Quds Bank 1.5% but in 2011 it was the highest growth 44% .

Table three: show the growth in customer deposits. The highest growth in 2012 bank of Palestine 20% but in 2010 the higher growth it was in Quds bank 42%, also in 2009 the growth it was 38%. The lower growth in customer deposits Palestine Commercial bank 4.4%.

Table four: show the growth in net profits in selected commercial banks in Palestine. The highest growth in net profits in 2010 for the Quds bank 64%, and Palestine Investment bank 63% in 2011. but in 2012 the lower growth Palestine commercial bank (-89)%.

Table five: show the growth in number of employee. The highest growth in number of employee in Quds bank in the year 2010 it was 36% and the lower growth in 2012 it was 0.9% in Palestine investment bank.

Table six: Growth of number of branches of Selected Bank in Palestine. The highest growth in 2011 in Quds bank 41%, and the second highest Palestine commercial bank in 2011 it was 16%. there is no growth at all in 2010, 2011, 2012 in number of branches.

Table seven: shows the trend equation and r^2 of total assets of selected commercial banks in Palestine. It is observed that the trend equation and r^2 in all banks less than 0.50 that's mean negative indicates in selected banks.

Table eight: shows the trend equation and r^2 of credit facilities of selected commercial banks in Palestine. Its reflect from the table that the trend equation and r^2 of all the selected banks are less than 0.50.

Table nine: shows the trend equation and r^2 of customer deposits of selected commercial banks in Palestine during the period 2008-2012. the trend equation in all the banks less than 0.50, this it gives negative indicators.

Table ten: shows the trend equation of net profit of selected commercial banks in Palestine bank of Palestine it gives positive indicators .0.99, while the three banks less than 0.50

Table eleven: shows the trend equation in number of employee of selected banks in Palestine. The table reflects that all the selected banks are positive and goodness of fit of all the equations is high more than 0.50.

Table twelve: shows the trend equation and r^2 of selected commercial banks in Palestine during the period 2008-2012. All the banks are good and positive which means more than 0.50 but Palestine commercial bank less than 0.50.

8. CONCLUSION

Commercial banks play an important role in the economic development of the country. The present study attempts to analyze the financial performance of selected commercial banks in Palestine on parameters like total assets, credit facilities, deposits, number of employee, number of branches, and net profit. The study based on secondary data gathered from annual report of selected banks. The analyzes of data reveals that in case of total assets bank of Palestine indicated the highest growth 21% while Palestine investment bank showed the growth 6.2% only. in case of customer deposits Palestine investment bank shows tremendous growth rate from (-13%) in 2011 to 17% in 2012 while Quds bank has indicated a decline in growth rate from 9% in 2011 to 5.8% in 2012. Credit facilities being important parameters in analyzing the financial performance of commercial banks. The secondary data analyzes that in case of Palestine investment bank the compound annual growth rate increase from (-17%) in 2011 to 20% in 2012, while in case of Quds bank the annual growth rate of credit facilities 44% in 2011 to 1.5% in 2012.

Profitability an important indicator of financial performance in respect of commercial banks in Palestine. The secondary data reveals that all the sample of commercial banks except who showed negative growth rate in regard of profitability. Hence the other commercial banks have to adapt measures which can increase the profitability there why overcoming their financial crisis. In order to increase the profitability more credit should be provided along with increase in branches. The revenue of the form of interest should be enhanced by proper credit mechanism.

On the basis of the above analyzes its conclude that the financial performance of bank of Palestine its far more better than other sample banks. Hence its suggested that quds bank and Palestine investment bank and Palestine commercial bank should adapt the financial polices and strategies of bank of Palestine.

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APPENDICES

TABLE ONE: GROWTH IN TOTAL ASSETS OF SAMPLE BANKS

Name of banks	Total Assets \$				
	2012	2011	2010	2009	2008
Bank of Palestine	2004494095	1653960732	1545038022	1283017502	1045622629
Compound annual growth rate %	21	7	17	17	
Palestine commercial bank	186169212	168803636	171495617	132031209	105342175
Compound annual growth rate%	10	(-1.5)	30	25	
Palestine investment bank	258689765	243475131	265367906	245620515	214612000
Compound annual growth rate%	6.2	(8.2)	8	14	
Quds bank	480906793	467680177	426533834	330132209	259549161
Compound annual growth rate %	2.8	9.6	29	27	

Source: Annual reports of selected banks

TABLE TWO: GROWTH IN CREDIT FACILITIES OF SAMPLE BANKS

Name of banks	Credit Facilities \$				
	2012	2011	2010	2009	2008
Bank of Palestine	976394928	720173048	545026391	343311230	285337011
growth rate %	35	3	23	10	
Palestine commercial bank	74159491	56448400	49491743	31987045	14958238
growth rate%	4.4	2.3	25	19	
Palestine investment bank	95120970	78771670	95463305	81098530	51426546
growth rate%	17	(13)	20	7.8	
Quds bank	292863010	288376020	198950665	121188598	128520482
growth rate%	5.8	9.9	42	38	

Source: Annual reports of selected banks

TABLE THREE: GROWTH IN CUSTOMER DEPOSITS OF SAMPLE BANK

Name of banks	Customer Deposits \$				
	2012	2011	2010	2009	2008
Bank of Palestine	1488572164	1242780471	1205950955	978947595	882395677
growth rate %	20	3	23	10	
Palestine commercial bank	110521917	105821447	103355452	82700002	69628808
growth rate%	4.4	2.3	25	19	
Palestine investment bank	138053319	117637453	136018695	112899089	104713597
growth rate%	17	(13)	20	7.8	
Quds bank	334256777	315726133	287215750	201805306	145703490
growth rate %	5.8	9.9	42	38	

Source: Annual reports of selected banks

TABLE FOUR: GROWTH IN NET PROFITS OF SAMPLE BANKS

Name of banks	Net profits \$				
	2012	2011	2010	2009	2008
Bank of Palestine	38347397	33980632	30119469	26929168	23610956
growth rate %	13	13	12	14	
Palestine commercial bank	62167	589127	1794022	2001967	217038
growth rate%	(89)	(67)	(10)	8.2	
Palestine investment bank	1826277	2552984	1569530	2928340	2949311
growth rate%	(28)	63	(46)	(7)	
Quds bank	3267925	4581794	4404155	2677253	5971848
growth rate %	(28)	4	64	(55)	

Source: Annual reports of selected banks

TABLE FIVE: GROWTH IN NUMBER OF EMPLOYEES OF SAMPLE BANKS

Name of banks	Number of Employees				
	2012	2011	2010	2009	2008
Bank of Palestine	1139	1061	943	864	752
growth rate %	7.3	12	9	15	
Palestine commercial bank	148	143	137	117	110
growth rate%	3.4	4.3	17	6.3	
Palestine investment bank	236	234	219	179	162
growth rate%	8.5	6.8	22	10	
Quds bank	450	448	353	258	215
growth rate %	4.4	27	36	2	

Source: Annual reports of selected banks

TABLE SIX: GROWTH IN NUMBER OF BRANCHES OF SELECTED SAMPLE BANKS

Name of banks	Numbers of Branches				
	2012	2011	2010	2009	2008
Bank of Palestine	48	46	42	40	32
growth rate %	4.3	9.5	5	25	
Palestine commercial bank	7	7	6	6	6
growth rate%	0	16	0	0	
Palestine investment bank	9	9	9	9	8
growth rate%	0	0	0	12	
Quds bank	18	17	12	12	12
growth rate %	5.8	41	0	0	

Source: Annual reports of selected banks

TABLE SEVEN: TREND EQUATION AND R² OF TOTAL ASSETS

Name of banks	Y=a+bx	R ²
Bank of Palestine	1506426596+228868616.2x	0.12
Palestine commercial bank	152768369.8+19842650.1x	0.12
Palestine investment bank	24555306.4+8601014.6x	0.0003
Quds bank	392960435+58026323.2x	0.14

TABLE EIGHT: TREND EQUATION AND R² OF CREDIT FACILITIES

Name of banks	Y=a+bx	R ²
Bank of Palestine	574048522+175897765.2x	0.2
Palestine commercial bank	45408983+14286386.1x	0.11
Palestine investment bank	80376204+8506198.8x	0.0003
Quds bank	564090955+49587247.8x	0.095

TABLE NINE: TREND EQUATION AND R² OF CUSTOMER DEPOSITS

Name of banks	Y=a+bx	R ²
Bank of Palestine	1159705372+147594585x	0.42
Palestine commercial bank	94405525+10490766.3x	0.37
Palestine investment bank	121864431+7141780.8x	0.12
Quds bank	256941491+49102740.1x	0.15

TABLE TEN: TREND EQUATION AND R² OF NET PROFITS

Name of banks	Y=a+bx	R ²
Bank of Palestine	30597524.4+3652434.6x	0.99
Palestine commercial bank	932864.2-172258.2x	0.09
Palestine investment bank	1971073.558-262142.4x	0.42
Quds bank	9180595-350330.5x	0.19

TABLE ELEVEN: TREND EQUATION AND R² OF NUMBER OF EMPLOYEES

Name of banks	Y=a+bx	R ²
Bank of Palestine	951.8+97.1x	0.99
Palestine commercial bank	131+10.2x	0.93
Palestine investment bank	206+20.3x	0.91
Quds bank	344.8+66x	0.94

TABLE TWELVE: TREND EQUATION AND R² OF NUMBER BRANCHES

Name of banks	Y=a+bx	R ²
Bank of Palestine	41.6+3.8x	0.92
Palestine commercial bank	6.4+.3x	0.74
Palestine investment bank	8.8+.2x	0.49
Quds bank	14.2+1.7x	0.78

JOBLESS GROWTH IN INDIA IN 2000's

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ABSTRACT

Despite high growth in output there has been a deceleration in employment growth in the post reform period especially in the second half of the 2000 decade. Whether it is the 1st half of the decade the employment growth has been driven by distress factors. It is the entering of the women labour force which causes the acceleration in participation rate and withdrawal of women labour force from the labour market which cause in deceleration in employment growth. It also shows over the year enhancement of enrolment in education among the young age groups and especially the women. The agriculture and manufacturing sector shows a decline in employment growth where as the construction and service sector shows a positive employment growth. In terms of quality of employment the 1st half of the decade shows increase in self employment while the second half of the decade shows increase in casual labour. The trend shows the increase in unorganized sector employment and decrease in organized sector employment which raises questions on the quality of jobs created. While unemployment is not a problem in India it is the under employment which needs more concern.

KEYWORDS

jobless growth, distress factors.

INTRODUCTION

Economic growth is inclusive only when it improves the employment conditions of the masses of workers. Poverty can be reduced from an economy by enhancing the employment of the masses. It could be argued that the economic reform would bring the economic growth, enhancement of employment and reduction of poverty and inequality. But the economic reform in India shows in other way. Though the economic reform results in growth in output it fails to enhance the employment growth. Though it has been increases by a smaller extent it is in the unorganized sectors and questioning the quality of jobs created. In India the model of growth and employment is not as it would be in developing countries. Though growth in output and movement of labour took place, it is not in the same order as proposed by Arthur Lewis i.e. from Agricultural-Industry- Service rather it happens from agriculture to service. The industrial sector especially the manufacturing sector remains stagnant in terms of employment creation. Though the agricultural share has been declining still around 60% of the population depends on this sector showing underemployment situation in agricultural sector in India. In terms of growth the service sector has done well over the year but the labour absorbing capacity of this sector is very low. The economic reform in India achieved a higher growth rate through increase in technology, productivity but in terms of employment generation it lacks behind. The employment has been increasing in the sector having lower productivity. While the 1st half of the 2000's decade shows an increase in employment by 59 million the 2nd half of the 2000's decade shows an increase by only 1.25 million. The higher employment in the 1st half decades is due to the enhancement in self employment job by women and the decline in the 2nd half is due to the withdrawal of women worker from labourmarket. While the first half shows enhancement of self-employment the 2nd half shows the increase in casualisation of the labour. Many researchers have described the phenomenon of "jobless growth" as (Sundaram 2001, Chadha&Sahu 2002, Bhattacharya & Saktivel 2004, Unni& Raveendran 2007). Hence it became important to know what are the factors which cause a decline in employment growth or decline in employment elasticity though output increases at a faster rate.

OBJECTIVES

- Growth in output & employment in the post reform era.
- Nature of employment in the post reform era.
- Relationship between productivity and employment elasticity.

DATA AND METHODOLOGY

In order to examine the above objectives the present study uses the data sets covering the period from 1993-94 to 2009-10. The output data have been collected from the National Account Statistics (NAS) and the employment data has been collected from the National Sample Survey Organisation (NSSO). This paper uses the 2004-05 as the base price for the output and its components. For employment status the usual status (principal & subsidiary) approach have been followed. The compound annual growth rate both for the output and employment has been calculated.

The section 1 of this paper discusses the broad trends of output of the Indian economy. Section 2 discusses the growth in employment of the economy shows the divergence trends in the 1st and 2nd half of the 2000's decades. Section 3 tries to explain the nature of employment after the post reform especially in the 2000's decade. Section 4 discusses the relationship between the productivity and employment elasticity in each sectors and section 5 concludes the paper.

STRUCTURE AND GROWTH OF OUTPUT IN THE ECONOMY

The economic reform has achieved a higher growth rate in output in India. The growth in output peaked to 7% after the economic reform from 1993-94 to 2009-10 which is higher than the pre reform 1983-93 growth rate of 5.26% which is the result of higher growth of the non-agricultural sector especially the service sector. The Indian agriculture has seen a drastically fall in the output growth due to heavy reduction in the institutional credit, subsidies, and hence increasing the cost of production. Over this post reform period the growth rate of output is 2.68% which is lower than the pre reform growth of 3.41%. With the introduction of new economic policy regime, the industrial sector registered a growth rate of more than 7% during the post reform period as against 5.56% during the pre reform period. Among the sub sector the construction sector recorded higher growth during the post reform period as compared to pre reform period followed by the manufacturing sector. The service sector has grown by 8.66% during the post reform period as against 6.45% during the pre reform period. This growth rate is due to growth in transport, communication, trade-hotel & restaurants. Over the year the agricultural share has been declined drastically now it remains around 15% of the total income where as the service sectors share has been increasing drastically after reform which is now around 55% of the national income. The industrial sector increases its share marginally which now account 30% of the national income.

TABLE 1: GROWTH RATE OF SECTORAL OUTPUT IN INDIA

Sectors/Year	1983 to 1993-94	1993-94 to 1999-00	1999-00 to 2004-05	2004-05 to 2009-10	1993-94 to 2009-10	1983 to 2009-10
Agriculture & Allied Sectors	3.41	3.31	1.58	3.05	2.68	2.98
Manufacturing	5.41	6.90	6.46	9.50	7.57	6.68
Construction	4.92	6.36	9.17	9.23	8.13	6.81
Industry	5.56	6.57	6.80	8.75	7.32	6.60
Services	6.45	8.34	7.43	10.31	8.66	7.76
Total	5.26	6.54	5.99	8.62	7.01	6.29

Source: Computed from National Account Statistics 2007, 2011.

STRUCTURE AND GROWTH OF EMPLOYMENT IN THE ECONOMY

Low labour participation rate (LPR) and work participation rate (WPR) have been persistent characteristics of India's labour market. In 2008, the LPR in India was only 56% compared to 74% in China and 71% in Brazil (Thomas, J.J. 2012). The LPR indicates proportion of population that is economically active, including employed and unemployed but actively seeking for jobs. The expansion of working age population and the emergence of new economic opportunities can lead to rise in the LPR and WPR. At the same time the increase in school and college enrolments can result in fall in LPR. The LPR & WPR declining in the post reform era over the pre reform era from 42% to 40%. The WPR declines for rural male, and rural & urban females. Where for the urban males it shows an increasing trends. The decline in female participation is due to the fact that women are now attaining higher education particularly in urban areas. It has been seen that the urban female WPRs have remained markedly lower than the corresponding rural figures.

The employment growth slowed down sharply during the 1990's especially in rural areas. The net increase in employment in India was 71 million between 1983 and 1993-94 but fell to 24 million between 1993-94 and 1999-00. There was a predominance of casual worker in the employment generated in the 1990's. During the first half of 2000's (1999-00 to 2004-05) employment growth in India revived with a net increase in 59.5 million new jobs and with a significant jump in self employment especially among the women in agriculture. While during the same period the quality of employment suffered a decline. The latest round of NSS in 2009-10 indicated that the employment generation in the Indian economy slowed down sharply again by creating only 1.25 million jobs over the 2nd half of the 2000's decade. The slowed down in the employment growth occurred during a time when the country's economic growth showed a distinct acceleration. The rate of employment generation in India during the post reform fell short in comparison to the pre reform period. The new job created between 1993-94 and 2009-10 is 5.3 million per year in comparisons to 6.8 million in the pre reform era between 1983 and 1993-94.

TABLE 2: DISTRIBUTION OF WORKFORCE BY GENDER AND LOCATION

Year	Rural			Urban			Total
	male	female	total	male	female	total	
Number of workforce in million							
1983	153.49	90.45	243.94	46.64	12.17	58.81	302.75
1993-94	187.66	104.29	291.95	65.1	17.4	82.5	374.45
1999-00	198.81	105.91	304.72	75.64	18.27	93.91	398.63
2004-05	218.85	123.96	342.81	90.42	24.62	115.04	457.85
2009-10	231.9	104.5	336.4	99.8	22.2	122	458.4
Compound Annual Growth							
1983 to 1993-94	1.84	1.3	1.65	3.08	3.3	3.12	1.95
1993-94 to 1999-00	0.97	0.26	0.72	2.53	0.82	2.18	1.05
1999-00 to 2004-05	1.94	3.2	2.38	3.63	6.15	4.14	2.81
2004-05 to 2009-10	1.17	-3.36	-0.38	1.99	-2.05	1.18	0.02
1993-94 to 2009-10	1.33	0.01	0.89	2.71	1.53	2.48	1.27
1983 to 2009-10	1.54	0.54	1.2	2.86	2.25	2.74	1.15

Source: Computed from various rounds of NSS Reports of Employment & Unemployment in India

Majority of the workforce are engaged in the agricultural sector despite declining share of this sector. The declined in employment share of the agricultural sector moves to the service sector without much adding to the industrial sector which missed the transformation trajectory. Within the industrial sector the manufacturing sector which has a higher share of employment has shown a declining trends in the 2009-10 where as the construction sector has been benefited a lot from the reform and especially due to the introduction of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). Within the service sector the highest employment growth has been recorded in finance, insurance, business service and transports. The service sector is unable to absorb the surplus labour from the agricultural sector.

TABLE 3: PERCENTAGE SHARE AND GROWTH OF INDUSTRIAL EMPLOYMENT

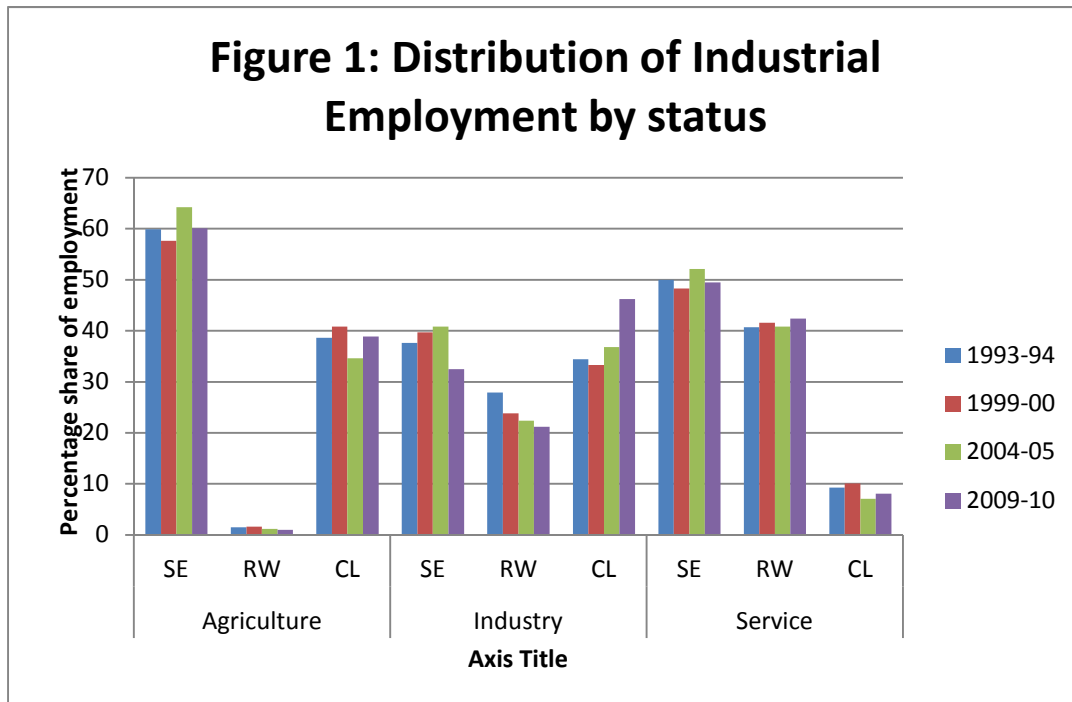
Year	A&A	MNF	CON	Industry	Service
1983	68.52	10.7	2.24	13.83	17.65
1993-94	63.84	10.68	3.24	15.01	21.15
1999-00	60.27	10.99	4.4	16.22	23.5
2004-05	56.5	12.2	5.68	18.7	24.79
2009-10	51.75	11.41	9.63	21.95	26.29
1983 to 1993-94	1.34	1.97	5.46	2.75	3.68
1993-94 to 1999-00	0.1	1.56	6.35	2.39	2.86
1999-00 to 2004-05	1.47	4.96	8.14	5.75	3.89
2004-05 to 2009-10	-1.72	-1.31	11.17	3.28	1.2
1993-94 to 2009-10	-0.05	1.69	8.4	3.71	2.66
1983 to 2009-10	0.51	1.81	7.19	3.32	3.07

Source: Computed from various rounds of NSS Reports of Employment & Unemployment in India

NATURE OF EMPLOYMENT IN INDIA

The additional employment generated does not lead to any economic development until the quality of employment is enhanced. The work categories has been divided as self-employed (SE), regular salaried employment (RW), casual labour (CL). While the regular employment has the social security benefit and hence more secure and casual labour is least secure. In India around 51% of the population are engaged in self-employment categories, 33% in casual labour followed by 16% regular labour according to the 66th NSS round data. In the 2000's decade it has been seen that the 1st decade shows the increase in self employment and the 2nd half shows the decline in self employment and increase in the casualization. The quality of employment can also be measured by the nature of employment i.e. whether the work is under organized or unorganized categories. Whereas the first one gives the security the second one does not. While the organized sector consist only 8% of the total workforce the unorganized sector consists of the other 92%. Though in the post reform era both the employment shows a declining trends. The deceleration in the organized sector employment is due to the slowdown in the employment in the public sector. The marginal increase in employment in India between 2004-05 and 2009-10 is the result of two opposing trends of labour absorption – an absolute decline of 21.1 million workers engaged in agriculture and a modest increase of 22.3 million workers in the non-agricultural sectors. Between 1999-00 and 2004-05 the persons who have joined in the agricultural labour force around 16.8 million of 18.5 million are self employed women who have joined in labour force to supplement their household income. Between 2004-05 to 2009-10, 22 million left the agricultural works due to improvement in economic condition of rural India, of which 19 million are self-employed. Another reason for slow growth in workforce during the 2nd half of the 2000's decade was faster expansion of population of students. The increase in ratio of students to total population in India is from 20.5% in 1993-94 to 26.6% in 2009-10. From 2004-05 to 2009-10 seen an enhancement of higher secondary education especially in rural areas and among the young's between 15-19 years. With increase in education the unemployment rate increases

which became a problem for the Indian economy. The higher educated youths who are aspiring for higher wage jobs didn't get it and remains unemployed. In Kerala this type of unemployment is higher among all the states in India.



Source: Computed from various rounds of NSS Reports of Employment & Unemployment in India

PRODUCTIVITY AND EMPLOYMENT ELASTICITY

The output growth may generate employment but incremental employment growth depends on the growth of productivity and the technology (capital-labour ratio). The productivity has been increasing during the post reform phase in comparison to the pre reform phase. The increase in productivity is accompanied by increase in growth of output and decline in employment growth. The service sector grew at a higher rate than the agriculture and industry. In the construction sector the employment growth has been faster than the output growth causing a decline in productivity. The manufacturing sector shows a negative employment growth but it has a higher productivity growth. This implies that there is a tradeoff between employment growth and productivity. The largest share of productivity growth has been witnessed in the service sector which also shows faster growth rate in the post reform period. The positive effects of productivity can be nullified if the capital labour ratio rises faster. There is a substantial decline in the employment elasticity in the post reform period. The construction sector display the highest employment elasticity followed by finance and real estate sector. The employment elasticity of the output in the agricultural sector, where the largest share of workers is engaged has been declining drastically. The employment elasticity of the manufacturing sector shows declining trends during the post reform period. Over all there is a declining labour absorb capacity of the economy during the post reform period.

TABLE 4: EMPLOYMENT ELASTICITY OF DIFFERENT SECTORS

Sector/Year	1983 to 1993-94	1993-94 to 1999-00	1999-00 to 2004-05	2004-05 to 2009-10	1993-94 to 2009-10	1983 to 2009-10
Agricultural	0.39	0.03	0.93	-0.56	-0.02	0.17
Manufacturing	0.36	0.23	0.77	-0.14	0.22	0.27
Construction	1.11	1	0.89	1.21	1.03	1.06
Industry	0.49	0.36	0.85	0.37	0.51	0.50
Service	0.57	0.34	0.52	0.12	0.31	0.40
Total	0.37	0.16	0.47	0	0.18	0.25

Source: Computed

CONCLUSION

In conclusion it can be said that though the economic reform brought growth in the Indian economy it is not in the pattern followed by the developing countries i.e. from agriculture-industry-service. The growth pattern and the employment pattern which the Indian economy follows is agriculture –service and lacking the industrial sector. The growth in the post reform era is driven by productivity growth with the sophisticated technology. Hence in terms of employment growth it has been showing very slow growth rate even in some sector a declining growth rate. In India though the unemployment is not high the underemployment is very high as lot of people depends on the agricultural sector which has shown a slow growth rate and a negative employment growth rate. The Indian economy also seen huge young educated unemployed. Hence what the government of India needs is not just creation of the employment through various employment programme rather creation of quality of employment. Hence we need both quantitative as well as qualitative employment. The agricultural sector are no more able to absorb the labour that's why what we need is the creation of small scale industries which needs more of labour and less of capital.

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FOOD PROCESSING AND VALUE ADDITION: THE PATHWAY TO AGRICULTURE SUSTAINABILITY

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ABSTRACT

At present import liberalisation has contributed in a big way to the reduction in prices of agricultural products. Having failed in getting remunerative prices to their products many farmers have curtailed their farm operations, which in turn has increased unemployment among the agricultural workers. In such a situation a question arises how to manage agriculture in a sustainable manner. This calls for a critical look at the inventory of our resources and identification of opportunities and areas of strength. The desired growth of India's agriculture and allied sector in general are achievable only with an effective integration and synergy between agriculture and agro-based industries. Food processing adds value, enhances shelf life of the perishable agro food products, encourages crop diversification and ensures remunerative market price of the agricultural produce by making it more marketable.

KEYWORDS

Food processing, primary, secondary and tertiary food processing, convenience foods.

INTRODUCTION

Agricultural development is central to rapid economic development of a country, especially in the case of India where majority of population depend on farm sector for their livelihood. In such an economy the attainment of Inclusive Growth presupposes agricultural sustainability. The practical remedy to attain agricultural sustainability would be to ensure remunerative price of the agricultural produce by making it more marketable by the simple device of processing it, packaging it and prolonging its durability. Food processing adds value, enhances shelf life of the perishable agro food products, encourages crop diversification and ensures remunerative market price of the agricultural produce by making it more marketable. An important stimulant for processed food is the rapid economic growth, which translates in to increased disposable income of the huge urban and rural middle class population. India has varied agro climatic conditions; it has wide ranging and large raw material base suitable for food processing industries. Food processing industry has a bright future due to demographic environment in India. The food habits, ready-to-cook and ready-to-eat and so life styles have given a new dimension to the food processing industry. This industry is in transformation mode. Food processing combined with marketing has the potential of solving the basic problems of agricultural surpluses, wastages, rural joblessness and better remuneration to the farmers. In the next four years, food production is expected to double. These produces, if processed and marketed smartly can make India a leading food supplier of the world. India has the potential to grow in to an important food producing country and to tap the global trade in a big way. The second phase of green revolution in India quite rightly focuses on crop diversification, processing, value addition and export of those items to which India enjoys competitive edge.

RELEVANCE

India has the capability of producing a wide variety of farm produce under its varied agro-climatic conditions, which provides necessary impetus for food processing sector to sustain. India is the world's second largest producer of food, of fruits and vegetables and has the potential to become number one in due course of time with sustained efforts. It is estimated that this sector due to its linkage effects, has the largest employment generating potential per unit of investment. Economic liberalisation and rising consumer prosperity is opening up new opportunities for diversification in food processing sector. Possibly what Information Technology, Business Process Outsourcing have done for urban India, Processed food revolution can do for rural India.

OBJECTIVES

1. To assess the importance of agriculture sector in Indian economy
2. To highlight the effectiveness of food processing sector in accomplishing agricultural sustainability.
3. To examine the competitiveness of the food processing sector in our economy

METHODOLOGY

The study is conducted primarily on the basis of second hand information pertaining to the topic. The sources from which the required information is collected includes the website of the Ministry of food processing industries, Economic survey, Indian journal of agricultural economics etc.... These secondary data provides a theoretical support to the present study.

Agriculture is the mainstay of Indian economy because of its share in employment and livelihood creation, notwithstanding, its reduced contribution to the nation's Gross Domestic Product. It is the most important sector of the Indian economy from the perspective of poverty alleviation and employment generation. The following facts indicate the strategic significance of this sector in our economy.

- Agriculture sector provides cereals and non-cereal eatables to feed the world second largest population.
- In the total National Income of India, agriculture sector contributes around 15 per cent.
- More than 52 per cent of the workforce still dependent on agriculture for their livelihood.
- The contribution of agriculture sector in the total export earnings is around 14.7 per cent.
- Agriculture provides raw material to various types of industries.
- Above all agricultural growth has direct impact on poverty eradication, containing inflation, raising agricultural wages and employment generation.

Rapid economic development will require rapid agricultural development either to precede or to go in hand with it. Indian planners learnt a bitter lesson during the second and third five year plan periods and in recent years, during 2002-03 for example, when failure of the agricultural sector spelt disaster to entire planning process. Thus any change in the agricultural sector positive or negative has a multiplier effect on the entire economy. The agricultural sector acts as a bulwark in maintaining food security and in the process, national security as well. Recognising the crucial role played by the agricultural sector in enabling the widest dispersal of economic benefits, the tenth plan emphasized that agricultural development is central to rapid economic development of the country.

FACTS ABOUT THE PERFORMANCE OF INDIA'S AGRICULTURE

The decade of 1990's witnessed two very significant developments that have profound impact on India's agricultural trade. The first phase of development relates to liberalization of economic policy and second relates to formation of WTO in 1995. Liberalization has provided an opportunity to take advantage of rising international prices which have well above the domestic prices. However, after the operationalisation of WTO in the year 1995, international price of agricultural commodities have dropped to a very low level and Indian agricultural goods prices in domestic market turned higher than international prices. This rendered Indian market attractive for import of several agricultural commodities. The World Trade Organisation is aimed at free and fair trade. But compared to

pre-WTO period developed countries have increased tariffs and started providing huge domestic subsidies to their farmers under "Green Box" and "Blue Box" clauses of the WTO. For these reasons, the competitiveness of developing countries like India has declining considerably in world agricultural trade.

In such a situation, a question arises how to manage agriculture in a sustainable manner. This calls for a critical look at all inventory of our resources and identification of opportunities and the areas of strength. In this context the evergreen revolution or sustainable advances in production, productivity, profitability and enhanced job opportunities can be attained only through a quantum jump in productivity per unit of land, water, energy, without causing any harm to the environment. Agriculture is intended to become not merely an efficient eco-friendly production system capable of meeting basic demands of the rapidly growing population, but it has to become a major powerful instrument for a comprehensive socio economic transformation of the country including improvement in the quality of life of every individual. This is an exciting opportunity and a challenging responsibility.

PROCESSING AND VALUE ADDITION: OPTION FOR AGRICULTURAL SUSTAINABILITY: A HISTORICAL PERSPECTIVE

India's strong agricultural base and accelerating economic growth holds a significant potential for the food processing industry. Food processing industry is of enormous significance for India's development because of the vital linkages and synergy that it promotes between agriculture and industry. A developed food processing sector will help to overcome the biggest challenges in front of India- i) low farmer income and high subsidies, ii) high wastages along the value chain and iii) co-existence of jobless growth and poverty. India is world's second largest producer of food, next to China and has the potential of being the biggest with the food and agricultural sector. The growth potential of this sector is enormous and if it is expected that the food production will double in the next decade and the consumption of the value added food products will grow at a rapid pace. This growth of food processing industry will bring immense benefit to the economy, inducing agricultural output, meeting challenges of productivity per acre, generating employment and raising the standard of very large numbers of people cut across the country, especially in rural and semi urban areas. The food processing industry is made up of primary², secondary³ and tertiary⁴ food processors.

Economic liberalisation and rising consumer prosperity is opening up new opportunities for diversification in food processing sector. The food processing sector has started producing many new items like ready to eat foods, beverages, processed and frozen fruit and vegetable products. Indian consumers are being fast induced to more and more high quality food products produced by induction of latest technologies in various food processing sectors. Government of India has recognized food processing as one of the primary sectors to boost the economic growth in India. Government intends to triple the present size of food production by 2015 with an investment of Rs. 97, 700 crores.

The food processing industry¹ is a strategic industry and has an irrevocable place in the whole edifice of the economic structure of a country (Edward C. Hampe Jr. and Merle Wittenber, pp 3-157, 1986). Employment generation and satisfaction of the basic needs of the entire population are the primary importance of FPI⁵ in developing countries. The newly emerging countries must develop FPI on a first priority because the cornucopia of food raw materials in these nascent economies are either non utilised or mal utilised leading to the import of food. Food shortages and deficient diet are clean obstacles in the path to maturity (UNIDO 1969).

India can become the food supplier to the world. It has cultivable land, all the seasons for production of all varieties of fruits and vegetables and an agribusiness system that works although it needs to be vastly improved. The single most important problem facing the Indian agricultural industry is the inefficient supply chain. By building an efficient and effective supply chain it is possible to secure the population with value added, with simultaneously ensuring remunerative prices to the farmers, strategic growth plans for achieving both national and international competitiveness of the food industry are essential. Agro-processing is now regarded as the sunrise sector of the Indian economy in view of its large potential for growth and likely socio-economic impact specifically on employment and income generation. Properly developed agro processing sector can make India a major player at-the global level for marketing and supply of processed food and a wide range of the plant and animal products. (N. Viswanadham @ gmail.com)

Important point in the food processing is that a substantial portion being rural based, it has a very high employment potential with significantly lower investment (Acharya 1997, pp. 162-175). Agro-industry generates new demand on the farm sector for more and different agricultural outputs, which are more suitable for processing. (Christopher G. Barin, 1989).

Indian food industry is estimated to be around US \$67 billion, making it the fifth biggest. The food industry is expected to grow to US \$280 billion by 2015 and generate an additional employment for approximately 8.2 million people. It has been observed that employment potential of the food processing sector is much higher than other sectors. There is also fourfold generation of indirect employment in auxiliary and other downstream activities on account of investment in the food sector.

INDIA'S STRENGTH IN FOOD PROCESSING

India is one of the key food producers of the world and has access to several natural resources. Diverse agro climatic conditions and wide ranging raw material base adds to the huge advantage of a large untapped domestic customer base. Food processing industry in India is supported by a great agro-climatic diversity suitable for round the year cultivation of crops. Urbanisation, rise in disposable incomes and changing life styles and aspirations are leading to significant changes in food habits of Indians. Increasing nuclear families and increasing women employees are leading to rise in consumption of processed ready – to – eat canned and frozen foods. The number of upper and middle class Indians consuming packaged food is expected to rise to 200 million in 2012. Changing demographics and rising disposable incomes are the most important demand booster for the processed food in India. Indian government recognized the potential of food processing sector to the economy and has come up with several initiatives to boost the quantity and quality of output in the sector. The government has increased the spending from INR 72.77 crore in 2002-03 to INR 159.78 crore in 2006-07 to increase the value of the output, share of global processed market and provide a fillip to the farmer's income.

DIFFERENT TYPES OF PROCESSED FOOD

For a perception of the growing market and existing opportunities a micro analysis of different type of processed food is essential.

i) **Processed fruits and vegetables**

India is the home of wide variety of fruits and vegetables. It has become the second largest producer of fruits as well as vegetables in the world. Prominent processed fruits and vegetable items in India are fruit pulps and juices, dried fruits and vegetables, ready to serve beverages, fruit juice concentrates, canned/frozen fruits, jams, squashes, pickles, chutneys, mushroom products etc.

ii) **Biscuits**

Biscuits in India are being manufactured in the organized and unorganized sector. The size of biscuits market in India is Rs. 5,000 crores, of which Rs. 3,000 crores is accounted for by the organized sector. Glucose and milk biscuits account for 25 per cent each and Marie biscuits 20 per cent of the biscuit market. Biscuits are amongst the lowest cost processed foods in the country when compared to Indian sweet meals and salted snacks. The biscuit industry offers an excellent potential for development.

iii) **Bread**

It is a common commodity consumed in many households for breakfast and also at a tea time. The bread industry with estimated production of 27 lakh tones in 2004-05 is represented by both the organized and unorganized sectors with 55 per cent and 45 per cent contribution to production. The overall market size for bread in India is a little over 36 lakh loaves a day, and only one third of this is from the organized sector.

iv) **Convenience food⁵**

They are of 4 types – a) ready – to – eat, b) ready – to – cook, c) ready – to – heat and d) ready – to – constitute and consume. The term is used for very heterogeneous groups of foods which vary in shape, size, method of preparation, processing and even with regard to their function in the diet.

v) **Fried Products**

They form large group of convenience foods marketed in India. A large number of food products are made from flours of wheat, rice, black gram etc.

vi) Popped and puffed cereals

A variety of popped and puffed cereals like popcorn, puffed sorghum, puffed ragi and puffed barley are marketed and consumed as snacks by all segments of the people.

vii) Expanded Cereals

It is another traditional convenience food widely consumed in India. The product is produced in the cottage sector and marketed widely.

viii) Beaten Rice

It is also a very popular traditional product which is consumed either as snack after toasting, frying and spicing or after soaking in water and seasoning with spices and vegetables as an item of breakfast.

ix) Extruded foods

These include a variety of products like vermicelli, noodles, direct expanded ready to eat snacks like corn puffs, texturised soyanuts etc.

x) Fermented Products

Idli and samosa are the two most popular fermented products either as snacks or in breakfast and are prepared from fermented rice and black gram. Attempts to prepare and market instant idli and dosa mixes have been successful and the products are gaining wide acceptance in households.

xi) Traditional Sweets

There are many traditional sweets prepared from grains which are consumed as snacks. These include candies, which are prepared from puffed or expanded rice, bengal gram, roasted peanuts, roasted cashew and jaggery.

xii) Instant mixes

Basically there are two types of instant mixes. First type of products are prepared by blending various ingredients in required proportion along with chemical leavening agents in planetary mixer. The other groups of instant mixes are based on pre cooked dehydrated products and these include kichidi, curried dhal, curried rice, curried peas and upma mixes.

Coming to food processing sector, the vast Indian diaspora around the world, of the order 20 million, can translate in to big business for the food processing industry. The demand potential of Indian food abroad is \$ 15 billion. The estimated revenue is 5 billion generated by Indian food restaurants and retailers in UK alone. The popularity of Indian ethnic food is rising not only among Indian expatriates but also among mainstream population in Europe and United States. Processed horticultural products are exported to developed nations like Europe, USA, Japan and the U.K. In spite of this global potential it is a sad fact that only 2 per cent of the agro food products are processed in India.

At present, the Indian food processing industry is primarily export oriented. Value of trade in agri and processed food between India and the Gulf region which has grown from € 6.05 billion in 2001 to € 38.9 billion at the end of 2006. Food exports to the Gulf Co-operation Council region is estimated at € 2.1 billion a year. India's export of agricultural and food products are of the order of Rs. 332 billion, which constitute about 4 per cent of the global trade. Exports of agro-food products has grown at 15 per cent annually in the last decade. The agro and food export in 2004-05 account for 10 per cent of the total export from India. For the food industry of developing countries, trends in population growth, rural urban migration, income levels and their distribution-particularly the size of the middle class-are seem to be the crucial differentiating variables.

Even though India has strong agricultural production base, its wastage of agricultural produce is massive and the food processing sector is still at a nascent stage in terms of development. In India, processing level is very low, i.e., around 2 per cent for fruits and vegetables, 26 per cent for marine, 6 per cent for poultry and 20 per cent for buffalo meat as against 60-70 percent in the developed countries. India's export of processed food in global trade is only 1.5 per cent. Value addition is around 20 percent. The highest share of processed food is in the dairy sector, where 37 per cent of the total produce is processed. So if the food processing sector taps the market at right time with right strategies it is sure that they can come up with profitable business.

CONCLUSION

Agricultural development is central to all strategies for planned socio economic development. In our economy, agriculture has to play multifaceted roles. Thus any change in the agricultural sector has multiplier effects on the entire economy. The widest dispersal of economic benefits can also be attained through agricultural development. So the agricultural sustainability should be essential for the attainment of the concept of Inclusive Growth. The best option for agricultural sustainability is to ensure remunerative price of the agricultural produce by making it more marketable by the simple device of processing it, packaging it and prolonging its durability. The food processing sector will help to solve the biggest challenges of low farmer income and high subsidies, high wastages along the value chain and co-existence of jobless growth and poverty. The food processing industry is made up of primary, secondary and tertiary food processors. It is a strategic industry and has an irrevocable place in the whole edifice of the economic structure of a country, food processing adds value, enhances shelf life of the perishable agro food products, encourages crop diversification and ensures remunerative market prices of the farm produce by making it more marketable. Increasing urbanization, consciousness on health and nutrition and changing life styles are changing consumption habits of India. The number of working women and nuclear families are increasing, creating a demand for processed ready-to-eat foods. Growth of organized retail which makes the processed food readily available is also driving growth of food processing. The food processing industry has a bright future due to India's varied agro climatic conditions and demographic environment.

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AGRICULTURAL MARKETING REFORMS IN INDIA

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ABSTRACT

Indian agriculture has successfully moved towards commercialization. Directly or indirectly agriculture in India has continued to be the source of livelihood to majority of the population. Indian agriculture has seen a lot of changes in structure from time to time when needed. India has successfully achieved the targets in agricultural production. Government of India has put agricultural development as its prime responsibility as the producer/farmer must get a maximum share in the consumer Rupee. The paper highlights the status of agriculture in Indian economy, need for agricultural marketing reforms, status of reforms in agricultural marketing, state wise status of reforms in APMC Acts, development of agricultural marketing infrastructure, grading and standardization, review of existing legal framework, review of implementation of marketing reforms, committee of state ministers incharge agricultural marketing to promote reforms, review of unregulated reforms, number of wholesale, rural primary and regulated marketing in India and whether agricultural marketing reforms are significant or not.

KEYWORDS

Agriculture marketing, marketing reforms.

INTRODUCTION

The Indian government has been implementing comprehensive economic reforms involving structural adjustment and liberalisation programmes since 1991. An important component of such programmes is the liberalisation of agricultural commodity markets. Economic liberalisation since the early-1990s led to increasing withdrawal of government intervention from the agricultural commodity sector, which made agricultural prices dependent on the market forces. Jha and Srinivasan (2000) have argued that such liberalisation is required for achieving allocative efficiency and long-term growth in agriculture. Moreover, minimising government interventions in internal and external trade in agricultural commodities and maintaining its role of price stabilisation can yield positive welfare benefits. Government interventions are likely to distort price signals in spatially separated markets because of which agricultural prices may not converge efficiently, and regional markets may remain segmented. Such interventions may insulate regional markets from each other and act as barriers to spatial market integration. Liberalisation of agricultural commodity markets is likely to strengthen spatial market integration by removing barriers to movement of commodities across markets, and allowing price signals and information to be transmitted smoothly and the market forces to determine agricultural prices. If agricultural markets are spatially integrated, producers and consumers will realize the gains from liberalisation. As the correct price signals are transmitted through the marketing channels, farmers will be able to specialise according to long-term comparative advantage and the gains from trade will be realised. Moreover, since integration of markets implies that a deficit or surplus in one market will be transmitted to other markets, an improvement in spatial integration of food markets will ensure regional balance among food-deficit, food-surplus and non-food cash crop-producing regions. Since spatial market integration refers to a situation in which the prices of a commodity in spatially separated markets move together and price signals and information are transmitted smoothly, spatial market integration may be evaluated in terms of a relationship between the prices of spatially separated markets. Since regional level trade flows data on agricultural commodities are not usually available, but the prices of traded agricultural commodities are readily available and generally considered as the most reliable information on marketing system in developing economies, market integration studies have been restricted to the interdependence of prices of spatially separated markets. Dercon (1995) has argued that since the extent of spatial market integration determines the transmission speed of price changes due to any policy reforms across regional markets, the effects of liberalisation and other structural changes in markets should be evaluated not only on the basis of what happens to the prices for producers and consumers but also on the basis of functioning of markets. He has reported that liberalisation had positive effect on the functioning of Ethiopian grain markets through increased short-run integration. Evaluating the performance of Indonesian rice markets, Ismet *et al.* (1998) have argued for limiting government interventions in the integrated markets by rationalising its price stabilisation activities and buffer stock policies, and letting the private sector contribute as much as possible. Traditionally, Indian agricultural development was based on government interventions in the form of various restrictions on internal and external trade in agricultural commodities. The policies were primarily intended to promote agricultural growth, attain long-term food security and stabilise prices of agricultural commodities. Agricultural price policy was considered a part of the package of policies designed to promote investment and growth in agriculture. Price incentives in the form of support and procurement prices for some crops are offered to farmers to achieve the objectives.

Government regulations on internal and external trade in agricultural commodities include licensing requirements and stocking limits for wholesale and retail trade, restrictions on storage, pricing and movement of agricultural commodities across regions, canalisation of trade in agricultural commodities through state trading agencies, quantitative restrictions (QRs) on foreign trade, and high tariffs on imports of agricultural commodities. The Essential Commodities Act 1955 is the most pervasive Act containing most of the restrictions. However, these restrictions, by repressing private trading, did not promote competition for fair play of the market forces. The World Bank (1999) has reported that the government's procurement, distribution, and buffer stock programmes have had negative impact of repressing private trading in food grains and undermining its potential contribution to long-term food security. Parikh *et al.* (2003) have argued that these interventions have produced adverse effects on gross domestic product and consumer welfare. This prompted many to argue in favour of the same structural adjustment and liberalisation programmes in agriculture in general and food grains in particular as the Indian government has been implementing in trade, industry and finance since 1991. The World Bank (1999) has proposed that the government should intervene in food grain market only when price fluctuations are outside the desired price-band. It should facilitate smooth operations of the market and should not exercise unnecessary control over it.

The large-scale economic reforms initiated in 1991 have significant implications for agriculture, even though initially the reform process was not much explicit for this sector. The reform process in agriculture was initiated from 1994-95 when India became a part of the multilateral trading system under the World Trade Organisation (WTO). The agricultural policy reforms undertaken by the Indian government since the early-1990s are classified into two categories: (i) reform measures liberalising internal market for agricultural commodities, and (ii) policy reforms liberalising external trade in agricultural commodities. For a review of the internal and external trade policies and agricultural sector reforms, see Athukorala (2005), Bathla (2006) and Chadha *et al.* (2008).

A series of domestic market reforms have been introduced to improve the efficiency of marketing system and to attract private investment and participation. The Agricultural Produce Marketing Regulations (APMR) Act has been amended. Most of the states have enacted state level APMR Acts. A network of regulated markets has been created to promote organised marketing of agricultural commodities. Changes have been made in the Essential Commodities Act 1955, which regulated internal trade in agricultural commodities. Restrictions on inter-regional movement of farm produce have been relaxed. Licensing requirements and stocking limits for wholesale and retail trade, and selective credit controls used to regulate institutional credit to traders are abolished. State trading activities have been significantly curtailed. Measures have been taken to simplify the regulatory nature of agricultural markets and to allow private sector to contribute as much as possible. Corporate sector has been permitted to enter the agricultural markets through 'contract farming', and many domestic and multinational firms are allowed to participate in the marketing and processing of agricultural products. Forward trading has been permitted in many agricultural commodities. External trade in agricultural commodities has been liberalised in line with the provisions of WTO. During the 1990s, trade policy reforms were undertaken to

facilitate greater integration of the agricultural sector with global market. Since 1997, all Indian product lines have been placed under the Generalised System of Preference (GSP). All agricultural products were removed from quantitative restrictions (QRs) and brought under tariff system. The number of agricultural commodities earlier canalised through state trading agencies was reduced, and most of the commodities were brought under Open General Licensing (OGL). Average tariffs on agricultural imports were reduced considerably. Export policies were liberalised to promote export of agricultural commodities through relaxation in export quotas, removal of restrictions on licensing, minimum export price and increased availability of credit.

These policy reforms and the consequent changes in the marketing system are expected to improve the performance of agricultural commodity markets. The reforms in internal and external trade would promote private investment and participation, and improve spatial efficiency of the marketing system. The linkages among regional agricultural markets are likely to be strengthened, and the degree of spatial market integration would improve during the post-reform period. Since tradability signals the transfer of information regarding market conditions (viz., excess demand or supply) from one market to another as actual or potential trade flows, market integration is usually described in terms of tradability between markets. Spatial market integration, essentially based on trade flows, therefore, includes the market clearance process in which demand, supply and transaction costs in different markets jointly determine the prices, trade flows and the transmission of price shocks from one market to another. Hence, market integration could be viewed as a situation where price signals and information are transmitted to different markets so that the prices in spatially separated markets move together over time. Naturally, any policy that improves the process of trade flows would strengthen spatial integration of markets. Government policies liberalising internal and external trade in agricultural commodities would make trade flows smoother, and allow the market forces to play a greater role in price determination. This would improve the mechanism through which price signals and information are transmitted smoothly across spatially separated markets.

STATUS OF AGRICULTURE IN INDIAN ECONOMY

India's agriculture sector is at the core of the economy's purchasing power; its produce is the most important component of the Indian commodity sector. A large number of state and central level institutions are engaged in agricultural marketing, employing technical manpower, with functional and commodity specialisation. Additionally, co-operatives, processors, financiers, service providers and consultants contribute to agricultural marketing. In India, the organised marketing of agricultural commodities has been promoted through a network of regulated markets. Most state governments and UT administrations have enacted legislations to provide for the regulation of agricultural produce markets. While by the end of 1950, there were 286 regulated markets in the country, their number as on 31 March 2006 stood at 7566. In addition, India has 21780 rural periodical markets, about 15 per cent of which function under the ambit of regulation. The advent of regulated markets has helped in mitigating the market handicaps of producers/sellers at the wholesale assembling level.

Agricultural marketing policy in India has been characterized by State participation in production activities; State intervention in procurement and distribution of foodgrains; directing agricultural economy through regulatory mechanism such as licensing and control on movement, storage; creation of facilitating centres in the form of regulated markets; encouraging co-operative marketing; creation of supporting infrastructure like storage and warehousing; and construction of link roads, market information, marketing extension, etc.

Current Agricultural marketing system in India is the outcome of several years of Government intervention. The system has undergone several changes over the last 60 years owing to the increased marketed surplus; increase in urbanization and income levels and consequent changes in the pattern of demand for marketing services; increase in linkages with distant and overseas markets; and changes in the form and degree of Government intervention. Actual buying and selling of commodities mainly takes place in market yards, sub-yards and Rural Periodic Markets spread throughout the country. There are in all 7,246 Regulated Markets in the country (as on 30.6 2011) and 21,238 Rural Periodic Markets, about 20 per cent of which, function under the ambit of regulation.

Law is essential to any orderly system in a large scale. Laws establish the framework of property, contractual and other rights that form the foundation of markets and are the primary means of regulating the behaviour of participants in markets and the consequences of their actions. Legal reform is one of the key tools available to policy makers wishing to reform agricultural marketing system. Programme to liberalize agricultural marketing have to be based on adequate understanding of relationship between law and the functioning of marketing system. The developing countries world over have recognized the importance of market liberalization programme and the need for legal reforms intended to improve the efficiency and effectiveness of marketing system.

In the pre-Green Revolution period, regulation of markets and marketing practices was accepted as one of the most important measures for improvement of agricultural marketing. The strategy for development of agricultural sector through development of an agricultural marketing system, centered on the Market Committee constituted under the State Marketing Legislations. The democratically constituted market committees with representation from all stakeholders and farmers were conceived to be an ideal and cohesive model for the farmers and other market participants to prosper. Except the States of Jammu and Kashmir, Kerala, Manipur and small Union Territories such as Dadra and Nagar Haveli, Andaman and Nicobar Islands, Lakshadweep, etc. all other States and UTs in the country have enacted State Marketing Legislations. The regulatory provisions are enforced by Agricultural Produce Market Committees, established under the Act.

NEED OF AGRICULTURAL MARKETING REFORMS IN INDIA

There was a felt need to bring reforms to make the government administered marketing organisations financial viable and managerially competent in keeping with the liberalised trade atmosphere. The marketing activities are manifold and need liaison and collaboration with related organisations. Market committees, including sub-yards, should be headed by professionals and existing secretaries need to be trained in professional management of the markets. The functions of APMC and marketing boards need to be remodelled accordingly.

The draft model legislation, the State Agricultural Produce Marketing (Development and Regulation) Act, 2003, provides for the establishment of private markets/yards, direct purchase centres, consumer/farmers markets for direct sale and promotion of public private partnership in the management and development of India's agricultural markets.

- It provides for the constitution of special markets for commodities like onions, fruits, vegetables and flowers among others.
- A separate chapter has been included in the legislation to regulate and promote contract farming arrangements in the country.
- It provides for prohibition of commission agency in any transaction of agricultural commodities • It redefines the role of State Agricultural Marketing Boards to promote standardisation, grading, quality certification, market-led extension and training of farmers and market functionaries in marketing related areas.
- It provides for the constitution of State Agricultural Produce Marketing Standards Bureau for promoting grading, standardisation and quality certification of agricultural produce with the producers.

Many states have introduced some reforms in agricultural marketing; the need of the hour is to consolidate the gains of reforms through appropriate policies and plans.

REVIEW OF EXISTING LEGAL FRAMEWORK (APMC ACT)

The legal and administrative framework for regulation and management of agricultural produce markets has mainly been provided in the provisions of more than 27 Regulated Markets Acts in vogue in different States and Union Territories of the country. Although the purpose of enactment of these Acts is basically the same i.e. regulation of trading practices, increased market efficiency through reduction in market charges, elimination of superfluous intermediaries and protecting the interest of producer-seller, many of these Acts differ even in vital contents. All the same, the States and UTs where such Regulated Market Acts have not been enacted and enforced have some administrative arrangements to look after the subject though rudimentary and of varied pattern. An attempt has been made to highlight the important aspects, problems and suggestion thereof.

(a) Commodity coverage: The manner of notifying the commodities for regulation varies from State to State. Some States like Andhra Pradesh and Himachal Pradesh have included all the commodities in the schedule or within the definition of the agricultural produce on the other hand in case of Punjab, Madhya Pradesh, Maharashtra, Rajasthan, Gujarat, etc though the schedule of the commodities has been appended to the respective Acts, yet control could be exercised

only on such commodities from amongst these included in the schedule, as are specified in the notification in respect of each market, despite the fact that some more agricultural commodities arrive in the markets which are intended to be regulated.

(b) Market Committee: The responsibility of enforcing different provisions of the Acts, Rules and Bye-laws framed thereunder for regulation of markets has been vested with the Market Committee in all the State Acts. In case of Tamil Nadu, only one Market committee is constituted for all the regulated markets located in the district. The number of members of the Market Committees varies from 10 to 17 in different States. They are either elected or nominated by Government in accordance with provisions of the State Act.

(c) Agricultural Marketing Boards: The institution of Agricultural marketing Board was established for expeditious execution of the market development work. In some States like A.P., Odisha and Tamil Nadu the Boards are advisory in nature and in the States of Punjab, Haryana, Rajasthan, W.B., Karnataka and Maharashtra are statutory in nature and have powerful role. There are wider variation in their composition and functioning.

(d) Demarcation of functions between Director Marketing and Board; The review of function of the Board revealed that functions assigned to the Board in Punjab, Haryana, Rajasthan, U.P. are wide and therefore, gives an impression that these Boards are slightly over stepping the principal purpose of their establishment. Most of the States have also State Agricultural Marketing Departments and in many of the States, Director of marketing also functions as Managing Director or Secretary of the State agricultural Marketing Board. Therefore, it is necessary that functions of the Director marketing and Board may be defined clearly for smooth functioning and implementation of the Act. The Director Marketing may look after the statutory regulation, standardization and grading, market intelligence, etc and Board may be assigned the work of development of infrastructure, market research and training, etc.

6. Though market regulation programme has initially served the purpose well, in the emerging scenario, several questions relating to the functioning and even relevance are being raised. The institution of regulated markets set up to strengthen and develop agricultural marketing in the country has achieved limited success in providing transparent transactional methods/marketing practices, need based amenities and services conducive to efficient marketing, marketing information and extension services. In a comprehensive study of agricultural marketing system in India during the last fifty years (Acharya, 2004) several problems associated with regulated markets have been identified:

(i) The marketing committees do not allow the traders to buy from the farmers outside the specified market yards or sub-yards. This adds to avoidable cost of marketing;

(ii) Despite expansion in the number of regulated markets, the area served per market yard is quite high. The national average is 454 square km and in some states like Assam, Himachal Pradesh, Meghalaya, it is considerably higher. The farmers are, therefore, required to travel long distances to reach a market place. With small surplus to sell, most of the farmers try to evade these markets;

(iii) Though the Acts stipulate for the provision of some prescribed facilities and amenities in each market yard, in several markets, the facilities/ amenities actually created are far from the prescribed norms;

(iv) Apart from the primary assembling markets, there are 21,238 Rural Periodic Markets (RPMs), where small and marginal farmers and livestock owners come in contact with the market economy. Most of these (80 per cent) have not been developed which hinders the market orientation of rural areas;

(v) In several States, regular elections of APMCs are not being held. These have been superseded by the Government and, for long, are being administrated by bureaucrats. They have thus, lost the characteristic of farmers-dominated managerial bodies (APMCs). The staff remains overly occupied in collection of market fees and construction work rather than market development;

(vi) With the expansion in the market arrivals, there is considerable congestion in several market yards. This leads to undue delays in the disposal of the farmers produce resulting in long-waiting periods and frustration for the farmers;

(vii) In several markets, malpractices like late payment to farmers are still prevalent and deduction of certain amount for cash or spot payment and non-issue of sale slips by traders have continued unabated;

(viii) Market functionaries (like traders, commission agents and labourers) in some markets have organized themselves in strong associations and thus, have created barriers to entry of new functionaries;

(ix) Market fee, by definition, is the charge for the services provided to market functionaries. But a considerable part of the market fee is not ploughed back. In some States, this has even become a source of income for the government. The market fee varies from 0.5% to 2% and Commission Charges from 2 to 8% across States depending upon the type of commodity; and

(x) By and large, the APMCs have emerged as some sort of Government sponsored monopolies in supply of marketing services/ facilities, with all drawbacks and inefficiency associated with a monopoly.

NEED FOR MODEL APMC ACT

The supply chain of agriculture products remain very fragmented with a large number of intermediaries. A study by Global AgriSystem of Fruit & Vegetable supply chain in four metros (Delhi, Mumbai, Bangalore and Kolkata) revealed that, on an average there are 5-6 intermediaries between the primary producer and the consumer. The total mark up in the chain added upto 60-75%. As a result the primary producers receive only 20-25% of the consumer price. Moreover, multiple handling by different intermediaries resulted in huge wastage of 15-25% of the value.

With increased quantity of marketable surplus coming into the market and the fact that the income from market fee is generally not being ploughed back for developing infrastructure, there has been huge gap in marketing infrastructure. Under NHM, only 11 States have taken initiative in establishing 109 cold storages and eight states have established 51 apni mandies. There is virtually no progress in the setting up of wholesale markets except in Kerala. Only 1637 grading units at the primary level, which include 125 units with cooperatives and 144 units with others. In Regulated markets, there are only 1368 grading units in a total of 7246 market yards/sub-yards. Only around seven percent of the total quantity sold by farmers is graded before sale. Scientific storage capacity is only 30 per cent of the required capacity. Cold Storage facility is available for only 9 per cent of fruits and vegetables.

Due to the glaring gaps in marketing infrastructure, existing markets operate very inefficiently and the transaction costs are high. Multiple handling by various players in the fragmented supply chain and the lack of warehouse and cold storage facilities also result in high post-harvest losses. A recent ICAR study on Status of Post- Harvest losses reveals the following:

Rural Periodic markets which are basically primary assembly markets such as *Haat*, *Bazaar* are most neglected. There is wide variation in their governance. While in some States they come under the purview of Panchayati Raj institutions, in other states they are directly under the local administration. The numbers of such Rural Periodic Markets may vary from 21,000 to 70,000. Most of them do not have even basic amenities like sheds to protect the users from the scorching heat of the sun or drinking water. The condition of cattle markets and fish markets are even more appalling. In most States they do not come under the purview of Agriculture Marketing Board/Department and are in a state of utter neglect.

The current marketing system also suffers from multiple tax regime and multiple licensing system. Apart from the market fees, commission charges, octroi entry tax, sales tax, weighing charges, labour charges for handling, loading and unloading, purchase tax, Rural Development cess etc. are charged. In Punjab, the total market charges on transactions of foodgrains are around 15.50%. (market fee 2%, Development charges 2%, Purchase Tax 4%, Commission charge – 2%, Infrastructure cost 1.5%, VAT 4% ad valorem apart from the charges for weighing – Rs.0.55, loading – R.0.40, Brokerage – Rs.0.16, Hamal Rs.1 and cleaning 0.65/bag/qrtl.) Commission charges in the market area varies between 2-5% in foodgrains and 4-8% in case of fruit and vegetables for different commodities across the States. There is lack of uniformity in market fee across States. Multi-point levy of market fee in sales transactions leads to high marketing cost. Separate mandies for cereals and fruits-vegetables require obtaining more than one license. There is also variation in period of validity of license. Separate license to be obtained for other market functionaries viz weighmen, Palledars etc. There are conditions imposed for licensing. Most State Marketing Boards have made it a pre-condition that the licensee must own a shop or warehouse in the Mandi which imposes severe restrictions on the number of licensed buyers. These restrictions result in logistical complexities and create inefficiencies in the value chain. Declaration of warehouses at the time of applying license increases warehousing and logistics costs. Procedure for filing of APMC returns and mandi fee payment (periodicity) is not uniform across the States.

In view of the existing conditions as described above, it is felt urgent reforms are needed in agricultural marketing. To be effective, the reforms must try to a) empower producers with knowledge, information and capability to undertake market-driven production b) provide multiple choice and competitive marketing channels to farmers c) provide efficient service at a reasonable transaction cost, and d) attract large scale investment needed for building post-harvest infrastructure.

The matter had been under continuous scrutiny during the last eleven years. On the recommendation of the Expert Committee for Agricultural Marketing (Government of India, 2001), the Inter-Ministerial Task Force (Government of India, 2002) recommended for formulation of Model Act for this purpose. Accordingly, the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, in consultation with State Governments, trade and industry has formulated a Model APMC Act and circulated to the States during 2003 for its adoption.

The Model Legislation provides for establishment of Private Markets/Yards, Direct Purchase Centers, Consumer/Farmers Markets for direct sale and promotion of Public Private Partnership in the management and development of agricultural markets in the country. It also provides for separate constitution for Special Markets for Commodities like Onions, Fruits, Vegetables, Flowers, etc. A separate Chapter has been included in the legislation to regulate and promote contract-farming arrangements in the country. It provides for prohibition of commission agency in any transaction of agricultural commodities with the producers. It redefines the role of present Agricultural Produce Market Committee to promote alternative marketing system, contract farming, direct marketing and farmers/consumers markets. It also redefines the role of State Agricultural Marketing Boards to promote standardization, grading, quality certification, market led extension and training of farmers and market functionaries in marketing related areas. Provision has also been made in the Act for constitution of State Agricultural Produce Marketing Standards Bureau for promotion of Grading, Standardization and Quality Certification of agricultural produce. This would facilitate pledge financing, e-trading, direct purchasing, export, forward/futures trading and introduction of negotiable warehousing receipt system in respect of agricultural commodities.

STATUS OF AGRICULTURAL MARKETING REFORMS IN INDIA

The status of implementation of market reforms by the States is given as under:

(i) Adoption of provision related to Private markets

The Model Act suggests provisions for private markets or yards managed by persons other than APMCs. Out of 35 states and UTs, the States of Andhra Pradesh, Arunachal Pradesh, Assam, Gujarat, Goa, Himachal Pradesh, Karnataka, Madhya Pradesh (only direct purchase), Maharashtra, Mizoram, Nagaland, Orissa (excluding for paddy / rice), Rajasthan, Sikkim, Tripura, Jharkhand and Uttarakhand have the provision for private market yards but Rules/bye-laws have not been formulated by all. Tamil Nadu is stated to have provided enabling provision through executive orders and Madhya Pradesh has provision for direct purchase and not for private market. Andhra Pradesh has formulated Rules, which stipulate a license fee of Rs 50,000 and minimum cost of Rs 10 crores for setting up of private markets. Orissa has not permitted private markets for paddy/rice. Some States have also prescribed a minimum distance of these markets from the APMC markets. Such stipulations are likely to be prohibitive and may not encourage private markets. Only the States of Maharashtra, Karnataka, Gujarat and Tamil Nadu have issued license to Private Markets. However, only one Private Market has come up in Maharashtra so far, but is reported to be having problems.

(ii) Provision for Direct marketing

The Model Act provides for granting licenses to processors, exporters, graders, packers, etc. for purchase of agricultural produce directly from farmers. The States of Andhra Pradesh, Arunachal Pradesh, Assam, Gujarat, Goa, Himachal Pradesh, Karnataka, Madhya Pradesh (only direct purchase), Maharashtra, Mizoram, Nagaland, Orissa (excluding for paddy / rice), Rajasthan, Sikkim, Tripura, Jharkhand and Uttarakhand have so far made this provision. In Andhra Pradesh, the license fee (Rs 50,000) prescribed for such a procurement centre is prohibitive. In Punjab and Chandigarh, there is an exemption of market fee for direct purchases of certain commodities by selected/identified processors. The States of Maharashtra, Gujarat and Karnataka have issued common license for direct procurement from farmers.

(iii) Provisions for Contract Farming

The Model Act provides for permitting contract farming by registration of contracts with APMCs, allowing purchase of contracted produce directly from farmers outside market yards, and exemption of market fee on such purchases. So far, the States of Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, Haryana, Jharkhand, Karnataka, Maharashtra, Mizoram, Nagaland, Punjab, Chandigarh (enabling provision in Rules), Orissa, Rajasthan, Sikkim, Tripura and Uttarakhand have incorporated these provisions, except the exemption of market fee. Only 11 States have exempted the market fee on purchases under contract agreements. The States of Karnataka has only exempted 30% of market fee under contract farming. Andhra Pradesh APMC Act requires the buyer to render a bank guarantee for the entire value of the contracted produce. One of the biggest concerns is that APMC, who is the major market player, is also a registering authority for contract farming and the arbitration process is not time bound.

(iv) Single Point levy of Market Fee

Only 13 States have provided provisions for single point levy of market fee. However, the rates of market fee vary generally between 0.50% to 2.00%. In many States, market fee is recovered by APMCs not only at the check-gates for transactions carried out in the notified area of APMCs but also outside the physical APMC yard thus, hampering the smooth flow of goods and services. In addition to above, in some of the States, additional developmental fee/cess/purchase tax is levied on the commodities traded in the market. For example, in Punjab the total market charges on transactions of foodgrains are around 15.50% (Market Fee-2%, development Cess-2%, Purchase Tax-4%, Commission Charge-2%, Infrastructure Cost-1.5%, VAT-4%,) ad valorem apart the charges for weighing-Rs.0.55, loading-Rs.0.40, Brokerage-Rs.0.16, Hamal-Rs.1 and cleaning 0.65/bag/qrtl). Besides, this fee/cess, the commission agents also charge their commission (payable by the buyers) on the transaction. In many states the agricultural commodities are subjected to cascading market fees when traded in subsequent markets within the State or in other States. The states of Chhattisgarh, Gujarat, Goa, Himachal Pradesh, Madhya Pradesh, Mizoram, Karnataka, Nagaland, Sikkim, UT of Chandigarh, Punjab, Jharkhand and Uttarakhand have made the provision for single point levy of fee.

(v) Commission Agents

Commission agents in the market provide an essential service to both buyers and sellers. The existing APMC Acts authorize APMCs to prescribe the rate of commission and also to specify whether to be collected from buyer, seller or both (though the first Model Act of 1960s desired that the farmer or seller should not be required to pay any charge including the commission). While Madhya Pradesh has reportedly abolished the system of commission agents in agricultural produce markets, the commission is payable by sellers in AP, Tamil Nadu and Delhi. In all other States, it is payable by the buyers. The commission charges vary from 1% to 2.5% in food grains, and 4% to 8% in case of fruit and vegetables. It has been reported that transactions of fruit and vegetables, the commission is charged from both buyers and sellers. The model Act, 2003 stipulates prohibition of commission agents in any transaction of agricultural produce of the farmers. The States of Madhya Pradesh, Chhattisgarh, Mizoram, Nagaland and Sikkim have amended the Act and made the provision, it is doubtful whether this provision will be implemented in letter and spirit.

(vi) Establishment of Farmers markets (Direct Sale by the Farmers)

With a view to provide the opportunity to farmers to undertake sale of their produce direct to the consumers, the model APMC Act, 2003 provides for establishment of such markets where no market fee is levied on farmers, though some service charge may be imposed. Such markets can be established either by the APMCs or by any person licensed by the APMC for this purpose. However, long before the circulation of Model Act, several States had promoted Farmers' Market. These include Punjab and Haryana (Apni Mandi), Rajasthan (Kisan Mandi), Andhra Pradesh (Raythu Bazar), Tamil Nadu (Uzhavar Shanthigal), Maharashtra (Shetkari bazaar) and Odisha (Kusushak bazaar). These markets have benefitted both farmers and consumers; but it has been noted that with lapse of time, small traders have taken over the place of farmers in many of these markets. Seventeen states have made provisions in their Act. The states of Arunachal Pradesh, Assam, Gujarat, Goa, Himachal Pradesh, Karnataka, Mizoram, Maharashtra, Nagaland, Rajasthan, Sikkim, Tripura, Punjab (only enabling provision), UT of Chandigarh (only enabling provision), Jharkhand and Uttarakhand have made provisions in their Act.

(vii) Sale of notified commodities outside the Market Yard by farmers

There is a huge variation in the density of regulated markets in different parts of the country. While the all-India average area served by a regulated market is 454 sq km, the same is 103 sq. km for Punjab and 11,215 sq km in Meghalaya. Though the original Act allowed the sale of produce by the farmers at any place in the market area (outside market yard or sub-yard) to a licensed buyer or consumer, the APMCs have restricted such sales, mainly with the intention of checking the evasion of market fee. Under the present APMC Act, the whole geographical area in the State is divided into and declared as market areas. A Market Committee constituted by the State Governments manages each of these markets. Once a particular area is declared a market area, no person or agency is allowed to carry on wholesale marketing activities in that area without obtaining license for the same. This restriction has led to large intermediation and effectively resulted in limiting market access to farmers and prevented development of a competitive marketing system in the country.

(viii) Declaration of some markets as special commodity markets

Already there are special markets for fruit and vegetables. The Model Act 2003 provides for declaration of any market as a special market or special commodity market with proper market infrastructure. The States Andhra Pradesh, Gujarat, Maharashtra, Karnataka, Nagaland, Sikkim, Tamil Nadu, Tripura, Jharkhand and Uttarakhand have only made this provision in their amended Act.

(ix) Mandatory utilization of Market committee fund for Market development

The existing State APMC Acts provide for creation of market committee funds to meet establishment expenses and cost of market development. The market development fund is created at the level of SAMB with contributions from APMCs. The development heads vary from market to market depending on the volume of transactions and number of market players visiting and using the market yards. There is no specific provision in the Act, which prohibits spending of Market Committee fund or development fund on purposes other than market development. As a consequence, a considerable part of these funds built out of market fee is transferred to the general account of the State Governments. To check such practices, the Model Act provides for application of market committee fund or development fund for creation and promotion, on its own or through public-private partnership, infrastructure of post-harvest handling, cold storage, pre-cooling facilities, pack houses, etc. for modernizing the marketing system. Out of seventeen States, which have recently amended their Acts, three have no such suggested provision.

A study undertaken in June 2010 by Premium Farm Fresh Produce Ltd, the country's first private wholesale market developing company, to assess the impact of these reforms across the country also tried to understand the perceptions of the stakeholders and identify the major gaps between provisions and their implementation at the ground level. A total of 300 samples of farmers and traders, including 60 APMC officials and 20 private investors were selected across the states of Rajasthan, Gujarat, Karnataka, Andhra Pradesh, Maharashtra, Tamil Nadu, Punjab, and Himachal Pradesh. The study analysed the following aspects of reforms in the Model Act in identified/selected states.

- Provision to promote and encourage PPP (Public-Private Partnership) in management of markets and e-trading.
- Provisions on indemnity against the alienation of producer's land on failure of contract farming.
- Provision specifying a model agreement format for contract farming.
- Provision for single-point levy of market fee in the state.
- Registration of market functionaries (not licensing).
- Provision for single-point registration for trade and transaction in more than one market area.
- Provision for prohibiting commission agents in the APMCs.
- Provision for setting up of producer/consumer markets (being facilitated through exemption clause) and dispute settlement mechanism for private markets/direct marketing.
- Provision for setting up of a separate market extension/training cell and the agricultural produce marketing standards bureau.
- Identifying Acts amended but respective rules not notified.
- Provision for notification of market area for private markets.
- Provision for strengthening backward-forward linkages by declaring value added centres (collection centers) such as sub-yards of private markets.
- Provision for level playing field between private markets and APMCs and maintaining market fee parity.
- Provision of developmental issues (preamble focused).

In spite of the efforts and repeated persuasion by the Ministry of Agriculture; reforms in agricultural marketing have not come up to a level of satisfaction, thereby affecting private investment in the sector for efficient marketing in the country. During the conference of State Ministers of Agriculture/Agricultural Marketing organized by the Department of Agriculture and Co-operation on 23rd April, 2008, a general consensus was that Ministry of Agriculture may constitute an Empowered Committee of State Ministers of Agricultural Marketing to guide the implementation of agricultural marketing reforms initiatives and for improving a framework for the APMC amendments and Market Reforms in agriculture. Accordingly, the Ministry of agriculture set up a Committee of State Ministers-in-charge Agricultural Marketing under the Chairmanship of Hon^{ble} Minister of Marketing and Co-operation, Government of Maharashtra on 2nd March, 2010 with members from the States of Orissa, Haryana, Gujarat, Uttarakhand, Madhya Pradesh, Andhra Pradesh, Assam, Karnataka, Bihar and Agricultural Marketing Adviser to the Government of India as a Member Secretary. The Committee had six meetings so far with the member States and other stakeholder and discussing the issues related to market reforms. The interim report of the Committee has been submitted to Government on 8th September, 2011.

The major recommendations of the Committee are as follows:

1. The States are required to amend the APMC Act on the lines of Model Act and the reforming States may also notify Rules at an early date. It is necessary that Member States may complete the process early;
2. There is a need for independent regulator for market operation for which the post of Director Marketing as regulator may be segregated from the post of M.D. of Marketing Board. as the Operator and Director Marketing should not draw salary and allowances from the Marketing Board. Thus, the role of service provider and regulator should be demarcated;
3. In many of the States, there is a provision that for taking a license, there should be shop in the mandi yard, which is hindrance for increasing the number of buyers in the market. Therefore, it was decided that the Member States de-link the provisions of compulsory requirement of shop for registration of traders / market functionaries for increasing the competition;
4. Under Essential Commodities Act, there is a need to have distinction between genuine service provider and black marketers/hoarders, to encourage investment and better service delivery to the farmers. It was recommended to provide exemptions to Direct Marketer, Contract Farming sponsor and Godown owner to the limit of their capacity of utilization of previous year;
5. Member States may maintain a separate account of market fee realized from purchase /sale of perishable horticultural produce and utilize the same for development of marketing infrastructure for horticultural produce exclusively. Member States are required to amend their corresponding Rules to facilitate the same pending with which Member States may consider by issuing and instant appropriate orders to implement the same;
6. It was unanimously agreed that investment in marketing infrastructure under RKVY be increased to minimum 10-15% of State RKVY spending in reformed states. A letter should be issued to the Chief Secretaries of States stipulating such minimum investment. It was further stipulated that efforts be made to encourage certain minimum private investment in marketing infrastructure outside the APMCs also;
7. In order to enhance the private sector investment in marketing and market infrastructure development projects, there is need of incentivizing such investments, being long gestation period projects, by way of Viability Gap Funding and treating them "as infrastructure project" so as to help attract FDI and ECB for their development;
8. Market fee/cess including Rural Development Fund, Social Development Fund and Purchase tax etc. should be maximum 2% of the value and the commission charges should be not more than 2% for food grains/oilseeds and 4% for fruits and vegetables;

9. Link the mandi fee with the services and infrastructure being provided for transaction of agricultural commodities. If the direct marketing entrepreneur provides minimum specified infrastructure facility and backward linkage to the farmers, the concerned States/APMC should waive off market fee on such direct marketing;
10. To encourage contracting parties, the following is recommended for simplifying & rationalizing the registration process:
- District level authority may be set up for registration of contract farming and no market fee should be levied under it. The APMC should not be the authority for registration / dispute settlement under contract farming; and
 - The disputes may be settled within five days and the decretal amount of appeal should not be more than 10 per cent of the amount of goods purchased under contract farming. Appeal should be disposed off within 15 days. No solvency certificate / bank guarantee may be required, if payment is made to the farmers on the same day of procurement of their produce.
11. With the view to move towards barrier free National market, it was unanimously agreed by the Member States that market fee/Cess can be levied at first transaction only between farmer and trader and in subsequent trading between trader to trader, there should be service charge related to service in the State as well as across the country;

PROGRESS OF REFORMS IN AGRICULTURAL MARKETS (APMC ACT) AS ON 30.09.2011

Sl. No.	Stage of Reforms	Name of States/ Union Territories
1.	States/ UTs where reforms to APMC Act has been done for <i>Direct Marketing; Contract Farming and Markets in Private/ Coop Sectors</i>	Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, , Maharashtra, Mizoram, Nagaland, Orissa, Rajasthan, Sikkim, Tripura and Uttarakhand.
2.	States/ UTs where reforms to APMC Act has been done partially	a) <i>Direct Marketing:</i> Madhya Pradesh, NCT of Delhi b) <i>Contract Farming:</i> Haryana, Punjab and Chandigarh. c) <i>Private markets</i> Punjab and Chandigarh
3.	States/ UTs where there is no APMC Act and hence not requiring reforms	Bihar*, Kerala, Manipur, Andaman & Nicobar Islands, Dadra & Nagar Haveli, Daman & Diu, and Lakshadweep.
4.	States/ UTs where APMC Act already provides for the reforms	Tamil Nadu
5.	States/ UTs where administrative action is initiated for the reforms	Meghalaya, Haryana, J&K, West Bengal, Puducherry, NCT of Delhi and Uttar Pradesh.

STATUS OF APMC RULES

Only the State of Andhra Pradesh, Rajasthan, Maharashtra, Orissa, Himachal Pradesh, Karnataka, Mizoram (only Single point levy of market fee), (Madhya Pradesh (only for special license for more than one market) and Haryana (only for contract farming) have notified such amended Rules so far.

Progress of Market Reforms as per major areas identified in Model APMC ACT:

Sl. No.	Area of Reforms	States adopted the suggested area of market reforms
1.	Initiative for setting up of new market by any person, local authority or grower	Chhattisgarh, Goa, Assam, Mizoram, Nagaland, Sikkim, Tripura, Uttarakhand and Jharkhand
2.	Setting up of Special Markets and Special Commodity Market	Andhra Pradesh, Gujarat, Maharashtra, Karnataka, Nagaland, Sikkim, Tamil Nadu Tripura, Jharkhand and Uttarakhand
3.	PPP in Market Extension activities of Market Committee	Andhra Pradesh, Himachal Pradesh, Karnataka, Nagaland and Sikkim
4.	To promote and encourage e-trading, Market Committee may establish regulatory system, create infrastructure and undertake other activities and steps needed thereto	Gujarat, H.P., Karnataka, Nagaland, Sikkim, Mizoram, and Goa and Maharashtra (under Rule 5 license granted to Commodity Exchanges registered under FMC) and Uttarakhand
5.	Secretary to be Chief Executive Officer of Market Committee. CEO shall be appointed by the Market Committee from the panel maintained by the Director/Board which may include professionals from open market.	Nagaland, Sikkim, Mizoram, Maharashtra (under Rule)
6.	Contract Farming Sponsor shall register himself with the Marketing Committee or with a prescribed officer in such a manner as may be prescribed.	Andhra Pradesh, Arunachal Pradesh, Assam, Goa, Himachal Pradesh, Karnataka, Haryana, Maharashtra, Madhya Pradesh, Mizoram, Nagaland, Orissa, Rajasthan, Chhattisgarh, Sikkim, Tripura, Jharkhand* and uttarakhand
7.	The contract Farming Sponsor shall get the contract farming agreement recorded with the prescribed officer.	Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Gujarat, Goa, Karnataka, Haryana, Madhya Pradesh, Mizoram, Maharashtra, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Jharkhand* and Uttarakhand
8.	No title, rights, ownership or possession shall be transferred or alienated or vest in the contract farming sponsor or his successor or his agent as a consequence arising out of contract farming agreement.	Arunachal Pradesh, Assam, Goa, Haryana, Maharashtra, Mizoram, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Jharkhand*, Andhra Pradesh, Karnataka and Uttarakhand
9.	Dispute settlement mechanism	Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Gujarat, Goa, Karnataka, Haryana, Madhya Pradesh, Mizoram, Maharashtra, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Jharkhand*; Himachal Pradesh and Uttarakhand
10.	Exemption of Market Fee on the sales to the contract farming sponsors taking place outside	Arunachal Pradesh, Goa, Karnataka (Reduced by 30%), Maharashtra, Mizoram, Nagaland, Orissa,

CONCLUSION

It is of immense importance to implement the reforms in agriculture marketing through adoption of model APMC Act and rules. Reforms are necessary to provide a barrier free national market and effectively disseminate market information and promote grading, standardization, packaging and quality certification of agricultural produce.

The committee of state ministers' incharge of agriculture marketing to promote marketing reforms has called for an effective implementation of the model Agriculture Produce Market Committee (APMC) Act in all the states. The committee has submitted final report to the agriculture minister Sharad Pawar. This committee was constituted in March, 2010 with Harshvardhan Patil, Maharashtra minister for cooperation and parliamentary affairs, as chairman. Sources said that the report was comprehensive and is supposed to boost reforms in agriculture marketing committees across the country.

The committee has recommended the setting up of multiple and competitive marketing channels; independent regulatory authority to encourage private investors and need for viability gap funding to attract private sector investment. It also supported waiver of market fee on fruit and vegetables; setting up of independent district level authority for registration and dispute settlement; and setting up grading units with trained manpower in the market.

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