

# **OIKONOMIKOS**

## **ECONOMICS-IN-PERSPECTIVE**



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## **Oikonomikos Economics - in - Perspective**

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We would also like to thank the National Science Library, New Delhi for supporting us and granting an ISSN Number for the journal, and thereby acknowledging our research efforts in the field of Economics. We would like to thank all the faculty and students who have contributed to this Journal.

We are happy to express our words of gratitude to our sponsors who supported us financially towards publication of the journal.

Finally, the Journal would not have been possible without the efforts of the Student Editorial Board, which was guided by Prof. B. Bhagwan Das, Head of The Department, Dr. R. Uma Maheshwari the LEAD President, and Prof. S. Neeta, Assistant Professor.

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## About Oikonomikos

Loyola College, a Catholic Minority Institution, was founded by the Society of Jesus (Jesuits) in 1925, with the primary objective of providing University Education in a Christian atmosphere for deserving students, irrespective of caste and creed. It started functioning from July, 1925 with 75 students on its rolls in three undergraduate courses, namely, Mathematics, History and Economics.

Rev Fr. Basenach, S.J. was the first Head of the Department of Economics and he held office from 1925 to 1963. Under the guidance of Rev. Fr. Basenach, the Department expanded and grew from strength to strength. He was followed by Rev. Fr. A. Devasia S.J., Prof. T.D. Felix, Rev. Dr. A.G. Leonard S.J., Prof. T. Vincent Jayakumar, Dr. A. Joseph Jeyapaul and Prof. T. Eugene as the Head of the Department in that order. The current Head of the Department is Prof. B. Bhagwan Das.

Prof. T. Eugene was instrumental in introducing an annual Economics journal called '**Oikonomikos**', published by the **Department of Economics** since 1997-98. Oikonomikos happens to be the Greek word for household management.

**Oikonomikos** has been the cornerstone of the Department's activities every year and is highly appreciated by the Economics fraternity. The journal attracts articles both from faculty and students of the Department. The current edition features for the first time articles in Tamil.



## From the Chief Editor's Desk

**Oikonomikos**, the Greek word for household management, is the annual journal published by the Department of Economics, Loyola College, Chennai since 1997-98. This year's edition of the journal has articles focusing on themes such as Demonetization, Non- Performing Assets of Commercial Banks, Microfinance, Rural Economy, Human Skill Development, and Housing Shortage in India. Needless to say, a large number of articles are on demonetization and the non-performing assets of commercial banks, given the fact that they have attracted a lot of public attention in recent times.

Readers might be aware that on November 8th 2016, the Government of India withdrew from circulation, Rs.500 and Rs.1000 currency notes, amounting to around 15.44 lakh crores of rupees and constituting nearly 87% of the currency in circulation. The percentage of non- performing assets of commercial banks has risen to double digits and it is estimated that around Rs. 8 lakh crores of borrowed money is yet to be repaid by some leading industrial houses of India. It is also documented that the rural economy is in distress because of drought, crop failure, rising cost of inputs, non-remunerative farm prices and the impact of withdrawal of high-value currency notes from circulation. The housing sector faces acute shortage of affordable housing as there is a demand-supply mismatch in this segment. Though India possesses a large stock of scientifically and technically trained manpower, the industry believes that most are not employable due to poor skill development. Microfinance sector is emerging as the backbone of rural India and is very crucial for the success of self-help groups (SHGs) in the country.

The Union Budget for 2017-18 has sought to rectify some of the above issues by remonetizing the economy, raising the cover for NPAs of banks from 7.5% to 8.5%, allocating Rs. 23,000 crores for affordable housing and increasing the outlay for rural development to Rs. 1,28,560 crores. The measures announced in the budget also have major ramifications for skill development as the Government plans to extend the network of Pradhan Mantri Kaushal Kendras to 600 districts across the country. There are also measures to maximize the employability potential of the youth both in the rural and urban areas.

This year's Oikonomikos has for the first time included two articles in Tamil on the subjects of demonetization and rural economy. I appreciate the tremendous effort put in by the Executive Editor, Prof. S. Neeta, the Associate Editor, Dr. R.Uma Maheshwari, the Student Editors, Aaron Saldanha Lakshmi Narashimman D and the members of the Editorial Board for publishing this journal and all those who have contributed articles to this year's edition of Oikonomikos.

*B. Bhagwan Das*

**Prof. B. Bhagwan Das**

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# A Review of the Dynamics of Oil Pricing

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Loyola College, Chennai*

## Introduction

With each passing year, oil seems to play an even greater role in the global economy. In the early days, finding oil using a drill was considered somewhat of a nuisance as the intended treasures were normally either water or salt. It wasn't until 1857 that the first commercial oil well was drilled in Romania. The U.S. petroleum industry was born two years later with an intentional drilling in Titusville, Pa. Many would argue that the modern oil era was born that day in 1901, as oil was soon to replace coal as the world's primary fuel source. Oil's use in fuel continues to be the primary factor in making it a high-demand commodity around the globe. Oil often referred to as black gold, is the most highly traded commodity in the world as most of the world runs on the by-products of oil be it as a fuel for automobiles or in industries for electricity generation.

Energy security is crucial for both sustaining high economic growth and controlling inflation. With rapid economic growth, energy demand in India has been rising rapidly, and India is now the fourth largest consumer of crude oil in the world. Unfortunately, India has to import most of its oil requirement, leading to severe pressure on the economy when the oil prices rise. Thus, estimations of crude oil demand and projections for the future should be useful to policy makers in making

appropriate supply arrangements for the future. During the past decade, the price of oil has travelled from \$60 per barrel to a peak of \$146 in 2009 and subsequently descended again to below \$50 in 2015. While oil is sold in a global market, the effect of rising or falling prices can be very different for importing and exporting countries.

## The Determinants of Oil Prices:

With oil's stature as a high-demand global commodity comes the possibility that major fluctuations in price can have a significant economic impact. The two primary factors that impact the price of oil are:

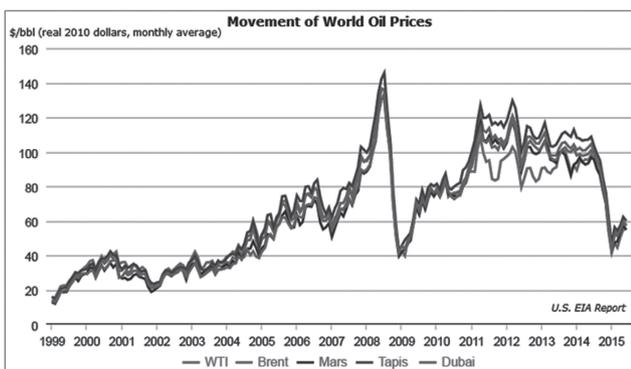
- supply and demand
- market sentiment

The concept of supply and demand is fairly straightforward. As demand increases (or supply decreases) the price should go up. As demand decreases (or supply increases) the price should go down.

## Global scenario:

World oil use is expected to grow from about 80 million barrels per day (mbpd) in 2003 to 98 mbpd in 2015 and 118 mbpd in 2030 as per Energy Information Administration, International Energy Outlook 2006. In the IEO 2006 reference case, world oil prices rise from \$31 per barrel (in real 2004 dollars) in 2003 to \$57 per barrel in 2030, and

oil's share of total world energy use falls from 39 % to 33 %. To meet the projected increase in world oil demand, total petroleum supply in 2030 will need to be 38 mbpd higher than the 2003 level of 80 mbpd. Of this, China is projected to consume additional 9.4 mbpd, US 7.5 mbpd and Asia (other than China & India) 6 mbpd. The balance growth is expected in South America, Africa and Middle East. As per the same report India is expected to consume an additional 2.2 mbpd. OPEC producers are expected to provide 14.6 mbpd of the increase. Higher oil prices cause a substantial increase in non-OPEC oil production 23.7 mbpd, which represents 62 % of the increase in total world oil supplies over the projection period. In addition, unconventional resources (including bio fuels, coal-to-liquids, and gas-to-liquids) are expected to become more competitive. In 2003, world production of unconventional resources totalled only 1.8 mbpd. Unconventional resource supplies are expected to rise to 11.5 mbpd and would account for nearly 10 % of total world energy supply in 2030<sup>1</sup>.



The oil price today is mainly influenced by 6 factors like

1. US production rates,
2. Saudi Arabia's ability to grow production,

3. Iran's latent ability to produce more oil,
4. Chinese economic slowdown and its impact on consumption,
5. Russia's ability to add global production, and
6. OPEC's inscrutable strategy.<sup>2</sup>

The report<sup>3</sup> outlines six of the major issues currently impacting the oil and gas industry (and the upstream market in particular). These issues include an anticipated shift in supply-demand fundamentals, the emergence of new trading patterns, consideration of OPEC's role in the market, falling LNG prices, the long-term costs of complex projects, and evolving dynamics between Integrated Oil Companies (IOCs) and National Oil Companies (NOCs).

#### Indian scenario:

India is the world's fourth-largest energy consumer with oil and gas accounting for 37.3 percent of total energy consumption. The country has 5.6 billion barrels of proven oil reserves and 1,330 bcm of gas reserves and produced only 47.6 bcm of gas in 2012. The high economic growth in the past few years and increasing industrialization coupled with a burgeoning population have created a lot of concern for India's energy scenario. India has 0.5% of the oil and gas resources of the world and 15% of the world's population. This makes India heavily dependent on the import of the crude oil and natural gas. India's crude oil production has not shown significant growth in the last 10 or more

<sup>1</sup>Pratik P. Valand. The overview of global oil scenario. Indian journal of applied research.

<sup>2</sup><http://oilprice.com/Energy/Energy-General/Oil-Prices-in-2016-Will-Be-Determined-By-These-6-Factors.html>

<sup>3</sup> Deloitte Touche Tohmatsu Limited's (DTTL) Oil and Gas Reality Check 2015 report.

years whereas its refining capacity has grown by more than 20% over the last 5 years. Oil consumption is growing at approximately 4.1% per year and natural gas consumption at 68% per year.<sup>4</sup>

India has 0.5% of the oil and gas resources of the world and 15% of the world's population. This makes India heavily dependent on the import of the crude oil and natural gas. India's crude oil production has not shown significant growth in the last 10 or more years whereas its refining capacity has grown by more than 20% over the last 5 years. Oil consumption is growing at approximately 4.1% per year and natural gas consumption at 68% per year.

The fact that India has not made any major breakthroughs in the field of renewable sources of energy, oil and natural gas would continue to hold a place of key importance in India's economy.

The prospects of Indian oil industry are far more exciting than any other, with India being among the least explored countries in the world at a well density of 20 per 10000 km<sup>2</sup>. India is the third largest oil consumer in Asia, even though on per capita basis the consumption is mere 0.1 tonne per year, the lowest in the region. Of the 26 sedimentary basins only eight have been explored so far. All this makes India the desired destination in terms of opportunities.<sup>5</sup>

### Findings from earlier studies:

Many researchers have undertaken studies to find out the reason behind oil price changes and also to see its impact on the global economy and how it affects the macro economic variables like inflation and economic growth in India. It infers that

a rise in the price of energy relative to output leads to decline in the productivity of existing capital and labour. Some of the findings are:

- Inflation and GDP growth was negatively correlated.
- Changes in oil prices affect the economic growth of G-7 countries because consumers' and producers' behaviour change to adjust with changes in oil price<sup>6</sup>.
- The principle alternative hypothesis attributes the run up in the prices to excess speculation and possibly manipulation<sup>7</sup>.
- Supply factors tend to play a more prominent role in affecting the price of oil with US shale oil and OPEC being the major market players mainly influenced by strategic behaviour and geopolitical factors<sup>8</sup>.
- That the price falls can potentially boost growth and help in controlling fiscal deficit and balance of payments<sup>9</sup>.
- For the exporting countries investor sentiment is dampened due to lower oil prices but helped the countries in reforming fuel subsidies that lowered the expenditure burden of the government.

<sup>4</sup> Indian chamber of commerce.

<sup>5</sup> Petrotech 2014- International oil and gas conference and exhibition.

<sup>6</sup> Ghalayini, Latifa (2011, January). The interaction between oil price and economic growth. Review of East (Middle) economics and finance journal.

<sup>7</sup> Ederington, H Louis.& Lee, K. Thomas. (2011 August) Factors influencing oil prices. US energy information administration.

<sup>8</sup>Husain, M Aasim., et al.(July 2015) Global implications of lower oil prices, IMF staff discussion note.

<sup>9</sup>Srinivasan, R., (January 2015) Decoding the oil price fall. The Hindu.

**Conclusion:**

Energy security is crucial for both sustaining high economic growth and controlling inflation. With rapid economic growth, energy demand in India has been rising rapidly. Changes in oil prices affect the economic growth of G-7 countries. The impact of crude oil prices on the Indian economy shows that crude oil prices play a significant role in raising the WPI. Some of the policy initiatives taken by the government include the 'Hydrocarbon Exploration Licensing Policy, HELP': An innovative Policy for future which provides for a uniform licensing system to cover all hydrocarbons such as oil, gas, coal bed methane etc. under a single licensing framework, Marketing and Pricing freedom for new gas production from Deepwater, Ultra Deepwater and High Pressure-High Temperature Areas, Policy for grant of extension to the Production Sharing Contracts for small, medium sized and discovered fields etc are some policies that will in the long term hope to make India self-sufficient in the energy sector.

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- *PM India website.*
- *Directorate general of hydrocarbons website.*



# NPA: A daunting task for the Banking Industry

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## Introduction

Across the globe, the banking sector acts as the catalyst for the country's economy. Banks play a vital role in providing financial resources especially to capital-intensive sectors such as infrastructure, automobiles, iron and steel, industries and high-growth sectors such as pharmaceuticals, healthcare and consumer discretionary. In emerging economies, banks are more than mere agents of financial intermediation and carry the additional responsibility of achieving the government's social agenda also. So, the fact cannot be denied that the economic prosperity of a country is highly correlated to the performance of their banking sector. But in the past we have witnessed a lot of banking failures over many years. Banking failures has negative impact on the economy. The negative effect of the banking sector can be cascading as it harms the economy as a whole, its causes the disturbances in the credit flow and in turn affects the working of the business units by effecting its efficiency and productivity. Many researchers have empirically found out that most of the time the cause of such failures is the Non-Performing Assets.

The debate over the NPA's has gained world's attention and all are looking for the measures to control it. NPA's cannot be stopped but it can only be reduced or controlled to an extent as the bank has to continue its primary function of lending for

the proper functioning of the bank itself and the economy at large. Non-performing loans are one of the main reasons that cause insolvency of the financial institutions and ultimately hurt the whole economy. By considering these facts it is necessary to control and regulate non-performing loans for the economic growth in the country, otherwise the resources can be jammed in unprofitable projects and sectors which not only damages the financial stability but also the economic growth. Hence, it is important to analyse the issue of NPA's, the challenges and possible remedies to control them.

## Non-Performing Asset

A Non-performing asset (NPA) is defined as a credit facility in respect of which the interest and/or instalment of Bond finance principal has remained 'past due' for a specified period of time. NPA is used by financial institutions which refer to loans that are in jeopardy of default. Once the borrower has failed to make interest or principle payments for 90 days the loan is considered to be a non-performing asset. Non-performing assets are problematic for financial institutions since they depend on interest payments for income. Troublesome pressure from the economy can lead to a sharp increase in nonperforming loans and often results in massive write-downs. With a view to moving towards international best practices and to ensure greater transparency, it had been decided

to adopt the '90 days' overdue norm for identification of NPA, from the year ending March 31, 2004.

Though the world's financial stability is affected by NPA's, in this study we will be focusing on the current problems and possible remedies with respect to India.

### Objective of the study

- Trends in NPA's and comparison of the performance of the three sectors namely the public sector, private sector and the foreign sectors in recent times with supportive answer.
- To identify the most effective channel for recovery.
- Suggestions and remedies to minimize the problem of NPAs.

### Methodology

A simple table and graphical depiction has been used to analyse the different aspects of NPA's from the data derived from RBI hand book of statistics.

### Trends in NPA

Table 1. Trends of Gross Advance , Gross NPA (amount) and Percentage of GNPA

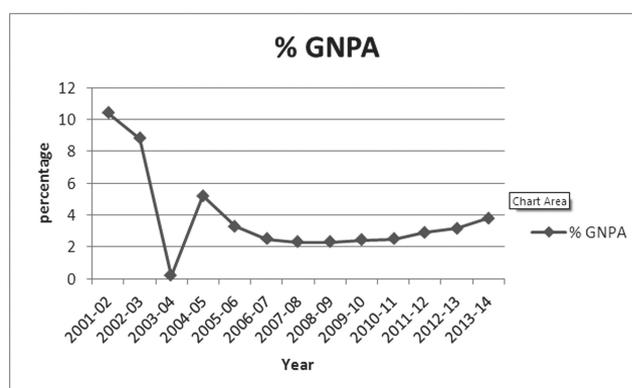
year	Gross Advance	Gross NPA (amount)	% GNPA
2001-02	6809.58	708.61	10.4
2002-03	7780.43	687.17	8.8
2003-04	9020.26	648.12	0.2
2004-05	11526.82	593.73	5.2
2005-06	15513.78	510.97	3.3
2006-07	20125.1	504.86	2.5
2007-08	25078.85	563.09	2.3

2008-09	30382.54	683.28	2.3
2009-10	35449.65	846.98	2.4
2010-11	40120.79	979	2.5
2011-12	46655.44	1370.96	2.9
2012-13	59882.79	1931.94	3.2
2013-14	68757.48	2641.95	3.8

Source: Rbi

The trend of Gross advance, Gross NPA and Percentage of GNPA shows overall an increasing trend, however it can be noted that the percentage of gross advance being default and categorised as NPA has been volatile .With 10.4 % of gross advance being default in 2001-02 which is the highest in 14 years. It got significantly reduced to 0.2 in 2003-04 and from 2005-06 onwards it has been more or less stable.

Fig 1. Percentage of GNPA of the Gross advance



Source: Rbi

Table 2. Trends of Net Advance, Net NPA (amount) and Percentage of NNPA

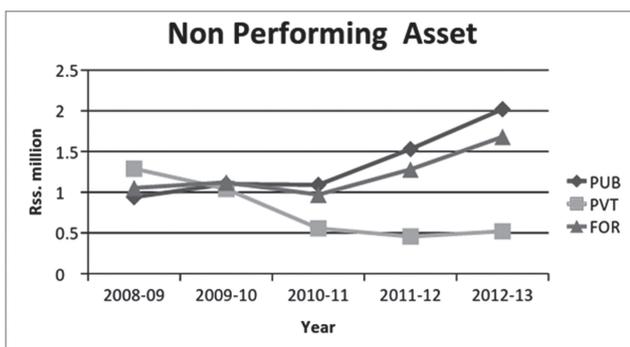
year	Net Advance	Net NPAs (amount)	% NNPA
2001-02	6458.59	355.54	5.5
2002-03	7404.73	296.92	4
2003-04	8626.43	243.96	2.8

2004-05	11156.63	217.54	2
2005-06	15168.11	185.43	1.2
2006-07	19812.37	201.01	1
2007-08	24769.36	247.3	1
2008-09	29999.24	315.64	1.1
2009-10	34970.92	387.23	1.1
2010-11	42987.04	417	1.1
2011-12	50735.59	652	1.3
2012-13	58797.03	986	1.7
2013-14	67352.32	1426.57	2.1

Source: Rbi

If we see the trend of Net Advance, Net NPAs and Percentage of Net NPA to Net Advance there is an increasing trend from 6458.9 bn in 2001-02 to 67352.32 bn in 2013-14. Net Advance is an asset for bank but it is very risky if not governed well and if there are maximum defaulters then it affects the profitability of the banks. Many researchers through their study have found that NPAs are the key determinant for the loss of profit and efficiency of the bank. The percentage of NNPA shows lot of improvement made by commercial banks from 2001-02 where the percentage of NPA was very high at 5.5 % to steady fall in it to 1 % in 2006-07 from then the trend was more or less constant with a steady increasing trend from 2011-12 onwards.

Fig2. Percentage of NNPA to Net Advance over the years



Source: RBI

Analysing the graph the foreign banks has been impressive in controlling the Non- Performing loans in last 5 years. The public sector has not fared well and there are many reasons for it. The primary reason can be dated by into 2007 recession. Due to the growing trend in the economy the investors wanted to scale up their projects and expand; for this they required additional financing and expected that the economy will grow just like it did previously. The banks too freely lent to these project without carrying out proper checks at their end. But then in 2008 as a result of the financial crisis things went downhill. Many of these projects which started with extended financing stalled.

Then, we could also factor in the fact that private banks do not lend heavily to industries like steel and manufacturing which were in a bad shape and are not growing post 2008. This could be one of the reasons of the downward trend. Since public sector banks lent to these industries and the borrowers could not payback, the banks suffered because of NPAs. Other reasons are corruption and undue influences which effects the decision.

One important reason for such low performance is improper check by the bank management before giving loans. Public sector banks have been known for bad management practices. Another important cause for such poor decisions is the short tenure of the bank manager. When the tenure of managers is short, it becomes a distorted incentive and the easier way out happens to be to push the reforms to the tenure of the next person. Also the review of the Manager’s decisions by external agencies and vigilance committees prompt the managers to not take risks

of strong decisions which could help clean ups in the long run.

However the blame cannot be put solely on the industrialists who defaulted and the

management of the bank. During recession such consequences were inevitable and that is the reason why Supreme Court appealed the name of the defaulters to be kept confidential.

### Effective recovery channels of NPA

Table 3. NPAs recovered by SCBs through different channels

Showing NPAs recovered by SCBs through DRTs (Amount in Crore)							
Items	2008	2009	2010	2011	2012	2013	2014
no. of cases referred	3728	2004	6019	12872	13365	13408	28258
amount involved	5819	4130	9797	14092	24100	31000	55300
amount recovered	3020	3348	3313	3930	4100	4400	5300
% of amount recovered to total amount	51.9	81.1	32	27.89	17	14.1	9.5
Showing NPAs recovered by SCBs through SARFAESI act (Amount in Crore)							
Items	2008	2009	2010	2011	2012	2013	2014
no. of cases referred	83,94	61,760	78,366	1,18,642	1,40,991	1,90,537	1,94,707
amount involved	7263	12067	14249	30604	35300	68100	94600
amount recovered	4429	3982	4269	11561	10100	18500	24400
% of amount recovered to total amount	61	33	30	37.78	28.6	27.1	25.8
Showing NPAs recovered by SCBs through lok adalat (Amount in Crore)							
Items	2008	2009	2010	2011	2012	2013	2014
no. of cases referred	1,86,535	5,48,308	7,78,833	6,16,018	4,76,073	8,40,691	16,36,957
amount involved	2142	4023	7235	5254	1700	6600	23200
amount recovered	176	96	112	151	200	400	1400
% of amount recovered to total amount	8.2	2.4	1.55	2.87	11.8	6.1	6.2

Source : Rbi

From the above table we can conclude that over the period of 2008-2014 the number of cases referred to all three institutions i.e., Lok Adalat,<sup>10</sup>DRTs<sup>11</sup> and SARFAESI Act<sup>12</sup> has increased along with the amount involved. The percentage of amount recovered from Lok Adalat is very minimal and the total amount too is only 1400 cr which shows the failure or inefficiency of Lok Adalat in

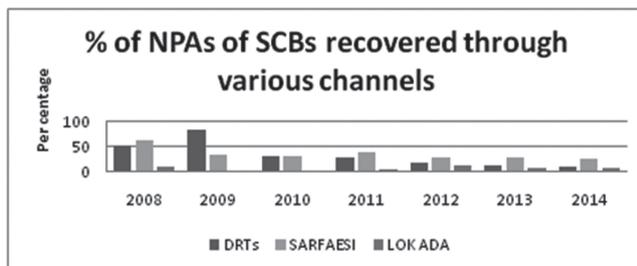
<sup>10</sup> Lok Adalat is one of the alternative dispute redressal mechanisms, it is a forum where disputes/cases pending in the court of law or at pre-litigation stage are settled/ compromised amicably. Lok Adalats have been given statutory status under the Legal Services Authorities Act, 1987.

<sup>11</sup> The Debts Recovery Tribunals have been established by the Government of India under an Act of Parliament (Act 51 of 1993) for expeditious adjudication and recovery of debts due to banks and financial institutions.

<sup>12</sup> The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (also known as the Sarfaesi Act) is an Indian law .It allows banks and other financial institution to auction residential or commercial properties to recover loans.

recovering the NPA. However we can see the improvement in later years i.e., from 2012 onwards but it is too little as compared to other two institutions. DRTs on the other hand showed its efficiency in 2009 by recovering 81 % of the amount involved but over the years its efficiency has fallen drastically with only 9.5 % of amount recovery. Performance wise it is the SARFAESI Act which has been efficient over the years recovering as high as 61 % of the amount in 2008. In 2014 it recovered 25.8 % of the amount which is much higher than DRTs and Lok Adalat. The efficiency of the SARFAESI act can be seen through if we compare the trends of all the three institutions. Given below is the graphical presentation of the same.

Fig4. Percentage of NPAs recovered from various channels



From this graph we can clearly make out that the SARFAESI Act has been an important and effective channel in recovering NPAs of SCBs.

#### Remedies

Non-performing assets are a drain to the banks. The banks in India are adopting various strategies to reduce the non-performing assets in their banks and they are also adopting various methodologies by which further addition to NPA portfolio is minimized.

In the real sense, in case there is a recovery in principal and instalments due in respect of the loans granted to the banks are received 100%, the question of non-performing assets do not arise. However, there is no such ideal bank where the NPA is nil.

Except banks which were originated recently, all banks are prone to have some portion of their loans and advances as non performing advances.

However following steps can be taken to minimize the problem of NPAs

- Revision of credit appraisals and monitoring systems should be done by RBI.
- Loan recovery methods should be improved with regular follow up.
- There must be regular follow-up with the customers and it is the duty of banker to ensure that there is no diversion of funds. This process can be taken up at regular intervals.
- Personal visits should be made after sanction and disbursal of credit and further close monitoring of the operations of the accounts of borrowed units should be done periodically.
- Managers under credit monitoring and recovery department should have dynamism in their work. Many managers say that “we do not fear to negotiate but we do not negotiate out of fear”. Such fear leads to arbitrary negotiation, which fails.
- Frequent discussions with the staff in the branch and taking their suggestions for recovery of dues.

- Assisting the borrowers in developing his/her entrepreneurial skill will not only establish a good relation between the borrowers but also help the bankers to keep a track of their funds.
- As a part of curative measures, bankers may resort to Compromise Settlement or One Time Settlement. Lok Adalats and Debt Recovery Tribunals are other ways for the recovery of dues. It has been observed that Banks these days are highly resorting to SARFAESI Act for the management of NPA.
- Suitable relaxation should be given by the bankers if the reason for a default is genuine, for example unavoidable circumstances of natural calamities and economic recession like that of 2007-08.

### Findings and conclusion

Amount of NPAs is on an increasing trend if we talk in terms of both gross and net level. But the percentage of gross advance and net advance turning up into NPAs has been controlled over the years with 5.5 % NNPA in 2001-02 to 2.1% in 2013-14. Likewise there is fall in GNPA too from staggering 10.4% in 2001-02 to 3.8 % in 2013-14. Various measures has been taken and implemented in managing NPAs. Through our study we also saw the effectiveness of different channels of recovery where we conclude that SARFAESI act has been very effective in terms of recovering of NPAs as compared to DRTs and Lok adalat. Across sectors

on a comparison foreign banks and private banks are faring well as compared to public sector in terms of management of NPAs but it has to be noted that public sector has been the key lender towards priority sectors unlike its counterparts. Efficient management, new set of norms, regular follow ups and close monitoring of operations has to be maintained in order to control the rising burden of NPAs.

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# THE BULL AND THE HELL

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Wealth measures the value of all the assets of worth owned by a person, community, company or country. Wealth is determined by taking the total market value of all physical and intangible assets owned, then subtracting all debts. Essentially, wealth is the accumulation of resources. Individuals in rural areas take pride in accounting cattle as their wealth measure.

Cattle wealth is large in India, as it plays an important role in the socio-economic life of people in general and in the villages in particular. India has the largest number of cows and buffaloes. It provides vast opportunity for self-employment. This sector contributed around 4.0% share toward GDP during 2013-14. It is also a source of raw material for several manufacturing industries. In States like Rajasthan, cattle are the only wealth of the people.

Table No: 1 Share of Agriculture and Livestock Sector in GDP

Share of Agriculture and Livestock Sector in GDP - (At current prices in Rs. Crore)					
Year	GDP (Total)	GDP (Agriculture)		GDP (Livestock Sector)	
		Rs.Crore	% Share	Rs.Crore	% Share
2011-12	8195546	986604	12.0	324013	4.0
2012-13	9252051	1080421	11.7	367318	4.0
2013-14	10477140	1233595	11.8	406035	3.9

Source : National Accounts Statistics-2015;Central Statistical Organisation;Gol

## Breeds of cattle in India:

In India at present there are twenty six well defined breeds of cattle and six breeds of buffaloes found spread across the country. Cattle are classified under three groups based on the purpose they serve to man. They are Dairy breeds, Dual

purpose breeds and Draught breeds. A breed is a group of animals of a species which has for a long period been bred among themselves. The members of the brood have closely resembling characters and these characters are hereditarily transmissible to young ones.

Table No: 2 Livestock Population in India by Species

Livestock Population in India by Species													
(In Million Numbers)													
Species	1951	1956	1961	1966	1972	1977	1982	1987	1992	1997	2003	2007\$	2012
Cattle	155.3	158.7	175.6	176.2	178.3	180.0	192.5	199.7	204.6	198.9	185.2	199.1	199.9
Adutt Female Cattle	54.4	47.3	51.0	51.8	53.4	54.6	59.2	62.1	64.4	64.4	64.5	73.0	76.7
Buffalo	43.4	44.9	51.2	53.0	57.4	62.0	69.8	76.0	84.2	89.9	97.9	105.3	108.7
Adutt Female Buffalo	21.0	21.7	24.3	25.4	28.6	31.3	32.5	39.1	43.8	46.8	51.0	54.5	56.6
Total Bovines	<b>198.7</b>	<b>203.6</b>	<b>226.8</b>	<b>229.2</b>	<b>235.7</b>	<b>242.0</b>	<b>262.2</b>	<b>275.7</b>	<b>288.8</b>	<b>288.8</b>	<b>283.1</b>	<b>304.4</b>	<b>299.6</b>

**Milch breeds (or) Dairy breeds:** The cows of this group are high milk yielders with extended lactation periods. The bullocks are of poor draught qualities. These cattle are well built with strong limbs. E.g. Deoni, Gir, Sindhi and Sahiwal. The cows in domestic usage for milk are non-descriptive types.

**Dual purpose breeds:** These breeds of cattle are meant for both milk yield and draught works. The cows are fairly good milkers and the bullocks are sturdy and are useful in draught works like ploughing the field, transport, cart pulling etc. Important examples are Haryana and Ongole.

**Draught breeds:** These breeds are exclusively meant for pulling carts, ploughing fields etc. They are well-built and the skin is well stretched. The

bulls are used for draught works. The cows are poor milkers. Important Indian draught breeds are Amrithamahal, Kangayam, Malvi, Hallikar etc.

**Exotic breeds of cattle:** Many milk yielding breeds of cattle are imported and reared in India. The exotic breeds are successfully crossed with indigenous breeds to obtain cross breeds, which have sufficient desirable characters. European breeds are the first kind of exotic breeds introduced in India about 90 years back. Important ones are short horns Ayreshire, Jersey, Brown Swiss, Holstein Friesean, Guernsy and Red Dane.

Draught breed cattle are largely available in Tamilnadu. They are mainly used for ploughing fields and pulling carts.

**Table no:3 - Distribution of Cattle Breeds of Tamil Nadu**

Breeds	Breeding Tract	Utility	Distribution
Kangayam	Erode district	Draught Breed	Erode District, parts of Coimbatore, Dindigul, Karur, Kancheepuram, Pudukkottai, Salem, Tiruchirappalli and Namakkal districts of Tamil Nadu
Bargur	Bhavani Taluka of Erode district	Draught Breed	Erode and Kancheepuram districts
Umblacherry	Thanjavur and Nagapattinam districts	Draught Breed	Nagapattinam, Thanjavur, Thiruvarur and Pudukkottai districts

Source: AE Nivsarkar et al., *Animal Genetic Resources of India, Cattle and Buffalo*, ICAR publication. Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Govt. of India.

Indigenous draught cattle, the male animals are good for work and cows are poor milk yielders. Their milk yield on an average is less than 500kg per lactation. In contrast Crossbred cattle yield milk much higher than the indigenous draught cattle. As the number of crossbred is more than the indigenous cattle, in few years of time the indigenous cattle will be extinct in nature.

**Table no:4 Performance of Indigenous cattle and Crossbred cattle**

Parameters	Indigenous Cattle		
	Kangayam	Bargur	Umblacherry
Breed Population ('000)	315	21	217
Adult Body Weight	Male: 540 Female: 380	Male: 340 Female: 295	Male: 385 Female: 325
Lactation Yield (kg)	600 to 800	350	300-500
Lactation Length (days)	270	270-310	250-270
Calving Interval (days)	365-670	480-540	446±4
Age at First Calving (days)	1,100-1,500	1,230	1,593±12
Parameters	Crossbred Cattle		Buffalo
	Jersey Crossbred	HF Crossbred	Toda
Breed Population ('000)	5,281	1,498	50
Adult Body Weight	Male: 300-450 Female: 300-325	Male: 300-450 Female: 300-350	Male: 380 Female: 380
Lactation Yield (kg)	1,123-2,135	1,940-2,700	500
Lactation Length (days)	258-305	286-305	200
Calving Interval (days)	360-480	360-480	480
Age at First Calving (days)	720-900	720-900	1,200-1,400

Source: AE Nivsarkar et al., *Animal Genetic Resources of India, Cattle and Buffalo*, Directorate of Animal Husbandry and Veterinary Services, Govt. of Tamil Nadu.

Milk is a rich source of protein. It has approximately 1 g of protein in each fluid ounce (30.5 g), or 7.7 g in each cup (244 g). Proteins in milk can be divided into two groups based on their solubility in water. Insoluble milk proteins are called casein, whereas soluble proteins are known as whey proteins. Both of these groups of milk proteins are considered to be of excellent quality, with a high proportion of essential amino acids and good digestibility.

The milk of the native breed is healthier than the crossbred cattle. Cow milk contains about 3.3% protein. There are two broad categories of milk protein —whey and casein. The ratio of whey to casein varies greatly by species, but in cow breeds about 20% of the protein is whey and the remaining 80% is casein. Bovine casein protein comes in 5 varieties: Alpha-S1, Alpha-S2, Beta, Kappa, and Gamma. In one study of casein proteins in Ayrshire cows, 49% were Alpha Caseins, 36% were Beta Casein, and the remaining 15% were Kappa and Gamma Casein.

Casein is the largest group of proteins in milk, making up about 80% of the total protein content. There are several types of casein in milk, and beta-casein is the second most common. Beta-casein exists in at least 13 different forms. The two most common forms of beta-casein are:

- A1 beta-casein: Milk from breeds of cows that originated in northern Europe is generally high in A1 beta-casein. A1 milk comes from breeds like the Holstein, Friesian, Ayrshire and British Shorthorn.
- A2 beta-casein: Milk that is high in A2 beta-casein is mainly found in breeds that originated

in the Channel Islands and Southern France. This includes breeds like the Guernsey, Jersey, Charolais and Limousin. Regular milk contains both A1 and A2 beta-casein, but A2 milk contains only A2 beta-casein. Some studies indicate that A1 beta-casein may be harmful, and that A2 beta-casein is a safer choice. This is the reason for the “A1 vs A2” debate.

A1 or A2 milk is all about Beta Casein and nothing else. Not fat or carbohydrates but only specific type of protein, Beta Casein, which accounts for just 30% of the total protein content in milk. In a cup (236g) of our Ayrshire milk, we would expect about 2.3g of Beta Casein out of the total 7.8g of protein. Regular consumption of A1 milk lead to serious health issues among Indians.

### **Risks of drinking A1 and A2 milk**

#### **Risk of Type 1 Diabetes:**

Type 1 diabetes is typically diagnosed in children, and is characterized by a lack of insulin in the body. Several studies indicate that drinking A1 milk during childhood may increase the risk of type 1 diabetes. However, these studies are observational in nature.

They cannot prove that A1 beta-casein caused type 1 diabetes, only that those who got more of it were at a higher risk of getting the disease. Animal studies have provided conflicting results. Some have found no difference between A1 and A2 beta-casein. Others have shown A1 beta-casein to have either protective or adverse effects on type 1 diabetes.

### **Risk of Heart Disease**

Two observational studies have linked the consumption of A1 milk with an increased risk of heart disease. This is supported by one experiment in rabbits. It showed that consuming A1 beta-casein promoted fat build-up in injured blood vessels. This build-up was much lower when the rabbits consumed A2 beta-casein. Fat accumulation may potentially clog blood vessels and cause heart disease. However, the human relevance of the results has been debated.

So far, two human trials have investigated the effects of A1 milk on heart disease risk factors. One of them included 15 men and women who were at a high risk of heart disease. The study had a crossover design, meaning that all participants received A1 and A2 beta-casein at different periods during the study. The study didn't find any significant adverse effects on risk factors for heart disease. Compared with A2 beta-casein, the A1 type had similar effects on blood vessel function, blood pressure, blood fats and inflammatory markers.

### **Sudden Infant Death Syndrome**

Sudden infant death syndrome (SIDS) is the most common cause of death in infants less than one year of age. SIDS is defined as the unexpected death of an infant, without an apparent cause.

Some researchers have speculated that BCM-7 may be involved in some cases of SIDS. One study found high levels of BCM-7 in the blood of infants who temporarily stopped breathing during sleep. This condition, known as sleep apnea, is linked to an increased risk of SIDS.

These results indicate that some children may be sensitive to the A1 beta-casein found in cow's milk. However, further studies are needed before any firm conclusions can be reached

### **Risk of Autism**

Autism is a mental condition characterized by poor social interaction and repetitive behaviour.

In theory, peptides like BCM-7 might play a role in the development of autism. However, studies do not support all of the proposed mechanisms. One study of infants found higher levels of BCM-7 in those who were fed cow's milk, compared to those who were breastfed. However, levels of BCM-7 dropped quickly in some of the infants, whereas they remained high in others.

For those who retained these high levels, BCM-7 was strongly associated with an impaired ability to plan and perform actions. Another study indicated that drinking cow's milk may worsen behavioral symptoms in autistic children. On the other hand, some studies found no effects on behaviour. Cow's milk may worsen behavioral symptoms in autistic children. On the other hand, some studies found no effects on behaviour.

### **Digestive Health**

Lactose intolerance is defined as the inability to fully digest the sugar (lactose) found in milk. This is a common cause of bloating, gas and diarrhoea. The amount of lactose found in A1 and A2 milk is the same. However, some people feel that A2 milk causes less bloating than A1 milk.

Supporting this, studies indicate that milk components other than lactose may cause digestive discomfort. Scientists have suggested that certain

milk proteins may be responsible for some people's milk intolerance.

One trial in 41 men and women showed that A1 milk may cause softer stools than A2 milk in some individuals. Additionally, studies in rodents indicate that A1 beta-casein may significantly increase inflammation in the digestive system.

**Conclusion:**

To have a healthy future generation, preservation and protection of our native breed cattle is the need of the hour. Hence we need to orient the future generation on the importance of native breed which is the sole base for A2 milk. We need to produce A2 milk on a large scale and make the crossbred cattle a clear washout in India as Risk of Type 1 Diabetes, Risk of Heart Disease, Sudden Infant Death Syndrome, Risk of Autism and Digestive Health are the real threat for Indian healthy living.

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# A STUDY OF THE TREND IN VARIOUS COMPOSITION OF ENERGY SOURCES IN THE TOTAL PRODUCTION OF ENERGY IN INDIA

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Energy sector is one of the basic infrastructural sectors. Depleting resources and growing pollution of environment due to energy use has necessitated the optimum use of its resources and for this, proper energy planning is required to achieve energy security. India's significant and sustained growth is exerting more pressure on the demand of energy resources. Production and consumption activities involve energy as a basic input. The accessibility of energy is essential in initiating and sustaining economic growth. The energy availability has become a necessity to curb economic growth. In a growing economy like India, the need and demand for Energy sector growth is imperative.

Energy plays a vital role in our day to day lives. Some energy that we use are renewable in nature which includes hydro, wind, solar, geothermal etc. while, other forms are non-renewable which cannot be replenished once it gets exhausted. By reducing the demand for fossil fuels, the utilization of renewable energy sources can result in important benefits of environment, developing security and employment (Mitra et al 1997). To meet the growing demand, massive addition to the installed generating capacity is required, and, investing on the available renewable sources of energy in India will be a long-term solution that will help quench India's growing energy demands. Formulation of

renewable energy production will help in the proper allocation of widely available renewable energy sources in meeting the future energy demand in India.

There is a large scope for installing efficient energy by shifting from fossil fuels to renewable sources of energy that will reduce the import dependence. Importing is bound by several multinational trade agreements and their regulations as well as by respective national trade policies which may be unfavourable at times and subjected to change during crisis. Restraining energy import may result in self-sufficiency and reduce the impacts during energy crisis. The focus of this paper is to study the various compositions of energy sources in the total production of energy and the existing production standards.

## **Indian Scenario:**

India, with its vast population and limited natural resources for meeting its energy requirements, to maintain its momentum of growth is also importing energy resources from other countries. India as a country is affected by significant energy poverty and persistent electricity deficits. In recent years, India's energy consumption has been increasing at a relatively fast rate due to population growth and economic development.

The rise in the demand for energy is not only due to the growing population, but also of the state of having more money or increased income leading to availability of more technological goods, to reach out to majority of the population thus leading to an increase in the production of energy. With increasing agricultural and industrial activities in the country, the demand for energy is also increasing thus more fossil fuels are used to meet the demands ending up in harmful emissions due to combustion of the fossil fuels. Formulation of a renewable energy production will help in the proper allocation of widely available renewable energy resources in meeting the future energy demand in India. Producing energy indigenously with reduction in energy imports will make India self-sufficient in energy production to meet the demands and reduces the costs involved in energy imports, thus fulfilling the objective of the Modi Government "Make in India". Prime Minister Narendra Modi, in the inaugural session of Urja Sangam 2015 said that "We can reduce this import by at least 10 per cent in 2022. This 10 per cent, we will produce ourselves and this should be our dream. If we become successful in reducing imports by 10 per cent in 2022, by achieving 10 per cent growth in domestic production, then I can assure you that by 2030 we can reduce this import to 50 per cent".

Per Garg.P (2012), with an economy projected to grow at 8-9% per annum, rapid urbanization and improving standards of living for millions of Indian households, the demand is likely to grow significantly. India is a country which accounts 18% of the world's population and with its vast population and limited natural resources for

meeting its energy requirements and to maintain its momentum of growth, a clear approach for use of best likely energy options available must be undertaken. More caution is also needed for emerging economies like India where lack of financial resources is a major constraint to move forward into clean energy. As per the International Energy Agency data, to meet the growing energy demand, a considerable quantity of energy needs to be imported. In 2014, out of the total production of 1287398 GWh of energy, 5008GWh was imported even though India is abundant with renewable sources of energy. We are able to produce only 298182 GWh of energy from renewable sources of energy, however due to the higher costs involved in the production process implementation in a large scale are discouraged. According to Vipul Tuli & Amit Khera (2014), India's energy demand, which was nearly 700 million tonnes of oil equivalent in 2010, is expected to cross 1500 tonnes by 2030. Its dependence on imports is expected to increase from 30 per cent to over 50 per cent, suggesting the need for a new way forward.

#### **Theoretical Background:**

Production and consumption activities involve energy as the basic input. Since the time of Adam Smith only land, labour and capital were the only inputs. Later during the 19th century, as a result of the growth of industrial nations, energy was regarded as the fourth input. The availability of energy is essential in initiating and sustaining economic growth. The availability of energy is a necessity for economic growth. It is predicted that the production of oil and gas falls well behind the

growth in demand and India's reliance on oil imports rises above 90% by 2040, requiring continuous caution as to the implications for energy security.

### **Review of earlier studies:**

Various studies have been conducted in the past on the composition of energy and the total production. As per the International Energy Agency (2015), a large expansion of coal output makes India the second-largest coal producer in the world, but, rising demand also means that India becomes, before 2020, the world's largest coal importer, overtaking Japan, the European Union and China. According to Garg.P (2012), if energy shortages persist, it is difficult to expect much improvement in energy access. Antonia V. Herzog, Timothy E. Lipman, Daniel M. Kammen, show that the development and use of renewable energy sources can enhance diversity in energy supply markets, contributing to secure long term sustainable energy supplies, help reducing local and global atmospheric emissions, and provide commercially attractive options to meet specific energy service needs.

According to Farret A Felix and Simoes M Godoy (2006), since humankind's beginning, the ability to harvest and convert energy has been a means of survival. According to Per Arif Hepbasli (2006), in attaining sustainable development, increasing the energy efficiencies of processes utilizing sustainable energy resources plays an important role. A sustainable energy system may be regarded as a cost-efficient, reliable, and environmental friendly energy system that effectively utilizes local resources and networks<sup>9</sup>.

Jose Goldember (2007), states renewable energy is one of the most efficient ways to achieve sustainable development. Increasing its share in the world matrix will help prolong the existence of fossil fuel reserves, address the threats posed by climate change, and enable better security of the energy supply on a global scale. Shahbaz Muhammad & Feridun Mete (2011), reveal that increased use of energy may lead to more efficient production and, hence lead to faster economic growth. Rebecca Ghanadan and Jonathan G. Koomey (2005), studied alternative pathways to adequately balance the energy needs with other economic, social, environmental, and land use interests, especially with a growing population and economy.

### **Significance of the study:**

According to Per Pokharel (2006) the relationship between the use of energy and economic growth has been a subject of greater inquiry as energy is one of the important driving forces of economic growth in all economies. According to a report by International Energy Agency, India needs to invest a total of 800 billion dollars in various stages by 2030 to meet its energy demand. India accounts for around 2.4% of the annual world energy production, but on the other hand consumes 3.3% of the annual world energy supply. The energy prospect in the country is one of the serious concerns. World Bank report claims that the cost of importing energy resources per container equivalent to US dollars was 1462.0 \$ in the year 2014 which means that every year major amount of money is spent on the import of energy resources itself. A renewable -intensive energy

future would introduce new choices and competition in energy markets. Growing trade in renewable fuels and natural gas would diversify the mix of suppliers and the products traded which would increase competition and reduce the likelihood of rapid price fluctuations and supply disruptions. It could also lead eventually to a stabilization of world energy prices. In addition, new opportunities for energy suppliers would be created and, eventually, the demand – supply mismatch can be reduced. The focus of this paper is to study the existing production standards and the various compositions of energy sources in the total production of energy and to find ways to improve energy production in India by exploring all possibilities of fully utilizing the unused renewable sources.

#### Objectives of the study:

1. To identify the composition of energy sources in India.
2. To study the trend in production of energy from different sources.

#### Scope of the study:

The study is essentially carried out in an uncertain scale, but the researcher has taken care in including all the relevant data available into the analysis. Findings and conclusions of this study may help future scholars to take reference, for sure. It will help common people to understand the

determinants in composition of energy sources in India and the measures to improve indigenous production.

#### Limitations of the study:

1. The research tools used in the study have its own limitations.
2. The secondary data collected from the official websites and other secondary sources may lack reliability and so may be thoroughly ensured.
3. Time constraint cannot be ignored.

Therefore, any conclusions drawn from the study and the findings should necessarily be interpreted with utmost care and caution from the part of the reader.

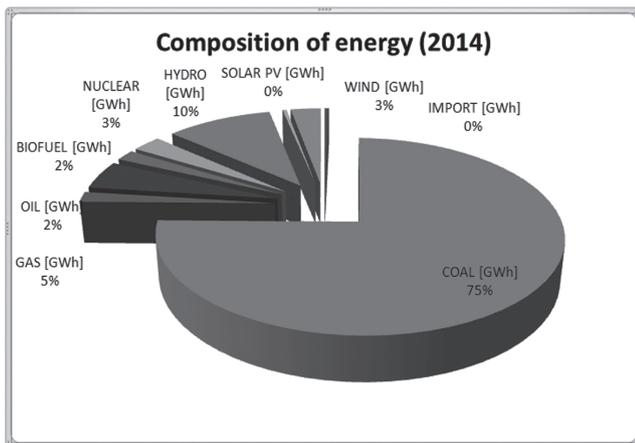
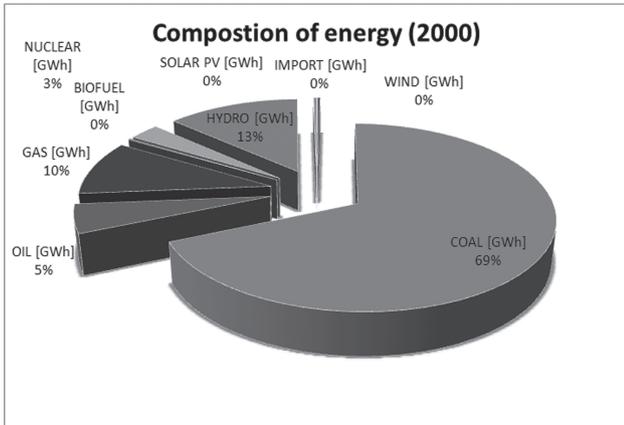
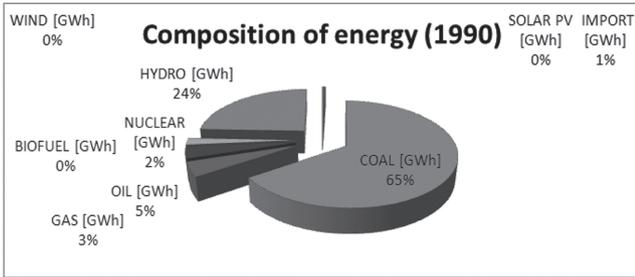
#### Methodology of the study:

The study is conducted using secondary data for a period of 25 years, collected from various Government sources and official web sites. OLS regression and trend analysis is used to accomplish the objectives. The analysis was done using MS Excel and SPSS software.

#### Trend Analysis and Inference:

The following table and diagrams show the trend in Total Production of energy and its various compositions along with the portion of Imports utilized to meet the energy demand of the nation during the years 1990, 2000 and 2014 respectively.

Source Year	Coal (%)	Oil (%)	Gas (%)	Biofuel (%)	Nuclear (%)	Hydro (%)	Solar PV(%)	Wind (%)	Imports (%)
1990	65	5	3	0	2	24	0	0	1
2000	69	5	10	< 1	3	13	< 1	< 1	< 1
2014	75	2	5	2	3	10	< 1	3	< 1

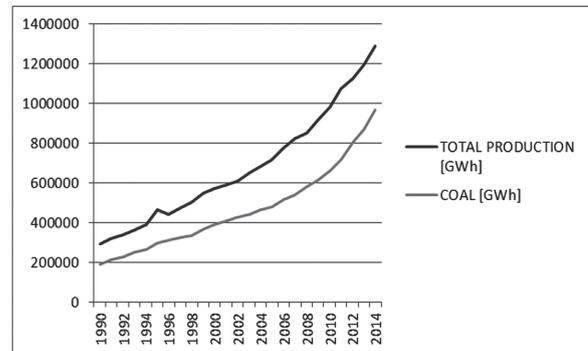


The above facts states that the major proportion of production is Coal followed by Hydro and Gas respectively. Over the years there seems a likely chance of increase in the production of renewable sources. It is observed that we are able to bring down the volume of imports across years, which has a considerable importance in this context.

The descriptive statistics of the selected variables are given below:

Variable	Obs	Mean	S t d . Dev.	Min	Max
Energy Production	25	678777.8	288237.2	292732	1287398
Imports	25	2814.8	1805.734	1352	5897
Coal	25	466512.1	210334.4	191633	966520
Oil	25	22364.12	5090.902	13312	31086
Gas	25	60339.08	32080.07	9958	116112
Biofuel	25	5881.68	7581.817	0	23908
Nuclear	25	16827.92	9366.456	5398	36102
Hydro	25	95442.68	26137.64	68419	143582
Geothermal	25	0	0	0	0
Solar P V	25	464.24	1218.117	0	4909
Wind	25	9031.04	11614.91	32	37155

**Trend Analysis:**



The table of descriptive statistics gives the mean values of all the variables under study. The mean total production is 678777.8 GWh. The mean imports are 2814.8 GWh. The production of Coal heads top with a mean value of 466512.1 and forms the major component of total energy produced across years. Next to coal is Hydro followed by Gas, Oil, Nuclear, Wind, Biofuel, Imports and Solar with mean productions 95442.68, 60339.08, 22364.12, 16827.92, 9031.04, 5881.68, 2814.8 and 464.24 GWh respectively.

The trend graph shows that across years there is an increasing trend to the usage of renewable energy sources like wind, bio fuel, solar etc in lieu of the non- renewable sources.

**Projections:**

According to a report by International Energy Agency, India needs to invest a total of 800 billion dollars in various stages by 2030 to meet its energy demand. India accounts for around 2.4% of the annual world energy production, but on the other hand consumes 3.3% of the annual world energy supply. The energy prospect in the country is one of the serious concern. India is exceptional with diversified renewable resources, but it is not successful in utilising the resources at the optimum levels. The nation has a potential of around 45000 MW from Wind Power, close to 15000 MW from Small Hydro, 16000 MW from Biomass and can produce 20 MW/sq km of Solar Power. But out of the above numbers, only 30% of the renewable potential have been utilised. The electricity generation mix in India comprises around 10% of the renewable source. There is lack of awareness among the people about the benefits of renewable sources.

**Conclusion:**

The composition of energy source in India includes coal, oil, gas, bio-fuel, nuclear, hydro, solar, wind and import. Though the energy production has been rising from all sources during the 25 year period, there has been a sharp decline in the production of energy from gas in the recent years. On supply, the production of oil and gas in India is declining. It is because there has been inadequate exploration, and also there has been inadequate

use of enhanced oil recovery technology for maximizing productivity of our oil fields. The country, therefore, must accelerate the process of exploration. On the demand side, transportation is the largest consumer of oil in India. The government has to plan more efficient ways to manage consumption of oil. The other front where we can reduce the amount of imports is the efficient use of oil for residential and commercial purposes.

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# RETHINKING WICKSELL'S DEMOCRACY

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Democracy of majority rule may not be for all and democracy that satisfies all seems to be an unrealistic concept in the contemporary era. The Swedish economist propagated a theory of unanimity in voting pattern which he believed was the only way to achieve a successful democratic system. Specifically, in his initial thoughts he spoke about absolute unanimity, which means absolute or completely unanimous pattern of voting. So as to understand this, let's take country "A" where there are 10 citizens, who all have the right to vote and every vote has equal value, also assuming a person can vote for himself. Now if we apply the concept of absolute unanimity, it is mandatory that all ten people must vote for the same person for the establishment of a perfect democratic system. On the other hand if nine people vote for say Person "P1" and the remaining one voted for another person say "P2", in this situation the principle of absolute unanimity becomes absurd as even a single person has the power to reject a strong mandate of 90 percent of the population. This will not just create social unrest but political instability too. Understanding this situation of chaos and unrest, Knut Wicksell put forward another concept of relative unanimity or which he called qualified majority voting. In this system of relative unanimity, a cent percent (100%) unanimity is not required but a relative unanimity which would be close to the absolute unanimity, for example a majority of

two-thirds, three-fourths, four-fifths may be approved for policy making through democracy. The main motive to introduce this system of democracy in Sweden was to establish a fair taxation system. His theory of taxation talks about the payment of tax in accordance with the paying capacity of citizens of the country. He was against the regressive tax regime in Sweden which taxed the poor community more and rich community less. To summarize his concept of democracy it can be said the he was against the system of simple majority of 51 percent which overrules the overwhelming minority of 49 percent in the democratic system and thus proposed the concept of qualified majority which gives more power to the minority group in influencing the decision making through voting process in democracy. One important merit of relative unanimity or qualified majority is that in this any single person cannot influence the decision through voting of the rest but instead in group.

## **Britain failed Democracy?**

What exactly is a fair democratic system is a question to be pondered upon today. In UK a simple majority of 52 percent won Brexit against an overwhelming minority of 48 percent who voted for Britain to remain in the old grand union of Europe. Yes, the phrase I've used here is "overwhelming minority" as the majority's voting

percentage is not overwhelming and the minority's voting percentage isn't weak enough. Now a decision of 52 percent overrules the choice of 48 percent, is this kind of democracy fair, it is a question left to the world to reflect upon. Do we need a concept of "Supermajority" for establishing a system of fair public choices and individual preferences where instead of simple majority of 51 percent, a supermajority of 70 percent or more may be compulsory? However in a multiparty system this seems very difficult to achieve. So far now a perfect democratic system is an unrealistic approach and a simple majority system though not the best but seems to be the only convenient door to a stable government. But choice of an overwhelming minority should be considered or disregarded is a question to be answered. Is the failure of an overwhelming minority a failure of democracy? Only time has the answer.

### **Switzerland's Referendum**

Another recent referendum which was conducted in Switzerland shows another side of democracy where 77 percent of people voted for rejecting the proposal of Basic Income for adults and children. This income was to be paid unconditionally, whether they worked or not. Switzerland is the only country which has had such a referendum. Now should we believe that the democracy won with an overwhelming majority or supermajority as stated earlier or should we say that 23 percent (who were in need of basic income) of the population's choice is disregarded by the overwhelming majority of 77 percent. However this referendum is considered a successful one with almost no criticism against the overwhelming

majority's decision.

### **Agitation against Democracy**

In the Indian state of Jharkhand where central government increased MNREGA (A wage for work scheme) wage from ₹162 to ₹167, an increase of ₹5, this increase of ₹5 was considered very low and ineffective by the people concerned and they decided to give up this increased amount and asked government to use it to keep its corporate friends happy. Workers expected an increase of ₹45 as it would bring the MNREGA wage close to minimum wage of ₹212 in the state. This case brings us to a conclusion that if any referendum of Basic Income is conducted in India, there's a high possibility that Indians may overwhelmingly accept such proposal of Basic Income.

The three contrasting cases of the respective democracies tells us that there will always be political winners (majority) and political losers (minority) in a democratic system, it seems to be an implied precondition of democracy, however I believe that it's always good to have an overwhelming or something much more than a simple majority for a better decision making which may be difficult to achieve. As for the losers it can be said that there's always a next time, when they can propagate their ideas even more aggressively and effectively and influence leaders as well the people holding conflicting viewpoints and choose a better leader or party for them.

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# INTERNSHIP IN EQUITAS SMALL FINANCE BANK: MICROFINANCE SECTOR

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## **Evolution of Microfinance in India**

Microfinance is seen as an important tool for poverty alleviation and over the years, MFIs have placed themselves as fulfilling this developmental goal. The program was a government initiated program with refinancing to banks from NABARD. SHG bank linkage program involved NGOs to form SHGs and train them. Each SHG typically consists of a group of women/men members interested in accessing financial services including savings, credit insurance etc. Thus, microfinance in this phase was government driven.

The microfinance sector started evolving with private sector participation leading to formation of microfinance institutions (MFIs). The MFIs accessed bulk funds from banks and did on-lending to the end borrowers (either SHG members or JLG members). The RBI granted priority sector status to bank loans advanced MFIs in 2000-01, following which, the microfinance sector witnessed rapid growth in the value of outstanding loans.

On 4th February, 2015 the RBI released a list of ten institutions which were licensed to convert into Small Finance Banks. By converting into SFBs, existing MFIs would be able to exit a cluttered market whose competition is growing and cater to a more niche market, offering more resources. This will as a result, broaden their customer base.

## **Demand drivers in Microfinance**

### **Huge potential market-**

Approximately 40 million people in India are being serviced by MFIs today. Currently, the number of people living below annual income of RS 1,60,000 in urban areas eligible for micro credit is 97 million while below Rs 100,000 in the rural area that number goes all the way up to approximately 243 million people. Thus the gap between the customers currently being serviced and the potential customers is quite high at a gap of around 300 million households with a potential market size of Rs. Rs 6,400,000 million

### **Government Priority**

Given the sheer size of Indian population and considering that a large section of society still lacks access to the formal banking services, driving financial inclusion has always been a key priority for Indian government.

### **Challenges**

#### **Low outreach-**

MFIs in India only have reached around 3% as of 2016. They prefer to lend small amounts to women as they are more inclined to use it for productive purposes as opposed to men who recklessly spend it.

**Low client retention-**

MFIs have low client retention rates at around 30%. This is because most of the members are uneducated and illiterate and do not understand the services being rendered to them. This problem is exacerbated when there is a high default rate. In such cases other members of the JLG will have to make good the defaulted amount.

**Other motives for usage of funds-**

Traditionally micro credit is to be used for productive business purposes and not for non-productive consumption purposes. However, many times the customers may use it for their own consumption purposes. This reduces their ability to do business and repay their loans with interest.

**Cash in transit losses seen as key concern to certain MFIs-**

Cash is the most widely used channel for majority of transactions between MFIs and borrowers. This leads to the risk of borrowers losing cash in transit (either due to fraud or theft by third parties) at the time of repayment and thus, becomes a key concern for MFIs. While some players have opted to transfer this risk to borrowers, others have sought cash-in-transit insurance.

**Inadequate monitoring mechanisms pose a risk to MFIs-**

Given the nature of business, MFIs require robust monitoring mechanisms, both prior to lending and later, to ensure timely collections. Simultaneously, they also need to control operational expenses, given the small ticket size of loans.

**Managing operating expenses-**

The modifications made by RBI in 2012 in the MFI guidelines released in 2011 have regulated the maximum lending rates and have imposed a margin cap of 12% for small MFIs (with GLP of less than ₹ 100 crores) and 10% for large MFIs (with GLP of greater than ₹ 100 crores). MFIs have high transaction costs for small loan amounts. Since most transactions between the MFI and customers are carried out using cash, an officer needs to be present for every transaction. This can turn into an extremely time consuming and expensive process.

**Success factors****Technology to be a major enabler to monitor portfolios and maintain asset quality-**

Apart from the cost benefits arising from automated documentation processes, having a robust back-end technological set up enables players to effectively monitor their loan portfolio. Technology is also likely to play a major role in preventing internal accounting lapses and facilitate a better monitoring mechanism for collections. Further, credit bureaus such as Equifax and Highmark are engaged in collecting data from several MFIs and building a comprehensive database that captures the credit history of borrowers. Receiving regular updates on borrowers' credit profiles from such bureaus will help MFIs maintain stronger asset quality.

**Managing local stakeholders- key determinant to an MFI's success-**

Considering the sensitive nature of operations, MFIs must ensure that their activities do not antagonise local leaders and government

authorities. Apart from adherence to legal and regulatory guidelines, maintaining amicable relations with key stakeholders in the respective geographies will be a key determinant of MFIs' success.

## The Equitas Story

### Important Milestones

The Company was incorporated in 2007 and is registered with the RBI as a non-banking financial institution in 2011. Equitas was transformed into a public limited company and changed the name to Equitas Holdings Limited in 2015. Equitas was converted into a Small Finance Bank with Microfinance as one of the asset businesses of the Equitas Small Finance Bank with 60% share of the portfolio including used Commercial Vehicle business, Housing Finance. Total disbursements in the microfinance business in fiscal 2013, 2014 and 2015 and in the three months ended June 30, 2015 were ₹ 11,491.36 million, ₹ 15,054.80 million, ₹ 21,290.42 million and ₹ 6,195.54 million respectively. AUM of the Microfinance business grew from 7240 million as on March 31 2012 to 21,440 million as on 31st March 2015

### SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Strong brand recall</li> <li>• Robust distribution in place</li> <li>• High customer base</li> <li>• Performance linked incentives via Esops</li> <li>• Diversified AUM</li> <li>• Significant capital for next growth phase</li> </ul>	<ul style="list-style-type: none"> <li>• Yet to establish Pan India presence</li> <li>• Large amount of collections done in cash</li> </ul>

Opportunities	Threats
<ul style="list-style-type: none"> <li>• Limited competition in existing customer base</li> <li>• New products included to diversify products</li> <li>• Strong pricing power offers ability to build strong franchise without impacting profitability</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory charges, especially with the MFI segment</li> <li>• Significant concentration of MFIs in the South, especially Tamil Nadu</li> <li>• Aggressive competitor practices</li> </ul>

### Product offering-

The primary target customer segment for the microfinance business is micro-entrepreneurial women with limited access to formal financing sources. These loans are provided essentially for use in their small businesses or other income generating activities.

The microfinance product offerings include loans extended for up to two years ranging from ₹ 5000 to ₹ 35,000, depending on the loan cycle. Customers who are able to access their loan amounts through their bank accounts are extended an additional loan of ₹ 2,000.

All the microfinance loans are offered at fixed interest rates, with principal and interest typically payable in fortnightly or 28 day instalments. Interest rates for microfinance product offerings are a function of Equitas' operating and funding costs, in particular its personnel and administrative costs, as well as the RBI limits on microfinance loan interest rates.

### Processes

#### Sourcing customers-

In the Equitas microfinance business, some of the company's field personnel, designated as

sales officers (“SOs”), source customers. The MFI typically does not involve any intermediaries in its microfinance business, for either sourcing new customers or for collection. The SOs usually performs village level and colony level surveys to assess the number of households and enterprise activities undertaken to determine the potential customer base. The SOs then convenes meetings with groups of women in the locality and explains the features of their microfinance products and the procedures involved.

#### **Credit approval-**

The branch manager visits some of the members of the relevant group in random to verify the original KYC documents and assesses them based on various criteria. A credit report for each applicant is procured from the relevant credit bureau and are verified to ensure compliance with RBI guidelines and credit parameters followed by Equitas.

#### **Joint liability groups-**

Equitas follows a model of direct lending through joint liability groups which promotes credit discipline through mutual support within the group and also promotes prudent financial conduct among the group and prompt repayment of their loans. If any member defaults in making payments to the group leader or is absent, the other group members are responsible for such amount.

#### **Disbursement-**

At the time of disbursement, the group is again educated on the terms and conditions of the loan and provided a copy of such terms. In addition, the original KYC documents are again verified prior

to disbursement. On disbursement of loan, individual acknowledgment of group members is obtained and their details are recorded

#### **Collection-**

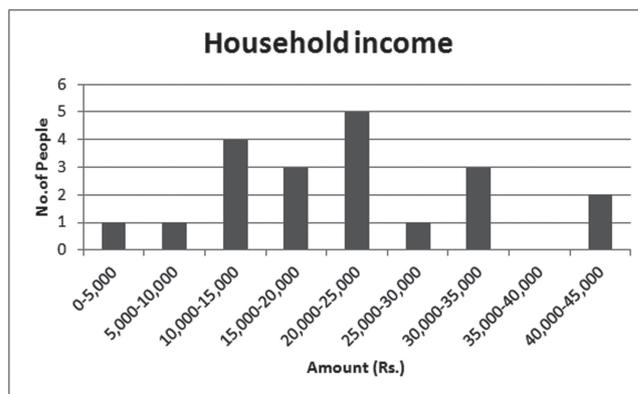
The collection process is a critical part of the microfinance business operations. Repayments are collected in cash at centre meetings. Passbooks are issued to customers and in order to minimize fraudulent activities

#### **Customer Survey**

As a part of my internship at Equitas SFB I visited the field in order to get a more holistic view of the various processes involved in the collection and disbursement of loans.

I also interacted with 20 of Equitas’ customers and findings are as under.

#### **3.1 Average monthly household income**



20% of the households lie within the monthly income bracket of Rs 20,000 to 25,000.

#### **Last time customer used a bank**

40% of the customers had used the banking service only in the previous month. It was also found that there was a positive correlation between people’s acceptance of the demonetisation policy

and the frequency with which they used their bank accounts.

### **Purpose of loan**

Around 55% were using the loans for productive purposes i.e. for - developing and expanding and business. Purposes under the 'other' category include house rent, children's school fees, consumption expenditure etc. People were citing the shortage of money due to demonetisation as an excuse for using the loans for non-productive purposes.

### **Customers' Business Profile**

45% of the customers were tailors. They usually worked from home. The initial capital is also not as much as being a store owner. Flower sellers, grocery store owners were some of the other customers.

### **Satisfaction Levels**

70% customers wanted more from Equitas in terms of loans and services. When asked, many were quick to praise the banks' services and lending efforts.

- One member felt uncomfortable being in a joint liability group as she did not want to bear the burden of other less credit worthy members of her group when she had a clean credit record.
- 13 members out of 20 respondents wanted higher loan amounts.

### **Opinion on demonetisation**

- Only two out of the twenty people were in favour of the policy and they earned the highest incomes. It was seen that households

which received incomes of less than 25,000 rupees a month were more inconvenienced by demonetisation than customers above that income bracket.

- It was no surprise to see most of the customers ie 18 in number, strongly opposed to demonetisation.
- Effects of demonetisation on their daily lives
  - o Unable to get employment as daily labourers. Unemployed as they had to close their business due to demonetisation.
  - o They were unable to purchase daily necessities such as food and medicines.
  - o They had to pull their children out of school as they were unable to afford their school fees.
  - o Another member, was using loans from both Equitas and Janalakshmi to pay for her children's' education. Spending on such items which in the short run are unproductive could cause her to fall into the debt trap.

### **Trends in the Microfinance sector**

#### **Digital trends**

With an increase in the number of MFIs along with increase in number of branches of each MFI, the need for efficiency and digitalisation has gone up. Tablets are used in order to scan important documents such as aadhar cards, KYC documents. This consolidates the data and is then sent to higher authorities. The Aadhar card is a citizen's national identification card. By incorporating the Aadhar card into the lending process, it makes the process

much more reliable as there is now a proper verification process.

The Prime Minister's Jan Dhan Yojana has resulted in the opening up of 24 crore bank accounts all over India. Apart from this, demonetisation has primed the nation to become completely digitalised. Along with the entire nation, MFIs will also become more digitalised and efficient. This will allow for electronic disbursements and collections between MFIs and customers.

### **Changes in demographics served**

From the year 2014-15, MFIs are becoming urban centric, MFIs are able to minimise operation costs and increase operational efficiency.

### **Small Finance Banks**

Recently, there has been a focus of NBFC MFIs to convert into small finance banks. With Equitas

and Ujjivan converting into small Finance Banks, around eight other MFIs also have plans of converting to Small Finance Banks. As SFBs, these companies can open savings accounts for smaller sums of money, something that commercial banks do not think as viable due to major transaction costs.

This will also help on the supply side, where MFIs still charge high interest rates on each loan cycle. Once they start raising deposits which are cheaper to collect then these cost savings will be passed on to customers in the form of lower interest rates.

These SFBs will also have to become more technology oriented, with the opening up of crores of bank accounts, greater usage of aadhar cards and the overall digitalisation of the economy.



# INDIA AND THE ENERGY SECTOR

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India is growing at a very fast rate. The country at a time when it is being appreciated as the fastest growing economy in the world is now in a crucial transformation phase where it moves to the centre stage of many areas of global interactions. Home to about 18% of the world population, the country is also bestowed with a vibrant democracy and policies that are being formulated and implemented to meet the needs of the growing population which is expected soon to be the most populous one. Indian economy already the third largest one (GDP in terms of purchasing power parity) is witnessing a fast pace modernization and the manufacturing sector is also expanding due to the various steps taken by the government at the centre. The opportunities are many but they never come without challenges. Even after the standard of living has risen for many, One third of world's poor reside in India

India's energy sector is one of the few sectors that have grown rapidly in the past few years. Given the projected economic and population growth reading along with the urbanization that is set to take place in the country, the energy demand will continue to rise in the near future. To tap the maximum benefit and recognizing the inherent challenges we need a comprehensive policy which takes care of the needed infrastructure to bring electricity to the millions of households who do not have it and to move towards more efficient energy

sources and to supplement the expanding manufacturing sector at least to bring down the demand-supply gap in the sector.

## **Energy in India: The Current Scenario**

Since 2000 India's energy use has almost doubled that pushed the country's share in the global demand to 5.7% in 2013. Even then this growth was slower than the economic growth and during this period India contributed about 10% of the increase in global energy demand. The shift away from the bio energy consumption, efforts towards energy efficiency and the growth of the services sector has helped in this regard. What happened as a result is impressive.

It took 12% less energy in 2013 to create a unit of GDP than it was required in 1990. Thus the energy intensity of the country is declining. Energy Intensity is a measure of the country's energy efficiency or in other words units of energy per unit of GDP. High energy intensity indicates a high price in converting energy into GDP and low energy intensity means lower cost in converting energy into GDP. Comparing the present energy demand of the country with the near 18% share in the world population the potential for further growth is huge.

Due to a rapid rise in coal consumption and a major shift away from the use of bio energy, almost three-fourth of India's energy demand is being met now by fossil fuels. Though demand for

bio energy has grown in absolute terms, its share in the primary energy mix has declined since 2000 as more and more households started using LPG for cooking. The easy availability of coal has contributed to its rise which at present accounts 44% of the primary energy mix, mainly due to the increase in the power generation fleet using it. Oil accounts for 23% in the total energy mix, 40% of which is used in the transportation sector. Demand for diesel is strong due to the high share of road freight traffic that stands at 70% of the total use in the transportation sector. Justifying urbanization the use of LPG has also risen which is now only second to the diesel among oil products. Natural gas, hydropower, nuclear and wind are mainly deployed in the power generation but all of them play relatively a small role in the total energy mix.

It was the building sector that had dominated the energy demand in terms of its consumption. But the demand in industry has surpassed that of building sector by 2013. Industrial demand for energy has almost tripled with the large scale expansion in the energy intensive sectors such as steel and cement. The consumption levels of these sectors are way below for a country like India as compared to other developing economies. Increase in income and the resulting trend towards the urbanization with the rising levels of ownership of household appliances such television, air conditioner, Refrigerator contribute a large chunk of the building sector's demand for energy.

Transport sector is the third largest consumer of energy. Road transport accounts for the 90% of the transport sector's demand for energy with the ever increasing ownership of passenger vehicles.

The provision of electricity to all its households is very important for the economic and energy image of India. It is difficult to achieve as it is a major area of uncertainty. The country's electricity demand was close to 900 terawatt hours in 2013 growing at a rate of 6.9% from 2000. Though this is the case still some 240 million people live without electricity. And it was not possible for the country to meet its peak demand during the 2001-2002 and again in 2008-2009. With electricity constituting 15% of the final energy consumption, urbanization, increasing stock of electrical appliances and the expected economic growth are all sure to put more and more pressures on the power sector. Losses arising from the subsidies to the consumers are too high to be covered by the higher prices paid by the industrial users. Thus the financial problems faced by the Discoms (distribution companies) are worsened by the dues from state governments on account of subsidies, poor billing and collection, inadequate investment and transmission and distribution losses, all resulting in poor performance. We know electricity shortages are seen as the main cause for the poor productivity of the industry. This can be read as the problem of the entire energy sector also.

Thus the solution to the problem faced by the electricity sector is to increase the rates and capacity along with dealing with the bottlenecks and inefficiencies. Utilisation rates both in the coal fired and gas fired plants have fallen besides the problems faced by the discoms. Also the shortages and poor quality coal by which more than half of the electricity is generated in India has started to make the problem more complicated making the import bill heavy. Overall it demands that

transformation, a quick one, to renewable sources of energy for India to meet its development goals.

### **Renewable Energy: The Way Forward**

We have already seen that the three fourth of India's energy demand is supplied by the fossil fuels. This trend may continue to increase if proper policy is not implemented in favour of alternative fuels as the population has already started to move away from the bio energy. Moreover this has two related problems. First the domestic production of fossil fuels is one of the lowest in the world increasing the imports. Secondly use of such sources create air quality problems and emit greenhouse gases (GHG).

Renewable Energy Sector in India has already been a major player in the total energy supply especially in the grid connected power generation capacity. The sector has seen tremendous changes largely in the past few years. It contributes to about 13% of national electricity capacity. Also it helped millions of people to meet their lighting and other energy needs in an eco-friendly manner. There have also been a lot of changes in the policy frameworks and ambitious plans are laid down to increase the share of solar powered energy. The actions towards more eco-friendly future is clear from the activities in last four years under the Jawaharlal Nehru National Solar Mission which was started in 2009 with an objective of generating additional power of 20000MW by 2022.

Energy Security, Energy Access and Commitment towards Climate Change are the main areas of concern regarding the development and implementation of renewable energy sources. Besides coal being the most dependent source for

power generation, its imports have grown to 23% in 2014 and to 28% in case of oil in meeting our energy needs. Still around 80% of the rural households use solid bio fuels in meeting their energy needs and a little less than half of them have no access to electricity. Poor quality and service of the supply is also a headache.

In the recently concluded CoP21 India has tried to balance its economic growth numbers and carbon emissions without a clear cut goal. But being a major contributor to the global emissions with over 4% and a part of the climatic change pact, India has significant role in going with the treaty. India has to reduce its carbon footprint by 33-35% to 2005 levels by 2030. Thus the main area of concern for the country is the reduction of emission intensity targets, which is the volume of emission per unit of GDP. Going by the numbers India will need roughly 175GW power production capacity from renewable sources by 2025.

The government plans to harness the untapped potential of renewable energy sources such as solar, wind, biomass, hydro and tidal energy. They all together now contribute about 13% of the total installed power capacity at the end of 2014. The total installed capacity of the country is as follows: 22,465 MW (wind power), 3,062 MW (solar), 4,272(biomass) and 3,990 MW (small hydro). The long coastline of the country of about 6000km opens up the immense potential of generating at least 35000MW of tidal energy.

The Renewable Energy Sector in India has tremendous growth opportunities. It can bring in universal access to energy. Many countries have already made their word to India in joining in this

mission of transformation for a bright future. India has both the expertise and experience in providing the renewable energy. It is the most feasible and viable source of energy to bring in electricity to those 240 million people who live in the shadows. As I said earlier there are a lot of opportunities, but they never come without challenges. It is the political willpower and economical foresight that are needed to bring in such a change that will have far reaching effects. Adhering to the global standards on climate and energy security fronts is very important for the country to maintain its international relations. What happens in India will influence the global energy economy.

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# **SWIMMING WITH THE CONSUMERISM TIDE**

## **E-COMMERCE IN INDIA – THE PAST, PRESENT AND THE WAY AHEAD**

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Every second, three Indians experience internet for the first time in their life and this trend only becomes more profound by the day. The revolutionary invention called the “internet” has successfully touched every aspect of human life and has transmogrified the way businesses work in the modern world.

### **INTRODUCING INDIA TO THE DIGITAL ERA:**

E-commerce was not a global phenomenon until the latter half of the 20th century. It was not until 1990 that people discovered the ease of doing business using electronic media for transactions. With the LPG reforms in 1991, India became open, not just to liberalized trade but also to any technical know-how from the West that could put the country on the targeted growth trajectory.

The very first instance of e-commerce in India was in 2000, when the IRCTC allowed online passenger reservations. This was followed by Air Deccan and a few other local airline players who introduced online air-ticketing to eschew undue fees to travel agents and make the whole ticketing process more transparent.

Today, the e-commerce sector in India has grown to a whopping \$23.39bn industry. The trend projections show that if e-commerce continues to grow at the current pace (75.8% in 2015), it is likely

to reach the \$100bn mark by 2020. With increasing internet penetration, growing number of smart phones and the largest global population of millennials, it would not be a clichéd prediction but a reliable truism that e-commerce will play a pivotal role in the Indian retail sector.

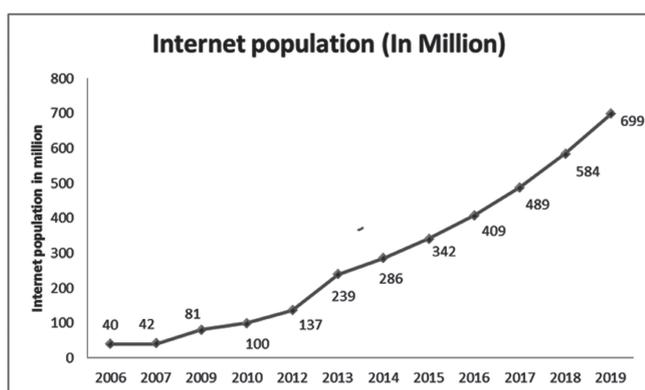
### **THE CHANGING SPECTRUM OF E-COMMERCE SERVICES:**

The term “Electronic Commerce” is used often with the limited meaning of “online shopping”. But only about 61% of “e-tail” trade relates to lifestyle. E-commerce today covers a much wider spectrum of services and the scope of it is only increasing. B2B (Business to Business) and B2C (Business and Consumer) businesses are proving to be major contributors to e-commerce’s share in the total retail trade in the country. E-commerce today includes job search, matrimonial sites, e-ticketing, tourism, hotel booking, e-learning portals, shopping and all allied services that require highly skilled individuals with specific subject knowledge.

### **PAY AS YOU GROW: E-COMMERCE AND THE INDIAN ECONOMY:**

The E-commerce umbrella of services has proven to be a boon to emerging economies like India and China because it entails a series of

infrastructure development that could help the copy infrastructure in these countries. With e-commerce giants like Flipkart and Amazon jostling with their “throw away prices” and “attractive discounts” not just are consumers happier, even economists believe this would ultimately lead to idiosyncratic infrastructure like specific distribution networks. Internet penetration in India has grown from a mere 15% in 2012 to 32% in 2016.



This graph shows the projected number of internet users by 2020. This number could be attributed to cheaper access to internet (3G & 4G) and exponential growth in the number of smart phone users. E-Commerce has also helped indigenous industries by extending credit facilities to small start-ups. This is adopted from the “Alibaba” model, China’s E-Commerce giant which extended credit facilities to infant entrepreneurs. The funds for this service came from the payments that were put on hold to the seller until the consumers attain physical possession of the goods. This was undertaken by “Amazon India” that advanced loans to the tune of Rs. 300 crores in the past decade. Paytm, India’s largest e-wallet currently operates with 120 million accounts and by the end of this year the number is said to grow to 200 million. On the economic front, e-commerce

firms have revolutionized supply chain management and ensured the burgeoning middle class population of India to get their products at the most competitive prices, even if it comes at the cost of their own profits. Statistics show that e-commerce services to the urban population accounts only for 51% of the total services. 40% of the demand comes from Tier 2 and 3 cities and the remaining 9% comes from rural India. These numbers become important because as demand for e-commerce services from rural India expands, this would inevitably lay the path for better infrastructure to facilitate logistics like faster delivery of goods to these regions. Given this trend, we could finally be looking at a correction in the regional imbalances at least in terms of infrastructure.

#### **NEED FOR REGULATING E-COMMERCE AND THE FUTURE OF E-COMMERCE IN INDIA:**

E-commerce has its own share of downfalls. For instance, “Brick and Mortar” retails have taken a heavy beating and are unable to compete with the slashed prices that e-tailing sites have to offer. Some of the grey areas in e-commerce that should be brought under Government regulation are as follows:

##### **➤ FDI IN E-COMMERCE:**

This has been a long debate in the retail sector. Whether or not to liberalize e-tail and allow foreign players has been deliberated upon by the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce, Government of India. The present policy allows for 100% FDI only in B2B firms and restricts FDI in B2C companies. A complete restriction has been imposed only on foreign single-brand retailers. With trade policies

becoming more liberal by the day, India might be forced to allow 100% FDI even in B2C businesses. This could mean a potential threat to completely wipe out local “brick and mortar” retailers or even worse, they could be replaced by a set of big foreign players turning into oligopolistic sellers.

#### ➤ **DECLARATION OF SALES VOLUMES:**

The Government of India has imposed rules for e-commerce sites with an annual turnover of greater than Rs. 10 lakhs to declare their total sales volumes and revenue. The sales of such companies have come under the scanner due to sharp rise in sales that peak during discount offers and often go unaccounted for. The government has also put in place restrictions on discount sales with a view to protect local “brick and mortar” retailers.

#### ➤ **TAX OBLIGATIONS:**

It was not until the 2015-16 budget that tax obligations of e-commerce players were clearly defined. These companies have for long not been covered by VAT requirements and making unscrupulous profits that resemble those of unorganized local shops, but only of a much greater magnitude. Recently, Amazon India was subjected to legal proceedings after it evaded VAT to the extent of Rs. 2,000 crores. Also listed were players like Flipkart, Snapdeal and Myntra. Thus, tax reforms are a much needed game-changer in the e-commerce sector.

#### **CONCLUSION:**

With 60% of the Indian population being young and the entire cohort joining the productive class in the next decade, it would not be wrong to say the e-commerce and m-commerce are what

would define Indian Consumerism in the coming years. The government must understand that e-commerce is not just a highly sensitive but also a significant player in the Indian economy. Thus, policy reforms must aim at the twin objectives of both promoting and regulating the e-commerce industry.

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# Foresight of Literacy rate in India by 2025

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The National Literacy Mission defines “Literacy as acquiring the skills of reading, writing and arithmetic and the ability to apply them to one’s day-to-day life.” The International Literacy Day is celebrated each year on September 8th with the aim to highlight the importance of literacy to individuals, communities and societies.

## Objectives:

- To analyze ways to enhance and improve the literacy rate of India
- To understand the factors that is related to the development of literacy rate in India
- To know the capable measures to increase the literacy rate of India up to 100% by 2025

## Introduction:

In India, Literacy acts as a prominent key towards the socio-economic progress of the country. Illiteracy has been one of the very crucial issues to be considered for the advancement of the prevailing socio-economic status of India. It is very intriguing to see how the Indian literacy rate has grown over the years and has significantly contributed to the country’s progress. Many factors are involved for such a rapid improvement in literacy rate.

Although schooling is free and compulsory from 6–14 years of age, it does have certain

shortcomings such as inadequate facilities, lack of willingness to educate children, etc. There is a wide gender disparity in the literacy rate in India. Approximately 40% of students, mostly girls, drop out by secondary school. It is estimated that by the year 2020 over 50% of the illiterate population will live in India. So there is a dire need to take measures to prevent such possibility of illiteracy rates in future India.

According to table 1, during 2011 there is a vast difference with relation to literacy rates in India, China and the world population. The data is alarming and need to be considered genuinely to make India to become successful globally.

**Table 1: Comparison of Adult and youth literacy rate during the year 2011**

Country	Adult Literacy Rate (%)	Youth Literacy Rate (%)
India	74.04	82
World Average	84	88
China	95.9	99.4

## Factors Affecting – Literacy Rate:

The absence of adequate school infrastructure like improper facilities and inefficient teaching staff is one of the main factors affecting literacy in India. There is a shortage of classrooms to accommodate all the students. In addition, there is no proper sanitation in most schools. The teachers also remain on leave most of the time. The study of 188

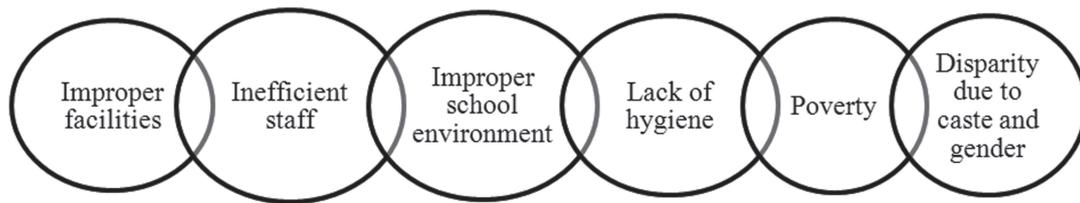
government-run primary schools in central and northern India revealed that 59% of the schools had no drinking water facility and 89% had no toilets.

Severe caste disparities also exist. Discrimination of lower castes has resulted in high dropout rates and low enrolment rates. Poverty is yet another drawback. "Poverty is the root of illiteracy and Illiteracy is the root of poverty"

Sons are thought to be more useful and hence are educated. Females are pulled out to help on agricultural farms and at home, as they are increasingly replacing the males on such activities, which require no formal education. The large

proportion of illiterate females is another reason for low literacy in India. Inequality based on gender differences resulted in female literacy rates being lower.

Indirect impacts on education of the child, such as distance of the school from home, quality of food provided in the schools have an impact on the child's thought process. Private schools are providing more opportunities and infrastructure facilities compared with government schools, and as a result parents want their children to get enrolled in private schools even though they charge more fee.



## Factors Affecting- Education System in India:

### 1. Education System Promotes Rat Race:

Our education system basically promotes rat race among our children. They have to read and mug-up an entire text book without having any understanding of it. So a student who scores 90 out of 100 and comes first actually remains a rat. I mean to say he or she does not have any analytical and logical skills that a child must need to survive in any profession, job role or even any simple task. It is time to change this type of derogatory education system.

### 2. Education Does Not Build Personality of a Child:

Unfortunately our education system is not helping to develop the personality of a child. Remember, it is personality that is more important than academic qualification. In Japan, the school students don't have any janitors, they clean and keep their respective classrooms clean which teaches them to respect all kinds of tasks and act with responsibility for the task given. There are many such examples for school system in different countries that include value education to their curriculum.

Meanwhile our education system, it demands just mere grades or numbers from a child irrespective

of his /her personality. Hence a child might not be able to develop a good personality and emotional intelligence. So this is another flaw in our education system.

### **3. No Critical Analysis, only Following the Establishment:**

Our children are not able to do critical analysis of anything, for example our history, culture and religion. They take the line of establishment or the views of predominant majority.

They are simply not able to look at things from their own perspective. If you want a society to become a lot better, then we must develop a culture of looking at things critically.

We are simply failing to do this because of our education system. Children must learn to critically examine our own culture and other established narratives.

### **4. Too Much Parochialism Rather Than Global Outlook:**

Our education teaches too much of nationalism and it could create a negative mindset in our younger generation. Loving your country is a good thing but just blind love is dangerous.

### **5. Teachers Themselves are Not Trained and Efficient:**

To make things worse, our teachers themselves are not sufficiently trained to teach kids. They do not have proper training to impart values in children that are going to change the future of the country.

If they can teach properly, then the government does not have enough salary to pay.

Hence, to improve our education system teachers should be better trained and more importantly better paid.

You cannot imagine a country without respecting teachers.

### **6. Medium of Language of our Education System:**

This is also a big problem that needs to be addressed. We are not able to decide on the medium of language of our education system.

Still emphasis is given to English where majority of children cannot understand the language. So how are they going to understand what teachers are teaching?

Moreover, subjects like mathematics, physics and arts have nothing to do with the medium of communication. Hence, over-emphasis on English could be wrong.

### **7. Education given is Irrelevant to Job-Market:**

This is perhaps the most apparent failure of our education system that after completing graduation in any discipline students are not able to get jobs.

It is simply because skills that are required in a job market are simply not present in a fresh graduate. All that a student is taught in his entire school and college life is almost redundant for job markets.

Skill that is required by them is not taught in schools and colleges. Hence our education system is needed to be revamped and must be designed according to our economic policies.

## 8. Missing Innovation & Creation because Only Applying Western culture:

If we talk about the privileged children in India, even they are not able to innovate and create new things. Although they have everything that a child needs they still lack something in them.

What they are doing is only applying western culture and not being able to do something new. On the one hand, children are not able to go to schools and on the other hand, even if they are going, they are not able to innovate or solve the problems that the country is facing.

Hence, this is yet another fundamental problem with our education system.

## 9. Students Happy in Getting a Highly Paid Salary Job but Lacks Ambition to Become Entrepreneur:

Now, in college campuses, it has become a common thing that every young student is interested in a getting a job that pays them well. However, they would never like to become an entrepreneur.

This lack of ambition does not allow our country to excel in any field. This attitude of our children is making them slaves of few multinational companies.

Therefore our education system should be designed to make our children successful entrepreneurs rather going for a salaried job.

## 10. Gross Failure of Our Education System to End Social Disparity:

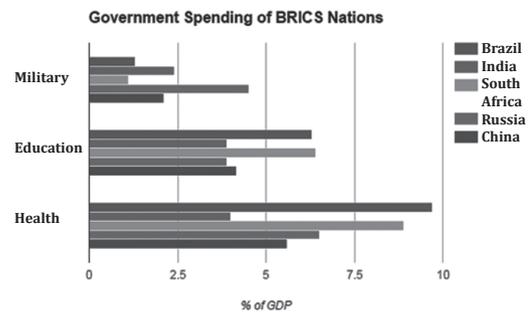
Last but not the least, failure of our education system is because it has not been able to reduce social disparity in our country. In fact, social

disparity has gone up.

It is such a shame that education itself has become a tool for creating divisions. A child of a rich parent would get good education and the child of poor parent cannot afford even a basic education.

Government should intervene and make education its prime responsibility.

### Figure 1: Comparison of BRICS Nations with 2016-2017 budget



How does government spending vary across BRICS nations? BRICS is the acronym for the association of five major emerging economies – Brazil, Russia, India, China and South Africa. As the total government revenue varies widely among the BRICS nations, budgetary allocation to a sector as percentage of GDP is a good indicator to compare government spending. Russia has the highest military allocation in percentage terms, followed by India and China. For education and health, India has the lowest allocation in percentage terms.

### Suggestive Measures to Improve Literacy Rate:

We spend only few percent of our GDP on education, so our government should make education its first priority, some of the countries with the literacy rate of 99% are allocating more than 12% of their GDP, whereas India allocates only

4.7% and stands in 143rd position comparing with other countries.

**Free Education:**

Free education system is more and more spread by the Government in various areas of India especially in the rural territories. Poverty is one of the main hindrances for a lot of parents in both city and village to send their children to schools. So the government is trying to provide the primary right of proper education to the students free of cost in various areas and it has become successful. In many areas more and more students are coming to schools for study. However, Government has to reach more rural areas to bring more students to school.

**Establishing new schools:**

Few decades ago, lack of schools was a huge problem especially in rural areas. Study in a private school is much more expensive and often the poor students cannot avail this facility. The students had to go miles after miles to reach their schools which created a lot of problems. However, in recent years, the government has established more and more schools in various rural areas and the problem is solved to a great extent. However, there is still many a village where the schools are far away. Many students, especially the girls face safety problems while going to these schools. Therefore, the government needs to take necessary steps on that it can bring more girl students into school.

**Various schemes:**

Government has taken various effective schemes to spread education in more and more students in various remote areas. Sarva Shiksha

Abhiyan Scheme is one of them. In this scheme, the government is providing education to many students absolutely free of cost. Mid-Day meal scheme has also been extremely successful in encouraging more students to attend schools. As the students are getting food in schools, the parents are sending their students to schools rather than in a hotel to become a child labor. However, it is true that in various places all these facilities are not properly received.

**Free Uniforms and scholarship:**

Recently government is providing school uniforms, text books, and some other necessary things to students in many places. Government scholarships are increasing the interest of lot of poor students for higher studies. Government is arranging various study courses and vocational trainings absolutely free.

**Proper use of fund:**

In India, Government is trying to generate more funds for students' education in various areas. However, recently the government is taking steps to ensure that the fund which is generated for the study of the children is properly used. The fund should reach the rural and remote areas where the students really need it. The Government is trying to assure that the fund is used for the proper reasons related to study only.

It is true that recently Government has taken a lot of measures to improve the education system in various areas in India. However, they need to continue this and generate more funds to make a proper infrastructure to make more and more children interested to study in schools.

**Safety Measures:**

Due to the lack of proper safety measures, there are so many drop-outs in both primary and in secondary level; the government should appoint at least two constables in front of every school for security measures.

**Arivoli Iyakkam:**

The Kanchipuram district, Arivoli Iyakkam is a registered institution. The main objective of Arivoli Iyakkam is to provide education to the non-starters and school drop outs in the age group of 15 - 45 years. This institution has successfully implemented non formal education programs in Kanchipuram district. Such schemes should be encouraged by the government among college students.

**Other measures:**

- Government should improve its sub-standard education quality and be on par with the excellent infrastructural development of private schools.
- Government schools should provide free education for union public service commission examinations.
- Government schools should adopt new technology based education such as smart boards to improve its quality of education.

- NGO'S and Corporates should include more CSR initiatives to introduce new programs to boost literacy rate in the country.
- The available sources of literate people must be used to the optimum extent to teach illiterates.

**Conclusion:**

In India we have adequate facilities and resources to improve the literacy rate. Common people's mind set should focus and give more importance to education. Poor and middle class people need to prioritize their importance to educating their children and themselves as equal to essential materialistic needs such as clothing, food, etc. Unless the Government creates awareness and provides ease of access to education programs and voluntary participation from parents and teachers in implementing the educational system in rural areas, the poor and middle income group people will continue to avoid educating their children and they will be concentrating more on employment for their basic needs alone.

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# HUMAN SKILL DEVELOPMENT FOR A BETTER FUTURE IN INDIA

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The principle of “Absolute Advantage” and the principle of “comparative advantage”, in general, are based on the superiority of one country over another country in producing a commodity. Absolute advantage refers to a country having higher productivity or lower cost in producing a commodity or service compared to another country. However, absolute advantage is neither necessary nor sufficient for mutually beneficial trade. For example, a country may be experiencing disadvantage (absolute) in the production of all commodities and services compared to another country, yet it may derive benefits by engaging in international trade with other countries, due to relative or comparative advantage over those countries. Likewise, absolute advantage is not sufficient, since the country may not have relative or comparative advantage. The principle of comparative advantage does not require a higher absolute productivity but only a higher relative productivity in producing a service or a commodity<sup>13</sup>. Pre-trade relative productivities / costs determine the pre-trade relative prices. They then determine the range of possible terms of trade for the trading partners. The terms of trade in general depend on demand patterns in those countries, which, in turn determine the gains from trade for each trading partner. And, a country’s comparative advantage in production of a certain good or service can change over the period of time due to changes in various

factors like resource endowment, specialization, government’s policies, quality and skilled population etc. In this study, competitive advantage is regarded as the absolute advantage.

In order to achieve pre-eminence in economic affairs, countries are relying increasingly on education and skill development for higher productivity and comparative advantage. The present Indian economic architecture has seen a new dimension with the introduction of “Make in India” and skill development programs by National Skill Development Corporation, National Federation of Indian Chambers of Commerce and Industry and the initiatives by the state and the central government. India is the 3rd largest economy in terms of Purchasing Power Parity (PPP) in the world and the 2nd largest populated country in the world. Yet, 52% (does not include allied sector) of the population continues to depend upon agriculture as their main source of income which contributes a mere 14.5 % to the GDP of the country in 2010-11 as indicated in reports of World Bank. As, we can see from Fig. 1, India and South Asia follow a similar trend with more of their labour engaged in agriculture compared to other developed countries which focus more on service and manufacturing rather than agriculture.

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<sup>13</sup> Satya Dev Gupta, Comparative Advantage and Competitive Advantage: An Economics Perspective and a Synthesis

Skill base of India is very low compared to other developed countries and, it is often referred to as one of the major factors which could prevent from sustaining a high economic growth<sup>14</sup>. A similar trend can be observed in other South Asian countries as well. The greatest advantage these countries have in common is the population and the availability of cheap labour but the major drawback is unskilled nature of the population. Hence, the greatest available resource is underutilized. A country has a comparative advantage in the production of that commodity which uses the relatively abundant resource in that country more intensively and all that the South Asian countries have to do is utilize the abundant resource<sup>15</sup>.

India is among the young and fairly new countries in the world, with the majority proportion of the work force in the age group of 15-59 years, increasing steadily<sup>16</sup> (predicting that India will have a working population of about 64% in 2020) and has the capability to become a worldwide supplier of skilled workforce. For that, it is imperative to understand the history and the journey of human capital formation and its development in terms of education and skill development in India to examine the existing available educational and skill development infrastructure, and evaluate its growth in comparison to the growing population and the cost associated with it.

It is also important to lay stress upon the fact that other South Asian economies can learn from the Indian model. Furthermore, all these nations need to work and develop together, in this regard.

Looking at the available infrastructure in terms of educational institutions in India, the All India Council of Technical Education (AICTE) in 2013 reported that, there are more than 4,599 vocational institutions that offer degrees, diploma and post-diploma in architecture, engineering, hotel management, infrastructure, pharmacy, technology, town services etc. There were about 1.74 million students enrolled in these schools in 2012 and there are about 1.3 million schools in the country enrolling about 227 million students. In the same year, the total annual intake capacity for technical diplomas and degrees exceeded a bit over 3.4 million, while there is an average of 13 million people expected to enter India's labour force each year for the next four decades, many have expressed concerns about the relatively jobless growth of the last fifteen years<sup>17</sup>.

87.8% of the population in this bracket has had absolutely no vocational training. Of the people who managed to receive vocational training, only 1.3 percent received formal vocational training. Mostly, skill deficit is a problem that plagues the unorganized/informal sector<sup>18</sup>. Though not exact projections, some figures on the dimensions of the skill-development problem are available from the 12th Plan. It is estimated that there will be a global skilled manpower shortage of 56.5 million by 2020. Of this number, India would be in a position to supply 47 million, provided adequate skills are delivered- if, from the existing 3.1 million per year,

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<sup>14</sup> S.K. Sasikumar, 2010

<sup>15</sup> Heckscher and Ohlin

<sup>16</sup> IRIS Knowledge Foundation report 2011

<sup>17</sup> Mehta, 2005

<sup>18</sup> Ernst and young report Knowledge paper on skill development in India Learner first, 2012

the skill development infrastructure expands to provide skills to 15 million. This will not only meet the annual workforce accretion of 12.8 million, but also possess enough surplus capacity to train or re-train those in the existing labour force.

The 12th plan by The Planning Commission of India has set forth a target of creating 50 million additional non-farm job opportunities in manufacturing and service sector. Moreover, the introduction of RTE and Sarva Shiksha Abhiyan (SSA), which is the principle programme for Universalization of elementary education in the country, has been harmonized with RTE, which mandates free and compulsory education for all children in the age group of 6 -14 years. SSA enhances access to primary education provisions for increasing the strength and infrastructure, as well as recruiting additional teachers to bring down high pupil-teacher ratio in all schools and improve the overall enrolment rate. The plan also targets to increase the percentage of workforce receiving formal training from present 10% to 25%. It also seeks to double the existing training capacity of 4.5 million to achieve the target of non-farm opportunities and also to improve access to formal training.

This would ensure higher returns and increase productivity, all leading to increased productivity and ultimately making India a haven for industries.

### **Suggestions:**

First of all we have to bring a change in the employment pattern as indicated earlier in the paper, most of the workforce in India is concentrated in the agriculture sector (58%) which generates very less revenue (contributes 14+3% to the GDP) for

that given population involved and as a result, many farmers live in poverty and are never able to get out of it. What we need to understand is why people are ready to work at such low cost (as also indicated earlier). Is it due to a lack of opportunity or lack of skill or lack of industries in the market? According to Human Resource of major firms in the market and also indicated in reports of Ernst & Young, a lot of companies are facing difficulty in filling up existing jobs due to poor skill set of the population which is of major concern. What we can assert from all this is skill development is the road ahead. Now, one might raise a question that even if we impart skills among people, will it really help the nation as, there might be no jobs. So, countries also need to stress upon the creation of jobs in the market and need a policy change to attract more investments, like the "Make in India" initiative and the ease in Foreign Direct Investment (FDI) policy, to setup more industries and expansion of the existing ones. The labour laws in many countries need to be worked upon and their implementation too has to be improved. Corruption too plays an important role here, as it hampers the implementation of the laws and leads to prosperity of a few and penury of many.

Upgradation of existing training centers and opening of new centers by the government is one of the many ways the situation can be improved.

Conscious of the need to involve the private sector in the modernisation of the ITIs, the government in the early 2000s decided to try the concept of public private partnership in the ITIs, with the necessity for the PPP approach emphasised by the Prime Minister at an award function of the

Ministry of Labour and Employment in New Delhi on October 4, 2004. And many upgradations were made by involving private sector in the field.

Public private partnership is envisaged in the form of active participation of the industry/private sector in every stage of design and implementation of this scheme and will be helpful in forecasting the emerging areas of employment in the country, development of instructional material for training and developing and designing the courses according to the needs of the industry, providing assistance in training of the trainers for improved efficiency, providing students with on-the-job training in their establishments, development of assessment standards, monitoring and quality assurance, assistance in placement, provide trade experts to work as assessors of competencies, donation of equipment to the ITIs/other training institutions.

Moreover, awareness should be spread among the people through various means like television, social media, rallies etc. and some efforts are required by the private players as well.

More schemes related to skill development should be worked upon by all the agencies and more funds need to be spent upon this sector by the government.

Moreover, the dropout out rate of children from schools is approximately 10.70 % in males and 15.2% among females between the age bracket of 10-14 years and 32.60% in males and 46.30% in females between the age bracket of 14-19 years<sup>19</sup>,

which is really high and needs to be worked upon. The main reason of them dropping out of schools and colleges is the economic reasons. Now, the major question that arises is, why do these children drop out, even when the government is providing free education under the RTE scheme? On further analysis it can be observed that these children dropout of schools as education is not considered necessary. These children are considered better off doing household work, farm/family business, taking care of sibling, performing outside work for payment in cash or kind, etc. So, minimum wages can be as low as 50-60 USD per month.

This problem can only be solved if they are paid a bit to study which would encourage them to study, the payment can be modelled according to attendance and the format under digital India can be used to transfer the payment. This fund could be generated by taking money from private schools and colleges and additional charges could be included in the fee of the government sponsored and run universities for this regard. The private educational institutes anyway enjoy many luxuries in terms of tax benefit and land prices from the government, so an additional minimum tax/fee could be charged. This model could be worked upon and tried on a small scale and, if proven to be successful could be implemented in all of India.

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<sup>19</sup> Borkotoky Kakoli and Unisa Sayeed, 2013, Educational progress in India in the Context of Out-of-School Children

# Demoralization in the Economy due to Demonetization

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On the evening of 8th November 2016, the government had rendered 86% of its monetary base in terms of high demonetization of 500 & 1000 rupee notes null and void. For 50 days, Honourable Prime Minister, Narendra Modi forced the nation to stand in queues to get their legitimate money. The reason given by our PM for sudden demonetization was to stop 'Terror financing and Black money'. Now let's find out what real impact 'Demonetization' has had on our society.

## **Scarcity of Cash:**

- Post Demonetization, many farmers couldn't purchase pesticides, fertilizers and other farming equipment fearing cash crunch.
- Small and medium enterprises failed to pay their daily wage workers which led to drop in production and at the same time, it created unemployment for many workers.

## **Parallel Shadow Economy:**

- In the heart of the tribal land, people in need of cash were getting Rs.300 or Rs.400 for old 500 rupee notes through middle men, which led to the emergence of parallel black economy due to lack of awareness.
- Even in urban areas, people with large sum of unaccounted cash desperately exchanged their old currency of 500 rupee notes for 400 rupees. This led to destruction of wealth of

many people and at the same time encouraged the black market.

## **Inadequate Payment Infrastructure:**

- Sudden cash crunch forced consumers and businesses to migrate to digital payment infrastructure. In India, Point of Sale terminals are very less in number i.e:1000 POS for a million people. Due to lack of POS, many stores lost their business and in turn the consumers couldn't buy desirable goods.
- Many of the ATMs were not calibrated to disperse new currency and some of the ATMs which were working witnessed long queues of people which created stress on payment infrastructure of the banks. This led to overall chaos and confusion among the people.
- Moreover in rural India, there are inadequate ATMs and bank branches which were not functioning properly.

## **Illusive impression of black money destruction:**

- Though the main objective of demonetization was to get rid of black money, the government failed to take into account that most of the black money is kept in the form of land, buildings or gold or kept abroad, only 4% of the total amount of black money is in the form of cash on which taxes are not paid. Thus, it leaves a false image of destruction of black money.

**Impact on GDP:**

- The demand in the economy has gone down leading to lower private investment and lower industrial growth, post demonetization.
- Automobile sales have dipped to 18% in December and home sales in top 8 cities crashed to 44% in October –December quarter.
- Two-thirds of small firms have seen a drop in business followed by 35% job cuts and 50% revenue dip.
- Investment proposal stood at Rs.1.25 lakh cr. in October –December quarter as against average of Rs. 2.36 lakh cr. in last nine quarters.
- The World Bank revised India's GDP growth downwards from 7.6% to 7%, post demonetization policy.
- This sudden step is a terrible stand back for Indian economy when our goal itself is to globalize rupee.

**Hardship for common-man:**

- In this whole process, more than 100 people lost their lives out of the shock triggered by this policy.
- The most badly hit are the small farmers, sellers, merchants, daily wage workers because of lack of proper planning, foresight and implementation of this policy.
- More panic mounted as the rules of the game changed everyday i.e., oscillating withdrawal limit for cash.

- Due to lack of demand for the farm products, many farmers could not recover their investment in perishable produces which led them to suffer heavy losses.

All the restrictions imposed by the R.B.I still do exist and no doubt that the P.M. has substantially enhanced his reputation as a strong leader but clearly the government was not prepared for this havoc on the Indian economy. In the words of Yogendra Yadav, "Mr.Modi had good politics but bad economics."

**Conclusion:**

- Thus, the P.M. was not able to deliver on GDP growth inflation, and bring back the black money from abroad, "yet the common man in the street thinks that this policy will eventually benefit him." But at present demonetization looks like Demoralization to the Indian economy. The government of India has taken a long view to curb the black money but in my view, "If you want to solve a mystery then you don't ask everyone in the country to submit their fingerprints and blood samples, instead you pursue the case systematically and make good judgmental decisions as to who the culprits are to solve the mystery." So far some have labelled this move as a 'Game Changer' while others call it as the 'Hollow move'. But the success of these policies depends on how much black money has been recovered by the end of this exercise and whether it can give India a cleaner cashless based economy or not.



# EFFECTS OF DEMONETIZATION ON LEFT WING EXTREMISM

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## INTRODUCTION

It has become almost a cliché to say that the LWE situation is the most serious internal threat facing the country. Naxalism has been operating in several parts of the country. It has been there from the late 60s and 70s and different parts of the country have been affected with different levels of naxal violence. If you look at the approach and the methodology, we use the word naxalites broadly, in order to avoid confusion with approach and methodology of the Maoists. The Maoists' objective is initially to develop base areas which they would like to develop as liberated areas. They typically operate in what they see as a perceived administrative vacuum in many of these areas. It is not something which they are responsible for; the responsibility is of the Indian State. There is an administrative vacuum because these are remote areas where the State Governments or the Central Government has not posted people in those areas. So there is a little bit of an administrative vacuum in many of these areas. There are some areas as in Malkangiri area. Many of you may not know that as a result of a dam which came up in late 1960s, there are more than 141 villages which got isolated. Believe me if I say today many people will be surprised those 141 villages have not been seen by anybody in either the State or Central Government since 1969. Nobody has ever gone to them. There

is not a single road, there is no BDO, no village officer, but we know they exist because the Maoists have come there, been their friends, indoctrinated them. You can call it neglect if you want.

Many areas in the fringes of the administration, where you had the weakness of the administration, are where the real basic growth of the Maoist movement has taken place. People are not posted in all these remote areas because of lack of development of infrastructure, schools, and hospitals and so on and so forth. It is termed as a punishment posting. Everybody wants to work close to urban areas, close to State capitals and for postings in these remote areas you don't send the best people sometimes and therefore you post people who are punished and persons who are punished go there and, literally, in one sense, take out their punishment on the people.

The Maoist strategy is that not only do they oppose development, development as they see it, development in a parliamentary democracy, but also they take advantage of this feeling of neglect in remote underdeveloped areas. It is a very significant aspect to be brought out. People do not obey the law and in many of the areas because of the lack of administration. It is the officers at the lower level who are all powerful in the absence of the district collector or superior officers who never visit. It is the village officer or the forest officer or

the sub-inspector in the police stations etc., who have authority. And the Maoists what they have really done is to show that this authority is really a paper tiger. They tell the villagers in an isolated area that they could go and catch hold of the village officer, catch hold of the forest guard, catch hold of the station house officer, tie him to a tree and tell the villagers, look this guy has been troubling you, he is just another human being and you can beat him up. He is just as much as flesh and blood as any of us. Take a gun, shoot him and once you have shot him, you realize in one sense that the myth of administrative power or the aura of state power which is there, disappears and you are able to get what they say the authority of the State in many of these areas. That is what has happened through violent attacks on the police, the field level functionaries etc. They say they are ineffective which is why when they attack a police station, the message they are trying to tell is, look if the police can't protect themselves, where are they going to protect you. They go after police informers. In last year's little over 500 killings, about 300 of them are allegedly police informers because they don't want anybody to be giving information to the State authorities. They deliver rough and ready justice. A climate of fear is created whereby if you want to survive in these areas, you have to be unflinchingly loyal only to the Maoists. Many a times, they come back and say we made a mistake and so on and so forth but by that time, the life is lost. The power of the left-wing extremist groups is immense and they can in one sense if they want to, bring many sectors of the Indian economy to its knees even today but they don't want to do that. They won't do it today because they know that the State will come down

very hard and they are not fully prepared to face the full onslaught of the State machinery and therefore they will move very slowly. This is how that we have lost areas and control over the last so many years.

If you see the violence profile of the left wing extremism itself, it has been going up year after year. Last year was possibly one of the bloodiest years and our estimate is this year it is only likely to go up whether we like it or not. Because for the first time I think in the last 8-9 months, the State has decided that it will tackle this head on. It will no longer allow this policy of continued expansion by the Maoists to continue unabated and the State has now decided that this must stop and it will take back areas which it has lost. Areas which you might call 'liberated' where officers would not go and where there is no civil administration. We are in one sense taking back those areas and much of the shouting and violence which is going on is because some of the areas we have, in fact, started to take back. It is a very small area, something like 4000 sq.km. We have now taken back areas which were not there in our control last year. It is now slowly getting into our control and we are getting back civil administration slowly into these areas.

Let me now give you a glance of what the left wing extremist violence is like. If you see the 908 killings which took place last year, it is the highest since 1971 when you had 849 killings at the height of what you call naxalism. We have crossed that. It is quite likely that it will go up in 2010 and perhaps even in 2011 before, in fact, the tide will begin to

turn. Almost 50% of the activities are in Jharkhand, another 20-25% in Chhattisgarh which is the real backbone of the left wing extremist movement.

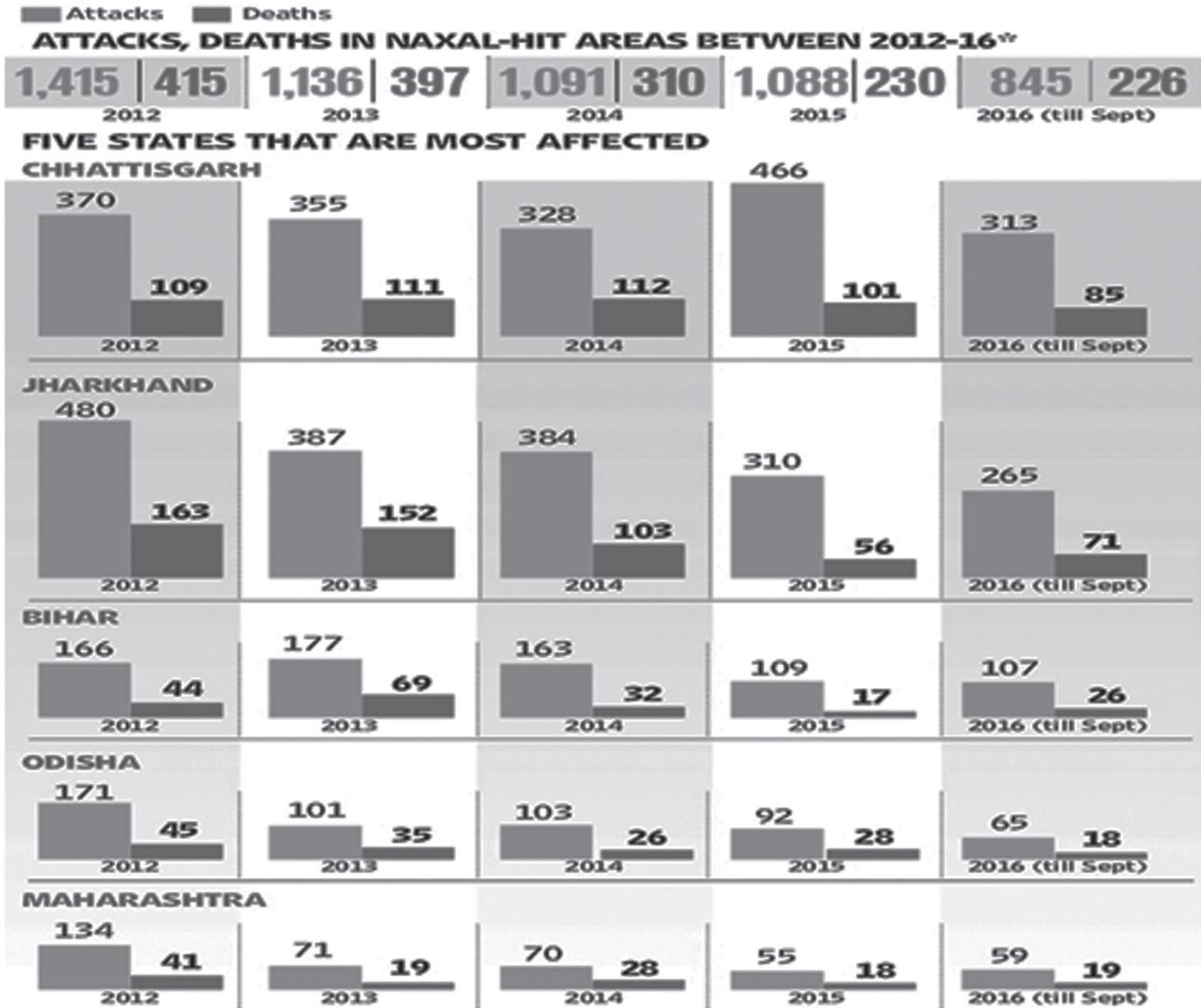
In Maharashtra's Gadchiroli district, they have got some portions under their control and you can see that to a certain extent the armed cadres are building up year by year. They have three basic modules, the real armed cadres which is the real fighting force and I wish to mention that we have not yet hit even 5% of this real hardcore force yet. All the fighting which is taking place is at the next level, the militia and what they call as the village supporters and so on. These are the ones with which we are interacting. The real armed cadres are yet to be tackled. So, that is why I say that we still have a long bloody battle ahead of us because we still have not hit the real fighting machine which is still held back. They don't want to bring it into direct conflict with state armed forces yet. The CPI (Maoist) is responsible for 90-94% of the incidents. They use IEDs considerably, mobilize through front organizations and are very highly motivated and very well trained. I am quite certain that there may be some ex-army or some paramilitary people who are helping them because they do a rigorous post mortem of their incidents. For every attack which has been done, they do a post mortem of the attack and they come out with an analysis which is as good as done by the armed forces of any country. They analyzed how they went about targeting the particular target, how they surveyed it for six months or eight months and how they detected various weaknesses. In some cases, when they actually carried out the attack, they found that their knowledge was not sufficient and they first faced

certain setbacks. Their analysis is very well documented. Like any other military doctrine, they bring out bulletins for circulation among their cadres so that everybody is aware of the lessons learnt.

The approach of the Central Government in one sense has been that you cannot deal with the naxal and the Maoist situation just by saying I will do socioeconomic development. It is a very crude illustration but somebody told me in Kolkata that the Marxists who wanted to settle the issue politically called the Maoists for a discussion on the respective strategy for people's development. The Marxists would convince the Maoists that their line is the correct line. After the statement of the Marxists was over, the Maoists leader said, "Have you finished"? The Marxists said, "yes, "now you listen to my line". The Maoists took out a gun and shot the Marxist representative and said, "anyone else want to come for political discussions?". In West Midnapore alone they have killed 159 party workers from the area committee member to the grass-root party workers from June to December 2009. You really cannot have any discussion with the Maoists because they don't believe in discussion as a matter of any principle. They only believe in armed struggle to overthrow the Indian state and therefore even a discussion is only a ploy to regroup or buy time because they don't believe in parliamentary democracy. It is only a strategy and I am sure if a few of their top leaders get arrested and so on, they will be far more willing to say they will come for talks just to get them released or regroup but they will not come until the pressure is there. My own assessment is that the Maoists are not under much pressure at the moment.

Therefore, all these talks of discussion and cessation of hostilities and so on and so forth are more to confuse the situation rather than anything else. My

assessment is that they will start feeling the pressure maybe about a year or so from now when we get our acts together fully.



SOURCE-Ministry of home affairs

**CURRENT SCENARIO –AFTER DEMONETISATION**

When Prime Minister Narendra Modi announced the demonetization on November 8, 2016 with many reasons on why it is [Rs 500 and 1000] currencies ceased to be legal tenders with the primary objectives among them was to hit the black money of the economy and extremist organizations such as Maoists from every part of

the country which are the big threat to the national security, it is not clear how much black money has come under the tax fold. Top officials sources in the police have confirmed that they [Maoists] located in the jungles of Chhattisgarh, Orissa and Andhra Pradesh border areas are desperate to get crores of rupees in the dumps exchanged for the new currency. And they are desperately trying to rope in contractors and ganja smugglers to get the old

notes exchanged. In these connections few contractors have (been) taken into custody and some have caught with money which they got from Maoists for exchange into new currency.

According to the report of the Chhattisgarh intelligence they have about Rs. 6000 to 6500 crore in cash and gold in the RED CORRIDOR area in Chhattisgarh alone. Mr. Srikanth DIG, Visakhapatnam range, pointed out the rough estimated annual income of the Maoists in the AOB region could range between Rs 300 to 400 cr., but five to seven years ago it was only about Rs 120 to 150 cr. and with the ganja smuggling taking the centre –stage it would have crossed more than 300cr. Basically, the main source of income of the left wing extremists is through extortion of the contractors and from ganja smuggling. A few years ago they used to keep the collected cash at safe place along with arms etc, but due to several factors they shifted their strategy and were converting cash into gold coins. Strict vigil at the banks and strict eye over the contractors and ganja offenders in the region by the police which forces them to shift their cash and gold from one state to another state like Chhattisgarh and Orissa but there also it becomes difficult for them with every passing day, which has created a desperate situation for LWE. Because of this desperate situation, they released a letter accusing the police having nexus with smugglers.

Experts of intelligence and counter terrorisms have different views on this, they says the impact on black marketers, criminals, Maoists and terrorists temporarily not a permanent. Along with this the experts on counter-terrorism also says this single step of currency reforms will not eradicate terrorism

entirely which emerges in several and ambiguous social, ethic and national interactions. The top ministers of the government said in Lok Sabha that insurgent group in north–east, Maoists and terror group in Kashmir have suffered a loss of around Rs 800 cr. This money was mainly used by them to sustain their operations, logistics and support their manpower, now that it has become scrap paper. One needs to look at the source of funding and not the means. The move of demonetization will not impact all sources of terror funding. India’s currently rank 8 in the global terrorism index among 10 countries impacted terrorism. According to the report of the Institute for Economics and Peace that ranks countries most affected by terrorism in the world which observe that the nature of terrorism in India is different than in countries like Iraq ,Syria ,Afghanistan and Pakistan,. Terror and insurgent groups are active at large level from Kashmir to north –east including separatist movement of Kashmir, so the government has banned 37 terrorists group including Islamic state and al-Qaeda under section 35 of unlawful activities prevention act, 1967. Roughly 0.05% of the total money circulation in India is used by terror groups for funding activities which are coming from sources like hawala, fake currency from Pakistan and extortion in north-east and taxation in Maoists infested areas, many terrorist groups have invested in real estate, NGOs as a front and self funding to sponsor its activities.

November 2015 report on terrorist financing to G20 leaders on action taken by the Financial Action Task Force said that India has frozen funds amounting to Rs 2.18 crore of banned terror group. It is true that the India has been the victim of

terrorism for more than decades. But India enacted anti-terrorist financing legislation only in 2010 by amending the Prevention of money laundering rules. In 2013 Fake Indian Currency Note was included in the ambit of UAPA making counterfeiting and its circulation a terrorism related offence.

The National Investigation Agency set up in 2008 after terror attack in Mumbai [26/11]. Now NIA (is) acting as a counter terrorism law Enforcement Agency to investigate offences related to financing of terrorism. Since then NIA has investigated more than 10 cases related to terror funding, and NIA were able to trace the funding of the banned terrorist with the evidence in the form of banking transactions, suspicious bank accounts, purchase of property etc. Terror group need ready cash for various bank operations and logistics support in their day to day use, for which they use hawala transactions and it is also a favoured channel to them.

Similarly money collected through taxes and extortion is stored in cash, so the demonetization move has majority affected this operation. The network for funding of the militancy and separatist movement in Kashmir and valley through hawala exists. Since 1989 which originates from Pakistan, separatist groups used militancy to garner further support from local population and used the money coming through hawala to recruit cadres and expand their areas of influence throughout the region and this is increasing day by day along with a big sum of cash transactions is reserved for the ground workers-prized assets of the both the militants group and the security agencies. Officials also says that in the recent years as militancy began

to wane down, militants in the valley and they don't have much cash for use because officials have recovered small amounts from dead or arrested militants, the documents which accessed by DNA reveals that the same cash in hand recovered from militants killed by security forces for the last three years. FICN pumped in the Indian boundaries through Nepal and Bengal borders. According to NIA chargesheet, high quality FICN with close and similar to the original currency is printed in Pakistan, annually an estimated R 70-100 crore against India, one third of the FCIN in circulation gets seized and rest gets observed in the officials banking channels. RBI data released in august this year, says that FCIN comprises 0.071% of the total currency in circulation [18 lakh crore].

FCIN accounts to a mere 400 cr ,although demonetization has been successful in widening counterfeiting business of Rs 500 and 1000 notes ,but the network in Pakistan still have the capacity of counterfeiting Rs 100 denomination currency of , the total FCIN detected by the banks in 2015-2016, 35% was Rs 100 denomination currency Ministry of Finance or MoF. As we know that LEFT WING EXTREMISM spread across 106 districts in ten states of India. Maoists have territorial control in tribal areas called as LIBERATED ZONE in which they have an illegal system of taxation for organizations, companies, civil contractors and tribal's and there is a fixed percentage levied on contractors, mine owners, coal mafia by the Maoists which are the backbone for the funding of the Maoists groups, intelligence officials estimate that the economy for Maoists activity in Chhattisgarh the worst affected from LWE violence to be approximately Rs 150-200 cr. Now Maoists group are forcing tribal and big

businessmen to get the old currency notes exchanged and pay the taxes in new Rs 2000 and 100 notes.

Maximum numbers of armed insurgent group are active in the North-east region. Extortion and money from real estate is a bulk of primary funding source of these groups. Along with the members of scheduled tribes residing in specified areas are exempted under section 10[26] of the income tax act, 1995 from declaring their income or revenue earned in this area and because of this exemptions the officials have doubts that insurgent groups may or likely to use bank accounts of tribals and proxies for channelizing their bad money. So the intelligence, police and IT officials need to be more vigilant on such suspicious transactions.

For the government, demonetization can be an opportunity to keep a close watch on the financial activities of armed group and clampdown at the right time; this can paralyze them for a long time. cops in Chhattisgarh and Jharkhand have the fear of misuse of JAN DHAN accounts by Maoists because the reports amid that LWE were forcing villagers in their strongholds to deposits money in their accounts , following the demonetization of higher denominations notes. Because of this police and intelligence units in Maoists insurgency hit Chhattisgarh and Jharkhand are keeping eye on JAN DHAN bank accounts. Police and intelligence officials from both the states have issued an appeal asking people not to allow Maoists to misuse their accounts to deposits illegal and extortion money. Districts authorities have been asked to convene a meeting to take preventive measures. Since the Maoists have significant amounts of cash and they

are desperate to convert and deposits currency through various means. Maoists are pressurizing their sympathizers/local industrialists/contractors/ mine owners/businessmen to exchange their old high denominations into new currency. Therefore the letter from the authorities has advised to maintain strict surveillance on all suspicious banking activity and warned of prosecution if the villagers allowed their bank accounts to be misused.

Demonetization leads to higher ever surrender of Maoists in a month, 469 Maoists and their sympathizers have surrendered since the demonetization announcement. Commodities of daily use by Maoists [firearms, ammunition and medicines] for cadres are badly affected. Along with this the government policies in LEFT WING EXTREMISM affected states and pressure built up by security forces for the past few months and the latest demonetization decision seems to be making very strong impact in the last 28 days which is the highest number. The regular crackdowns by the CRPF and local police forces in LWE affected areas which have been a contributing factor, the demonetization of old 500 and 1000 rupees notes has also played substantial part in the development which resulted the surrendered of 469 Maoists and their sympathizers since November 8 alone and more than 70% of the surrenders have happened in Malkangiri districts of Orissa. Officials says that the statistics of surrenders , compared with previous months and years , such a large number have not given up arms ever in such a short period. According to home ministry data, since 2011 till November 15, 2016 the total number of Maoists surrenders stands at 3766 out of which 1399 Maoists have surrendered in 2016 alone. The

officials says that several factors have contributed to the large number of surrenders including government's development activities in the LWE affected districts and clear message to Maoists and their sympathizers and the latest demonetization move has thwarted the Maoists as they are not able to launder the old currency stashes to their suppliers with ease.

The report of the INSTITUTE OF DEFENCE STUDIES AND ANALYSIS pegged the naxal's extortion revenue at Rs 140 cr. per year [2013]. Government's move to ban the country's biggest bank notes will cripple naxal activities more severely than any security operations has in the recent past, an assessment by highly placed intelligence and police officials. In naxal stronghold of Chhattisgarh, Jharkhand and Orissa the militants have buried their funds in Rs 500 and 1000 bills deep in thick forests of the three eastern states on the so-called red corridor. Security forces have now intensified their vigil after tips that the guerrillas might attempt to dig their expired cash holdings out of their jungle hideouts, the source added. Authorities have stepped up monitoring of all entry points to the forests where naxals could have dumped their funds underground. Some security officials however also warn that cash crunch could push the naxals to a reckless extortion overdrive for liquidity. Because the ultra-left militants get much of their financial supplies through extortion from contractors of infrastructure firm, illegal mining mafia in the form of Maoists tax from vehicles passing so-called LIBERATED ZONES in real belts. According to the state police of Chhattisgarh the naxals collect up to Rs 1,500 crore through extortion every year and the intelligence officials believe that the Maoists

could have as much as 7,500 cr buried underground in the real corridor. But given the expenditure incurred by the Maoists on intelligence gathering weapons and ammunition as well as medical emergencies, it is not yet clear how much they would be putting for safekeeping of their finance dumps in forests, but some of the data are:- Rs 1,500 cr money extorted in a year by Maoists in Chhattisgarh, 2- Rs 320cr money extorted in a year by Maoists in Jharkhand. During interrogation by the Chhattisgarh police, villagers confessed that the money was given to him by red rebels to convert from bank. Meanwhile all the Maoists affected districts and the neighbouring Telangana has been put on alert as Maoists are trying to move their money to get them exchanged. The news have come across the country about the misuse of JAN DHAN accounts by the Maoists and the state's banned rebel group who were forcing the villagers to deposits the illegal and black money in his account. Just for example the Tiritiya Prastuti committee, banned rebel group of Jharkhand has deposited around Rs 10 cr. in the account of villagers, where he asked them to deposits their money in their JAN DHAN accounts, old age pensions, scholarship scheme, MNREGs and other saving accounts. We are keeping a close watch on the accounts of villagers and they will be held responsible for such illegal transactions if caught, the alters about suspected transactions lies with banks, the same alerts has been sent to financial intelligence units, who refers these cases to appropriate authorities such as the NATIONAL INVESTIGATION AGENCY, CBI AND ED for further probe. Particularly the Jharkhand government has formed a multi-disciplinary task force comprising

officials from various departments to stop the extremists from getting their old notes exchanged in banks through villagers posters by rebel group in their stronghold and asking the contractors and businessmen to pay specified levies failing which they will not allow them to work because the government's move has virtually made the rebels-BANKRUPT. The naxal belt of Jharkhand has not gone untouched, a day after the move was announced, and Jharkhand police arrested four men near Ranchi while they were allegedly trying to deposit Rs 25lakh in a rural branch of the SBI. The money reportedly belonged to the Maoists organization "PEOPLE'S LIBERATION FRONT OF INDIA".

**The following questions need to be answered –**

- What has made it possible for the Maoists to sustain their movement despite relentless government crackdowns?
- Government tackles this issues with police action, while simultaneously pursuing development of LWE affected regions, the government needs to balance its response, how
- The security forces can only deal with the problems but not solve it. As far as the dialogue is concerned a lot of negative connotation has been attached to the term; dialogue' do we actually legitimize the naxal movement if we negotiate with them
- Government should evolve a suitable institutional and grievance redressal mechanism to ensure the rights and

ownership of tribal in respect of land and resources associated with it?

- The tribal's have been trapped between the legitimate sovereign power of the state and the illegitimate coercive power of the extremists in the Maoists affected areas, who deliver instant justice through peoples' court and other informal devices, how it should be rectified?

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# CURRENT SCENARIO OF CASHLESS ECONOMY IN INDIA

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## INTRODUCTION

It is said that “money is an idea that inspires confidence”. From the evolution of different forms of money from stone to plastic, money was in practice, among all highly accepted and widely used form of money or currency was paper currency. But the most significant development since the November 8, 2016 announcement of demonetization is the shift in the legitimizing narrative around the high value denomination of currency note ban. The Prime Minister in his address to the Nation said, “There comes a time in the history of a country’s development when a need is felt for a strong and decisive step,” and propounded two primary reasons for this decision. One was to check “enemies from across the border.... using fake currency notes”. The other was to “break the grip of corruption and black money.

Dr. Manmohan Singh in his article, highlighted both these intentions are to be honoured and deserve to be supported whole-heartedly. Counterfeit currency and black money are as grave a threat to the idea of India as terrorism and social division. They deserve to be extinguished using all the firepower at our disposal. With this background, this article highlights four areas, initially it starts with question, why India should be cashless now?, answering this question, secondly, it deals with Current Scenario of Cashless Economy in India,

thirdly, it stresses on the collective responsibility, ultimately it concludes with suggestion.

## Why India should be Cashless Now?

One immediate outcome of a cashless India would be a sharp rise in Indirect Taxes compliance. Traders, small businesses, shopkeepers, and consumers routinely use cash as a means to avoid paying service tax, sales tax, VAT and any number of indirect taxes and fees. This mindset needs to change if the imminent Goods and Services Tax (GST) regime is to actually work. Brutally enforcing a cashless payments system – by sucking out 86 per cent of paper money and letting people flounder for a period in a condition of acute paper money scarcity – is perhaps the quickest means way to get there.

The second reason is big beneficiary of a cashless India is finance capital. At present, India’s low-income households access credit through informal systems – be it a pawn broker or employer or a relative with cash savings. This informality has been partially dented with the arrival of self-help groups that can access formal credit. But given India’s population, both the debt and the savings of the working classes constitute an enormous market that global finance has so far been unable to access.

Forcing them to shift to cashless payment platforms instantly formalizes this world of informality. As the Prime Minister himself has reiterated many times, the mass opening of bank accounts under the Pradhan Mantri Jan-Dhan Yojana is a means towards financial inclusion, but in reverse: it channels personal income (wage/cash transfers) to financial markets via insurance and pension schemes such as the Pradhan Mantri Suraksha Bima Yojana and Atal Pension Yojana. Thanks to forced deposits, unlike cash in a piggy bank or a plastic pouch, money in Jan-Dhan accounts can serve as a fresh source of liquidity for financial institutions.

The third beneficiary is the digital sector, which enjoys a complex but symbiotic relationship with finance capital. Digital payment apps and e-wallet companies have enjoyed record downloads and deposits post – November 8. Their massive ad spends were possible: courtesy of the financial institutions that have invested in these finance technology (fintech) businesses.

Ultimately, in a global scenario of debt-soaked slowdown, extreme income inequality, and stagnating real wages, capital accumulation is only possible through a mechanism that systematically administers an upward redistribution of income – from the 99th percent to the 1 per cent. While an indirect tax regime like the GST would accomplish this objective for the state, the integration of personal savings into the global debt economy would manage the same for finance capital. The primary requirement in both cases is to capture the circuits of capital and commodity circulation that lie beyond their respective domains of taxation and

credit – that is, the entire cash economy. The drive towards a cashless society is hence the lynchpin for securing the supremacy of the state-finance nexus.

### **Current Scenario of Cashless Economy in India:**

Across the Globe, irrespective of their development, every country witnessing India with surprise expectations, since last week of November 2016, digital payments have hit record transactions: PayTM said there was a 200 per cent increase in its mobile application downloads and a 250 per cent increase in overall transactions; MobiKwik said its user traffic and merchant queries increased by 200 percent within a few days of the government's announcement. Companies such as Oxigen and PayU have also seen a rise in their service usage. This trend is certainly heading in the right direction if we are moving towards a cashless economy, but the speed of technological development and its integration into our economy far supersedes the speed of defence mechanisms and protocols that could mitigate cyber attacks. Cyber security is unparalleled and reactive in nature, which begs the questions: is it safe to utilize these new payment platforms?

How, as a coin has two sides, in the same way even cashless economy/digital mode of cash transaction has its challenging phase. There are ample chances for attack but easier methods that anyone with basic IT skills can deploy. These include creating fake mobile applications and spyware that steal information, or social engineering tactics that make you reveal your login credentials. Forums on the Internet are flush with step-by-step instructions on how to create fake websites that imitate digital payment platforms.

The larger concern, however, is that if companies like HDFC and ICICI, which are most likely proactive in updating their security systems, also experienced cyber-attacks, what does that imply about unsuspecting users? Most new users, especially street vendors, have been forced onto the digital payments bandwagon. Are they aware of the security risks involved? And even if they are, what precautions can they take to minimize the potential damage from attacks?

### **Collective Responsibility**

Who is responsible? If any rules and regulations, programmes and policies or any new initiatives proposed by the government since independence, without saying well understood that everyone's responsibility. Companies, customers, and the government should collectively participate to mitigate cyber attacks and minimize its damages. First, all companies that offer platforms or services enabling digital payments should increase awareness among their customers of the risks, and educate them on ways to secure themselves. They must employ behaviour analytics and pattern analysis at their fraud prevention departments to predict suspicious behaviour. They must be proactive in looking out for any fake applications or websites that masquerade their service. They must monitor discussion boards, social media platforms, and forums that discuss hacking and fraud tactics, and implement measures to thwart such tactics.

Secondly, the government should check if the current policies regulating these platforms are adequate and update them regularly. People must be educated on the risks involved, strict policies

must be enforced, and companies accountable for not meeting security standards must be held. Benefits that come from overlooking security precautions must be minimized and public-private partnerships (PPP) on live information sharing about cyber attacks and fraud should be strengthened.

Thirdly, customers should educate themselves about the risks involved and take precautions. They must minimize vulnerability with two-factor authentication and change their password frequently. They must check the authenticity of applications by looking for the number of downloads and read reviews by other users – the higher the number of downloads and reviews, the higher the chances that the application is legitimate. Customers must also check for other application releases from that developer. For instance, they must check the Website's authenticity by searching for the proper spelling of the Web address, check if the Website is secure by looking out for green padlock symbol on the left side of the Web address, and keep Web browsers updated so they can recognize illegitimate sites easily.

Prime Minister Narendra Modi recently asked people to embrace the digital cashless world, reiterating that digitization of economic activities is here to stay. In the midst of going cashless, we should not cast a blind eye to the security aspect of digital payments. Everyone should share a collective responsibility to build a safe and secure digital infrastructure.

### **Conclusion:**

One among the initiative of Cashless economy under the umbrella of Prime Minister's flagship

programme Digital India. If Government of India, Companies and Customers with their triangular support and co-operation and safe and secure digital infrastructure, hundred percent literacy in the knowledge economy especially computer literacy, avoiding jobless economic growth, increasing the job avenues according to the trend of increasing young people in India, uninterrupted power supply with free accessibility of internet connection. Hands on experience to tackle cyber attacks through proper protection and security efforts by the government may create accommodative positive impact of cashless economy in India very near future.

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# THE HOUSING SHORTAGE IN INDIA

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## 1. INTRODUCTION

**“Owning a Home is a keystone of wealth...both financial affluence and emotional security”**

**-Suze Orman**

Food, clothing and shelter are the three basic necessities of human life. While food and clothing are necessary for survival, shelter gives the social security for an individual. The importance of housing is universally acknowledged. Even during ancient days, the Neolithic man built durable houses like beehive huts, pit dwellings and lake dwellings etc., with the available means of resources. With advancement in civilization and development in the needs of people like sanitation, privacy, environment, location of house, better facilities like bringing electricity, housing needs have gained further importance.

A house determines the socio- economic status of an individual. It acts as a collateral security for the poor households at the time of adversity. Housing is a fundamental need, which has its impacts on the other aspects like health, sanitation etc., It also furnishes the physical & mental strength and also the psychological base to the individuals. This clearly indicates that the house is a part and parcel of human’s life. In the recent scenario, the goods such as mobiles, vehicles, refrigerators, etc., which were considered a luxury have become affordable, Whereas owning a shelter, which is a basic necessity has not yet become affordable to every citizen of the country.

## HOMELESSNESS

Homelessness is quite a big conundrum in India. It destroys the sanctity of India and contributes to the increasing crime rate in the country. Homeless people constitute about 0.19% of the total population of India<sup>20</sup>. A study on the total homeless people in the country indicates that Uttar Pradesh accounts for the highest share of 18.56% of homeless people, followed by Maharashtra with 11.9%, Rajasthan with 10.24%, Madhya Pradesh with 8.26% and Tamil Nadu with 2.87% of the country’s homeless people. This number does not include the poor who have accomplished to build built unstable tent like shelters.

URBAN HOUSING	RURAL HOUSING
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## 2. HOUSING SHORTAGE IN INDIA

Like any other product or service, housing also has its own demand and supply side. This housing shortage would not be a problematic phenomenon if there is no mismatch between the people for whom the houses are built and those

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<sup>20</sup> According to 2011 census – [www.censusindia.gov.in](http://www.censusindia.gov.in)

<sup>2</sup> According to report on nearly 2 in 1000 is homeless in India – [www.timesofindia.indiatimes.com](http://www.timesofindia.indiatimes.com)

who need them. One of the conundrums of housing market in India is that on the one hand, we have huge housing shortages while on the other hand houses are kept unoccupied by humans and are vacant. According to the census report of 2011, it is found that nearly 8% of the houses are lying vacant. Slum clearance boards are allocating houses to the poor people, but those are either kept vacant or given for rent. Yet those people still live in slums. Though housing finance markets have been experiencing buoyant growth in recent years, there is still a steep increase in the homelessness among lower segments of the society.

In urban areas, the people who are homeless and cannot afford a proper shelter are forced to live in slums while another significant population is forced to spend their nights on platforms, roads, railways, parks, footpath and other public places. In rural India, even though the slums don't exist, the absence of shelter is largely observed which is contributed by a large population of weaker sections. A large population of weaker sections contributes.

### **3. URBAN HOUSING SHORTAGE IN INDIA**

The common determinants of housing shortages in India are rapid population growth, decay of existing housing conditions, and break down of joint families. The urban housing shortages are contributed by migration, limited land supply, competing land use which includes the use of land dedicated for one use only like residential, commercial, industrial and recreational purposes. The migration includes the rural – urban migration and urban- urban migration. These migrations are the main catalyst for the development of

urbanization. Since the urban areas are highly populated and occupied by the people who are in the need of studies, corporate professions and other related professions. This urbanization also led to the rapid increase in the number of slum dwellers. The lower income groups in the urban areas are forced to live in slums and other informal settlements. In urban areas we can witness a scenario.

where there is housing shortages having increasing number of slums on one side and growing stock of vacant houses on the other side. This results in widening the gap between the demand and supply sides of housing. According to the census 2011, the urban population of the country was 31.1 % (377 million) of the total population of which the 65.5 million people residing in the land is expected to touch 104.67 million by 2017.

### **4. RURAL HOUSING SHORTAGES IN INDIA**

The acquisition of land is not just enough for a proper housing. The housing requires construction activities, which involves the huge finance. The rural India has its own population density and also its low level of economic activity. The rural areas are also face weak institutional capacity for the rural finance providers. The main reason for rural housing shortages in the country is the lack rural finance, lack of computerized land records, lack of client information. Affordability is the main term to be quoted while discussing the issues of rural housing. Despite the availability of land, the rural people should be affordable in purchasing land for the construction of their houses. This affordability is the function of various inputs like finance, land,

technology, building materials and income of the people.

**TABLE 1 – ESTIMATED HOUSNG SHORTAGES IN INDIA**

CATEGORY	SHORTAGE (in million units)	% To Total	CATEGORY	SHORTAGE (in million units)	% To Total
EWS	10.55	51.18	BPL	39.3	90
LIG	7.41	39.44	APL	4.37	10
MIG	0.82	4.38			
TOTAL	18.78	100		43.67	100

According to the report of working group of twelfth five-year plan (2012-2017) it is estimated that the housing shortages in rural areas is at 43.67 million units. The urban housing shortages are estimated to be of 18.78 million units. It is found that though there is rural urban migration exists; rural areas have the maximum housing shortages compared to urban housing shortages.

- Urban housing shortages (2012-2017) report of the ministry of housing & urban poverty alleviation to estimate the urban housing shortages for the 12th five year plan (2012-2017)

**TABLE 2 - NEED OF HOUSING IN INDIA**

(Units in crores)

PARTICULARS	URBAN AREAS	RURAL AREAS	TOTAL
Current Housing Shortages	1.9	4.0	5.9
Required Housing units by 2022	2.6-2.9	2.3-2.5	4.9-5.4
Total Need	4.4-4.8	6.3-6.5	10.7-11.3

Source: Funding the vision – housing for all 2022, KPMG India Report.

It is found that the large number of housing needs are required in rural areas with the need of nearly 6.5 crores of which the already existing shortages are 4.0 crores. This gives the clear picture about the comparison between urban and rural India where the housing needs for 2022 may further increase if the necessary steps are not taken immediately. These housing shortages needs should be considered as an important issue since it will reflect in the chain reactions dealing with protection, privacy, health, sanitation etc.,

## 5. THOUGHTS FOR FUTURE ACTION

- There is need for exploring the possibilities of developing the low-cost alternatives to traditional building materials and technologies. It helps in saving the time and cost at the same time not compromising the quality and long-lasting durability. The Government can encourage the low-cost, pre-fabricated house construction companies to have a tie-up in building the houses by which time, materials, man work is saved so that it enables to cover the vast population.
- From the approaches followed by countries like China and Singapore, the take away for India is that the government of India has to provide incentive to private sector to increase their participation in creation of housing stock. This would encourage the Private Public Partnership (PPP) model in the housing sector. Also the government can enable local bodies by giving them mandate to develop the effective affordable housing program by decentralize the decision making.

- The extension of housing finance market is required by means of encouraging the housing finance companies for creditability and to be financially supported with the sustained growth rate for long time period.
- There is a need for three stage developers in enhancing the housing finance and constructions.
- **ENABLERS** – Self –help Groups (SHG), NGO’s and registered societies, Panchayat Presidents to identify the genuine user groups and acts as the channels of communication.
- **PROVIDERS** – Financial Institutions, Government Departments, Bankers, NBFC’s, HFC’s to provide the approvals, incentives, technical and financial support.
- **EXECUTORS** – Government execution by linkages with rural masons groups through MGNREGA, PPPs, and tie-ups with low cost,

pre- fabricated house construction companies to execute the process of construction of houses.

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# IMPACT OF SGSY ON INCOME, SAVINGS AND ASSETS IN MADURAI DISTRICT

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## INTRODUCTION

Women workers contribute about 3 per cent of the Indian workforce and their share in employment has been on the rise (NSSO data). Most of these workers are based in rural India. This is because typically rural areas are poorer, and poor women are more often in paid employment than women from better off households where social norms and patriarchal values restrict women's entry into the labour market. While the unemployment rate is usually low in developing countries and in India, it is clear that there has been a rise in unemployment over the last few decades. In the late nineties for the first time, rural female employment especially for the age groups 15 to 19 and 20 to 24 was observed to be substantial standing at 4.2 per cent and 4.9 per cent respectively. It has further increased in recent years.

More than four fifths of all women working in rural areas are engaged in agriculture which is the least productive sector in India and characterized by widespread poverty. While there has been a decline in the share of men in agriculture, the share of women in agriculture has been on the rise. State level NSSO data shows that there has been a rise in female agricultural workers in 12 out of 15 major states in India and in some states; women constitute more than half of all agricultural workers (Haryana,

H.P, Maharashtra, Rajasthan and TamilNadu). It appears that while men often move out into other activities or migrate to other areas in search of work, women have fewer options. They remain as a flexible labour force in agriculture as own account workers, casual agricultural workers or unpaid family workers. Rural female unemployment has also been on the rise and is higher than rural men's unemployment rate. Poverty among women is about 5 percentage points higher than that among men even when one assumes no intra-household differences in consumption. Also with standing opening up of job opportunities for women in recent years, the participation of female in labour market may remain low due to cultural and ethnic factors. The large parts of the female adult population in many of the states that remain outside labour force constitute the untapped potential for development. Stronger labour mobilization among women is a distinct possibility especially as sustained fertility decline is likely to continue for the next three decades thereby freeing women from the responsibility of motherhood for large periods.

## SGSY- a description

On 1st April 1999 the IRDP and allied programme including the Million Well Scheme (MWS) were merged into a single programme

known as Swarna Jayanti Gram Swarozgar Yojana (SGSY). The SGSY is conceived as a holistic programme of micro-enterprise development in rural areas with emphasis on organising the rural poor into self-help groups, capacity building, planning of activity clusters, infrastructure support, technology, credit and marketing linkages. It seeks to promote a network of agencies, viz the DRDAs, the departments of state governments, banks, NGOs and Panchayat Raj Institution (PRIs) for implementation of the programme. The SGSY recognizes the need to focus on key activities and the importance of activity clusters. The programme has in-built safeguards for the weaker sectors. It insists that 50 per cent of the self-help groups must be formed exclusively by women and that 50 per cent of the beneficiaries must be SCs and STs. There is also a provision for disabled beneficiaries. The programme is credit driven and subsidy is back-ended. The credit and subsidy rate is pegged at 3:1. The subsidy is fixed at 30 per cent of the project cost subject to a maximum of Rs. 7,500/- per individual beneficiary for those in the general category and 50 per cent of the project cost subject to a maximum of Rs. 10,000/- in the case of SC/STs. In the case of group projects, the subsidy is 50 per cent of the project cost subject to a ceiling of Rs. 1.25 lakh. Funds under the scheme are shared between the Centre and State government in the ratio of 75:25. While IRDP concentrated on individual beneficiary, SGSY laid greater emphasis on social mobilization and group formations.

### Methodology

The main objective of this present paper is to analyze the impact of SGSY scheme on income, savings and asset position of women SHG members in Madurai District of Tamil Nadu. This study made

to cover 400 sample women beneficiary of SGSY who were members of 3793 Self Help Groups organized by four NGOs. Of the 400 sample women beneficiaries, 200 were selected from rural areas. Of the 200 sample beneficiaries in urban areas 74 of them (60.66%) were involved in marketing, 22.13% were engaged in micro enterprise, followed by 17.27% who were engaged in production. In Rural areas, of the 200 samples beneficiaries 62.39% of them were engaged in marketing, 21.37% of them were engaged in micro enterprises and 16.24% were involved in production. Majority of them in rural as well as urban areas were motivated by NGOs. Apart from NGOs, in urban areas they were motivated by the project officials and in rural areas it was done by family members.

### Findings

Majority of the 200 sample beneficiaries (37.71%) in urban areas have invested less than Rs. 2000/- and a significant proportion, (19.67%) also invested between Rs.2001/- and Rs. 4000/-. In rural areas, of the 200 samples beneficiaries 35.04% have invested below Rs.2000/- and about 30.77% also invested between Rs.2001/- to Rs.4000/-. In rural areas of the 200 samples beneficiaries 67.5% of them have provided additional employment to their family members and for urban areas it was 60%. In urban areas of the 200 sample beneficiaries 45% of them said that their economic activity has provided employment to 15-20 women and 36% said that it provided employment to 11-15 women. In rural areas of the 200 sample beneficiaries 45.5% of them provided employment for 11-15 women and those who provided employment to 15-20 person were also significant. Of the 200 sample beneficiaries, in urban area, 36.5% of them earned an income ranging Rs. 1500/- 2000/-, from their

economic activity and those who earned between Rs. 1000/- 1500/- were also significant (26.5%). In rural areas, of the 200 beneficiaries 31.22% of them earned between Rs. 1500/- 2000/- and a similar per

cent of beneficiaries also earned between Rs. 1000/- 1500/-.

The following table shows the average incremental income between pre and post SHG situation in rural as well as urban areas.

#### AVERAGE INCREMENTAL INCOME BETWEEN PRE AND POST SHG SITUATIONS

Sl. No.	Name of the Group	Average Income (Rs.)		Different in Income (B – A)	t- Statistic
		Pre – SHG (A)	Post – SHG (B)		
	<b>Urban</b>				
1.	MNEC	849.84	1541.98	692.14	2.9161*
2.	MMSSS	893.28	1634.62	741.34	3.4115*
	Overall	866.78	1578.11	711.33	2.6121*
	<b>Rural</b>				
1.	PREED	889.08	1485.04	595.96	2.6124*
2.	PACHE	911.13	1617.47	706.34	2.0173*
	Overall	898.22	1539.99	641.77	3.2141*

**Source:** Survey data.

In urban areas there has been an increase of Rs. 711.33/- after joining SHG whereas it was Rs. 641.77/- in rural areas.

#### AVERAGE INCREMENTAL FAMILY INCOME BETWEEN PRE AND POST

**SHG SITUATIONS** (Source: Survey data.)

Sl. No.	Name of the Group	Average Family Income (Rs.)		Difference in Family Income (B – A)	t- Statistic
		Pre – SHG (A)	Post – SHG (B)		
	<b>Urban</b>				
1.	MNEC	4211.97	7725.41	3513.44	3.4261*
2.	MMSSS	3833.37	7884.62	4051.25	2.6521*
	Overall	4050.87	7787.50	3736.63	3.2161*
	<b>Rural</b>				
1.	PREED	4183.60	7425.21	3241.61	2.6121*
2.	PACHE	4025.74	8237.95	4212.21	3.2241*
	Overall	4118.32	7762.50	3644.18	2.6131*

The above table reveals that in urban areas the family income of the SHG members have increased from Rs. 4050.87/- to Rs. 7787.50/- (an income of Rs. 3736/-). Similarly in rural areas there has been an increase of Rs. 3644.18/- after joining SHG

#### AVERAGE INCREMENTAL SAVINGS BETWEEN PRE AND POSTSHG SITUATIONS

Sl. No.	Name of the Group	Average Savings (Rs.)		Difference in Savings (B – A)	t- Statistic
		Pre – SHG (A)	Post – SHG (B)		
	<b>Urban</b>				
1.	MNEC	166.51	514.75	348.24	3.4161*
2.	MMSSS	190.65	438.46	247.81	3.6621*
	Overall	175.92	484.99	309.07	4.6121*
	<b>Rural</b>				
1.	PREED	148.72	457.26	308.54	2.9121*
2.	PACHE	156.63	473.49	316.86	3.2451*
	Overall	152.00	463.99	311.99	4.6121*

**Source:** Survey data.

The above table reveals that the savings of SHG members in urban areas has increased from Rs.175.92 to Rs. 484.99 (an increase of Rs.309.07). Similarly in rural areas it has increased from Rs. 152 to Rs.463.99 (an increase of Rs. 311.99). Most of these savings were made with SHGs and Banks.

#### AVERAGE INCREMENTAL ASSETS BETWEEN PRE AND POSTSHG SITUATIONS

Sl. No.	Name of the Group	Average Asset Position (Rs.)		Difference in Asset (B – A)	t- Statistic
		Pre – SHG (A)	Post – SHG (B)		
	<b>Urban</b>				
1.	MNEC	13114.09	19385.25	6271.16	3.2411*
2.	MMSSS	12492.02	20833.33	8341.31	4.2461*
	Overall	12907.68	19986.20	7078.52	2.9021*
	<b>Rural</b>				
1.	PREED	12473.08	18397.44	5924.36	3.6112*
2.	PACHE	13497.33	19909.64	6412.31	3.3141*
	Overall	12898.14	19025.00	6126.86	2.9121*

There has been an increase in the value of the asset of women in SHGs from Rs. 12907.88 to Rs. 19986.20 after joining SHGs in urban areas. In rural areas the asset value has increased from Rs. 12898.14 to Rs. 19025.00 (an increase of Rs.6126). Most of the asset acquired was in the form of gold jewels in urban areas whereas it is live stocks in rural areas.

### CONCLUSION

The Government sponsored self-employment programme, like SGSY in the study area results in independency of women, enhancing their socio, economic, political and decision making empowerment.

Further, SGSY programme has helped in assisting the families of the women beneficiaries below the poverty line by ensuring appreciable sustained level of income through Self Help Groups (SHGs). This self-employment scheme has enhanced the income of the respondents, assets creation and increasing savings.

A noteworthy and remarkable achievement of SGSY programme in the study area is that it has relieved the members from the clutches of money lenders and reduced their indebtedness.

Hence, it is concluded that SGSY a holistic programme has been successful not only in meeting peculiar needs of the poor in rural area, but also resulted in all round development of women under poverty.

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# THE STORY OF HOW MARKETS ARE CLASSIFIED: THE TAXI WAR IN INDIA

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The word “Market” may give a picture of a crowded place where buyers and sellers involve in transactions, something like a local market. On the other hand, an economist would acquaint with classification of markets: perfect competition or imperfect competition. This article is the outcome of the author’s inquisitiveness to understand what goes into the process of classification of markets even before they are tagged to a particular category.

When a new unique product/service is innovated, it immediately cannot be tagged as perfectly competitive or imperfectly competitive market. The market nomenclature oscillates due to various factors that affect the product’s market share. Factors like market share and number of sellers decide whether the product/service is under monopoly, duopoly, oligopoly or perfect competition. The author is convinced that

1. For a new product/service, during its initial stages in the market, the classification of market type is not stable, but keeps switching between the different categories until a more stable market type is arrived in the long-run. In other words, a product/service cannot be assigned to a particular market type in the short-run and it is possible only in the long-run.
2. There are greater chances for the instability in market classification to follow a

particular pattern or order before it settles on a long-run permanent market classification. The process of market shifting follows an ascending order in terms of number of sellers i.e. it starts as a monopoly firm (single seller), then becomes duopoly firm (two sellers), then an oligopoly firm (few sellers) and finally a perfectly competitive firm (many sellers).

To test the validity of the above two observations, the cab industry in India has been taken for consideration. Even though the concept of hired cab (known as taxi in olden days) is not new in India, its usage as a regular means of commutation is only a decade old. An attempt has been made to understand the pattern of shifting of market type of the cab industry.

An understanding of the difference between a ‘Radio taxi’ and an ‘Aggregator’ is required. A radio taxi need licenses from the Government and should have a 24 x 7 call centers as well as a GPS. Only drivers who have transport badges issued by the transport department after proper scrutiny are permitted to drive the cabs. Popular radio taxi companies in India include Meru Cabs, Easy Cabs, Tab Cab, Mega Cabs and Fast Track to name a few.

In contrast cab companies like Ola, Uber and Taxi for Sure are criticized as aggregators and are not identified as service providers by the radio taxi

companies. They run through apps and are technically exempted from regulation. The literary meaning of aggregator is “a website or program that collects related items of content and displays them or links to them.

The taxi market had been an untapped segment over the years. Before a decade taxis in India were mostly used by commuters to connect themselves towards Railway stations and Airports. A slight change in scenario occurred when taxis were used for planned special occasions like weddings, festivals, tours etc. The taxi market in India had been sluggish till 2010 as the number of commuters relying on taxis were very nominal. Most of them preferred to travel using a public mode of transport rather than a private hired vehicle. The reason was cheap availability of public transport systems and low income of people.

Now that the standard of living of people has increased considerably due to increased income, car whether owned or hired is no more a luxury, it is just a comfort. With the increasing income of people and greater willingness to spend on comforts, the market size of the taxi industry has increased considerably.

The taxi industry in India can be classified as an oligopoly market with few sellers / service providers fighting over the market share. The entrance of Ola as an aggregator in December 2010 disturbed the taxi market in India. The concept of aggregator was new to the then existing radio cab service providers. The fact is that the government has allowed these aggregators to operate with minimum regulation and provide similar services that were earlier delivered by the radio cab service

providers. This has allowed the already established cab industry to get disturbed by new market entrants. The process of ‘Market Oscillation’ starts.

If we assume that there is no differentiation between radio cab services and aggregators, then aggregators like Ola, Uber and Taxi for sure cause the oscillations to occur and are responsible for continuous alteration in market share by the existing firms in the industry. The already existing oligopoly market starts to oscillate and the new market form to be achieved depends upon the number of new entrants and the dominance of the well established firms in the industry.

In contrast if we assume the aggregators to be a completely new line of business, then it is logical to treat them as a separate industry. Under such an assumption, Ola Cabs were the first to enter the app based cab industry as a monopolist in December 2010. It enjoyed all the benefits as a monopolist for almost three years until the entry of Uber Cabs in August 2013. The entry of Uber Cabs changed the position of Ola Cabs from a monopolist to a duopolistic market situation. Ola and Uber were enjoying the market share until the entry of Taxi for Sure in 2015. With the entry of Taxi for Sure, the market oscillation started and rested on an Oligopoly market. With Reliance India Ltd. (RIL) expected to launch its Cab services by mid 2017, it does give a positive signal to all other investors both domestic and foreign that cab industry in India is a prime profit making venture. The entry of RIL cabs is not going to create any market oscillations from its current position as an oligopoly market. The status of oligopoly can be retained even up to a handful of new cab investors.

There are chances that with entry of new cab firms, the consumers would prefer one cab service over other and based on their own judgement settle with a cab firm permanently. Such a situation might create a monopolistic market situation. On the other hand, the entry of big giants like RIL can make the market survival of other small cab firms difficult. It might force the small firms to quit the market or allow the big giants to operate as the price leader. In event of these situations the market might permanently settle as oligopoly.

### CONCLUSION

The classification of markets for a new product/service is not predetermined. Rather it travels through a series of market oscillations and finally settles on a particular market type. Any market classification in the short-run is only a temporary phenomenon. There are factors that initiate market oscillations and force movement to another market type. The intensity and direction of market oscillations depends upon the nature of factors under consideration. As an observation, in general the market oscillation the process of market shifting follows an ascending order in terms of number of sellers i.e. from monopoly to duopoly,

duopoly to oligopoly, oligopoly to monopolistic competition. In rare cases from monopolistic competition to perfect competition also.

The observations are only descriptive in nature and require further empirical testing. The factors that induce market oscillations are to be identified. The impact of those factors on market classification in the short-run and long-run are to be estimated.

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# TRANS-PACIFIC PARTNERSHIP: A BIG DEAL FOR THE WORLD ECONOMY

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## Introduction

The Trans-Pacific Partnership is a proposed free trade agreement among 12 Asia-Pacific countries. When it comes to existence, duly passed by various legislations in the member countries, it will be the largest trade agreement in the world. The member countries in the Trans-Pacific Partnership (TPP) are Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. TPP is such a huge agreement which had a combined GDP of \$28 billion or 36% of the world's GDP and accounted for 5.3 trillion in the world trade or 23% of the world's total trade.

The member countries are like a bag of mixed fruits because they are unusually diverse, comprise of low, middle and high income countries with varied economic systems. The agreement is a deep and comprehensive trade pact aimed at creating economic integration of goods, services and investments to new issues such as digital economy, intellectual property rights etc. Even though, everything from framework to legislation have gone fine, the agreement got a major blow due to the election victory of Donald Trump as The president of the United States, who promised to scrap the deal on the first day he enters the white house.

## TPP: Origin and Objectives

The origin of TPP dates back to 2004 and it expanded in the due course of time to create its present form. The initial group was formed in 2004 popularly known as "P4", which is constituted by four countries such as Singapore, Chile, New Zealand and Brunei which has Pacific Ocean as their common ocean boundary. Their main aim is to create a group to increase their trade and revenue while protecting their sensitive issues such as imports, exports and protected sensitive sectors. In 2010 march, eight other countries including Australia and The United States of America also joined the negotiations which made it a much noticed trade pact. Later Malaysia, Canada, Mexico and Japan joined in a period from 2011 to 2013. This deal aims at creating great financial inclusion for certain south East Asian countries and the western Latin American countries that didn't have many trade opportunities till TPP. Another important strategic objective of the TPP is to make the US influence stronger in south East Asia which saw a growing Chinese influence over the last few decades. Thus this agreement can also be viewed as a set back to the Chinese political and financial ambitions which aimed to fill the vacancy of Soviet Union in the area.

### **Importance and Working**

The TPP's importance lies in its difference as it is much different from the existing Free Trade Agreements (FTAs) in terms of its framework and working. TPP also tries to show more loyalty to its liberalization principles as it seeks very lesser exceptions from liberal laws such as intellectual property rights; digital economy etc. It also looks at the domestic laws that would restrict the foreign trade and investment practices and it also incorporated strong dispute settlement procedures in its framework.

Firstly, we can analyze its importance in economic terms. Its hold in world's GDP and trade is 36% and 24% respectively. It is the most comprehensive trade pact involving both developing and developed nations that has ever been negotiated in terms of coverage and depth of commitments to trade liberalizations and policy reforms. The elimination of trade barriers will provide an impetus to the growth of trade and investment of both goods and services which results in the growth, especially of the member countries and to the world economy as a whole.

Secondly, TPP's working is not only limited to its framework but also helps in improving trade relationships between the member countries and those which have earlier involved in trade pacts. For example the North American Free Trade Agreement (NAFTA) between US, Canada, and Mexico became less effective due to the stronger trade competition, will become stronger again due to the security and environment provided by the

TPP. Its working also strengthens and establishes new trade rights and obligations which will help to follow the liberal trade laws more effectively.

Lastly, the security relationships between the member countries will also improve significantly due to the implementation of TPP. Effective strategic partnership is needed for the growth and to unleash the full potential of trade and investment. The US security concerns in region such as Japan and South Korea will now get economic backing along with their existing strategic partnership with the United States. Failure in implementing will be shown as the acceptance of Chinese dictum on economical and political aspects of the area.

**The effect of TPP on some important areas is given below:**

#### **(a) Market Access:**

The basic principle of TPP is to eliminate the tariffs of all its member countries. The full implementation of the TPP agreement will result in the abolition of 99% of the total tariffs in the member countries. As the tariff structure and line followed by the member countries are extremely diverse, the percentage of the reduction is also different. Japan will eliminate nearly 95% of its tariffs, as we know; Japan is one of the closest economies among the TPP economies. Because of the strict policies by Japan on the quality and standards of its imports, the US and the other developed countries are the ones which benefits the most. US has a trade deficit of \$67 billion as the exports to Japan is only \$67 billion as compared with the imports of \$134 billion.

The member countries have many protected sectors such as sugar and dairy sectors of the US, the protection of dairy and rice sectors by Canada and Japan respectively. These protections will be withdrawn as a part of implementing TPP which will throw open a great sea of opportunities to the traders and investors.

### **(b) Intellectual Property Rights (IPR)**

IPR is one of the most discussed and debated topic among the trade pact laws. The Intellectual Property Rights is the core element behind the successful innovation and implementation of goods and services such as sophisticated technologies, techno products, medicines and healthcare etc. The TPP aims to upgrade or create the IPR laws in par with the standard of laws of the United State which are more stricter than the WTO provisions of 1994, which are practiced all over the world. The new laws governing the IPR proposed to be implemented in the areas such as biologics, pharmaceuticals patents, copyrights, trademarks and trade secrets. The main threat of these laws is that it will restrict the flow of ideas, technologies and knowledge which is very necessary for the human existence. Its impact can be mainly seen in the area of medicines, especially in the case of life saving and generic drugs in the special circumstances of emerging diseases.

### **(c) Agricultural Sector:**

Agricultural sector is one of the main sectors influenced by the elimination of tariffs because it is one of the sensitive areas and is protected by several member countries. The free flow of agricultural commodities will result in the flooding of goods in the market of developing nations, where

agricultural output is expensive due to the lack of availability of resources as well as the slow modernization of the sector. According to the study of US Department for Agriculture, the agrarian sector of the US will grow nearly 1.5% by 2025 and there will be a significant decline in the agricultural sectors of Japan, which protected most of its agricultural sector till the implementation of TPP, and also in the countries of Vietnam and Malaysia.

### **(d) Digital Trade or E-Commerce:**

It is the most active trade medium over the last few years with the rapid expansion of digital economy. It has a big opportunity to become the world's largest marketing system in a very short span of time. That is why TPP provided a special attention to digital trade and flow of information. It adopts rules which prohibit the countries from blocking the flow of data or information across borders. It tries to provide a free market to digital goods and services. It prohibits the data localization which would tend to make the privacy laws and law suits regarding cybercrimes more complicated as the arbitrations moves from the local courts to international settlement courts which would have certain limitations in upholding individual values and rights.

### **Criticisms on Trans-Pacific Partnerships**

Since its inception, TPP is subjected to many criticisms especially from the ordinary people and anti-capitalists. The main fear of the ordinary citizens is that their jobs, work and income may get diluted as the big players are entering the ground with huge financial as well as political powers. Even in the United States, there is a huge campaign going against TPP. The main allegations against TPP are

**(a) TPP allows expansion of corporate power over government.**

The dispute settlement in TPP is made by a dispute settlement tribunal constituted by the corporate jurists whose verdicts are placed above the constitutionally appointed judiciary in the respective countries. It will allow the corporate motives and values prevail over the ordinary people's ambition, which will cause much discomfort to the general public as they will suffer from the profit oriented policies. There is a serious allegation that the dispute settlement laws in the TPP are formulated by big corporations with a very little influence from the state legislatures. This settlement court is necessary to uphold the values put forward by TPP, but it is sure that they may create a serious conflict of interests to the governments of the member countries.

**(b) TPP will result in losing jobs as well as in wage reduction.**

More market access and liberal tariffs will also result in fewer employment opportunities. Loss of jobs is one of the most feared outcomes of the TPP. According to the new estimates of Peterson Institute for International Economics (PIIE), in US alone there will be a decline of 1,21,000 new job opportunities till 2030, after the implementation of TPP. The big loser will be the manufacturing sector, as its jobs are unskilled ones, the countries which can provide the unskilled labour at a cheap rate will be the winner in the jobs market. The service sector jobs which are more skill based will not be affected so much due to the need of quality and skilled human capital.

**(c) It will result in the flooding of low quality goods and services in three domestic markets.**

Another important criticism is that TPP will help in flooding of low quality products from the developing countries in the developed markets. Many right-wing activists from the developed countries warned against the eroding quality of imports. They allege that this will plunder the native producers who are producing quality products. They also fear that this will question their superiority in the production of certain goods and services.

**(d) It will result in the increase in prices of medicines due to stricter IPR.**

Lastly, the main allegations are against Intellectual Property Rights (IPR), the laws are blocking the free flow of ideas, innovations and technology. This will provide monopoly position to big corporations which will use their intellectual properties only for profit motive other than public welfare. The main sector which is going to suffer due to these laws is the healthcare and allied activities. The lifesaving medicines and generic drugs which are now provided at an affordable rate due to the governmental intervention will now go back to the control of pharmaceutical corporations who will turn it to a profit earning sector mainly by controlling their production and increasing their prices. This will cause great difficulties to the common man.

The criticisms against TPP has grown bigger and gathered popular support such that the new president of the United States, Donald Trump, made an election promise that he will scrap the deal on the first day of his office. Now the future of TPP lies on the discretion of the future president of USA.

## India and TPP

In a globalized world, every deal has a significant impact on the non-participant countries as well. The effect of TPP on the Indian economy is a much discussed topic. Majority of India's exports to the TPP members are 'services'. There is a possibility that these services are replaced by the service which is exported from the member countries itself. The standard put up by the TPP is par with the standards of the United States or that of the developed countries. It provided an important opportunity to India to reshape its industries in line with that of developed nations. India needs to improve the quality of its exports to face the increased competition from the member countries of the TPP. The bilateral treaties with some of the member countries may provide some grounds to the Indian opportunities but they are very little exceptions in the rigid framework of other trade pact. India will lose some of its East Asian markets of grains and other crops, processed food and heavy manufacturing. TPP may result in losing some of the markets but it provides an opportunity to reap long term benefits by increasing its standards of trade and production.

## Conclusion

The TPP have the potential to become the largest trade pact ever existed in the world. It can significantly influence the international trade to change its traditional workings in the era of digital world. The TPP after its full implementation will increase the real income of the member countries by nearly 0.5%-1.0% of the GDP. In US alone the real income will be increased by \$131 billion by

2030. Even though some of the jobs gets eliminated, more productive jobs will be generated to fill the gap, with increased benefits.

TPP has a stronger set of rules and regulations that would help in the better integration of the world economies of diverse backgrounds and growth mechanisms. If the TPP is smoothly implemented, it will be a new synergy in strengthening the world trading systems and will guide international trade and investment in the coming years.

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# THE TRANSITION OF WOMEN OVER THE YEARS IN INDIA

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## Introduction

An estimation of the level of economic development of a nation is made not only on the base of growth in terms of an increase in the per capita income, but also on the basis of improvements in the quality of life of its population. Economic development is achieved only when the economic progress generates an environment in which the people of the country can live longer, healthier and more productive lives. The eventual purpose of planned development is to guarantee well-being through sustained development in the quality of life of the people, particularly the poor and the vulnerable segments of the population. The development of human resources contributes to the sustained and inclusive growth which leads to fruitful employment. A healthy, educated and

skilled workforce can contribute more significantly and effectively to the economic development. Quality of life of the people of a country is reflected by various indicators such as health status, literacy level, freedom in political and economic decision making etc... A nation's development ultimately rests on the degree to which one half of its population namely women and girls have access to a good quality of life. Development is a human centred process. People are mutually the ends and the means in this process. Human resource development applies fairness to both women and men. Women play an equal role, even in the sustainability of development throughout the world. But the positive results of development are dispersed unevenly among males and females. Let us take a brief look on the levels of human development across the world.

**TABLE - 1.1: HUMAN DEVELOPMENT INDEX AND ITS COMPONENTS (2014)**

HUMAN DEVELOPMENT LEVELS	COUNTRY	HDI (VALUE)	LIFE EXPECTANCY AT BIRTH (YEARS)	EXPECTED YEARS OF SCHOOLING (YEARS)	MEAN YEARS OF SCHOOLING (YEARS)	GNI PER CAPITA (2011 PPP \$)	GNI RANK-HDI RANK
Very high	Norway	0.944	81.6	17.5	12.6	64992	5
	Australia	0.935	82.4	20.2	13.0	42261	17
High	Belarus	0.798	71.3	15.7	12.0	16676	14
	Oman	0.793	76.8	13.6	8.0	34858	-23
Medium	India	0.609	68.0	11.7	5.4	5497	-4
	Bangladesh	0.570	71.6	10.0	5.1	3191	5

<b>Low</b>	Kenya	0.548	61.6	11.0	6.3	2762	9
	Pakistan	0.538	66.2	7.8	4.7	4866	-14
	World	0.711	71.5	12.2	7.9	14301	NA

**Source:** UNDP Report, 2015

The table 1.1 indicates the level of human development attained by different countries in the world. While calculating HDI, three important components such as health, education and income are taken into account, based on these components a country can attain either a very high, high, medium or low levels of human development. So the above table indicates that Norway and Australia fall under the category of very high human development with a HDI value of 0.944 and 0.935 respectively. Followed by Belarus (0.798) and Oman (0.793) at high level of human development, India (0.609) and Bangladesh (0.570) are at medium level of human development and Kenya (0.548) and Pakistan (0.538) falls under the category of low level of human development.

**TABLE - 1.1: HUMAN DEVELOPMENT INDEX AND ITS COMPONENTS (2014)**

LEVELS OF HUMAN DEVELOPMENT	COUNTRY	GDI (V)	HDI (VALUE)		LIFE EXPECTANCY AT BIRTH (YEARS)		EPECTED YEARS OF SCHOOLING (YEARS)		MEAN YEARS OF SCHOOLING (YEARS)		GNI PER CAPITA (2011 PPP \$)	
			F	M	F	M	F	M	F	M	F	M
<b>VERY HIGH</b>	Norway	0.996	0.940	0.944	83.6	79.5	18.2	16.8	12.7	12.5	57140	72825
			Australia	0.976	0.922	0.945	84.5	80.3	20.7	19.7	13.1	12.9
<b>HIGH</b>	Belarus	1.021	0.806	0.789	77.2	65.5	16.2	15.1	11.9	12.1	12922	21010
	Oman	0.909	0.741	0.815	79.2	75.1	13.9	13.5	7.0	8.5	14709	46400
<b>MEDIUM</b>	India	0.795	0.525	0.660	69.5	66.6	11.3	11.8	3.6	7.2	2116	8656
	Bangladesh	0.917	0.541	0.590	72.9	70.4	10.3	11.5	3.2	5.4	2278	4083
<b>LOW</b>	Kenya	0.913	0.527	0.577	63.4	59.9	10.7	11.3	5.9	7.3	2255	3270
	Pakistan	0.726	0.436	0.601	67.2	65.3	7.0	8.5	3.1	6.2	1450	8100

From the above table 1.2, it is clearly understood that there exists gender inequality in the quality of life of the people across the world. The gender imbalances is somewhat low in the highly developed countries than that of the less developed countries and so women in these highly developed countries were in a better position compared to the women in the less developed countries. The above data on gender development index also reveals that when the quality of life of women is improved, it led to an increase in their income.

**The status of women in the society then and now**

According to the census 2011, India's total female population stood at 586 million, but their situation has been grim. For centuries, they have been intentionally denied opportunities of development in the name of religion and socio-cultural practices. Before independence, women were victim to many objectionable customs and conventional rigidities due to which their status in the society was very pitiable and their situation was all around depressing. They were sufferers of widespread illiteracy, forced child marriage, indeterminable widowhood and so on which led to the absolute rejection of their individuality. Besides the economic dependence, heavy household workload which remained unpaid and unrecognized, absence of career and mobility, non-recognition of their economic contribution, poor work conditions and wages, and repetitive jobs which men usually refused to do was also responsible for their pathetic condition. At the socio-political plain, women suffered from the rejection of freedom even in their homes, subjugation and unnatural propaganda, unequal and low-grade status, rigid caste hierarchy and untouchability. These spiritual customs and social institutions had and still have a deep bearing on the role and status of women. Due to this patrilineal social structure, women are categorized as the poor and marginalized. Once the economists and reformers came to know about the significance of integrating women with development, this condition is going through a slow but steady change. Feminist economist like Ester Boserup (1970), Charlotte Gilman (1898) emphasized on the empowerment of women which was a desirable factor for inclusive growth. Therefore, for the

acceleration of economic development, inclusive growth is a necessity. Women make up a little over half the world's population, but their contribution to the calculated economic activity, growth and well being is far below potential, with serious macro-economic consequences. Regardless of momentous progress in recent decades, labour markets across the world stay separated along the gender lines. And advancement towards gender equality seems to be a herculean task. According to the World Bank report 2011, women represents 40 percent of the global labour forces. On the other hand, the UNDP Report, 2015, showed that the Indian Female labour force participation rate to be 54.2 percent in 2013.

**Importance of the study**

Over the time, there has been a significant improvement in the health, education and employment status of the women in India, yet they lag behind in many cases i.e. (gender, between many countries etc...). If women's health, education and economic well-being are improved along with their role and status in both families as well as in the society, this empowerment of women will invariably lead to overall development in the quality of nation's human resources.

The fact that the women have fewer opportunities in the labour market may contribute to their unequal treatment in the household. Parents have lower aspirations for their daughters than for their sons. If women do not work outside the home, there may be a perception that they do not need to be strong and healthy and that they do not need a formal education. Women's empowerment and economic development are interrelated. While development itself will bring

about women empowerment, empowering women will bring about changes in decision-making which will have a direct impact on the development.

#### Macro Indicators of Human Capital:

As already stated, development of a nation not solely depends upon the acceleration in economic growth but rather importance should be stressed upon the formation of human capital too. Improvements in human capital formation can be categorized as on the basis of health, education and work/employment. Only when there is an elevation in these macro indicators, well being of a nation is possible. Therefore, to accelerate economic growth and development, there should be a balance between both man made capital and human capital.

**TABLE - 1.3: LITERACY RATES IN INDIA**

CENSUS YEAR	PERSONS (%)	MALES (%)	FEMALES (%)	MALE-FEMALE GAP IN LITERACY RATE (%)
1991	52.21	64.13	39.29	24.84
2001	65.38	75.85	54.16	21.70
2011	74.00	82.2	65.5	16.7

**Source:** Census Report, 2011

The above table 1.3 indicates the literacy rates in India for the period 1991 to 2011. Though the data reveals an increase in literacy rates in general, it is seen that there is an inequality or discrepancy between the male and female literacy rates. The statistics reveals that, male stand superior over female as they are able to read and write much better than their female counterparts. As years passed by, the gender gap in literacy rates have narrowed down marginally.

**TABLE1.4: THE WORK PARTICIPATION RATE OF WOMEN IN INDIA (1981-2011)**

CENSUS YEAR	WORK PARTICIPATION RATE OF WOMEN IN %
1981	19.67
1991	22.27
2001	25.63
2011	25.51

**Source:** Census Report, 2011

As per Census 2011, it is found out that the work participation rate of women has marginally reduced to 25.51 percent in 2011 as compared to that of 25.63 percent in 2001. But there is an improvement from 19.67 percent in 1981 to 25.521 percent in 2011. On the other hand, the work participation rate of women in rural areas was found to be 30.02 percent as compared to 15.44 percent in the urban areas.

It is mostly seen that the female labour force participation rate has remained lower than their male counterparts. Women account for most unpaid work and when women are employed in paid work, they are over represented in the informal sector and among the poor. They also face significant wage differentials. Apart from this, due to the discrimination in the labour market, female representation in senior positions and entrepreneurship is low. Therefore, it can be said that growth and stability are necessary to give women the opportunities they need, women's participation in the labour market is also a part of growth and stability. It can be said that, better opportunities for women can also contribute in broadening the economic development in developing countries.

Workers and work participation rate: The working population and work participation rate highlights the occupational distribution of a region.

**TABLE1.5: WORKERS AND WORK PARTICIPATION RATE IN INDIA (1981-2011)**

CENSUS YEAR	WORKERS			WORK PARTICIPATION RATE (WPR)		
	TOTAL	RURAL	URBAN	TOTAL	RURAL	URBAN
1981	244,604,986	197,308,289	47,296,697	36.8	38.9	30.0
1991	314,131,370	249,028,944	65,102,426	37.5	40.0	30.2
2001	402,234,724	309,956,070	92,278,654	39.1	41.7	32.3
2011	481,888,868	348,743,092	133,145,776	39.8	41.8	35.3

**Source:** Census Report

The above table1.5 indicates the workers and work participation rate (WPR) for the census 1981-2011. It is seen that the WPR has registered a continuous increase in the last four decades. In India, only 36.8 percent of the total population was economically active in 1981 which has increased to 39.8 percent in 2011. The number of total workers in the country has almost doubled in the thirty years period from 1981 to 2011. Corresponding increase was also seen in the rural and urban workers which stood at 197,308,289 in 1981 to 348,743,092 in 2011 for the rural and for the urban; it increased from 47,296,697 in 1981 to 133,145,776 in 2011.

**TABLE1.6: WORKERS AND WPR IN INDIA GENDER WISE 1981-2011**

CENSUS YEAR	MALE WORKERS			MALE WORK PARTICIPATION RATE (WPR)		
	TOTAL	RURAL	URBAN	TOTAL	RURAL	URBAN
1981	181,080,212	139,920,487	41,159,725	52.7	53.8	49.1
1991	224,363,807	168,598,744	55,765,063	51.6	52.5	48.9
2001	275,014,476	198,839,153	76,175,323	51.7	52.1	50.6
2011	331,939,875	226,837,013	105,102,862	53.3	53.0	53.8

CENSUS YEAR	FEMALE WORKERS			FEMALE WORK PARTICIPATION RATE (WPR)		
	TOTAL	RURAL	URBAN	TOTAL	RURAL	URBAN
1981	63,524,774	57,387,802	6,136,972	19.8	23.2	8.3
1991	89,767,563	80,430,200	9,337,363	22.3	26.7	9.2
2001	127,220,248	111,116,917	16,103,331	25.6	30.8	11.9
2011	149,948,993	121,906,079	28,042,914	25.5	30.0	15.4

**Source:** Census Report

The above table 1.6 shows the workers and WPR for male and female for the census year 1981 to 2011. The above data shows that the male work participation rate in rural areas was higher than that in urban areas. This trend has been witnessed for India from 1981 to 2011, with an exception in 2011 where urban WPR was higher than the rural WPR for India. As far as urban WPR is concerned for India, it was found out to be less than fifty percent in 1981 and 1991 period but it later improved in 2001 and 2011. On the other hand, the female WPR was very low in comparison to the male counterpart for total, rural and urban population in India. In absolute terms, the female workers have more than doubled in the thirty year period from 1981 to 2011.

### Conclusion

In India, the socio-economic scenario has undergone a massive change, and so has the position of women. In the study, the Gender development index shows that, there exists gender inequality in the quality of life of the people across the world.

At the present phase, women have made momentous contributions in several fields. They have and are still trying to break the chains of patriarchy which once withhold them from competing with men. Today, women are well equipped, trained and are confident enough to take up a job outside home. Post liberalization, the

Government has understood the significance of women empowerment for the sustainable development of the nation and so, importance is given to improve all aspects of women to empower them. From the census report, it can be understood that there has been notable changes in the status of women in India but this is not enough. It is rather distressing that the position of Indian women is far below her foreign counterparts and steps should be taken to promote women welfare and development to attain sustainable growth and expansion of the nation.

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## The Enigma of Demonetization

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Historically, 'redenomination' of currency by the state has been in response to hyperinflations. This is the case when economy suffers from excess liquidity and trust deficit in the home currency. On the contrary, India adopted this unique measure which was never attempted as before to initiate a long standing battle against the unaccounted black money, terrorism and a move towards cashless economy. Although it is not a new concept, demonetization in India was undertaken in 1946 and 1978 which failed to derive the intended results effectively.

As mentioned before, demonetization was carried out for the same objective to obliterate the black money out of the economy. However, the policy's intended impact today is larger than the past for the reason that the high denomination currencies existing today is around 86 percent of the total cash in circulation, as compared to just around 4-5 percent in the past. There are strong consensus among the opposition parties to oppose the executive decision taken up by the government. The sudden implementation of demonetization policy was meant to mainly attack the parallel economy existing along with the mainstream economy simultaneously to put an end to terror financing and counterfeiting of currency. The recall of Rs. 500 and Rs. 1000 currency notes by replacing

it for new Rs. 500 and Rs. 2000 currency notes is intended to temporarily stall the circulation of counterfeited currency which acts as a major source of funding for smuggling activities, terror-outfits and espionage. Also, the owners of unaccounted and illegal cash will be blocked from using it since they will not be in a position to deposit the same in the banks nor could use it for any transactions. This immediate effect of such policy was also to attack the psychological motive of people to hoard unaccounted money. Another impact of redenomination was the following cash crunch which in turn affected the supply chain management; normalcy is expected to be achieved only after a period of 6-7 months, when the whole pumped out money in circulation, is reinstated. Till such a situation is resolved, the economy is presumed to be in disequilibrium. It is anticipated that the real estate market, bullion trading, retail market would be majorly hit. As far as stock market is concerned, it witnessed a steep slump in both major markets of India namely NSE and BSE. This reflects that the domestic as well as the foreign investors lost confidence in the Indian market due to the run of the stock markets. This was followed by depreciation of Indian rupee against the US dollar, although the major factor attributed to rupee's depreciation was the expected hike on the interest rate by Fed.

A crucial impact of the concerned policy will lower the overstated real estate asset industry which will fuel the growth of housing sector in the coming years, thus it will help in generating a new class of people in the housing sector. Another impact which is expected to be felt is in the informal sector which accounts for 90 percent of the economic activity. This sector mainly consists of farmers, small and medium traders, labour-intensified industries. And the striking characteristic of this sector is that, it is cash-driven and so, is anticipated to have an adverse impact because of the cash crunch. This cash crunch will cause a reverse migration from urban centers to rural areas as employers aren't in a position to meet the wage payment in cash. According to the recent data, demonetization has displaced around half a million workforce from the labour market. According to the estimates of the world renowned economist and the former Prime Minister of India, Dr. Manmohan Singh, the GDP of India is set to decline by 2 percent which is an underestimated figure. He also maintained that this policy will loosen the people's confidence in the currency as well as the banking sector.

The impact of demonetization will be felt across sectors with differing intensities across varied time zones. Unaccounted money is one of the major sources for the already flourishing real estate, gold and construction industries. But on the positive note, this policy is set to benefit payment banks, e-wallets like Paytm. Demonetization may lead to a strong push in financial Inclusion among the citizens in our country. It is for sure that cash crunch would adversely affect the consumption pattern of the people for at least 6 to 7 month (and

it is an underestimated timeframe) as the good proportion of the market is run by hard currency. Further, the government's revenue through tax is said to increase as the demonetization will promote financial inclusion, once transactions are substantially digital they get caught in tax net. Therefore the future tax collection would be much higher compared to prior years. This can lead to the lowering of direct and indirect tax in the next fiscal year.

There are lots of controversies played in the media against the introduction of Rs. 2000 notes as it would be easier to hoard the unaccounted money in the new high valued currency. As far as our intuition says that the arrival of Rs.2000 is so as to liquidate the economy as soon as possible before the cash crunch could derail the economy. In the advancing years, the Central Bank of India would be in a position to withdraw the same when the circulation of the currency turns to normalcy. The cost of demonetization is estimated to be roughly around 1.28 lakh crore rupees which is mainly comprised of 16800 crore rupees of cost incurred on printing of the new currency and logistical cost for transporting the new currency to bank branches and ATMs all over the country. But the major impact would be the loss of business which accounts for 61500 crore rupees. The government justified the demonetization policy on the ground that, it will be able to unearth Rs. 4000 crores of unaccounted cash but the total benefits the economy accrue due to the policy fails to surpass the total cost of demonetization. Hence on economic perspective there is a need to re-evaluate the policy taken up by the government. Government could have opted for some other ways by which the

shadow market could have been targeted by increasing the tax base through reducing the income tax rate as well as by enlarging the scope of indirect tax on goods and services with the aid of proposed GST bill which is said to be implemented in the next financial year. Modi led government's demonetization policy is a synonym to a situation described in a famous proverb "Burning your house to smoke out a rat", as the government could have taken other steps to deal with the situation. In the forthcoming days, the recall exercise of the old currency would be completed and the new currency would fill in the shoes of our economy. The further generation of black money needs to be mitigated; else the whole pain borne by the common man due to cash crunch would go in vain.

On the implementation side, it seems that the government was totally unprepared to handle the chaotic view of long queues outside the banks and ATMs for exchanging their old notes for new ones. The shortage of new currency being printed is one of the factors which made the Finance department to limit the exchange and withdrawal limit from the bank. It would have eased so many issues if the Reserve Bank of India gave priority for printing Rs 500 notes (or even Rs 1000 notes) rather than Rs 2000 currency notes. Most people suffered from demonetization as they were unable to spend Rs 2000 notes for small purchases and petty expenses. The government needs to appraise about the reality before implementing such policies as it could totally backfire. It is for sure that the

government of India is not taking up any plans to withdraw the demonetization decision. We need to wait until December 31st, 2016 to see whether the promise that the pain taken by common man would reap benefits and the normalcy against currency crises is met. This is an apt example where the state bridged the gap between the well-intentioned policy and its eventual implementation but failed on the corner of potential preparedness and caused "monumental mismanagement" to the fastest growing large economy in the world.

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# **NPAs : A Threat to the Financial Strength of Public Sector Banks in India**

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The Indian banking sector has been working in a more open and globalized environment for the last two decades since liberalization. This liberalization process of The Indian economy has made the entry of new private sector banks, possible. Foreign banks have been permitted to open more branches with effect from 1998-99. With increased competition and emphasis on profitability, the public sector banks are now moving towards an economic-oriented model, departing from the social approach which has been followed for decades. The public sector banks, which had dominated the banking sector for decades, are now feeling the heat of the competition from private and foreign sector banks. The strength of the economy of any country, basically hinges on the strength and efficiency of the financial system, which in turn, depends upon a sound banking system. A major challenge to the public sector banks in India is their surging non-performing assets. Researchers confirm that PSBs are relatively more prone to asset delinquencies.

A bank is generally understood as an institution which provides fundamental banking services such as accepting deposits and providing loans. There are non-banking institutions that provide certain banking services without meeting the legal definition of a bank. Public sector banks are those banks where a majority stake (i.e. more

than 50 percent) is held by the government. There are, a total of 27 PSBs in India of which 21 are nationalized banks and the remaining 6 are State Bank of India and its associates. Those, where private institutions or individuals hold more than 50 percent of the shares are known as private sector banks. The term nationalized banks refers to those banks which were nationalized under the Banking Companies (Acquisition and Transfer of Undertaking) Bill.

The public sector banking got widened with two rounds of nationalization, first in July 1969 when 14 major private sector banks, each with deposits of Rs. 50 crore or more were nationalized, and thereafter in April 1980, 6 more banks with deposits of not less than Rs. 2 crore each, were nationalized. It resulted in the creation of public sector banking with a market share of 76.87 percent in deposits and 72.92 percent of assets in the banking industry at the end of March 2003. With the merger of New Bank of India with Punjab National Bank in 1993, the number of nationalized banks went up to 19 and the number of public sector banks to 27. They act as a body that carries the objectives of the central government by providing various facilities to the people who are connected with the bank by various government schemes, loans and pensions. The motive of the public sector banks does not always remain profit

making, but they also see through the development aspect of the region, they are operating in.

Over a period of time, the financial health of PSBs continued to deteriorate resulting in a decline in their efficiency. During 1992-93 and 1993-94, these banks actually posted huge losses to the tune of Rs. 3,513 crores and Rs. 4,705 crores respectively. It is possible to defend the low profitability by referring to their commitment to the social obligations imposed by the government, as for instance, opening rural branches in large numbers, financing poverty alleviation programmes at concessional rates of interest, priority sector lending to an extent of 40 percent, huge NPAs, etc. As a result of their involvement in social banking and other factors such as directed investment, the state of health of these banks have left much to be desired. The net profit as a percent of the total assets became 0.99 percent in 1992-93 and 1.1 percent in 1993-94. The return on assets of PSBs does not compare as favourably with that of banks elsewhere. As per data provided by Bank of International Settlements (BIS) 1999, return on assets, defined as profit before tax, moved from 0.08 to 1.07 in Euro area in 1998 with most countries covering around the 0.5 mark, even on free tax basis.

The Indian banking sector witnessed major changes in their structure due to global melt down in 2008-09. The economic slowdown has exerted pressure on bank's profitability and capital. PSBs with a 70 percent share, were hit worse due to corporate borrowers' declining loan servicing capacity, their own tax credit appraisal and the undue advantage they took of the debt restructuring

mechanism to defer non-performing asset formation. While private banks have seen improvement in asset quality and efficiency parameters, public sector banks have seen decline in both areas. The interest margin of most of the PSBs has declined in 2012-13 as compared to 2008-09. Return on equity as well as return on assets of PSBs has decreased between 2008 and 2013. NPA ratio highlights the share of non-performing assets from the total assets of banks. The non-performing assets has also increased after the financial crisis in case of public sector banks as compared to the other sector banks in India. PSBs failed to maintain their past level of capital adequacy ratio.

The central bank has been pushing the lenders to review the classification of loans given by them as part of an Asset Quality Review (AQR). The resultant sharp surge in the provisions for bad debts has eroded profitability, especially at state-owned banks. The gross bad loans of public sector banks has increased to 7.6 percent as of March 2016, from about 6 percent a year earlier, according to RBI's data. There was almost an 80 percent jump in gross bad loans in 2015-16, according to the report.

An asset or loan of a bank is treated as non-performing when the repayment of the principal installment and the interest by the borrower becomes overdue, and it ceases to generate income. Depending on the duration of overdue period, the NPAs can be categorized into various types, reflecting the severity of impairment. In India, RBI's Master Circular on Prudential Norms on Income Recognition, Asset Classification, and Provisioning Pertaining to Advances, dated 1st July

2015, delineates extant guidelines for asset classification and provisioning on NPAs. The guidelines stipulated that, an asset can be treated as an NPA, if interest or installment of principal remains overdue for a period of more than 90 days for a term loan. Agricultural loans are treated as NPAs, if loan installments remain overdue for two/one crop seasons for short/long duration crops. Within NPAs, an asset is termed as substandard if it remained an NPA for less than 12 months, beyond which it is termed as doubtful. The worst quality of NPAs are termed 'loss assets', which are identified as loss by the bank itself or by the auditors or the RBI, provided the amount is not written off wholly by the bank.

When assets become NPAs, there is an additional burden arising from provisioning requirements. Banks make separate provisions for NPAs by setting aside a part of their income from other assets. The amount of provisioning corresponds to the severity of loan delinquency. For example, the loss assets have extremely low recovery potential. Banks are required to make 100 percent provisioning for them.

According to the India Development Update Report by the World Bank published in June, 2016, the global lender lowered India's growth forecast for FY 2016-17 to 7.6 percent from 7.8 percent. It said that the most significant near and medium term risks stem from the banking sector. The Update suggested two key reform fronts for the financial sector; acceleration of ongoing structural transformation in banking sector; and addressing the NPA challenge. An overseeing committee was set up by the government to fix stressed assets by

the end of December, 2016. Accordingly, the top management of PSBs are required to submit their plan to resolve the stressed assets to the committee by the end of December. The level of NPAs in public sector banks have increased to 7.3 percent as of March, 2016 from 5.43 percent in March 2015. The actors contributing to an increase in risk of PSBs are deteriorating asset quality and profitability. 32.8 percent of the total bad loans are from infrastructural sector. Large borrowers' share of bad loans is at 86.4 percent, whereas the proportion of highly leveraged companies is down to 12.9 percent from 14.2 percent in March 2015. In a bid to boost credit growth in the economy and to meet the requirements of the Basel III framework by the 2019 deadline, the center announced a sum of Rs. 22,915 crores for the recapitalization of 13 PSBs. The government's capital infusion provides immediate succour, but is insufficient to clean up their books and to enable them to lend more to support growth.

The World Bank report also lowered the country's growth estimate for the fiscal 2018-19 to 7.7 percent from 7.9 percent. India's financial sector has performed well on many dimensions and can be a reliable pillar in future economic growth. However, accelerating structural reforms and addressing the NPA challenge remain urgent tasks. While the stressed assets reveal resilience, the system could become vulnerable if the macroeconomic conditions were to deteriorate sharply. If the macro situation deteriorates in the future, gross NPA ratio may increase further to 9.3 percent by March 2017.

In order to study the composition of NPAs in public sector banks for a period of 13 years, the following econometric model has been used;

$$GNPA = \beta_0 + \beta_1 PSL + \beta_2 NPSL + \beta_3 PuSL + U_i$$

GNPA indicates gross non-performing assets of public sector banks in India, PSL is the share of priority sector lending in gross NPAs of PSBs, NPSL is the share of non-priority sector lending in gross NPAs and PuSL is the share of public sector lending in gross NPAs.

The results were computed using R language. R is a language and environment for statistical computing and graphics.

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	-266.6985	119.1568	-2.238	0.051995
a\$psa	2.7613	0.4974	5.551	0.000356 ***
a\$npsa	0.7748	0.3009	2.575	0.029935 *
a\$pusa	-3.8792	8.3281	-0.466	0.652426

At 0.1% level of significance, the estimate of  $\beta_1$  is significant. At 5% level of significance, the estimate of  $\beta_2$  is significant.

There is a positive relationship between priority sector lending, non-priority sector lending and GNPA. There is a negative relationship between public sector lending and GNPA. It has been found that the 98 percent of change in the GNPA is due to changes in PSL, NPSL and PuSL. When priority sector lending increases by 1 percent, the GNPA increase by 2 percent. Priority sector lending turns out to be the most important component of gross NPAs in public sector banks.

NPAs also affect the financial strength of the banks through decreasing return on assets (ROA) and increasing capital adequacy ratio (CAR). In order to analyse the impact of NPAs on the banking indicators the following econometric model has been run in R language;

$$[[GNPA]]_{sbi} = \beta_0 + \beta_1 ROA + \beta_2 CAR + U_i$$

The data for GNPA of the State Bank of India were collected from the Bank's website for a period of 9 years.  $[[GNPA]]_{sbi}$  is the gross NPAs of State Bank of India, ROA is the return on assets in SBI, and CAR is the capital adequacy ratio in SBI.

Estimate	Std. Error	t value	Pr(> t )
Intercept 4.0582	4.1545	0.977	0.36121
<b>b\$ROA -6.5435</b>	1.3458	-4.862	0.00183
<b>b\$CAR 0.4068</b>	0.3416	1.191	0.27251

The results show that there is a positive relationship between CAR and GNPA and negative relationship between ROA and GNPA. When ROA increases by 1 percent, GNPA of SBI decreases by 6 percent. When CAR increases by 1% GNPA increases by 0.4%. 72% changes in GNPA of SBI are due to its ROA and CAR. At 1% level of significance, ROA is highly significant.

In his speech delivered at ASSOCHAM on June 22, 2016, the former Governor of RBI, Dr. Raghuram G. Rajan was of the opinion that, the major reason for slowdown in credit growth is not higher interest rates but surging NPAs.

The NPAs in public sector banks can be reduced to a greater extent by improving the quality of credit appraisal and follow up. It is of paramount importance that the prudential measures to

mitigate the risks of recessionary pressures must be developed. The cleaning of bank balance sheets, and the restoration of credit growth are vital, yet related elements in the growth agenda. Priority sector lending, which forms a major part of the gross non-performing assets in public sector banks, should be reduced in order to tackle the problem. Loans extended to the agricultural sector and the small scale industries have been identified as non-performing. It is also evident that NPAs affect the profitability of banks by reducing the return on assets. Immediate actions should be taken to reduce the pressure on PSBs in terms of stressed assets.

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# MACROECONOMIC DYNAMICS AND FINANCIAL CRISES IN NIGERIA

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## INTRODUCTION

Financial globalization has started since the mid 1980's, which has been marked by a surge of capital flows among industrial nations, and also between industrial and developing nations. Generally, capital inflows are associated with high rate of economic growth. Consequently, most of the developing nations that experience massive capital inflows also experience some level of collapsed economic growth in some time, and significantly financial crises that have substantial macroeconomic and social cost.

Through international integration of ideas, products, services and even cultures, the world has become one community, this process now encompasses even the integration of economic decision such as consumption, investment and savings across the globe through improvement in transportation, communication, regulation of the tariffs, and the openness of the economies, international trade have become easier.

The American economy is the largest global economy, representing 22.4% of nominal global GDP and 16.6% of global GDP (PPP)(Wikipedia). The United States' dollar is the most widely accepted and used currency in the globe; it is used as reserves and even as national currency in some economies, it is most influential in stock market based market capitalization, i.e. the New York Stock Exchange (NYSE).

With interdependence, interaction and interconnection of US economy with the rest of the world through globalization, a boom in US economy would have a positive effect in the other national economies, likewise an economic downturn is said to have an adverse effect in other national economies.

Different financial crises have occurred in the rest of the world, example being the great depression of the 1930's.

What began as a bursting of US housing market bubble and a rise in foreclosure has ballooned into a global financial crises, some of the largest and the venerable banks, investment houses and insurance companies have either declared bankruptcy or have to rescue financially. In October, 2008 credit flows froze, lender confidence dropped, and one after another the economies of countries around the world dipped towards recession (CRS Report for Congress). High default rates on subprime and adjustable rate of mortgage began to increase quickly thereafter. An increase in loan packaging, marketing and incentives such as easy initial terms and a long – term trend of rising housing prices had encouraged borrowers to assure difficult mortgage in the belief that they would be able to quickly refinance at more favorable terms (Blanchard, 2008)

Liquidity and other assets fall by 4% in 2008, from a peak of \$1.2 trillion in 2007, the development finance coming into developing countries dropped sharply to \$707 billion in 2008 (Global Development Finance, 2009).

## LITERATURE REVIEW

Prior to the crises, Nigerian economy have an estimated GDP growth of 6.2%, this growth in GDP was driven by the non – oil sector, which grows by 9.6% (CBN 2008a), like the agriculture, crop production, livestock and fishing. Other drivers of growth in non – oil GDP included the wholesale, retail trades, constructions and services, which recorded a growth rate of 15.3%, 13.00% and 9.8% respectively. Industrial output fell by 3.5%, attributable mainly to the 5.9% drop in the crude oil production occasioned by the Niger Delta crises (Olu Ajakaiye and Tayo Fakiyesi)

According to The New York Times in a world business report Dec, 2007, the United States imports more than one million barrels of crude oil every day.

Abdul A. (2009) in his paper titled “the effect of global financial crises on Nigerian economy”, he discovered that the financial crises will cause a fall in commodity prices, decline in exports, lower portfolio and FDI inflows, fall in equity market, decline in remittance from abroad etc.

Olaopa et al (2011) discussed on how economic reforms, as a reaction to the effects of the global financial crises, have intensified popular unrest and redefined the composition, interests, and socio-economic and political attitudes of Nigeria’s increasingly complex social strata using

secondary data. They discovered that the past and present economic reforms policies have failed the dividends of democracy and worsened the socio-economic situation of the citizenry.

Olokoyo and Ogunnaike (2012) using primary data, through the use of questionnaire and chi-square revealed that the global financial crises had a deteriorating effect on all sectors of the Nigerian economy and had a greater effect on the financial sector especially on the banking sector. However, the economic meltdown had a positive effect on branding of bank services. Banks are investing on branding more than ever before, in order to survive the turbulent environment.

By applying VAR framework on the annual time series data from 1969 – 2009, Olowe O. (2011) opines that the Nigerian economy is far from converging towards a sustainable equilibrium in the short run. He suggests that, attitudinal change, monetary and fiscal policies could be used to address the Nigerian version of the global financial crises. However, the right mix of these policies to avoid the conflicts in the light of dampening effects of the global financial melt – down as well as the possible effects of the global financial crises and the macroeconomic fluctuations on economic development in Nigeria is of relevance.

By using Ordinary Least square Technique of analysis and dummy to capture the qualitative variables, Arinze and Matthew (2014), concludes that the crises provide an opportunity and rationale to move more quickly to address overdue reforms in areas as diverse as financial regulation and inclusion, trade competition and public sector improvement in the Nigerian economy.

According to Ujunwa et al (2011) in their paper titled "the global financial crisis: realities and implications for the Nigerian capital market" states that the prices of shares in the capital market nose – dived and investors lost huge sum of money. The crises also crept into the banking sector as a result of excess exposure to the capital market and oil gas sector. The central bank of Nigeria responded simultaneously by injecting N600 billion into the banking sector. While the effort has been applauded by analysts and justified on the basis of the vital role of banks in economic development. They argue that capital market regulators must undertake swift reforms, which will restore public confidence and protect investors. They further show that further neglect of the capital market has the implication of stifling the long – term end of the financial system, which will make the financial system atrophied, thus hindering economic growth.

According to Peter J.O (2009), the crises have eroded the confidence of the general public in the Nigerian banking industry, despite their consolidation. Even the Nigerian stock market (NSM) which is expected to act as buffer of fund, is not left out of the financial crises.

YakubuZ. (2012) using the Ordinary Least Square found that the global financial crises has no significant effect on the Nigerian stock exchange. This means that the policy of regulators had deepened the recession of the Nigerian stock exchange.

According to Emeka and Aham (2012), due to the financial crises, market capitalization which stood at N13.3 billion in 2007 had fell to N9.6 billion in 2008 and further declined to N7 billion in 2009,

while the All Share Index grew by 74.73 percent in 2007 and fell by 45.8 percent in 2008 and which further declined by 33.8 percent in 2009; the crude oil price declined sharply from US\$147 per barrel in July 2008 to \$38 per barrel in January 2009, leading to a decline in external reserves and hence accruable revenue. The debt profile has also increased. Foreign portfolio investors have withdrawn over \$15 billion, while remittances and official development assistance (ODA) fell greatly from 2008 to 2009. Unemployment and inflation rate has increased from 6.6 percent and 1.70 percent in 2007 to 15.1 percent and 14.90 percent in 2008, respectively. Government projects were affected with less budgetary allocation, thus, leading to instability in the Nigerian economy.

### **MACROECONOMIC POLICIES**

Nigeria, in the past decades has experienced some periods of boom and recession; crises and drought; which really makes the Nigerian economy volatile in nature, resulting in static or a decrease in the rate of growth. Numerous macroeconomic policies were proposed and many were implemented with the object of ensuring sustained economic growth along with fiscal and monetary discipline. Over the years, the successive implementation of a number of prudent and sagacious macroeconomic policies like Structural Adjustment Programme (SAP), National Economic Empowerment and Development Strategy (NEEDS), Nigeria Stability and Reconciliation Programme (NSRP), etc., have extended the stability and an increase in the growth rate of the Nigerian economy.

SAP was implemented for the purpose of deregulation and privatization of government

enterprises. The policy was set to strengthen and adopt a realistic exchange rate policy which led to the establishment of Foreign Exchange Markets (FEM). Another befitting goal of the SAP is the rationalization and privatization of public sector enterprises and the adoption of appropriate pricing policies for the public enterprises. SAP was set to restructure and diversify the productive base of the Nigerian economy by sustaining a non-inflationary or minimal inflationary growth, to achieve fiscal stability and positive balance of payments as well as to reduce the dominance of unproductive investment in the public sector.

The implementation of NEEDS, aims to create more employment opportunities in the nation as unemployment is assumed as a major hindrance for a sustained economic growth. Considering the Solow's Growth Theory, he assumed that with the efficient and appropriate utilization of technology and with growth in population, the economy will reach to the steady state. Thus, population in his context is the efficient and productive labour force. The basic goal of NEEDS is reduction of poverty by strengthening food security, increase in employment opportunities and by boosting the agriculture as an engine for broad based economic growth in the country. The government recognizes the need and importance of empowering people to design and manage their own development activities. Through, providing access to credit, land, participation in

decision making, access to agricultural extension services, access to improved seeds and planting materials, farm inputs and tools, traditional thrift, savings and insurance schemes.

The NSRP aims to reduce violent conflicts in Nigeria. The programme provides support to Nigerian stakeholders to manage the conflicts better, resulting in wealth creation, service delivery and poverty reduction.

## RESEARCH METHODOLOGY

By adopting the time series method of analysis, as there is a need for test of stationarity, The Dickey Fuller GLS was adopted. The lag selection criterion is based on Schwartz and Akaike information criterion.

### Ex – ante Diagnostics

#### Dickey Fuller GLS

The Dickey Fuller GLS consist of the following regression:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \sum_{i=1}^m \alpha_i \Delta Y_{t-1} + \varepsilon_t$$

where  $\varepsilon_t$  is a pure white noise error term and where  $\Delta Y_{(t-1)} = (Y_{(t-1)} - Y_{(t-2)})$ ,  $\Delta Y_{(t-2)} = (Y_{(t-2)} - Y_{(t-3)})$ , etc.

Having conducted the unit root test, the series shows the same order of integration that is I(1). Based on the theoretical underpinning, the appropriate methodology is

## UNIT ROOT TEST

Variables	@ Level		@ First Difference		Order
	Intercept	Intercept & trend	Intercept	Intercept & trend	
RGDP: 1%	-2.625606	-3.770000	-	-	I(1)
5%	-1.949609	-3.190000	-	-	
10%	-1.611593	-2.890000	-	-	
Test Stat.	-0.690431	-4.014035	-	-	
CPI: 1%	-2.625606	-3.770000	-2.625606	-	I(1)
5%	-1.949609	-3.190000	-1.949609	-	
10%	-1.611593	-2.890000	-1.611593	-	
Test Stat.	0.71070	-2.105498	-3.079542	-	
EXR: 1%	-2.624057	-3.770000	-2.625606	-	I(1)
5%	-1.949319	-3.190000	-1.949609	-	
10%	-1.611711	-2.890000	-1.611593	-	
Test Stat.	0.649430	-1.406804	-5.772789	-	
MS: 1%	-2.625606	-3.770000	-2.625606	-	I(1)
5%	-1.949609	-3.190000	-1.949609	-	
10%	-1.611593	-2.890000	-1.611593	-	
Test Stat.	0.844556	-1.626205	-4.219411	-	
PLR: 1%	-2.65606	-3.770000	-2.625606	-	I(1)
5%	-1.949609	-3.190000	-1.949609	-	
10%	-1.611593	-2.890000	-1.611593	-	
Test Stat.	-0.730477	-2.296941	-8.954635	-	
RGE: 1%	-2.624057	-3.770000	-2.625606	-	I(1)
5%	-1.949319	-3.190000	-1.949609	-	
10%	-1.611711	-2.890000	-1.611593	-	
Test Stat.	1.443083	-2.736544	-6.784176	-	

Source: Own computation

**Post ante Diagnostics**

**Vector Error Correction Model (VECM).**

Vector Error Correction Model (VECM). The model is specified as below:

$$X_t = \Phi_1 X_{t-1} + \dots + \Phi_p X_{t-p} + \varepsilon_t$$

There always exists an error correction representation of the form ( $X_t = X_{t-1} + \Delta X_t$ )

$$\Delta X_t = \Pi X_{t-1} + \sum_{i=1}^{p-1} \Phi_i^* \Delta X_{t-i} + \varepsilon_t$$

where  $\Pi$  and the  $\Phi^*$  are functions of the  $\Phi$ 's. Specifically,

$$\Phi_j^* = - \sum_{i=j+1}^p \Phi_i$$

$$\Pi = -(I - \Phi_1 - \dots - \Phi_p) = -\Phi(1)$$

The characteristic polynomial is  $I - \Phi_1 z - \dots - \Phi_p z^p = \Phi(z)$

**Johansen Cointegration Test**

Johansen (1998) suggests a method for determining how many cointegrating vectors are there and on estimating all the distinct relationships. In a sense, this is no more than a multivariate generalization of the Dickey Fuller test. The model is specified as below:

$$\Delta Y_t = (\alpha_1 - 1) Y_{(t-1)} + \varepsilon_t$$

**Wald Test**

Under the Wald test, the maximum likelihood estimate  $\hat{\theta}$  of the parameter(s) of interest  $\theta$  is compared with the proposed value  $\theta_0$ , with the assumption that the difference between the two will be approximately normally distributed. Typically, the squared of the difference is compared to a chi-square distribution. It is used to determine the short-run influence of variable on another. The covariance matrix  $V, \sqrt{n} (\hat{\theta}_n - \theta) \xrightarrow{D} N(0, V)$ . The test of Q-hypothesis on the p parameters is expressed with a QXP matrix R:

$$H_0: R\theta = r$$

$$H_1: R\theta \neq r$$

$$(R\hat{\theta}_n - r)' [R(\hat{V}_n | N)R']^{-1} (R\hat{\theta}_n - r) \xrightarrow{D} X_Q^2$$

where  $\hat{V}_n$  is an estimator of the covariance matrix.

**Granger Causality Test**

Multivariate Granger causality analysis is usually performed by fitting a Vector Autoregressive Model (VAR) to the time series. In particular, let  $X(t) \in R^d$  for  $t=1, \dots, T$  a d dimensional multivariate time series. Granger causality is performed by fitting a VAR model with L time lags as follows:

$$X(t) = \sum_{\tau=1}^L A_\tau X(t-\tau) + \varepsilon(t)$$

Where  $\varepsilon(t)$  is a white Gaussian random vector. A time series  $X_i$  is called a Granger Cause of another time series  $X_j$ . If at least one of the elements  $A_\tau(j,i)$  for  $\tau=1, \dots, L$  is significantly larger than zero (in absolute value)

**FINDINGS**

Having followed the above mentioned methodology, the speed of adjustment or loading factor conforms to the acceptance theory (Vector Error Correction Model), where the result shows -0.527687 and being statistically significant. Though, this signifies a quick adjustment in the model. It means that a steady state can be maintained or achieved in semi-annual basis.

The short-run relationship between the variables shows that the lagged values of the prime lending rate jointly influence the gross domestic product. Also, the lagged values of the consumer

price index jointly influence the prime lending rate. Consequently, the lagged values of money supply jointly influence the prime lending rate and the lagged values of government expenditure jointly influence the prime lending rate. Although, the lagged values of gross domestic product, consumer price index, money supply, prime lending rate and the government expenditure jointly influences the exchange rate. Also, the lagged values of prime lending rate jointly influence the government expenditure.

By the way of observation, the Granger Causality results' indicate a one way causality among the variables; prime lending rate and consumer price index, consumer price index and government expenditure, prime lending rate and exchange rate, government expenditure and money supply, prime lending rate and government expenditure. This is however a unidirectional relationship between the variables.

The long-run estimation reveals that, almost all the parameters are statistically insignificant. This is due to the negligence of the relevant authorities to tackle the issue of financial crises spill over to the country, even though the loading factor shows a quick recovery into the system.

### **CONCLUSION AND RECOMMENDATION**

The research aims at studying macroeconomic shocks as a result of financial crises, the model shows a steady convergence to the equilibrium, the statistical parameters shows that there is a negligence of the relevant authority in tackling the spillover effect into the Nigerian economy.

It is recommended to the relevant authority to use a combination of both fiscal and monetary policies in addressing the issues. Since, the spillover effect is from the western donor countries whom contribute significantly to the Nigerian economy in terms of trade, grants and even financial aid, the Nigerian authorities should concentrate on measures that will fill the gap or deficit, this can be achieved through diversification of the economy, encouragement in export through export processing zones, protection to the infant and local industries, provision of soft loans to both manufacturing and agricultural sector.

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# HEALTH INFRASTRUCTURE IN RURAL INDIA

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## **Introduction:**

Health is not everything but everything else is nothing without health. "In the beginning, there was desire which was the seed of mind", says Rig-Veda, which probably is the earliest piece of literature known to mankind. Since antiquity, India is the first state to give its citizens national health care as a uniform right. India has a rich, centuries-old heritage of medical and health science. However, over the centuries, with the intrusion of foreign influences and mingling of cultures, various systems of medicine gained popularity under the British rule and made a major impact on the entire approach to health care in the country after independence.

In the present scenario, Indian rural health care faces a crisis unmatched to any other social sector. Nearly 86% of all medical visits in India are made by rural population of which a majority is still travelling more than 100 km to avail health care facility of which 70-80% is borne out of pocket, landing them in poverty.

Mostly, the rural population is based on agriculture and it's based works where their income is very low. They even find it difficult to fulfill their basic needs. Under this situation, it is very hard for them to spend more money for health. However, urban people can avail good medical facilities in the private hospitals by spending more but people from

rural and poor background find themselves difficult to avail good health treatments at low cost.

India is a signatory to the Alma Ata Declaration of 1978 and was committed to in attaining the goal of "Health for All by the year 2000" through the universal provision of primary health care services. However, India could neither achieve reproductive health related goals nor could develop a good health care infrastructure for rural people.

Government succeeded in generating health infrastructures in urban areas but failed to do so in rural, which sustains 70% of Indian population. Though existing infrastructural setup for providing health care in rural India is on a right track, yet the qualitative and quantitative availability of the Primary Health Care facilities is far less than the defined norms by The World Health Organization.

Most of the diseases can be cured in the primary stage but it is difficult to find the disease in the early stage because of the lack of technical facility available. So to get the facility people has to travel a lot to reach the private health institution in the town nearby the village and another important problem is that there are unqualified doctors.

Our Government spends almost 4% of our GDP in terms of development in the health status whereas developed countries like U.S. spends

around 16% of their GDP for their growth in the health status.

One of the best initiatives undertaken by the Government of India to address the needs of 700 million people living in the rural areas is the National Rural Health Mission (NRHM). It was launched on April 2005 by the former Prime Minister Dr. Manmohan Singh. NRHM brought out a number of schemes and initiatives for the welfare of rural population. Later it became (NHM) 'National Health Mission' and NRHM was brought under the control of NHM.

At present, the health care system has a three-tier structure to provide health care services to its people. The first tier, known as primary tier, has been developed to provide health care services to the vast majority of the rural people. The primary tier comprises three types of health care institutions: Sub Center (SC), Primary Health Center (PHC) and Community Health Center (CHC).

#### **SUB-CENTER:**

The sub-center is the most peripheral institution and the first contact point between the primary health care system and the community. Each sub-center is manned by one Auxiliary Nurse Midwife (ANM) and one male Multi-purpose Worker {MPW (M)}. A Lady Health Worker (LHV) is in charge of six sub-centers each of which are provided with basic drugs for minor ailments and are expected to provide services in relation to maternal and child health, family welfare, nutrition, immunization, diarrhea control and control of communicable disease.

Sub-centers are also expected to use various mediums of interpersonal communication in order to bring about a behavioral change in the reproductive and hygiene practices, needs of men, women and children. As per the UMHFW there were about 1,46,026 sub-centers functioning as of September 2015.

#### **PRIMARY HEALTH CENTER:**

Primary Health Centers (PHC's) comprise the second tier in rural health care structure envisaged to provide integrated curative and preventive healthcare to the rural population with emphasis on preventive and promotive aspects. (Promotive activities include promotion of better health and hygiene practices, tetanus inoculation of pregnant women, intake of IFA tablets and the institutional deliveries). PHC's consists of a medical officer in charge, supported by fourteen paramedical and other staffs. It acts as a referral unit for six sub-centers. The activities of PHC involve curative, preventive and the family welfare services. According to the Ministry of Health, there was 23,109 PHC's functioning as on September 2015 which was 22,236 a year earlier. Though the number appears to be increasing there is still a shortfall of about 16% when compared to the required norms of PHC's.

#### **COMMUNITY HEALTH CENTER:**

Community Health Centers (CHC) forming the uppermost tier are established and maintained by the state government under the MNP/BMS (Minimum Needs Programme/ Basic Minimum Services) programme. Four medical specialists

including a surgeon, physician, gynecologist and pediatrician, supported by twenty-one paramedical and other staffs are supposed to maintain each CHC. Norms require a typical CHC to have thirty indoor beds with OT, X-ray, and a labour room and the laboratory facilities. A CHC is a referral center for four PHC's within its jurisdiction, providing facilities for obstetric care and specialist expertise. There were 3346 CHC's in our country, which is almost a 50% shortfall.

#### **CASE STUDY:**

The study was conducted in a primary health centre for the following objectives

- To know the factors which influence people to prefer the primary health centers
- To know the medical facilities, drugs, medical technology available at the primary health centers
- To study the implementation of NRHM norms in Primary Health Centre.

#### **PROFILE OF PRIMARY HEALTH CENTRE, VOLETI VARI PALEM, ANDHRA PRADESH:**

The primary health centre was set up in the year 2000. Under the control of VV Palem PHC, there are 8 sub-centres around nearby villages. This PHC takes care of 5,428 patients.

Doctor & staff availability	Numbers
Doctors	2
ANMs	15
ASHAs	30

#### **TREATMENTS PROVIDED IN PHC:**

- Basic treatment such as cold, cough, fever, etcetera.
- Tuberculosis
- Malaria
- Leprosy
- HIV/AIDS
- Maternity
- Family Planning
- Child care
- First-Aid

#### **FACILITIES AVAILABLE AT PHC:**

- 6 Beds
- Basic laboratory
- Operation theater
- Drugs for basic problems
- Computers and Tablets were provided to the staffs

There are 15 ANM staffs in the PHC. The Accredited Social Health Activists(ASHA) will be paid incentives on their work basis. There is no private hospital around the nearby villages. Ambulance service is provided all the time and the primary health centre works 24 hours a day. The PHC is working under the guidelines given by the National Health Mission (NHM).

#### **FINDINGS:**

After the analysis is done with the help of the primary data with 150 samples collected through

survey and the secondary data through hospital records, the study has brought few findings, they are:

- Low income is the major factor which makes people to prefer primary health centre and as a result almost 100% of the people with low income prefer PHC.
- This PHC's have followed all the guidelines given by NHM.
- 57.1 % of the People with low income have said that the quality of the service is satisfactory and 28.6 % of the people with low income have said the quality provided is good.
- Due to the political instability, the policies cannot be followed and kept in progress.
- The PHC has showed a 100% success in the births for a period of 10 years.
- People are aware of the facilities that are provided in the PHCs.
- People are attracted more to the PHCs because of the good quality service, facilities, etc.

#### **SUGGESTIONS:**

- More facilities such as scans, x-ray and advanced laboratories can be brought in.
- There should be proper co-operation between political parties. Apart from the politics they should work together in implementing and continuing the policies and schemes.

- More number of Doctors can be recruited because there are only 2 doctors available for a population of more than 3000.
- There should be an increase in the funds available, so that the facilities of the PHC can be improved independently by the heads of PHC, rather than waiting for the approval from government.
- The study can be done in the future all over the country to know the growth and performance of all the primary health centres in the country.

#### **CONCLUSION:**

The study is based on a primary health centre and its growth which brought a clear view and in-depth knowledge in the field of primary health care available in the rural India. The Primary Health Centre in VV Palem is set to be a model for other primary health centres because of their performance in providing the quality health service. However, there are few political issues which can be changed; the performance of the PHC is very high is the reason for people preferring the primary health centre more than the private health institutions. The suggestions mentioned above should be implemented and should be brought into practice, then definitely there will be a huge change in the medical field, people from all backgrounds can avail the best treatment with low cost,. But today people are charged very high price for the basic medical treatments. Receiving the quality health services is a right of every citizen in the country and it is the responsibility of a government

to provide a quality health care to the people. In 2030, India will be contributing world's largest youth workforce. So it is very important to have a healthy workforce for a higher productivity. Thus concentrating more on rural health care is required. A better health for better future....

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# ECONOMIC IMPACT OF HIV/AIDS AND THE VISION 2020 IN NIGERIA

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## **Introduction:**

Nigeria is the most populous country in the sub-Saharan Africa. It had an estimated population of 182, 202,000 people (CIA Est. 2015). It is the region that carries the globe's heaviest burden of HIV/AIDS. In an estimated number, about 3.5 million people are living with HIV/AIDS (PLWHA), (NACA, 2014). "HIV epidemic has remained a major challenge and obstacles to the attainment of National developmental goals including the Millennium Development Goals (MDGs) and Vision 20:2020". This epidemic poses a serious threat to the development in Nigeria through the reduction in life expectancy, destabilization of the local and national economy and increased burden on the health and welfare of the populace (Emmanuel 2004).

The economic effects will vary according to the severity of the epidemic and the structure of the economy. The situation is so grave that, the world Bank has indicated that "in parts of Africa, if effective action is not taken to combat the spread of the epidemic, HIV/AIDS could result in economic collapse" (world economic forum). It is different from most other diseases because it strikes people in the most productive age group 15-49 and is essentially 100 percent fatal". The consequences of these are numerous, ranging from great suffering,

pain and death, accompanying with negative effects on national growth and development (Emmanuel 2004).

In Nigeria, various developmental plans have been initiated to achieve National developmental goals. The vision 20:2020 is a dream statement that Nigeria will become one of the top 20 economies in the world by the year 2020 (Onyenakenwa 2011). "Trace the history of the dream to a research conducted by economists at an American investment Bank, a fall-out of which was a prediction that Nigeria would be in the league of 20 top economies by the year 2025". However, this dream is under serious threat by the most destructive health crises of modern times, i.e. "HIV/AIDS". Furthermore, the disease has complicated the efforts to fight poverty, improve health, and to promote development by diminishing a person's ability to support, work and provide the needs for a family. (Enobon & Usenobong 2013).

## **2. An overview of the vision 20:2020 in Nigeria**

The vision 20:2020 is an economic plan which aims at making Nigeria as one of the top 20 most developed and largest economies in the world by the year 2020 (Vision 2020, Blueprint 2009). The vision was introduced in 2007 towards the end of Chief Olusegun Obasanjo's regime. But no concrete action was taken towards actualizing the vision. The

coming of Late President Umaru Musa Yar'Adua's administration in an effort to consolidate on the gain of the Obasanjo led government, and to rise the hope of Nigerians, gave the vision an impetus by making it a cardinal objective in achieving its seven – point agenda (Kayode, et al 2012).

In November 2009 the vision 20:2020-Economic Transformation Blueprint for Nigeria was released to the public. The vision is anchored on the Nigerian Economic Empowerment and Development Strategy (NEEDS II) and the seven point agenda. Linking the objectives of the NEEDS programme (2004-2007), the NEEDS II programme, and that of with the seven-point Agenda, the vision 2020 have the key objectives to:

- i. Stimulate Nigeria's economic growth and to launch the country into a path of sustained and rapid socio-economic development.
- ii. Place Nigeria in the bracket of 20 largest economies of the world by the year 2020, able to achieve a GDP of not less than \$4000/ annum by the year 2020 (Nigeria's Vision 2020, Blueprint, April, 2009).

Generally, the main aim of the vision is to address the distortions in the economy and stimulating its economic progress into the path of sustained, rapid economic growth and development by 2020 (Enobong and Usenobog 2013).

### **3. HIV/AIDS: Meaning, Status and Condition for its Spread**

#### **i. Meaning of HIV/AIDS**

"HIV Means Human Immunodeficiency virus. It is a virus that attacks, destroys and continues to deplete human immune system. The acronym AIDS

means Acquired Immuno Deficiency Syndrome." This suggests that the condition or illness is not inherited but acquired from possible environment factors such as virus infections." Similarly the, immune deficiency means that the viruses have gradually caused deficient immunity as clearly manifested in poor nutrition and low resistance to opportunistic infections (Salami 2014). HIV and AIDS are interrelated because AIDS is believed to be an advanced form of HIV infection." Thus, AIDS is a severe immunological disorder caused by HIV, resulting in a defect in cell-mediated immune response causing increased susceptibility to opportunistic infections like fever, tuberculosis, skin rashes and so on which ultimately leads to death (Azuh 2014). There are at least two strains of the viruses that cause AIDS and AIDS related conditions, namely HIV-1 and HIV-2. HIV-1 is the most common cause of AIDS Worldwide except in West Africa where the HIV-2 (which is less virulent) is common (Salami, 2014).

#### **ii. Status of the HIV/AIDS Epidemic in Nigeria**

The first case of AIDS in Nigeria was reported in 1986. Six years later in 1991, national spread of the disease was determined for the first time. Between 1991 and 2001, there was a rise in the prevalence rate from 1.8% in 1991 to 5.06% in 1999 and to 5.8% in 2001. It declined to 5.0% in 2003 and to 4.4% in 2005. There was a small rise in 2008 to 4.6% and then it declined to 4.1% in 2010. It has even declined further to 3.4% in 2012 (UNAIDS, 2014). Similarly as on 2015 the adult prevalence was at 3.1%. The same year's available statistics shows that about 3.5 million people are living with HIV and there were 250,000 were new HIV victims,

along with 180,000 AIDS related deaths. Although the national median prevalence of HIV is reducing in recent years, the reality is, the absolute number of people living with the virus has increased by almost half a million people in three years. This is because of the aggressive case deflection drive of the programme executors. AIDS related death has also increased in the same period because the country is behind the target in most success indicators for HIV treatment. For example, only 1 in 3 (4,50,000 of 1.5 million) Nigerians living with HIV/AIDS and in need of ARV gets it, only 18% of pregnant women receive prophylaxis for PMTCT and there are no group-specific HIV preventive measures in place for the most at risk members of the society such as the female sex workers (FSWS), injection drugs users (IDUS) and the men who have sex with men (MSM), (Salami, 2014).

### iii. Condition for the spread of HIV/AIDS in Nigeria

According to (James 2003), both economic and social factors are involved in the spread of HIV/AIDS in Nigeria. Some of these factors includes:

- i. **Poverty:** Poverty has contributed to the rapid spread of the disease in the country. Namely, the cost of the treatment for those already infected. An HIV positive person cannot afford the drugs necessary, as he or she has other needs like food and housing to consider. The point therefore, is that poverty plays a significant role in the spread of HIV/AIDS in the country. One fact that needs to be emphasized, is that poverty gives rise to powerlessness. Poverty and powerlessness create circumstances in people's lives that predispose them to the highest indices of
- ii. **Unemployment:** Again, economy is the keyword here. The poor economic situation of the country has led to the loss of jobs especially in the unskilled labour sector, as many companies and industries were forced to lay off their workers. Therefore, there is a vast and growing number of unemployed people in the country, Some of these unemployed people, unfortunately happens to be graduates, with at least a first degree or more, who had to struggle to pay for their education through the University, with the hope of getting a good job, only to come out and be roaming in the labour market. The point therefore is that some may fall in bad hands and engage in men having sex with men or sugar mums, also young ladies use their natural endowment as compensation for employment.
- iii. **Hawking:** Tied to the problem of unemployment is the growing phenomenon of hawking, which has become a major feature in most Nigerian cities. Hawking is the practice of selling goods, mostly items such as clothing, leather products, food, packaged water etc. This practice is common in the lorry parks, bus stops, on the major highways, in traffic jams and traffic lights. These Hawkers are mainly young girls, though not limited to them alone, the majority of whom have an average education or at least a primary school

education. A large number of others are drops outs from schools, due to poverty and other reasons. These Hawkers contribute to the spread of HIV/AIDS because these girls not only sell their goods, but also their bodies as well too, in order to supplement the little amount, they earn from Hawking.

**iv. Prostitution (Commercial sex work).**

Commercial sex work, play a key role in fuelling the HIV/AIDS epidemic in Nigeria in particular and Africa in general, as these commercial sex workers have a high rate of change in sexual partners. Prostitution in Nigeria and other parts of Africa is practiced not just for the fun or as a preferred business. It is tied to an economic condition which is poverty.

- v. Cultural beliefs.** Many people often reflect ignorance and denial about the disease. Most of the HIV/AIDS patients are often or attribute their sickness to the witchcraft and the work of evil spirits. Hence wrong medications are applied.

**4. Economic Impact of HIV/AIDS**

As economic considerations played a great role in the spread of HIV/AIDS, thus the impact of this disease has it's economic consequences. As we can see the rate of its prevalence history, it is the economically active adults that are being hit by the disease. These are the people upon whom the economic growth and development of the country lies, hence it is obvious that there will be a negative economic impact, collectively as a nation, and individually as well. Some of these economic impacts would affect the national development and

the actualization of the vision 2020 in the country. (James 2003).The impacts includes:

- i. Decline in Labor Force:** The HIV prevalence is said to be high among the age group of 15-49 years. Given this, we see a threat to the economic survival of the nation as the labour sector depends on these people for productivity. With many HIV positives, and probably a great number is still in the incubating stage, many of these people will become sick as they progress to full blown AIDS. Consequently, national productivity will gradually decrease as these workers, teachers, business men and women, civil servants etc succumb to AIDS and eventually die. This is bound to be a loss of trained and experienced workers. Another issue is that, economic base of a country relies on the availability of cheap, unskilled labour, especially in the private sector and in the area of agriculture and agricultural products. The problem then would also arise in the area of food production. Besides the problem of low productivity, demand for goods will certainly be reduced as the potential buyers die.
- i. Increased poverty.** Poverty had been earlier identified as a contributing factor to the spread of HIV/AIDS. However, with AIDS, there comes the burden of increased poverty. The fact is that many will become poor as the bread winners are lost to AIDS, and the scarce resources will be put into burying the dead. The consequence of HIV/AIDS epidemic is that it becomes more difficult for those who are already at a disadvantage, economically.

So that, these people might never get a change to rise beyond the poverty level.

**ii. Deterrent to potential Investors.** HIV/AIDS may also prove to be a bad omen for the country economically as it could scare away the potential investors, especially foreign investors. This is based on the fact that these investors would have to contend with the possibility of not getting local workers and the fact that their goods or product may not sell as the demand for goods is down. However, it must be painted out that this will create a problem not only for Nigeria, but also will affect foreign investors, mainly from North America and Europe, who are expecting a peak in their economies. Thus they need to turn to the developing countries for profits. There is no doubt that Nigeria represents a potential economy base for world investors. Therefore, the HIV/AIDS crisis in Nigeria will have a destabilizing effect on the global market economy.

**iii. Human Development.** AIDS has an adverse effect on development. The most generally accepted measure of human development is the human development index (HDI) of the United Nations Development programme (UNDP). AIDS will first affect life expectancy, consequently increases the infant mortality and premature death among adults. As the epidemic worsens in Nigeria, the impact on education may result in increased dropout rate to enable children work to compensate for losses, occasioned by the death of a family bread winner. This assessment by the UNICEF

says any increase in the dropout rate will impact on the already low secondary school enrolment that stands at 37 per cent for males and 31.1 cent for females.

**iv. National Productivity.** Another area of impact would be the on national productivity. Companies would have to bear the brunt of increasing costs when employees report sick due to a HIV/AIDS or die of it by depleting the revenue in the process. There is also an additional burden of replacement cost of dead employees or the terminally sick.

### **Conclusion**

The impact of HIV/AIDS is capable of rolling back the decades of gains in the development progress in Nigeria if any urgent measures are not taken to address the trend. This impact is heavily felt by the health sector through indirect costs such as expenditure on medical treatments and so on, as well as on the increasing stress on health system. Similarly, productivity will be affected as the most productive age groups of 15-49 were heavily infected. The HIV/AIDS epidemic is a serious challenge to Nigeria, a country that is already facing difficulties in meeting basic health care needs of the population. The HIV/AIDS pandemic should not be seen as a sole problem of a particular region but as a global problem. A problem experienced in one part might resurface else with the same problem still manifesting across the board. The issues raised and discussed here in this article have some notable implication for the developmental goals, which stress that the poverty Alleviation and Youth Empowerment programme need to be revisited in order to achieve its stated objectives in the country.

It is needless to say that the health sector is very strategic to the development of the Nigerian economy. Therefore, there is need for health sector reform in the country. Simultaneously, the Government should address the issue of unemployment among the youths by creating job opportunities.

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# Comprehending the Impacts of Early Initiation of Breast-feeding On Infant Mortality Rate & Neo-Natal Mortality

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## **Introduction:**

Pondering upon maternal and child health, India hasn't achieved any good position. Indicators like pre-pregnancy weights and weight-gain during pregnancy are both stunted. India has already gone beyond the halfway of its demographic dividend, and in order to avail full advantage of its demographic asset we require a healthy and educated population. Making investments in maternal nutrition and sanitation, and further enhancing their effectiveness and efficiency by working to amend social standards, can help India explore this window. Hence improving mother's health becomes crucial which can simultaneously lead to a healthy breast-feeding practice. Breast feeding is an old practice of human kind. It is generally accepted and acknowledged to be the optimum and perfect food for infants as it fulfils necessary nutritional needs.

Extensive research has been made in this area of breast feeding and those researches have documented promising results on the health of the infant. A healthy breast feeding also has positive impact on the health of the mother, family and society. Breast-feeding may have various kinds of impact which includes nutritional, immunological, developmental, psychological, and socio-economic and it also yields environmental benefits. Hospital

team can play a significant role in the initiation and maintenance of breast feeding. This can happen if the doctors, nurses, professionals and rest of the hospital team have necessary knowledge of its benefits and also with the presence of competent clinical management with necessary skills and habits. In order to warrant successful breast feeding, it is important that it should be initiated as early as possible during the neonatal period. Moment the child is born, the sucking reflex is most active and infants are more alert during the first hour and if these infants are put to mother's breast within this period, chances of exclusive and prolonged breast feeding increases.

This study primarily focuses on the effects of breast feeding (in the first hour of birth) on the neo-natal mortality rate and infant mortality rate. Studies have reported that initiation of breast-feeding within 24 hours of birth was significantly associated with reduction in all-cause mortality, low birth weight related neonatal mortality and infection related neo-natal mortality among all live births. Furthermore early initiation of breast-feeding also prevents hypothermia in infants. Benefits of early initiation of breast-feeding are not limited to the infants but also takes into its stride the mothers. The early suckling stimulus stimulates the secretion of oxytocin which reduces the risk of

postpartum haemorrhage in mother. Despite these recognized benefits, rate of early initiation of breast feeding in South Asia is low.

### **Breastfeeding in India**

The first hour of infant's life is often considered to be miraculous; but it's the most delicate and sensitive hour too. It is the time when the child is at the highest risk of inviting complexities and developing breathing difficulties. Most importantly, it is also the time when infants are at the risk of not getting what they require the most: first breast milk.

Around just 41 percent (2013) of the mothers in India initiate early breast feeding. Lack of awareness and availability of substitutes for breast milk are the major reasons for low breastfeeding rates in the country. Among both the section weather rich and poor, there is lack of awareness about the importance and technicalities of early as well as exclusive breast feeding. Breast milk acts as a natural and most effective child's first vaccination which impacts the life and death of the child. It is shocking that mothers' milk is being substituted for various other food items. Also the use of formula food should be reduced. In India, women are still not aware of the benefits of early and exclusive breastfeeding it is advantageous for the emotional and physical well-being of both the mother and the infant. Factually speaking, mothers' milk is the best and perfect food for the infant.

In India 16.5 lakh children die every year due to diseases which can be easily controlled or cured. This early initiation of breast feeding can alone protect the lives of 13 percent of the children.

Under-nutrition is itself a cause of one-third of deaths of children in India. Breastfeeding can play a very vital role in this area.

Recently a report published by United Nations Children's Fund (UNICEF, August 2016) said that only half of the new born infants in India are breastfed within the first hour of birth. Out of 140 million live births in 2015 (globally), 77 million new born infants had to wait too long to put to breast. Just 45 percent of the newborns were put to breastfeeding within the first hour of life.

### **Cesarean Section Delivery in India**

Worldwide researches and studies show that cesarean section delivery has increased in developed countries and in few developing countries like India. Cesarean deliveries have thus become a major concern for the social scientists and the concerned government authorities dealing with the mothers' and child's health. In relation to breastfeeding it is important to ponder upon caesarean deliveries because caesarean deliveries have a negative impact on early initiation of breastfeeding. The World Health Organization has advised that the rates of caesarean section deliveries, generally, mustn't exceed 15 percent and any rate higher than this, indicates inappropriate usage of this procedure. As against this, the current level of caesarean delivery in many as 64 countries is as high as between 30 to 50 percent. In developed countries like Australia, US, Germany, Italy and France, the rates have gone up rapidly (Sufang et.al, 2007).

Data of 20 major states show that the cesarean section deliveries have rapidly increased in India. From 1992-93 (NFHS-1), the cesarean section deliveries have increased from 2.9 percent

to 7.1 percent in 1998-1999 (NFHS-2) which further increased to 10.6 percent in 2005-06 (NFHS-3). National Family Health Survey-III provides data of 28 states which has found that 17.8 percent cesarean deliveries were witnessed in urban areas and 6.2 percent in rural areas. The national percentage of cesarean deliveries stood at 10.6 percent. District Level Health Survey also shows similar results where data of 28 states and 7 union territories have been taken into consideration. It has found that from 2002-04 (DLHS-2) the cesarean deliveries have increased from 6.7 percent (rural-4.6%, urban-12.3%) to 8.1 percent (rural-5.9%, urban-17.1%) in 2007-08 (DLHS-3). Although recent trends of 2015-16 (NFHS-4) aren't available at hand but various newspapers and articles suggest that cesarean deliveries have further increased in numbers as well as in percentage. However according to World Health Statistics which was released in 2012 said 9 percent of all new births in India were through cesarean section deliveries. Experts have pointed out that the decreasing early initiation of breastfeeding is caused majorly due to cesarean deliveries. This paper aims to validate the effects of early initiation of breastfeeding on neonatal mortality rate and infant mortality rate. And thus through data analysis, it will also enlighten us about trends of breastfeeding and its relation with cesarean section deliveries.

Are Cesarean Section Deliveries an Obstacle to Early Initiation of Breastfeeding?

Cesarean section deliveries are considered as an obstacle to early initiation of breastfeeding. However in a research by CR Banapurmath et al, (2013) it has been found that 65.2% of mothers

initiated breastfeeding activity within the first hour of delivery. It was found that there was no significant difference between vaginal delivery and cesarean section delivery in the early initiation of breastfeeding, ( $P = 0.35$ ). Researchers were successful in dealing with this obstacle by involving a lactation management counsellor in helping mothers in early initiation of breastfeeding following the cesarean section.

### Literature Review

Recent Studies: Breast feeding within an hour of delivery has significant impact on "maternal infant bonding" as it results in improvement in the mother and child's bonding (Himani et al, 2011). Wendy H. Oddy (2013) in an ecological study of 67 countries found that breast-feeding in the first hour of life protects against neonatal mortality rate. Vishnu Khanal (2015) in a research on "Factor associated with early initiation of breast-feeding in Western Nepal", found that low birth weight of new born infants were more at risk because of delayed breast feeding.

Earlier Studies: Salariya et al found that babies who were first fed within half an hour of birth were likely to remain breast feeding for a longer period of time. The relationship between early first contact of mother and infant and the outcome of breastfeeding may be closely related to what Klaus and Kennell (1976) describe as an early sensitive period in the mother. This period immediately following the child birth seems to be the time for optimum attachment and perfect bonding of the mother to the infant. A 1974 research in Brazil compared the breastfeeding of two different groups of 100 women. The mothers

of one group nursed their child immediately after birth and maintained constant contact throughout the period in the hospital with their babies in cribs by their beds. The control group mothers had a glimpse of their infants shortly after birth and then visits for approximately 30 minutes, every 3 hours, 7 times a day, beginning 12-14 hours after birth. At 2 months, 77% of the experimental group mothers were breastfeeding without supplemental formula. In contrast, only 27% of the control group mothers were breastfeeding without formula supplements at 2 months. Knowledge and support must also be taken into consideration as causal factors in this research study as a special nurse assisted the mothers of the experimental group to stimulate and encourage breastfeeding.

Salarya et al (1978) assigned 111 primiparous women intended to breastfeed into groups matched for age and social class. Half of the subjects had their infants put to the breast within 10 minutes after birth. The other subjects began breastfeeding at four to six hours after delivery. The early-initiation group fed for an average of 161 days or about 40 percent longer than the 96 day average in the other group. Each of these early contact studies supported the idea of a maternal sensitive period in the first hour after birth. Prolonged breastfeeding seems to be one of the results of promoting early contact of mother-infant pairs.

### Objective

To understand the impact of breast-feeding initiation in the first hour of birth on Neo-natal mortality rate and Infant Mortality Rate.

### Methodology

The methodology followed here is the method of data collection, data compilation and data analysis. Data has been collected from Ministry of Health and Family Welfare (ON923) and (ON420) and Statistical data from World Bank. Two linear regression models have been built where in the 1st model, the breastfeeding rate (in first hour of life) has been taken as the independent variable and the neo-natal mortality rate has been taken as the independent variable. In the 2nd model breastfeeding rate has been taken as dependent variable and infant mortality rate has been taken as independent variable. Also Karl Pearson coefficient of correlation has been estimated to see the correlation between the two variables.

Data Source: Ministry of Health & Family Welfare and World Bank.

	No. of Live Births Reported	Number of Newborns Breastfed Within 1 Hour
2009-10	20400458	12912488
2010-11	21010725	15020408
2011-12	21201548	16793461
2012-13	20932728	17272698
2013-14	21206838	18421572
2014-15	20790181	18385938

Data Source: Ministry of Health & Family Welfare and World Bank Statistics

Table 1 shows a time series data from 2009-10 to 2014-15 of two variables namely, “number of live birth reported” and “number of newborns breastfed within one hour”. Table 2 shows time series data of same period, 2009-10 to 2014-15 of the variables – “Neo-Natal Mortality Rate”, “Infant Mortality Rate” and “Breastfeeding Rate” in the first hour of birth. Breastfeeding rate in table 2 has been calculated from the data given in table 1. Variables of table 2 have been used to analyze the data.

	INDEPENDENT VARIABLE	INDEPENDENT VARIABLE	DEPENDENT VARIABLE
	Infant Mortality Rate	Neo Natal Mortality Rate	% of Breast-feeding (1st Hour)
2009-10	48.2	33.8	63.29
2010-11	46.3	32.7	71.48
2011-12	44.4	31.6	79.2
2012-13	42.6	30.6	82.51
2013-14	40.9	29.5	86.86
2014-15	39.3	28.6	88.43

Data Source: Ministry of Health & Family Welfare and World Bank Statistics

Model 1: Relationship between Neo-natal mortality rate and breastfeeding rate (in the first hour of birth): here we study the impact of breastfeeding on neonatal mortality rate. Here the dependent variable is breastfeeding rate and the independent variable is neonatal mortality rate. Regression model has been built to study the relationship.

$$Nmr = -0.19Bf + 46.70$$

Where:

Nmr is Neonatal mortality rate

Bf is Breastfeeding rate

**Interpretation:** It is inferred that there exists a negative relationship between neo-natal mortality rate and breastfeeding rate within first hour of birth. The above equation says that a 19 percent decline (negative change) in breastfeeding rate will cause a 100 percent positive change (increase) in neonatal mortality rate.

**Correlation Analysis:**

	Neo Natal Mortality Rate	% of Breast-feeding (1st Hour)
Neo Natal Mortality Rate	1	
% of Breast-feeding (1st Hour)	-0.976148086	1

Correlation Matrix presented above shows us that there exist strong negative correlation of 97 percent between neonatal mortality rate and breastfeeding rate. An increase in any one variable will lead to decline in the other and vice versa.

Model 2: Relationship between Infant mortality rate and breastfeeding rate (in the first hour of birth): Here we have taken breastfeeding rate in the first hour of birth as the dependent variable and infant mortality rate as independent variable. Like the previous model, again regression analysis has been employed to study the relationship between the two variables namely infant mortality rate and breastfeeding rate.

$$Imr = -0.33Bf + 70.24$$

Where,

Imr is the infant mortality rate

Bf is the breastfeeding rate in the first hour of birth

Interpretation: It is inferred that there exists an inverse relationship between infant mortality rate and breastfeeding rate. The equation estimated in this model says that a 33 percent decline in the breastfeeding rate will lead to a 100 percent positive change in infant mortality rate. It can also be said that an increase of 33 percent in breastfeeding rate will lead to 100 percent decline in the infant mortality rate.

**Correlation Analysis:**

	Infant Mortality Rate	% of Breast-feeding (1st Hour)
Infant Mortality Rate	1	
% of Breast-feeding (1st Hour)	-0.977506656	1

The correlation matrix presented above shows that there exist a strong negative correlation of 97 percent between infant mortality rate and breastfeeding rate.

**Conclusion:**

The paper concludes that the Neo-Natal Mortality Rate and the infant mortality rate are

negatively correlated with the Number of New born breast fed children within first hour of life. The paper finds a strong negative correlation between both-

1. Infant mortality rate and breastfeeding rate
2. Neonatal mortality rate and breastfeeding rate

Also it is understood that although the impact of breastfeeding on both the mortality rates is significant, the impact on infant mortality rate is much higher than the impact on neonatal mortality rate. So it is important that the children are breast fed within the first hour of life as it will increase their life expectancy, as it will reduce the Neonatal Mortality Rate and infant mortality rate and will lead to a nutritious society which is imperative for economic growth of any nation. The study shows that India's breastfeeding rate within the first hour of birth (delivery) is increasing rapidly. This is actually a very good sign for socio-economic prosperity.

This paper, in the initial section has already mentioned that the cesarean deliveries in India are increasing robustly, which should indicate that the breastfeeding rate in the first hour of life would decrease. However the data when collected and analyzed shows conflicting results. Also the results of the study do not relate (match) with the report of UNICEF citing that only 50 percent of children were put to early initiation of breastfeeding. What we can understand is that either the cesarean deliveries are managed so well that the breastfeeding practice is at work in efficient and effective way or the data collected contain errors. This study also aims to suggest the problems and discrepancies prevailing in the data publication, as the data

collected don't match or relate to the data published by UNICEF recently.

However this research should make the authorized agencies and department to reflect upon the current situation of breastfeeding, neonatal mortality rate and the rate of cesarean deliveries in the country. This study also aims to pave way for further extensive research in the same area.

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# A JOURNEY THROUGH THE FISCAL CONSOLIDATION EFFORTS IN INDIA

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## **Introduction:**

Independent India witnessed the growth of fiscal deficit over the years of development. India being a protectionist economy, it was in need of developing its capital base for a smooth journey forward. This responsibility was very well recognized by the government and a planning agenda was put forth in the form of Five Year Plans. The aim of these plans was the overall socio-economic development of the economy. The increased role of government has led to deterioration of the fiscal performance of the economy, ultimately leading to the balance of payment crisis in 1990s. Fiscal discipline of the centre and states was recognized as prerequisites of the economic development of the country.

Fiscal consolidation is the key to better fiscal health of the economy to overcome the fiscal deficit of the economy. Fiscal consolidation is brought forth through improved tax realization and a better aligned expenditure. This paper attempts to do a journey through the fiscal positions of the economy over the years and the efforts taken by various governments to control the fiscal disequilibrium and the challenges faced.

## **PRE-LIBERALISATION ERA**

Since independence, efforts were made to bring about socio-economic stability and equity; thereby transforming the shattered economy to a strong economy. Major hurdles toward this were

the high rate of poverty and low productivity which prevailed in the economy. With the poor economic conditions of the country, the governments assumed greater role of development to create the capital and industrial base, strong enough to holdup as one of the largest economies of the world.

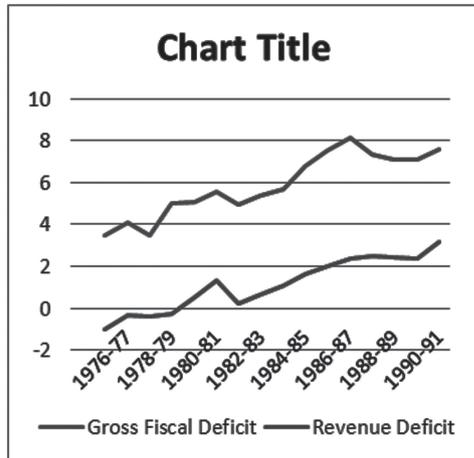
The young independent India over the years witnessed deterioration of fiscal conditions due to the greater global turbulence and other socio-economic and political instability. The initial effort to have disciplined fiscal actions was reflected in being a planned economy. The various financial commissions were set up to make necessary suggestions apart from specialized committees on various issues.

The first official study was made by Tax Enquiry Commission chaired by Shri. John Matthai on the incidence of direct and indirect taxes on households and he suggested widening and deepening of taxes for the purpose of financing developmental expenditures. A similar study by prof. Nicholas Kaldor in 1956 found that the prevailing tax system to be 'inefficient and inequitable'. Kaldor's review recommended the 'broadening of the tax base through the introduction of an annual tax on wealth; the taxation of capital gains; a general gift-tax; and a personal expenditure tax.'<sup>22</sup>

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<sup>22</sup> Empirical fiscal research in India : A survey, RBI

In early 1960s, Indian economy experienced improvement in its fiscal position primarily due to the favourable monsoon and the agricultural sector showed a growth of 8 % and the industrial sector grew at 7-8%. Despite this development, the non-planned expenditure of government was growing substantially.



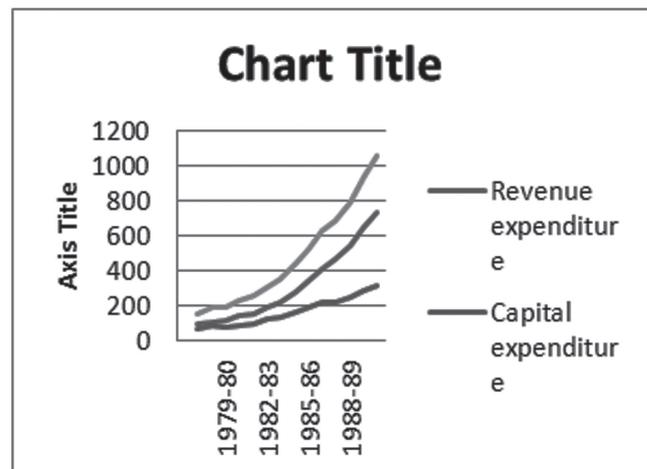
Source: RBI

This was coupled by the poor performance or failure of various projects undertaken, unsatisfactory fiscal performance of states and the under developed capital markets. Various efforts are made to mobilize resources and to improve the savings habit of the public. Nationalization of banks helped to improve the faith in the financial system of the country. However, these were short-lived improvements. By 1971-72, unforeseen strains of refugee influx from Bangladesh and the hostility with Pakistan exerted greater pressure on the government and the overall deficit turned out to be 738 crores.<sup>23</sup> The deficit exhibited an upward trend on account of food, fertilizer subsidies, drought relief and budgetary support to states.

V. M. Dandekar committee (1979) proposed some changes in the Central Tax Laws such that it

promotes employment in the economy. Also, suggestions were given with respect to the introduction of MANVAT for manufacturing sectors, so that the indirect tax system becomes more responsive.

Other committees had also put forth their suggestions for increasing tax compliance via reducing the tax rates. This was accepted and thereby the tax rates were brought down to 66% from 72% and further to 50% in 1980s. In addition to that, long term Fiscal Policy was announced to promote a stable economic environment, reducing uncertainties. The revenue of the government increased by 22% and tax buoyancy by 23 % but pressure on government accounts was high. Fiscal imbalances on the government accounts lead to the balance of payment crisis of 1991.



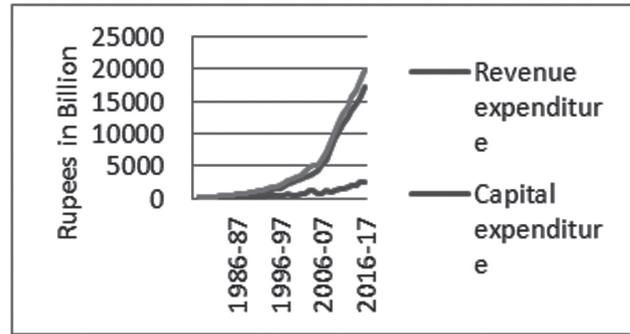
Source: RBI

## POST-LIBERALIZATION ERA

The balance of payment crisis brought forth the structural reforms with substantial implications

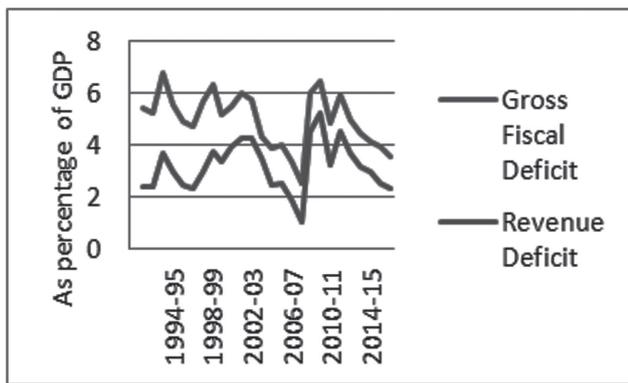
<sup>23</sup> Sixty-five years of the Indian economy, Prasad, Chandra Sekhar, Himanshu Shekhar, ISBN-978-81-7708-363-7, New century publications, 2013

for fiscal discipline. It has been realized that the overall economic betterment requires better fiscal environment. With the structural changes, the Indian economy has experienced higher growth in GDP and its foreign reserves. However, the accounts indicate higher amount of non-developmental expenditure than developmental expenditure. The interest payments are an important component of revenue expenditure.



Source: RBI

In 2000-01, Medium Term Fiscal Reform Measure was laid down by the union government to curtail the wasteful expenditures and to improve the revenue and efficiency of tax collection mechanism of the states. The Eleventh Finance Commission recommended a Fiscal Reform Facility in the form of 15% of grants for improved fiscal adjustment as an incentive for the states.



Source: RBI

Along with liberalization policies to improve the investment and industrial licensing, austerity measures were also adopted with the point that the defense expenditures are important but to be cautioned with respect to the available resources. Tax Reform Commission headed by Dr. Raja Chellaiah suggested lowering marginal tax rates, reducing corporate tax rate, widening tax base, progressive reduction of customs duties and unification of tax rates.<sup>24</sup> The opening up of economy helped to reduce the deficit from 8.5% to 5% by 1993-94. Minimum Alternative Tax was introduced in 1996-97 which requires companies to pay 30% of book profit as tax. However the inefficiencies existed along with the exemptions and tax incentives. The deficits have again gone up to strike 6.1% by 1998.

The most important reform towards fiscal consolidation was the Fiscal Responsibility and Budget Management Act of 2003 under which the fiscal deficit was to be curtailed below 3% and eliminating revenue deficit. Fiscal Responsibility Legislations were recommended for states to attain fiscal discipline. In 2005, Pension Fund Regulatory and Development Authority was formed to monitor the pension investments in the markets thereby expanding the capital market. The focus was not merely on the expansion of revenue but also on the expenditure such that it results in development of

<sup>24</sup> Fiscal reforms in India, Dr.Sing, Neha Tomar,IOSR Journal of Humanities and Social Science (IOSR-JHSS), p-ISSN: 2279-0845. Volume 7, Issue 2, pp 3

economy through multiplier effect. Actions were taken to attract investments into the country whereby simplifying the norms for acquiring licenses. Also, disinvestment process has been taken up and National Investment Fund (2005) has been created to finance the socio-economic infrastructure of the economy.

FRBM was followed by other measures which helped to reduce fiscal deficit substantially from 5.74% in 2002 to 2.54% by 2007-08. The ripples of the global economic slowdown were felt in India as well. In order to help the economy cope with the external shocks a number of stimulus packages have been announced. This led to strains on the public exchequer along with poor performance of agricultural and manufacturing sectors and the deficit increased to 6.46% by 2009-10. However, the economy gradually recovered from the adversities.

### **CURRENT SCENARIO**

The recent trends in fiscal deficits are promising to the economy. In the past five years there has been a substantial reduction in the deficits i.e. deficits which was 5.91% in 2011-12 has come down to 3.94 in 2015-16. The policy-makers have taken at most efforts to curtail the deficits to the tolerable levels without compromising the developmental activities. A synthesis of tax and expenditure reforms is being implemented. On expenditure front, the subsidies are reformed to

be more target oriented, reduction in gas and petroleum subsidies and also the Direct Cash Transfer have helped to improve the efficiency of the system. Expenditure Management Commission was set up in 2015-16 in order to monitor the expenditure of the government.

### **CONCLUSION**

Fiscal consolidation is the process of enhancing the fiscal health of an economy thereby promoting the overall development. Fiscal discipline has become an important aspect in that as it reflects the prospects of the economy and its credibility. A stable economy is the one preferred by the investors. India, one of the fastest growing economies of the world is not an exception on this regard. The efforts of policy makers over the years have helped to develop the economy and reduce the deficits despite the external volatilities.

The present trends of expenditure and revenue insists on further focusing to reduce the non-developmental expenditure and to improve the overall efficiency of the system with respect to the collection of revenue and devolution of funds. With the initiatives to implement GST from next financial year, there arose a need for revisiting the existing inter-governmental fiscal relationship.

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# The Growing Need for Experimentation

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**“Discovery commences with the awareness of anomaly, i.e., with the recognition that nature has somehow violated the paradigm-induced expectations that govern normal science.”**

**-Thomas Kuhn**

Unbounded rationality, complete self-control and similar such axioms of neo-classical economics have constantly been challenged by several empirical studies of decision-making. Intellectual curiosity has sparked lively dialogue and innovative research. Research in economics has taken off in new directions, and behavioral economics and experimental economics are now among the most happening fields in the subject.

A productive dialog now exists between theory, laboratory experiments and field studies (**Judd Kessler and Lise Vesterlund**). Although experimental research in economics has early predecessors like Chamberlain, Reinhard Selten, to name a few, Dr.Vernon L.Smith is considered to be the main researcher in the field. He was even awarded the Nobel Prize in Economic Sciences in 2002 for his path-breaking contributions to experimental economics. Causality plays quite an important role in experimentation, and the validity and reliability of an experimental study depend on the causal inferences the researcher is able to draw from the experiment. Field study is one end of experimentation, and lab study is the other end. Deciding on whether a particular study has to be a field experiment or a lab experiment is something

that requires careful thought. Laboratory experiments, as opposed to field studies, are concerned with controlling the extraneous variables that may have a considerable impact on the dependent variable, which is also referred to as the outcome variable. So, laboratory experimentation acts as a platform for the researcher(s) to deliberately manipulate or ameliorate the influence of independent variable(s), and derive definite conclusions.

However, lab studies are not free from limitations. It is likely that anything we are interested in explaining will have a number of causes. In a lab environment, everything is stylized and simplified in order to isolate a single cause. For instance, if we want to find out whether temperature affects people’s ability to make decisions, we would adjust only the temperature of the room. This may not be possible in a field experiment, which, on the contrary, is thought to be more practical. Real-world economics is all about people being sub-optimal and making decisions in different contexts and situations. In simple terms, the responses which a participant gives in a controlled setting may deviate from the choices he makes in a real-market condition which could be plagued by numerous

co-occurring events that are inferential impediments.

**“Isn’t the real-world ultimately what we want to effect, what we need to study, what we need to understand.”**

**Nina Mazar**, Associate Professor of Marketing (Behavioral Science), Rotman School of Management, University of Toronto.

Despite the belief that trials run on the field are more logical in nature, one should not forget that given the fact that it is difficult to develop an irrational model of decision-making, field observations make it more tedious to do so as it is hard to infer causality. Colin Camerer (2012) argues that lab experiments can be altered to better reflect an external environment of interest than do field studies.

In conclusion, irrespective of the several dissimilarities between field and lab trials, we have to accept that the concept of empirical testing has acquired greater scope over the years, and has its place when it comes to evaluating a theory or notion.

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## பண மதிப்பீழ்ப்பும் மக்களின் வாழ்வாதார ஒழிப்பும்

ஷ்யாம் பிரபு, முதுகலைப் பட்டம் பொருளாதாரம்,  
இலயோலா கல்லூரி, சென்னை.

### அறிவிப்பு :

புழக்கத்திலிருக்கும் ரூபாய் நோட்டின் மதிப்பினை நீக்கித் திரும்பப் பெறுதல் பண மதிப்பீழ்ப்பு எனப்படும். கடந்த நவம்பர் மாதம் 8,2016 இரவு இதனை நம் இந்தியப் பிரதமர் மாண்புமிகு நரேந்திரமோடி அவர்கள் அறிவித்தார். அறிவித்த நாள் முதல் இன்று வரை மக்கள் படும் வேதனையைச் சொல்லி மாளாது. புழக்கத்திலிருந்த 15.44 லட்சம் கோடி அதாவது 86 சதவீதம் புழக்கத்திலிருக்கும் உயர் மதிப்பு நோட்டுகளான 500 மற்றும் 1000 ரூபாயினை செல்லா நோட்டுகளாக மாற்றினார் நம் பிரதமர்.

பண மதிப்பீழ்ப்பின் காரணத்தை இது வரையில் பிரதமரோ, நிதி அமைச்சரோ, அல்லது ரிசர்வ் வங்கி ஆளுநரோ முறையாகத் தெரிவிக்கவில்லை. ஆனால் இதை ஊடகங்கள் தெரிவிக்கும்போது கருப்புப்பணத்தை ஒழிப்பது, தீவிரவாதத்துக்கு நிதி வழங்குவதை தடுப்பது மற்றும் கள்ள நோட்டுகளுக்கு முற்றுப்புள்ளி வைப்பது என்றே சொல்கிறார்கள். ஆனால் இதனால் பொருளாதாரத்தில் எத்தகைய மாற்றம் ஏற்படும் என்று சரியாக விளக்கவில்லை.

### இயல்பு நிலை மாற்றம் :

இந்த அறிவிப்பால் இந்திய மக்கள் பெரும் சிரமத்திற்கு ஆளாகியுள்ளனர். இது மட்டுமல்லாமல் ஒரு நாளைக்கு 4500 ரூபாய்

மட்டுமே மாற்றப்படும் என்றும். மற்றொரு நாள் 2000 ரூபாய் மட்டுமே மாற்றப்படும் என்றும் மாறி மாறி சட்டங்களை வெளியிடுகிறது வங்கிகள்.இதைப் பெற மக்கள் வங்கிகளை நோக்கி படையெடுத்தனர். இதனால் வங்கியின் முன் நிற்கும் மக்களின் எண்ணிக்கை நாளுக்கு நாள் அதிகரித்துகொண்டே இருக்கிறது. ஒவ்வொரு நாளும் புதுப்புது சட்டங்கள், புதுப்புது முறைகளைக் கையாளுகிறது வங்கிகள். ஒரு நாள் 2000 ரூபாய் நோட்டுகள் மட்டுமே விநியோகம், மற்றொரு நாள் 100, 50, 20, 10 நோட்டுகள் விநியோகம், ஒரு வாரத்திற்கு 24000 ரூபாய் மட்டுமே எடுத்துக்கொள்ளலாம், நாள் ஒன்றுக்கு தானியங்கி இயந்திரம் அதாவது ஏடிஎம்மிலிருந்து 2000 ரூபாய் மட்டுமே எடுக்கலாம் என்று வெவ்வேறு உத்திகளைக் கையாளுகிறது வங்கிகள். இந்த அறிவிப்புகளின் காரணமாக மக்கள் மிகுந்த பாதிப்புக்கு உள்ளாகியுள்ளனர். மக்கள் தங்களிடம் உள்ள நோட்டுகளை மாற்றுவதற்காக வங்கிகளின் முன் கால்கடுக்க நின்று கொண்டிருக்கிறார்கள். அப்படியே மக்கள் தங்களிடம் உள்ள பழைய நோட்டுகளை மாற்றினாலும், உயர் மதிப்பிலான 2000 ரூபாய் நோட்டுகளை மட்டுமே பெறுகிறார்கள். அந்த 2000 ரூபாய் நோட்டுக்குச் சில்லரை மாற்றுவது என்பது சிக்கலாக உள்ளது.

இந்தியாவைப் பொறுத்தவரையில், வறுமைக் கோட்டிற்குக் கீழ் உள்ளவர்கள்

மற்றும் நடுத்தர மக்களின் தொகை அதிகம். இவர்களின் வருமானமும் குறைவாகவே உள்ளது. அந்தக் குறைந்த வருமானத்தை வைத்தே அவர்களுடைய அன்றாடத் தேவைகளைச் சந்தித்து வருகின்றனர். ஆனால் பிரதமரின் அறிவிப்பின் பிறகு இவர்கள் படும் துன்பங்களை வார்த்தைகளால் விவரிக்க முடியாது.

தங்களுடைய வருமானத்தில் வரும் பணத்தைச் சிறுகச்சிறுகச் சேமித்து வைத்தனர். ஆனால் இந்த அறிவிப்பு வெளியானவுடன், இவர்களுக்குத் தான் சேமித்து வைத்த பணத்தை எப்படி மாற்றப்போகிறோம் என்ற கவலை வாட்டியது. இது மட்டுமின்றி தாங்கள் செய்த வேலைக்கு அவர்களுக்குக் கிடைத்த ஊதியத்தை வங்கியிலிருந்து எடுக்க முடியாமல் திண்டாடிக் கொண்டிருக்கிறார்கள். மாதம் முழுதும் பணிபுரிந்து தங்களது உழைப்பையும் ரத்தத்தையும் செலவு செய்து சம்பாதித்த பணத்தை எடுக்கவும் முடியாமல், அனுபவிக்கவும் முடியாமல் மக்கள் வருந்துகின்றனர். எதிர்வரும் பண்டிகைகளை நினைத்துப்பார்த்து அச்சம் கொள்கின்றனர்.

### சிறு குறு தொழில்கள் பாதிப்பு:

கூலித்தொழில் செய்யும் பணியாளர்கள் மிகுந்த சிரமத்திற்கு உள்ளாகியுள்ளனர். தாம் செய்த வேலைக்கு முதலாளியிடம் கூலி கேட்டால், முதலாளி வங்கியில் தன்னால் பணம் எடுக்க முடியவில்லை என்கிறார். இதை எதிர்த்து கேள்வி கேட்கும் தொழிலாளியிடம் மறுநாளிலிருந்து அவர் வேலைக்கு வரவேண்டாமென்று கூறுகிறார். இதனால் பாதிப்படைவர்கள் கூலித்தொழிலாளிகள் மட்டுமல்ல முதலாளிகளும் தான். மற்றொருபுறம் பணப்பற்றாக்குறை

காரணமாக என்னால் உங்களுக்குச் சரியான கூலி வழங்க முடியவில்லை என்று அவர்களை வேலையிலிருந்து நிறுத்திவிடுகின்றனர். ஆகவே அமைப்பு சாரா கூலித்தொழில் மிகவும் பாதிக்கப்பட்டு உள்ளது.

### சுய தொழில் பாதிப்பு :

இப்படியிருக்க சுய தொழில் செய்யும் மக்கள் தங்களுடைய முதலீட்டை எடுக்க முடியாமல் துன்பப்படுகிறார்கள். மக்களிடம் போதுமான பணம் இல்லாத காரணத்தால் தங்களின் அன்றாடத் தேவைகளுக்கும் அத்தியாவசிய பொருட்கள் வாங்க முடியாமல் தவிக்கின்றனர். இதனால் சுயதொழில் துறையில் பாதிப்பு ஏற்பட்டுள்ளது. இது மட்டுமின்றி சுயதொழில் செய்யும் தொழிலாளிகள் அதை நிறுத்திவிடவே முயல்கின்றனர்.

### தனியார் துறையில் தொழிலாளியின் பாதிப்பு:

தனியார் துறையைப் பொறுத்தவரை இயல்பாக சம்பளத்தைத் தொழிலாளியின் வங்கிக் கணக்கில் வரவு வைப்பார்கள். தொழிலாளிகள் தமக்குத் தேவையான பணத்தை ஏடிஎம்மிலிருந்து எப்பொழுது வேண்டுமானாலும் எடுத்துக் கொள்வார்கள். ஆனால் இப்போது உள்ள சூழ்நிலையில் பெரும்பாலான ஏடிஎம்களில் பணமில்லாத காரணத்தினால் வங்கிக்குச் சென்றே பணம் எடுக்கும் நிலையுள்ளது. தன்னுடைய சம்பளத்தை வங்கியிலிருந்து எடுக்க பணிக்கு ஒருநாள் விடுப்பு எடுத்துச் செல்லும் பரிதாபத்திற்குரியது. தொழிலாளியின் நிலை, "பணத்தை எடுக்க முடியுமா?" என்ற கேள்விக்குறி எழுகின்றது.

## முதியவர்கள் பாதிப்பு:

முதியவர்களுக்கு வழங்கும் ஓய்வூதியத்தை அவர்கள் பெற முடியாத நிலை உள்ளது. அரசுப் பணியில் இருந்து ஓய்வு பெற்றவர்களுக்கும், அரசுப் பணியிலிருந்து இறந்து போனவர்களின் மனைவிகளுக்கும் வழங்கும் ஓய்வூதியம் வங்கியிலிருந்து தான் பெற்றுக்கொள்ள முடியும். ஆனால் இந்த பணமதிப்பிழப்பு இவர்களையும் விடவில்லை. இந்த ஓய்வூதியத்தில் வரும் பணத்தை வைத்தே அவர்களுடைய குடும்பத்தின் அத்தியாவசியத் தேவைகளைச் சந்திக்க வேண்டும். ஆனால் இவர்களும் தங்களுடைய முழு ஓய்வூதியத்தைப் பெற முடியவில்லை. ஏனென்றால், வங்கியின் விதிமுறையின்படி நாள் ஒன்றுக்கு ஒரு நபருக்கு 5000 ரூபாய் மட்டுமே வழங்கப்படுகிறது. வாரத்துக்கு 24,000 ரூபாய் வரை பெற முடியும். இந்த விதிமுறை இவர்களைக் கடுமையாக பாதித்துள்ளது. ஓய்வூதியம் பெறுபவர்கள் பெரும்பாலும் 60 வயதுக்கு மேல் உள்ளவர்கள். அவர்களால் வங்கிக்குப் பலமுறை வந்து செல்ல இயலாத நிலை உள்ளது. ஆகவே இது முதியவர்களை மன உளைச்சலுக்கு ஆளாக்கியுள்ளது.

## கிராமப்புறங்களில் பாதிப்பு:

இந்தியாவைப் பொறுத்தவரையில் 70 சதவீதத்திற்கும் மேல் மக்கள் கிராமப்புறங்களில் வாழ்கின்றார்கள். இது நாமறிந்த ஒன்றே. ஆனால் பிரதமரின் இந்த முடிவு இவர்களைக் கருத்தில் கொள்ளாததுபோல் இருக்கிறது. ஏனென்றால் பணப்பொருளாதாரத்திலிருந்து, வங்கிப் பொருளாதாரத்திற்கு மாறுங்கள் என்று கூறுகிறார். ஆனால் இன்றளவும் கூட பல கிராமங்களில் வங்கி இல்லை என்பது அவர்

அறிந்த உண்மை. எனவே வங்கியே இல்லாத இடத்தில் வங்கிப்பொருளாதாரம் எப்படி உருவாகும் என்பது கேள்விக்குறி. மேலும், இன்னும் கிராம மக்களுக்கு வங்கிப்பரிவர்த்தனைகளை எப்படி மேற்கொள்வது, வங்கியினை எப்படி பயன்படுத்துவது என்றே தெரியாத நிலை உள்ளது. இந்தச் சூழ்நிலையில் வங்கிப்பொருளாதாரம் என்பது சாத்தியமில்லாத காரியம். மட்டுமல்லாமல் கிராமத்தில் உள்ள மக்களுக்கு கிரெடிட் கார்ட் மற்றும் டெபிட் கார்டை எப்படி பயன்படுத்துவார்கள் என்பது புரியாத புதிராக உள்ளது. இந்த நிலையில் இவர்கள் இந்த சேவைகளைப் பயன்படுத்துவதில் மிகுந்த சிரமத்துடன் கூடிய சவாலாக உள்ளன.

இது ஒருபுறம் இருக்க கிராமப்புறங்களில் சிறு மற்றும் குறு தொழில்களே நடக்கின்றன. விவசாயம், காய்கறி விற்பனை, மற்ற பொருட்களின் விற்பனையே இவர்களின் வாழ்வாதாரமாக இருக்கிறது. அதுவே ஒரு தேநீர் கடைக்காரரோ, காய்கறி வியாபாரியோ, பெட்டிக்கடை வியாபாரியும் செய்வது சிறு அல்லது குறு வியாபாரமே. இதில் எல்லாம் பணமில்லாப் பரிவர்த்தனைப் பயன்படுத்துவது தற்போதைய சூழ்நிலையில் சாத்தியமில்லாத ஒன்று. ஆகவே இவை அனைத்திற்கும் பணம் அவசியம். ஒரு பால் வியாபாரியிடம் சென்று நான் உங்களுக்கு கிரெடிட் கார்ட் மூலம் பணம் செலுத்துகிறேன் என்று சொல்ல முடியாது. ஆகவே கிராமப்புறங்களில் வாழும் மக்களின் பொருளாதாரம் பணத்தைச் சார்ந்தது மட்டுமே என்பதில் சந்தேகமே இல்லை. ஆனால் இந்த அறிவிப்பிற்குப் பிறகு இவர்களின் நிலைமை மிகவும் மோசமடைந்து விட்டது. அன்றாட தேவைகளுக்குப் பணமில்லாத சூழ்நிலை உருவாகி விட்டது. இதற்கு காரணம்

500 மற்றும் 1000 ரூபாய் நோட்டுகள் செல்லாது என்ற திடீர் அறிவிப்பே. இது கிராம மக்களின் வாழ்க்கையை முடக்கியுள்ளது.

### பொருளாதாரப் பாதிப்பு :

இந்த அறிவிப்பின் காரணமாக நம் இந்தியப் பொருளாதாரம் பின்னோக்கிச் செல்ல ஆரம்பித்துவிட்டது. மக்களிடம் போதுமான பணம் இல்லாததின் பயனாக பொருள் வாங்கும் திறன் (Capacity of Buying) வெகுவாகக் குறைந்துவிட்டது. நுகர்வு குறையும்பொழுது வளர்ச்சி குறையும். இதை ரிசர்வ்வங்கி தன்னுடைய அறிக்கையில் இந்தியாவின் வளர்ச்சி விகிதம் 7.5 சதவீதத்திலிருந்து 7.1 சதவீதத்துக்கு குறையும் என கணித்துள்ளது. இந்த வளர்ச்சி விகிதம் இன்னும் சரிவதற்கான வாய்ப்புகள் உள்ளதாக பொருளியல் நிபுணர்கள் கூறுகிறார்கள்.

### சரிசெய்யும் முறைகள்:

- 1) இதனைச் சரிசெய்ய வேண்டும் என்றால் பணத்தைத் தேவைக்கேற்ற அளவுக்கு புழக்கத்தில் விடவேண்டும். இந்திய அரசு மற்றும் ரிசர்வ் வங்கி இதனை உறுதி செய்யும் பட்சத்தில் இந்த நிலையைச் சரிசெய்ய வாய்ப்பாக அமையும்.
- 2) உயர்மதிப்பிலான 2000 ரூபாய் நோட்டை நிறுத்த வேண்டும், அல்லது குறைந்த மதிப்பிலான ரூபாய் நோட்டை வெளியிட வேண்டும். அப்படி செய்யும்போது இந்த நிலைமை மாறக்கூடிய சூழல் உள்ளது.
- 3) வங்கி ஏடிஎம்மில் சரியான அளவுக்குப் பணத்தை நிரப்ப வேண்டும். ஏடிஎம்மில் பணமிருந்தாலே மக்களின் பெரும் வேதனை குறையும். இதற்குப்

பணப்புழக்கம் சீராகவும் வேகமாகவும் இருக்க வேண்டும்.

- 4) வங்கிப்பொருளாதாரத்தின் பயன்களை மக்களுக்குத் தெளிவுபடுத்த வேண்டும்.
- 5) கிரெடிட் மற்றும் டெபிட் கார்ட் பயன்படுத்த மக்களுக்குப் பயிற்சியும் விளக்கமும் தேவை.
- 6) புழக்கத்தில் இருந்த 500 மற்றும் 1000 ரூபாய் நோட்டுகள் திரும்பப் பெறப்பட்டன. இதனை ஈடுகட்டும் விதமாக 9.2 லட்சம் கோடி புதிய ரூபாய் நோட்டுகள் புழக்கத்தில் விடப்பட்டுள்ளது. ஆனால் இன்னும் 6.42 லட்சம் கோடி பணம் தேவை உள்ளது. இதைச் சரிசெய்ய ரிசர்வ் வங்கி புதிய நோட்டுகளை அதிகளவில் புழக்கத்தில் விடவேண்டும்.

### முடிவுரை :

ஆகவே இந்த அறிவிப்பு எல்லாத் தரப்பு மக்களையும் கடுமையாக பாதித்துள்ளது. இது இந்தியா போன்ற வளர்கின்ற நாட்டுக்குச் சரியான கொள்கை அல்ல. இதன் முழு விளைவை நாம் பொறுத்திருந்து பார்க்க வேண்டும்.

### குறிப்புகள்:

- 1) நவம்பர் 9, 2016 தினகரன், தமிழ் நாளிதழ்
- 2) டிசம்பர் 7, 2016 ரிசர்வ்வங்கி அறிக்கை மற்றும் அறிவிப்புகள்
- 3) ஜனவரி 19, 2017, மாலை மலர்

## கிராமப் பொருளாதாரம் : நாம் தொலைத்த செழிப்பான பொருளாதாரம்

து. லட்சுமி நரசிம்மன் , முதுகலைப் பட்டம்,  
பொருளாதாரம் இலயோலா கல்லூரி, சென்னை.

நாங்கள் 2016 நவம்பர் மாதத்தில் புறச்சேவைத் துறை வாயிலாக கடலூர் சென்றோம். அங்கே குறிப்பிட்ட ஒரு பகுதியான நெல்லித்தோப்பு என்ற பகுதியில் உள்ள விவசாயிகளை சந்தித்தோம். அவர்கள் ஒரு நாள் கூலியாக 300 ரூபாயிலிருந்து 700 ரூபாய் வரை பெறுகிறார்கள். அவர்களுக்கு 3 வாரங்களாக கூலி கொடுக்கப்படவில்லை. அங்கே மக்கள் தங்கள் பணத்தேவைகளுக்கு வட்டிக் காரர்களிடம் கடன் வாங்குகிறார்கள். அங்கே உணவு தானியங்களை சேமிக்கும் கிடங்கு இல்லை. நான் அங்கே வறுமை கொடும் சூழலைக் (vicious cycle of poverty) கண்டேன்.

குறைந்த வருமானம்

குறைந்த சேமிப்பு

குறைந்த மூலதன ஆக்கம்

குறைந்த உற்பத்தித் திறன்

குறைந்த விலையினால் குறைந்த வருமானம் கிடைக்கிறது. விளைச்சல் அதிகமாக இருந்தாலும் விலை பெருமளவிற்கு ஏறவில்லை. அரசாங்கம் விலையை மாற்றுவதற்கு விரும்பவில்லை. ஆனால் விவசாயிகளின் வருமானத்தை ஏற்றுவதற்கு இன்னும் பெரிதளவு மாற்றங்கள் தேவை. இயற்கை

உரங்களை பயன்படுத்தி, இயற்கை விவசாயத்தை ஊக்குவித்தால், யூரியா, பொடாசியம், பாஸ்பரஸ் போன்ற உரங்களுக்குத் தரும் மானியம் சேமிக்கப்பட்டு, அதனால் விளைச்சல் அதிகரிக்கும். நீர் ஆதாரத்தை பெருக்குவது, நீர் மேலாண்மை செய்வது ஆகிய இரண்டும் முக்கியமாக செய்ய வேண்டும். நமது பழங்கால மன்னர்கள், விவசாயிகள் நீர் வளத்தை பாதுகாத்துப் பெருக்கினால் வரிவிலக்கு அளிப்பார்கள். எனவே மக்கள் கிராமத்தை விட்டு வெளியேறாதபடி வேலைவாய்ப்பையும் சேவைகளையும் கிராமத்தை நோக்கி நகர்த்த வேண்டும். அதாவது குடிசைத்தொழில்கள் மற்றும் விவசாயம் சார் சிறு தொழில்கள் வளர நிதி வழங்கப்பட வேண்டும். அரசாங்கம் கூட்டுறவு விவசாயத்தை ஊக்குவிக்க வேண்டும். மொத்த உள்நாட்டு உற்பத்தியில் விவசாயத்தின் பங்கு குறைந்து கொண்டே செல்கிறது. அதனை நிலை நிறுத்த வேண்டிய கட்டாயத்தில் இருக்கிறோம். கிராமத்தில் ஒரு இசேவை மையம் தொடங்க வேண்டும். கிராமத்திற்கு மாநில அரசாங்கம் நிதி ஒதுக்கீடு செய்தால், இந்த மையத்தினால் அது தெரிய வரும். இதனால் ஆட்சியில் வெளிப்படைத்தன்மை உருவாகும். மக்களுக்கு இதனால் கிராமத்தின் நிதி ஒதுக்கீடு பற்றி அனைத்தும் தெரிய வரும்.

அதேபோல் ஒவ்வொரு கிராமத்திலும் ஒரு விவசாய ஆராய்ச்சி மையம் தொடங்கப்பட வேண்டும். அதன் பக்கத்தில், ஒரு மண் பரிசோதனை மையம் தொடங்கப்பட வேண்டும். ஏனென்றால், நம் உடல் நன்றாக இருக்க நாம் உடலை பரிசோதிக்கிறோம். அதேபோல் மண் வளம் எவ்வாறு இருக்கிறது என்பதை நாம் மண் பரிசோதனை செய்தால்தான் தெரியும்.

தரமான அரசு மருத்துவமனை கிராமத்திற்கு இன்றியமையாத ஒன்று. அதில் உடல் பரிசோதனை மையம் இடம்பெற வேண்டும். அப்போது மக்களுக்கு அவர்களுடைய உடல்நிலை பற்றி தெரிய வரும்.

பண்டைய தமிழர்கள் பல்வேறு விதமான நீர் மேலாண்மையை பின்பற்றினார்கள். அவை

- கண்மாய்
- கரணை
- தாங்கல்
- ஏந்தல்
- ஏரி
- குலம்
- குட்டை
- ஆறு
- கடல்

அதேபோல் நம் முன்னோர்கள் பாரம்பரிய பயிரினங்களையே நடட்டார்கள். அவை

- செம்பா வகையான சீரகசெம்பா, கருடச்செம்பா, தங்கச்செம்பா என்பன

- கேப்பை, கேழ்வரகு, ராகி, நெல், கோதுமை, பாசிப்பருப்பு, மொச்சை, கடலை போன்றவை வளர்க்கலாம்.

1945 க்குப் பிறகு பயன்படுத்தப்படாத நச்சுக்குண்டே இன்று இருக்கும் பல ரசாயன உரங்களில் பயன்படுத்தப்படுகிறது. அந்த நச்சுத்தன்மையை எதிர்க்கும் பயிர்களையே இன்று நாம் பயன்படுத்துகிறோம். அவை நம் உடல்நலத்திற்கு ஏற்றது இல்லை. அவை அதிக நீரை எடுத்துக்கொண்டு வளரும்.

தமிழ்நாட்டில் ஒவ்வொரு ஆண்டும் சராசரியாக 945 மழைநீர் பதிவாகியுள்ளது. அவற்றை கடலில் கலக்கவிடாமல் குடிநீர் தேவைகளுக்கு பயன்படுத்திக் கொள்ளலாம். அதுவே நமக்கு இயற்கை வழங்கும் சுத்தமான குடிநீர். பல்வேறு ஏரிகளைத் தூர்வாரினால் விவசாயத்திற்கும், குடிப்பதற்கும் நீர் நமக்கு போதுமானதாக இருக்கும்.

கிராமங்களில் சித்தா மற்றும் ஆயுர்வேத மருத்துவமுறைகளை கொண்டுவரவேண்டும். காரணம் இன்றும் மஞ்சள் காமாலை நோயினால் ஒருவர் அவதிப்பட்டால் அவருக்கு கீழாநெல்லி போன்ற மருத்துவச்செடிகளைத்தான் கொடுக்கிறோம். தலைவலி, இருமல், ஜலதோஷம், ஜூரம் வந்தால் மொடக்கத்தான் என்ற மருத்துவச் செடியினால் ஆன ரசம் தான் கொடுக்கிறோம். மலேரியா, டெங்கு ஆகிய நோய்களைத் தடுக்க நிலவேம்பு குடிநீர் மற்றும் துளசி கஷாயம் கொடுக்கிறோம். நமது முன்னோர்கள் உணவையே மருந்தாக உட்கொண்டார்கள். எனவே இத்தகைய

மருத்துவகுணம் வாய்ந்த செடிகளை நாம் வளர்க்க வேண்டும்.

ஒரு கிராமத்தில் இந்த மரங்கள் இருந்தால் அது நன்மை பயக்கும்

- வேப்பமரம். இந்த மரத்தில் உள்ள வேப்பக்குச்சியில் ப பல்துலக்கி துப்பினார் அது அந்த மண்ணுக்கு உரம் ஆகும்.
- வாழைமரம்.இங்கே குளித்தால். அது அந்த மண்ணுக்கு உரம் ஆகும்.
- ஆலமரம்.இந்த மரம் 24மணிநேரம் நாம் சுவாசிக்கும் ஆக்ஸிஜனைக் கொடுக்கும்.
- பனைமரம்.இந்த மரத்தின் வேர் ஆயிரம் அடிக்கு பரவி நீரைப் பிடித்துக்கொள்ளும். இதனால் நிலத்தடி நீர் பாதுகாக்கப்படும்.
- தென்னைமரம். இதில் மக்கும் உணவுக் கழிவுகளைப் போட்டால் அந்த மண்ணுக்கு உரம் ஆகும்.
- புங்கைமரம்.மாமரம்,பலாமரம் ஆகியன இந்த மரங்கள் பல்லுயிர் பெருக்கத்திற்கு வழி செய்யும்.

“பகுத்துண்டு பல்லுயிர் ஒம்புதல் நூலோர் தொகுத்தவற்றுள் எல்லாம் தலை.”

என்பது வள்ளுவர் வாக்கு.

பூச்சிக்கொல்லி தேவைப்படாது. காரணம், அந்த பூச்சிகளைப் பறவைகள் நின்றுவிடும். இது உணவுச்சுழற்சியில் ஒரு முக்கியமான பாகம்

வேப்பமரத்தில் பூக்கும் அனைத்துப் பூவும் விதை ஆவதில்லை. எந்தப்பூ பறவைகளால் தின்னப்பட்டு அதன் கழிவுகள் நிலத்தில் சேர்கிறதோ அப்போது தான் அவை இன்னொரு மரமாக வளரும். வண்டுகள் தான் காய்கறிகள் பூ வாக இருக்கும்போது அதனுள் நுகர்ந்து, அதன்பின்னர் தான் அவை நல்ல காயாக மாறும். எனவே வண்டுகள் என்ற இனம் இல்லையென்றால் மனிதகுலமே இன்னும் 4 ஆண்டுகளில் அழிந்துவிடும் என்கிறார் விஞ்ஞானி ஐன்ஸ்டீன்.

அதேபோல் நமக்கு பல நாட்டு மாடு இனங்கள் உள்ளது.

- கிர்
- ஓங்கோல்
- பர்சூர் மலை மாடு
- தேனி மலை மாடு
- சிந்தி
- சிவப்பசக்கி
- சாக்கிவால்
- உப்பலஞ்சேரி

போன்ற இனங்கள் உள்ளன. இவை ஜெர்சி மாட்டினைக்காட்டிலும் நல்ல நோய் எதிர்ப்பு சக்தி கொடுக்கும். இவை ஒரு நாளுக்கு 3லிருந்து 5லிட்டர் வரை பால் கொடுத்தாலும் தாய்ப்பால் போன்ற தூய்மை கொண்டது.இந்தியாவில் பாலின் சந்தை மதிப்பு 50 லட்சம் கோடி. இதில்தான் நம் பாரம்பரிய பொருளாதாரம் உள்ளது. அதேபோல் நாம் நாட்டுக் கோழிகளை

வளர்க்க வேண்டும். அவை வளர்ப்பதற்கு நீர் அதிகமாகத் தேவைப்படாது. இது ப்ராய்லர் கோழிகளுக்கு ஒத்துவராது. அவை உடல்நலத்திற்கு தீங்கு விளைவிக்கும். அதேபோல் நமது நாட்டு நாய்கள் நள்ள மோப்ப சக்தி உடையது. சிப்பிபாறை, ராஜபாளையம் நாய்கள் ஆகிய நாய் வகைகள் நன்றாக காவல் காக்கும். வெளிநாட்டு நாய் வகைகள் வந்ததால் அதற்கு வெளிநாட்டிலிருந்து இறக்குமதி செய்யப்பட்ட உணவுகள் கொடுக்க வேண்டியுள்ளது. நம் பொருளாதாரம் இவ்வாறு சுரண்டப்படுகிறது.

அதேபோல் கிராமத்தில் விவசாயிகளிடம் வட்டியில்லாக் கடன் கொடுப்பதற்கு ஒரு கூட்டுறவு வங்கி வேண்டும்.தற்போதைய நிதி மேலாண்மையில் பல ஆராய்ச்சிகள் செய்து மேம்படுத்த வேண்டும்.

மைசூரில் ஒரு விவசாயி பல்வேறு விவசாயிகளை பங்குதாரர்களாக இணைத்துக் கொண்டு அங்கே விவசாய நிலத்திற்கு அருகே அவர்களுக்கு வீடு கட்டிக்கொடுத்து கூட்டுறவு விவசாயம் செய்தார். அவர்களுக்கு நல்ல விளைச்சல் கிடைத்தது. இந்தியாவில் விவசாயம் மட்டும் மொத்த உள்நாட்டு உற்பத்தியில் 17.4% பங்களிக்கிறது 2015 2016 . முன்பாக இது 18.4% என்ற அளவில் உள்ளது.

இந்தியப் பொருளாதாரத்தின் மொத்த வேலைவாய்ப்பில் விவசாயம் இன்றளவும் 45% மேல் பங்களிக்கிறது.தற்போது 201516 ஆண்டில் 1.1% மட்டுமே விவசாயத்தின் மொத்த உள்நாட்டு உற்பத்தி வளர்ச்சி கண்டுள்ளது. கிராமத்திற்கான கடன் நிதி 15,000 கோடியாக

உள்ளது. 201415 ஆண்டில் விவசாயத்தின் மொத்த உள்நாட்டு உற்பத்தியில் 12.1% ஏற்றுமதி செய்யப்பட்டது. உலகத்தின் எதிர்காலம் உணவு உற்பத்தி செய்யும் நாடுகளிடம் உள்ளது. ஆயுதம் உற்பத்தி செய்யும் நாட்டிடம் இருக்கப்போவதில்லை.

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## INCLUSIVE GROWTH OF SOCIAL SECTORS IN INDIA

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Since the process of planning was initiated without altering initial structural inequities, the distribution of benefits of economic growth has not been egalitarian. Social sector policy, which could have acted as a redistribution measure, did not don this mantle. Further, the approach of the state towards social sectors has been ambivalent. They have been considered, either as constitutional welfare, or as a means for enhancing human capital. In a regime of fiscal stringency and competing demands a welfare orientation towards social sectors has implied that the allocation of required amount of resources to these sectors could be repeatedly diverted to 'productive sectors' which were seen as being more important. The adoption of the human capital approach implies a focus on higher level facilities with not much attention being paid to the basic levels. The result is that this lack of vision about the role of social sectors in development strategy is reflected in the uneven progress that has been achieved and the paradoxical situation that it has spawned.

The main challenge facing India's development is the high proportion of population that continues to be poor despite a high rate of growth of real per capita income (around 2% per annum) being recorded between 1985 and 2001 a rising stock of over 58 million tones. It was observed that the impressive improvements in the literacy rate from 18.33% in 1951 and 52.21% in 1991 to 65.38% in 2001, and the resultant decline in the actual

number of illiterates by 31.96 million between 1991 and 2001 (GOI,2002) have been widely commended. While not undermining these gains, it needs to be mentioned that over one-third of the population continues to be illiterate and our current achievement falls short of the 77% literacy rate attained by the neighboring countries of Sri Lanka (UNDP.2002) as far back as 1970. Though

'education for all' was to be achieved by the year 1990, and an allocation of 6% of GDP as public investment in education (Kothari Commission, GOI, 1996, Ramamurthy Committee, GOI, 1991), was considered necessary for the purpose, public expenditure has hovered at best as 4.5% of GDP.

Two approaches should be considered for development of social sector. The human capital approach and the human development approach could be used to analyze social sectors. The first approach emphasizes investment in education; health and nutrition as a means of enhancing the quality of human capital which may be defined as 'stock of skills and productive knowledge embodied on people. The human capital approach attracted attention during the 1960s when Schultz and Gary Becker highlighted the view point that education, health and nutrition cannot be considered merely as consumption goods. Investment in these sectors is emphasized as a 'means' to higher productivity of labour force. Productivity of labour force is justified on the basis of either financial rates of

return (as in the case of education) or elasticity estimates emerging from production function (as in the case of health).

The human capital approach has been very influential in focusing attention on the investment aspects of education, health and nutrients and has generated a large body of literature, particularly on the measurement of returns to such investment. Nonetheless, analyses since Blaug have been pointing out the limitations of this approach. Briefly, it has been noted that the human capital approach exaggerates the importance of returns to the investment in schooling and ignores the importance of self-learning in enhancing the quality of human capital. Since the approach considers production in a mechanistic sense as being organized on an assembly line with individuals contributing to the production process, it fails to take cognizance of the contribution of individuals in evolving new technologies and practices. Subsequently literature on endogenous growth theories incorporated the latter aspects with externalities accruing to the society from investment in schooling as well as expenditure on research and development being given due importance.

The human development approach also known as the capabilities approach, views basic human attainments such as basic education, good health and nutrition as an 'end' in itself rather than as a 'means' to higher productivity and higher earnings. Social sector attainments are perceived as contributing to enhancement of the quality of life as well as to economic growth. Human growth as a concept is defined as 'enlarging the range of people's choices' (UNDP, 1990) and encompasses

the element of empowerment, Co-operation, equity in basic capabilities and opportunities, sustainability and securities. As is evident, this approach has strong overtones of neo-Kantian philosophy. The human development approach, while seemingly similar to the basic needs approach, is clearly distinguished from it by the fact that while the human development approach is concerned mainly with the 'state of existence of people – the lives they lead', the basic needs approach centers around assessing the extent of possession of detached objects.

An important feature of the human development approach is that it considers the acquisition of minimum level of education, health and nutrition as basic rights of the people and therefore assigns a key role to the State in providing these rights. Thus, there is greater emphasis on the supply of public services as compared to the reliance placed on the rise in general affluence to enhance capabilities. The State is not only a regulator but a provider of services as well. The focus of attention is not merely on workers who contribute to production but also the old and infirm who may not be in a position to make an economic contribution. Importantly, the approach needs no justification such as rates of return to investment to justify public expenditure on social sector.

### **A Budget that Evades the Real Issues in the Social Sector**

It is clear that there is a new conceptualization for the "social sector" that appears to be focused on skills, employment and entrepreneurship rather than education or even basic health.

The presentation of the Union Budget for 2016-17 has probably for the first time in the history of the budget, simply glossed over elementary education. The budget speech by finance minister Arun Jaitley made a blink-and-you-miss-it reference to primary education that was not just only factually incorrect – India has not achieved universalization in primary education, as claimed by him – but it did not even include the budgetary allocation the government plans to make to this sector. Instead, Jaitley moved swiftly to higher education, for which we are told Rs. 1000 crore has been put aside for its financing.

Budget documents, however, reveal that the allocation for school education is **up by a meager Rs. 1367.5** crores from the revised estimate (RE) of 2015-16. What is interesting to note is that the demand for grants in 2016-17 for school education by the ministry of human resources development was Rs. 63, 826.7 crores, but only Rs 43, 554 crores has been allocated by the finance ministry – a whopping shortfall of 20, 273 crores! However, for higher education the demand for grants has been met by the increase in allocation this year, indicating a clear shift in priority towards higher education. It is not surprising, therefore, that for Sarva Shiksha Abhiyan (SSA), which is the government’s vehicle for fulfilling its constitutional obligation under the Right to Education Act, the allocation has gone up by a negligible Rs. 500 crores (even less if compared to the RE). The allocation to the higher education sector thus registers an increase of 13.5% from last year (RE to budgeted estimate), while school education shows a negligible increase of 3.24%, which if adjusted does not even cover the inflation rate.

### Budgetary Allocations for Education

	Total [2015-16] BE	Total [2015-16] RE	Total [2016-17] BE
Total Education	69,074.8	67,585.8	72,394 [92,666.7]
School Education	42,219.5	42,186.5	43,554 [63,826.7]
SSA	22,000	22,015.4	22,500

[figs in brackets show demand for grants] In ‘000 crores

Source: Vol II of Expenditure Budget, 2016-17.

What is ironic, though, is that Jaitley’s speech starts off by listing the social sector as one of the four main areas of the budget, which also include the farm and rural sector, infrastructure and bank recapitalisation. He even starts off the section on social sectors with a quote by Vivekananda which states that a country can only progress if “its population is well-educated, well-fed and well cared for”. So, it is a bit of a mystery that what is then enunciated for the social sector made little reference to either of these issues, as shown below. The minister’s speech started off by referring to LPG connections in the name of women, presumably by way of improving their health so that they do not have to inhale the smoke of “chulhas” with Rs. 2000 crores allocated for this. Other issues covered were as follows:

#### Health

1. A health protection scheme for catastrophic health expenses amounting to Rs. 1 lakh/ family with a top-up of Rs. 30,000, for citizens above the age of 60 years.
2. Quality medicines through a new Jan Aushadi Yojana that will operate through 3000 drug stores across the country.

3. A national dialysis programme to be run as a public-private partnership

### **SC/ST and Women**

1. National SC/ST Hub for SC/ST and women entrepreneurs to ensure their economic empowerment. Odd that SC/STs form the highest number of school drop-outs and have the lowest literacy rates of all social categories, but not a mention is made of how that challenge will be addressed. Girl's education also continues to be a challenge, but the focus seems to have shifted away from addressing that this year.
2. National Scheme for Incentives to Girls for Secondary Education has been given a princely amount of Rs 3 crores!

### **Minorities**

1. Skill development of minorities by way of their social development.

The allocation for minority education however is down from Rs 375 crores [Rs 335 RE] last year to Rs. 120 crores this year.

### **Education, skill development and job creation**

1. Since 'universalisation of primary education' has apparently been achieved, the focus will be on improving quality and higher education. No plans for how the improvement in quality might be effected.
2. Sixty-two new Navodaya schools to be opened in districts where none exist. But Navodayas, cater only to a small section of the rural population and are highly controversial as they embody a hierarchy within the public education

system, in contravention of the government's obligation under the 86th amendment that makes elementary education a fundamental right of every child. Nevertheless, roughly Rs. 200 crores more than last year has been allocated under this head. With only a total increase of Rs 500 crores for SSA, which caters to the bulk of the population using government schooling, the 'elitist' thrust of the budget is unmistakable.

3. PM KaushalVikasYojana to "capitalise on the demographic dividend" by setting up 1500 skill training institutes across the country in "partnership with industry and academia" with an estimated budgetary allocation of Rs 1700, crores.
4. 300 schools to be catered to through online entrepreneurship courses.
5. A national career service to be expanded with 100 new centres established in this year and linked with State employment exchanges.
6. Swachh Bharat to get Rs. 9500 crores

The final point under the social sector part of the speech then included 'Retail Trade' as one of the issues. The FM therefore went on to state that a Model Shop and Establishment Bill will be passed to enable smaller shops to be opened 7 days a week. It is hard to understand, how this is part of the "social sector."

### **Redefining the social sector**

It is clear that there is a new conceptualization for the "social sector", that appears to be focused on skills, employment and entrepreneurship rather than education or even basic health. As a result,

one cannot garner a coherent plan for education from the announcements made in the budget. The 'schemes' for socially marginalized groups – SC/ST/ minorities or women are also geared towards skill enhancement and entrepreneurship, despite the fact that the majority within these groups, are yet to be in a position to take advantage of such initiatives. The minister used flashy terms like great leap forward, digital literacy for the rural population and entrepreneurship for empowerment of SC/ST and women, when in fact the critical issues for the

marginalized and for the social sectors, have not even been touched upon. The way forward for the bulk of the population, which is still deprived of basic education, has been left ambiguous, at best.

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# MACRO ECONOMIC INDICATORS AND THEIR IMPACT ON THE AUTOMOBILE SECTORAL GROWTH IN INDIA

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## INTRODUCTION

The Indian Automobile Industry embarked on a new journey in 1991 following the delicensing of the economy and subsequent opening up for 100 per cent Foreign Direct Investment (FDI) through the automatic route. Since then almost all global automakers have set up their presence in the southern part of the Indian sub-continent. The Indian automotive Industry has emerged as a sunrise sector in the Indian Economy and is one of the world's fastest growing passenger car markets and second largest two wheeler manufacturers. The growth of Indian middle class and increasing purchasing power along with strong growth of economy, over the past few years, have attracted the automakers to Indian market. The near stagnation in auto sector in markets of the USA, EU and Japan has helped India as a push factor for shifting of new capacities and capital to the auto industry. In recent years, India is emerging as an export hub for most of the passenger and commercial vehicles. The recent policy initiative of MAKE IN INDIA by Modi led NDA government is presumed to further enhance manufacturing and export capabilities in our country.

## GLOBAL SCENARIO

In the initial years, most of the manufacturing activities were concentrated in the USA, Japan and in some of the European countries. Though these

countries still account for a significant share in production, more and more volumes of production come from other parts of the world, especially from Asian region. Around three- fourths of the global production is being carried out in the top 10 countries, out of which Japan, the USA and China constitute over 40% of global production. The automobile industry has emerged as a major driving force for supportive industries like steel, iron, aluminum, rubber, plastics, glass, transport and insurance. The automobile industry generates large amount of employment opportunities in the economy. The global automotive car market is growing at a rate of about 2 per cent per annum and is not expected to pick up in the near term. Growth has dropped due to the increasing levels of saturation of automobiles in the developed countries. But in recent years, the rise in purchasing power among the growing middle class due to rapid urbanization in developing countries mainly in Asian region has helped in the automobile sector growth. Fall of crude oil price to less than \$ 50 per barrel in the last two years has resulted in considerable reduction in ownership cost of vehicle which helped automakers to grab new customers in the recent periods. A likely rise in crude oil prices to over \$100 a barrel and growing concern of financial crisis would hurt the automobile industry badly which was quiet evidently seen in the year 2008.

## INDIAN SCENARIO

India is home to a vibrant automobile industry which annually produces and sells around more than 40 million vehicles. It has been one of the few countries across the globe which witnessed a growth in automobile sales despite the financial crisis of 2008. In fact in the year 2009-10 it has recorded its highest volumes ever. It is believed that this upward trend would continue in the foreseeable future due to a strong domestic market and increasing thrust on exports. The Indian economy has grown at an average rate of around 8 per cent over the past fifteen years and is expected to grow in the same tandem in the coming decades too. This is predicted to drive an increase in the percentage of the Indian population able to afford vehicles. Indian's car per 1000 population is currently among the lowest in the world. The twin phenomena of low car penetration, rising income coupled with other favourable macro-economic indicators are expected to contribute to an increase in India's automobile demand. A likely upsurge in crude oil price per barrel is expected to lower the automobile sales in our country.

## REVIEW OF RELATED STUDIES

Firstpost (2012) in his article points out that the rising interest rate and hike in fuel price has impacted the growth of automobile industry with a marginal growth from the previous financial year. Society of Indian Automobile Manufacturers Association (SIAM) data reveals that passenger car production grew at 2.5%, domestic sales rose 0.31% and exports jumped to 16.2%.

KPMG INDIA (2010) study on the 'Indian Automobile Industry Evolving Dynamics' emphasizes

on the point that growth in the economy for the past one decade has influenced a particular middle class in India which was able to afford vehicles. Low car penetration in India coupled with favourable macro-economic indicators will pave growth for Indian automobile industry. The changing demographic profile of the country, growth in rural demand for passenger vehicles will enhance growth in the industry.

## SIGNIFICANCE OF THE STUDY

The main aim of the study is to analyse whether the various macro-economic variables has had an impact on domestic sales of automobiles in India. Growing disposable income among the middle class households, lowered crude oil prices in the recent time period, favourable macro-economic conditions and rapid urbanization is influencing in automobile sector growth.

## OBJECTIVE OF THE STUDY

To evaluate the impact of various macro-economic indicators on automobile sales in India

## INTRODUCING THE VARIABLES

The variables used in the study for analysing the impact of macroeconomic indicators on net sales of passenger vehicles and two wheeler are Inflation rate, GDP growth rate, Crude oil price per barrel in(\$), lending rate. These variables have an impact on the domestic sales in India.

## METHODOLOGY OF THE STUDY

The study is built upon with the help of secondary data availed from various sources for the years from 2001 to 2015. Multiple Regression analysis is used in the study for analysing the objective framed.

**SCOPE OF STUDY**

In recent years India has been developing as a potential market for automobiles due to rise in demand and as a result, there is an increased production to tap the growing demand both at

home and in the foreign markets. This is reflected in the production and sales figures of the industry especially remarkable in the passenger vehicle and two wheeler divisions, where production and sales side has witnessed a phenomenal growth.

**DATA ANALYSIS AND INTERPRETATION**

To evaluate the impact of various macro-economic indicators on automobile sales in India:

**Table – 3.1**

<b>DOMESTIC SALES OF AUTOMOBILE FROM 2001 TO 2016</b>				
<b>(UNITS)</b>	<b>(Numbers)</b>	<b>(Numbers)</b>	<b>(Numbers)</b>	<b>(Percentage)</b>
<b>YEAR</b>	<b>PASSENGER VEHICLE</b>	<b>TWO WHEELER</b>	<b>TOTAL SALES</b>	<b>PERCENTAGE GROWTH IN SALES</b>
2001-02	675116	4203725	4878841	
2002-03	707198	4812126	5519324	13.12776948
2003-04	902096	5364249	6266345	13.53464663
2004-05	1061572	6209765	7271337	16.03792961
2005-06	1143076	7052391	8195467	12.70921703
2006-07	1379698	7872334	9252032	12.89206582
2007-08	1549882	7249278	8799160	-4.894838237
2008-09	1551880	7437670	8989550	2.163729265
2009-10	1951333	9370951	11322284	25.9493968
2010-11	2501542	11768910	14270452	26.03863319
2011-12	2629839	13409150	16038989	12.39299918
2012-13	2665015	13797185	16462200	2.638638882
2013-14	2503509	14806778	17310287	5.151723342
2014-15	2601236	16004581	18605817	7.484162452
2015-16	2789678	16455911	19245589	3.438559027

Source- The data on domestic sales of passenger vehicles, two-wheeler was obtained from <http://www.siamindia.com/> and the researcher himself calculated data on total sales of automobiles and percentage change in sales with the help of SIAM database from 2001 to 2015.

Table -3.2

MACRO ECONOMIC INDICATORS IN INDIA FROM 2000 TO 2015				
units	(percentage)	(percentage)	(US dollar per barrel)	(percentage)
YEAR	INFLATION RATE	GDP GROWTH RATE	AVERAGE ANNUAL CRUDE OIL PRICE (\$)	LENDING RATE
2002	4.31	3.804	30.52	12.92
2003	3.81	7.86	36.26	12.083
2004	3.77	7.923	47.98	11.917
2005	4.25	9.285	61.65	11.458
2006	5.97	9.264	69.64	10.917
2007	6.39	8.608	74.44	10.75
2008	8.32	3.891	102	11.188
2009	10.83	8.48	59.93	13.021
2010	12.11	10.26	78.65	13.313
2011	8.87	6.638	93.21	12.188
2012	9.3	5.619	90.72	8.333
2013	10.92	6.639	94.25	10.167
2014	5.88	7.243	87.05	10.604
2015	5.22	7.563	42.53	10.292

Source- The data on inflation rate, GDP growth rate and lending rate were obtained from <http://databank.worldbank.org/data/home.aspx> and the data on price of average crude oil price per barrel (US dollar) were obtained from [http://inflationdata.com/Inflation/Inflation\\_Rate/Historical\\_Oil\\_Prices\\_Table.asp](http://inflationdata.com/Inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp) for the years from 2001 to 2015.

Table – 3.3

PERCENTAGE CHANGE IN INFLATION, GDP, CRUDE OIL PRICE FROM 2001 TO 2015.				
units	(percentage change)	(percentage change)	(percentage change)	(percentage change)
YEAR	PERCENTAGE CHANGE IN INFLATION	PERCENTAGE CHANGE IN GDP	PERCENTAGE CHANGE IN CRUDE OIL PRICE PER BARREL	PERCENTAGE CHANGE IN LENDING RATE
2002	14.3	-21.11	-2.492	-6.478328173
2003	-11.6	106.62	18.807	-1.373831002
2004	-1.04	0.8015	32.32	-3.851640514
2005	12.7	17.19	28.491	-4.721591901
2006	40.4	-0.2261	12.96	-1.529724283
2007	7.03	-7.081	6.892	4.074418605
2008	30.2	-54.7979	37.023	16.38362531
2009	30.16	117.9388	-41.245	2.242531296
2010	11.81	20.99	31.23	-8.45038684
2011	-26.75	-35.3	18.51	-31.62947161
2012	4.847	-15.35	-2.671	22.00888036
2013	17.41	18.152	3.891	4.298219731
2014	-46.15	9.0977	-7.639	-2.94228593
2015	-11.22	4.418	-51.14	-4.294597746

Source – The percentage change on inflation, GDP growth rate and crude oil price, lending rate in India were calculated by the researcher.

Multiple Regression was undertaken to analyse the impact of various macro-economic indicators on automobile sales. Percentage change in automobile sales was taken as dependent variable and percentage change in Inflation, GDP growth rate and crude oil price per barrel, lending rate was taken as independent variables.

The results are as follows:

Table -3.4

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.778165049							
R Square	0.605540843							
Adjusted R Square	0.430225662							
Standard Error	6.616782977							
Observations	14							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	4	604.8918	151.2229	3.454013	0.056641			
Residual	9	394.0364	43.78182					
Total	13	998.9281						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	7.939691972	1.968891	4.032571	0.002961	3.485751	12.39363	3.485751	12.39363
INFLATION	0.132511271	0.088802	1.492212	0.169841	-0.06837	0.333395	-0.06837	0.333395
GDP GROWTH	0.105999794	0.041158	2.57544	0.02992	0.012894	0.199106	0.012894	0.199106
CRUDE OIL PRICE	0.05728887	0.075722	0.756573	0.468647	-0.11401	0.228583	-0.11401	0.228583
LENDING RATE	-0.401032611	0.167399	-2.39568	0.040182	-0.77971	-0.02235	-0.77971	-0.02235

#### Inference:

The model could be summarized as Inflation rate, GDP growth rate and crude oil price are having a positive impact on Automobile sales, whereas lending rate is leading to negative impact on sales. The coefficient of GDP growth rate is statistically significant at one per cent and that of Lending rate is significant at five per cent.

The coefficient of correlation is the measure of the degree of association between the dependent

variable and all the independent variables. In the current context the Multiple R value is found to 0.778165, which implies that a strong positive relationship exists between the percentage change in automobile sales to the percentage changes in inflation rate, GDP growth rate, crude oil price per barrel and lending rate.

R square measures the rate of change in dependent variable caused due to changes in independent variable. In the regression analysis,

the R square value is estimated to be 0.605540, which implies a 60.554% change in automobile sales is caused due to 100% change in inflation rate, GDP growth rate Crude oil price per barrel and lending rate. The R square value also points out that around 40% of changes in automobile sales in India are caused due to the other variables.

#### **Interpretation:**

A unit change in Inflation rate, leads to a 0.1325 change in Automobile sales. This can be understood as 100% increase in inflation rate will lead to 13.25% change in net automobile sales. On the contrary, under normal circumstances, when inflation rate increase there will be negative impact on net sales.

A 100% increase in GDP growth rate will cause a 10.59% change in automobile sales. It is presumed that when GDP growth increases in the economy, it will lead to growth in automobile sales.

A 100% increase in Crude oil price per barrel will lead to a 5.72% change in automobile sales. In normal situation, we expect that a rise in crude oil price will lead to reduction in automobile sales, while here through research, it was inferred that there was weak positive impact.

A 100% change in Lending rate will reduce automobile sales by 40.10%. It implies that when lending rate increases, the automobile sales is being negatively affected.

#### **MAJOR FINDINGS**

- 60.554% changes in automobile sales is caused due to 100% changes in inflation rate, GDP growth rate Crude oil price per barrel and lending rate and the rest 40% of changes in automobile sales in India are caused due to the other variables.
- Favourable macro-economic indicators like lowered inflation rate, high GDP growth rate, lowered crude oil price and low lending rate

will influence in the positive growth in automobile sales.

#### **CONCLUSION**

The automotive industry in India has recorded phenomenal growth during the last two decades. The opening of Indian automobile sector to the foreign players has repositioned the automobile sector in India. The study conducted to analyse the factor which influences the domestic sales of automobiles, factors such as GDP growth rate, Inflation rate, Lending rate, crude oil price have helped in domestic sales growth in over the last decade. Under normal conditions, when inflation rate increase their will be negative impact on net sales. When GDP growth increases in the economy, it will lead to growth in automobile sales. A rise in crude oil price will lead to reduction in automobile sales, is a trivial difference in terms of global level. It is anticipated that with the changing demographic profile of the country, growth in rural demand for passenger vehicles will enhance growth in the industry.

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# ECONOMICS OF TRADE MARK: COST BENEFIT ANALYSIS

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Intellectual Property Rights allows people to assert ownership rights on the outcomes of their creativity and innovative activity in the same way that they can own physical property. Intellectual Property arises out of human labour hence it is bound by a number of changes. The four main types of Intellectual Property are Patents, Trademarks, Designs and Copyrights. This article will deal with Trademarks, which is an important aspect of Intellectual Property with respect to economics`

## **WHAT IS A TRADEMARK?**

A trademark is any sign that individualises the goods of a given enterprise and distinguishes them from goods of its competitors. Marketing of a particular good or service by the producer is much better off as by trademark because recognition becomes easier and quality is assured. The owner of the mark can prevent the use of similar or identical signs by competitors if such marks can lead to confusion. By this way similar low quality substitutes will be prevented from replacing good quality ones.

A trademark is a word or symbol or combination thereof used by manufacturer or vendor in connection with a product or service. The distinctiveness is maintained as well as sales are much smoother as people are able to identify with that particular commodity or service.

The Trade Mark Act, 1999 defines “well Known Trade mark” as a mark in relation to any goods and services which has become so to the substantial segment which uses such goods or receives such services that the use of such mark in relation to other goods or services would be likely to be taken as indicating a connection in course of trade or rendering of services between those goods or services and a person using the mark in relation to the first mentioned goods or services.

A trademark can thus be called a device that gives distinctiveness and a mode of identification to a particular product or service. An increasing number of countries also allow for the registration of less traditional forms of trademarks such as single colours, three dimensional signs (shapes of product packaging), audible signs (sounds) or olfactory signs (smell).

## **EVOLUTION OF TRADEMARK LAWS**

From ancient times human beings have been under the process of creating and innovating things, during pre-historic period man had made stone, jewellery, hunting materials, vessels etc., when spirituality started to sprout up he made figurines of gods and goddesses. Originally, marks were placed on objects to identify ownership and to deter would be thieves. By this way the ancient people tried to control low quality goods, and as the maker of the product was identified

automatically the infringers were punished. The more a trademark came to be known the more it inspired confidence in the goods and services to potential clients. When a mark was placed it meant that any other third party other than the manufacturer did not have any right over it, in a large way it helped deter people with vested interest. In the middle ages two basic kinds of marks could be found:-

1. Merchants Mark
2. Production Mark

The Merchants Mark indicated ownership whereas the Production mark indicated the Origin. Production marks were used by guilds to guarantee quality and to control entry to particular trade. People also started engraving their names in ships this was the first widely recognised method of using trademarks, where in case of ship wreckage, identification would be possible. The other people who started using trademarks were people doing business or in guilds started asserting it as a mark on their goods. This made the manufacturer responsible for the quality of the goods that are being produced and to retain their customers. Nowadays it is up to a seller to use or not use a mark. Modern marks do not aim at identifying ownership as was the case with the proprietary marks of the Middle Ages. Modern marks are an asset for the producer whereas in earlier times the trade marks were a liability. Many of the laws like the aforesaid law of bread and beer assizes fought to bring about a mode of standardisation as well as protect the consumers so that they do not get cheated with adulterated goods. A specific mode of measurement was fixed.

## **Trademark Law in India**

Earlier, the legal provisions for registration and protection of trademarks of goods were contained in the Trade and Merchandise Marks Act, 1958. In view of the developments in trading and commercial practices, particularly in the wake of economic liberalisation and globalisation of industry and trade, the need to encourage transfer of technology, and to give effect to some major judicial decisions on the subject, a comprehensive review of the law was made.

Consequently, the Trade and Merchandise Marks Act, 1958, was repealed and replaced by the Trade Marks Act, 1999, which came into force on 15th September, 2003. The legislative provisions of the 1999 Act have been supplemented and elaborated by the Trademarks Rules, 2002, the Trademarks

The law of trademarks in India has two basic objectives.

### **1. Provision for registration and protection of trademarks of goods and service:**

The registration of trade mark protects the goodwill of the firm selling goods and providing services. The protection of a firm's goodwill will motivate it to maintain and improve the quality of its products and services. Trade mark also protects the sellers and service-providers from the loss of their customers and reputation through unauthorised use of the mark. This is a very important gain to business firms.

### **2. Prevention of the use of fraudulent marks:**

The trademark law protects the interest of consumers who buy products and hire and use

services. The consumers are saved from the confusion arising out of any fraudulent trade mark. Consumer also benefits from the registration of trade marks in that it results in the reduction of his research costs.

Thus, the legal system for protection of trademarks is beneficial to the business world, the consuming public, and to the society at large.

### **Economics and Trademarks**

To oversimplify somewhat, a trademark is a word, symbol, or other signifier used to distinguish a good or service produced by one firm from the goods or services of other firms.

### **Benefits of Trademarks**

The Market for Trademarked Goods. The benefits of trademarks in reducing consumer search costs require that the producer of a trademarked good maintain a consistent quality over time and across consumers. Hence trademark protection encourages expenditures on quality. To see this, suppose a consumer has a favourable experience with brand X and wants to buy it again. Or suppose he wants to buy brand X because it has been recommended by a reliable source or because he has had a favourable experience with brand Y, another brand produced by the same producer. Rather than investigating the attributes of all goods to determine which one is brand X or is equivalent to X, the consumer may find it less costly to search by identifying the relevant trademark and purchasing the corresponding brand. For this strategy to be efficient, however, not only must it be cheaper to search for the right trademark than for the desired attributes of the good, but also past experience

must be a good predictor of the likely outcome of current consumption choices - that is, the brand must exhibit consistent quality. In short, a trademark conveys information that allows the consumer to say to himself, "I need not investigate the attributes of the brand I am about to purchase because the trademark is a shorthand way of telling me that the attributes are the same as that of the brand I enjoyed earlier."

Less obviously, a firm's incentive to invest resources in developing and maintaining (as through advertising) a strong mark depends on its ability to maintain consistent product quality. In other words, trademarks have a self-enforcing feature. They are valuable because they denote consistent quality, and a firm has an incentive to develop a trademark only if it is able to maintain consistent quality. To see this, consider what happens when a brand's quality is inconsistent. Because consumers will learn that the trademark does not enable them to relate their past to future consumption experiences, the branded product will be like a good without a trademark. The trademark will not lower search costs, so consumers will be unwilling to pay more for the branded than for the unbranded good. As a result, the firm will not earn a sufficient return on its trademark promotional expenditures to justify making them. A similar argument shows that a firm with a valuable trademark would be reluctant to lower the quality of its brand because it would suffer a capital loss on its investment in the trademark.

It should be apparent that the benefits of trademarks in lowering consumer search costs presuppose legal protection of trademarks. The

value of a trademark is the saving in search costs made possible by the information or reputation that the trademark conveys or embodies about the brand (or the firm that produces the brand). Creating such a reputation requires expenditures on product quality, service, advertising, and so on. Once the reputation is created, the firm will obtain greater profits because repeat purchases and word-of-mouth references will generate higher sales and because consumers will be willing to pay higher prices for lower search costs and greater assurance of consistent quality. However, the cost of duplicating someone else's trademark is small - the cost of duplicating a label, design, or package where the required inputs are widely available. The incentive to incur this cost (in the absence of legal regulation) will be greater the stronger the trademark. The free-riding competitor will, at little cost, capture some of the profits associated with a strong trademark because some consumers will assume (at least in the short run) that the free rider's and the original trademark holder's brands are identical. If the law does not prevent it, free riding will eventually destroy the information capital embodied in a trademark, and the prospect of free riding may therefore eliminate the incentive to develop a valuable trademark in the first place.

b) The Market in Languages. An entirely different benefit of trademark protection derives from the incentives that such protection creates to invest resources not in maintaining quality but in inventing new words<sup>12</sup> (or symbols or, less clearly, design features used as trademarks, such as the Perrier bottle -- but for the moment we confine our attention to words). Trademarks improve the language in three ways. They increase the stock of

names of things, thus economizing on communication and information costs in the ways just suggested. They create new generic words -- words that denote entire products, not just individual brands ("aspirin," "brassiere," "cellophane," "thermos," "yo-yo," "dry ice," and a number of other names of common products were once trademarks--and, whatever courts might say, "Kleenex" and "Xerox" are widely used to denote entire products as well as particular brands).<sup>13</sup> And they enrich the language, by creating words or phrases that people value for their intrinsic pleasantness as well as their information value ("Pheremon" perfume, "Swan's Down" cake mix).

These benefits, however, are small. This point will later help us explain important features of trademark law -- such as the termination of trademark protection if the mark becomes generic -- that would be inexplicable if trademarks provided the same sort of intellectual enrichment that patents and copyrights do. To show this we will require a brief look at the economics of language. The goal (to which language is central) of a communication system is to minimize the sum of the costs of avoiding misunderstanding and the costs of communicating. Suppose we have a word for snow and a word for falling, and now the question is should there be a new word, meaning "falling snow"? In favour of the new word is the fact that unless it is very long it will be shorter to speak, read, and write; against it is that people will have to learn and remember another word. The more common a term is, the more the benefits of having a single word are likely to outweigh the costs, not only because the gains from shortening the term will be greater, but also because the cost of learning

and remembering a word is less if it is in common use. So we are not surprised to find that Eskimos have a single word for falling snow, though we do not. The use of a word rather than a periphrasis to name a brand illustrates the same point.

Both examples are closely related to a statistical observation made years ago: the length of words is inverse to their frequency.<sup>16</sup> It might seem that, rather than frequently used words being shorter than infrequently used words, all words would be short in order to economize on communication costs. But length is an important dimension along which words vary, and this dimension would be lost if all words were short. It makes economic sense for the frequently used words to be short and the infrequently used ones to be long; then total length is minimized without sacrificing distinctiveness, thereby increasing the number of errors (misunderstanding). More generally, the drive to make language simple is balanced by the desire to avoid ambiguities and confusions that result from lack of differentiation.<sup>17</sup>

### **Conclusion**

The purpose of this paper has been to summarise the extant theory as it relates to the economics of trademark, and to give some suggestions for further research referring to distinct streams of literature. The appearance of trademark as a sign used in exchanges can be traced to the

increased separation between the points of production and sale, and so between the makers and buyers of a good. This process generates a market failure caused by the information asymmetry to consumers, who are no longer able to determine quality of the products which they purchase. The result is classic economics of information problem described by Kerlof (1970), in which the market is impoverished in terms of both transactions and quality. Trademark is the sign introduced to remedy the market failure; it facilitates purchase decisions by indicating the provenance of the goods, so that consumers can attribute to the offering specific quality attributes deriving from their own, or others', past experience. Trademark holders, on their part, have an incentive to invest in quality because they will be able to reap the benefits in terms of reputation. In other words, trademark law becomes an economic device which, opportunely designed, can produce incentives for maximising market efficiency. This role must of course be recognised, as a vast body of literature has done, with many important economic results. However from a broader perspective, trademark appears to do more than simply correct a market failure in the production of information: it has additional dynamic effects which, though largely overlooked, unequivocally contributed to the overall efficiency and balance.



# THE FUNCTIONING OF LOW COST FOOD STALL WITH RESPECT TO THENAMPETTAI IN CHENNAI CITY

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## Introduction:

According to World Bank report, an average earning of an Indian is Rs.33 and it is very difficult to fulfil the basic needs of an individual, especially his hunger. Food, cloth and shelter are the basic necessities of a human being. One of the important schemes initiated by the Government of Tamil Nadu is low-cost food stalls, which has fulfilled the need of many poor in Tamil Nadu. In these food stalls, one idli is priced at Re.1, Sambar Rice Rs.3 and Curd Rice Rs.2, Curry Leaf Rice Rs.5. and a plate of two Chappathis at Rs.3. In these stalls, idli sambar is available from 7a.m to 10a.m and sambar rice and curd rice from 12 noon to 3.p.m. So the study tries to analyse the benefits provided through this scheme with the help of survey conducted through questionnaire with a set of 150 samples in Chennai city (Thenampettai).

## Statement of the problem:

Almost 26% of people in our country are living below poverty line. We were able to fulfil the basic needs after initiating this scheme. People were able to avail better food all the three times per day. This is the major reason which leads to the following objectives;

## Objectives:

To study the benefits received by different groups of people

To analyse the quality of food available in low cost food stall.

## Analysis and interpretation:

Age wise classification, opinion about food and merits of low cost food stall. Age is an important factor as it enables us to know which age groups come to low cost food stalls. This can be presented in the following table1.1.

**Table 1.1**

S.No	Age	No. of Respondent	Percentage%
1	10-20	16	10.6
2	21-30	26	17.6
3	31-40	34	22.6
4	41-50	48	32
5	51-60	16	10.6
6	61-70	10	6.6
	Total	150	100

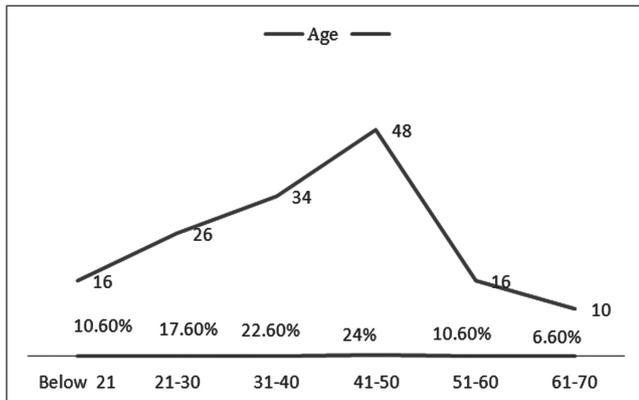
## Sources of data: Primary data

The above chart 1.1. shows that it is clear that 10.6 percent of our respondents belong to 10-20 years, 17.6 percent of our respondents belong to 21-30 years, 17.6 percent of our respondents 10.6 percent of our respondents are belong to 10-20 years, 22.6 percent of our respondents belong to 31-40 years, 32 percent of our respondents belong to 41-50 years, 10.6 percent of our respondents

belong to 51-60 years. 6.6 percent of our respondents are belonging to 61-70 years. The majority of our respondents are belonging to 41-50 years.

**Chart- 1.1**

**Age wise classification**



**Classification of the respondents on the basis of opinion about taste:**

Preparation of food is like an art. This result has been presented in the following table 1.2

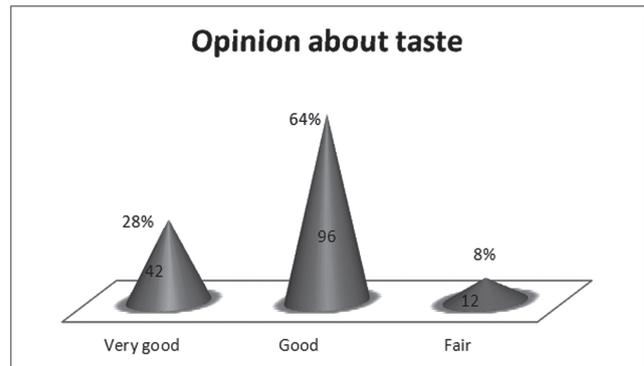
**Table 1.2**

	Opinion	No of respondents	Percentage
1	Very good	42	28
2	Good	96	64
3	Fair	12	8
	Total	150	100

**Sources of data: Primary data.**

The above table 1.2 shows that 28 percent of our respondents opine that taste is very good. 64 percent of our respondents have responded that taste is good. 8 percent of our respondents' opinion about taste is fair. Majority of our respondents' opinion about low cost food stalls is good.

**Chart 1.2**



**1.3. Merits of low cost food stalls**

The merits of low cost stalls are taste and hygiene. The low cost food stalls were established mainly for low income people. The following table 1.3 explains the merits of low cost food stalls.

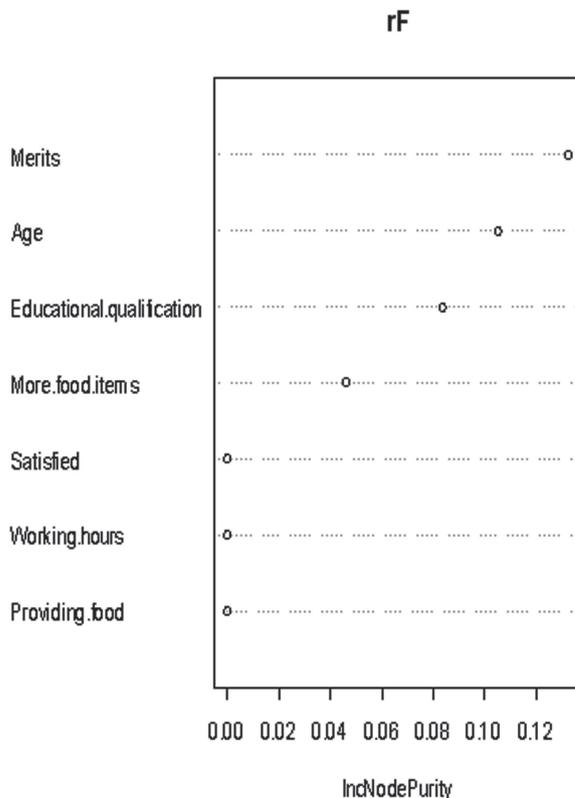
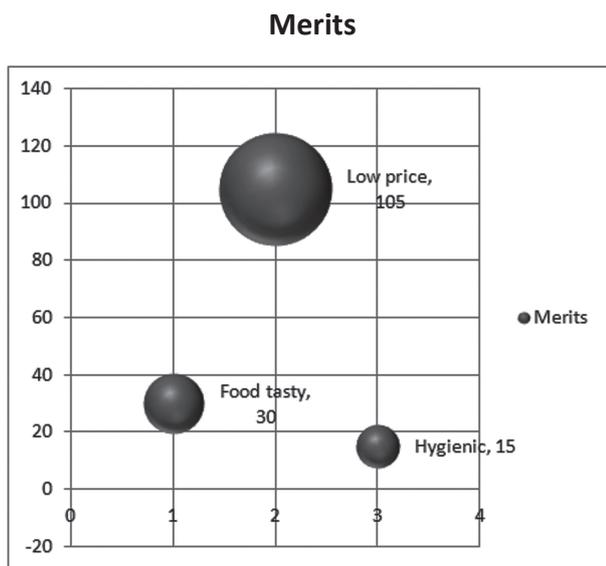
**Table 1.3**

S. No	Merits	No of respondents	Percentage %
1	Food tasty	30	20
2	Low price	105	70
3	Hygienic	15	10
		150	100

**Source : Primary data**

The above table 1.3 shows that 20 percent of our respondents said that the food was tasty , 70 per cent of our respondents said that the food was at low price, 10 per cent of our respondents said that the food was hygienic. The above table clearly shows that a majority of our respondents said that food was sold at low price in the low cost food stalls.

Chart-1.6



**INTERPRETATION: RANDAM FOREST METHOD**

The Random forest package optionally produces two additional pieces of information:

- A measure of the important variables
- Measure of the internal structure of the data (the proximity of different data points to one another).

**RESULT:**

- Table1.4

> Importance (rF)

	IncNodePurity
Age	0.10516562
Educational qualification	0.08337899
More food items	0.04607714
Satisfied	0.00000000
Working hours	0.00000000
Providing food	0.00000000
Merits	0.13255574

**INFERENCE**

- The variable Merits ( 0.132 )is highly loaded. So this is the first important variable to influence hygiene.
- The Age (0.10) is the second variable which influences hygiene.
- The Educational qualification (0.08) is the third variable which influences the hygiene
- The More food items (0.046) is the fourth variable which influences hygiene.
- Satisfaction, Working hours, providing food are the variables which do not influence the hygiene.
- From the above table, we can finally conclude that from all the above variable Merits is the most important variable that influences hygiene.

**Findings, suggestions and conclusion:****Findings:**

- Majority of our respondents are between 41 and 50
- 64 percent of our respondents have responded that taste is good.
- 70 percent of our respondents said that food was sold at low price.

**Suggestions:**

- The scheme should start giving parcels.
- This scheme contains only limited food items. So the government should provide more food items in the low cost food stall like poori, dosa and non- vegetarian food items.
- The government should take steps to provide food at night in the low cost food stalls.

**Conclusion:**

From the above study, it is very clear that 'Amma Unavagam' has a great positive impact among the middle class people who are living in the city like Chennai. If the same strategy is continued or even improved, this scheme will create a great 'good will' on the Govt. of Tamil Nadu.

Amma canteen which was introduced in 2013 for giving low cost food is a big success all over Tamil Nadu. Amma canteen has become a brand which ensures low cost good quality food.

- The poor and low income people are the targeted beneficiaries of this scheme. But, after its implementation, even middle as well

as upper sections of the society are benefitting through the scheme.

- The main demand of people regarding the canteen in the rural areas is that unlike urban outlets, they have less variety of food items and they expect the government to take off this regional disparity in implementation. The customers are also expecting take-away availability in the outlets.
- Lack of seating arrangement in these stalls has made the customers suffer. But no action so far has been taken on this account by the Government.
- The majority of the regular customers of these outlets are educated working class people. The respondents' view is that they can save more money as the food is cheap. Also, the food is healthy and hygienic.

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# VIABILITY IN AGRICULTURE: AN ANALYSIS ON THE ALTERNATIVE SOURCES OF ENERGY

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## **Introduction:**

An energy source can be considered as sustainable only if it fulfils three demands of energy

1. The energy can be naturally replenished.
2. Technology should improve energy efficiency.
3. Long term availability.

Sustainable energy is one which is able to meet the growing demand of today's people without compromising what we require for our future generation. All renewable resources like solar, wind, geothermal wave and tidal power are the important forms of sustainable energy. These energy resources are here to stay till life is available on earth. Renewable energy sources have no negative environmental impact and widely available under naturally replenished.

Sustainable agriculture is the production of food, fibre or other plants or animal products using farming techniques that protects, the environment, public health, human communities and animal welfare. Sustainable agriculture also depends on replenishing the soil while minimizing the use of non-renewable resources and promoting use of renewable energy system for sustainable agriculture such as solar photovoltaic water pumps, green house technologies etc. (2015 sustainable table organisation)

India is a country whose land pattern diverse from district to district and state to state. The

agrarian sector also shows this diversity but has a common feature of certain problems most importantly water shortage or lack of irrigation. India's agriculture primarily depends upon monsoon or natural rainfall as a source of water, the irrigation facilities are not adequate due to lack of electricity or fuel. The rural electrification is still on primary stage so that increase in irrigation facilities can be achieved on through alternative ways such as solar, or other sustainable energy sources. The solar water pump which can remove all those barriers can provide an impetus to irrigation infrastructure as well as to the production.

The contribution of agriculture to carbon emitting and greenhouse effect is less studied one in the agriculture including both pre and post production works accounts for one third of the total greenhouse emission. The primary objective of solar water pump is to increase the environmental friendly agricultural practices in India.

## **IMPORTANCE OF SOLAR WATER PUMPS IN AGRICULTURE.**

In India, over **50% of the workforce** is employed in the agricultural sector so there is an enormous opportunity to link residential electricity needs with agricultural electricity needs, like the electricity needed to power irrigation pumps, and provide a more comprehensive electrification solution.

Today, most Indian farmers typically rely on the monsoon for watering crops, however, irrigation can increase crop yields up to **four times**. But irrigation requires energy. Currently, it is estimated that **26 million** diesel and electric pumps run on Indian farms, making them the dominant technology offerings today. However, grid-connected pumps that rely on electricity face the same challenge that any other load connected to India's central grid faces: frequent outages. Having electricity flow through wires in the middle of the night isn't helpful for farmers or labourers who need to pump water during the day. In addition, diesel-based pumps burden farmers with high recurring fuel expenditures, which can be as much as **\$250/year** — eating away at what could otherwise be disposable income e.(2014. World economic forum)

Power from the sun is clean, limited and free. The photovoltaic cells are now a process technology which is obviously safe as opposed to other fossil fuel based technologies. In this process there is no fuel is required for generation, so the fuel cost for power generation is zero. since there is absence of fuel in this process, generation of electricity from solar photovoltaic is totally free of greenhouse gas emission.

#### **Advantages of Solar Water Pumps:**

- It helps in saving Energy.
- There is no fuel cost - as it uses available free sun light.
- No electricity required.
- Can be operated lifelong.
- It is highly reliable and durable.
- Easy to operate and maintain
- It is also useful for clean, drinking water sanitation and also irrigation.

- It reduces the dependence on rain is reduced.
- It creates wealth for farmers by increasing no of crops.
- Power can also be transmitted for house consumption after the use for irrigation.

#### **Benefits to the government**

- Replacement of 1 million diesel pumps with solar pumps would result in diesel use mitigation of 9.4 billion litres over the life cycle of solar pumps which translates into diesel subsidy saving of Rs 8,400 Crore and CO2 emission abatement of 25.3 Million Tonnes.
- Forex savings of USD 300 Million per annum on diesel imports for replacement of 1 million diesel pumps translating into forex savings of USD 4.5 Billion over pump life.
- Improved energy access and livelihood in rural areas
- Over a period of time, electric pump replacement can also be triggered leading to the path to substantial reduction in the burden on the electricity grid
- Better crop yields that can improve agricultural output by Rs 2,000 Crore per annum or Rs 30,000 Crore over the pump life.

#### **COMPARISONS OF SOLAR VS DIESEL WATER PUMPS.**

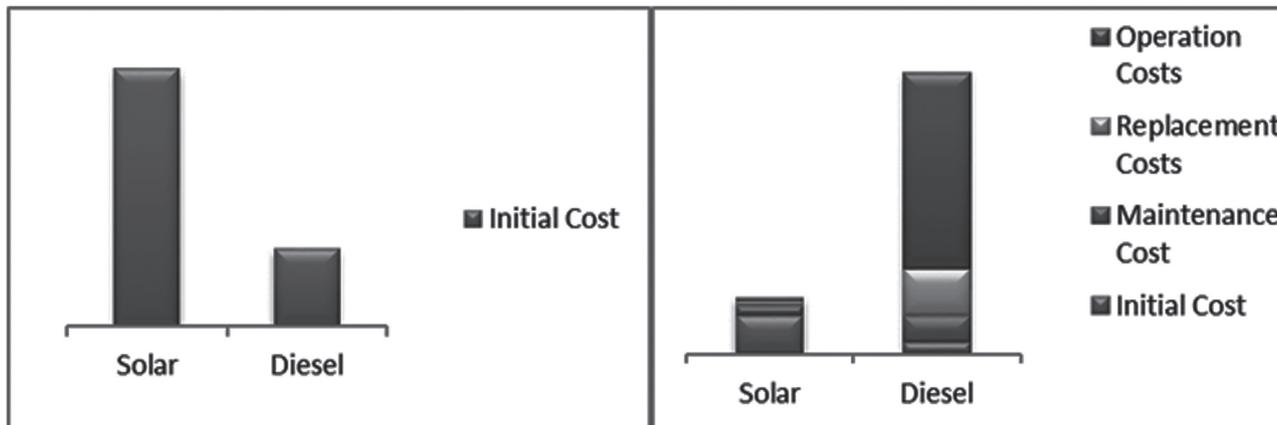
##### **1. Cost comparisons of solar and diesel**

When the comparisons are made, both solar water pump and diesel water pump has its own advantages, but here the study have to see which

is sustainable for the development of agriculture. The cost comparisons of solar pumps and diesel pumps are given below

1. The initial cost of solar pumps are 4 times that of diesel pumps. the initial cost contains the

(source: report of sun flower solutions limited. 2013)



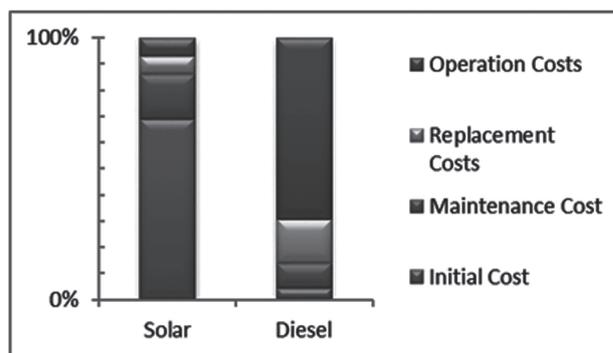
3. The fluctuating price of diesel or fossil fuels cannot be controlled. As fossil fuel sources are depleting day by day, it is sure that the price of fuel will surely increase rapidly in the coming future.
4. Operational cost or energy cost is variable cost and uncontrollable increase in the variable cost in the results in the losses for the farmers.
5. The replacement cost of solar pumps is ¼ that of the diesel pumps, as the expected duration of diesel pumps is limited to five years as a same time the life span on solar is 20 years.
6. The replacement cost has great impact on farmer’s income. A basic set of solar pumps cost nearly 2.18 Lakhs initially has compared to 92400 of diesel pumps. but the capital investment made on solar pumps will last for 20 years. The life span of diesel pumps is 5 years

cost of the expensive solar panels and the installation.

2. The real benefit of solar pumps comes after the installation. The energy cost of diesel pumps are 20 times higher than that of solar pumps, which have only meagre amount as energy cost.

and capital expenditure for 20 years is 3.70lakhs which is much higher than the solar pumps that is nearly times higher.

7. As solar pumps get a fair amount that is average of 60% of total cost as a subsidy, the benefits to farmers are much higher than the statistical figures.



**2. Comparisons of solar and diesel water pump based on output.**

The study analyses two important case studies of two different areas, Bihar and Rajasthan

which is marked by lack of irrigational infrastructures and frequent crop failures. These states even rank bottom in India's states in development index. Rajasthan is naturally prone to a lack of agricultural irrigational infrastructure due to its physical features of barren deserts and lack of natural streams. If we take the case of Bihar, which is located at the Gangetic plain which is supported by abundance of rivers and natural streams and also a good ground water resources. (2015, Divya Pandey)

The main problem of these two states is the lack of techniques to tap the water sources it naturally has. The problem also lies in the lack of electrification in rural areas. Rural electrification is in primary stage in India. Urban centres has unlimited supply of electricity, the rural areas struggle with frequent power cuts ranging from 2-16 hours and nearly half of these areas are not electrified. The fuel prices increasing day by day and the farmers can't simply depend upon diesel pump as they can shed away their profit margins due to high cost of fuel.

The only technique which can increase the irrigational facilities without shedding away their profits and can increase their production is solar powered pumps. We analysed two reports on solar pump irrigation from two states Bihar and Rajasthan and found out the following facts.

In Bihar study is conducted by international food policy research institute. The firm took the farming of both wheat and paddy for the research. The research is based on the case study done in 320 farmers who are divided equally has solar and non-solar farmers the following table shows the

irrigational cost in both wheat and rice.

(SOURCE: 2015 REPORT OF IFPRI)

Crops	Solar (In rupees)	Non solar ( in rupees)
Wheat	813	3130
Rice	1540	4850

- The cost is per hectare.

As we know that the paddy needs more water as compared to wheat so the irrigation cost changes significantly between the crops. From the above table itself we can easily prove that how efficient the solar pumps in reducing the irrigational cost of farmers. In case of wheat the cost is reduced to one fourth of the total cost incurred by non-solar techniques

And in rice the cost is reduced to nearly one third of the cost. The reduction in irrigational cost itself will act as game changer increasing the returns by reducing the outflow of funds.

In case of paddy the transplantation of paddy saplings can be carried out only if there are sufficient irrigational facilities. In case of the fields irrigated by the solar water pumps the transplantation is carried out in 93% of the full area of the farming and 100% of the area is cultivated.

(SOURCE: 2015 REPORT OF IFPRI)

Type of technique	Area under transplantation	Area under cultivation
Solar	93%	100%
Non solar	42%	66%

In case of non-solar technique, the transplantation is carried on only in 42% of the total area and only 66% of the total area is cultivated. This is a pure example how a good irrigation can

act as a catalyst in increasing cultivation. Crops yield increase to 25% to 30%. The cost of production per quintal of paddy is reduced by 6500 per hour 4000 per hour in case of wheat. The increase in return is 10050 per hour in paddy and 7500 per hour in wheat.

From the case study of Bihar, we can prove that the solar technique in agriculture can bring out following changes,

- Reduction in irrigational cost
- Increase in the area under cultivation
- Reduction in overall cost
- Increase in returns
- Helping in drought condition in certain areas such as Nalanda district which faced drought in three out of last five years.

Now, let’s take the case of Rajasthan. This data is published by solar energy mission of Rajasthan government in 2014. They provide the data about the overall results of the implementation. It helps us to analyse the harmful offsets of diesel pumps which are frequently used in the rural areas. The carbon di oxide (CO2) emitting by diesel engine to produce 1kwh of electricity is used in the area of testing. The carbon di oxide thus saved is 3480 kg. Total increase in production value is 240 crores and the amount of diesel saved per year is 2.4 million litres. 18000 is saved due to implementation of solar pump. (2015.divya Pandey)

So therefore the total difference of solar pump and diesel pump can be concluded by the following table,

Solar	Diesel
Unattended operation	Attended operation
Low maintenance cost	High maintenance cost
No fuel cost	Fuel cost fluctuates high.
Long life (up to 20 years )	Not more than 5 years
Easy installation	Easy installation
Environment friendly	Causes noise and air pollution.

**BARRIERS AND POSSIBLE SOLUTION.**

**Market related issues**

Obstacles	Potential corrective measures
High upfront cost	Smart subsidies and innovative finance
Lack of finance mechanisms	Innovative consumer / business finance mechanism
Low awareness among consumers and other relevant stake holders	Awareness campaigns
Lack of maintenance and support	Localised service infrastructure
Lack of market intelligence and information.	Provision of adequate resources and market data
Danger of theft	Portable / community owned system and insurance

**Regulatory issues**

Obstacles	Potential and corrective measures
Restricted financial engineering	Innovative polices and financial engineering

Maze of government departments	Single window approach
Lack of market oriented policies	Policies providing a level playing field with diesel pumps
Concealed tenancy and small land holding	Tenancy reforms leasing mechanism & group investments

### Technology related barriers

Obstacles	Potential and corrective measures
Lack of standardization and quality assurance	Standardized products that cater to local needs
Lack of local manufacturers	Promotion of local manufactures

**Source: (I GEN REPORT ON SOLAR WATER PUMPS)**

### CONCLUSION:

India's economic security continues to predicate upon the agriculture sector and the situation is not likely to change in the foreseeable future. Even now, from the period of independence till date, both the contribution to GDP as well as the work force has fallen drastically. The main reason behind this change is due the problems faced by the farmers. One of the main problems they face is lack of electricity for irrigation. Therefore, we framed the objective to analyse the impact of solar pumps to overcome the lack of electricity for irrigation and move towards sustainable agriculture. Presently majority of people use diesel water pumps for irrigation, it will cause a lot of environmental impact and cannot last more than 5 years. Therefore, we analysed and came to a conclusion that solar water pumps are

far superior than diesel pump and it is sustainable for irrigation. From the data and statistics we analysed and we can determine that the solar water pumps can reduce the cost production as well as increase the output. the awareness of solar pump usage and its effective implementation will lead to reduction in agriculture and social problems like farmer's suicide due to crop failure and debts etc. therefore it can bring back the agriculture as a major income producer and can turn rural areas to smart hubs.

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# BLACKONOMICS : THE SCIENCE OF CONVERTING BLACK MONEY AND CREATING IT.

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The term 'black money' was coined by the British imperialism of historic South Africa where the Blacks denied paying taxes in order to oppose their rule. This money was called black money so as to refer to the Africans. Some of them consider this term offensive. So this can be called as unaccounted money or hoarded money.

Where is the **Capital of India?** It is in the Off-shore accounts of the foreign banks

If money grew on trees, humans won't mind becoming monkeys to catch it. There are certain people who only want money. No citizen of this democratic nation wants black money to accumulate. But who does it? How do they do it? People are not just witty enough to commit these mistakes but at the same time make a justification and glorify it. An Alchemist generally converts any chemical into gold. Similarly there are certain scientists who have found out that we can convert black money into legal money. Let us see certain ways to do it.

There are two aspects to be seen here

1. GENERATION OF BLACK MONEY
2. CONVERSION OF BLACK MONEY INTO LEGAL MONEY.

## **Generation of Black Money:**

Black money generation in India takes place through only two sources.

- i. Activities which are not permitted by law like crime, drug trade, terrorism, and corruption.
- ii. Permissible activity but not accounted for or reported to public authorities which may result in tax evasion

## **Black money: omnipotent and omnipresent**

Transactions that may result in taxation of receipts or income are not entered in the books of account by the taxpayer. He does not maintain the books of accounts or maintains two sets or records partial receipts only. This method is a source of generation of black money across real estate, consumer market, betting etc.

## **Catch me if you can: I am in your accounts.**

When it becomes mandatory to maintain books of accounts then certain activities like accounting for fictitious expenses, manipulation of expenditure or capital etc. is done to evade taxes. If a person buys a sofa and the price is Rs 60,000 plus taxes 15%, then the buyer asks for a discount. In reply the seller tells that he would sell it for Rs 58,000 without the bill then this Rs 58,000 is the 'black money'.

## **Land is a Gift of Nature: Black Money is a Gift of Land.**

In India, real estate black money is one of the major sources of black money generation. As per 2015 real estate contributes 11% to India's GDP. At

present state government levies a tax of 5% that is stamp duty and central government levies a tax of 3-5%. Thus, there is always an under-reporting of transaction price. Generally the sub-contractors are hired for the job of painting or civil construction etc. and are not generally registered with the service tax or the VAT department. Therefore real estate finds it easier to dispense its black money in paying sub-contractors in cash. Real estate transactions involve complicated compliance and high transaction costs in terms of search, advertising, commissions, registration, and contingent costs in litigation and title disputes. Unless the real estate laws are simplified and the old laws along with complicated laws like URBAN LAND CEILING REGULATION ACT and RENT CONTROL ACT are repealed and high tax rates are eliminated there won't be a possibility of black money elimination in real estate. Between Jan and June 2012, 30% of transactions in real estate were executed using black money. According to consultancy firm Liases Foras in financial year 2010, 80 real estate players were identified with INR 2,250 crores of unaccounted money as compared to 120 real estate groups with INR 1,950 crores of black money in 2009.

**“All that glitters from gold is black money.”**

Unlike real estate, gold does not have a huge set of taxes. This year it had 1% excise duty but the gold traders expected a cut on import duty on gold from 10% to 20%. But the government has increased the import duty from 10% to 15%. There is 1% TCS that is a tax collected at source for the transactions relating to gold exceeding Rs 5,00,000. A staggering 100 tonnes of gold were imported during the month of November when demonetisation was announced.

This shows that there was a rush in converting the black money into gold. Usually the gold transaction takes place using the cash. Even some of the gold traders do not specify their actual profits earned. They also smuggle gold as the import duty on gold is heavy as seen below. This money goes unaccounted. Due to these unaccounted transactions tax departments lose revenue in every form of duties and taxes. Dr Ravi Singh research head at SMC commodities trade said that within four hours of Prime Minister Narendra Modi's announcement, 10gms of gold was selling at Rs 50,000 to 55,000, even though the normal price was around Rs. 30,000. This strongly suggests that there had been conversion of black money.

**BLACK MONEY = LEGAL MONEY**

HOW IS THIS EQUATION SOLVED? PLEASE FOLLOW THESE STEPS.

**Multi-Level Marketing Scheme:**

Under this a group of individuals float a multi-level marketing scheme promising extraordinary returns to investors. Investors deposit cash or cheques in bank accounts floated by the firm, the firm in turn issues them post-dated cheques. The firm transfers this money to the personal bank account of promoters and they finally wire transfer the money to different tax haven nations. The offshore bank issues a credit card or debit card which a promoter can use for transactions.

**Disguised Ownership:**

Under this a criminal Z generates Rs 10 crores in cash from illegal activities in India and he wants to launder it abroad and he finds the hawala route to transfer the money. First he gives this money to

the local hawala operator. The operator for a fee, arranges to deposit the sum in an offshore bank account belonging to a company Y. This offshore company buys shares in a domestic company promoted by Z at steep valuations. The domestic company pays high salary and dividends to Y. Black becomes white and Z can show the money as income.

**Mixed Sales:**

This is one of the popular methods of mixing legitimate income with that which is illegitimate. In this method the illegal money is mixed with actual sales by depositing in the bank account of the company. The cash receipts will be shown as business income, say cash receipts in restaurant. With this total income, the firm files income tax returns and they show losses in certain other business lines or by fictitious deductions. Black has become white and it can be used to buy assets.

**Smurfing:**

This method is used by some of them to evade notice by the authorities monitoring transactions above a certain threshold. If Y deposits illegal money into different bank accounts, there is a threshold limit for the depositing of money. If the threshold limit in a bank is Rs10 lakhs, then person Y deposits Rs 9 lakhs in different bank accounts to trail away the source. After this, the money is transferred from the multiple bank accounts to the offshore bank account. An agreement is signed between the holder of the offshore bank account and the person Y. Finally the amount is received as loan and the money is converted to white.

**Trade Mispricing:**

Under this goods were either priced lower or higher to enable money laundering or goods exported were different from description.

**CASE: A CAB RENTAL FIRM RECEIVED 100 CRORE AS ADVANCE PAYMENT FOR EXPORT OBLIGATION THAT DOES NOT RELATE TO ITS LINE OF BUSINESS. IT ALSO HAD ISSUED CHEQUES OF SMALLER VALUES RS. 10, 000 TO VARIOUS PEOPLE.**

**REALITY: IT WAS FOUND OUT THAT THE CHAIRMAN OF THE FIRM HAD DIFFERENT INTERNATIONAL BANK CARDS. FAKE INVOICES TO SHOW DIAMOND PURCHASES OF RS 188 CRORES WERE ALSO RECOVERED. NO PURCHASES WERE MADE. THE COMPANY RECEIVED RS 300 CRORES FROM THREE LOCATIONS SINGAPORE, DUBAI AND HONGKONG. INTERESTINGLY, RECEIVERS OF EXPORT SHIPMENTS WERE DIFFERENT FROM PEOPLE WHO SENT THE ADVANCE PAYMENTS.**

With the current technology, it is easy to file such export or import invoices, and it is easy to show such fictitious invoices and corporations can easily show that they have received goods.

**MONEY TRANSFERS TO BENAMI ENTITIES:**

Under this method, there are two cases mentioned which were found out by the Karnataka lokayuktha. These cases are relating to export of iron ores.

**CASE1:** MLA B NAGENDRA devised an ingenious route to source and export iron ore illegally through a network of mines.

MLA owns a company called Eagle traders and logistics ETL. ETL agrees to source the iron ore

from Nagaraj and Karapudi whose job is to illegally mine iron. The job of these associates is to mask the actual source for which they had been paid money through creating layers. After this exporters deposit the money in five bank accounts of ETL. ETL then transfers the money from one of the bank accounts to Nagaraj and Karapudi. These individuals issue cheques to individuals who may be a benami. Between Sep 2007 and Feb 2011 there was combined debit and credit of Rs 649 crore. This is the main indication of this method. The final individual makes withdrawal in most cases in denominations of Rs 9 lakhs.

**CASE 2:** Janardhan Reddy promoted Obulapuram mining company OMC.

This case was also documented by the Karnataka Lokayuktha.

**Under this case there were three steps followed:**

- i. Under invoicing: OMC exports 8,52,000 tonnes of iron ore below the market price to GLA Trading international, a Singapore registered company.
- ii. Family contribution: Janardhan Reddy is the director of GLA, which is owned by GJR holdings international, a company registered in Isle Of Man. GJR is in turn owned by the Interlink services group which is registered in Virgin islands. Both Isle of Man and Virgin islands are tax havens. GJR refers to Gali Janardhana Reddy and GLA refers to Gali Lakshmi Aruna, Reddy's wife.
- iii. Tax evasion: Now GLA sells iron ore to outside party at market price. It pockets the profit that too inflated instead of Indian entity OMC.

It can move the profit to the companies in tax havens owned by the family members of Reddy. The under invoicing in two years when Reddy was the director of GLA is estimated at Rs 215 crores. Due to this under- invoicing, OMC under paid customs duty and corporate tax. If the IT department had failed to recognise this under invoiced portion to India, then this portion would have returned to India as a foreign direct investment.

As of now, these are the most used methods of generating black money or converting black money to white. A world economic survey tells that the black money of Indians in all nations of the world is estimated around USD 500 BILLION dollars. Only with robust software, simple tax laws can we reform or mitigate the problem of black money. More than 80 per cent of the black money of India is in the foreign banks of the world.

**Conclusion:**

Certain whistle-blower laws must be strengthened to encourage and report tax recovery. Credit deterrence must be cost effective. Such deterrence to black money could be achieved by information technology, integration of system database and compliance departments of Indian government, direct tax administration, adding data mining capabilities and improving the process of prosecution. Political party funding must come under rigorous scrutiny. The parties spend more money than the prescribed limit for a candidate of a constituency during elections. Even spending on a movie ticket or an expensive music concert is a way of spending black money, and so reasonable rates must be maintained for these tickets. Changes

in mining permits to check the flow of black money are required. Over invoicing and under invoicing must be regularly tracked. The major crux of black money is not paying taxes honestly. The direct tax base of the nation must be strengthened. Tax laws pertaining to real estate should be made simple. Thus in demonetisation, the targeted black money is only 5 per cent. The majority stays in offshore banks and other avenues of investment. There is 13 times more money in the Swiss bank compared to India's loan to the World Bank. The best way is to speed up enquiry and gather proper evidence, corner them at the earliest. Thus, the sources of black money are these illegal activities. Thus government must tackle this through its legal stand. There must be a check on the velocity of conversion of black money into legal money through different ways possible.

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