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**SOCIETY OF SOCIAL SCIENCES PUDUCHERRY**  
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**(A CENTRAL UNIVERSITY)**  
**PUDUCHERRY, INDIA.**

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## **ECONOMIC MELTDOWN AND ITS IMPACT ON GLOBAL ECONOMY**

**\* Kanuparthi Ramanaiah**

### ***Abstract***

What Started as a financial crisis has become a full blown real economic crisis that seems to spare no corner of the world. The Sub-prime loan crisis broke through the surface in the United States and Lehman Brothers collapsed, there is no sign that the people of the world have seen the worst of the crisis that now envelops the global economy. Worldwide, a lot of debates, conferences and seminars have been organized on Global meltdown. In this context, this paper explores that the genesis of the Economic Meltdown and the extent of the spread of the crisis to Global Economy - how it affected the Global economy and then evaluate the policy responses attempted so far.

“Recent economic numbers have been terrifying, not .Just in the United States but around the world. Manufacturing, in particular, is plunging everywhere. Banks aren’t lending; business and consumers aren’t spending. This looks an awful lot like the beginning of a second Great Depression.”

- Paul Krugman (Nobel Laureate, 2008)

*Key words:* Economic meltdown, Global Economy, Economic Growth, banking Regulations.

### **Introduction**

Meltdown refers to a situation in which a rapid rise in the power level of a nuclear reactor, (as from a defect in the cooling system) results in the melting of the fuel rods and the consequent release of dangerous radiation that may cause the core to sink into the earth. So, it is a decline or breakdown a disastrous, rapidly developing condition or situation say economic conditions and status in the present context.

The world is passing through a difficult time. More so, the developed world. The industrially advanced countries are now officially in recession. It is not known at this stage how long will this recession last and how deep will it be. It is feared that will be perhaps the deepest recession in the post-second world war period.

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The large domestic demand of the US was met by the rest of the world, especially China and other East Asian economies, which provided goods and services at relatively low costs leading to growing surpluses in these countries. Sustained current account surpluses in some of these EMEs also reflected the lessons learnt from the Asian financial crisis. Furthermore, the availability of relatively cheaper goods and services from China and other EMEs also helped to maintain price stability in the US and elsewhere, which might have not been possible otherwise. Thus measured inflation in the advanced economies remained low, contributing to the persistence of accommodative monetary policy.

Apart from creating large global imbalances, accommodative monetary policy and the existence of very low interest rates for an extended period encouraged the search for yield, and relaxation of lending standards. Even as financial imbalances were building up, macroeconomic stability was maintained.

Relatively stable growth and low inflation have been witnessed in the major advanced economies since the early 1990s and the period has been dubbed as the Great Moderation.

As inflation started creeping up beginning 2004, the US Federal Reserve started to withdraw monetary accommodation. With interest rates beginning to edge up, mortgage payments also started rising. Tight monetary policy contained aggregate demand and output, depressing housing prices. With low/negligible margin financing, there were greater incentives to default by the sub-prime borrowers

Global growth for 2009, which was seen at a healthy 3.8 per cent in April 2008, is now projected to contract by 1.3 per cent (IMF, 2009c). Major advanced economies are in recession and the EMEs - which in the earlier part of 2008 were widely viewed as being decoupled from the major advanced economies, -have also been engulfed by the financial crisis-led slowdown. Global trade volume (goods and services) is also expected to contract by 11 per cent during 2009 as against the robust growth of 8.2 per cent during 2006-2007. Private capital inflows (net) to the EMEs fell from the peak of US \$ 617 billion in 2007 to US\$ 109 billion in 2008 and are projected to record net outflows of US \$ 190 billion in 2009. The sharp decline in capital flows in 2009 will be mainly on account of outflows under bank lending and portfolio flows. Thus, both the slowdown in external demand and the lack of external financing have dampened growth prospects for the EMEs much more than that was anticipated a year ago.

Monetary policy developments in the leading economies not only affect them domestically, but also have a profound impact on the rest of the world through changes in risk premia and search for yield leading to significant switches



The global search for yield was reflected in record high volume of capital flows to the EMEs; since such flows were well in excess of their financing requirements, the excess was recycled back to the advanced economies, leading to depressed long-term interest rates. The Great Moderation over the preceding two decades led to under-pricing of risks and the new financial and economic regime was considered as sustainable. The combined effect of these developments was excessive indebtedness of households, credit booms, asset price booms and excessive leverage in the major advanced economies, but also in emerging market economies. While forces of globalisation were able to keep goods and services inflation contained for some time, the aggregate demand pressures of the accommodative monetary started getting reflected initially in oil and other commodity prices and finally onto headline inflation.

The consequent tightening of monetary policy led to correction in housing prices, encouraged defaults on sub-prime loans, large losses for banks and financial institutions, sharp increase in risk aversion, complete lack of confidence and trust amongst market participants, substantial deleveraging, and large capital outflows from the EMEs. Financial excesses of the 2002-06 were, thus, reversed in a disruptive manner and have now led to the severest post-war recession. In brief, the large volatility in monetary policy in the major reserve currency countries contributed to the initial excesses and their subsequent painful correction.

### **Economic Meltdown impact on Global Economy**

The United States government has been applying the Colin Powell doctrine of “shock and awe” to the economy, throwing every conventional and unconventional policy it can think of at the problem; yet the numbers from the US economy keep getting worse. GDP contracted in the final quarter of 2008 at an annualized rate of over 6 per cent. Industrial production in January 2009 was 10 per cent lower than in January 2008. Consumer confidence as measured by the Conference Board is at its lowest since the series started in 1967. More than 3 million houses were foreclosed in 2008, meaning that about 10 million people shifted into rented accommodation, vans or shelters.

The numbers from Japan, the world’s second biggest economy, are even worse. Toyota has cut car production by half, Sony has put most of its labour force on part-time work and is probably to close at least four factories overseas. Exports, which account for almost half of Japan’s manufacturing output, were more than a third lower in value in December 2008 than in the previous December. Export orders for core machinery fell by 46 per cent between September and November 2008, and domestic orders by 20 per cent. GDP fell in the last quarter of 2008 at an annualized rate of 13 per cent.

in export units. This in turn reduced domestic demand in their economies which resulted in fall in the growth rates of their GDP.

Even the financial sector was not free from such globalized impact. As soon as the stock markets collapsed in USA and Europe, there was panic in the Indian stock markets. The foreign institutional investors who had invested in Mumbai stock market suddenly withdrew their investment. This naturally dipped the SSE sensdex. The value of sensdex which reached 17578 on February 2008 declined to 16371 on March 28, 2008. It further declined to 14043 on July 6, 2009 because of the net selling by the (foreign institutional investors Fils). Such decline was noticed in many other Asian stock markets also. The Table 2 shows the change in the equity index value of share indices of major Asian countries in major Asian Stock Markets after the US financial crisis. It may be observed that downward pressure on the share values was severe in 2008. However, in 2009 share values recovered in some Indian and Chinese stock markets because of economic stimulus measures announced by their governments.

**Table 2: Cumulative Change of Equity Index Over 2003 Level in Asian Stock Markets (Points)**

S.No.	Equity Index	2007	2008	2009
1	BSE Sensex (India)	247.4	65.2	199.1
2	Hang Send Index (Hong Kong)	121.2	1.1	74.2
3	Nikkie 225 (Japan)	43.4	-22.9	-5.3
4	TSEC Weighted Index (Taiwan)	44.4	-25.2	32.3
5	SSE Comosite Index (China)	251.5	43.7	116.9

Source : Economic Survey, 2009-10, GOI

China is the only major economy likely to show significant growth in 2009, for reasons related to the fact that it breaks every second rule in western economic textbooks about how to do development- including the government using its majority control of the banks to keep them lending. But electricity production fell by more then 6 per cent in 2008, having grown at 15 per cent on average for the past five years; which suggests that China may have been growing much more slowly than the published figure of around 9 per cent Even 5 per cent growth is not enough to stop unemployment from rising rapidly, and the middle class social compact of “ political exclusion in return for rising prosperity” will be breached. In the rest of the world, crisis-ridden companies hoping that Chinese cash-rich buyers will come to their rescue are likely to be disappointed, because most of China’s overseas acquisitions made earlier in the 2000s have turned sour, having been made at peak of the market.

**Table 3 Share of banking assets held by foreign banks with majority ownership, 2006**

Country	0% - 10%	Country	0% - 10%	Country	0% - 10%	Country	0% - 10%	Country	0% - 10%
Algeria	9	Moldova	30	Senegal	48	Rwanda	70	Madagascar	100
Nepal	9	Honduras	29	Congo	47	Côte d'Ivoire	66	Mozambique	100
Guatemala	8	Ukraine	28	Uruguay	44	Tanzania	66	Swaziland	100
Thailand	5	Indonesia	28	Panama	42	Ghana	65	Peru	95
India	5	Cambodia	27	Kenya	41	Burkina Faso	65	Hungary	94
Ecuador	5	Argentina	25	Benin	40	Serbia and Montenegro	65	Albania	93
Azerbaijan	5	Brazil	25	Bolivia	38	Cameroon	63	Lithuania	92
Mauritania	5	Kazakhstan	24	Mauritius	37	Romania	60	Croatia	91
Nigeria	5	Pakistan	23	Burundi	36	Niger	59	Boznia – Herzegovina	90
Turkey	4	Costa Rica	22	Seychelles	36	Mali	57	Mexico	82
Uzbekistan	1	Malawi	22	Lebanon	34	Angola	53	Macedonia	80
Philippines	1	Tunisia	22	Nicaragua	34	Latvia	52	Uganda	80
South Africa	0	Mongolia	22	Chile	32	Jamaica	51	El Salvador	78
China	0	Sudan	20	Venezuela	32	Zimbabwe	51	Zambia	77
Vietnam	0	Morocco	18	Georgia	32	Namibia	50	Botswana	77
Iran	0	Colombia	18	Armenia	31			Kyrgyzstan	75
Yemen	0	Malaysia	16					Poland	73
Bangladesh	0	Jordan	14					Bulgaria	72
Sri Lanka	0	Russia	13					Paraguay	71
Ethiopia	0	Egypt	12						
Togo	0								

Note : (1) A bank is defined as foreign owned only if 50 per cent or more of its shares in a given year are held directly by foreign nationals. Once foreign ownership is determined, the source country is identified as the country of nationality of the largest foreign shareholder(s). The table does not capture the assets of the foreign banks with minority foreign ownership. (2) World Bank staff estimates based on Bankscope data.

(2) Source : World bank (2008)

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## A PROFILE OF ELDERLY WOMEN LIVING IN OLD AGE HOMES-A STUDY IN KERALA

\* J.Suhara Beevi

### *Abstract*

The UN defines a country as 'ageing' where the proportion of people over 60 years reaches 7 per cent. India exceeded that rate of proportion with 7.8 per cent in 2001 and India comes under the purview of the UN definition of 'ageing country'. The number of elderly is 77 million in 2001 but is expected to cross 100 million in 2013 and 177 million by the year 2025. Among the Indian States, Kerala has the largest proportion of elderly population and the growth rate among the aged is increasing higher and higher. Kerala has the largest number of old age homes in India. Old age homes are the last resort for the aged.

The study has been conducted in two districts, Alappuzha and Kottayam of Kerala state. . The sample size is 210 and it is taken from 30 Old Age homes.

*Key words* :Institution,Old age home, aged women, young old, oldest-old

### **Introduction**

Ageing is a universal phenomenon and natural biological process of life cycle; it is not a disease which can be cured. The UN defines a country as 'ageing' where the proportion of people over 60 years reaches 7 per cent. India exceeded that rate of proportion with 7.8 per cent in 2001 and India comes under the purview of the UN definition of 'ageing country'. The number of elderly is 77 million in 2001 but is expected to cross 100 million in 2013 and 177 million by the year 2025. (National Census Report 2001 and Projection report)Another feature of the demographic transition with serious, long-term implications is the increasing number of elderly females.

### **Global Ageing**

The United Nations designated 1999 as "The year of older persons", thereby recognizing and reaffirming our global population is ageing and at an unprecedented rate. The confluence of lowered fertility and improved health and longevity has generated growing numbers and proportions of older population throughout most of the world. After the year 2010, the number and proportions of elderly, especially the oldest old will rise rapidly in most developed and many

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developing countries. It is the result of reduced death rates at all ages, decline in the prevalence of infectious and parasitic disease, decline in infant and maternal mortality and improved nutrition. Most developed nations are in fact demographically oldest in the world today and some might have more grand parents than children before the middle of the 21<sup>st</sup> century. Elderly population has grown because of world wide improvements in health services, educational status and economic development. As the World War II baby-boom cohorts, common to many countries, begin to reach their elder years, after 2010, there will be a significant jump by 2030 in the proportion of the world's elderly population.<sup>1</sup>

The United Nations designated 1999 as “The year of older persons”, thereby recognizing and reaffirming our global population is ageing and ageing at an unprecedented rate. The world population ageing is 629 million and more than half of the aged population are in developing countries. The Sex ratio of aged persons are 100/81(2002).The demographic transition brought about by decline in birth and death rate has resulted in population ageing in Kerala. As per the 2001 census, 10.5 per cent of the States population were aged 60 and above. Average life expectancy in Kerala has reached 71.6 years for males and 74.7 years for females (2004) (Economic Review 2005,Govt.of Kerala) and this kind of longer life span is associated with worsening health condition.

### **Statement of the problem**

Among the Indian States, Kerala has the largest proportion of elderly population and the growth rate among the aged is increasing higher and higher. Therefore one of the many challenges facing Kerala is its growing elderly population. It is growing much faster than the overall population. In the absence of joint family system and nuclearisation of families with one or two children, empty nest syndrome, the old parents have no other alternative than joining the old age homes. Kerala has the largest number of old age homes in India. Old age homes are the last resort for the aged. Ageing is predominantly a women's problem. Not only do women live longer but most of them are widows. Extra provisions of care and support are required to save them from their miserable plight. There is a lot of difference between the problems of the aged men and aged women. The problems that we face in old age may be more severe than that of we face when we are young or in middle age. However, old age has certain specific problems especially in the case of aged women due to their vulnerability.

### **Conceptual Framework**

The conceptual framework of the present study has been formulated based upon the earlier studies on various problems of ageing.

Deva Sahayam (1988) identified that aged female are suffering more than their male counterparts<sup>2</sup>. Amrita Bagga in her study entitled 'A Study of Women in Old-age Homes of Pune' revealed that there are more women in the old age homes than there are men. The study was conducted on older women living in three old age homes catering to middle class, with Information relating to their education, occupation (Pre-retirement) economic status, number and sex of children, whether living or dead or migrated were collected and analyzed. It was concluded that majority of women in these homes came from smaller families. Children, if living, had migrated or otherwise were daughters only. Depression was more common in the under engaged group contrary to the others who were more active, alert and contented. Majority of women staying in oldage homes are widows or barren or both. Some have living children but either they have migrated to foreign countries or they are daughters and not sons<sup>3</sup>. Nag Pal and Chadha (1991) attributed that adjustment, inadequate accommodation and loneliness as reasons for joining Old Age Homes. The institutionalized still prefer living in well provided community set up with recreational activities<sup>4</sup>. Saraswathi Mishra (1993) revealed that most of the inmates showed dissatisfaction with their segregated life in old age homes<sup>5</sup>. Sreevals and P.S.Nair (2001) in their study on 'Elderly and Old Age Home in Kerala' among one hundred and fifty seven inmates from eight randomly selected old age homes from Thiruvananthapuram District revealed the relevance and usefulness old age homes in Kerala, with reference to the socio-demographic characteristics of the inmates, the factors that led them to join old age homes and their level of satisfaction about the conditions and life in the homes. Majority of the inmates were females in the age group of 60-75 years. 60 per cent of inmates joined the old age homes voluntarily. The majority joined the old age homes due to family problems, Absence of care givers emerge only as the second most important reason for moving to old age homes<sup>6</sup>.

Indira Jai Prakash (2004) described the burden of disease appears significantly in women compared to men. Women are at a higher risk for Alzheimer's compared to men<sup>7</sup>. Phoebe S. Leibig (2004) suggests that the National policy on older persons looking to NGOs and village councils to be primary sources of non familial aged care<sup>8</sup>

Pushpa Mary Rani (2001) in her paper on 'Institutional care of the Aged' noted that the care of the aged traditionally had been the concern and responsibility of the family. The aged were considered to be a blessing to the family but in the present scenario, new factors have emerged which have weakened the tradition. The result of the study revealed that ageing is not just biological but psychological and sociological too<sup>9</sup>.



With the backdrop of the review of literature, the present study is designed to analyze the socio-economic characteristics of elderly women, the causes leading the elderly women seek admission in the OAHs., the problem Socio,economic,psychological and health confronted by them in institutions, their living conditions, the provision available in OAHs, and the extent of satisfaction expressed by the elderly with the available provisions. This has been done based on primary data in the present study.

### **3. Present Study**

Kerala is the state of India's most progressed society in terms of education, literacy and health. Kerala has the highest Physical Quality of Life Index (PQLI) in India, and the highest Human Development Index, with the highest literacy rate in the country, highest life expectancy, least population growth, lowest infant mortality, Kerala has been adopted by the world bodies as the role model for developing countries. Among the Indian States, Kerala has the largest proportion of the elderly population and the growth rate among the aged is becoming higher and higher. One of the many challenges the state of Kerala faces is its growing elderly population. It is growing much faster than the overall population itself. With the possibility of declining birth rate and fewer children in families, there will be lesser and lesser people taking care of the elderly as the decades roll by. Traditional life guards of family care are dwindling due to migration, dual career and growing consumerism of the people. All these make the well being of the elderly a growing challenge of the 21<sup>st</sup> century.

The total population of Kerala is only 3,18,38,619 and India's total population is 1, 02, 70, 15, 247. (National Census Report 2001) Annual growth rate of population in India is 1.9 per cent and Kerala is 0.9 per cent, Density of population in India is 324/sq.km and Kerala is 819/sq.km. Sex ratio in India is 933/1000 and Kerala is 1058/1000. Aged Sex Ratio in India is 1017/1000 and Kerala is 1220/1000. (Report of Economics and Statistics department, Govt. of Kerala 2004).

It is a noteworthy feature of Kerala that the percentage of elderly population is increasing fast. In Kerala an average of 13.5 per cent of the total population is elderly, which is comprised of 13.8 per cent of elderly women and 13.2 per cent of elderly men (2004). The proportion of elderly population increased from 5.8 per cent in 1961 to 10.5 per cent in 2001. (Economic review 2005,Govt.of Kerala) The figure will be 16 per cent in 2021 and about 30 per cent in 2051. (Projection report) High female life expectancy in Kerala will increase the elderly women population. The proportion of the elderly females is highest in Kerala, compared to other states.

Protection and power of the elderly under the joint family system has declined and the younger generations have migrated to other places for



employment or other purpose and the elderly parents feel empty nest syndrome. Hence the need for old age homes in the rapidly changing social settings is recognized today. Elderly widows are much larger in number than elderly widowers. Under the prevailing social set up, the condition of women is still worse. In this situation, the old age homes play a great significant role. The purpose of an institution is not only to be of service to its members but also to promote the welfare of society at large.

When compared to other districts in the State of Kerala, the proportion of female elderly living in institutions is the highest in Alappuzha district followed by Kottayam districts. Hence these two districts of Kerala state are selected for the present study of elderly women. The study makes an attempt to understand how elderly women are cared in the institutions.

### **Institutionalization of the Elderly**

The idea of institutionalization of the elderly has been borrowed from the western societies, whose values and norms are quite different from that of India. Usually living in old age homes evokes a picture of apathy, dependence and sadness. The inmates often confront problems due to highly institutionalized, depersonalized and bureaucratic atmosphere in OAHs. They face problems of adjustment with tight and rigid schedule, total or near total separation from the family, anxiety over entrusting oneself to a new environment, diminished physical capacity and very close and frequent encounters with death and ailments in the institution.

### **Old Age Homes in India : A state wise profile**

The first old age home in India was supposed to have been started in the early 18<sup>th</sup> century but information is available only from 1782. There are over 1000 old age homes in India, the majority of which are run by Non Governmental Organizations. (Directory of OAHs in India Revised Edn.2006, HelpageIndia, New Delhi)

India had only 96 old age homes before 1950, another 94 were added in the next two decades (1951-70) During the next decades, there was a rapid expansion in the number of OAHs. Kerala State led the rest of the country, followed by Tamil Nadu and Maharashtra. One out of every 5 old age homes in India is located in Kerala. South India (Kerala, Tamil Nadu, Karnataka, Pondicherry and Andhra Pradesh) accounts for 54 per cent of the total. Muslim agencies maintain only one old age home and It is located in Kozhikode district of Kerala. The Kerala scenario is different compared to other states. 80 per cent of the old age homes in Kerala are managed by Christian agencies and the rest by non-religious organizations.

In keeping with the cultural and religious traditions prevailing in India, there are separate old age homes for males and females while some old age homes are meant for the poor aged and destitute. Others concentrate on the sick and handicapped. Three fourths of the old age homes run by Christian Organizations offer free accommodation as against one-half in the case of secular organizations. The number of old age homes run on payment basis is much higher among secular organizations than Christian institutions.

The total number of OAHs in India is over 1000, out of which 20 per cent is in Kerala and it is 182. (Directory of OAHs in India, Helpage India 2006) Kerala has the largest number of old age homes in India. The highest number of such homes is found in Kottayam district (37) followed by Ernakulam and Thrissur together that account for 62 per cent of old age homes. Most of the old age homes are run by Christian organization in Kottayam. Currently, at least 5 new old age homes are coming up every year and it is likely to increase to 10 in the years to come. Almost 55 per cent of old age homes accommodates both elderly men and women. 36 per cent admit only females.

Kottayam has the second highest number of old age homes (37) in the country, second only to Greater Mumbai district of Maharashtra. Among these old age homes (87 per cent) are managed by Christian organizations. Among the fourteen districts of Kerala, Kottayam has the highest concentration of Christian population (46 per cent)<sup>10</sup>.

Old people form a significant part of our population and a considerable proportion of them live in old age home. The reasons for the admission of these people to old age homes are different. The present study analyzes the data of personal profile of respondents, family background, economic condition, housing condition, health condition, psychosocial aspects, and the reasons which brought these old women to old age home<sup>10</sup>

## **Materials and Methods**

### **1. Objectives**

The objectives of the present study are:

1. To find out the socio-economic characteristics of the elderly women living in old age homes.
2. To examine the circumstances that make the elderly women seek admission in the old age homes.
3. To study the facilities provided to the elderly women in old age homes.

## **2. Hypotheses**

1. The number of children and marital status are two main factors leading to orphaned status in the old age.

## **3. Study area and selection of respondents**

The study has been conducted in two districts, Alappuzha and Kottayam of Kerala state in India. The elderly population of female 60 years and above in the area is considered as the subject for the study. The sample size is fixed as 210 elderly females from institutionalized.

Towards the study of institutionalized aged females spread over the said two districts, 30 old age homes were selected for sampling. In the 30 institutions selected, there were 4 Government and 26 Non Government institutions (Private old age homes). In the 26 non Govt. old age homes 5 were paid homes. As there are only 5 old age homes functioning at present in Alappuzha district all the five old age homes are included in the sample. There are 37 old age homes at Kottayam district out of which 25 old age homes from Kottayam district were selected using simple random sampling by lottery method. From each Old Age Home seven inmates were selected randomly so that minimum sample size will be 210. Multistage sampling technique is used for the selection of samples.

## **4. Sample Size**

The sample size in the case of institutionalized elderly women is 210. The said 210 samples were collected for the study from the above said 30 Old age homes. i.e., seven samples from each Old age home.

## **5. Research Design**

Design of the present study is descriptive in nature, based on primary data. The study is designed to examine the problems of the aged women, their socio-economic profile, family background, environmental degradation, etc.

## **6. Tools of Data Collection**

A structured interview schedules was administered for data collection. They included both open ended and close-ended questions. Various pamphlets, booklets, Websites and journals published by governmental and Non governmental organizations relating to the subject under investigation.

## **7. Data Analysis**

All data were analyzed using a simple statistical technique, namely percentage analysis, the data have been presented in tabular, diagrammatic and textual forms.

## **Operational definition**

**Elderly Women:** Women those who are above 60 years of age.

**Institutions:** Old Age Homes

**Institutionalized:** institutionalized means elderly women living in old age homes

**Young Old-** Elderly persons in the age group of 60-69

**Old– Old –** Elderly persons in the age group of 70-79.

**Oldest – old –** Elderly persons between the age group of 80 and above.

**Extreme old –**Elderly persons above 90 years

## **Age**

Young-old (42.4 per cent) and old-old (45.2 per cent) group respondents are living more in institution. When age advances the elderly women have some adjustment problems in the families with their children and in-laws and the young old age is still a productive age so that their children can utilize the services of these persons. When age increases their vulnerability also increases. This leads to various problems like cultural rejection, self rejection, anxiety and panic, psycho-social exhaustion and isolation. Economic dependence is also a cause for dissatisfaction. The deteriorating health of the aged persons and the medical cost is also a threat to their children. So, these persons become a burden to their children, so that they try to discard these elderly persons

## **Marital status**

49.5 per cent of the respondents are widows. Only 2.9 per cent are married respondents single elderly women (42.9 per cent) are forced to live in institutions.

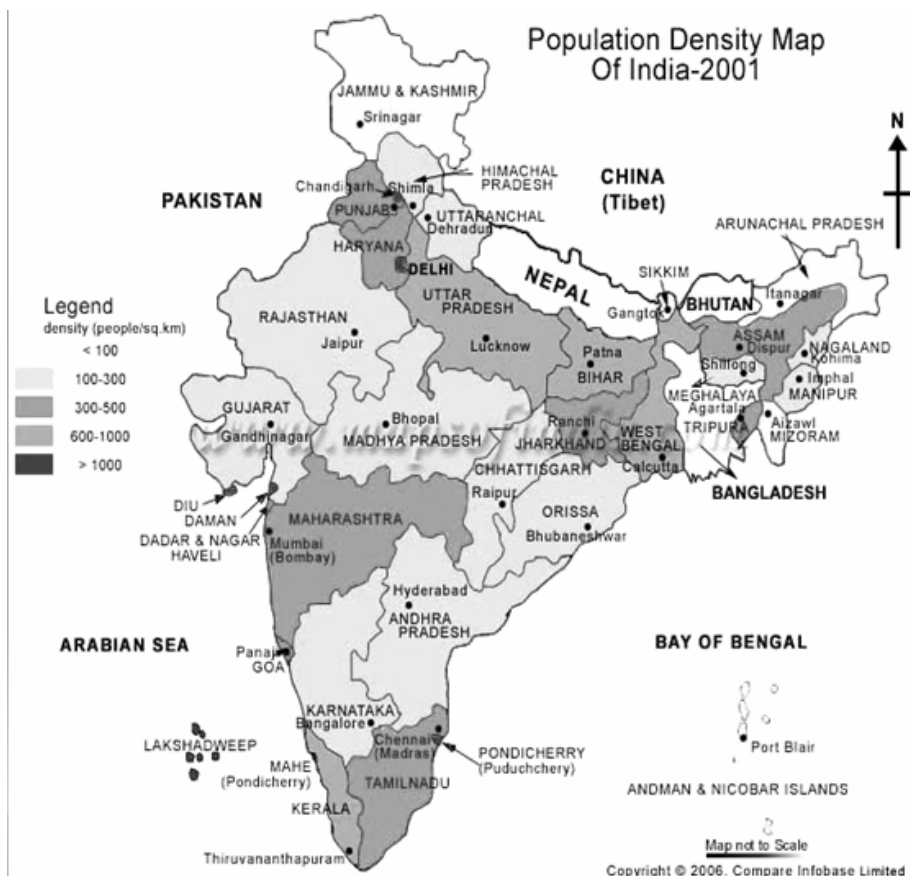
## **Education**

One third of the respondents are illiterate (27.6 per cent). More number of respondents is primary educated (61.9 per cent) and 2.4 per cent of the respondents are well educated.(Post graduates & doctors)

## **Religion**

In the case of religion, majority of the respondents (76.2 per cent) were Christians in institutions. 22.8 per cent were hindu respondents. Only one percent of the Muslim respondents was in institutions.

Christian women are more in institutions when compared to other religion. One reason may be that Christian churches are running more old age homes compared to Hindus and Muslims and so they admit more Christians.



Map of Kerala : Kerala is the state of southern end of India. South east by Tamil Nadu, north Karnataka and west Arabian sea.

## Discussion and Analysis

**Table No.1 Demographic profile of the Respondents**

Respondents		Frequency	Percent
Age	Young old	89	42.4
	Old-Old	95	45.2
	Oldest –Old	26	12.4
	Total	210	100.0
Marital Status	Single	90	42.9
	Married	6	2.9
	Widowed	104	49.5
	Divorced	10	4.8
	Total	210	100.0
Education	Illiterate	58	27.6
	Primary	130	61.9
	Secondary	11	5.2
	SSLC& above	6	2.9
	Others	5	2.4
	Total	210	100.0
Religion	Hindu	48	22.8
	Christian	160	76.2
	Muslim	2	1.0
	Total	210	100.0
Occupation	No Occupation	89	42.4
	Self Employment	106	50.5
	Govt. –service	5	2.4
	Private service	10	4.8
	Total	210	100.0

### Occupation

Occupation of majority of the respondents in the OAHs (50.5 per cent) were self employment and more number of respondents had no occupations.2.4 per cent had in Govt.service.

## Number of surviving Children of the respondents

**Table No. 2 Distribution of Respondents by surviving children**

Number of surviving children	Institution			
	Male		Female	
	Frequency	Percent	Frequency	Percent
0	157	74.8	138	65.7
1	26	12.4	39	18.6
2	15	7.1	15	7.1
3	9	4.3	10	4.8
4+	3	1.4	8	3.8
Total	210	100.0	210	100.0

### The number of surviving children is very less for the inmates of OAH

It is seen from the study that there is relationship between the number of surviving children and the women who are constrained to stay in the old age homes. Majority of the respondents in the institutions have no children (65.7 per cent) followed by single (42.9 per cent). More number of single aged women have joined the OAH, since they have none to look after them after the demise of their close relatives. Not having male children can be a factor in making the respondents seek refuge in institutions. The study reveals that there is a high proportion of single women in the institutions. Before coming to institution with whom the respondents were living

**Table No. 4 The Table shows with whom respondents were staying before joining OAH**

Category	Frequency	Percent
Spouse	19	9.0
Son/daughter	52	24.8
Brother/Sister	75	35.8
Distant relatives	64	30.4
Total	210	100.0

More number of (35.8 per cent) institutional respondents were staying with their brothers and sisters, distant relatives (30.4 per cent), and son/daughter (24.8 per cent), before joining OAH. The study shows that that the death of the sibling, their children send the respondents to the old age homes. It is found that more number of the single women respondents who had been living with brothers and sisters joined the old age home in their later years.

### Reasons for joining the institution

**Table No. 5 Distribution of the respondents by Reasons for joining in old age home**

Reasons for joining old age home	Frequency	Percent
No one to take care at home	101	48.1
Children are away	1	0.5
Problems with children	22	10.5
Problems with in-law	73	34.8
Other reasons	13	6.2
Total	210	100.0

The study reveals that problem with in-laws and no one to take care at home are the reasons attributed by the respondents for joining the OAH.

### Satisfaction of the respondents in OAH

Majority of the respondents are satisfied with the environment of OAH, since they are able to satisfy their basic needs.

### Ownership of property and paying capacity of the respondents in OAH

It is observed in the OAH that majority of the inmates were destitutes and they have no one to look after them and they do not possess any property. Majority of the respondents do not have paying capacity.

### Place of residence of children of respondents in OAH

**Table No. 6 Distribution of the respondents by place of residence of the children**

Place of residence of the children	Frequency	Percent
Native district within Kerala	47	22.4
Other district within Kerala	71	33.8
Other states of India	1	0.5
Abroad	1	0.5
Not applicable	90	42.8
Total	210	100.0

The study shows that 33.8 per cent of the children of the inmates are live in other districts within Kerala and 22.4 per cent of their children living in the same district. Only 0.5 per cent of them are abroad and other states. 42.8 per cent of them are single persons and they have no children. More number of the



children of the respondents in the institutions were found to be living in nearby districts.

### **Reported problem of the respondents in the institutions**

**Table No.7 Table showing reported problems of the respondents after joining**

Category	Frequency	Per cent
Health problem	152	72.4
Adjustment problem	164	78.1
Problem of spiritual enforcement	58	27.6
Isolation & loneliness	172	81.9
Non availability of medical facilities	167	79.5
	N=210	*

The major problems reported by the respondents after joining the OAH is 'isolation and loneliness' (81 per cent), 'non availability of medical facilities (79.5 per cent)' and 'adjustment problems (&\*.1 per cent)'.

### **Availability of food**

Almost all of the respondents living in institutions are having adequate food (96.7 per cent)

### **Adequacy of food**

The study reveals that majority of the respondents (96.4 per cent) of Government and non Government (96.7 per cent) institutions opined that the food provided to them is adequate. There is not much difference in the adequacy of food availability for the inmates of Govt. and non Govt. Institutions.

### **Psychological problems**

**Figure 1. Distribution of Resp. According to psychological problems**



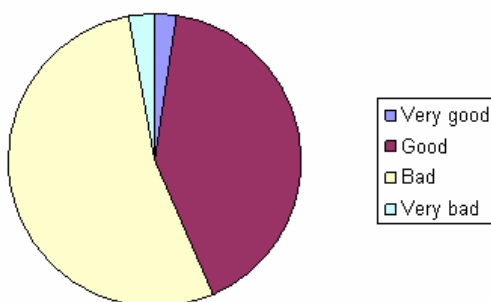
Greater number of respondents in the OAH has the problems of sleeplessness and feeling of loneliness.

### Leisure time activities

For more than half (52.9 per cent) of the institutional respondents are reading newspapers and sitting idle in their leisure time.

### Conditions of health

**Figure 2 Frequency**



More than half of the institutional respondents stated that their state of health is bad. Majority of the respondents had not been so much concerned with their health in their early years. Those who always concerned and most of the time concerned are very healthy in their later years.

### Arrangement of medical care

**Table No. 8 Distribution of the respondents by arrangement of medical care in the institution**

Category	Frequency	Percent
Drs. visit daily	5	2.4
Drs. visit regularly once in a week	45	21.4
patient is visit to nearby hospital	153	72.9
Dr. on call duty	7	3.3
Total	210	100.0

Majority of the respondents are taking allopathic medicine as the system of treatment.

Majority of the respondents (72.9 per cent) stated that they are taken to nearby hospital for medical treatment followed by 'doctor visit regularly once in a week' (21.4 per cent),

### Morbidity status of the respondents

**Table No. 9 Distribution of the respondents by their morbidity status**

Disease	Institution	
	Frequency	Percent
Gastro intestinal disease	25	11.9
Chronic Asthma	45	21.4
C/C Constipation / piles	18	8.6
Diabetes	35	16.7
Hyper tension	82	39.0
Urinary problem	9	4.3
Tuberculosis	-	-
Rheumatism	63	30.0
Arthritis	72	34.3
Vision impairments	146	69.5
Hearing impairment	27	12.9
Filariasis	2	1.0
Others*	40	18.9

*Source: Computed from primary data*

Other disease\* include–Breast cancer, CHD, Dementia, Neuro problem, Skin allergy, Thyroid, Uterus prolepses, Varicose vein c/c head ache,

The major health problems of the respondents are impairment of vision due to cataract (69.5 per cent), arthritis (34.3 per cent), rheumatism (30 per cent), hypertension (39 per cent), diabetes (16.7 per cent), gastro intestinal disease (11.9 per cent), chronic asthma (21.4 per cent) and hearing impairment (12,9 per cent)

They are suffering from loss of vision due to cataract and they are not in a position to do the cataract surgery because many of them are not physically fit for a surgery due to hypertension, diabetes and anemia. The percentage of vision impairment is more in the institution, many of them want to do the surgery for regaining the eye sight but no one is ready to assist them in hospital as by standers during the surgery and they can not afford the surgery expense.

Accommodation facility in Govt. and non-Govt. Old Age Homes

**Table No. 10. Distribution of the respondents according to living arrangements and type of the institution**

Living Arrangement	Type of the institution			
	Government		Non-Government	
	Frequency	Percent	Frequency	Percent
Single room	1	3.6	16	8.8
Double room	2	7.1	31	17.0
Family room	0	0	1	0.5
Dormitory	25	89.3	134	73.6
Total	28	100.0	182	100

There are only 4 Govt. Old age homes and 26 Non Govt. Old age homes. As for family room only in non government institution 0.5 per cent of them accommodated in family rooms. There is no family room in Government institution.

The study shows that the Government institution provides more (73.6 per cent) dormitory facilities than non Government institutions.

#### Accommodation facility in paid and unpaid Old Age Homes

There are 5 paid old age homes covered in this study, More number of those who pay the institution is provided with single and double rooms' facility. About 60 per cent of the paid homes have single or double rooms. Majority of the unpaid (88.6 per cent) are staying in dormitories whereas only 40 per cent are staying in paid institution.

**Table No. 11 Distribution of the respondents by Living arrangement and institutional status**

Living arrangement	Institutional status			
	Paid		Unpaid	
	Frequency	Percent	Frequency	Percent
Single room	12	34.3	5	2.8
Double room	9	25.7	14	8.0
Family room	0	0	1	0.6
Dormitory	14	40.0	155	88.6
Total	35	100.0	175	100.0

The study reveals that majority of the respondents are accommodated in dormitories in unpaid homes and the living arrangements of the paid and non-paid institutions are not homogenous.

The rating of respondents about facilities available in terms of need

**Table No. 12 Table showing the rating by respondents on facilities available in terms of need**

Facilities in the OAH	Type of institution			
	Government		Non-Government	
	Frequency	Percent	Frequency	Percent
Quite adequate	12	42.9	130	71.4
Just adequate	9	32.1	52	28.6
Not adequate	1	3.6	-	-
Not at all adequate	6	21.4	-	-
Total	28	100.0	182	100.0

Majority of the respondents in non Government institutions rated the facilities available in the OAH as quite adequate.(71.4 per cent)

It is seen that the facilities in the paid Old age home is better than the facilities in the unpaid homes.

The inmates who rated the location as hygienic, ventilation as good and cleanliness as good are more in the case of institutional respondents than respondents in the families except space rated as spacious in which case respondents in families are more than the institutional respondents only by 0.4 per cent.

Compared to Govt. institution, majority of the respondents in non-Government institutions have better living environment with regard to location, ventilation, space and cleanliness.

## Conclusion

1. Old age is a growing problem in India, as in the past society the old were looked after by the joint family. Today increasing life expectancy coupled with the increasing demands of life marginalizes the old from the family. This study evidences that elder's family is the main support system, though many elderly are forced to institutional care giving system. Comparing the elderly who live in the institutions and non institutions, the aged who live in the household are healthier and 'happier than those in the homes. More single elderly women and barren women are forced to live in institutions. The number of children and marital status are two main factors leading to orphaned status in the old age.
2. Christian women are more in institutions when compared to other religion. For those who stay in the old age homes, though they have more facilities

in the Old Age Homes. the company of the peer groups, and good living environment do not give much satisfaction as they miss their families very much and feel discarded , they have segregation from social life also. Though both the groups have deprivations, the elderly who stay in the old age homes have more deprivations than those who stay in families.

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## **PROBLEMS AND PROSPECTS OF TRIBAL PARTICIPATION IN DEVELOPMENT PROGRAMMES - A CASE STUDY OF JEYPORE BLOCK IN ORISSA**

**\* Murali Dhar Majhi**

### ***Abstract***

The development process is viewed as a mechanism of changing the socio-economic life in a society. It is argued that people's participation makes the development process effective. Higher the degree of participation higher will be the degree of success on development. However it is found that participation of tribals in development programmes has been discouraging. What keeps them alienated has been the major concern of this research. To a great extent non-participation leads to non-development which in turn further non-participation. This is because developmental projects as solutions to their socio-economic problem are imposed from outside and from above without any appreciable degree of participation from below. Therefore for genuine and self-reliant development people must participate in development, take control of the situation and seek their own original paths of development on the basis of analysis of own problems, conditions and constraints. The tribals are part of our society, at the same time they are different. When we plan for tribal development, we have to regard these differences, take a special note of their situations and capabilities and provide them facilities to develop on the line they want to take. The paper examines the problems and prospects of tribal participation in various development programmes in Jeypore block of Orissa. The paper also made an attempt to search out various possibilities of constraints and to enhance participation of tribal communities in development programmes.

*Key words:* Problems, Prospects, Development Programmes, Participation, Tribal Community.

### **Section – I**

#### **Introduction**

People's participation in development process represents a process by which goals are set and means are chosen in relation to all sorts of developmental

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issues. People's participation makes the development process effective. In this context, people are treated not as passive respondents or consumers but as project developers, evaluators and operators. Without participation there can be no development and if there is no scope for development there will be no participation. Individual's ability to choose and make use of inputs and produce output is the crux of participation. Compared to other populations, tribals constitute a major part in Orissa but their participation in development programmes is not encouraging. A wide range of factors, many of them deeply embedded in the nature of culture and society, prevent the tribals from participating in development programme. In spite of several legal and developmental schemes the rate of progress and their participation in development are not commensurate with the expectations. The enhancement of participation has posed big challenges to the administration. Further, given the social stratification of the society and the seclusion of tribals and their areas from mainstream there are problems that inhibit tribals from participating in development activities.

To draw these tribals remarkably into the mainstreams of economic progress numerous developmental programmes have been introduced. But this has happened only in a symbolic way. In other words, despite all such efforts and a massive input, the results have been fallen short of expectation as only a marginal participation has been noticed in majority of programmes. What is there that hinders their participation in development process then? What keeps them alienated from the source of their development? And why they are not identified with and involved in the schemes made for their cause? These are some pertinent questions which constitute the essence of this piece of research.

## **Section- II**

### **Data Base**

To study about problems and prospects of tribal participation in development programmes, Jeypore block of Koraput district in Orissa has been selected. Further an empirical investigation has been conducted through field survey to assess the composition, growth and prospect of tribal participation. For this a sample of 19 villages has been selected out of 19 Gram Panchayats (G.P) of Jeypore block i.e. one from each G.P. The villages selected were those having highest percentage of tribal concentration to their total population in the Gram Panchayat. Techniques like interview, observation and questionnaire are followed. Information is also gathered through focus group discussion and from the available records of each block level department. Separate discussions were held with block officials associated with tribal development and records of each department were referred to. Further this study has taken development programmes of 11 departments implemented in the block of Jeypore. Among the development programmes implemented by these 11 departments, only two schemes of each

department were studied as sample schemes. The period for which data are collected covers from 1980-81 to 2000-01.

## **Methodology**

This study has used semi-log model of econometrics to calculate the growth rate. It is a non-linear econometric model which is used to obtain the growth rate of participation of tribals on each development programmes over the time period. Data relating to participation of tribals on various development programmes in the block of Jeypore of last 20 years i.e. 1980-81 to 2000-01 has been taken. To test the significance of growth rate t-statistic in the context of hypothesis testing has been used.

## **Section – III**

### **Composition of tribal participation**

Table-01 outlines the composition of tribal participation in different development programmes of Jeypore block from 1980-81 to 2000-01 respectively. The effectiveness of programmes and the priorities of tribals in participation and whether they have changed in any way over the twenty years period can be studied through this table. By and large all the development programmes implemented so far are quantitative in nature – i.e. exhibits their effectiveness by the number of projects undertaken, amount of money spent and number beneficiaries as a whole. On the other hand important factors like the number of potential and expected participants (both male & female), their actual needs, programmes in conformity with their locations, programmes as per specific tribe has not been taken into. This gets manifested in the marginal participation of tribals in different development programmes. The rate and pattern of participation of tribals also reveals where their priorities lie. The paper therefore, analyses the composition and overall growth in tribal participation for highlighting some of the contemporary disturbing trends.

**Table-1. Composition of Tribal Participation in development programmes (Jeypore Block) 1980-81 to 2000-01**

Sl. No	Name of the dept./ programmes	1980-1981		81 - 82		82 - 83		83 - 84		84 - 85		85 - 86		86 - 87		87 - 88		88 - 89		89 - 90		90 - 91	
		ST		ST		ST		ST		ST		ST		ST		ST		ST		ST		ST	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1.	I.R.D.P.	35	06	171	04	63	18	33	-	200	28	135	12	105	36	84	09	79	23	96	25	140	17
2.	TRYSEM	-	-	03	14	13	08	-	11	-	-	-	-	04	09	25	16	09	14	01	09	21	18
3.	I.T.D.A	109	10	93	16	96	24	106	20	88	28	99	37	79	32	116	42	428	38	362	51	356	74
4.	I.C.D.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	P.D.S.	1165	205	1210	280	1240	319	1265	360	1420	370	1504	598	1522	615	1560	643	1574	652	1610	715	1695	670
6.	Forest & Env.	75	02	64	01	79	04	85	02	67	-	78	-	94	06	91	05	67	07	85	-	98	02
7.	Agri.	208	-	218	02	210	04	198	-	216	05	225	03	275	08	245	10	222	-	217	07	214	04
8.	Horticulture	10	03	13	-	17	-	14	-	18	02	08	-	10	-	16	02	14	-	12	03	15	01
9.	Soil Conservation	42	-	36	-	74	-	26	-	38	-	42	01	31	-	45	03	30	03	25	-	41	06
10.	Animal Resources	46	-	34	-	45	02	62	10	49	07	33	11	41	22	35	06	42	14	44	-	-	04
11.	Social Welfare	393	281	415	281	417	281	423	275	443	272	454	270	454	270	448	282	473	282	470	285	465	290
	Total	2083	507	2257	598	2254	660	2212	678	2539	712	2578	932	2615	998	2665	1018	2938	1033	2922	1095	3045	1086
	Grand Total	2590		2855		2914		2890		3251		3510		3613		3683		3971		4017		4131	

Contd....

Sl. No	Name of the dept./ programmes	91-92		92-93		93-94		94-95		95-96		96-97		97-98		98-99		99-2000		2000-01	
		ST		ST		ST		ST		ST		ST		ST		ST		ST		ST	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1.	I.R.D.P.	88	12	106	19	93	23	106	31	142	11	170	32	128	66	186	06	25	07	-	-
2.	TRYSEM	-	15	-	-	42	16	38	46	16	09	08	-	18	-	21	07	47	13	-	-
3.	I.T.D.A	332	86	287	36	194	80	164	40	113	44	97	52	106	60	102	57	103	58	134	54
4.	I.C.D.S.	-	-	-	3436	-	3567	-	3781	-	3874	-	3915	-	4126	-	4379	-	4567	-	5214
5.	P.D.S.	1714	635	2007	810	2013	765	1978	805	2078	820	2076	815	2176	815	2200	828	2180	830	2216	845
6.	Forest & Env.	120	06	98	05	108	15	145	13	180	25	189	18	200	47	178	24	194	28	240	85
7.	Agriculture	220	12	218	15	216	13	224	11	245	10	274	21	269	16	258	20	264	18	289	27
8.	Horticulture	24	04	19	05	32	06	20	02	23	05	51	08	19	03	37	-	24	09	102	10
9.	Soil Conservation	45	-	32	04	51	10	37	04	46	09	50	04	41	10	48	12	59	20	68	27
10.	Animal Resources	95	-	21	-	43	-	65	-	82	-	16	24	29	07	45	17	57	34	-	12
11.	Social welfare	554	288	570	285	585	285	612	283	622	290	534	386	556	378	625	370	667	405	676	412
	Total	3192	1058	3358	4615	3377	4780	3389	5018	3547	5097	3465	5275	3542	5528	3700	5720	3620	5989	3725	6686
	Grand Total	4250		7973		8157		8407		8644		8740		9070		9420		9601		10,411	

Source: Panchayat Samiti, Jeypore and Field Survey  
 • N.B: ST- Scheduled Tribe M:- Male F:- Female

The evaluation from table-01 indicates that the programme of IRDP (Integrated Rural Development Programme) had several flaws in identification of beneficiaries, estimating quantum of funding, arranging marketing facilities etc. The participation of tribals in the programme indicates a disturbing trend. Even after the introduction of liberalisation regime in 1991-92 the participation of any year has not crossed over the participation of 1984-85. So far as women participation is concerned it is almost marginal both in the pre and post-liberalisation period. In contradiction to the basic objectives of IRDP, it is found that one third of the beneficiaries did not have the original assets and in no year women section constitute the 40 per cent of total beneficiaries during survey.

The self employment programme of TRYSEM (Training of Rural Youth for Self Employment) from table-01 indicate that during pre-liberalisation phase in the year 1980-81, 1984-85, 1985-86 and 1992-93, no training has been imparted to any youth for self employment. The most noticeable feature that can be observed is that the composition of women in comparison to their male counterpart is not encouraging. It is disturbing that, participation of tribal women has an insignificant share through out the period and nil in the year 1980-81, 1984-85, 1985-86, 1992-93, 1996-97 and 1997-98. It has been observed from the field survey that Pentia, Gadba and Omatya tribe are the dominant participant in the above programmes.

In the various programmes of ITDA (Integrated Tribal Development Agency), Jeypore an upward trend of participation has been noticed. Again the women participation in the programme implemented through ITDA, Jeypore is though encouraging, it is not at par with participation of tribal males.

Viewing the percentage of participation in ICDS (Integrated Children Development Scheme) programme, it is no doubt showing an upward trend and the growth of participation is significant. But till now maternal mortality, infant mortality, malnutrition of children is a common feature among tribals in the block. Many more people are out of the purview of the scheme. From the survey it has been noticed that except Khonds tribe the participation of tribals in the schemes is appreciable, where Bhatra tribe has the dominant participation.

The disaggregated view from the above table shows that the participation of tribals in PDS (Public Distribution System) during post liberalisation period (1991-92 to 2000-01) has registered an upward trend in participation than the previous decade. Women participation is concerned, it exhibits stagnancy from 1980-81 to 1991-92 and a marginal increase has been noticed during post liberalised era.

From the field survey it is observed that the forest officials have failed to channelise the tribal mentality or tribal folk in raising their participation.

In the selected sample schemes of agriculture department a very marginal participation of tribals has been noticed. Simultaneously throughout the period of study the participation of women in various programmes of agriculture department is insignificant.

In the sample schemes of horticulture department the participation of tribals is almost insignificant during pre-liberalisation period (1980-81 to 1990-91). But after 1991-92 the participation of tribal males has increased due to dissemination of information and continuous demonstration by department officials. However participation of tribal women has not exceeded to 10 numbers in any one of the year. Tribe specific participation is concerned it is Gadba, Holba & Omanatya tribe are the chief participants found in the scheme during survey.

During the survey it is noticed that tribals are quite ignorant about the existence of a department called soil conservation. Rarely do they have an idea about the implementation of various schemes under its banner. As the schemes of this department do not have a tribe specific approach except to curb "Podu" cultivation and construction of check dams to stop soil erosion, it can not be judge as tribe specific or participation of any tribe is dominant.

The twenty years data on cattle farming and poultry of animal resources department exhibits that no proper attention has been given to the requirements of the tribal beneficiaries. Table-01 shows that in 1980-81 to 1981-82 and the year 1991-92 to 1995-96 participation of tribal women is nil. Similarly in the years of 1990-91 and 2000-01 no participation from tribal males has been registered.

Under the social welfare head, the percentage of change in participation from 1980-81 to 1995-96 remained marginal. So far as participation of tribal women registered, though it is encouraging it requires a devoted effort in bringing more women under the fold.

## **Section- IV**

### **Growth of tribal participation**

To calculate the growth rate of tribal participation in various development programmes the "Semi-log Model" of econometrics has been used. Table-02 shows the growth rate of various components undertaken in the study.

**Table- 02 (Growth rate of tribal participation as per Programme wise)**

Sl. No.	Heads/ Name of the Programmes	b	r = b-1	Growth rate = r * 100	N = Sample size
01	I.R.D.P	1.02189	0.02189	2.189	20
02	TRYSEM	1.1169	0.1169	11.69	20
03	ITDA	1.02345	0.02345	2.345	21
04	ICDS	1.04718	0.04718	4.718	09
05	PDS	1.040628	0.040628	4.0628	21
06	Forest & Environment	1.0741843	0.0741843	7.41843	21
07	Agriculture	1.0162573	0.0162573	1.625734	21
08	Horticulture	1.078559	0.078559	7.985598	21
09	Soil Conservation	1.032199	0.032199	3.219909	21
10	Animal Resources	0.9908946	? 0.0091054	? 0.91054	21
11	Social Welfare	1.0235857	0.0235857	2.358571	21
12	Women Participation	1.0479558	0.0479558	4.795583	21
13	Total	1.0938785	0.0938785	9.387855	21

Table-03 shows the computed values of t-statistics on various development programmes.

**Table- 03. Sample size (N), R<sup>2</sup> and 't' value on Growth of tribal participation on development programmes in Orissa.**

Name of the Programmes	Sample size (N)	R <sup>2</sup>	't' value
I.R.D.P	20	0.049742	0.97068 (ns)
TRYSEM	20	0.208722	2.17899**
ITDA	21	0.084877	1.32749 (ns)
ICDS	09	0.940528	10.52151*
PDS	21	0.920322	14.81461*
Forest & Environment	21	0.031079	10.255*
Agriculture	21	0.58836	5.211224*
Horticulture	21	0.610542	5.457637*
Soil Conservation	21	0.321811	3.00263*
Animal Resources	21	0.006225	? 0.0345 (ns)
Social Welfare	21	0.941216	17.44186*
Women Participation	21	0.887847	12.26423*
Total Growth	21	0.502189	4.378024*

\* - Significant at 1% level      \*\* - Significant at 5% level

ns – Not significant following 't' tests



The following are the tabulated value of 't' statistics at 1 per cent, 5 per cent level of significance for 18 d.f., 19 d.f. & 7 degree of freedom respectively.

t<sub>0.01</sub> for 18 d.f. = 2.88

t<sub>0.05</sub> for 18 d.f. = 2.10

t<sub>0.01</sub> for 19 d.f. = 2.86

t<sub>0.05</sub> for 19 d.f. = 2.09

t<sub>0.01</sub> for 7 d.f. = 3.50

t<sub>0.05</sub> for 7 d.f. = 2.37

### Analysis of Data

The data were scrutinized and analysed variable wise. Table-02 shows the computed growth rate & table-03 exhibits the 't' value of the growth rate of participation of tribals on different programmes implemented in the block of Jeypore, Orissa. It is observed that the overall growth of participation in all programmes taken as sample is increasing at 9.38 per cent per annum and found statistically significant. The decrease in the growth rate of participation in programmes of Animal resources dept. is found over the study. So far as participation in programmes like TRYSEM & programmes of Forest & Horticulture department is concerned it is highly correlated to the participation of tribals in Jeypore block of Orissa. The study also reveals that there is a significant positive relationship between the training achievement and tribal attitude (Highest growth rate i.e. 11.6 per cent per annum is observed in TRYSEM Scheme).

On the other hand participation in ICDS & PDS programme is increasing with a greater consistency. In comparison to programmes of Soil Conservation, Agriculture, Social Welfare Programme, the participation in programmes of ICDS, Forest & Environment and Horticulture dept. has experienced a comparatively higher rate of growth. So far as participation of women in different development programmes is concerned, it is growing only by 4.79 per cent and found significant relation with the level of tribal development.

From the study it is observed that two fold reasons are responsible for marginal participation. Firstly, low participation of tribal women is evident in all most all development programmes. The main reason which attributes to the marginal participation of tribal women is the lack of awareness about the programme, low status of women both in the family and in official procedures and poor economic condition connected with illiteracy. Secondly, another crucial phenomenon which has been observed is that the people of those Panchayats which are nearer to the block office have a better access to the information and their participation in the programme is significant. Hence it can be judged that distance from the centre is another problem to the block officials for implementation of the programme. Finally it can be mentioned that this marginal participation of tribals in development programmes is not peculiar to Jeypore

block alone. In fact, in all most all the blocks of Orissa, experiencing such a low level of participation in development programmes.

### **Interpretative Comment**

The study has indicated that there are wide variations in tribal participation in different development programmes. Analysis shows that the growth of tribal participation in each of the programme has shown a marginal growth from 1980-81 to 2000-01. Deceleration has been particularly marked in case of the programmes of animal resources department. Low participation of tribals on the development programmes of I.T.D.A., Agriculture, and Soil Conservation departments has been a much debated issue. It shows that there are inherent weaknesses in development programmes for which the blame cannot always go to the tribals but to the programme planners who are not down to earth. The inter-variability of participation of tribals in different programmes is a problem which needs to be tackled either in otherway or through an agency like ITDA etc. In addition to this the govt. has to ensure the quality and pattern of development programmes as well as monitor the need and requirement of the tribals. More intensive planning on Agriculture, Horticulture, Animal resources and Forest resources need to be done at state level by resource group in consultation with national level experts. There is the need of flexibility and adaptability with regard to implementation of the Social Welfare and ICDS programme. So also these development programmes must work in coordination with other supportive institution / community ownership/other agencies. The poor tribals in the village have shown greater interest in earning their livelihood and are not available for continuous participation in their own development. This shows that, an autonomous process of people's participation can hardly taken for granted in an ongoing process of development. It is also found that programmes divorced from regional specificity would tend to less meaningful for the tribal of their location. So also it is the functional gaps which tend to keep tribals divorced from productive activities / programmes perpetuate them in economic backwardness. Inherent weaknesses in the system of development administration, programme implementation strategy and constraints faced during programme implementation etc. are the major reasons for slow growth of tribal participation in the development programmes of Jeypore block. The study also provides differential trends regarding the level of participation, awareness and attitude of tribal women of Orissa relating to various development programmes.

The overall participation among the women is not satisfactory and significant difference is marked among the tribal male & tribal females basing on their habitations, age groups, and socio-economic background. For this greater awareness of women's contribution to development process, changing long held perceptions that undervalue tribal women's work and breaking down discriminatory practices and attitudes are essential in improving tribal women's

access to and participation in development programmes. Similarly for mobilising the tribals to participate in the developmental process there is a need to shift from an exclusive focus on modern mass media to a broader focus on participatory communication media, as well as the institutional aspects of managing communication strategies and campaigns. Therefore to sum up, the study reveals that, programme pattern (i.e. input process of development programme) and process of implementation of development programmes in tribal areas both need re-valuation and re-orientation.

## **Section - V**

### **Findings**

1. In Jeypore block of Orissa, development programmes for the Scheduled Tribes and lower sections of the society are undertaken in various sectors. This has resulted in remarkable achievements in terms of increased tribal participation as well as improvement in their quality life. But it could have achieved higher rate of participation with slightest supervision.
2. The staff of the block offices undertaking development programmes are unable to pay due attention to supervision and monitoring of these programmes (especially for tribes) because of their pressing engagement in implementing other development programmes and complying with several administrative needs.
3. The field visits of the government official staff to supervise the development programmes meant for scheduled tribes are very rare, irregular and not down to village. This act a hindrance in tribal participation in different development programmes.
4. Some of the guidelines designed for development of scheduled tribes appear to be faulty, inadequate and not clear and therefore, need a review. (i.e. agriculture, horticulture schemes etc.)
5. Owing to absence of banks in interior and inaccessible areas, the tribal people do not get loans and thereby fall prey to indebtedness, land alienation and bonded labour. This has reduced the tribal participation in most of the schemes. (i.e. IRDP, ITDA schemes, Agriculture & Animal resources etc).
6. In schemes like Indira Awas Yojana (IAY) the house structure design are not compatible with the cultural beliefs, values and ritual of tribals. As a result, the IAY colonies have been deserted or disliked by the tribal people in certain cases.
7. In the present system of development schemes, participation vis-à-vis employment generation for women is heavily neglected. The schemes are so designed as to provide employment mainly to men among the scheduled tribes.

8. The directive to avoid over administration and not to overwhelm the people with a multiplicity of schemes is ignored.
9. Tribals are attached to their own culture, religion and way of life and unless the development programme is very carefully adjusted it may do as much harm as good, destroying much that is of value and putting little in its place. Besides no survey is conducted to know the aspiration and felt needs of tribal people. Therefore, the annual action plans, which do not properly reflect peoples aspirations and felt-needs, are not very much people-oriented. Further, the programmes for vocational training and awareness generation are neglected and measures for involving people in development programmes are also not taken in a planned way.

## **Section- VI**

### **Suggestive Model**

- ♦ Measures to improve conditions and opportunities for tribals in development programmes.
- ♦ Measures to ensure a non-discriminatory environment for tribals and
- ♦ Measures to ensure that all development programmes of government are attuned to and appropriate to the realities and needs of tribal people

Against this background the following are options given to enhance the tribal participation in development programmes in Orissa.

- I. Firstly there is a need to establish Planning and Action Committees of Tribals (PACT) at village circle and block levels consisting of spokesmen of tribals who are enlightened and who possess some necessary organisational skills and leadership capabilities. The PACT should be provided with some minimum amount of seed money to meet the cost of their periodic meetings, educational and training programmes and motivational and promotional campaigns. The role of PACT will be to understand and solve the socio-economic problems collectively with or without external, financial, administrative, legal and legal support for enhancing participation of tribals in development programmes.
- II. Secondly there is a need to create and strengthen the organisation of tribals at the block level which will be concerned with the problem of development in general. This organisation can be politically more active so as to press for swift and concrete results as a pressure group.
- III. Thirdly there is a need for special appoint at the district level who can watch and monitor the performance and participation of tribals in development programmes and development administration.

At last hopefully, it can be said that accessing complete information about tribal participation will no doubt promote a new system of enhancing tribal participation in Orissa, India.

## **Section - VII**

### **Conclusion**

By concluding it can be said that anyone thinking of tribal participation in development programmes can not afford its human dimension: it has social and cultural components and correlates. The theoretical premise has to be borne in mind and translated in to action. Tribes today have to be restudied and observed comparatively, cross culturally and on that basis development policies and plans should be formulated and pursued vigorously. They have to develop in a way they feel is suitable for us so that the element they cherish in cultures can be protected and preserved from threats from outside. The traditional village councils in tribal areas should be re-activated, their informal labour cooperatives reinvestigated, traditional social institutions bases tapped, and their natural resource base and human potential harnessed. This would warrant empowerment of tribal people and a participatory mode of development.

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## **OCCUPATIONAL LOCKING-IN AND ORGANISATIONAL STRESS AMONG THE PART TIME CONTRACT TEACHERS WORKING IN VARIOUS DEGREE COLLEGES OF TRIPURA.**

**\* Deepa Ghosh**

### ***Abstract***

The present study aims at investigating the Occupational Locking-in and Organisational Stress of the Part time Contract Teachers working in the government degree colleges of Tripura. A group of 100 college teachers, among them 49 part time contract teachers (Male-31, Female-18) and 51 regular teachers (Male-29, Female-22) were selected as sample in this study. The age group of the subjects ranged from 35-50 years. The Occupational Locking-in questionnaire, developed by Ghosh (2002) and Organisational Role Stress scale developed by Pareek (1983 and 1993) and locally adapted by Deepa Ghosh (2002) were administered for measuring the locking-in condition and occupational stress of the part time contract teachers. The obtained scores were statistically analysed. Results divulge that the part time contract teachers significantly experiences more locked-in feelings, in comparison to the regular teachers ( $t = 8.14$ ;  $p < 0.01$ ). They also experience organisational role stress, especially in terms of role stagnation, role expectation conflict, role erosion, role overload, role ambiguity and resource inadequacy. The results suggest that the feeling of locking-in will surely lead to organizational stress because there are positive correlations between the two variables.

*Key words:* Occupational Locking-in, Organisational Role Stress, Part time Contract Teachers.

### **Introduction**

Stress is an inseparable part of human existence. It affects all individuals rich and poor, literate and illiterate, both men and women and young and the old alike across the developed and developing nations. It exists everywhere, whether it is a family, a government organisation or any other social or economic organisation. The modern world, which is said to be world of achievement, is also a world of stress.

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Organisational Stress means negative environmental factors associated with a particular job in an organisation. Such negative factors may be in connection with administrative policies and strategies, organisational structure and design (Kasl, 1992), organisational process, and working conditions. Organisational stress may be defined as 'a condition arising from the interaction of people and their jobs and characterised by changes within people that force them to deviate from their normal functioning' (Beehr and Newman, 1978). Occupational stress is an individual experience, depending on the traits of individuals, in that not all people react to events the same way (Manthei and Gilmore, 1996; McKenna 1987).

Occupational locking-in refers to the ongoing feeling when an individual had almost no opportunity to move from their present job or virtually when there is no berth available for their promotions (Quinn, 1975). Quinn distinguished three components of locking-in: (1) low probability of securing another job as good or better than his present one; (2) little opportunity to modify a presently disliked employment situation by securing a change in job assignments; and (3) low likelihood that a worker who was dissatisfied with his job could take psychological refuge in the performance of other roles not linked to his job. This feelings of being trapped in a job leads to job dissatisfaction and reduced mental well-being (Sutherland and Cooper, 1986). Professionals who report being 'locked into' their job endure extreme costs. They have lower feeling of self-worth, more negative encounter in their marriages and less marital satisfaction, and report more depression, poorer health and less life satisfaction (Wolpin and Burke, 1986).

In an organisation career development may be a source of stress, if an individual do not find scope to develop his career. Marshall (1977), and Wolpin and Burke (1986) identified lack of job security and obsolescence, status incongruity (under or over promotion and frustration due to non-reaching to the career ceiling as a result of occupational locking-in condition) as the potential sources of stress. In addition, poor pay is also a source of potential stress for an individual in any organisation.

Occupational stress can result in psychological, physical and behavioral consequences for individuals. Psychological consequences include job dissatisfaction, reduced job commitment, anxiety, frustration, anger, and of most concern, burnout (Aluja, Blanch & Garcia, 2005; Angerer, 2003; Hanson & Sullivan, 2003; Luthans, 2002; Maslach, 1982; Sarros & Sarros, 1992; Troman, 2000). According to a substantial body of literature, teaching can be a very stressful occupation and teacher stress appear to have increased in recent decades (Bernard, 1990; Munt, 2004)

Physical consequences of occupational stress involve changes to normal bodily functioning (Ashcraft, 1992). Research conducted in numerous settings, including schools, have established links between the following and occupational stress (and burnout): hypertension, elevated blood pressure, dryness in the throat, nervous tics, stomach complaints, ulcers, neck or back pain, headache, migraine, tiredness, chest pain, heart disease and stroke (Angerer, 2003; Ashcraft, 1992; Brown & Ralph, 1992; Burke & Greenglass, 1994; Caputo, 1991; Dinham, 1993; Kyriacou & Sutcliffe, 1977).

Behavioural consequences of occupational stress are the actions by individuals. These may arise directly from stress or as a result of psychological or physical reactions as described above. The five major behavioural consequences identified in the literature are withdrawal, reduced performance, deteriorating collegial relations, substance abuse and accidents (Aluja et al, 2005; Angerer, 2003; Hanson & Sullivan, 2003; Kalliath & Beck, 2001; Sarros & Sarros, 1992; Solman & Field, 1989; Spector, 2000; Troman, 2000).

These outcomes, in their various forms, can prove quite costly to individuals and organization//to which they belong. For educational institutions student learning can be disrupted or otherwise affected. For these reasons, the reduction of occupational stress should be of great importance to colleges and other organizations because with job dissatisfaction, the pecuniary loss can be considerable; the cost in terms of disrupted learning for students cannot be measured. According to Acirrt, 2002, Punch & Tuetlman, 1996) teaching has been identified as one of the professions associated with high to very high levels of occupational stress.

The prevailing employment scenario of Tripura is very depressing in comparison to other states of the Indian union. Here job opportunity is confined to government jobs only. Since the existence of industry is bare minimum, hence the opportunity of employment is also restricted to the spheres of government job. So, the educated youths after completion of higher studies eye for a government job. Some succeed in securing a government job, others fail to do so.

The Part Time Contract teachers are recruited by the State Higher Education Department and are given contractual appointment for one academic session only, subject to review and reappointment. This is done with an objective to ensure healthy student teacher ratio and guarantee smooth completion of the teaching-learning process in the existing 15 nos Government degree colleges of the state. Out of the total teachers working in the colleges to augment the teaching learning process, 45 per cent among them are part time contract teachers. As manifested through statistics, the rein of the teaching learning process of the colleges situated in the various sub-divisions including the state capital virtually depends upon the part time contract teachers. Statistics reveal that 2 per cent of

the part time contract teachers are NET/SET qualified and 14 per cent among them have completed their Ph.D/M.Phil. But, the astounding fact is that 33 per cent of the part time contract teachers have surpassed the age limit (37 years) fixed for any government job i.e. virtually they are ineligible to apply for any government job.

The Part time Contract Teachers are assigned with the task to perform duties similar to a regular teacher. But, the difference lies in their designation, salary and responsibility. This leads them to a feeling of powerlessness and demotivation. While performing the duties for a long period, the Part time Contract Teachers have developed an expertise at par with the regular teachers working for a similar period. But since their recruitment is made temporarily for one academic session only, hence they develop in them a sense of insecurity. They also bear the fear of being discontinued from service. In addition, the salary drawn by the Part time Contract Teachers is abysmally low, due to which they persistently explore possibilities for enhancing their income by engaging themselves in other Part time jobs. This develops among them 'role overload' and 'role conflict'.

Although the Part time Contract Teachers and regular teachers work in the same environment and perform similar duties, but they do not have either job security or financial stability. Numerous studies found that job stress influences the employees' job satisfaction and their overall performance in their work. Because most of the organizations now are more demanding for the better job outcomes. In fact, modern times have been called as the "age of anxiety and stress" (Coleman, 1976).

All these facts related to the Part time Contract Teachers working in different government degree colleges of Tripura has inspired me to postulate the following hypothesis:-

1. Stagnated group of teachers express more intense amount of locked-in feelings than non locked-in teachers.
2. Locked in group of teachers' exhibit significantly higher amount of organisational role stress while comparing with non locked-in teachers.

## **Method**

**Aim of the study:-** The aim of the present investigation is to collect relevant information from a representative group of part time college teachers, whether they experience occupational stress or not.

**Sample:-** The total sample for the study consisted of 100 teachers working in the various government degree colleges of Tripura. Out of them, 49 [M-31,

F-18] were part time contract teachers and 51 [M-29, F-22] were regular teachers. The age range of the sample was 35-50 years. The selected teachers have at least 7 years of teaching experience.

### **Tools used**

**Occupational Locking-in Questionnaire:-** It is a Likert-type five point scale consisting of 9 items, and has been developed by Ghosh (2002) following the conceptual framework of Wolpin and Burke (1986). This tool was developed for the assessment of occupational locking-in feelings of the stagnated group of teachers. The scoring rationale is, the higher the score the greater is the amount of locked-in feelings. The odd-even reliability co-efficient is 0.86.

**Organizational Role Stress Scale (ORS):-** Originally this scale was developed by Pareek (1983 and 1993) [which was based upon industrial settings]. Later on, it was adapted by Ghosh (2002) to suit the measurement of organizational stress among the teachers. The total number of items in the adapted version was 78 (originally it was 50). The items were structured in the statement form. The total possible score on the adapted ORS scale ranges from 0 to 312 using the scoring method 0 to 3. There are ten enquiry areas like:- (i) Inter-Role distance; (ii) Role stagnation; (iii) Role expectation conflict; (iv) Role erosion; (v) Role overload; (vi) Role Isolation; (vii) Personal inadequacy; (viii) Self role distance; (ix) Role ambiguity and (x) Resource Inadequacy. The reliability of the adapted version of the ORS Scale was 0.71.

**Procedure:-** At first a list of part time contract teachers, those who have a working experience of 7 years was collected from the department of higher education. From them, a group of 49 part time contract teachers (Male-31, Female-18) and a group of 51 regular teachers (Male-29, Female-22) were selected through Stratified Random sampling technique from different degree colleges of Tripura viz, MBB College, Ramthakur College; Women's College; NSM, Udaipur, Kabi Nazrul Mahavidyalaya, Belonia College, Khowai College and Amarpur Government Degree College. Here also, those regular teachers having seven years of teaching experience were selected. The teachers were approached individually and were requested to volunteer for the testing schedule according to the instructions provided at the beginning of the questionnaires. The two test booklets along with answer sheets were distributed among them and were collected from them on the dates according to their availability. Each answer sheets was scrutinised carefully to find out that not a single item remained unanswered.

### **Result and Discussion**

The Mean, Standard Deviation and Standard Errors of mean of the occupational locking-in scores for both the Part time Contract Teachers and Regular teachers (Table-1) largely speak in favour of their clear cut distinguished

categories or separate homogeneous group so far as their locked-in feelings are concerned. From the Table it is clear that the Part time Contract Teachers have locked-in feelings. As they have no chance to shift from their job due to limited employment opportunity in the state, they are compelled to continue here as a Part time Contract Teachers. Irrespective of their high qualification, they are not in a position to obtain any permanent job, due to lack of suitable employment alternative. It is noteworthy that 33 per cent of the part time contract teachers have already surpassed the age limit of 37 years and has virtually become ineligible for any government job (Source-Department of Higher education, Govt of Tripura). The statistically significant critical ratio ( $t=8.14$ ;  $p<0.01$ ) further reinforces the above statement i.e. Part time Contract Teachers or stagnated group of teachers expressed more intense amount of locked-in feelings than non-locked-in teachers. Such findings provide ample evidence to accept the 1<sup>st</sup> hypothesis.

**Table-1. Mean, SD and Standard Error of Mean of Occupational locking - in scores for Part time contract teachers and regular teachers and comparison between them**

Locking-in Score	Part time Contract Teacher	Regular teacher	t-ratio
Mean	31.41	21.75	8.14*
SD	7.57	3.73	
S.E. <sub>Mean</sub>	1.08	0.52	

\* $p < 0.01$

NB – Maximum possible score is 45; High score indicates more intense locked-in feelings.

The findings in the Table-2 unequivocally reveals that the concerned stagnated Part time Contract Teachers, have reported significantly more amount of Organizational Role Stress, specially in terms of the following aspects:- i) Role Stagnation (ii) Role erosion (iii) Role overload (iv) Role ambiguity and (v) Resource inadequacy, in comparison to the reported organizational role stress of the regular teachers concerned. In view of the above evidence, the 2<sup>nd</sup> Hypothesis i.e. 'Locked-in group of teachers' exhibit significantly higher amount of organisational role stress while comparing with non locked-in teachers' can be retained. The locked-in stagnated teachers have reported about their negative feelings due to the non-availability of resources needed for effective role performance and frustrating attitudes caused by uncertainty to avail of career development opportunities, as expected by them. Corroborative evidences were found present in the comment of Cooper (1994) as well as Smith and Bourke (1999), who observed that lack of recognition of good work and 'lack of promotional opportunities generate highest level of teachers' stress'. Ghosh (2002) found out that lack of promotional opportunity leads the university teachers (Readers) to experience job dissatisfaction and organizational stress.

From the result it is also seen that the locked-in group of teachers have significant amount of role overload. Since the salary is not adequate for the locked-in group of teachers, therefore in order to fulfill the basic necessities of life, and battle the sky rocketing prices of essential commodities, they are compelled to work in more than one part time job. But, as the job is not similar to regular job, therefore they have no liabilities, power, status, recognition, responsibilities. For this reason, their ego needs is not satisfied in the organizational context, which also affect their family life or social life. Actually, role overload is more likely to occur in the absence of a mechanism of role integration, in the absence of power ceded to role occupants, in situations where there are large variations in expected output and in instances when delegation does not result in more time as expected (Pareek, 2008). Moreover locked-in group of teachers have significant amount of conflict called role ambiguity and role erosion. Due to their temporary nature of job and having qualification more or less similar to the regular teachers, they subjectively feel that some functions that he / she would like to perform are given to some other role. Thus, a conflict develops in them which lead to depression, stress and dissatisfaction to life.

**Table-2. Organisational Role stress levels of Part Time Contract teachers and regular teachers as well as their comparisons**

Organizational Role Stressors	Maximum Possible score	Regular teachers		Part time Contract Teachers		t-ratio
		Mean	SD	Mean	SD	
Inter Role Distance (IRD)	30	18.11	6.23	20.11	5.99	1.63'
Role Stagnation (RS)	28	17.88	5.11	21.56	6.02	3.29***
Role Expectation Conflict (REC)	20	10.18	4.17	11.13	3.78	1.20'
Role Erosion (RE)	28	18.56	2.71	21.41	4.78	3.68***
Role Overload (RO)	28	16.38	3.39	18.37	3.34	2.96***
Role Isolation (RI)	32	15.81	5.64	17.22	6.28	1.18'
Personal Inadequacy (PI)	28	16.92	2.64	17.79	3.93	1.30'
Self-role Distance (SRD)	60	30.01	10.11	31.22	9.11	0.62'
Role Ambiguity (RA)	12	16.88	2.35	18.58	3.98	2.61***
Resource Inadequacy (Rin)	40	20.11	6.43	22.59	6.39	1.99**

\* Difference insignificant; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

NB – High score indicates high stress.

The coefficient of correlation between scores of occupational locking-in and 'Organisational Role stress' (Table-3) indicate all positive relationships, irrespective of the scores of the Part time Contract Teachers and regular teachers. Such positive correlations have further been observed to be statistically significant in case of 'Role stagnation', 'Role Erosion', 'Role Overload', 'Role Ambiguity' and 'Resource Inadequacy' for both part time contract teachers and regular

teachers, whereas an additional stressor ‘Self Role distance’ and ‘Role expectation conflict’ has also been observed in case of Part time Contract Teachers and regular teachers respectively. In case of locked-in group of teachers, it can be said that since they are relatively compelled to join this job after completion of their higher education, (because of no other job alternative) which may or may not suit their interest, hence, they may develop in them a conflict between their self concept and the role they occupy in the organization. This led them to play the role in a routine way to earn their living. Besides this, in the light of Equity theory, it is seen that Motivation is the function of perceived equity – equity of input (effort, loyalty, hard work, commitment, competence, adaptability, flexibility, tolerance, determination, enthusiasm, trust in superiors, supporting colleagues, personal sacrifice etc) with output (salary, benefits, perks, recognition, reputation, responsibility, sense of achievement, praise, sense of growth, Job security) and equity of one’s output with others’ output of the same input (Pareek, 2008). Therefore, employees assess the fairness of the outcome. If they do not find fairness (whatever may be the reason) then it will lead to the feeling of demotivation. This feeling of deprivation will lower their job satisfaction and quality of performance. Of course there are some among them who occupy their roles very seriously forgetting their own self concept. But in the long run it will also affect his / her mental health. Because, there are many studies which showed that stress produces mental illness. Hence from the above result and discussion it can be said that there are marked evidence towards the contributory role of “Occupational locking-in” condition for generating some amount of stress among the concerned group of teachers.

**Table-3. Relationship between Occupational locking-in Scores and Organisational Role Stress (Component Scale) Scores.**

Relation of Occupational Locking-in scores and ORS Components	Coefficients of Correlation	
	Regular Teachers (N=51)	Part Time contract Teachers (N=49)
Inter Role Distance (IRD)	0.22 <sup>*</sup>	0.21 <sup>*</sup>
Role Stagnation (RS)	0.33 <sup>**</sup>	0.40 <sup>***</sup>
Role Expectation Conflict (REC)	0.30 <sup>**</sup>	0.17 <sup>*</sup>
Role Erosion (RE)	0.32 <sup>**</sup>	0.40 <sup>***</sup>
Role Overload (RO)	0.29 <sup>**</sup>	0.42 <sup>***</sup>
Role Isolation (RI)	0.18 <sup>*</sup>	0.12 <sup>*</sup>
Personal Inadequacy (PI)	0.21 <sup>*</sup>	0.18 <sup>*</sup>
Self-role Distance (SRD)	0.26 <sup>*</sup>	0.29 <sup>**</sup>
Role Ambiguity (RA)	0.39 <sup>***</sup>	0.39 <sup>***</sup>
Resource Inadequacy (RIIn)	0.30 <sup>**</sup>	0.38 <sup>***</sup>

\*Insignificant; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$



## Concluding Remarks

On the whole, it can be concluded that the Part time Contract teachers have significant amount of locked-in feelings which lead them to become demotivated and feel stressed. There are five major behavioural consequences of stress, viz, withdrawal, reduced performance, deteriorating relationship among colleagues, substance abuse and accidents. Since withdrawal or changing the job is not possible in the context of Tripura, the leftover behavioural consequences of stress, i.e. reduced performance, deteriorating relationship among colleagues, substance abuse and accidents will come into effect. Thus the student learning will be badly disrupted. Finally the dictum of creating human resource for the nation may remain an unfulfilled dream. In order to take some appropriate measures the following points should be duly considered:-

1. The Government should take some effective steps and policy measures so that scope for permanent employment of the part time teachers is enhanced.
2. Educational policy makers should be sensitized about the problem and the quantity of regular teachers should be increased from amongst the part time teachers to facilitate smooth running of the teaching-learning process.
3. To cope with the stressful situation, the locked-in group of teachers should involve themselves in yoga, meditation etc.

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## **CORPORATE SOCIAL RESPONSIBILITY: AN ANALYSIS ON HOW A PRECEPT BECOMES A PRACTICE**

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### ***Abstract***

Corporate Social Responsibility (CSR) though publicised in recent decades, had been a concept practiced from ancient times. In ancient and medieval times the merchant organisations and guilds donated a part of their income for the upliftment of the poor and distressed, for the growth of social and cultural organisations and for the development of temples and religious institutions. Such activities continued in Colonial era also. This leads to an irrefutable belief that CSR practices had its origin in India. This paper makes an attempt to case study the CSR initiatives of a few Indian companies and ponders on how the CSR efforts are translated into rebuilding and for the betterment of Indian society. Further, this paper also explores on how the precept becomes a practice to develop the well-being of the members of the Indian society.

*Key words:* Corporate Social Responsibility, CSR initiatives, Corporate institutions.

### **Introduction - A Brief Historical Perspective**

In recent years business leaders, government officials and academicians are increasingly focussing more and more attention on the concept of Corporate Social Responsibility (Reinhardt et al. 2008). The concept of Corporate Social Responsibility (CSR) has a long and varied history (Carroll, 1999). Corporate Social Responsibility though publicised in recent decades, had been a concept practiced from ancient times. The great Indian philosopher Kautilya (4<sup>th</sup> century B.C) from India and the pre-Christian era philosophers in the West advocated ethical principles and advised people to control greed while engaging in business (Godbole, 2007). The Christian concept of “live and let live,” Thiruvalluvar’s moral rule “share the wealth with every one,” the Islamic principle “assign a part of your income to the poor and needy,” and tenets of all religions of the world reflect the principles of the CSR concept.

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Further, a deep study of various religions throws light upon various laws which dictate that a part of one's earnings was to be donated towards the welfare of the poor and disadvantaged. The Hindus called it the '*Dharmada*', the Sikhs '*Daashaant*' and the Muslims called it as '*Zakaat*' (Godbole, 2007).

Social responsibility of business has been a subject of discussion in India since time immemorial. Several references towards this end can be found in ancient Indian philosophical and spiritual literature. Vedic literature (around 2000 BC) views business as an instrument of wealth for welfare, to attain socially desirable goals, through ethically worthy means, resulting in a generation of healthy, wholesome individuals, who carry ethical values and positive impulses into their community. Kautilya in his political treatise, the Arthashastra, has enunciated about the principles of fair trade, which were designed to promote the welfare of the people. In recent times, many business houses believe that the role of business in society should not be limited to increase of wealth for its owners and promoters but also for the larger society. The early pioneers of Indian Industry, such as the TATAs, Birlas and Bajajs, firmly believed in the concept of social responsibility of business.

In ancient and medieval times, the merchant organisations and guilds such as *Manigramathar*, *Nagarathar*, *Valanjiar*, and *Anjuvannathar* donated a part of their income for the upliftment of the poor and distressed, for the growth of social and cultural organisations and for the development of temples and religious institutions. Such activities continued in Colonial era and during the Post-Independence period also and it is to be noted that CSR activities has gained greater momentum in recent decades.

It is a general view that the roots of CSR can be traced to the British Colonial era. There is an irrefutable belief among the social activists that CSR had its origin in India. However, CSR is not new to Indian companies. When the industries in the western countries amassed wealth in the booming economies, the emerging entrepreneurs in India fired by their spirit of nationalism in the British ruled India and moved by the abysmal poverty of their compatriots wanted to help the society by and large. One such entrepreneur was the founder of the Tata Steel Company, Jamshetji Nusserwanji Tata who dedicated his steel factory to the nation (Fernando, 2007-08), and expressed his view very clearly when he said "*we generate wealth for the nation, what comes from the people must, to the extent possible, therefore get back to the people.*" Gandhiji elaborated this concept further by emphasising the moral responsibility of business through his idea of trusteeship. He viewed owners of capital as Trustees holding resources on behalf of the society, which to produce goods and services, will benefit society, at large. The founder of Bajaj group, Shri Jamnalal Bajaj said: "*Our wealth should be utilized for improving the quality of the society and the nation.*"

*We should never fail to spend at least a portion of our income on the social, economic and educational development of the province where we live.”* Thus, the early pioneers of Indian industry Tatas, Birlas, and Bajajs, firmly believed in the concept of social responsibility of business. Hence, the corporations are not only judged by the profits they make for their shareholders but also by the impact they make on the well-being of the community.

A cursory glance at the Indian corporate scene would show numerous examples of social initiatives being promoted by various companies. Almost all the big industrial houses, in public or private sector, either implement social development project themselves or support NGOs and Government's initiatives on this. Even the small and medium industries are not lagging behind. CSR is being seen as an integral part of corporate world, not only by outsiders but also by the corporations themselves.

This could be gauged by the fact that in the World Summit on Sustainable Development (WSSD) held in Johannesburg in September 2002, a large number of Corporate Czars from all over the world were present. This paper makes an attempt to introduce and provide an overview of the major issues related to CSR, synthesize ideas of CSR, study CSR initiatives of a few organisations in India and in the process it is pondering on how CSR efforts are translated into rebuilding society and are made for the betterment of Indian society. It further examines as to how effectively the precept becomes a practice to develop the well-being of the members of the society through the case study format.

### **Corporate Social Responsibility Defined**

Corporate social responsibility is a concept with a growing currency within India and also around the globe. CSR is a concept that frequently overlaps with similar approaches such as corporate sustainability and corporate citizenship. While CSR does not have a single universal definition it is often linked to sustainability, stakeholders and ethics (Carroll, 1979).

Generally, CSR is viewed as the private sector's way of integrating the economic, social, and environmental imperatives of their activities. CSR also involves in creating innovative and proactive solutions to societal and environmental challenges, as well as collaborating with both internal and external stakeholders to improve CSR performance (Alexander, 2008).

Bowen (1953) set forth an initial definition of the social responsibilities of businessmen as follows: “It refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society”

Further, Bowen argued that “social responsibility is no panacea, but it contains an important truth that must guide business in the future.” Because of his early seminal work on CSR, Carroll (1999) opines that Bowen deserves the appellation to be called as “Father of Corporate Social Responsibility.” Bowen’s (1953) book and definition represented the most notable contribution to the CSR literature from the 1950s.

Challenges of examining the concept of CSR among a bewildering range of concepts and definitions are found in the quantum of literature. But we adopt a more dynamic and simple definition originally offered by Chauhan and Gupta (2007-08) and quoted by the World Business Council for Sustainable Development publication that states “*Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the work force and their families as well as of the local community and society at large.*”

Corporate Social responsibility can also be defined as the commitment by organisations to balance financial performance with contributions to the quality of life of their employees, the local community and society at large. Many of the concepts and definitions almost concur with this focal point.

### **Corporate Social Responsibility, its meaning and Relevance**

CSR gives many meanings to many people and different people understand it differently. It should not be confused with corporate philanthropy. CSR ranges from mere compliance with law to pure philanthropy. The beneficiaries could range from employees, communities, and suppliers to customers (Godbole, 2007). The conceptualisation of corporate social responsibility until the 1990’s was purely in terms of philanthropy or charity. For example, welfare programs or initiatives were introduced not as a duty or a responsibility but as a form of charity that was supposed to indicate true virtues of the company to the people (Mahapatra and Visalaksh, 2008).

The post- liberalisation phase had seen a fundamental shift from the philanthropy to corporate social responsibility and to stakeholder participation. This change is evident in the statements about corporate social responsibility by India’s leading industrial groups like the Tatas over the years. Further, the nature of the company’s involvement with the community has undergone a change. It has moved away from charity and dependence to empowerment and partnership. In the present scenario the idea of social responsibility of business is based upon the concept that business is something more than a purely economic institution. Therefore corporate social responsibility is the ability of a business entity to relate its operations and policies to the social environment in ways that are mutually beneficial to the company and the society. It also encompasses an

organisation's commitment to behave in a economically and environmentally sustainable manner.

Thus, Corporate Social Responsibility involves a commitment by a company to manage its various roles in the society, as a producer, employer, customer and citizen in a responsible manner. The company's corporate responsibility goals are governed by company's history, vision of the founder, organisational culture, experience, philosophy of the company, business laws of the land and Government regulations (Godbole, 2007). Further, how organisations demonstrate corporate social responsibility and the rationale behind such practices may vary according to the type of industry and kind of sector and country in which organisations operate.

Also, in an era of information technology revolution, the consumers are increasingly aware of the issues like human rights, environmental damage, ethical and moral issues, improper treatment of workers and faulty production that inconveniences or endangers consumers which are frequently highlighted in the mass media. Because of this heightened awareness, the consumers have become increasingly sensitive to the corporate social responsibility activities of the companies from which they buy their goods and services.

Further, companies are also now under the scanner and under the pressure of these new developments and trends and so they are increasingly opting to operate in an economically, socially, and environmentally viable and sustainable way to create a good corporate image among the public institutions and masses.

### **Why Companies Engage in CSR Activities?**

CSR is an initiative taken by the corporate organisations to show people that they care for the society. Besides, the CSR initiative also serves as a powerful image-building tool in creating a brand image for the products and services of the organisations. Corporate entities engage in CSR activities with a belief that, beyond compliance behaviour, it will help companies to gain favour with their current as well as potential future customers and differentiate themselves from their competitors to ensure brand loyalty.

In addition, CSR activities enable a company to build loyalty and goodwill among employees. Since most employees prefer to work for an employer who is highly respected than one who is widely reviled. Further, CSR activities according to corporate managers reduce costly employee turnover and increase productivity in the company by developing a sense of pride in them working for that company. It is also to promote community goodwill as it can engender in the communities in which companies have their customers, headquarters or operating facilities.



According to Portney (2008) CSR activities enable the company to have a loyal customer who is willing to pay more for the goods and services of companies whose CSR records are exemplary. Evidence also suggests that some individuals are willing to pay more for the products and services of companies who are socially responsible.

Lockwood (2007) opines that corporate social responsibility programs tend to improve the company's public image which in turn leads to brand recognition and consumer confidence. Further, corporate social responsibility practices can position the company as an employer of choice, improve employee loyalty, promote recruitment of top talent and even lead to increased workforce productivity.

There is also an opinion that company's profitability and CSR activities are related. For example, Margolis, Elfenbein and Walsh (2007) link profitability to CSR activities, showing that evidence indicates that CSR in general has little effect on profitability. However, there is a stronger evidence to suggest some causality in the opposite direction that companies that are profitable are more likely to engage in CSR activities.

Interestingly, organizations, also like human beings have various needs in which the CSR activities can be related to Self-actualization needs of an organization. For example, Tuzzolino and Armandi (1981) had suggested that organizations, like individuals, also have criteria that needed to be fulfilled or met, just as people do, as depicted in the Maslow (1954) hierarchy of needs. The authors illustrated how organizations too have physiological, safety, affiliation, esteem, and self-actualization needs that parallel those of humans as depicted by Maslow.

### **Corporate Social Responsibility: Public and Private Sector Initiatives**

The CSR initiatives in the private sector seem to be satisfactory (Mahapatra and Visalaksh, 2008) and more and more private sector enterprises work for the betterment of the community at large. India also has a large public sector companies like Oil and Natural Gas Commission (ONGC) Steel Authority of India Limited (SAIL) and Gas Authority of India Limited (GAIL), which are doing their best for the development of several backward regions of the country. Also, Indian Airlines and Bharat Heavy Electricals (BHEL) have been widely hailed for their disaster management efforts. In fact, both public and private sector organisations had been taking sincere efforts in recent decades for improving the conditions of the people and society at large. Whether it is for the cause of clean environment or for balance of ecology, for the amelioration of the condition of the poor and distressed or for the development of the depressed and disabled, for the upliftment of the communities or for the benefit of the social, religious and cultural institutions, both are vying with each other in taking initiatives to accomplish their task.



## CSR in the Present Scenario

In the present scenario the corporate social responsibility has undergone a sea change with focus on initiatives of people-centric with active community participation at all levels. The corporations themselves have moved away from the charitable initiatives like giving financial grants or sponsorships for providing products and services in a manner that would make a real difference in the target communities.

Corporate social responsibility at the conceptual level has been viewed as a fundamental transformation from charity-oriented approach to the stakeholder oriented approach where the target group is seen as stakeholder in the community whose well-being is integral to the long term success of the company. But the real transformation occurred in the implementation stages where corporate entities have started accommodating manpower and expertise in addition to financial resources in order to provide a host of services, programs and schemes that are flexible enough to accommodate the needs of the target community. For example, Tata Consultancy Services (TCS) has set up a fully equipped computer-training laboratory for children, for the welfare of the physically handicapped at Pune in India for imparting basic computer knowledge. Similarly, NIIT has also launched a highly popular scheme where the children in the rural areas can learn computer basics using the play-way method (Mahapatra and Visalaksh, 2008).

India is the country that most extensively reports its CSR. Its community involvement consists primarily of community development, education and training, and health and attending to the issues of disability. India was also the country in which the waves of issues were the largest. All the issues were to be attended for a good solution. Problems concerning labour production processes which consist primarily of environmental responsibility, health and safety, and the employee relations which are mainly concerned with employees' welfare and such other issues had been addressed in various CSR assemblies and meetings of various organizations.

The corporates are hosting innovative programs and schemes in several areas like education, healthcare, rural development, environment protection, protection of artistic and cultural heritage, and disaster management that are customised to meet the specific needs of the target group. Jet Airways, the largest private sector airlines raises funds through its flight collection programme for the "Save the Children." The Citibank gives a percentage of what customers offer to CRY, an Indian NGO working for the welfare of children as contribution on customer's behalf. Shriram Social Welfare Trust, the CSR arm of the Shriram group runs a destitute home, called Ashram, for children in the age group of 2 to 14 years, and primary and secondary schools for poor children and it provides sponsorships in the form of uniforms, textbooks, school fees, etc. to poor and needy children.

Even today, the practice of providing relief and doing charity is quite common among the Bangladeshi organisations. Activities like offering donations at the community levels during floods, droughts, cyclones, etc. or helping weaker sections of the society by patronising social activities or institutions, and providing food, clothes, etc. during religious festivals are quite common. Besides, the corporates offer not only financial assistance but also the much-needed expertise, manpower, products and services that are essential for the successful implementation of these projects and schemes (Mahapatra and Visalaksh, 2008)

### **Criticisms on CSR**

According to Fernando (2007-08) criticisms are often levelled against CSR as a proactive strategy questioning the actual motives of a company and claiming that the entire process is an eye-wash meant to enhance the public relations values of the company.

The corporate entities that participate in costly CSR activities are often burdened to raise prices, reduce wages and other costs, accept smaller profits, or pay smaller dividends and also have to accept the economic consequences.

The earlier models of corporate giving could broadly be classified as ethical (Gandhian trusteeship model) and statist (public sector enterprise). The earlier proponents of social responsibility were in public or private sector either sought to promote these models by designing and implementing community development projects in the vicinity of their jurisdiction. Along with this, another preferred way was to donate either in cash or kind, promote sports and games, art and culture and provide services like health, education, drinking water, etc. While majority of companies still prefer to operate the concept of CSR this way, the CSR scene is increasingly becoming more stakeholder oriented than before. Companies are becoming strategic in their CSR activities, as against majority of earlier cheque-book type corporate philanthropic efforts.

The process of economic survival of the fittest suggests that companies that engage in unsustainable CSR may find themselves being pushed out of business. Therefore the companies should engage in CSR activities based on sound financial principles governing their CSR objectives.

### **Case Studies on Corporate Social Responsibility Activities by Indian Organisations**

#### **CSR practices in Aditya Birla Group**

Aditya Birla Group's CSR vision is, "To actively contribute to the social and economic development of the communities in which we operate. In so doing, build a better, sustainable way of life for the weaker sections of society and raise the country's human development index," which is quoted by Mrs Rajashree

Birla, Chairperson, the Aditya Birla Centre for Community Initiatives and Rural Development. The Aditya Birla group is one of the first promoters of the concept of social responsibility in the country. As early as 1940 the founder of the group Shri G D Birla supported the trusteeship concept of management, which entails that the wealth that one generates, and holds is to be held in a trust for multiple stakeholders. With regard to CSR, this means investing part of the profits beyond business, for the larger good of society.

### **CSR activities at ISHA Foundation (Spiritual institution located at Coimbatore, Tamil Nadu, India)**

The humanitarian efforts of ISHA Foundation have spanned a gamut of social intervention that have been carried out largely by the resources and philanthropic efforts of its own dedicated two lakhs volunteers all over the world. Though what is achieved is something phenomenal it is only a mini scale of what needs to be done in the world today. While retaining its primary focus on spiritual and inner well being of all people, the launching of a commercial enterprise whose proceeds would be dedicated to fund social action fulfils *Sadhguru's* vision and ideal of expanding the reach and horizons of its humanitarian action.

The proceeds of ISHA Business Private Limited had been meant for funding the much-needed areas of Rural Education, Health, Child Welfare and Women Empowerment under the frame work of its project 'Action for Rural Rejuvenation, and for sustainability of CSR programs. ISHA Foundation Times Group, India, jointly carried out community development programmes in rural areas. It is referred as "Action for Rural Rejuvenation".

### **CSR practices in T.V.Sundaram Iyengar Motor Company (TVS)**

The concept of Corporate Social Responsibility as indicated earlier is not a new phenomenon in India. Indian companies like TVS had been practising CSR from the grass root level way back from 1996 by establishing Srinivasan Services Trust (SST) by Venu Srinivasan to create self-reliant communities that could become the models for empowerment and sustainable development in rural areas (Srinivasan Services Trust Report 2006-2007).

Right from the days of inception over a period of 11 years till 1997 SST has transformed the lives of over 88, 302 people, and over 8,647 families have been benefited from income generation projects. Further, the SST activities expanded to 146 villages across 4 states, Maharashtra and Himachal Pradesh in the North as well as Tamil Nadu and Karnataka in the South. In these states SST has adopted a holistic plan of community development from human and economic development to conservation of cultural and natural resources.

## **CSR practices in Hyundai Motors Company (HMC)**

Hyundai Motors Company is the second largest automaker in India in terms of market share, also largest auto exporter in India and also become the largest investor in Tamil Nadu. According to Hyundai Motors Company (HMC) Corporate Social Responsibility consists of three areas. They are trust-based management, environmental management and social contribution. For the trust-based management HMC focuses on enhancement of labour relations, mutually beneficial co-operation with suppliers, ethics management and transport management. For the environmental management, the HMC proactively responds to global trends and regulations related to the environment. And for social contribution, the HMC plans to enlarge their capacity and obtain expertise to effectively carry out global social welfare projects and to participate in volunteering programs to contribute to development of communities.

Hyundai Motors Company as a global automobile manufacturer recognises the importance of alleviating impacts driven by climate change and is doing its best to reduce greenhouse gas emissions. The best way to reduce vehicle greenhouse gas emissions is to cut down the use of fossil fuel and to use low carbon energy sources, as an alternative. To increase fuel efficiency HMC has initiated research in car body design, application of new technologies and production of lightweight vehicles, in order to cut down on the need of fossil fuel. Also, HMC has been continuously supplying fuel efficient vehicles to reduce the level of air pollution and carbon-dioxide emissions in order to protect the environment.

In addition, HMC had initiated social welfare benefits to the disadvantaged like campaigning for the physically disabled people to improve their mobility and safe move campaign to promote safer traffic culture in order to contribute to the society. Besides HMC has also opened the global corporate social responsibility website and established the Global CSR network in the year 2007 to increase social contribution and fulfil its social responsibility.

Hyundai Motors India founded the Hyundai Motors India Foundation (HMIF) in April 10, 2006, and whenever Hyundai Motors India sells a car in India, they donate 100 rupees to the Hyundai Motors India Foundation. This donation fund is used for new social contribution projects and activities in India. Hyundai Motors India through the Hyundai Motors India Foundation provides scholarships to the traffic safety campaigners who regulate the traffic in the congested areas in Chennai. Also, it had been helping the Dalits to get education so that they could be economically independent.

Hyundai Motor Company had taken the initiative to protect the environment in order to benefit overall general public by promoting a pollution free environment

through related research and training programs, including awareness and campaign programs, protection of bio-diversity in national parks, reserve forests, sanctuaries, and also through schools, colleges, universities and institutions. Besides it has also taken measures to nurture and develop arts, science and technology to benefit the overall general public by promoting performing arts and crafts, architecture, culture, heritage and cuisine, and by conducting awareness and campaign programs in various educational institutions.

Furthering its commitment towards corporate social responsibility, Hyundai Motors India had also donated 100 Accent cars to Chennai Police in an initiative to help the Tamil Nadu Government to improve the local traffic, and Law and Order situation in the city and to improve the response time taken by Chennai city police in reaching the spot to enhance their crime detection efforts.

In an effort to initiate the preservation of Heritage buildings, Hyundai Motors India Foundation had contributed Rupees 35,00,000 to the University of Madras for renovating its Senate House, which is 150-year-old building, as a part of conservation of heritage of India in general and Tamil Nadu in particular.

### **CSR practices in Tata Consultancy Services (TCS)**

Tata Consultancy Services (TCS) limited is the world leading information technology consultancy services, business process out-sourcing and engineering services organisation. TCS has used IT as an instrument for social development and change. Some of the CSR initiatives by TCS are in the areas addressing environmental and civic problems, setting up and maintaining infrastructure for urban beautification, pollution reduction and healthcare, waste management in the office environment, besides tree plantation and water treatment.

The nature of work in TCS is in Information Technology (IT) consulting business, which by itself has low impact on the environment. TCS has published its own environment policy, which encompasses air, water, natural resources, people and their inter-relation. TCS environment policy aims at improving environment management by setting higher standards, and optimising the use of power, water, consumables, and other natural resources. It also aims at reducing pollution by minimising the waste generation from business operations.

Also, the CSR initiatives start with the employees with their concern for the environment. For example, the employees are concerned about the wasteful use of electricity or paper at work place that depletes natural resources and adds to pollution caused by the generating and manufacturing units. Therefore TCS initiates energy conservation, waste recycling and paper reduction. Besides, TCS also provides education to children including the underprivileged and those living in slums.

TCS as India's largest unlisted software and Services Company had also won the "Asian Corporate Social Responsibility Award" for its community work to raise the literacy levels in the country. TCS has also set up the "Adult literacy programme" to help the Indian government to eradicate illiteracy, a major social concern affecting a third of the Indian population comprising of old and young adults. TCS has also won the "Golden peacock Global Award" for corporate social responsibility in Asia for the year 2007. TCS was conferred with the award based on the corporate functioning, responsiveness to the needs of different stakeholders and development of innovative partnership models to fulfil social responsibilities (www.tcs.com).

### **CSR practices in National Thermal Power Corporation (NTPC)**

National Thermal Power Corporation limited is the largest thermal power generating company in India. It is a public sector company and was incorporated in the year 1975 to accelerate power development in the country as a wholly owned company of the Government of India. The concept of corporate social responsibility is deeply ingrained in NTPC's culture. NTPC since its inception has been undertaking community welfare activities like improvement of roads, healthcare, education, vocational training, infrastructure development and sports, which are the major activities. Besides, various welfare and cultural activities had also been taken up by the organization (Godbole, 2007).

### **CSR practices in WIPRO**

Wipro was incorporated as Western India Vegetable Products Ltd in the year 1945. Wipro has grown from producing cooking oil to a global company and most of its business comes from information technology services (Godbole, 2007). Wipro believes that to have a successful business, the surrounding society must also be resourceful. Mr. Azim Premji, Chairperson, Wipro state that *"we cannot be an island of excellence. Along with the development of a business the society around it too has to be developed. Otherwise, there are bound to be conflicts that will affect every one. It actually makes good business sense to work with the society in mind, and the focus area of Wipro is education, and Wipro sees education as being very fundamental to development. Wipro contributes towards improving quality of education in government schools in India"* (Godbole, 2007).

It is in this way that apart from improving the overall quality of life, corporate social responsibility, sustainable development and good human resource practices can help to improve India's long-term international competitiveness in attracting 'socially responsible investment' (Aparna and Kate 2003).

ESG compliance would make Indian stocks stronger and more to issuers from other emerging markets in the race for long-term, high quality investors.



There is also a need to involve small and medium enterprises in CSR as they contribute significantly to employment generation.

India has been ranked second in a global study on CSR, undertaken by the research company, TNS automotive. With the growth of such measures, an inclusive and sustainable pattern of economic growth can emerge which will improve the life of all Indians.

### **Concluding Remarks**

Right from ancient times, through the ages, the tenets and virtuous principles were advocated by saints, seers and intellectuals to protect the poor, deprived, disadvantaged and less fortunate from the jaws of poverty, illiteracy, backwardness and social evils and disabilities. In the past few years, organisations worldwide have begun to embrace corporate social responsibility both as a social obligation and also for gaining competitive advantage in the market place. Thus, CSR activity is being seen as an integral part of corporate world, not only by outsiders but also by the corporations themselves. Initiating as well as engaging in CSR activities enable the organisations to achieve a stronger public image as a positive outcome of their corporate responsibility programs.

Thus, Carroll (1999) rightly opines that in future we will see new realms in which we think about new business responsibilities to our stakeholder society, particularly at the global level, and in new and emerging technologies, fields, and commercial applications. In this context, it appears that the CSR concept has a bright future because at its core, it addresses and captures the most important concerns of the public regarding business and society relationships.

Corporate social responsibility has much broader implication for the society and nation as a whole. CSR activities reduce dependency on the government for the implementation of social welfare activities. Moreover, when compared to private and public sector's CSR activities most governmental social development programmes become embroiled in political manipulation, corruption, communal overtones and bitter infighting. Whereas CSR initiatives by the public and private sectors are devoid of these pitfalls and drawbacks, and they will bring people together, and mutually benefit the society and the corporate entity and reinforce peace and harmony.

Thus, these precepts are to be practised to develop an ideal welfare society. In this task, the business organizations have these precepts in their CSR agenda and had been striving to bring them to practice. This is quite evident in their CSR Information Reports. Thus according to Ghosal (2006) CSR has become a potential tool not only to overcome competition but also to ensure sustainable growth. Exercising social responsibilities is no doubt a novel mission, but only a few big business houses are practising it voluntarily, which is a mammoth task

and no one government or few business houses are sufficient to accomplish this mission. Ghosal further suggests that Government should pass a Bill and make it mandatory for all large-scale business houses to contribute a particular percentage of profit for social upliftment, if not possible directly, it must be through some NGOs. With these CSR efforts and initiatives the corporates can be the good Samaritans of the society.

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## DEPRIVED AMONG THE MARGINALIZED – HEALTH STATUS OF WOMEN IN A TRIBAL SETTLEMENT

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### *Abstract*

**Introduction:** Indicators related to health of women in Kerala depict a rosy picture. But there is a lot to be observed in between the social strata of the population, especially among those communities who are getting increasingly marginalized, like the tribal community. The aim of this study is to analysis the status of a tribal community compared to a non-tribal community sharing the same geographical location with respect to the gender. Present study is a cross sectional study conducted in a tribal belt inhabited by both the tribal and non-tribal people. Two cross sections were taken for better comparison. The data regarding all the 52 tribal families were analysed against 95 families who are not tribal. The tribal women enjoy a very low standard of living and poor living conditions. The health issues of these deprived should be considered for the all-inclusive development of the state and the country.

*Key words :* Health Status, Status of Women, fertility, mortality

### **Introduction**

Gender is one of the most important and sensitive dimensions of equity in health care. It is thought that women empowerment has largely contributed to the high public health standards that the state of Kerala is enjoying now. Kerala has the highest proportion of female literacy in India (88 per cent) with a literacy gap of only 1.1 per cent compared to the male counter part<sup>1</sup>. It is the state having sex ratio favouring females (1058)<sup>1</sup>, when all other states of India is experiencing some thing called ‘missing women’<sup>2</sup>. Life expectancy of women in Kerala is 76 years<sup>3</sup> at least three years ahead to that of men. More than 90 per cent of the deliveries are happening in hospitals<sup>4</sup> and the Maternal Mortality Ratio is lowest in the country<sup>5</sup>. The mean age at marriage for women in Kerala is 21.5 years<sup>6</sup>. Though the indices depict a rosy picture there are a lot to be observed in between the social strata of the population, especially among those communities who are getting increasingly marginalized from the overall development of the state, like the tribal community.

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Tribals are indigenous people living in primitive conditions with territorial affiliation. They have their own social organization, economic systems and features of self identification. They are socio-economically disadvantaged and lack contact with other communities at large. They are referred to as backward, due to their lack of capacity to utilize the opportunities of development offered to them. The access to health care and health security are severely deprived for this people even though the constitution of India<sup>7</sup> acknowledges the status of specific indigenous people as “Scheduled Tribes”, (ST). The tribal population constitutes around 8.2 per cent of the population of India<sup>8</sup> and 1.1 per cent of the population of Kerala state. Most places inhabited by them are geographically parts of the Western Ghats in the state. More than 90 per cent of backward tribes bear financial incapability which is higher than that of the forward community (69 per cent)<sup>9</sup>. The major health problems among the tribal people are poverty & under-nutrition, deficiency diseases, lethal epidemics, substance abuse and alcoholism, child birth at home, specific diseases like sickle cell anemia and environmental problems like poor environmental sanitation & hygiene and lack of safe drinking water. The health care delivery system in tribal population dominated areas is in jeopardy.

Analyzing the empowerment of the tribal community, one can easily observe a pattern of hierarchy among them. Most often the women folk form the lowest rung of the ladder may be competing with elderly. The inequality in gender in case of morbidity, mortality, education, occupation, health care provision and utilization domains will measure the deprivation. It is well known that female gender is deprived in all sectors of health cutting across the economic and cultural variability. Our aim here is to analyse the status of a tribal community compared to a non-tribal community sharing the same geographical location with respect to the gender.

## **Materials and Methods**

### **Study setting**

This study was conducted in the tribal belt named Ambathekkar, Kulathoopuzha of Kollam district, a forest area in Western Ghats. This place is a small village inside reserve forest and is inhabited by both tribal and non-tribal people. It is 5 kilometres away from the small town nearby. The nearest primary care centre is situated 7 kilometres away and the nearest first referral unit is located at Anchal which is 25 kilometres away. There is an Anganwadi and primary school in the village. But the children have to walk or depend on the limited conveyance facilities to go to a high school which is more than 5 kilometres from this village. The tribal population residing there belong to a tribal group known as ‘Kani’s. The non-tribal group is a mixed population of Hindus, Christians and Muslims.

## Study design

This is a cross sectional study. Two cross sections were taken, one from the tribal population and the other from the non-tribal population for better comparison. The data regarding all the 52 tribal families residing in the localities were collected and analysed against the data of 95 families who are not tribal but sharing the same geographical setting.

## Data collection

Students (6<sup>th</sup> semester MBBS) of Government Medical College, Thiruvananthapuram collected the data during their field visit using a structured interview schedule. The interview schedule was designed to measure the living condition and health of the community from different angles including morbidity, mortality, education, occupation, health care provision and utilization.

## Results and Discussion

The population of the 52 tribal households was 208 while the total population of the 95 non-tribal households was 410. Family size in the tribal and non-tribal areas was found to be 4 (3.86-4.14) and 4.3 (4.19-4.41) respectively. The family size here is defined as number of people residing under same roof. This is less comparable with the family size in Kerala (4.8)<sup>8</sup> as per the Census report. This could be explained on the basis of migration, mortality and setting up of independent families early in life.

### 1. General features of the population

General features of the population is described in terms of demographic pattern including dependency, education, occupation, fertility and mortality.

### Demographic pattern

**Table 1. Proportion of population in different age categories.**

Age category	Proportion of population	
	Tribal population (%)	Non-tribal population (%)
Below 15 age group	20.4	22.9
15 to 64 year age group	73	70.7
65 and above	6.7	6.3
Dependency ratio		
Overall dependency	36.9	41.4
Young age dependency	27.7	32.4
Old age dependency	9.2	9

From Table 1, It is evident that only a very small percentage of people are there in ‘above the age of 65’ category in both the groups, tribal and non-tribal. This shows the higher overall mortality experience of the community. It could also be partly due to higher mortality rates in the elderly in this locality cutting across the social stratification under study.

The old age dependency is almost 9 in both the groups is close to the National average of 8 and very low compared to the general population of Kerala, that is 12<sup>10</sup>, indicating that these populations are young in terms of the median age than that of the state.

### Education and Occupation

**Table 2. Education and Occupation of adults (Age > 18 years)**

Factor	Tribal population with 95 % CI	Non-tribal population with 95 % CI
Adult literacy	88.9% (86.5-91.3)	87.8% (86.0-89.6)
Higher education (More than 12 <sup>th</sup> standard)	11.1% (8.7-13.5)	7.9% (6.4-9.4)
Work participation rate	59.9% (56.1-63.7)	44.0% (41.2-46.8)
Proportion of people employed in service sector	9.6% (7.3-11.9)	12% (10.2-13.8)

The Table 2 shows that both the strata are not much different in case of Education and Occupation. It is evident that among both communities proportion of people who have received education of 12<sup>th</sup> standard or more (11.1 per cent in the tribal population and 7.9 per cent in the non-tribal population) are low compared to that of the state’s average of 27 per cent. In this forest setting tribal communities are better compared to that of non-tribal in terms of higher education. This also reflects the utilization of services once it is made available to them.

The work participation rate is high compared to that of the general population (32.3 per cent)<sup>8</sup>. But only 9.6 per cent of the tribal group and 12 per cent of the non-tribal group are employed in service sector (compared to 52 per cent in the general population of the state)<sup>10</sup> This indicates gross under employment and it drives more people to lowly paid work for their livelihood. The higher WPR in this case do not reflect better development rather it indicates underdevelopment. The nature of jobs once listed, it becomes clear that almost all jobs listed are lowly paid also.

## **Fertility and Mortality**

In case of fertility the tribal group is slightly more fertile. CBR (Estimated) in tribal population is 15.4 per 1000 population and in non-tribal population it is 14.1 per 1000 population and it is comparable to the Kerala average of 15 and very low compared to the Indian average of 25<sup>11</sup>. These groups are even more identical in case of mortality. CDR (Estimated) in tribal population is 10.5 per 1000 population and in non-tribal population it is 9.8 per 1000 population. The crude death rate in both tribal and non-tribal groups is almost equal and is nearer to the India average of 9 rather than that of Kerala. The general population of Kerala experiences a death rate of just 6.2 per 1000<sup>8</sup>. This may be due to the poor quality of living conditions that both the groups are sharing.

## **2. Gender issues**

### **Sex ratio**

The overall sex ratio is 1189 in the tribal area and 1109 in the non-tribal area. This is higher than the sex ratio in Kerala (1058) and much higher than that of India (933)<sup>8</sup>. Thus sex ratio is appearing to be favourable for women. The sex ratio for the 'less than 15 age group' is 1100 among the tribal population and 843 among the non-tribal population. But the sex ratio 'above the age of 65' gives a reverse picture (Table No.3). This is just 750 among the tribal population and 1363 among the non-tribal population. The negative sex ratio among the tribal people in this age group could be due to a higher female mortality and indicates poor living conditions for women. It becomes clear that in extremely hostile living conditions, the life of tribal women is more endangered compared to that of non-tribal women. This should be again viewed in the back ground of better education of the tribal community. Obviously we could not capture the social determinants of this phenomena, but this study brings out the essentiality of such an academic exercise.

### **Education and Occupation**

If adult literacy can be taken as an indicator of education, the tribal women are well educated. 92 per cent of women in the tribal group are exposed to formal education compared to 82.6 per cent of their non-tribal counterparts. This indicates the positive attitude of the community towards education and prosperity. The table 3 shows the education status of both the communities in terms of gender.

**Table 3. Pattern of Education among adults**

Levels of schooling	Tribal population		Non-tribal population	
	No. of women (%)	No. of men (%)	No. of women (%)	No. of men (%)
No schooling	7 (8.8)	9 (12)	26 (17.4)	10 (6.9)
Primary	24 (30)	21 (28%)	39 (26.1)	49 (33.8)
Secondary	40 (50)	38 (50.7)	71 (47.6)	76 (52.4)
Higher education	9 (11.2)	7 (9.3)	13 (8.7)	10 (6.9)
Total	80 (100)	75 (100)	149 (100)	145 (100)

Most of the women stop their formal education in between 8<sup>th</sup> standard and 12<sup>th</sup> standard (50 per cent of tribal women and 47.6 per cent of non-tribal women).

The overall work participation Rate (WPR) is 59.9 among the tribal people and 44 among the non-tribal people as discussed earlier. But the WPR among women is 56.9 in the tribal population and 15 among the non-tribal population. The WPR among females in Kerala is 15.3 very much close to the non-tribal group under study. It should be kept in mind that the percentage of population in high income jobs is only 9.6 per cent therefore females are forced to work in order to meet the livelihood.

### Unhealthy habits

The habit of pan chewing has some cultural dimensions especially in India. The table shows the prevalence of pan chewing habit among females. The prevalence of this bad habit is very low in non-tribal people in spite of lower levels of education.

**Table 4. Prevalence of Pan Chewing**

Pan chewing	Tribal population	Non-tribal population
Yes	26	15
No	65	170

Chi-square value = 20.19 and p value = 0.000

Odd's ratio = 4.53 (2.15-9.66)

### Causes of Mortality and age of dying

We have got the information about only 31 deaths altogether even though we collected all the mortality experience of the community for the past 5 years. But even this number is higher compared to the CDR experience of the general population of Kerala as discussed earlier. Out of this 29 (93.5 per cent) deaths

were due to Non communicable diseases, comparable to that of Kerala average of 95 per cent (Personal information from Directorate of Health Services, Kerala state). Interestingly the 2 deaths due to communicable diseases happened in the tribal settlement and both of them were women. The CDR in the tribal population (10.5 / 1000) is very high compared to Kerala average (6 / 1000) even though the number of old age people is meagre compared to the state.

**Table 5. Age of dying**

Age category	No. of deaths among tribal people	No. of deaths among non-tribal people
Below 60	8	5
60 or above	3	15

Chi-square value 4.49 (df=1) pvalue =0.034

Odd's ratio= 5.87 (0.87-47.49)

From the table it is evident that 8 (72.8 per cent) out of 11 deaths in tribal population has occurred before 'old age', during the past 5 years. The figure is even more unfavourable for women (4 in 5 deaths). Mortality in younger age group is less (25 per cent) in the non-tribal population. This difference in the age pattern of mortality with tribal and non-tribal populations is statistically significant.

### **Conclusion and recommendations**

Family size in the tribal and non-tribal areas was found to be 4 (3.86-4.14) and 4.3 (4.19-4.41) respectively. The old age dependency is almost 9 in both the groups is close to the National average of 8 and very low compared to the general population of Kerala, that is 12. Sex ratio 'above the age of 65' is just 750 among the tribal population and 1363 among the non-tribal population. The Work Participation Rate among females is very high in the tribal community (56.9 per cent) and the percentage of tribal population in high income jobs is only 9.6 per cent. The under employment may be the social force in the high WPR among women. Eight (72.8 per cent) out of 11 deaths in the tribal population has occurred before 'old age'. The figure is even more unfavourable for women.

High WPR denotes the existing extreme form of poverty of the tribal women. Implementation of National Rural Employment Guarantee Scheme needs to have a focus on tribal life. Lower proportion of higher educated women in the tribal community brings in poor opportunity for high income jobs. This should be viewed in the context of job reservation in public sector where tribal hands are noted by its paucity than its abundance. Provision of higher education especially that of tribal women should be a priority issue for development planners of the state. Higher mortality among the tribal women compared to that of non-



tribal women needs further study bringing out the dynamics of treatment seeking and other health related practices of tribal community.

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## **SEXUAL MORBIDITY, TREATMENT SEEKING BEHAVIOUR AND CONDOM USE AMONG THE CLIENTS OF SEX WORKERS: IMPLICATIONS FOR HIV/AIDS INTERVENTION PROGRAMMES**

**\* K.E.T. Rajarama, \*\* R.K. Sinha**

### ***Abstract***

In recent years, studies on sexual morbidities are on rise because of presence of sexually transmitted diseases (STD) in an individual enhances the chances of acquiring and transmitting HIV infection. Hence, effective management of sexual diseases among general population and high risk groups is important in the control of HIV/AIDS epidemic. In this context, an attempt has been made in this paper to know the sexual morbidity, treatment seeking behaviour and safe sex practices among clients of female sex workers who are considered as bridge group in spreading HIV infection from sex workers to low risk population.

The present study is based on primary data collected from 307 clients of sex workers from 8 sex service points of Hubli-Dharwad Municipal Corporation area (Karnataka) by using Time Location Cluster Sampling (TLCS) technique. This was done after mapping of high-risk areas in the city.

*Key words:* HIV/AIDS, STD, CSW, Condom, Intervention Programme

### **Introduction**

Sexually Transmitted Diseases (STDs) are a group of diseases that are predominantly spread by sexual contact. Sexual contact may be contact between penis and vagina (vaginal sex), contact between penis and anus (anal sex) and contact between the penis/vagina and the mouth or tongue (oral sex). STD can also be transmitted by skin to skin contact in the genital area during sexual activities. There are more than 25 STDs, either caused by bacteria, virus or fungus, and most of them are curable by proper medication. Presence of STD in an individual increases the chances of risk of acquiring HIV or transmitting HIV by 3 to 10 times (Mohammad S, Salil P, 2004). Therefore, prevalence of HIV is more among STD patients. A study conducted in three STD clinics in Pune city between 1993-1998 reveals that among the 9300 STD patients

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screened for HIV, overall, 22.9 per cent of them were HIV positive and almost 88 percent of them had sex with sex workers some times in their life (IIPS, 2002). Treatment of STD has been reported to reduce the proportion of men who shedding HIV through genital secretion and also the amount in semen (Mehandale, 1998). Hence, management of STD is important in the effective control of HIV epidemic. Realizing this fact, intervention programmers of government and non-government organizations (NGOs) focused on treatment and prevention of STD to prevent the sexual transmission of HIV.

There are number of individual and socio-economic factors that contribute to vulnerability to STD and HIV. Some of these are: extensive out-migration and in-migration, thriving transport industry, active commercial sex activity, *devadasi* system, sex with multiple sex partners, lack of condom use, consumption of alcohol during sex, staying away from family, low education etc. (IIPS, 2002).

The HIV prevalence among STD clinic attendees was 5.6 per cent in Karnataka during 2006. The corresponding percent for Dharwad district was as high as 13.6 per cent during same period (NACO, 2006). The clients of sex workers who have sex with number of commercial and non commercial partners are responsible for transmitting HIV/STD from Commercial Sex Workers (CSW) to general populations. Since population of this group is much more than the CSWs population or population of any other group they spread the disease more rapidly than any other group among general population. The studies conducted at different cities (Bhattacharya 2004, ICHAP 2003) reveal that almost half of the clients visiting sex workers were currently married men indicating their spouses were also at the risk of getting HIV infection. In this context, it is important to know the experience of STD among the clients of sex workers, their treatment seeking behaviour and sexual activities during STD symptoms.

## **Objectives**

The specific objectives of the paper are:

To study the sexual morbidity among clients of sex workers;

To know treatment seeking behaviour and condom use in sexual activities during STD symptoms.

## **Methodology**

The present study is based on primary data collected from 307 clients of sex workers from 8 sex service points of Hubli-Dharwad city (Karnataka) using semi-structured questionnaires. The Time Location Cluster Sampling (TLCS) was used to interview clients. In all, 54 high-risk clusters were identified and 8 such clusters were selected purposively where volume of sex worker and clients were more for the interview of the respondents. The study used both qualitative

and quantitative techniques. For this paper, we have considered the respondents those who experienced STD symptoms during last 6 months preceding the survey.

### **Study Area**

This study was conducted in Hubli-Dharwad Municipal Corporation (HDMC) area during January-March 2008. This twine city is the second largest city in Karnataka in terms of population and it is a key centre for education, finance and industry in northern region of the state. It is located on Mumbai-Bangalore railway main line and Poona-Bangalore National High way (NH-4). The Sentinel Surveillance data show that HIV prevalence among the antenatal attendees varied very much from year to year in Dharwad district. It was 3 per cent during 2003 and declined to 1.80 per cent in 2004, but shot up to 6.25 per cent during 2005 and again declined to 1 per cent in 2006 (NACO 2006). The prevalence rate of sexually transmitted diseases (STDs) is also higher in this district. HIV among STD patients was 16 per cent during 2003 and declined to 13 per cent in 2006. According to the estimation of India-Canada Collaborative HIV/AIDS Project (ICHAP, 2004) approximately 631 female sex workers (FSWs) entertain 2202 clients over 175 hot spots in (Hot spots include brothels, lodges, parks, bus terminus, market place, cinema halls, railway stations open places etc.) HDMC

There are no demarcated “red light” areas for sex business in Hubli-Dharwad as in the other places of Karnataka. Some of the areas, where the sex trade can be noticed, are the places in which they solicit their clients; and some other can be known by sex work facilitators - auto drivers, pan shop keepers, brokers, who roam around such areas. Sex trade changes its mode of operation according to the local situation like police vigilance, police harassments, media coverage and public protest. However, the pattern of sex work in HDMC can be understood as usually street-based, lodge-based and home-based. In recent years, home-based sex work has been increasing due to strict police vigilance in lodges and public places.

### **Limitations of the Study**

One of the limitations of the time location cluster sampling is selecting the same respondent for more than once. In order to avoid this problem, only two of us (principal investigator and one interviewer) conducted all the interviews and moved in the clusters together and knowing each other respondents. Hence there was a remote possibility of interviewing the same person for the second time. It was difficult to collect data on the sexual morbidity, as respondents do not want to reveal their STDs due to stigma attached to it. Since it is impossible to take them to clinical test, the only feasible method is to ask the sign and symptoms they experienced. Chances of underreporting sexually contacted

diseases were more. We cannot generalize the study findings as it was based on few clients who were not selected from general population.

## Findings:

### Extent of the STD Symptoms

It was separately asked to the respondents whether they ever experienced the following STD symptoms - discharge from penis, sores, ulcers or blisters on or around sex organ, swelling in the groin, painful swelling of the genitals/scrotum, burning pain while urinating etc. A note of caution is in order here. Given the sensitivity of the questions on sexual morbidity, there is a potential for reporting bias to an unknown extent. Hence, results in this section should be interpreted with caution.

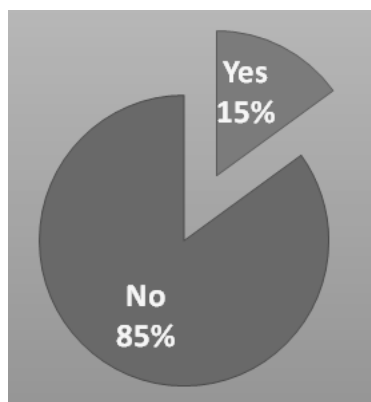
**Table 1: Experience of STD symptoms by selected background characteristics**

Background characteristics	Yes	No	N
<b>Current age</b>			
15-24	24.49	75.51	49
25-44	14.87	85.13	195
45 +	7.94	92.06	63
<b>Number of years of schooling</b>			
Illiterate	23.21	76.79	56
1-7 years	17.80	82.20	118
8+ years	9.02	90.98	133
<b>Caste</b>			
Upper caste	13.91	86.09	115
SC/ST/OBC	13.66	86.34	183
<b>Occupation</b>			
Labourer, related	17.95	82.05	156
service & business related	8.33	91.67	84
Other category	16.42	83.58	67
<b>Marital status</b>			
Ever married	13.49	86.51	215
Never Married	18.48	81.52	92
<b>Total</b>	<b>14.98</b>	<b>85.02</b>	<b>307</b>

Table 1 presents percentage distribution of clients of sex workers by experience of STD symptoms during the last 6 months prior to the survey according to selected background characteristics. Overall, 15 per cent of respondents reported experience of one or the other STD symptoms during the

reference period. Incidence rate among the study population varies much according to the background characteristics. STD was found high among the clients aged 15-24 (24 per cent), and it decreased as age increased. Similar pattern was noticed with the number of years of schooling as highest proportion of clients found among illiterates (23 per cent) and it decreased as years of schooling increase. No variation was noticed among the clients of upper caste and SC/ST/OBC groups. More of labourers (18 per cent) than clients working in service sector (8 per cent) experienced sexual morbidity during the reference period. It was found more among never married (18 per cent) than ever married (13 per cent). It is revealed from the table that sexual morbidity was more common among the study subjects who belonged to the lower socio-economic conditions.

**Figure 1: Experience of STD symptoms during the last 6 months**



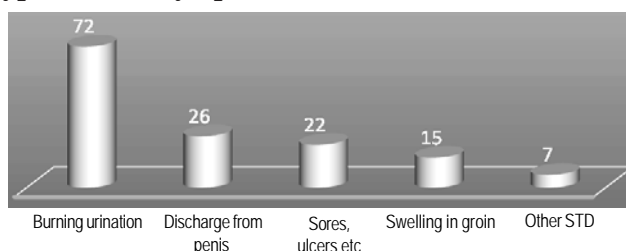
### Type of STD Symptoms

Table 2 shows percentage distribution of clients of sex workers by type of STD symptoms experienced during the last 6 months. Among the clients who suffered from STD, most commonly reported symptom was burning on urination (72 per cent) and it was followed by puss like discharges from penis (26 per cent) and sores/ulcers on genital parts (22 per cent).

**Table 2: Type of STD Symptoms**

Type of STD symptoms*	Percent
Discharge from penis	26.08
Sores, ulcers etc	21.74
Swelling in groin	15.22
Burning on urination	71.74
Other symptoms of STD	6.52
	N=46

\*Multiple response categories

**Figure 2: Type of STD Symptoms****Sexual activities during STD symptoms and Type of Sexual Partners**

Having sex contact during STD symptoms is risky for sex partners. The chances of transmitting the infection to the sex partner are almost cent percent in the absence of correct use of condom. Many people without the knowledge of this fact had sex with commercial as well as non-commercial sex partners and spread the infection to them. It is important to know, from the point of view of intervention programmes, what proportion of clients had sexual contact while experiencing STD symptoms. Table 3 gives percentage of clients of CSW who experienced STD during the last 6 months by sexual contact during STD symptoms and types of sex partners

**Table 3: Sexual Activities and Type of sex partners during STD symptoms**

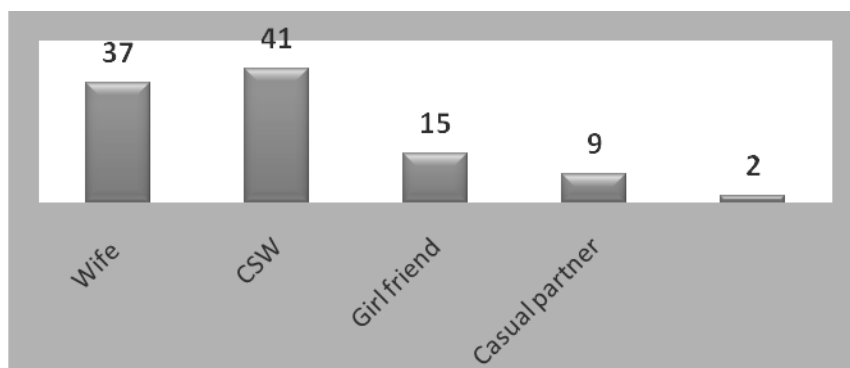
Type of partner*	Sex during STD		Total
	Yes	No	
Wife	54.84	45.16	100.00
Girl friend	22.58	77.42	100.00
Casual Partner	12.90	87.10	100.00
Neighbour/relatives	3.22	96.78	100.00
CSW	61.29	38.71	100.00
Total	67.39	32.61	100.00

\*Multiple response categories

Overall, around 67 per cent of clients who suffered from one or the other STD during the last 6 months had sex either with commercial partners or non commercial partners. It indicates their sexual partners were at the risk of getting STD or HIV. It is revealed from the table that proportion of clients who had sex with CSW seems to be more than wife or non - commercial sex partners during experience of STD symptoms. For instance, little more than 61 per cent of the study subjects had sex with commercial sex partners, whereas 55 per cent of such patients had sex with wife. Further it is noticed that this kind of behaviour found considerably low with other non-commercial partners like girl friend, casual

partners and neighbours. The table indicates that the study subjects who suffered from one or the other STD had sex with different types of sex partners.

**Figure 3: Type of sex partners during STd symptoms**



### Frequency of Condom Use during STD symptoms

Use of condom either regularly or occupationally during sexual intercourse significantly reduces the risk of acquiring HIV/STD infection. Men who reported having used condom regularly in the past 3 months were at the 30 per cent decreased risk, it was 25 per cent in case of occasional user (IIPS, 2003). It is revealed from the previous table that quite a good proportion of the clients who experienced STD had sex contact with different types of partners. It is important know that how many of these had taken precaution to prevent the transmission of the infection to their partners. Table 4 presents percentage distribution of clients of CSW who experienced STD during last 6 months by sex during STD symptoms and frequency of condom use according to type of sex partners. It is noticed that condom use during the presence of STD symptoms is highly unsatisfactory; only little less than one-fifth of respondents used condom regularly, little more than a quarter of patients used irregularly and 55 per cent never used. Wide variation in use of condom with different partners was noticed. Condom usage was relatively more common with commercial sex workers than wife or non commercial partners; only 6 per cent of respondents used condom with wife. This proportion was slightly better with CSW and non-commercial partners (26 per cent and 8 per cent with commercial and non- commercial partners respectively). Further, it is noticed that 71 per cent of study subjects never used condom with wife, while nearly one-third did so with sex workers. It is important to note that large majority of clients did not use condom regularly during the problem which has a large sexual health implications on sex partners. Innocents sex partners of clients of sex workers like wife, girl friends, and casual partners are at greater risk of acquiring wide range of STD including HIV due to this kind of risky behaviour.



**Table 4: Percentage distribution of clients of CSW who experienced STD during the last 6 months by sex during the STD symptoms and frequency of condom use according to type of sex partners#**

Type of sex partner**	Every time	Some times	Never	N
Wife	5.88	23.53	70.59	17
CSW	26.32	42.11	31.58	19
Non-commercial partner	8.33	41.67	50.00	12
<b>Total</b>	<b>19.35</b>	<b>25.81</b>	<b>54.84</b>	<b>31</b>

Chi-square significance level \*\* p&lt;.01

# Multiple response category

**Perceived Cause for STD Symptoms**

It is common among the patients to perceive reason for their any health problem. Medication is largely influenced by patient's perceived cause for it. If perceived cause is wrong or simple or not serious patient is likely to approach wrong person or likely to ignore the problem and may not go for medication. Perceiving the right cause for health problems also facilitates individuals to change their behaviour or lifestyle by adopting healthy practices. In this context, it is essential to understand the perceived cause of STD symptoms of the clients of sex workers. Table 5 gives percentage distribution of clients of CSW who ever experienced STD symptoms by the perceived cause. It is noticed that 57 per cent of respondents who had suffered from STD symptoms perceived that heat was the main cause for their sexual health problem. A little less than one-third of the study participants (33 per cent) rightly perceived the cause as sexual contact with sex workers. Eleven percent of clients could not perceive any reason. The table indicates majority of clients could not identify the correct reason.

**Table 5: Perceived cause for the STD symptoms**

Type of STD symptoms	Perceived cause			
	Heat	Sex with CSW	Don't Know	N
Discharge from penis*	33.33	66.67	00.00	12
Sores, ulcers etc	40.00	40.00	20.00	10
Burning urination	60.61	30.30	09.09	33
Other STD	40.00	60.00	00.00	10
<b>Total</b>	<b>56.52</b>	<b>32.61</b>	<b>10.87</b>	<b>46</b>

Chi-square significance level \* p&lt;.01

As for the type of STD symptoms experienced and causes are concerned, two- thirds of the respondents rightly perceived the cause for discharge from

penis (sex contact with sex workers). The corresponding proportion for swelling in groin / scrotum and sores/ulcers etc were 60 per cent and 40 per cent respectively. Further, it is observed that only 30 per cent of clients who had suffered from burning and painful urination perceived the correct cause for their problem. It is revealed from the table that identifying the correct cause for sexual health problem was largely inadequate among the study participants for some STD symptoms.

### Treatment Seeking Behaviour

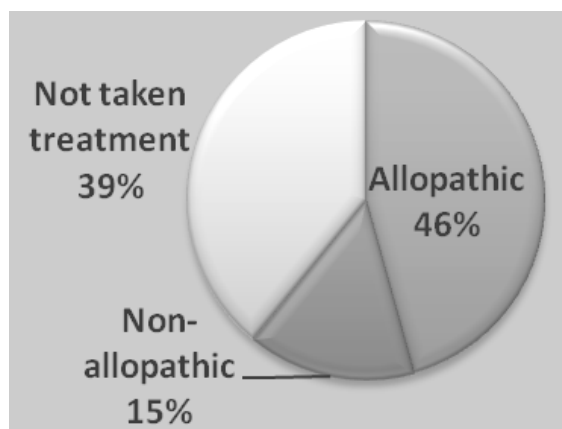
Lot of stigma and discrimination is attached to sexually transmitted diseases because these are predominantly transmits through sexual contacts. To conceal one's behaviours many patients do not seek treatment or seek treatment from non-qualified health care providers. In such cases health problem will remain uncured. If infections are uncured, there is a greater chance of transmission of infection to their sexual partners. Table 6 presents percentage distribution of clients of sex worker who suffered from STD symptoms during the last 6 months by source of treatment. In all, nearly 40 per cent of patients had not taken any treatment and ignored the problem. Those who had taken treatment 46 per cent of them sought treatment from allopathic health practitioners. Remaining 15 per cent of patients approached non-allopathic healers like *ayurvedic*, homeopathic etc.

**Table 6: STD symptoms by source of treatment**

Nature of STD symptoms#	Allopathic doctor	Non-allopathic doctor	Treatment not taken	N
Discharge from penis*	66.67	33.33	00.00	12
Sores, ulcers etc*	60.00	20.00	20.00	10
Burning urination	40.00	10.00	50.00	10
Other STD	39.39	18.18	42.42	33
<b>Total</b>	<b>45.65</b>	<b>15.22</b>	<b>39.13</b>	<b>46</b>

Chi-square significance level \*\*  $p < .01$  # multiple response category

Symptoms wise analysis reveals that 67 per cent of patients who suffered from discharges from penis had taken treatment from allopathic doctors, while 33 per cent had approached non-allopathic healers. Six in every ten clients had sought treatment from allopathic health care providers for sores and ulcers but 20 per cent of the patients had not taken treatment. Proportion of clients who had taken treatment from allopathic doctors was less among the clients who had experienced swelling in groin and burning on urination (40 per cent). Fifty percent and 42 per cent of patients not availed treatment from any health care providers for swelling in groin and burning on urination.

**Figure 4 : Source of Treatment for the STD Symptoms**

It seems that clients who had complaint of swelling in groin and burning on urination were less inclined to take treatment and the reverse is true with the respondents who had discharge from penis (all had taken treatment). This might be because many did not take this problem as serious and perceive cause for these problems were due to excess of body heat which generated because of hard work under hot sun or travel etc. Therefore, they might have considered it as common for everybody and ignored the problem. It is noted from the table that for all symptoms except for discharge from penis some proportion of patients did not avail any treatment. This kind of behaviour of clients has larger health implications. Therefore, stigma related to STD and shy feeling to get treatment is to be removed from the minds of men in the study area. These issues are to be properly addressed in intervention programmes.

### **Current Status of STD**

We have tried to know the present status of the STD symptoms among STD patients who have taken treatment by source of treatment. It is presented in table 7. It is observed that a little less than two-thirds of respondents reported that their STD has been cured. The large difference is noticed in proportion cured by system of medicine is concerned. For instance, among those who sought treatment from allopathic health practitioners, 71 per cent of the respondents reported that their STD had been cured. The corresponding proportion among those who had taken medicine from non-allopathic health care providers was 43 per cent.

**Table 7: Source of treatment by current status of the STD**

Source of treatment	Cured	Under treatment	N
Allopathic doctor	71.43	28.57	21
Non-allopathic doctor	42.86	57.14	7
<b>Total</b>	64.29	35.71	28

## Discussion

Sexual health studies of general population in general and high-risk groups in particular are gaining importance in recent decades due to the prevention programme of HIV/AIDS epidemic. Although all types of men are visiting sex workers but it is more common among the people belonged to lower socio-economic condition. It is suggested that intervention programmes on sexual health awareness should be more focused on people belonged to lower socio-economic condition. Awareness programme and other intervention programmes can be arranged in slum areas and other such areas where socio-economically backward people are living. It is noticed that having sex contact during the problem with wide range of sex partners without condom was quite frequent among the study subjects. This kind of behaviour has larger sexual health implications on the sex partners. This kind of attitude might be because of clients' ignorance about the transmission mechanisms of STD, severity of consequences of STD, misconception about condom use etc. Education should be given to clients regarding abstinence from sex during STD, if that is not possible, condom should be used. Education should also to be given to women folk to insist on their sex partners to use condom. Large majority of the respondents had failed to perceive the right cause for their problem. Therefore, it is suggested that types of STDs and its symptoms, transmission mechanisms of STDs, precaution to be followed to prevent the contracting the infection to the sex partners' etc. to be the essential part of intervention programme. Attitude of respondents for not taking treatment for sexual morbidity is a serious matter; they not only suffer but also transmit the infection to their sex partners. The reasons behind for not taking treatment might be - since it is caused by sexual contacts they feel shy to share their problems with others. This attitude must be changed because consequences of ignoring STD are far more serious; some untreated STD leads to heart attack, arthritis, sterility among women etc. Intervention programmes should focus on educating people on these issues.

Since the presence of STD in an individual facilitates spreading HIV to a great extent, educating the target population regarding STD, importance of medication, partner treatment, and abstinence during STD etc. is of great importance. Government also provide STD services in its health care centres at free of cost, but many people are not aware of the availability of this facility. This point should also be included in the HIV/AIDS intervention programmes.

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## **WOMEN CORPORETARS: A STUDY OF GULBARGA CITY CORPORATION**

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### ***Abstract***

If we look the major objectives of Local Bodies, which are working since, from number of years in this country, one could ascertain that there was an attempt to achieve to the development. Therefore, it is necessary to evaluate the provisions of different acts pertaining to the working of Local bodies time to time. The recent Constitutional amendments (73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments) brought about significant changes in the political scenario of the country with regard to women's participation in politics. Indian democracy is 60 years old now, yet the participation of women in politics has actually declined since the days of the freedom movement, both in quantity and quality. The paper will find out socio-economic status of women corporators, educational background, position held by the corporators in corporation, women participation in urban government i.e., in the corporation and women corporators know the corporation act or the knowledge of the corporations act.

*Key words:* Women, Corporation, Empowerment, Education,

### **Introduction**

The only institution where there is now an element of popular control are the Local Boards and Municipalities. These were constituted in 1884 under the Scheme of local self-government associated with the name of Lord Ripon. In the resolution of Local Self Government issues in 1882, the Government of India stated that "it was commonly asserted that the people of India were themselves entirely indifferent to the principle of self-government, that they took but little interest in public matters and that they preferred to have such affairs managed for them by Government officers". The Governor General in Council stated "that he did not attach much of the officers. The Governor-General then proceeded to state "that the task of administration is yearly becoming more one rouse as the country progresses in civilization and material prosperity. The annual reports of every Government tell of an ever-increasing burden laid upon the shoulders of the local officers. The cry is everywhere for

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increased establishments. The universal complaints in all departments are that of over work. Under these circumstance, it becomes imperatively necessary to look around for some means of relief; and the Governor-General in council has no hesitation in stating his conviction that the only reasonable plan open to the Government is to induce the people themselves to undertake, as far as may be the management of their own affair; and to develop, or create, if need be, a capacity for self- help in respect of all matters that have not for imperial reasons, to be retained in the hands of the representatives of Government”. Not withstanding this definite statement of the policy of the Government the official hierarchy is very slow to part with its powers. Out of 965 Municipalities in existence in 1915, only 273 have either elected on nominated non-official Chairman and the remaining 422 Municipalities are still under the control of either elected or nominated officials.

As societies became more complex and technologically advanced, they began to depend increasingly for their development on individual talent and initiative. The old system of social stratification, with its rigidly drawn lines between categories of people was unsuited for the best utilization of the available human to a new system in which social status is based on personal capabilities and achievements. The old criteria-age, sex, family membership and so on one by one lost their weight in determining an individuals place in society. The movement of progress has been from inherited status to individual freed and skill.

In political terms, this means that modern societies are becoming more democratic in the sense that they draw their elite not necessarily from the status of birth and caste, but from a wider catchments area. The corresponding sociological process involves the gradual transition from a social organization based on pre-determined role to those based on achieved roles.

### **Objectives of the study**

1. To identify the socio-economic status of women corporaters
2. To study the educational background of the family in general and particularly the councilors
3. To study the women participation in urban government i.e., in the corporation.
4. Identify the position held by the corporaters in corporation
5. To know how for women corporaters know the corporation act or the knowledge of the corporations act.

## Methodology

To give greater validity to the study and to make it exhaustive, primary data were collected using a structured interview schedule as the main tool. The interview was conducted to 40 women councilors in the corporation from present and preceding councilors. The present women councilors in Gulbarga Corporation is of 19 member, all the 19 member were interviewed and even 21 omen councilors from preceding corporations. Total of 40 women councilors were interviewed. And with primary data, secondary data's were also used.

## Review

Bhargava and others (1996) writes that it was to improve women's representation that the policy of reservation was introduced. According to them, reserving seats for women in the political institutions will provide them and opportunity to raise their grievances and other related social and economic problems in a formal forum, a political process necessary to ensure the improvement for all women in all spheres of life.

Srinivasan P Malhotra G (1995) Empowerment of women implies that women have equal opportunities as men in health, employment, decision-making capacities within the family and outside the family and are able to participate in equal measures as men in national development. Following the 1994 International Conference on Population and Development Conference in Cairo, the approach of the population programs shifted towards reproductive and child health (RCH), including family planning services. Accordingly, there is a need for sensitizing and empowering women in Panchayati Raj institutions (rural self-governing bodies) through training in health and social development issues, including reproductive health. In response, training programs were organized by the Population Foundation of India in seven districts of six states during 1997-98. The Foundation also undertook a large-scale project entitled "Empowerment of Panchayati Raj Institutions in the State of Haryana" during 1998-2000. Moreover, a project was conducted in Uttar Pradesh to empowerment Panchayati Raj institutions through electronic media. Finally, a training of the Panchayat members by master trainers was implemented. The lessons learned from these training programs are also cited.

P. Manikyamba, in her study of Andhra Pradesh found that socio-economic background in general and political backgrounds in particular are important determinants of shaping the nature and level of participation of members in political institutions. The study reveals that education and participation are interrelated. In general, women members having secondary educational qualification are more participated well in the meetings. Next, economic status gives a sense of confidence and encouragement to participate. The participation



of the poor women members is found mostly insignificant. The middle class and rich members showed greater degree of participation. Then, age has its impact on participation. The extent of participation of the young and the middle age is generally more than that of old age. Next, women members with experience in politics played active roles in the institution under study.

S.Govinda Gowda and others (1996) in their study of Karnataka women elected panchayat leader found that the women members of developed taluks were found to play a better developmental role than their counterparts in the backward taluks. The study reveals that among the socio-economic attributes such as age, education, caste, annual household income and land holding of women leaders, only education and annual household income had a highly significant and positive relationship with their developmental role performance. The findings of the study states that women members of the Panchayat Raj institution could play an effective developmental role if they are given adequate recognition and encouragement.

### **Political History of the Gulbarga District**

There has been a significantly hectic political activity in the region and had consequently been affected by the changes that have occurred in at the national level. There has been a sound political participation of the masses responding to the urgency of the socio-political circumstances, which exercise influences all over the region. Gulbarga also played an important role creating political awareness and joining the movement against the British powers. The Gandhi's visit to Gulbarga in the year 1927 shows the attractive impulse of Gulbarga. The famous leaders of freedom movement are Hardekar Manjappa, who was a staunch follower of Mahatma Gandhi participated actively in Khadi and various National Congress programmes and he was mainly the product of Hyderabad-Karnataka region. Mr. Mantal started the Khadi Bhandar at Gulbarga in the year of 1932. The President of Hyderabad State Congress, Shri Govindrao Nanal and Ramanand Teertha, were quite influential in activating people in this area during the national struggle for independence. There were besides these, Budleppa Hallikeri, Andanappa Doddameti, Dattatraya Auradi, Prof. Deogaonkar, Kollur Mallappa, Narayanrao Kenyal, Sardar Sharanagauda Inamdar, Jagananth Rao Chandraki, Kakeri Hanumath Rao, Anna Rao, Veerabhadrapa Patil, Hakeekat Rao, Umaji Chitgupkar, and many other leading figures that stood for independence. They rendered service as major contributing activists representing the Hyderabad-Karnataka area in the Indian freedom movement.

### **Gulbarga City Corporation**

The Gulbarga district as a headquarter for the district, for the first time implemented Municipality in the year of 1952, prior to this Municipality, town development activities were looked after by the District Boards. In the year

1952 first elected board was formulated and in the year 1961 Gulbarga had 97,159 populations, which is divided into 31 wards. And 34 elected as members of the municipality among them 6 were belonging to Scheduled Castes.

The municipality was converted into city Corporation in the year 1981, after its making into city Corporation, administrative area it expanded and covered many rural villages. The city Corporation election which held in the year 1996 that contained 55 members of which 27 were general contestants, 14 belongs to the Other Backward Castes (OBC-A). The 4 contestants belong to the (OBC B), 9 belonged to the Scheduled Castes and Scheduled Tribes. The 19 members were women from all the categories.

### **Socio-Economic Background of women corporaters of Gulbarga city**

Understanding of socio-economic background is indispensable pre-requisite for perceiving the thought and behavior of any group of respondents. This helps in understanding of the problems of respondents. In the case of this study, of women corporaters. In the given social context, the data about respondents clarifies several aspects which are not always manifesting outwardly. This forms essential care of the study and its serves as the benchmark for analysis and evaluation. The behavior of women corporaters can be fully explained by making a close investigation of the environment in which they grow and develop. Politicians, after all, are human beings involved in a variety of relationship with other human beings.

**Table-1. Age of the women councilors**

Age	Frequency	Percentage
21-30	5	12.50
31-40	13	32.50
41-50	12	30.00
50 and above	10	25.00
Total	40	100.00

From the above table it is evident, that the age group of the respondent's majority of the women councilors is in the age between 31-40 years of age group i.e., (32.30 per cent) between the age group of 41-50 are of 30.00 per cent represents, 25 per cent of the women councilors were from 50 and above group. While less representation from the young generation i.e., is 12.5 per cent. Only from the age group of 21-30 years of age. The data indicates that majority of the women councilors in Gulbarga Corporation is of from 41-50 age groups. These signify the younger generation women categories emerging by overthrowing the old tradition leadership.

**Table-2. Religion of the member**

Caste	Frequency	Percentage
Hindu	26	65.00
Muslims	12	30.00
Christians	02	5.00
Others	-	-
Total	40	100.00

From the above table it is shown that the religion of the women members. Women corporators comes from the different religion. Majority of the women members came from the Hindu religion i.e., 65 per cent, 30 per cent from Muslim religion, and the 5 per cent from the Christian religion.

**Table-3. Caste**

Caste	Frequency	Percentage
Brahmin	03	7.50
Lingayat	08	22.00
Minorities	12	30.00
SC/ST	08	20.00
OBC	06	15.00
Other	03	7.50
Total	40	100.00

From the above table it is clear that the caste wise distribution of the women corporators in Gulbarga city. The women corporators represents different caste, from the data it is clear that the higher caste people are representing more in the corporation, while SC/ST are representing small number of members in corporation i.e. 20.00 per cent, meanwhile OBC members also represent less in corporation and other categories members are just 15 per cent. It shows that caste plays pivotal role in bring corporators to Flore of the corporation.

### **Background of the family**

Family is a universal institution that form the point of view structured and working its appears in different manner in different societies therefore sociologists do not maintain a unfair view about the definition of family. The names among celebrated thinker who tried to understand and evaluated the definition of family are the following Mukharjee and Singh, Bhatnagar, Mishra I.P Desai, Shah and Dalme Balsara and A.K. Desai. In the content of urban Indian community including the role of family its economic aspects socialization

and social control in order to fulfill religion and culture aims has been very much effective. Because, only those who have money time, and may power can afford to participate in functional politics, therefore, large joint family is also significant in the context of the women leadership. Hence, family conditions of the leaders are analysed here.

**Table-4 Family type**

Type of family	Joint	Nuclear	Total
Self	8 (20.00)	32 (80.00)	40 (100.00)
Father	16 (40.00)	24 (60.00)	40 (100.00)
Husband	18 (45.00)	22 (55.00)	40 (100.00)

From the above table, it is clear that 80 per cent of women corporaters are from nuclear family while 20 per cent from the joint family. It is why because of socialization family members are leading the life of nuclear family life and due to the urbanization. The father of 60 per cent from nuclear family while 40 per cent from the joint family. However, the husband belongs to the nuclear family is of 55 per cent and 45 per cent from the joint family.

**Table-5. Family size of women corporaters in Gulbarga city**

Size of family	Frequency	Percentage
1-3	12	30
4-6	26	65
7-9	02	05
Total	40	100

From the above table it can be understood that the family size of the women corporater in Gulbarga Municipal Corporation. In these connection only members leaving with them is considered. In the present study 65 per cent of the families consist of 4-6 members, while 30 per cent from the 1-3 members leaving in the family and only 5 per cent of the corporaters have the 7-9 members in their family.

### **Educational Background**

Education have important place in Indian society. The force of rapid urbanization, industrialization and expansion of means of communication are bringing it into the fold of national and even international stream of life. Education renders mean to annexure higher position in political life now days it is essential in all walks of life.

**Table-6. Educational Background of the women corporaters**

Education	Frequency	Percentage
Illiterate	04	10
Literate (Primary+Mid)	08	20
Educated (High School+Inter)	06	15
College Education	16	40
University Education	06	15
Total	40	100

According to the above table it is shown that the educational status of the women corporaters, women members with the college education is of 40 per cent, and 15 per cent of women member have their education at the university level. While both primary and high school education is of 35 per cent only 10 per cent of the women corporaters were uneducated.

### Occupational Background

Occupation is not only necessary for an individual's livelihood, but it also important for his social status and conditions. This is the reason that most of the part of mass active movement is spent on some as same occupational activity. Occupation is the source of the income of people and play an important role in establishing his/her amount of income. Whereas, in are manner occupation plays a direct role in means of livelihood. In the some way it affects the socio-economic condition of the people. On the basic of their studied many sociologists have tried to show the importance of the occupation in the life of the people.

**Table-7. Occupation of the members**

Occupation	Frequency	Percentage
Agriculture	09	22.50
Business	12	30.00
Service	09	22.50
Household	10	25.00
Total	40	100

From the above table it is shown that the self-occupation of the women corporaters, 30 per cent are in the business line 25 per cent of women members are household activities, 22.50 per cent are in service sector and the 22.50 per cent of women member occupation is agriculture.

**Table-8. Occupation of Husband**

Occupation	Frequency	Percentage
Agriculture	10	25.00
Business	26	65.00
Service	04	10.00
Total	40	100

From the above table it is showing that the respondents husband occupation, women corporaters husbands occupation in different field i.e., 65 per cent their husband are in the business, with different type of business, 25 per cent of the women corporaters husband work in agricultural field and 10 per cent of their husband occupy the service sector. Husband occupies the service sector.

### **Economic Background**

Indian social system is the symbol of status. According to Khan, income is an important factor in the context of economic condition of women, according to D.R Singh, they are also quite relevant to standard of living of man. The economic conditions are more significant in the context of leadership, because, they determine its capacity to achieve as well as sustain power.

**Table-9. Monthly income of the members**

Income	Frequency	Percentage
1000-2000	10	25.00
2001-3000	07	17.50
3001-4000	07	17.50
5000 and above	16	40.00
Total	40	100.00

From the above table it is shown that the monthly income of the members is of 35 per cent of their income is of 5000 and above, 40 per cent of the their income is of between 1000-2000, 17.50 per cent of their income between 3001-4000 and 2001-3000 only 5 per cent It will directly effect to the women members political life.

**Table-10. Income of the husband**

Income	Frequency	Percentage
1000-2000	11	25.00
2001-3000	09	22.50
3001-4000	13	32.50
5000 and above	07	17.50
Total	40	100.00

The income of the husband of the members is another indicator to show the background of the women members. The husband placed in a better income group can provide better facilities for the women members. From the above table it is shown that the husbands income. 32.50 per cent of their husband income group between 3001-4000, 25 per cent of the husband income between 1000-2000, 22.5 per cent of the husband income between 2001-3000 and the 17.50 per cent of the husband income group between 5000 and above.

### Position held in the Corporation

One of the indicators that measures equal political opportunity is the percentage of women holding elected or nominated office. If women have political opportunities equal to men's then their percentage should be similar.

**Table-11. Position held in the Corporation by Women**

Office	No. of Female Respondents	Percentage
Mayor	1	2.5
Deputy mayor	4	10
Chairman of committee	1	2.5
Member of committee	26	65
Others	08	20
Total	40	100

In order to know as to how many women have held and are holding higher positions within the corporation, the respondents were asked to specify posts held by them.

### Suggestions

1. The role of mass media in building awareness cannot be ignored. There should be a concerted effort through all mass media about the importance of a greater role of women in local politics.
2. There is increased awareness of the particular disadvantage women suffer and efforts are being made on many fronts to increase women's economic and decision-making power and to improve the general well-being.
3. Immediately after elections all women members should be trained and made aware rights and duties so that they are empowered to exercise their authority. Female trainers can understand better the strengths, fear and aspirations of their fellow women and can inspire confidence in the trainers.
4. The creation of women's section wings gives women more opportunity for experience in organizing list of candidates, adequate representation should be given to women members.

5. Political parties have a major responsibility in facilitating women's participation parties must deliberate efforts to place their women members in both party organization and outside in position of authority so that there is enough scope for women to participate in the political process.

## Conclusion

Women represent an important sector of human resource that cause national development and forming almost half the population, it is necessary to know what percentage of seats are filled by women in the local governmental organization. Also, only by getting into these seals of power women can bring about change in the society where "mobilization" and modernity have been confined only to a chose few and where there is need for political modernization and political development, these questions are considered even more essential in the light of the fact that though equal rights for men and women are lindy proclaimed, it is very clear that women play a very limited part in the local bodies in terms of proposition to men not only in membership but also a holders of high offices. An examination of the socio-economic background of the women members of the corporation revealed that most of the women members were from belongs to dominate castes (20 per cent) and only (20 per cent) from SC/ STs.

Women members were economically balanced sense that is (38 per cent) of member 20,000 thousand annual income, while only (4.80 per cent) from more than one lakh fifty thousand. It has been found that female members were younger than male members. The most of the women representative between the age group of 31-40, i.e., is 32.50 per cent while only 25 per cent were from above 51 age group and even less representation from the 18-30 age groups i.e., 12 per cent. It shows that the orthodox society curtailing the rights of women.

The study brings certain trends regarding the role of women as local decision maker. Women assert the policy of reservation as a necessary step to motivate adequate participation because the more important a political position, the harder it is for a women to win it.

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## **REGIONAL HETEROGENEITY IN FOOD CONSUMPTION AND NUTRITION INTAKE IN INDIA**

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**\*\*\* A.R. Prasad**

### ***Abstract***

Per capita income and food consumption both are the indicators of human development but food consumption is a better indicator of human welfare. India's faster economic growth over 1990s has raised per capita income (expenditure) and has significantly impacted its food consumption patterns by causing a change in the structure of food consumption patterns observed earlier during pre-reforms period. This raises the relevance of looking at the composition of India's food consumption basket. Changes in the composition of food consumption expenditure during the

It is easier to analyze trends of consumption pattern of people at national level but is really complex to analyze at a state-level. The analysis is expanded and the inter-state differences in consumption pattern have been brought out more explicitly. The objective of the present paper is to examine changing food consumption pattern across the regions of India and is based on seven NSSO rounds (50<sup>th</sup>, 55<sup>th</sup>, 5<sup>th</sup>, 59<sup>th</sup>, 61<sup>st</sup> 62<sup>nd</sup> and 63<sup>rd</sup>) diverging from most of the previous studies which have considered the shift in consumption pattern (Ray, R., 2007; Chatterjee, S., Rae, A. & Ray, R., 2007, Chatterjee, S., 2007) taking two or three NSSO rounds.

The study concludes that the focus should be not only on food consumption but also on nutrition security so that human being could consume healthy food which full of energy and nutrients and human development could improve.

**Key words :** Food consumption, Nutrition Intake, Heterogeneity

### **Introduction**

Consumption of food items shows the welfare of human being. Good foods keep a human being fit and sustain a healthy living. After initiation of economic

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reforms in 1991, Indian economy is continuously growing and due to increase in per capita income consumer shifts to high value added food items from low value added food items. The shift in food preferences away from cereals towards meat, egg & fish and milk & its products. This leads to a dramatic change in the structure of food consumption pattern- the shift is towards a more diverse and expensive diet. This type of shifting is also rising the issue of nutritional implications because cereals are cheap and sources of high calories and meat, egg & fish and milk & its products are expensive and sources of low calories so due to increase in purchasing power of consumer are awaking and start to shift towards high value added food items but these are full of low calorie which are harmful for their health.

### **Motivation and Objective of the Study**

The main motivation of this study is that much of the discussions about consumption expenditure of Indian households have centered round the measurement of poverty and inequality magnitude; less attention has been paid to observe changes in the pattern of food consumption during post-reforms period. Though many analyses have been on changing food consumption pattern [for example, Suryanarayan (1997), Meenakshi and Vishwanathan (2003), Radhakrishna (2005), Rao (2005) and Ray and Lancaster (2005)]. but all are on all India level (Sector wise) so the analysis needs to be expanded and the inter-state differences have to be brought out more explicitly. Consumption pattern at the disaggregated level can throw more light since aggregation at the all India level may have hidden the variation that could explain better shift in consumption pattern.

The objective of the present paper is to examine changing food consumption pattern across the states of India and is based on seven NSSO rounds (50<sup>th</sup>, 55<sup>th</sup>, 57<sup>th</sup>, 59<sup>th</sup>, 61<sup>st</sup>, 62<sup>nd</sup> and 63<sup>rd</sup>). The rest of the paper is organized as follows. Data issue and Periodization scheme are described in Section III. The findings of observed data are presented in Section IV. Final comment is reported in Section V. The final section VI raises the issue of the nutritional implications of changing food pattern.

### **Data Issues and Period under Study**

The present study is based on cross-sectional data set on state wise food consumption expenditure and specific food items. All are drawn from National Sample Survey organization, Govt. of India, New Delhi. At the time of finalizing paper, the 2006-07 (63<sup>rd</sup> round) dataset was the most up-to-date available data. Data cover 11 food items (i) cereall (ii) pulses 2 (iii) Milk & Milk products (iv) Edible Oil (v) Meat, fish & egg (vi) Vegetables3 (vii) Fruits & nuts (viii) Sugar (ix) Salt (x) Spices (xi) Beverages4.

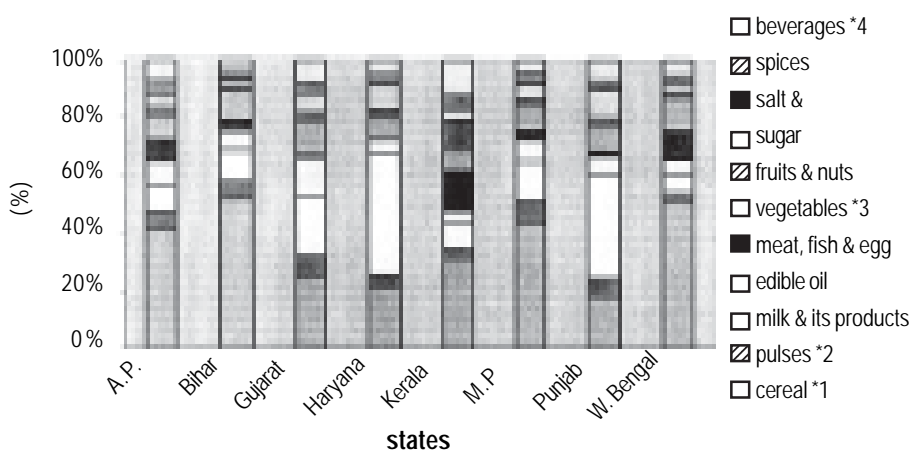
Period under study is post reform and the rounds have been selected for data analysis are 50th (1993-94), 55th (1999-00) 51st (2001-02) 59th (2003) 61st (2004-05) 62nd (2005-06) 63rd (2006-07) and also the selected states are Andhra Pradesh, Bihar, Gujarat, Haryana, Kerala, Madhya Pradesh, Punjab and West Bengal (these are the most alarming states, according to IFPRI global hunger report).

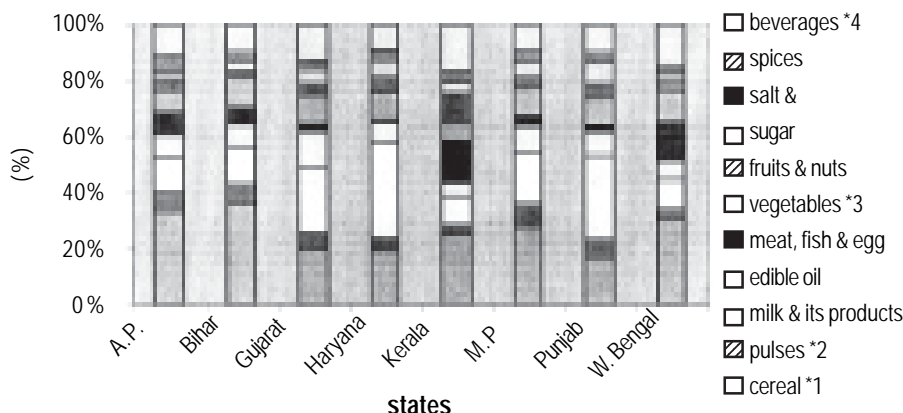
### Findings of Observed Data State Wise

It is very easy to analyze trend at national level but very complex on state level yet here many findings have been got about interstate comparison. Hence the analysis is going to be more broad-based.

1993-94 (50<sup>th</sup> round) - On analyzing the share of cereal and non-cereal in total food consumption in both rural and urban areas (see Figure 1 & 2) the picture is very similar to the above trends. In rural areas, the share of cereal varies from 18 per cent - 21 per cent (Haryana & Punjab) to 50 per cent - 51 per cent (Bihar & W. Bengal). In the same way within the non-cereal food group the highest share of milk is in Haryana (42 per cent), Sugar is in Punjab (9 per cent); Kerala is most famous state for consumption of beverages & meat, fish and egg (12 per cent - 13 per cent) and in Gujarat (13 per cent) is edible oil. In urban areas, the share of cereal varies from (16 per cent-19 per cent) Punjab & Haryana to (33 per cent - 36 per cent) A.P. & Bihar. For non-cereal Punjab & Haryana are high in milk (30 per cent - 34 per cent), Gujarat for edible oil (13 per cent), again Kerala for meat, fish & egg and beverages.

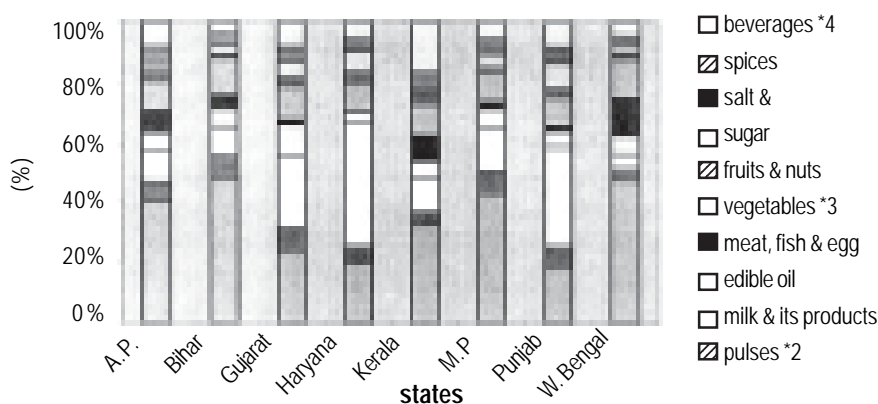
**Figure 1: Percentage Share of Food Items in Total Food consumption (Rural) 1993-94**



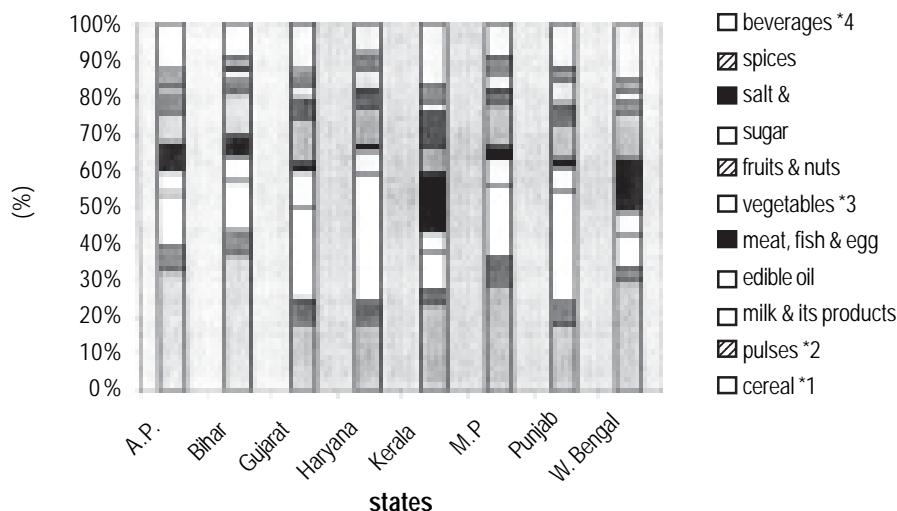
**Figure 2 : Percentage Share of Food Items in total Food Consumption (Urban) 1993-94**

Source – NSSO Report No.401, 1993-94 (Ministry of Statistics & Programme Implementation, Govt. of India)

1999-00 (55<sup>th</sup> round) – Here (see Figure 3 & 4) in the rural sector, the share in cereal is varies from (19 per cent) (Haryana & Punjab) to (47 per cent - 48 per cent) W. Bengal & Bihar. Within the non-cereal, in pulses M.P. (7 per cent), Gujarat for edible oil (10 per cent), in meat, fish & egg W. Bengal (11 per cent) and (13 per cent) in vegetable also, beverages in Kerala (14 per cent). In urban sector, the share of cereal varies from (17 per cent - 18 per cent) Punjab & Haryana to (32 per cent - 37 per cent) A.P. & Bihar. Within non-cereal Haryana for milk, in meat fish & egg W. Bengal & Kerala (14 per cent - 15 per cent), (9 per cent) in Kerala for fruits & nuts. There is highest share of beverages in Kerala & W. Bengal.

**Figure 3 : Percentage Share of Food Items in total Food Consumption (Rural) 1999-00**

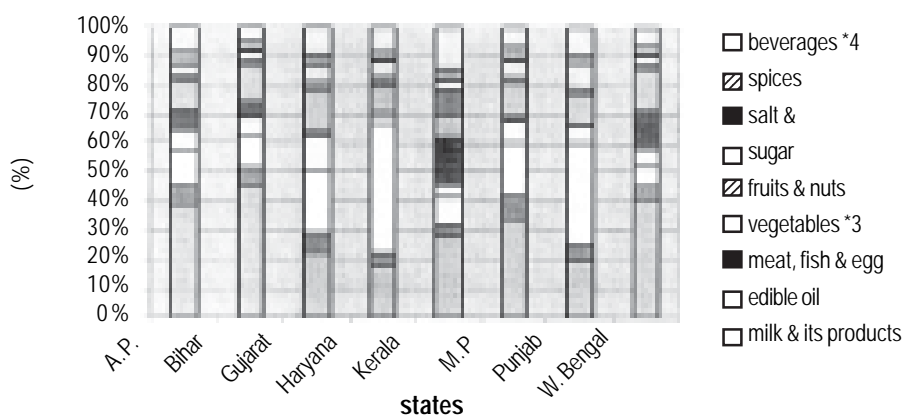
**Figure 4 : Percentage Share of Food Items in total Food Consumption (Urban) 1999-00**



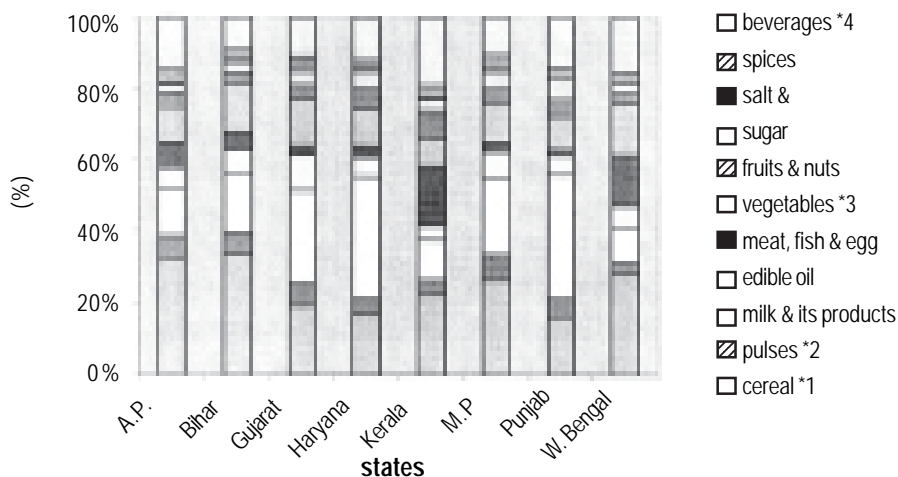
Source – NSSO Report No.454 (55/1, 0/2), 1999-00 (Ministry of Statistics & Programme Implementation, Govt. of India)

2001-02 (57<sup>th</sup> round) – In (see Figure 5 & 6 there is not much change in the pattern of food consumption but shifting from cereal to non-cereal can be seen in this round. As a result in rural Indian states, the share of cereal varies from (17 per cent - 19 per cent) in Haryana & Punjab to (40 per cent - 44 per cent) in W. Bengal & Bihar and in Urban area (16 per cent) in Haryana & Punjab to (32 per cent - 33 per cent) in A.P. & Bihar. Within non-cereal there are many differences between rural and urban sector, as it can be seen that in rural, Meat, Fish & Egg (15 per cent - 20 per cent) in Kerala & W. Bengal but less consumption of meat, fish & egg in Punjab and Haryana on the other hand in urban meat, fish and egg is high in W. Bengal & Punjab (14 per cent - 16 per cent). In vegetables the share is (13 per cent - 14 per cent) in rural Bihar & Gujarat, same for urban area.

**Figure 5 : Percentage Share of Food Items in total Food Consumption (Rural) 2001-02**



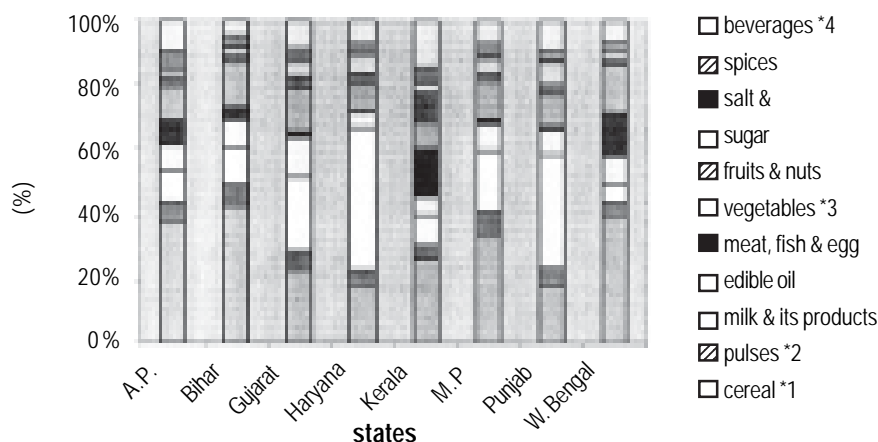
**Figure 6 : Percentage Share of Food Items in total Food Consumption (Urban) 2001-02**



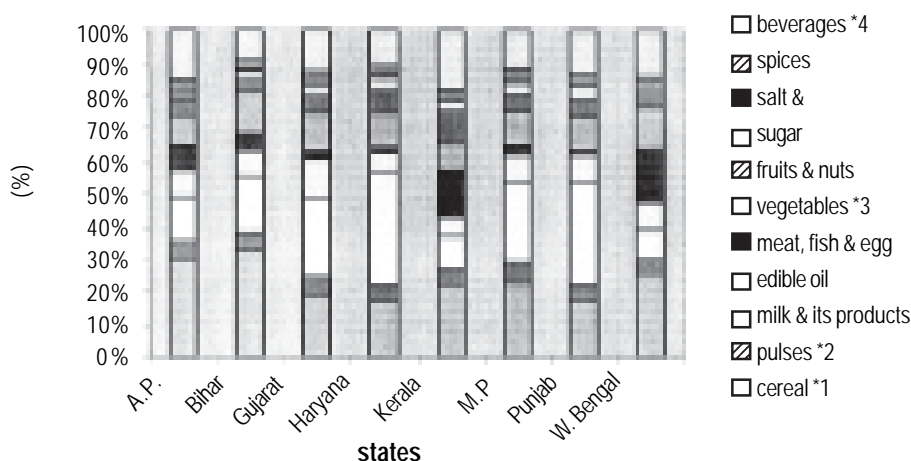
Source – NSSO Report No.481 (57/1, 0/1), 2001-02 (Ministry of Statistics & Programme Implementation, Govt. of India)

2003 (59<sup>th</sup> round) – (see Figure 7 & 8) in rural Bihar the cereal consumption is (42 per cent) and (17 per cent - 18 per cent) in rural Haryana – Punjab and this fact is same in urban also. For non – cereal highest share of meat, fish & egg in both rural and urban Kerala and W. Bengal is same. (10 per cent) share of fruits and nuts in both rural and urban erala, for beverages the picture of urban and rural is different because (14 per cent) in rural Kerala and (16 per cent - 17 per cent) in urban A.P. & Kerala. Consumption of sugar is also high in rural and urban Punjab (8 per cent)

**Figure 7: Percentage Share of Food Items in total Food Consumption (Rural) 2003**



**Figure 8: Percentage Share of Food Items in total Food Consumption (Urban) 2003**

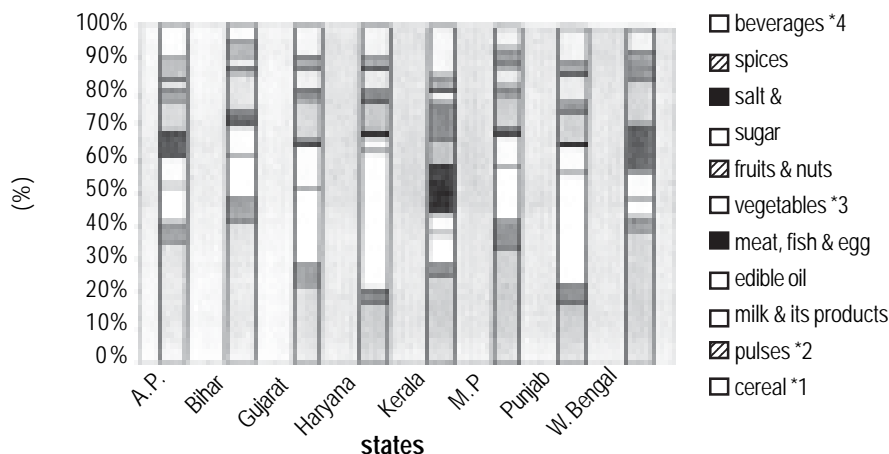


Source – NSSO Report No.490 (59/1, 0/1), 2003 (Ministry of Statistics & Programme Implementation, Govt. of India)

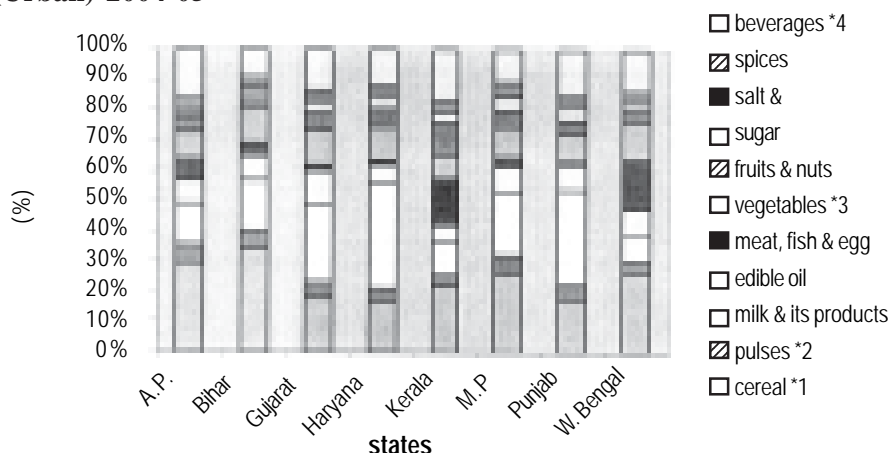
2004-05 (61<sup>st</sup> round) – There is also variation in (see figure 9 & 10). Cereal consumption of rural and urban Bihar is higher than rural and urban Haryana, Punjab and Gujarat. The consumption of meat, fish and egg is highest in Rural and Urban Kerala & beverages in important dominant food item in W. Bengal and Kerala.



**Figure 9 : Percentage Share of Food Items in total Food Consumption (Rural) 2004-05**



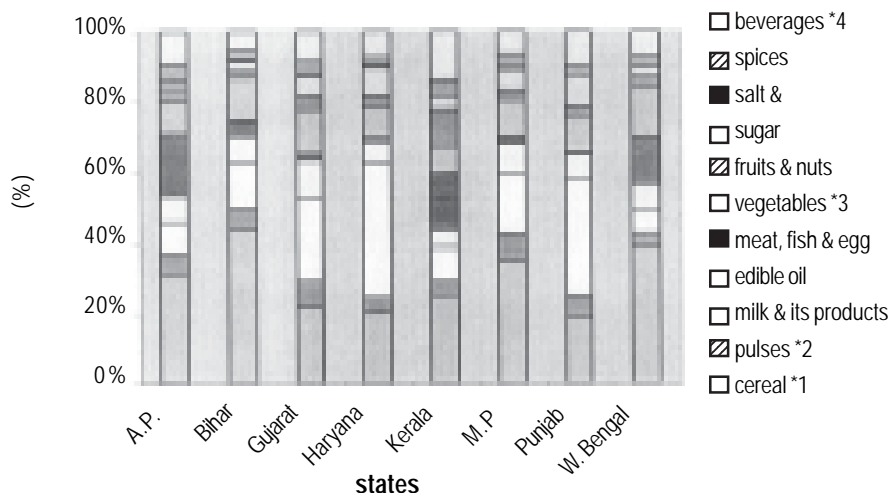
**Figure 10 : Percentage Share of Food Items in total Food Consumption (Urban) 2004-05**



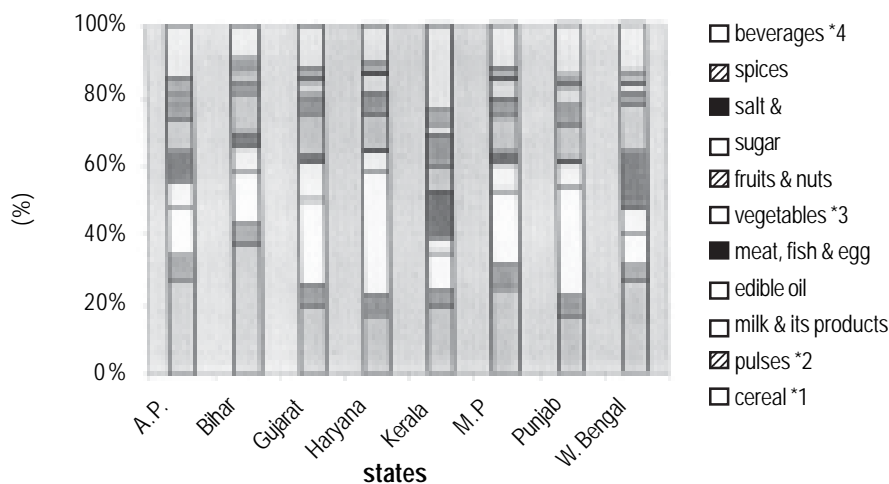
Source – NSSO Report No.508, 2004-05 (Ministry of Statistics & Programme Implementation, Govt. of India)

2005-06 (62<sup>nd</sup> round) – (see Figure 11 & 12) the cereal consumption is (18 per cent - 44 per cent) in rural Punjab and Bihar and (16 per cent - 17 per cent) in urban Punjab & Haryana, (37 per cent) urban Bihar. The consumption of meat, fish and egg is high in rural Kerala, A.P. and in urban W. Bengal. Rural & urban sector of Kerala are highest in fruits and nuts. There is (13 per cent - 24) of beverages in rural Kerala. So we have again got the similar picture that highest non – cereal consumption is in Haryana, Gujarat and Punjab and lowest in Bihar.

**Figure 11: Percentage Share of Food Items in total Food Consumption (Rural) 2005-06**

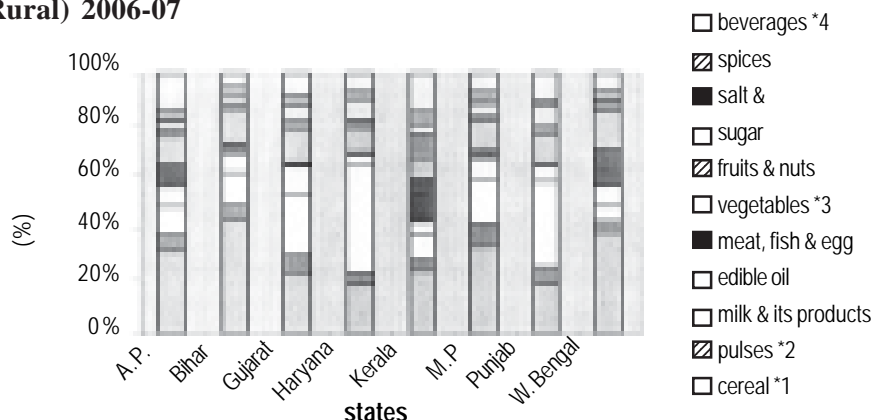
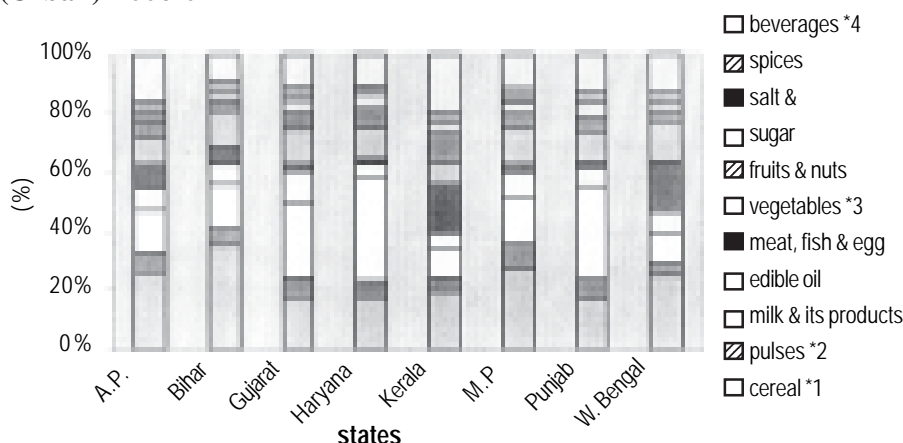


**Figure 12: Percentage Share of Food Items in total Food Consumption (Urban) 2005-06**



Source – NSSO Report No.523 (62/1, 0/1), 2005-06 (Ministry of Statistics & Programme Implementation, Govt. of India)

2006-07 (63<sup>rd</sup> round) – The overall picture is different in (figure 13 & 14) because now more diversified states are not only Haryana, Punjab, Gujarat but it is Kerala also. The consumption of cereal is more in rural and urban Bihar & less in Haryana, Punjab and Gujarat. The consumption of pulses increased in rural M.P., Punjab and Gujarat. In meat, fish and beverages again most famous states are again Kerala and W. Bengal.

**Figure 13: Percentage Share of Food Items in total Food Consumption (Rural) 2006-07****Figure 14: Percentage Share of Food Items in total Food Consumption (Urban) 2006-07**

Source – NSSO Report No.527 (63/1, 0/1), 2006-07 (Ministry of Statistics & Programme Implementation, Govt. of India)

## Comments

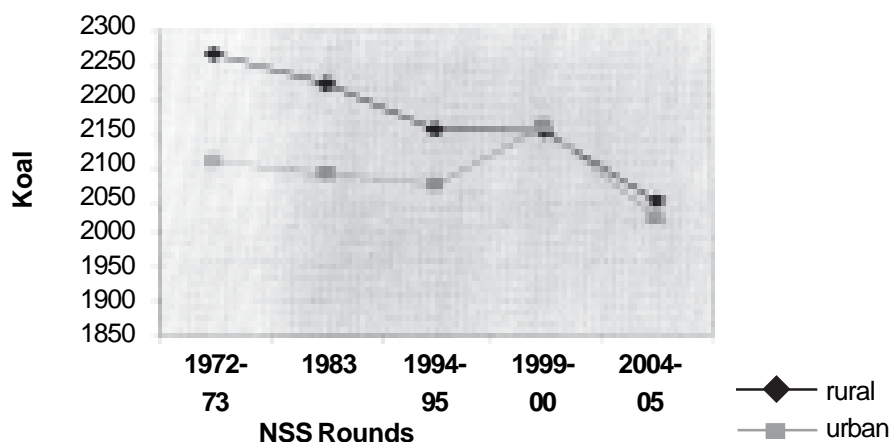
The main comments are that the diversification from cereal to non-cereal is happening in the states of India. Haryana, Punjab, Gujarat and Kerala these four states are most famous for diversification. Cereal consumption is very high in Bihar during the period of 1993-94 to 2006-07 because of low purchasing power and high poverty rates. The share of cereal is low in Haryana and Punjab due to high purchasing power. And in 1993-94 the most diversified states were Haryana and Punjab but in recent 2006-07 by seeing the change pattern it can be seen that Kerala and Gujarat also became most diet diversified states in India. In W. Bengal the share of meat, fish and egg and cereal (especially rice) are high because rice crop is dominant food item in it and as a complementary

goods there rice and meat, fish and egg are used for consumption. In 50th round pulse was important food item in M.P. but now Gujarat also became important. Milk consumption is very high in Haryana and Punjab. Finally the main determinants of the diet diversification in states of India are: income growth which leads to major shifts in demand across different types of food; the process of urbanization, which brings about new dietary needs; and more generally lifestyle changes.

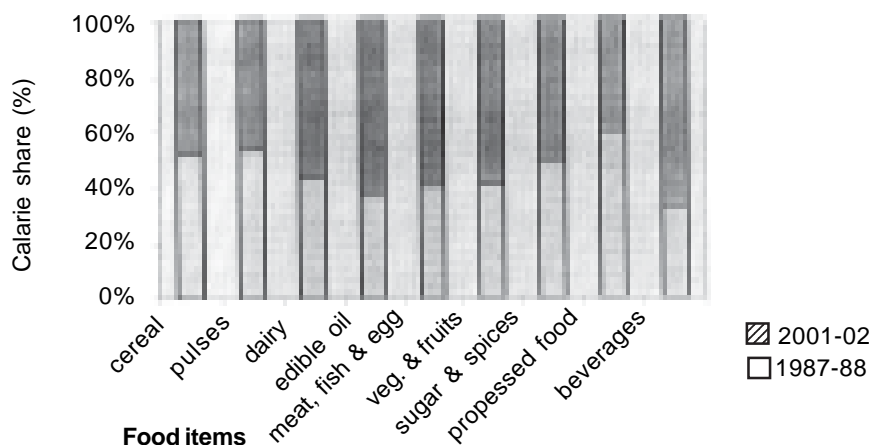
### Nutritional Implications of the Pattern Changing Food

Food provides calories that are very necessary for human being. The shift in food preferences away from cereals & bread (which are sources of cheap and high calories) towards meat, egg & fish and milk & its products (which are sources of expensive and low calories) raises the issue of nutritional implications of such shift. With the growth, the increasing affluence levels not only prompts diversity in dietary pattern, the diversity can be at the cost of calories adequacy if the preference changes in favour of lower-calorie food items. It then becomes an issue of empirical investigation as to whether food expenditure changed in tune with the switching of food consumption in favour of the more expensive, but lower calorie sources. It can be seen from figure 15, 16 and 17.

**Figure 15: per Capita per Diem intake of Calorie (In kcal)**



Source – NSSO Report No.513, Nutritional intake in India, 2004-05 (Ministry of Statistics & programme implementation, Govt. of India)

**Figure 16 Changes in calorie share of Food items in Rural India(%)**

Source – Chatterjee, S., Rae, A. & Ray, R. (2007)

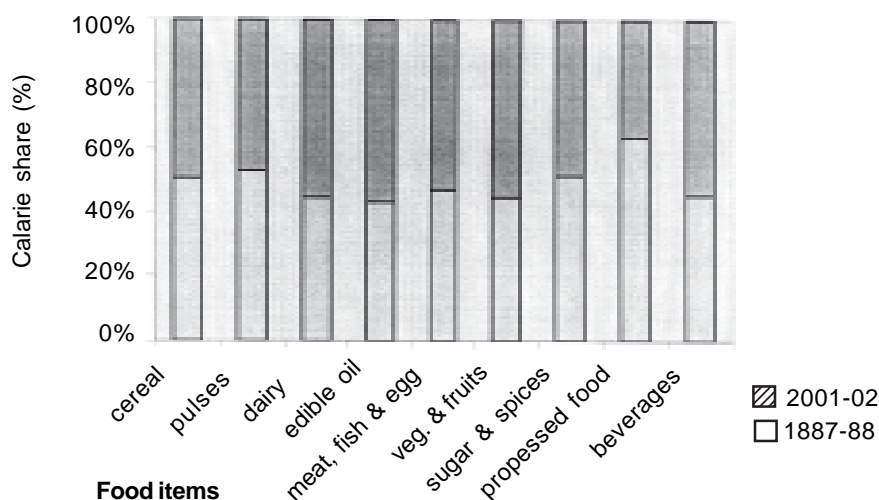
**Figure 17 Changes in calorie share of Food items in Urban India(%)**

Figure 15 indicates that in 2004-05, it has fallen to 2,047 calories in rural India (against the norm of 2,400) and to 2,020 calories in urban sector (against the norm of 2,100). Indeed per capita calorie consumption in urban India was lower than for rural India because rural people consume more calories due to greater intensity of work in rural sector. In 1999-00 there is the convergence between rural and urban sector because of urbanization, reduction in physical work etc. Yet people are diversifying towards more value added but low calorie food items.

Figure 16 and 17 shows the difference between pre and post reform period. After reform due to economic growth, people have shifted towards non-cereal food items. Yet now we can see that cereal continue to supply well over 50 per cent of the total calorie intake of the household also, it also reveals a high level of calorie deprivation in India. If one recalls that the poverty lines in India were originally based on a minimum per capita calorie requirement of 2400 calories per day in the rural areas, and 2100 calories in the urban, then the median figures suggest that, right through the reforms decade of the 1990s, a large number of households were unable to meet their minimal calorie requirements. The issue is studied in detail in Ray and Lancaster (2005)

**Table 1: Median monthly per Capita Calorie Consumption From 1987/88 to 1999/2000**

State	Rural			Urban		
	1987/88	1993/94	1999/2000	1987/88	1993/94	1999/2000
Andhra Pradesh	62,777	61,006	61,093	61,098	59,214	61,713
Maharashtra	59,326	56,237	60,631	59,888	59,739	62,208
Punjab	70,678	69,878	68,453	59,992	63,158	66,247
West Bengal	62,495	64,345	62,379	62,372	64,846	62,798
All India	64,056	63,005	62,917	62,189	62,717	65,060

Source - Chatterjee, S., Rae, A. & Ray, R. (2007)

Table I shows the movement in the calorie intake figures in the period from the late 1980s (1987/88) to the end of the millennium (1999/2000) by presenting the median monthly per capita calorie consumption in the “thick samples” from the 43<sup>rd</sup>, 50<sup>th</sup> and 55<sup>th</sup> rounds of the NSS. The table presents the all-India figures and those for the 4 representative States. Notwithstanding the significant shift in consumer preferences from Cereals to non Cereals, the All India figures do not reveal any systematic variation in the calorie intake figures. The decline in the calorie intake in rural areas over the whole period, 1987/88 - 1999/2000, contrasts sharply with the increase in the urban areas. The all-India figures mask some significant regional differences. The rural Southern region, represented by Andhra Pradesh, records a sharply lower calorie intake than the rural North, represented by Punjab. This picture holds throughout the period of this study.

The per capita food consumption for cereals (rice, wheat and other cereals) and non cereals (pulses, dairy products, oil and fats, vegetables, meat/fish/egg, etc) were analyzed. Result revealed that in spite of India’s rapid economic growth there are differences among states of India particularly for consumption of food

items (cereals and non cereals). State-wise trends are more mixed with wide divergence in dietary pattern in states. The states that have higher expenditure on food items (Bihar, A.P. and W. Bengal) are ones that spend higher on cereals crops. Therefore, the rise in food and cereal crop prices is likely to hurt these states compared to states like Punjab, Haryana etc as in the latter expenditure on both food and cereals is lower.

Overall, the basic conclusion that can be drawn is that the current state of nutritional intake in the country is quite appalling and its main reason is that food calorie intake has been found to have a strong empirical linkage with both human health and productivity. The human body needs energy to maintain normal body function (basic metabolic rate), engage in required minimal activity related to good health and hygiene (standard minimum requirement), and carry out productive activities to sustain the supply of energy and other required nutrients to the body. So this issue needs immediate policy attention to ensure adequate access to food by people across the country.

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1 Includes cereals substitutes

2 Includes gram

3 Includes sweet potato

4 Includes refreshments & processed food



## **ORGANIC HORTICULTURE: A MICRO STUDY**

**\* Nazeerudin**

### ***Abstract***

India has a wide variety of climate and soil on which a large range of horticulture crops such as fruits, vegetables, potatoes etc. Development of high yielding varieties and green technology and their adoption in areas of assured irrigation paved the way towards food security in the 60's. It however gradually became clear that horticultural crops for which the Indian topography and agro climates are well suited is an ideal method of achieving sustainability of small holdings, increasing employments, improving environment, providing an enormous export potential and above all achieving security as a result, due emphasis on diversification to horticultural crop was given only during the last one decade.

While the need for a paradigmatic shift in the growth strategy, organic farming received a special emphasis under suitable policy approach. The post Globalization scenario opened new markets as well as challenge for the developing countries like India. Now there is a trend for scope for export value products in India. In this backdrop, an attempt is made in this paper to explore the importance of organic farming in cultivating horticultural crops. It further offers an incisive analysis of estimate cost of cultivation of horticultural crops finally to asses the organic horticultural crops have more export value and eco friendly.

*Key words:* Green revolution, sustainability, organic farming, Globalization, Horticultural crops

### **Section I**

#### **Introduction**

The horticulture sector in India has an important role in economic development of rural poor. Livelihood options and cultural development are key factors related to horticultural development. India has a variety of horticultural crops including fruits, vegetable, roots, tubers, flowers, ornamental plants, medicinal, aromatic plant species and other plantation crops. India is the second largest producer of fruits after China and contributes 11 per cent of all vegetables

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and 15 per cent of all fruit production in the world. Majority 65-70 per cent of fruits and vegetables produced in India are consumed domestically. Two percent of fruits and vegetables are being processed. Out of the total production only 1 per cent is being exported Post harvest losses account to 20-30 per cent of the stored fruits.

India has a wide variety of climate and soil on which a large range of horticultural crops such as, fruits; vegetables, potato and other tropical tuber crops; ornamental, medicinal and aromatic plants; plantation crops ; spices, cashew and cocoa are grown. After attaining independence in 1947, major emphasis was laid on achieving self sufficiency in food production. Development of high yielding wheat varieties and high production technologies and their adoption in areas of assured irrigation paved the way towards food security ushering in green revolution in the sixties. It, however, gradually became clear that horticultural crops for which the Indian topography and agro climates are well suited is an ideal method of achieving sustainability of small holdings, increasing employment, improving environment, providing an enormous export potential and above all achieving nutritional security (Bansil PC 2008)As a result, due emphasis on diversification to horticultural crops was given only during the last one decade.

Dry lands, in fact are the only hope of the future for feeding the fast increasing population. To improve the economic conditions of the people in the dry tracts and their nutrition and health standards, it is necessary to encourage dry land horticulture through extension support for dry land orchards and support for development of new technologies for dry land horticulture through R&D. The state has given the highest priority for watershed management of farm areas and also tank development.

### **Karnataka**

Karnataka occupies a prominent place in the Horticulture map of the country. Horticultural crops occupy an area of 17.25 lakh ha. with an production 130.26 lakh tones. Although the area comprises only 14.44 per cent of the net cultivated area in the state, the total income generated from the horticulture sector accounts to over 40 per cent of the total income derived from the combined agriculture sector. This accounts for 17 per cent of the GDP of the state.

Horticulture provides excellent opportunities in raising the income of the farmers even in the dry tracts. A significant shift towards horticulture is evident in the state with an increase in area and production. For instance about 58,000 ha. area has been brought under horticultural crops through the watershed programmes. Horticulture provides higher unit productivity and offers great scope for value addition and this sector is taking inroads throughout the length and

breadth of the state. Karnataka having the highest acreage under dry farming in the country next only to Rajasthan has a great potential to grow high value but less water demanding horticultural crops.

### **Major Horticultural crops**

Karnataka is a progressive state in the field of modern horticulture in the country. The diverse agro-ecological conditions prevailing in Karnataka has made it possible to grow different types of horticultural crops such as fruits, vegetables, flowers, spices, plantation crops, root and tuber crops, medicinal and aromatic crops etc. Karnataka is the 3<sup>rd</sup> largest producer of fruits and stands 5<sup>th</sup> position in area and production of vegetable crops. State stands 1<sup>st</sup> in area and 3<sup>rd</sup> in production of flower crops. It occupies 2<sup>nd</sup> and 3<sup>rd</sup> position with respect to area and production of plantation crops. Karnataka is the largest producer of Spices, Aromatic and Medicinal crops.

There have been various studies of organic farming on food and horticultural crops. Now there is a trend for scope for export value products in India. In the light of the above, organic farming in horticultural crops gaining momentum as an eco friendly approach for sustainability is under operation

An attempt has been made in this paper to discuss the potential of organic agriculture through horticultural crops from a case study

### **Organic farming in Horticulture**

In their quest for higher yields, farmers are using heavy doses of fertilizers, herbicides, fungicides, pesticides, growth regulators. This results in not only increased cost of production but also drastically changes our environment. In recent years, there has been emphasis on organic farming to obtain pesticide residue-free fruits, vegetables, spices and other horticultural commodities. However, scientific technology with sound alternatives is not available. Keeping in view the benefits, which this technology offers along with higher returns in international markets for such products, systematic programmes need to be taken up. To ascertain and guarantee the consumer/importer that the produce has been genuinely raised Organically, the production has to follow standards

### **National scenario**

The national situation gives a hopeful scope for the higher production of coconut and arecanut.

### **Coconut**

In coconut, area has increased from 1 million hectares in 1980 to 1.793 million hectares in 1996-97. India has become one of the largest coconut producing country of the world. Production of coconut has gone up from 5677

million nuts to 13968 million nuts. The productivity in coconut has increased from 5249 nuts/ha to 7808 nuts/ha. Coconut contributes 700 billion rupees to the GDP of the country. This contributes 700 billion rupees to the GDP of the country. The contribution of the crop to the total edible oil pool in India is around 6 per cent. India also exports coir and coir products derived from coconut husk to the tune of 2260 million Rupees.

### **Arecanut**

India continues to dominate the world in area, production and productivity of areca nut and has achieved self sufficiency in areca nut production (0.27 million tones). Most of the production is domestically consumed.

## **Section II**

### **Objectives of the study**

1. To explore the importance of organic farming in cultivating horticultural crops.
2. To estimate the cost of cultivation of horticultural crops in study area
3. To asses the organic horticultural crops that have more export value and eco friendly

### **Methodology**

The present work is based on both primary and secondary data. It profiles the organic farming activity for 2 chosen plantation crops such as coconut and areca nut in selected areas of Tumkur District in Karnataka. The sampling method is *purposive* rather than being *random*, since the objective is to get insight into the scenario. The needed information was obtained in *three ways*;

- 1) Direct observation of the farming conditions and approach.
- 2) Personal interview and in depth discussion with practicing organic farmers.
- 3) Reference to secondary data for background information on Organic farming

### **Tools of Analysis**

A few basic tools are used for data coding, presentation and analysis. These are briefly as follows;

- 1) One-way and two-way tables to present information compactly.
- 2) Averages (mean, median and mode) and ratios as summaries. The latter often have the advantage of being *free from unit of measurement*; also as a consequence these are unaffected by *monetary inflation*.

### Section III

#### Cropping Pattern across size of holding in the study area

The cropping pattern is an integrated component of the farming system. The allocation of area for crops depends on the capacity of farmers to take risks of using new practices, soil characteristics, irrigation facilities, climatic condition, availability of labour etc.,. Table 1 indicates that the farmers follow different patterns in the study area. They primarily cultivate food crops (Ragi and Paddy) and horticultural crops of areca nut and coconut. In addition, Bengal gram, horse gram, and cowpea are cultivated as mixed crops. Among the various crops Ragi, Arecanut and Coconut dominate the area, with a total share of nearly 80 per cent. Overall, food and horticulture crops had more or less equal share. A mixed trend across size of landholdings is also found to exist.

**Table 1: Cropping Pattern versus Size of holdings in the study area**

(Percentages in parentheses)

Size of holding	Total Area (Acres)	Cropping Pattern				
		Paddy	Ragi	Coconut	Areca nut	Mixed crop
Small Farmers (N=11)	3.91 (100)	0.46 (11.9)	0.65 (16.3)	1.27 (32.5)	1.32 (33.6)	0.23 (5.7)
Medium Farmers (N=9)	7.61 (100)	0.82 (10.7)	1.28 (16.7)	1.83 (24.0)	2.27 (29.7)	1.43 (18.8)
Large Farmers (N=5)	14.30 (100)	1.60 (11.2)	6.60 (46.2)	2.70 (18.9)	2.10 (14.7)	1.30 (9.1)
Total (N=25)	7.32 (100)	0.84 (11.5)	1.96 (26.9)	1.86 (25.7)	1.78 (24.4)	0.84 (11.5)

Source : computed from field study

In the small farmers category, cultivation of areca nut has a major share (33.6 per cent) with an average household area of 3.91 acres, followed by coconut, ragi, paddy and mixed crops in that order having a share of 32.5, 16.3, 11.9 and 5.7 per cent, respectively. Around 66 per cent of the total area is occupied by horticultural crops and the rest by food crops. This shows that small farmers have given priority to horticulture crops.

The average holding size for medium farmers was 7.61 acres and food and horticultural crops accounted for 53.7 and 46.3 per cent, respectively, in terms of total area. The operational average area of mixed crops was 1.43 acres (18.8 per cent) which is higher than the cultivation of paddy (0.82 acres) or ragi (1.28 acres). A possible reason is that this category has more livestock than the others. Mixed crops generate by-products

## Section IV

### Results

#### Costs and Returns in Horticultural Crops

Coconut and areca nut were the horticultural crops grown under irrigated conditions by the respondents. The costs and returns are presented in Table- 2

#### Case of Coconut

There is a waiting period of 5 to 6 years to get yield. Meanwhile mixed are grown. The average yield per acre is about 4000 nuts from 50 trees. It is a perennial crop and a tree yields for more than 40 years. The *average cost* of cultivation of coconut was Rs. 27,572 per acre. Among the components, the shares of farmyard Manure (FYM), compost and human labour account for nearly 75 per cent of the total. About 90 per cent of the income comes from the sale of coconuts and the balance from sale of coconut scalp needed by coir industry. The return per acre was about Rs. 33,000 and net income was about Rs. 5,428 per acre. The BRC is about 20 %.

**Table: 2 Costs and Returns of Coconut and Areca nut Cultivation**

(Rs/per acre/Per crop)

	Sl No	Particulars	Coconut	%	Areca nut	%
Variable Costs	1	Farm Yard manure	7500.55	27.20	15000.45	31.51
	2	Compost (green and dry leaves mulching)	6545.25	23.74	8000.00	16.80
	3	Bullock labour	1450.25	5.26	4650.66	9.77
	4	Human labour	6500.00	23.57	10720.00	22.52
	5	Water charges	1500.60	5.44	2460.00	5.17
	6	Others	3500.00	12.69	6000.00	12.60
Fixed Cost		Interest on fixed investment	575.35	2.09	775.25	1.63
		<b>Total Cost : C</b>	<b>27572.00</b>	<b>100.00</b>	<b>47606.36</b>	<b>100.00</b>
Returns	1	From main products	30000.98	90.91	120000.00	98.77
	2	From by products	3000.00	9.09	1500.00	1.23
		<b>Total Returns : R</b>	<b>33000.98</b>	<b>100.00</b>	<b>121500.00</b>	<b>100.00</b>
		<b>Returns = (R - C)</b>	<b>5428.98</b>		<b>73893.64</b>	

Source : computed from field study

#### Case of Areca nut

The minimum waiting period to yield is three years from the date of planting. It yields annually 10 - 12 quintals per acre from about five hundred plants.

The operational cost of FYM, human labour, compost, water charges and others (pest control and other miscellaneous expenses) were around Rs.15,000, Rs.10,720, Rs.8,000, Rs.4,650, Rs.2,460 and Rs.6,000, respectively. The expenditure on *FYM*, compost and human labour accounted for nearly 81 per cent of the total. All most all of the income came from the sale of arecanut. The average cost of per acre for arecanut was around Rs. 47,606 and gross income was Rs. 121,500 leading to a net returns per acre of about Rs. 73,894, benefit - cost ratio being 1.55 implying benefit substantially exceeding cost.

### Averages and dispersion

When quantitative responses are obtained from *several individuals* it is natural to examine the *average* response, as well as the *variation* in the responses. In this regard the per acre costs for (i) human labour and (ii) *FYM* plus green manure was put under the scanner for the 4 chosen crops. The responses were in money terms. The arithmetic *mean* and *median* were computed for the role of averages while range and relative range were used in measures of dispersion. The table 3 provides a summary of these computations.

**Table 3. Cost (Rs.) average and dispersion for horticultural crops**

Crop	Component	Mean	Median	Range	Relative range %
Arecanut	Labour	10606	10600	750	7.07
	Manure	22720	23750	3500	15.40
Coconut	Labour	6615	6700	750	11.33
	Manure	14117	14050	1300	9.21

Note: Relative range/Mean) 100

The general closeness of mean and median and the relative range being not excessive indicate that the responses are consistent in the sense of fair agreement in the cost aspect reported by the respondents. Also the variation noted was often attributed to transport costs rather than the per acre input costs.

## Section V

### Challenges

As a result, the productivity per unit area is low resulting in high cost of production. Further, the quality of produce in many cases is far from satisfactory. The post harvest losses continue to be high. Full advantage has yet to be taken of several frontier areas eg., biotechnology, protected cultivation management of inputs, integrated nutrient management, leaf nutrient standards, biofertilizers, integrated pest management and mycorrhiza., The future growth of horticulture industry will largely depend on new and globally competitive technologies.

## **Crop production**

- ♦ To develop horticultural crop based cropping systems for different agro-ecological regions.
- ♦ To develop integrated nutrient management system i.e. efficient utilization of chemical fertilizers, use of bio-fertilizers and addition of organic material using leaf nutrient standards.
- ♦ Standardize water management practices in major crops including micro-irrigation and fertigation.
- ♦ Develop techniques of organic farming for export oriented horticultural crop.

## **Crop protection**

- ♦ Develop IPM strategies for important pests of commercial crops.
- ♦ Develop biological control for important diseases and insects affecting commercial crop product

## **Conclusion**

India has a good natural resource base an adequate R&D infrastructure and excellence in several areas. As a result, the horticultural scenario of the country has been changing fast. Both production and productivity of several crops has increased manifold and India can boast itself as a leading horticultural country of the world. Many new crops have been country of the world. Many new crops have been introduced and many others have adapted to non introduced conventional areas. Some other crops are under adaptive trials.. Export of fresh as well as processed fruits has been increasing. The demand of horticulture produce is on the rise due to increasing population, changing food habits, realization of high nutritional value of horticultural crops and greater emphasis on value addition and export. However, several challenges are yet to be met. These are, fast eroding gene pool, fast population build up, shrinking land and other natural resources, serious production constraints, biotic and abiotic constraints and huge post harvest losses. Further, in the era of globalization, our produce has to be of international quality and globally competitive. Our future expansion of horticulture has also to be in arid and semi arid areas and on under utilized horticultural crops.

While the impact of green revolution in India was felt mainly in assured irrigation areas, horticultural crop production has brought prosperity even in arid and semi arid areas. In the light of the above, the promotion of cultivation of organic horticultural farming ensures quality of produce which ultimately increase the economic value at the international market and at the same time sustains the regional environment safety.



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## **ENVIRONMENTALISM IN INDIAN ANTHROPOLOGY**

*“AN EMERGING RESEARCH AREA”*

**\* Anjuli Chandra**

### ***Abstract***

Anthropology, ever since its inception as a discipline, was concerned with man and his culture, accordingly anthropological studies revolves round culture, an attribute exclusively belonging to man. But gradually, with the march of time, the shape of anthropological researches changed a lot as now a shift had taken place from traditional to applied aspect, but still the method, technique and the central theme of the subject remained the same. The present paper is an effort in this direction by defining environmentalism with special reference to its development in India, stating significance and development of environmental researches and studies in anthropology, and by providing an overview of books and empirical works on environmental researches done so far in different disciplines of social sciences, including anthropology, which shows both the gap and the need of environmental researches in Indian Anthropology. At the same time the present paper also attempts to focus on the distinctiveness of anthropology from other social science disciplines during handling any of the research problems, be it traditional or applied. The paper concludes by showing the future prospects of environmental researches in anthropology in India.

*Key words:* Culture. Environmental Anthropology. Environmentalism. Environmental Management. Holistic Approach. Human Ecology.

### **Introduction**

Current anthropological researches mainly fall into two broad categories: traditional and applied. Traditionally, an anthropologist is believed to do an ethnographic research of a tribe, caste or any small isolated group of people with certain characteristics of their own, following participant observation method and living with the natives. But now- a- days conceptions have changed. An anthropologist is now not a mere spectator of a phenomenon, instead with the help of his exclusive tools (participant observation, comparative method, cultural relativism, holistic approach) he can definitely play a vital role in the task of nation building, just like an economist or a political scientist. So, there is an

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urgent need to explore such areas of researches, which are mainly constrained to some specific disciplines. “Environment” is one such areas of research, upon which the present paper try to focus by providing an analytical review of works done so far in the field of environment and by giving the significance of environmental researches in Anthropology also try to explore a new area of research of the discipline, still not properly explored. In the end, the authoress makes a plea to all anthropologists not to under estimate or marginalized anthropological researches to any particular group or area of research, in fact to promote new field of researches and to utilize anthropological tools and techniques to a number of new areas of researches, which are in the domain of certain restricted social science disciplines even in this present era of interdisciplinary researches.

### **Environmentalism**

In its every day use, the term ‘environmentalism’ typically refers to a concern that the environment should be protected, particularly from the harmful effects of human activities. Environmentalism is expressed in many ways: through public support for organizations dedicated to environmental protection, through government policies aimed at decreasing pollution or conserving wild life, through demands for changes in land use, through the purchase of goods whose producers claim to be sensitive to environmental needs. It appears to have grown, over the last forty years, out of a longstanding but relatively low- key minority interest, to become a significant, but far from dominant political influence at national and international level. With in this context, because it is seen as a relatively new and growing phenomenon, it is often described by analysts as a social movement. And because it has become an important and distinctive component of political discourse, it is often characterized as an ideology (Milton, 1996).

There has been a widespread and organized concern for environmental issues all over the world particularly after 1960s. “Environmentalism” has now occupied a central place of discourse world over. Man’s concern for protection and preservation of his environment i.e. ‘environmentalism’ today is the outcome of the bio-physical, social and economic impact of technological innovation and 20<sup>th</sup> century industrial revolution in the west. Social science theories look at environmental issues in the context as how society works and how people and groups take decision in this regard. From the traditional point of view, philosophical explanation put environmental factors under the control of human beings, where as the modern version of philosophy maintain that man is the part of nature and subordinate to its laws. In Indian ecological thought, the degradation of nature is viewed as the death of nature or feminine principles. On the whole, these theoretical explanations are not mutually exclusive. Global environmentalism today, however, reflects overlapping of elements of more than one theoretical perspective (S. Radha & Sankhyan, eds. 2004).

## Environmentalism in India

India's environmental concern with regard to pollution can be traced back to 1853 when the Shore Nuisance (Bombay and Calcutta) Act was passed. Since then a number of Acts were passed to control and regulate different types of pollution but there was lack of a special institution to monitor such legislations and prevent adverse impact on the environment, (*Kuik et al, 1997*). During the 1960s India was consolidating the pattern and direction of its development and Indian professionals had just begun to turn their attention to the problems of rural development. At that time many of the relevant disciplines were very young- ecology was a minor branch of biology, and Indian Sociology and Social Anthropology had barely taken root. It is against this background that environmental concerns and advocacy emerged in India in 1970s, (*Krishna, 1996*). A break through came in 1972 in the wake of the Stockholm Conference with the establishment of National Committee on Environmental Planning and Coordination (NCEPC) in 1972. It had the responsibility of reviewing policies and programmes for the environment. Another milestone in environmental action occurs with the enactment of the Water (Prevention and Control) of Pollution Act of 1974. Under this law, Boards for Prevention and Control of Pollution of water were established both at the central and state levels with the necessary technical competence and legal power to monitor the implementation of law and to meet the expenses of the Boards, the Water Cess Act, 1977 was passed requiring industries to pay a cess on their water consumption, (*Kuik et al, 1997*). Indian environmentalism was given an impetus in the latter part of 1970s also by a number of movements directed to specific ends, notably the Chipko Movement because it gave environmentalists a human face, because this was a struggle involving poor rural people, not just scientists and educated city- dwellers, (*Krishna, 1996*). The next important step was the setting of the Department of Environment (DOE) in the Central Government in 1980. Following recommendations of Tiwari Committee (GOI, 1980), NCEPC was replaced by NCEP (National Committee on Environmental Planning), in April 1981. In the same year, steps were taken to control air pollution with the enactment of the Air (Prevention and Control of Pollution) Act, 1981. The Bhopal Gas Tragedy which took place after the midnight of 3<sup>rd</sup> December, 1984, proved to be a turning point in the evolution of environmentalism in India. One of the first steps was to reconstitute and upgrade the DOE and transforms it into a full fledged Ministry of Environment and Forests (MOEF) in 1985. Its status improved significantly compared to the earlier backbench position of the DOE, (*Kuik et al, 1997*). This lead to increased government action in the planning, coordination and promotion of environmental programmes, and such action itself became a focus of environmental activism. Increasing academic research on the one hand, and media attention on the other, helped to extend the environmental debates, (*Krishna, 1996*). An 'Umbrella' Act was also enacted by the National Parliament

entitled, the Environment (Protection) Act, 1986. Unlike the earlier Acts, the scope of this act is broad, covering water, air, land and the inter relationship that exist among water, air, land and human beings and other living creatures. That is how the MOEF came to be given a key role as nodal agency, for environmental protection and conservation, (Kuik *et al*, 1997). By the time of the 1992, Earth Summit (UN Conference on Environment and Development) at Rio de Janeiro, Brazil, global environmental concerns- climate change and biological diversity- had been acknowledged up front and the idea of sustainable development became the central theme of the debate (Krishna, 1996). Sustainable Development is however, considered as a process of economic development such that natural capital stock stays constant over time [*The World Commission of Environment and Development (1987)*]. Development then is defined as a vector of social goals or objectives like increase in real per capita incomes, improvements in income distribution, in health and nutrition, in educational status and so on. And constancy of natural capital stock can be interpreted to mean that natural resources should be protected and the environmental quality should be maintained as the quest for economic development continues. The Eighth Five year Plan (1992) captures quite well the essence of sustainable development. It seems to suggest that environmental objectives are synonymous with development and that environment, ecology and development are to be balanced to meet the needs of the society, (Chatterji. *et al*, 1998).

For expeditious disposal of cases arising out of such accidents as Bhopal Gas Tragedy (BGT) and to provide early relief and compensation to persons, properties and environment, the National Environment Tribunals Bill, 1992 has been introduced in Parliament, which results in the formation of NET (National Environment Tribunal) in 1995. Thus, the evolution of environmentalism in Indian federal republic has traveled a long way, particularly, after 1970s, (Kuik *et al*, 1997).

### **Significance of Environmental reseraches in Anthropology**

The logical question to be asked here is, why, should the environment be a matter of concern for an anthropologist? Aren't we talking about issues that are in the province of scientists, biologists, zoologists, etc? The answers to these questions are quite immediate. Even though the environment is physical yet man's interaction with the environment has its social dimension, implications and consequences that deserve the attention of anthropologists. In addition, presently environmental issues are quite sensitive and taking significant place in the contemporary social science researches. Geographer, economist, political scientist, psychologist, sociologist, and philosopher everyone has to offer something to environment, so being one of the disciplines of social sciences, the one concerned most with the man and his surroundings, why not anthropology can take up researches directly concerned with the environment, (Aluko, 2003,

pp: 263-269, *J. Human Ecology*, 14(4). Anyone who has just a casual acquaintance with anthropology may be surprised to learn that it can contribute to environmental discourse. Its popular image fostered by television documentaries, is of a subject concerned with esoteric rituals and exotic forms of marriage, or with the reconstruction of unrecorded histories. Anthropology, it appears looks back or sideways, but not forwards. Environmental researches in anthropology, in this context become categorically important, as in the final analysis it would have something to offer about the future of peaceful and healthy life on earth. From the viewpoint of social sciences, the most significant shifts in the perception of environmental issues have taken place since the early 1980s. Anthropologists have found the ecological approach a useful means of analyzing human cultural arrangements because subsistence strategy that a society uses to exploit its environment viz; hunting and gathering, pastoralism, horticulture, agriculture, or industrialism, has important effects on the social structure and culture, (Milton, 1996).

Thus to a large extent, the environmental studies would help to provide an understanding and awareness of various issues and challenges of environment: the problems, the tasks of development and the management. Environmental studies would thus play a constructive role in the national tasks of planned transformation, regulation and protection of environment, development and society, (Kayastha and Kumra, 1986). Therefore, the problem of preserving the environment for optimal productivity and development and at the same time maintaining a healthy quality of human life is being a matter of deep concern for the environmental researches in India.

### **Development of Environmental Studies in Anthropology**

Environmental research in anthropology has been the part of the discipline from its very beginnings. It is often referred to as the ecological approach in anthropology, but 'environmental anthropology' is a more inclusive term than 'cultural ecology'. Franz Boas led the way in the United States with his original study of *Central Eskimos* (1888), adaptations to life in the Arctic, which stresses the interrelationship between geographical and cultural factors. Significant progress came from the development of what came to be known as 'cultural ecology', an approach proposed by Julian H. Steward, became the most robust in the study of environmental anthropology (Steward 1955; Netting, 1977). Whereas cultural ecology seemed to be concerned with cultural areas as a unit of analysis, the approach proposed by A.P. Vayda and R. Rappaport (1976), 'ecosystem ecology' emphasizes that human are but a compartment in much larger ecological systems. In the later part of the 1970s and a good part of the 1980s one of the most notable approaches was to focus on bio-cultural processes using concepts from 'evolutionary ecology'. Evolutionary ecology refers to

the study of evolution and adaptive design in ecological context to explain the diversity of behavior that is encountered in human systems (*Smith and Winterhalder, 1992*). Another direction taken by researchers was to focus on '*ethno ecology or ethno science*' the study of how people categorize their environment. This has now become a fairly standard set of techniques available to all environmental anthropologists and is highly recommended in the early stage of any study (*Berlin, 1992*). An even more recent development is the variety of forms of what is coming to be known as '*historical ecology*' (*Crumley, 1994*). Contemporary historical ecologists focus on the role of individuals and communities in constructing not only their history but also their environments. *Landscape ecology* is however, concerned with what behaviors lead to degradational patterns, to increase or decreased forest cover and biodiversity, etc. *Global ecology* is closely linked to what may very well become the environmental anthropology of 21<sup>st</sup> century- one concerned with our history and evolution and with the consequences of these experience to our present and future prospects on this and other planets, (*Encyclopedia of Cultural Anthropology, Vol-1, 1996*).

In this way we come to know that how environmental studies at world level, took different forms in different time periods, starting right from Franz Boas study of Central Eskimos to the Global Ecology i.e. environmental anthropology of 21<sup>st</sup> century.

### **Overview of Literature Concerning Environmentalism**

Environmental studies create new vistas for researches in number of social science disciplines. Different domains of social sciences define environment differently. Although geographers claim whole sole authority on environmental studies yet political scientists, economists, philosophers, psychologists, etc also look to environment from their own perspectives. Political scientists concentrate more on developing environmental policies, economists wanted to coordinate environment with economy, of which sustainable development is a result. On the other hand, philosophers are mainly concerned with environmental ethics, where as psychologists looked for people's perception and behavior towards their environment. Apart from all these social science disciplines, Anthropology moves a step forward by adopting an integrated and holistic approach, merging and borrowing ideas from different disciplines and applying it to its own studies (exclusively) related to man. Accordingly, following a systematic and analytical approach, an overview of literature concerning researches done so far in the field of environmental anthropology by eminent Indian as well as International anthropologists will be presented, which will ultimately shows both the gap and the need for environmental researches in Anthropology in India.



Srivastava (2001), in his Ph. D dissertation titled “*Wild life vis-à-vis Human Life: A Study in Ecological Anthropology*”, submitted to the Department of Anthropology, University of Allahabad, attempted to focus on the problems of preservation of wild life and the importance of tribal life for a comprehensive understanding of this problem, which can be best solved, according to scholar, by understanding the equation of Teak- Tribal and Tiger complex.

In the paper named “*Environmental Problems in Urban Environments and Human Biology*”, published in the Annual Review of Anthropology; vol-32, Schell and Denham (2003), followed the bio-cultural approach of anthropology to understand the relationship of urbanism and human biology. Using three different types of pollution as examples: air, lead and noise, the study shows the impact of pollution on human biology (morbidity, mortality, reproduction, growth and development). The review ends with ecological footprints of cities, which includes the impact of pollution.

The study named “*Sustainable Development, Environmental Degradation and the Entrenchment of Poverty in the Niger Delta of Nigeria*”, published in *Journal of Human Ecology*; 15(1), by Aluko (2004), sought to investigate how environmental degradation had impoverished the peoples of the Niger Delta and how this at the same time hindered sustainable development. The findings of the study showed that environmental degradation destroyed the ecosystems and subsequently lead to the loss of farmlands, fishing sites and equipments. In addition unemployment, diseases, inadequate reparation and deterioration in the quality of life of the people are the obvious outcomes. The study concluded by making several recommendations to redeem the situations.

In the succeeding paragraphs an account of research works done by eminent Indian anthropologists in the field of environmental anthropology, is presented which were all taken from an edited book called *Culture, Ecology And Sustainable Development* by Chaudhary, 2006.

Mrs. Channa, in her work called “*Cognitive Environment and Ecological Relationship- A Study of Jads of Utter Kashi*”, discuss the importance of cognitive aspects in ecological analysis, supporting it with the detailed ethnographic account of the Jads, a pastoral community of the upper Gharwal region of U.P. Starting with the location and habitat, the researcher continued the chapter by stating the economy, religion and the perceptions or the cognitive aspects to the environment of the Jads. In the concluding part she discussed about the multiculturalism of the Jads, relating it with the location, economy, trade, modernization, historical and other similar forces acting upon them.



In the study named “*Dynamics of Health and Ecology – A Study of Indigenous Medicine among the Karang Fisherman of Manipur*”, Joshi. *Etal* by giving comprehensive ethno medical accounts of an indigenous population of the fishermen of Karang Island, of Manipur, concluded that different indigenous methods of treatment by man were largely associated with their immediate ecological surroundings. Starting with the brief introduction of the island and the fishermen, they describe the concept, causes and treatment of disease and illness as perceived by the natives. In the end they supported the study empirically by giving number of cases, narratives and the indigenous terminologies which the natives use for different medical terms and diseases.

The next study called “*People and Culture – Himalayan Ecosystem and its Future*”; by Joshi revolves round the Himalayan ecosystem particularly the forest resource base. Through giving number of examples from different cultural groups living in the Himalayan region he concluded that traditions, customs, rituals and people’s perception of their forest and wild life, plays a significant role in the conservation of forest and management of the bio sphere reserves of the fast deteriorating Himalayan ecosystem.

Patnaik & Mehrotra in their study named “*The Politics of Water – Lake, People and the State*” makes us aware of the alarming situations of over exploitation of natural resources, by taking Chilika Lake of Orissa as a case study. In the light of historical documents and the changing nature of state policies regarding lake management, they try to reveal how the ecological balance of the lake got badly affected showing all the symptoms of environmental degradation. In addition the politics also raised number of disastrous conditions like prawn mafia, cases of frequent firing, violence and murder, which affects the socio- cultural life of the traditional fishermen community resulting in a protest, ultimately taking shape of a mass movement.

Man, be him ancient or modern is devotedly concerned with the environment and habitat of his own and through his religious attitudes i.e. the awe and reverence which he pays towards the mother- nature he make all efforts including sacrifice of his own life to save his mother. Taking this as a basic theme, V. K. Srivastava, a renowned Indian anthropologist in his study entitled “*Religion and Environment – A Perspective from the Community of Bishnois*” makes an excellent effort to show the association of 29 religious principles with the efforts to conserve the environment including the wild life and greenery, of the Bishnois, a community of N. India. The love, passion, and respect of the Bishnois towards their ecological settings are nicely documented in detail by him, increasing the significance of the study manifold.

Following the lines of the previous study this time also, Hasnain, in his study called, “*Religion- Environment Interface – Islamic Environmentalism*”

associate the act of environmental conservation with the belief of Islamic religion. The study starts with the international dialogues associating religion and environment. The second part deals with the Islamic principles symbolizing towards the sustainable utilization, development and conservation of natural resources, supported by quotations from Quran, the most auspicious book of Islam.

In this way the present overview shows that research work in the field of environmental anthropology at world and national level has been done, but the number is so insufficient and few that it shows both a clear gap and a need for further environmental researches in the field of anthropology in India, as environment and ecology have now come to occupy the centre stage of both national and international policy discourses.

### **How is anthropology different**

The most obvious and well known distinguishing feature is anthropology's interest in non-industrial indigenous and 'traditional' societies, the study of which was initially fostered by colonial expansion. It is this heritage that has given anthropology its exotic public image. This image is not unfounded, but it is misleading because it conceals the fact that an increasing number of anthropologists are studying various aspects and consequences of industrialism, writing about major issues of public concern, and commenting on the implications of contemporary technological change. Thus, anthropologists often share the concerns of sociologists and political scientists but have come to them through a different route. Anthropology's traditional interest in the full range of human societies is important in shaping its contribution to environmental discourse. Equally important but less accessible to public gaze, is the distinctiveness of anthropological theory, where the most enduring and consistent presence has been the concept of culture. This is not to say that culture has been the exclusive territory of anthropologists, far from it, especially in recent decades as 'cultural studies' has acquired an identity as a discipline. But there is no doubt that culture has had a more central position in anthropological thought than in any other social science, at least until the emergence of cultural studies, and that anthropologists have accorded it a great deal of analytical significance (*Milton, 1996*).

In addition, anthropology through its four major and distinctive techniques of data collection, i.e. participant observation, comparative method, cultural relativism and holistic approach, maintain its exclusiveness from other social science disciplines while looking on any of the research areas be it traditional or applied.

## **Future prospects of environmental researches in anthropology**

Anthropology's contribution to environmental discourse might take two main forms. First, the knowledge generated by anthropologists about the diversity of human culture might be important in addressing environmental problems. This means treating anthropology as the study of human ecology, and applying its findings in much the same way as the work of other ecologists is applied. Second, anthropologists might use their distinctive approach to study environmentalism itself as a cultural phenomenon and contribute to the development of environmentalist thought. In this way, environmentalism is both a project to which anthropologists might contribute and an object which they might analyze (Milton, 1996).

In addition, anthropology could also contribute in the field of Environmental Management, which is currently very popular topic in contemporary environmental researches. The central theme of environmental management is the reduction or minimization of the impact of human activities on the physical and ecological environment. It is an endeavor to avoid the overuse, misuse and abuse of the resources in the environment. When there is a talk of environmental management, activities like mining, fishing, grazing and manufacturing, or environmental system such as water bodies, atmosphere and forest, what is implied is that in the former case, discretion must be exercised to avoid over exploitation of resources and in the latter case, conservation should be practiced to preserve their sanctity. The cornerstones of environmental management are:

- ♦ Environmental Planning.
- ♦ Environmental Status Evaluation.
- ♦ Environmental Impact Assessment.
- ♦ Environmental Legislation and Administration. (*Khoshoo, 1984*).

So, in this new millennium, the time has come to undertake researches that are interdisciplinary and follow holistic approach, which encompass the analysis, understanding and defining the environment and environment related issues at micro level. So that the gap between policy implications in theory and policy implications in practice could be filled up and we could make the world a better place to live in.

However, in the end I must want to say that anthropology still has a long way to go in establishing its role in environmental discourse, and in convincing other participants of the value of that role. This paper is however, intended as a step along the way, showing future research aspirants a path and providing them a new research area to explore anthropologically.

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## **FOOD PRACTICES AND FOOD TABOOS DURING PREGNANCY AND LACTATION AMONG TRIBALS OF ANDHRA PRADESH**

**\* A. Varadarajan**

### ***Abstract***

Food habits of tribals in different region are quite different from the other parts of the country as foods habits of many tribal groups are mostly monotonous and local based. On many occasion the nutritive values of the locally available foods are either ignored or undervalued. The present study was conducted in three different regions of Andhra Pradesh with 225 sampled eligible mothers. It was found that existence of widespread food taboos among tribal communities during pregnancy and lactation. Further food taboos during pregnancy and lactation was discussed and analyzed. The study also suggests that there is an urgent need to clearly define and streamline the nutritive value of the tribal foods with regional specifications and dissemination.

*Key words:* Food Practices, Food Taboos, Pregnancy and Lactation.

### **Introduction**

Food is the basic and prime requirement of all living organisms including human beings. Food intake and malnutrition is inextricably linked with overall health status of an individual, family and society. Survival of any living being is determined by the quality and quantity of the food stuff that one consumes in the day to day life. It helps in maintaining of body tissues with balanced physical equilibrium. Food observance has been maintained according to the seasonal changes as it has deeper impact on health. Indeed, food is sign of security and prosperity among tribals. Food habits are closely associated not only with traditional concept of health and illness but also reflect the cultural marker of social status, taste, and cultivation (Duarah: 2004; Sunita Reddy: 2003; Bhushna Reddy and Papa Rao: 2000). Malnutrition is the direct result of the low and imperfect food intake and it has direct effect on the human development index. Less food intake is vicious circle and has deep relationship with overall physical, mental and social well being. Problems due to unhealthy food habits exacerbated in the midst of wrong personal practices, cooking practices food taboos and choice of food as well.

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Food choices are much diversified among various communities depend on geographical location and flora – fauna. Food habits and food culture are also varies from one region to another. Apart from the geographical and regional differences, it is mainly the food habits of an individual or community that suited to that particular region determines disease from body constitution. Food habits are also very closely associated with health and morbid conditions. Outbreak of food borne morbidity cases are occurring increasingly in the tribal areas due to incompatible food habits and frequent movement of individuals and their changing food habits. Moreover the severity of such morbid cases are high in the isolated areas like hills and homogeneous settlement groups as they tend to spread fast and transmit through environment. It usually warrants an emergency like situation that they pose to life threat to the whole community. Therefore, it has become essential to look into the food habits of tribals in a comprehensive manner in the light of overall health and development (Basu: 1993). Personnel working in the food supply agencies such as ICDS officials, village health volunteers and public distribution personnel and anganwadi workers etc are adequately sensitized with tribal food habits and trained in the detection and treatment of malnutrition among children and detection of high risk cases among pregnant women. However, this knowledge can be documented through grass root level workers such as anganwadi workers working very closely with the tribal population. The potential of the anganwadi worker could have been positively influenced the health and food practices of the tribal women folk and consequently to improve their health

There has been a persistent effort from the Government agencies through various means and strategies to bring desirable food behavior among the primitive tribal groups in the region. Yet, food habits modification is a complex and long term-task, as there is immense cultural values on food behavior and it is assumed that they are particularly difficult to modify all of a sudden. Often this has been accomplished through self realization that changes in the food habits of an individual but not out of compulsion or force. In the case of the tribal societies, it is due to socio-cultural conservation on traditionally accepted food habits that any changes and modification of the food habits take place in very slow transition.

### **Concept**

Food taboos exist almost in every societies, communities and tribes. Food habits are regulated by different phases of life cycle such as childhood, adult, elderly, pregnancy, childbirth and lactation and so on and it is not uniform in all societies and it may vary from one to another. Traditionally accepted food habits, food taboos during illness and pregnancy are part of the wisdom developed over many generations. Besides, the fresh cooked food items for day to day consumption, natural preservation methods such as sun drying, dehydration are very common and consuming them in the lean period or during the starvation period, besides the less known food items and its consumption such as forest

fruits, roots and grasses during lean period of the year (Jain: 1963; Roy and Rao: 1957). At the same time some of beliefs and practices elude them from accessing and consuming rich natural foods which are abundantly available in and around. However, some of their knowledge is valid and currently relevant with wider applications for human benefit and survival. It can be traced through their arts and crafts, rituals, legends and folklore, beliefs and social customs (Myrdal: 1968). It is generally passed through word of mouth from generation after generation. Further, there are variations in the food consumption within various tribal groups and regions that are expected and consumed, in terms of content, quantity, and quality. Therefore, an attempt has been made to study the pattern of food habits and taboos practiced by tribals in the context of pregnancy and lactation.

### **Main Objectives**

The study is basically a descriptive in nature with empirical evidences. The main objective of the paper is to study the food habits of tribals of Andhra Pradesh. Besides, to analyze the practice of food avoidance during pregnancy and lactation period among tribal groups in the three regions are examined and compared.

### **Methods and Materials**

The selection of the study area is purely on the basis of concentration of tribal population. The Government of India, working group on scheduled tribals has divided the tribal areas into three major categories, viz., (a) tribal residing in areas with traditional concentration, (b) primitive tribes' concentration and (c) dispersed tribal population. Accordingly, one district from each region, namely Visakhapatnam (Region I), Adilabad (Region II) and Medak (Region III) districts are selected. From each district one notified tribal PHC was randomly selected. The selection of villages was based on distance from the PHC. Accordingly, it has been decided to take one PHC village, one sub centre village and one village where no health centre was present. From each village 25 eligible mothers<sup>1</sup> were randomly interviewed. A total of 225 mothers were covered in all nine villages covering three regions. A structured schedule was used to collect data related to food habits besides, focus group discussion with elderly mothers and dais was also used to collect the required information to substantiate from the sampled villages. The data collection for this study was conducted during March – June 2004.

### **Discussion**

Improper food habit is a problematic one and it has direct effect on overall health and development. Wrong food practices including cooking procedures and incompatible choice of food combinations contribute to an unhealthy individual



and society. Un-time eating habits, and frequency of eating etc are too contribute to sick individual which cause unknown morbid symptoms. However, in case of tribal communities, having three meals in a day is considered to be a prestigious position in their community and out of hunger. Food besides fulfilling the prime natural call of hunger, it also fulfills the physiological, psychological and social needs of human being. But, unfortunately food is not equally distributed among all and hence there is uneven distribution and malnutrition. The table below present the number of meal tribal eats in a day in the three regions.

**Table – 1. Distribution of Region wise Respondents by No. of Eating**

Sl.No	No. of Eating	Region I	Region II	Region III	Total
1	Once in a day	6 (8.0)	-	-	6 (2.6)
2	Twice in a day	57 (76.0)	66 (88.0)	54 (72.0)	177 (78.6)
3	Thrice in a day	12 (16.0)	9 (12.0)	21 (28.0)	42 (18.6)
	Total	75 (100.0)	75 (100.0)	75 (100.0)	225 (100.0)

(Figures within brackets denote percentages)

It is clear from the above table that 78.6 per cent of the respondents are having only two meals in a day, and 18.6 per cent of them thrice in a day. It is observed that 8.0 per cent of the respondents (all from the region I, i.e. from the hilly tract of the agency area in Vishakapatnam district) have only one meal a day. These respondents are mostly belongs to Gonda Doara tribe, which is one of the notified Primitive Tribal Group (PTG)<sup>2</sup> of Andhra Pradesh. It was observed that Gonda Doaras are still practicing *podu* cultivation in the hilly tracts of northern Andhra Pradesh. It reflects their absolute poverty condition. Despite, the presence of Public Distribution System (PDS) in the sampled villages, a significant proportion of tribals remain incapable to buying enough food grains due to their low income and poverty stricken conditions. It is worth to mention here that according to Government reports there are 41, 172 fair price shops functioning in the state, out of which, 34, 598 are in rural and tribal areas. On an average each shop is having 525 card holders. The State Government supplies rice at the rate of Rs. 5.25 per Kg. to the below poverty line families (White family card holders) to alleviate hunger. Though the public distribution system is in the state list, vast subsidies have been granted in almost in every Central Union budget of the Government of India. But still the incidence of starvation deaths due to severe malnutrition is the common plight in many backward areas of India.

### **Food Taboos**

Food taboos during pregnancy and lactation affect maternal nutritional status and reproductive outcomes. Bartholomew and Poston (1970) estimated in their study that the diets of 10.0 per cent of the respondents that they have



surveyed are subject to folklore and cultural beliefs. It is the common practice in the tribal society that knowledge of food habits stored in the form of culturally specific beliefs and practices. These knowledge were transferred from one generation to next. However certain specific food habits and food related practices were inextricably woven into their local dialects, rituals, myths, symbolism and history of tribals. Since the knowledge about food taboos and the reason behind it is compactly integrated into their rituals such knowledge is much less likely to be transferred to cross-cultural societies (Patel: 2002). Hence, an attempt is made to identify certain food taboos during pregnancy and lactation among these tribal groups are tabulated below.

**Table – 2. Food Taboos Practiced during Pregnancy in the Study Area**

Sl.No	Food Items	Region I	Region II	Region III	Total
1	Papaya	12 (16.0)	12 (16.0)	22 (29.4)	46 (20.4)
2	Egg	7 (9.3)	3 (4.0)	7 (9.3)	17 (7.6)
3	<i>Gongura</i>	6 (8.0)	9 (12.0)	13 (17.3)	28 (12.4)
4	Pineapple	9 (12.0)	6 (8.0)	11 (14.7)	26 (11.6)
5	Gingili with Sugar	3 (4.0)	6 (8.0)	3 (4.0)	12 (5.3)
6	Palm Sugar	9 (12.0)	6 (8.0)	-	15 (6.7)
7	<i>Dumba Kuralu</i> (Root vegetable)	4 (5.3)	-	-	4 (1.8)
8	Bamboo Shoots	5 (6.7)	-	-	5 (2.2)
9	No idea	20 (26.7)	33 (44.0)	19 (25.3)	72 (32.0)
	Total	75 (100.0)	75 (100.0)	75 (100.0)	225 (100.0)

(Figures within brackets denote percentages)

It is evident from the above table that 20.4 per cent of the respondents stated that papaya frits should be avoided during pregnancy and this food taboo is followed by *gongura*, a leafy vegetable. Pineapple is another item to be avoided as reported by 11.5 per cent of the respondents. Egg is another predominant item that as many as 7.5 per cent of the respondents reported to be avoided. Further, it was observed that the practice of food avoidance is more in region I and II compared to region III. However, young mothers are not much aware of such food taboos and these were mostly reported by the elderly mothers. It was reported by the Gond tribes that they would not consume buffalo milk as they describe that it is inauspicious and harmful to health. Food avoidance during pregnancy shows that the main reason for abstaining from certain foods during pregnancy was fear of abortion. They believe that these specific foods can produce heat in the body and thereby induce uterine hemorrhage and spontaneous abortion to anemic women during early pregnancy. Pregnancy is

felt to be a hot state and therefore necessitating restriction of hot foods. It was also observed that avoiding animal protein during pregnancy is very common among all tribal groups.

Similarly, there are strong beliefs on food avoidance during lactation period too. It is also their belief that food nutrients and essence are passing through breast milk to the child. The table below explains the taboo practices during lactation period.

**Table No. 03. Food Taboo Practices during Lactation**

Sl.No.	Food Items	Region I	Region II	Region III	Total
1	Mango	6 (8.0)	15 (20.0)	4 (5.3)	25 (11.1)
2	Jackfruit	12 (16.0)	15 (20.0)	6 (8.0)	33 (14.6)
3	Coriander leaves	-	6 (8.0)	5 (6.6)	11 (4.8)
4	<i>Thondakkai</i>	-	-	5 (6.6)	5 (2.2)
5	Fresh ground nut and root vegetables	7 (9.4)	3 (4.0)	2 (.7)	12 (5.4)
6	No idea	50 (66.6)	36 (58.0)	53 (70.8)	139 (61.8)
	Total	75 (100.0)	75 (100.0)	75 (100.0)	225 (100.0)

(Figures within brackets denote percentages)

The above table explicitly shows that 14.6 per cent of the respondents reported that jackfruits should be avoided during lactation. Mango is another food item that has to be avoided during lactation as reported by 11.1 per cent of the respondents. Interestingly, coriander was reported as a taboo item by 8.0 per cent of the respondents from region II. The reason given by the lactating mother was that it has the capacity to reduce the breast milk. Similarly, jackfruit, fresh ground nut and mango may cause loose motion and root vegetables such as tapioca, yam etc may cause digestive disorder for infants. Besides, hot foods like brinjals, drumsticks, fish, dried fish, greens, bottle guards and certain dals were felt to be good for lactation, while cold foods were thought to produce diarrhea and indigestion for infant. All the food restrictions were primarily conceived in the interest of breastfeeding infant, to whom harmful effect would be transmitted through the breast milk.

Food restrictions for just delivered mothers are also observed seriously. For the first day rice water, pepper, garlic, ginger and salt has to be drunk to get started on good milk production. Till three days boiled rice water with some ground chilies and ginger is used as a drink as it would 'clean up the inside'. No cold items are consumed as long as the baby breast – fed. Women from Sugali tribes used to prepare a mixture of dill oil and jaggery masala and it would be kept in a clay pot to be consumed two to three times in a day for 10-12 days to

get speedy recovery from delivery. Dill oil is considered to increase breast milk production and also cleans it off toxins in the stomach. Women from Yerukula tribes drink the decoction of *neem* leaves for three days and *neem* paste is swallowed with rice water to clean the stomach. Despite all these shortcomings, there has been a major shift in food habits of tribes in all regions in the recent past. Now tribals rarely dig for wild tubers. For all purposes, they give up eating wild roots, *caryota* pith and mango *kernlas*. However, it was reported from region I, that Konda Dora, one of the primitive tribal group still consumes sorghum millet brought under *podu* cultivation. Certain traditional foods<sup>3</sup> are slowly disappearing from the tribal areas where its proximity is closer to urban centres.

### Food during Scarcity Season

Nuts and seeds are one of the best sources of protein. They are rich in fiber and antioxidants with omega 3 fats which have effect of lowering cholesterol level. One of the common seasons of nuts consumption among tribal groups is scarcity period. They generally store nuts and seeds for lean season and consume it when nothing is available to eat afresh one. They consider eating seeds and nuts during harsh climatic conditions where no livelihood is available would be as it is possess more protein and calories. For instance pumpkin seeds, tamarind seeds and dry vegetables (brinjals, country beans, and raw mangoes) are commonly storing commodities among tribal groups for lean period. It is worth to mention here that both roots and tubers possess large quantity of starch, fat and some amount of minerals. They can also easily identify the rotten roots and tubers through its bitter taste and change of color on the outer portion. Generally they avoid eating raw as it causes diarrhea and vomiting. Similarly, they also monotonously eat the jack fruits and its seeds during the harvesting season. After eating the juicy pulp of jack fruit the seeds were dried in the sunlight and stored for future use. During the scarcity seasons, they boil it in hot water and consume it with salt.

Further they also consume locally available cheap food items after cooking or sometimes raw. Some of the food items are sweet potato, tapioca, jack fruit seeds and ragi porridge etc. While sweet potato and tapioca contains more carbohydrate which gives approximately 125-150 kilo calories per kilo, ragi and jack fruits contains good source of protein. Ragi also contains good amount of calcium, phosphorus, iron and minerals. Palmyra nut is another traditional food item that used to consume after germination.

Minor forest produce and gathering from forests continue to supplement by agriculture produces for consumption. The hilly forest also provides many varieties of fruits, mushrooms, bamboo shoots, tender leaves, wild nuts, wild grass, honey, resin, arrow-root, and bark etc. They bartered those products

with the local traders or to middlemen for salt, dry fish, clothes and other daily needs. Domestic animals were a form of wealth for the tribal. The small landholders devote much of their time to agriculture work, and subsistence during the unproductive period as well as dependent on collection of forest produce. However, the reserve forest cover in the tribal areas has increased to 46 million hectares out of total 67million hectares (Sexena: 1999). The tribal rights of collecting forest produces have been curtailed. With the depleted forest resources tribals survival is threatened and has also increased the pace of migration to nearby towns, where by become underpaid wage labourers.

## Conclusion

It can be summarized from the above analysis that food habit of tribal group is mostly monotonous. Tribals are vulnerable to malnutrition because of their certain traditional belief and cultural practices. Food avoidance during pregnancy and lactation and post-partum periods widely prevails in the study areas and it is also region specific. They also still believe of Hot-Cold food syndrome during pregnancy and lactation. As knowledge of healthy food practices and its nutritive values is very poor among tribal communities, general thrust on nutritive values of the locally available food materials must be brought to the notice of the tribal groups especially among self help groups, anganwadi workers and local health staff for further dissemination. While enforcing appropriate food habits and its nutritive values, the local eating habits, availability of food grains and vegetables as well as cultural practices of the tribals are to be kept in mind. Further, health education based focus group discussion among pregnant, lactating mothers and adolescent girls will help not only to adopt appropriate food practices but also to improve their health by improving healthier reproductive life.

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## FootNote

- <sup>1</sup> Eligible Mothers refers to married women who have experienced at least one delivery at the time of survey.
- <sup>2</sup> Primitive Tribal Groups (PTG): There are 8 primitive tribes in Andhra Pradesh namely Chenchus, Kolam, Kondareddy, Konda Doaras, Gadabas, Gonds, Porjas and Thotis.
- <sup>3</sup> **Notes:** 1. Tallu chettu (*Grewia Tilaefolia*): Young leaves are eaten as vegetable and it is used to curdle milk. 2. Niakhenda (*Hibiscus Rugosus*). It is a root and inner portion of the roots are eaten after boiling. 3. Kandichettu (*Indigofera*

Pulchella). Its flowers are cooked and eaten as vegetable. 4. Ippa (*Madhuca Indica*). It is a tree, its flowers are used as vegetable and extracts oil from its seeds. Liquor is largely made from the flowers during the season. Its flower is stored for future use. 5. Yam: It is a tuber eaten after processing. It is also cultivated in the backwards. 6. Cenegadda (*Dioscorea Hispida*). It is kind of tuber largely eaten after processing. These tubers are boiled in hot water after removing the skin. They are soaked into water during nighttimes so as to remove the acrid content. Later it will be sliced and dried up in the sun light. They prepare like a chip and sell in the markets. 7. Young Bamboo Shoots: It is one of the delicious tribal foods in the agency tracts of Andhra Pradesh. It is a common sight in the roadside that tribals are selling the shorts to outsiders. Chutney made out of bamboo shoots is also widely available during the season.

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# **UNIVERSALIZATION OF THE ELEMENTARY EDUCATION FOR ALL IN INDIA: ASSESSING THE PROGRESS OF SARVA SHIKSHA ABHIYAN PROGRAMME IN UNION TERRITORY OF PUDUCHERRY**

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## *Abstract*

The government of India had taken initiative to universalize the elementary education by community-ownership in the name of Sarva Shiksha Abhiyan (SSA) by providing elementary education for all children in the 6 to 14 age group by 2010. The present study had made an attempt to evaluate the progress of the implementation of SSA programme in the four regions of Puducherry Union Territory. Direct participant observation method was adopted for collection of data with the help of scientific questionnaire from 18 per cent of the schools out of 575 schools where the programme is implemented. The study highlights on the infrastructure facilities provided to the schools, with good drinking water, class room, toilet facilities etc. to the students. The utilization of grants like school grants, maintenance grants, to school, TLM grants to teachers, training programme for teachers and functioning of village education committee, student's beneficiary under children special needs, vocational skill, night school, bridge course for the slow learners, mid day meal etc. were evaluated and suggestions were imparted for its success.

*Key words:* Sarva Shiksha Abhiyan, elementary education, night school, universalized education

## **Introduction**

Sarva Shiksha Abhiyan (SSA) is an effort by the government of India to universalize the elementary education by community-ownership of the school system. The demand for quality basic education all over the country is its major goal. It attempts to provide an opportunity for improving human capabilities to all children, through provision of community-owned quality education in a mission mode.

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## **Location of the District**

The present evaluation study was conducted in Pondicherry, a Union Territory of India. It is a former French colony, consisting of four non-contiguous enclaves, or regions, and named after the largest region, Puducherry. The territory was officially known as Pondicherry until 2006 then it was renamed as Puducherry. Of late, Puducherry is also considered an educational hub of Southern India.

Puducherry, the capital of the Union Territory, also a port city, which is located 162 kms south of Chennai, the capital of Tamilnadu and 22 kms north of Cuddalore, the head quarter town of South Arcot district in Tamilnadu. Puducherry is surrounded by Bay of Bengal in the east and by South Arcot district of Tamilnadu from other three sides. Puducherry consists of four non-contiguous regions: Puducherry, Karaikal, and Yanam on the Bay of Bengal and Mahé on the Arabian Sea. Puducherry and Karaikal are by far the larger ones, and are both enclaves of Tamilnadu, Karaikal region is embedded in the Nagappattinam and Tiruvarur District of Tamilnadu, Yanam and Mahé are enclaves of Andhra Pradesh and west cost of Kerala, respectively.

## **District Profile**

The District of Puducherry consists of two municipalities namely Puducherry Municipality and Oulgarate Municipality. There are five Commune Panchayats in the District of Puducherry they are: Ariyankuppam Commune, Bahoor Commune, Mannadipet Commune, Nettapakkum Commune, and Villianoor Commune.

Karaikal is located on the shore of Bay of Bengal, 135 kms from Pondicherry. It is surrounded by the Nagai District of Tamilnadu. Some 10 kms north of Karaikal, the historically famous Dutch settlement of Tranquebar is situated. The total area of Karaikal is 160 sq km. The District of Karaikal consists of one Karaikal municipality and five Commune Panchayats namely Thirunallar Commune, Neravy Commune, Nedungadu Commune, Kottucherry Commune and T.R. Pattinam Commune

Mahé is, by far, the largest island, and it is home to the capital, Victoria, the international airport, the fishing and commercial ports, most of the population and many resorts and hotels, plus four casinos. It covers a distance of 848 kms from Puducherry by train. Its powdery white, idyllic beaches, lush vegetation, plantations of coconut palms and cinnamon rise to forested peaks with unequalled views of the neighboring islands. Surrounded by coral reefs the clear, calm waters invite relaxation and many water sports. Although it is the nation's economic hub, it has retained all of its natural beauty and charm. The District of Mahé consists of only one Mahé municipality



Yanam is one of the regions in the Union Territory of Puducherry, which is 870 kms. away from it. It is situated on the East Coast of the Indian Peninsula at 16 degrees 42' northern latitude, and between 82 degree 11' Eastern longitude bounded on all sides by the East Godavari District of Andhra Pradesh State. The entire Yanam region consisting of Yanam town and eight villages is treated as Municipality for purposes of local administration. The region, which covers an area of 30.0 Sq. Kms, The region is bounded on the east and south by rivers Gauthami and Godavari which discharges itself into Bay of Bengal after flowing almost 14 Kms towards east from Yanam.

### **What is Sarva Shiksha Abhiyan (SSA)?**

Sarva Shiksha Abhiyan (SSA) is a programme with a clear time frame for universal elementary education, and it response to the demand for quality basic education all over the country. It provides an opportunity for promoting social justice through basic education. The scheme put an effort at effectively involving the Panchayati Raj Institutions, School Management Committees, Village and Urban Slum level Education Committees, Parents' Teachers' Associations, Mother Teacher Associations, Tribal Autonomous Councils and other grass root level structures in the management of elementary schools. An expression of political will for universal elementary education across the country. It has a partnership between the Central, State and the local government to implement and achieve the mission towards providing the basis elementary education to all in India, This also gives an opportunity for States to develop their own vision of elementary education

### **The goal of Sarva Shiksha Abhiyan (SSA)**

A new scheme viz., Sarva Shiksha Abhiyan has been introduced by the government of India to universalize elementary education by making the community the owner of the education system.

The Sarva Shiksha Abhiyan is to provide useful and relevant elementary education for all children in the 6 to 14 age group by 2010. There is also another goal to bridge social, regional and gender gaps, with the active participation of the community in the management of schools.

Useful and relevant education signifies a quest for an education system that is not alienating and that draws on community solidarity. Its aim is to allow children to learn about and master their natural environment in a manner that allows the fullest harnessing of their human potential both spiritually and materially. This quest must also be a process of value based learning that allows children an opportunity to work for each other's well being rather than to permit mere selfish pursuits.



Sarva Shiksha Abhiyan realizes the importance of Early Childhood Care and Education and looks at the 0-14 age as a continuum. All efforts to support pre-school learning in ICDS centres or special pre-school centres in non ICDS areas will be made to supplement the efforts being made by the Ministry of Women and Child Development.

The scheme will provide useful and relevant elementary education for all children in the 6-14 age group by 2010 and bridge social, regional and gender gaps.

Sarva Shiksha Abhiyan has the following objectives:

- ◆ All children in school, education guarantee centre, alternative school, 'back to school' camp by 2003.
- ◆ All children complete five years of primary schooling by 2007.
- ◆ All children complete eight years of elementary schooling by 2010.
- ◆ Focus on elementary education of satisfactory quality with emphasis on education for life.
- ◆ Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010.
- ◆ Universal retention by 2010.

The implementation of SSA will make the Union Territory of Puducherry realize the promulgation found in the Article 45 of the Indian Constitution, which has been beyond our reach so far.

### **Methodology**

The direct participant observation method was adopted for collection of required data. Scientific questionnaire was prepared to study various indicators based on the monitoring format developed by the NCERT was adopted to collected scientific data from the schools where the SSA programme was implemented. The study was conducted on almost 18 percentage of schools as sample in all the four regions of Puducherry Union Territory where the programme in implemtd. Immense care was taken to select the sample school in rural and urban areas of all the four regions The study was conducted during the academic year 2008-10.

### **Population and Sample**

In Pondicherry district the SSA scheme was implemented in 378 schools out of which 36 (09.42 per cent) schools were taken for sample survey.

In Karaikal district the SSA scheme was implemented in 147 schools out of which 16 (10.88 per cent) schools were taken for sample survey.

In Yanam district the SSA scheme was implemented in 20 schools and the monitoring team had undergone a census study covering all the 20 (cent per cent) schools taken for study.

In Mahé district the SSA scheme was implemented in 30 schools and all the 30 (cent per cent) schools were taken for Monitoring by adopting census survey method.

**Table 1.The population and sample SSA schools in Puducherry Union Territory**

Sl.No.	Region	Total No. of schools with SSA programme	Sample Schools for evaluation study	Percentage to the total population
1	Puducherry	378	36	09.52
2	Karaikal	147	16	10.88
3	Mahé	30	30	100.00
4	Yanam	20	20	100.00
	<b>Puducherry UT</b>	<b>575</b>	<b>102</b>	<b>17.74</b>

### **Analysis of the Data**

The data collected partially through from the relevant official records of the State Project Office, District Project Office and the corresponding schools. Further more information was collected by observation and through sutured questionnaire and also discussion with the school administrators, students and parents and analyzed with qualitative technique too. The data collected through questionnaire were scored, tabulated and analysed. These formed an important part of the analysis, as they constituted the reactions and suggestions of the people in the field. Percentages were used to quantify the responses given by the concerned. Interpretation was done in a descriptive way giving due weightage to all sources of data.

### **Interpretation of Data**

Based on the data collected from the four regions of Puducherry Union Territory schools in the different blocks and District Project Office (DPO), State Project Office (SPO), the interpretation of data is presented bellow:

**Table: 2 Category of sample Schools studied in Puducherry UT**

Sl. No.	Region	Primary	Upper Primary with Primary	High School with Primary & Upper Primary	Higher Sec. School with Upper Primary	Total
1	Pondicherry	12 (33.33)	8 (22.22)	7 (19.44)	9 (25.00)	36 (100.00)
2	Karaikal	9 (56.25)	2 (12.50)	3 (18.75)	2 (12.50)	16 (100.00)
3	Mahé	12 (40.00)	3 (10.00)	8 (26.67)	7 (23.33)	30 (100.00)
4	Yanam	12 (60.00)	2 (10.00)	6 (30.00)	0 (0.00)	20 (100.00)
	<b>Puducherry UT</b>	<b>45 (42.45)</b>	<b>17 (16.04)</b>	<b>26 (24.53)</b>	<b>18 (16.98)</b>	<b>102 (100.00)</b>

**Note:** The figure in the parenthesis denotes the percentage to the total.

The above table 2 shows that in all the four regions of Puducherry, out of 102 schools taken for study 42.45 per cent of the schools are independent primary schools, 16.04 per cent of the schools are with primary and upper primary, 24.53 per cent of the primary and upper primary schools are attached with High school and the rest 16.98 per cent of the higher secondary schools are running with upper primary school level. It shows that preferences are given to the primary and upper primary schools where the SSA programme is intended to be implemented in all the four regions. So, the study had selected more than fifty per cent of the schools from primary and upper primary level than that of the other category of schools.

The above table 3 reveals the type and management status of the schools where the SSA programme is in progress. In the all the four regions of the Puducherry Union Territory out of the sample schools the highest of 90.18 per cent of them of co-education schools followed by 8.93 per cent school for only girls and one school is boys' school. With respect to the Puducherry region out of 36 sample schools visited only one (2.78 per cent) school is boys' school, nine (25.00 per cent) schools are girls' school and the rest 26 (72.22 per cent) schools are co-educational schools. In Karaikal region except one girls' schools rest all other schools are co- education schools. As such in Mahé and Yanam cent per cent of the schools are co-education schools.

**Table: 3 Types and Management status of the SSA Schools in Puducherry UT**

Sl.No.	Region	Type of School				Management status		
		Boys	Girls	Co-education	Total	Govt.	Private	Total
1	Pondicherry	1 (2.78)	9 (25.00)	26 (72.22)	36 (100.00)	35 (97.22)	1 (2.78)	36 (100.00)
2	Karaikal	0 (0.00)	1 (6.25)	15 (93.75)	16 (100.00)	14 (87.50)	2 (12.50)	16 (100.00)
3	Mahé	0 (0.00)	0 (0.00)	30 (100.00)	30 (100.00)	18 (60.00)	12 (40.00)	30 (100.00)
4	Yanam	0 (0.00)	0 (0.00)	20 (100.00)	20 (100.00)	18 (60.00)	2 (40.00)	20 (100.00)
	<b>Puducherry UT</b>	<b>1 (0.89)</b>	<b>10 (8.93)</b>	<b>31 (90.18)</b>	<b>102 (100.00)</b>	<b>85 (75.89)</b>	<b>27 (24.11)</b>	<b>102 (100.00)</b>

Note: The figure in the parenthesis denotes the percentage to the total.

Regarding the management type of the sample schools, in all the four regions 75.89 per cent of the schools are government owned schools and the rest 24.11 per cent of the schools were private management schools. It was noticed from the study that majority of the private schools falls in the Mahé region and only one or two schools each in rest of the regions of Puducherry were private schools and the rest are government schools.

**Table: 4 Type of School Buildings**

Sl. No.	Region	Pucca RCC roofed Building	Tiled roofing building	Total
1	Pondicherry	36 (100.00)	0 (0.00)	36 (100.00)
2	Karaikal	15 (93.75)	1 (6.25)	16 (100.00)
3	Mahé	30 (100.00)	0 (0.00)	30 (100.00)
4	Yanam	20 (100.00)	0 (0.00)	20 (100.00)
	<b>Puducherry UT</b>	<b>101 (99.11)</b>	<b>1 (0.89)</b>	<b>102 (100.00)</b>

Note: The figure in the parenthesis denotes the percentage to the total.

The table 4 shows structure of the building under which the students are studying. Among the sample schools in all the four regions except one school

(0.89 per cent) in Karaikal rest 99.11 per cent of the schools are functioning under the RCC roofed buildings. It was noted from the government authority that necessary legal proceedings are taken for constructing the single titled school in Karaikal as RCC roofed building.

### Display of SSA sign Boards

As per the norms of the SSA scheme, it is mandatory that the schools need to put up the sign board of the SSA, which means that the particular school is functioning with SSA programme. On observation during the visit, it was found that except two schools all other 100 schools had displayed the sign board with the logo and slogan of the SSA. Apart from this the materials that are purchased/constructed under the SSA fund were also named on the product as “purchased/constructed under SSA scheme”.

The fund which is allocated by SSA under the head civil work, the amount was spent to construct toilet and providing drinking water to the students. The above table 5 reveals about the civil work provision under SSA scheme. Out of the 36 schools in Pondicherry 17 (47.22 per cent), in Karaikal out of the 16 sample schools 11 (68.75 per cent) of schools were provided with toilet facilities, in Mahé out of the 30 sample schools 27 (90 per cent) schools were construct toilet to the students. With regard Yanam 20 schools were funded to construct toilet and the amount was released, but it was notices that only one school had constructed toilet yet remaining schools they had not utilized the fund stating that the fund is inadequate. Under the SSA scheme the government releases an amount of Rs.20,000/- per school to provide toilet facilities to the students.

**Table: 5 Availability of Drinking water and Toilet facilities to the students**

Sl. No.	Region	Toilet			Drinking Water		
		Yes	No	Total	Yes	No	Total
1	Pondicherry	17 (47.22)	19 (52.78)	36 (100.00)	19 (52.78)	17 (47.22)	36 (100.00)
2	Karaikal	11 (68.75)	5 (31.25)	16 (100.00)	12 (75.00)	4 (25.00)	16 (100.00)
3	Mahé	27 (90.00)	3 (10.00)	30 (100.00)	28 (93.33)	2 (6.67)	30 (100.00)
4	Yanam	1 (5.00)	19 (95.00)	20 (100.00)	20 (100.00)	0 (0.00)	20 (100.00)
	<b>Puducherry UT</b>	<b>56 (54.90)</b>	<b>46 (45.10)</b>	<b>102 (100.00)</b>	<b>79 (77.45)</b>	<b>23 (22.55)</b>	<b>102 (100.00)</b>

**Note:** The figure in the parenthesis denotes the percentage to the total.

As such, so has to provide hygienic drinking water to the students Rs.15,000/- was sanctioned and released to each school were the SSA programme are implemented, under which 19 (52.78 per cent) schools in Pondicherry, 12 (75 per cent) schools in Karaikal, 28 (93.33 per cent) schools in Mahé and 20 schools in Yanam were provided ozonized filter water drinking water to the students. These civil works are carried out after the convergence of Village Education Committee (VEC) meeting and then the work is executed under the supervision of the School Management Committee.

### **School Grants and Maintenance Grants**

The government schools where this SSA programme is implemented are eligible for Rs.2,000/- as school grants and Rs.4,000/- as maintenance grants per school for every year. In Puducherry union territory except the aided schools all the government sample schools were released with these amounts. It was also explored from the study that all the schools that were provided with these grants had used to purchase the school needs and maintaining the school. Before using these funds the approval is taken from the VEC and separate account was maintained. The DPO or the SPO do not follow any centralized purchase and supply of materials. Regarding the utilization of these grants almost all school use these amount properly for the benefit of the students in time.

### **Text Books**

The free text books and note books to the students were provided by the Puducherry Union Territory government through the state education fund. So, the SSA, fund was not used for providing free text books to the students.

### **Teachers and Teachers Training**

The study found that there are no additional or new teachers sanctioned in the sample schools of all the four regions, there is proposal to recruit new teachers under SSA scheme. The study also found that a total of 352 teachers were trained under various SSA training programmes held during the academic year 2006-07. The teacher's opinion regarding the training programme is found satisfactory. At the same time the teachers welcome these kinds of knowledge refreshing training programmes which would enable them to update their teaching skill. If a teacher attends one programme his next turn come after 2-3 years so they need periodical training which will helps to update their knowledge for better implementation of the programme, it will also enhance the academic progress by establishing a training cell.

Under SSA scheme, the school runs "Evening Schools" and coaching for "Slow Learners". Educated unemployed youth in that particular village is identified and selected as the evening school teacher. The selection was done

by the VEC and approval was taken from the State Project Office (SPO). This evening and slow learners classes functions after school hours from 6 to 8 pm of every school working days .So has to motivate the functioning of the school. Frequent visit was made by the BRC officer and check the attendance registers and inspect the students performance. From the sample of 36 schools the in Pondicherry it was found that about 19 schools were running these two night schools and evening school for the slow learners. There were 86 night schools and 40 evening schools are functioning in Karaikal District. In Mahé it was found that from the total of 30 schools about 18 schools are conducting evening for the slow learners, and 12 private schools have been funded to conduct night schools for week students. It was found from the study that there were 42 night schools and evening schools for slow learners are functioning in Yanam District

### **Teacher Learning Materials (TLM)**

The grants under the Teaching Learning Materials (TLM) provided to the schools at Rs.500/- per teacher, in which 3393 teachers were benefited during the current academic year. The TLM grant was used in procuring teaching aids and it was reported that the teachers are more comfortable in their teaching by having these teaching aids .The study found that in the sample schools about 474 teachers in these 36 schools from Pondicherry, in Karaikal about 147 teachers from 20 schools, 75 teachers in 30 schools from Mahé and 105 teachers in from 20 schools of Yanam were provided with TLM grants. The TLM includes, hand made chart, maps, thermocoal cutting models, models of scientific equipments, models of science objects and other instruments used in laboratory. The SPO had directed the school to display all the TLM together once in year as an science exhibition period the students can also exhibit their own hand models, which helps the students to learn much more from other class teachers.

### **The Status of the out of School Children and Drop-out**

The status of the out of school children is concern, during the last academic year there is not even single case was found reported in all the four regions where the sample study was conducted. In Karaikal during the last academic year one student was detained he is suppose to drop the course but he was put into alternate school and special care was taken to educate the student and then he was put into regular stream of schooling from the next consecutive year.

**Table: 6 Children with Special Need (CWSN)**

Sl.No.	Sanctioned aid	Pondicherry	Karaikal	Mahé	Yanam	Puducherry UT
		No. Student Benefited				
1	Spectacles	236 (95.16)	41 (83.67)	58 (71.60)	28 (32.18)	363 (78.06)
2	Hearing aid	5 (2.02)	6 (12.24)	12 (14.81)	5 (5.75)	28 (6.02)
3	Escort allowance and equipment	7 (2.82)	2 (4.08)	11 (13.58)	2 (2.30)	22 (4.73)
4	Speech Therapy	0 (0.00)	0 (0.00)	0 (0.00)	52 (59.77)	52 (11.18)
	<b>Total</b>	<b>248 (100.00)</b>	<b>49 (100.00)</b>	<b>81 (100.00)</b>	<b>87 (100.00)</b>	<b>465 (100.00)</b>

Note: The figure in the parenthesis denotes the percentage to the total.

With regard to children special needs, the Puducherry District had 1984 students, in Karaikal District had 342 students, in Mahé 81 students and in Yanam 87 students are suspected to have deficits and were taken for medical examination to the nearby hospital and the students who were found in need of aids and appliances were provided with hearing aids, spectacles etc. Among the sample schools surveyed in Pondicherry region 236 students had provided with spectacles five had provided with hearing aid and seven with escort allowance of Rs.2000/- each. In Karaikal 41 students had provided with spectacles six had provided with hearing aid and two with escort allowance of Rs.2000/- each. In Mahé 58 students had provided with spectacles, 12 students had been provided with hearing aid and 11 students with escort allowance of Rs.2,000/- each. In Yanam 28 students had provided with spectacles five had provided with hearing aid, two provided with physically challenged clippers. The benefited students said that within a week time after medical examination they got their aids and appliances from the SPO. Ramps were constructed in all the schools were the team visited.

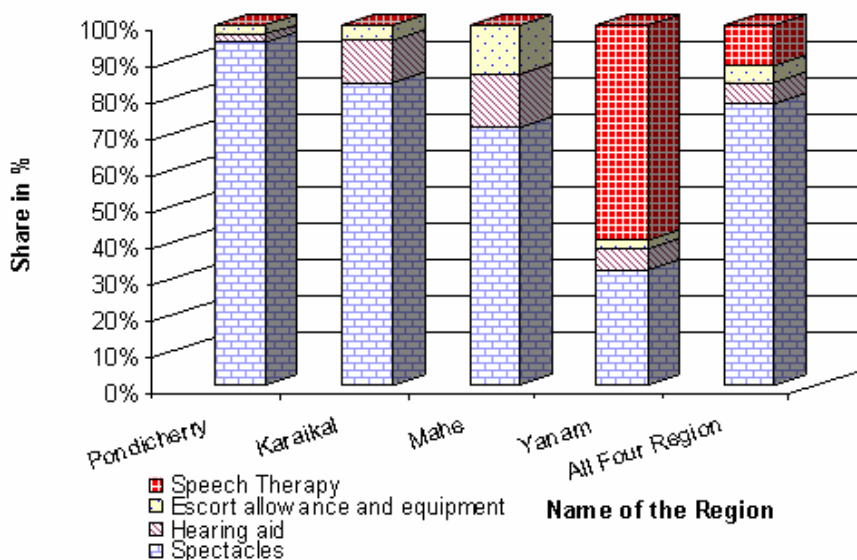
**Table: 7 District Information systems for Education (DISE)**

Sl.No.	DISE submitted	Pondicherry	Karaikal	Mahé	Yanam	Puducherry UT
1	Yes	36 (100.00)	16 (100.00)	30 (100.00)	20 (100.00)	102 (100.00)
2	No	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	<b>Total</b>	<b>36 (100.00)</b>	<b>16 (100.00)</b>	<b>30 (100.00)</b>	<b>20 (100.00)</b>	<b>102 (100.00)</b>

Note: The figure in the parenthesis denotes the percentage to the total.



**Figure : 1 Students beneficiary under Children with Special Need (CWSN)**



The DISE Information scheduled was issued to all the schools by the State Project office and collected back, this helps to study the progress of the programme. The collected data were computed in state project office. So, has to avoid mistake while filling up the DIES schedule, information manual and training is given to the school authorities. The study found that in all the four regions of Puducherry Union Territory the schools school authorities had prepared their school DISE report with care and submitted in time. The school authorities are of the opinion that training regarding the DISE schedule briefed by the concern BRC coordinators level helps to provide correct information. The BRC coordinators will verify 5 percent of the total schedules collected from each BRC and forward it to the SPO for data compilation and analysis.

### Functioning of the VEC

As an objective of the SSA programme to involve the community-ownership of the school system an village level “Village Education Committee” (VEC) was constituted by the school administration and villagers after taking the approval of the SPO, JDWO, CEO and DPO.

The study found that all the sample schools visited had constituted VEC and the frequency of meetings held was almost in quarterly, whenever the VEC meeting is held, they will discuss about the issue /problem of the schools and decisions will be made to utilize the allotted fund. So as to document the meeting resolutions a separate Register is maintained .The school Headmasters were

trained how to maintain a register and when the VEC meeting has to be constituted. The study found that in Pondicherry among the 36 sample schools 2 (5.56 per cent) schools doesn't maintain the VEC Record properly; as per the guideline of the SSA. The rest all other 34 schools (94.44 per cent) are following as per the Guidelines framed by the SSA. In Karaikal among the 16 sample schools 2 (12.5 per cent) schools doesn't maintain the VEC Record properly, rest all other 14 schools (87.5 per cent) are following as per the Guidelines framed by the SSA. In Mahé among the 30 sample schools all schools are maintaining the VEC Record properly. In Yanam among the 20 sample schools 2 (10.00 per cent) schools doesn't maintain the VEC Record properly rest 18 schools (90.00 per cent) maintain the VEC records properly.

In general the study examined that among all the sample schools in Puducherry Union Territory on an average about 90 per cent of the VEC members attend the meeting regularly.

**Table: 8 Number of schools functioning with Village Education Committee (VEC)**

Sl. No.	Particulars	Pondicherry	Karaikal	Mahé	Yanam	Puducherry UT
1	School with VEC	36 (100.00)	16 (100.00)	30 (100.00)	20 (100.00)	102 (100.00)
2	Schools without VEC	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	<b>Total</b>	<b>36 (100.00)</b>	<b>16 (100.00)</b>	<b>30 (100.00)</b>	<b>20 (100.00)</b>	<b>102 (100.00)</b>

Note: The figure in the parenthesis denotes the percentage to the total.

### **Staffing at State and District Level**

In Puducherry Union Territory the SSA office was functioning with the following staff, during the study period it was noticed that Puducherry the SSA State Project Office is functioning with a total number of six staff out of 11 sanctioned posts. With respect to Karaikal the office is functioning with a total number of eight staff with the help of school teacher on office order. In Mahé it was found that only 5 positions were filled out of 11 sanctioned positions. In Yanam the office is functioning with four sanctioned posts and with the help of school teachers. In all the three regions the ADPC is empowered to take care of the programme activities.

**Table: 9 Staffing pattern in SSA at Puducherry by region wise**

Sl.No.	Designation	Pondicherry		Karaikal		Mahé		Yanam	
		Sanctioned	In Position	Sanctioned	In Position	Sanctioned	In Position	Sanctioned	In Position
1	State Project Director	1	1	-	-	-	-	-	-
2	Stenographer – Gr.III	1	1	-	-	1	-	-	-
3	Asst. Dist. Project Director	-	-	1	1	1	1	1	1
3	Academic co-ordinator	3	1	-	-	3	1	1	1
5	Data Entry Operator	1	Nil	-	-	1	1	1	1
6	Junior Accounts Officer	1	1	-	-	1	-	-	-
7	Upper Division Clerk	1	Nil	-	-	1	-	-	-
8	Lower Division Clerk	1	1	1	1	1	-	1	1
9	Peon	2	1	-	-	2	1	-	-
<b>TOTAL</b>		<b>11</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>11</b>	<b>4</b>	<b>4</b>	<b>4</b>

### Mid-Day Meal Scheme

The Mid-Day Meal (MDM) scheme is fully taken care by the state government of Puducherry Union Territory. The Puducherry State Government pool the SSA fund for mid day meals with the state fund and implementing it with separate wing deputed an officer incharge to execute and monitor the activities . The state government provides best food to the students, every day morning they start with providing milk with biscuits, noon lunch with rice, curry and fried vegetables, weekly twice they use to provide egg with lunch and in the evening when the students leave home they were provided with a cup of milk. In town limit i.e. urban area food were supplied from central kitchen, in rural areas food were cooked within the school in few schools 2-3 schools share the kitchen. About, the students and parents opinion regarding the quality and quantity of food, they found highly satisfied. The school teachers were deployed to monitor while the students are taking their food, washing of hands and their plates. The visited schools have very good, hygienic and clean kitchen. 90 per cent of the schools cook the food by using fire wood and the rest 10 per cent by using kerosene stove. In short MDM scheme operated by the state government is functioning well.

### Additional provisions and for successful implementation of the scheme

In Puducherry District the schools were functioned for 195 days during the last academic year. It was observed from the study that the School have neat and clean environment, with minimum required good ventilations, all schools were provided with required numbers of desks and tables. The schools visited have cent per cent electrification, and cement flooring was laid. The class room consists of black board, TLM materials displayed. Almost all the schools were used the school grant for black board maintenance. The state government provided the schools with required amount of play materials. On an average of 95 to 98 per cent of the attendance are present from all the 36 schools. Private schools they follow penalty system if the students are irregular to class. The government schools Headmaster warn their parents of the students if they are irregular to class.

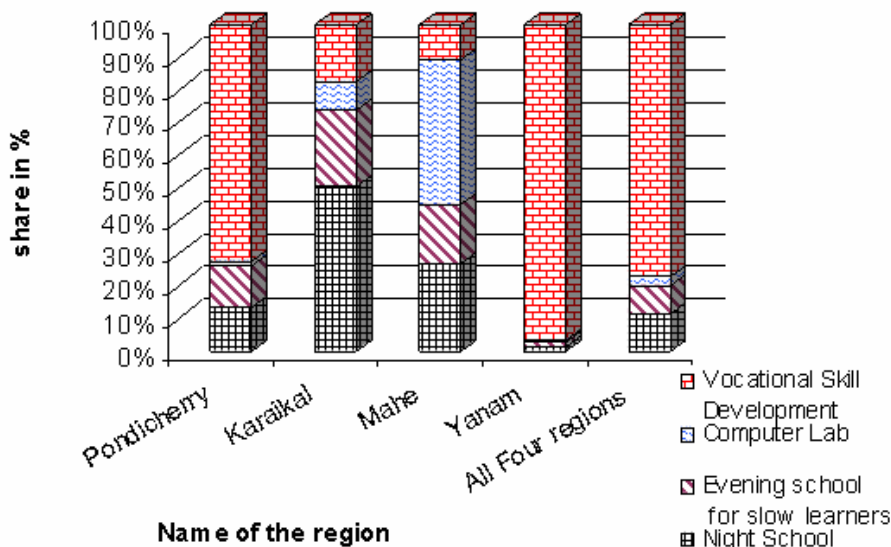
With the help of the special assistance programmes the slow learning students were given additional care by imparting night school and evening schools. Apart from this the female students were given vocational skill development courses like embroidery, stitching, paper mold dolls etc. In the middle school level the students were provided with basic computer facilities. In the primary school level the students were give ability learning skill course career. The below table shows the special assistance programme to improve the quality of education among the students in Puducherry district:

**Table: 10 Special Assistance Programme to Improve the Quality of Education**

Sl.No.	Particulars	Pondicherry	Karaikal	Mahe	Yanam	Puducherry UT
		No. of Schools				
1.	Night School	215 (13.21)	86 (50.59)	18 (26.87)	12 (1.05)	331 <b>(10.99)</b>
2.	Evening school for slow learners	207 (12.71)	40 (23.53)	12 (17.91)	16 (1.39)	275 <b>(9.13)</b>
3.	Computer Lab	24 (1.47)	14 (8.24)	30 (44.78)	7 (0.61)	75 <b>(2.49)</b>
4.	Vocational Skill Development	1182 (72.60)	30 (17.65)	7 (10.45)	1113 (96.95)	2332 <b>(77.40)</b>
	<b>Total</b>	<b>1628 (100.00)</b>	<b>170 (100.00)</b>	<b>67 (100.00)</b>	<b>1148 (100.00)</b>	<b>3013 (100.00)</b>

Note: The figure in the parenthesis denotes the percentage to the total.

**Figure: 2 Special Assistance Programme to Improve the Quality of Education**



## Conclusion and Suggestions

It is encouraging to note that the overall implementation and performance of the SSA scheme in Puducherry Union Territory is good. It has been noticed from the visit that the school authorities have realizing the goals of universalization of elementary education. However, a few lacunas have to be bridged for the successful implementation of the programme they are:

- ♦ Few schools are in needs new class rooms and compound walls.
- ♦ The Education Inspector should be empowered to monitor the implementation of SSA schemes frequently.
- ♦ One Junior Account Officer who is appointed in the SPO level is fully engaged in looking after the accounts position in state level, so he does not find time to check the account procedure in schools which leads to complication in maintaining a standard accounts procedure as per the SSA norms. So, an additional JAO should be appointed so has to visit all the schools and monitor and guide them the expenditure of SSA in a right direction. Ever since the date of implementation of the SSA programme no one had inspected and assessed the school accounts, this may give chance for misuse of funds.

- ♦ Apart from the school authorities the teachers should also trained to know about the aims and objectives of SSA programme, so the training programme should be made compulsory to all the teachers. They should attend atleast one training progrmme in two years.
- ♦ Atleast one computer lab has to be established at primary school level depending upon the student strength. This will increase the quality of education.
- ♦ A sum of Rs.25/- per girl student under Vocation Skill Development (VSD) is given this has to be revised to Rs.100/- per student, so that the drop-out rate of female children can be reduced at the same time an self confidence can be created among them.
- ♦ In some schools it was found that the fund allocated to the schools for maintenance/school grants were not used in time, i.e, during the particular academic year for which the amount is sanctioned. In many schools account balance was too high. So, proper guideline/notification has to be issued to the schools about how the balance fund should be used.
- ♦ The Headmasters are not attending the VEC or SSA meeting conducted by the DPO. They will send their representative to attend the meeting, so there is a communication gap. During the visit to schools many Headmasters were not aware how to use the fund and what is the purchase procedure and guideline, so as to rectify this regular refresher course for Headmasters has to be conducted.
- ♦ Those who are appointed as Headmaster by promotion/incharge, should undergo compulsory training programme to know about the objective and goal of the SSA programme before taking charge as Headmaster which would enable in smooth functioning of the programme.

It is hoped that the SSA scheme will bring a qualitative education if the above said suggestions are looked into seriously, it is sure that SSA scheme will bring an laurel towards the universalisation of elementary education in Puducherry Union Territory.

## **MOTHERS' NUTRITIONAL STATUS AND ITS IMPACT ON THEIR CHILDREN ANEMIC CONDITION: A STUDY AT TAMILNADU**

**\* A.K. Ravishankar**

### ***Abstract***

Tamilnadu is one among of the demographically advanced States in India and it has established a framework of programmes with the potential to combat malnutrition including an ICDS programme, a NMMP and a PDS (Public Distribution System) and other some employment schemes providing food for work. Despite these programmes, the state continues to bear a burden of malnutrition – high prevalence of CED and anemia among mothers and more number of severely undernourished children. These situation calls for an exploration of the relationship between CED and children's nutritional status in Tamilnadu.

The main objectives of the study are to study nutritional status of women in the age group of 15-49 years and to present a nutritional profile of children less than five years of age in Tamilnadu. Finally, to explore impact of 'chronic energy deficiency' of women on nutritional status of their children

The data for the present study were drawn from National Family Health Survey, 2005-06. The structure of the survey is similar to that of the DHS conducted in various Asian and African countries.

In Tamilnadu, one-quarter of women have chronic energy deficiency, which is lower than national average. At the other end of the spectrum, women with obesity percentage were higher than country's average. Overall picture indicates that overweight problem overshadowed underweight problem. Finally, underweight is largely a result of poor diets and infection during childhood. The causes of obesity epidemic are sedentary lifestyles with a fall in spontaneous and work related physical activity and high-fat, energy-dense diets.

***Key words:*** Chronic energy deficiency, Obesity, malnutrition, nutritional status, anemia

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## Introduction

Women are more likely to suffer from nutritional deficiencies than men are, for reasons including women's reproductive biology, low social status, poverty, and lack of education. Socio-cultural traditions and disparities in household work patterns can also increase women's chances of being malnourished. Several reviews have emphasized the vulnerability of women throughout their life cycle [Leslie, 1991]. In some countries, like India, girls are treated differently in terms of access to health care, food, and education. Malnutrition poses a variety of threats to women. It weakens women's ability to survive childbirth, makes them more susceptible to infections, and leaves them with fewer reserves to recover from illness. In addition, malnutrition in women undermines their productivity, capacity to generate income, and ability to care for their families.

Adequate nutrition, a fundamental cornerstone of any individual's health, is especially critical for women because inadequate nutrition wreaks havoc not only on women's own health but also on the health of their children. Above all, the malnutrition leads to economic losses for families, communities, and countries.

It is difficult to determine exactly what proportion of those losses are due to maternal malnutrition, but recent research indicates that 60 percent of deaths of children under age 5 are associated with malnutrition - and children's malnutrition is strongly correlated with mothers' poor nutritional status (David L. Pelletier and Edward A. Frongillo, 2003).

In recent year, dramatic progress has been made globally in tackling malnutrition, especially in reducing vitamin A deficiency and iodine disorders. However, around 800 million people are chronically malnourished, and more than a billion are sick or disabled because of nutrient deficiencies in the world. Each year, chronic malnutrition is a key factor in the deaths of at least 13 million children under five years of age in the developing world. Maternal nutritional status is important for a host of reasons-for the woman herself, for her capacity to reproduce, and for the development of her children, with implications for the health and reproductive capacity of the next generation's mothers. However, for decades, issues in women's nutrition have centered on nutrition during pregnancy and lactation and much of the concern has thus been for the newborn's health and well-being [Shepard et al. 1996]. The nutritional issues of women themselves have rarely been investigated and not many nutritional data are available from non-pregnant women.

In India, malnutrition remains a silent emergency, though the government of India has made significant progress in the past several decades in improving the health and well-being of its people.



According to the World Bank Report, in the last 40 years in India the mortality has declined by half and fertility by two-fifths, but malnutrition has only come down by about one-fifth. It is obvious that the further progress in human development in India will be difficult to achieve unless malnutrition is tackled with greater vigor and more rapid improvement in the future than in the past.

In recent decades, India has established a framework of programs with the potential to combat malnutrition, including a Public Distribution System (PDS), an Integrated Child Development Services (ICDS) program, a National Mid-day Meals Program (NMMP), and several employment schemes providing food for work. In India, volumes have been written about the nature and cause of adult and child malnutrition and the means of reducing it. But the role of women's 'chronic energy deficiency' in children's nutritional status has gone largely unnoticed until recently.

In Guatemala, in 1987, the term 'chronic energy deficiency' (CED) was being used as a term to indicate an inadequate household food supply. Since then, attempts to define, measure and assess CED have evolved, using the body mass index (BMI or weight/height<sup>2</sup>) of individuals as the index of CED. Therefore, in this study BMI can be used to assess the nutritional status of women. Among children, anthropometry is usually used to track growth or failure to grow (wasting and stunting). Anthropometry is the single most non-invasive method of assessing body composition. It reflects both health and nutrition and predicts performance, health and survival.

Tamilnadu is one among of the demographically advanced States in India and it has established a framework of programmes with the potential to combat malnutrition including an ICDS (Integrated Child Development Services) programme, a NMMP (National Mid-day Meals Programme), and a PDS (Public Distribution System) and other some employment schemes providing food for work. Despite these programmes, the state continues to bear a burden of malnutrition – high prevalence of CED and anaemia among mothers and more number of severely undernourished children. These situation calls for an exploration of the relationship between CED and children's nutritional status in Tamilnadu.

The main **objectives** of the study are :

- ◆ to explore the nutritional status of married women in Tamilnadu
- ◆ to investigate nutritional status of the children less than five years of age
- ◆ to study the degree of 'chronic energy deficiency' and anemia (severe, mild and moderate) among married women by selected background characteristics

- ♦ to examine the impact of mothers' chronic energy deficiency (BMI) on their children's nutritional status in the study area

## Subjects and methods

**Subjects:** The data for the present study were drawn from National Family Health Survey, a nationally represented large-scale sample survey conducted in Tamilnadu, India during 2005-06. The structure of the survey is similar to that of the DHS conducted in various Asian and African countries. In Tamilnadu the survey was based on a sample of 6344 households in all 32 districts of Tamilnadu that is representative at the state level, within the state at the urban and rural levels. HFHS-III interviewed 5919 women age 15-49 from all the selected households to obtain information on population, health and nutrition.

A total of 5730 women alone were considered for this study. Women who are all currently pregnant and those who have given birth in the month of interview were excluded. In addition, out of 1416 children born to eligible women in the five years preceding the survey, this survey was considered only 1234 for assessing the nutritional status of children who born in the previous year of the survey.

**Methods:** Anthropometry is the single most portable, easily applied, inexpensive and non-invasive method of assessing body composition. It reflects both health and nutrition and predicts performance, health and survival.

Women were classified as chronically energy deficient or obese as described by James et al. (1998) and the World Health Organization (1995). The use of body mass index (BMI) as a measure of obesity has been widespread and has recently been promoted for assessment of chronic energy deficiency (CED) in adults. The Body Mass Index (BMI) is defined as the weight in kilograms divided by the height in meters squared ( $\text{kg/m}^2$ ). A BMI of less than 18.5 indicates chronic energy deficiency (CED). Chronic energy deficiency grades I, II, and III correspond to body mass index (BMI) 17.0-18.4, 16.0-16.9, and  $< 16.0$ , respectively. Women with BMI 18.5-24.9 were classified as normal. Finally, obesity grades I, and II correspond to BMI 25.0-29.9, and  $>30.0$  respectively. The weight of children and women was measured using a solar-powered digital scale, which gives results with an accuracy of  $\pm 100$  grams. Height/length was measured using an adjustable wooden measuring board that provides accurate measurement to the nearest 0.1 cm.

Three indices of nutritional status were calculated for children: height-for-age, weight-for-height, and weight-for-age. The height-for-age index examines linear growth retardation and is an indicator of chronic under-nutrition. The weight-for-height index compares body mass to body length. This index reflects acute under-nutrition. Weight-for-age is a composite measure of both chronic

and acute under-nutrition. Under nourished children on the weight-for-age index are referred to as “underweight” on the height-for-age index as “stunted” and on the weight-for-height index as “wasted”. The measurements on these three indices are compared with the international reference population as recommended by WHO (Dibley et al 1987).

## Results and Discussion

Women’s Nutritional Status in the study area: BMI are most effectively used as indicators to describe the nutritional status of population and as an expression of the magnitude and distribution of under nutrition and over nutrition. Even though there is a progress in the nutritional status of adults, the incidence of CED remains high in India over the past two decades, according to the National Nutrition Monitoring Bureau Survey (2000-01) 37.4 per cent of adult males and 39.4 per cent of adult females suffered from CED in rural areas of nine sample states. The adult malnutrition is largely a result of poor diets and infection during childhood (Gillespie and Mc Neill 1994).

**CED:** In Tamilnadu, among the 5730 women surveyed, one-quarter of women (25.3 per cent) had Chronic Energy Deficiency (CED), which is lower than the national average (36 per cent). Further the CED grade-III (severe thinness), grade-II (moderate thinness) and grade-I (mild thinness) degree were found among 5.8 per cent, 6.2 per cent and 13.3 per cent of women respectively.

**Table No.1. Percentage distribution of Ever-married women in Tamilnadu by their Nutritional Grade (BMI)**

Nutritional Grade	No. of Women*	Percent	Nutritional Grade	No. of Women	Percent	India
Severe Thinness (<16.0)	331	5.8	CED (< 18.5)	1450	25.3	35.6
Moderate Thinness (16.0 – 17.0)	357	6.2				
Mild Thinness (17.0 – 18.5)	762	13.3				
Low Normal (18.5 – 20.0)	789	13.8	Normal (18.5 – 25.0)	2795	48.8	51.8
Well-Nourished (20.0 – 25.0)	2006	35.0				
I degree obesity (25.0 – 30.0)	981	17.1	Over weight (25.0 – 30.0)	981	17.1	12.6
II degree obesity (> 30.0)	504	8.8	Obese (>30.0)	504	8.8	
Total				5730	100.0	

\*Excludes the women who are all currently pregnant and those who given birth in the month interview

At the other end of the spectrum, the women with obesity percentage was higher (25.9 per cent) than the country's average (12.6 per cent) and the obesity I and II degree were found among 17.1 per cent and 8.8 per cent of women respectively. On the whole, only 35 per cent of the women in the 15-49 age groups were well nourished in Tamilnadu. The overall picture indicates that overweight (obese) problem surpassed the underweight (CED) problem in Tamilnadu. Finally, It may concluded that the underweight is largely a result of poor diets and infection during childhood. The causes of obesity epidemic are sedentary lifestyles with a fall in spontaneous and work related physical activity and high-fat, energy-dense diets.

**Anaemia:** Anaemia is characterized by a low level of hemoglobin in the blood. Anaemia usually results from a nutritional deficiency of iron, foliate, vitamin B12, or some other nutrients. This type of anaemia is commonly referred to as iron-deficiency anaemia. Iron deficiency is the most widespread form of malnutrition in the world, affecting more than two billion people. In India, anaemia affects morethan fifty percent of the population. Anaemia may have detrimental effects on the health of women and children and may become an underlying cause of maternal mortality and perinatal mortality. Anaemia results in an increased risk of premature delivery and low birth weight.

**Table No.2. Percentage distribution of Ever married women in Tamilnadu by their Hemoglobin level (G/DL)**

Anemic Nature	Number of women	Percentage of women	Percentage of women	India
Severe Anemic	114	2.0	Any kind of anemia 52.6	1.8
Moderate Anemic	725	12.7		15.0
Mild Anemic	2069	36.1		38.6
Non-Anemic	2625	45.8	47.4	44.6
Total	5533	96.6	100.0	100.0
Missing	197	3.4	-	-
Grant Total	5730	100.0	5533	100.0

The prevalence of 53 per cent of anaemia among the ever-married women indicates anaemia as a major nutritional problem in Tamilnadu. Further, more than one-third of the women had mild anaemia (36.1 per cent) and 12.7 per cent had moderate anaemia. The only state in India with a prevalence of severe anaemia of nearly 2 per cent among the non-pregnant women is Tamilnadu. It is comprehensible that these high levels are attributed to diets that are low in iron content, clear absorption of iron due to inhibitors and increased demand due to the physiological requirements of menstruation, pregnancy and lactation.

**Children's Nutritional Status in the study area:** Adequate nutrition and health during the first several years of life is fundamental to the attainment of the Millennium Development Goals for child survival and the prevention of malnutrition. Poor nutrition during these critical formative years has both immediate and long-term consequences. A recent authoritative paper on child survival ranked nutrition interventions among the most effective preventive actions for reducing under-five mortality (Jones 2003). Throughout the world children fail to grow in length and weight in a remarkable similar age-specific pattern, despite vastly different prevalences of low weight-for-age, length-for-age, and weight-for-length between and among regions (Shrimpton 2001). Recent estimates show that about 40 per cent of the undernourished children in the world are in India although India accounts for less than 20 per cent of the children in the world.

**Table No.3. Percentage distribution of Children less than five years of age classified by their Nutritional Status in Tamilnadu**

Age groups (in months)	Anaemia				Anthropometrics Indices			Total No. of Children
	Severe	Moderate	Mild	Not anemic	Stunting	Under weight	Wasting	
<6	0.0	29.4	35.3	35.3	22.4	14.9	39.7	174
6-11	1.4	43.7	25.4	29.5	34.4	19.1	47.8	157
12-23	4.2	47.5	22.5	25.8	54.2	24.5	42.2	249
24-35	6.0	38.0	26.9	29.1	56.1	31.0	50.2	255
36-47	2.2	29.2	29.7	38.9	57.3	32.2	46.7	199
48-59	1.1	21.5	25.8	48.4	52.0	30.0	54.5	200
<b>Tamilnadu</b>	<b>3.2</b>	<b>36.2</b>	<b>26.1</b>	<b>65.5</b>	<b>47.7</b>	<b>25.9</b>	<b>46.9</b>	<b>1234</b>
<b>All India</b>	<b>2.9</b>	<b>40.2</b>	<b>26.3</b>	<b>69.4</b>	<b>48.0</b>	<b>19.8</b>	<b>42.5</b>	

In terms of nutritional status of children, about one-fourth of children (25.9 per cent) were underweight and more or less equal proportions of children were suffered by stunted (47.7 per cent) and wasting (46.9 per cent) in Tamilnadu. Further, the above table shows that the underweight and stunting are relatively low for children less than 6 months old (14.9 per cent and 22.4 per cent respectively). On other hand the incidence of stunting and wasting were increases after 6 months and highest of all among children who were 48-59 months (52 per cent and 54.5 per cent). In Tamilnadu about one in two children were too thin (wasting) and too short (stunting). The overall picture discloses the fact that both the acute and chronic under nutrition were a serious concern in Tamilnadu.

The prevalence of anaemia is higher during infancy and early childhood than at any other time in the life cycle (Yip 2002). The state representative data from NFHS-3 shows 65.5 per cent of children below 5 years with any kind of

anaemia (26.1 per cent had mild, 36.2 per cent had moderate and 3.2 per cent had severe anaemia). The prevalence of anaemia varied from 64.7 per cent in the age group of less than 6 months to 51.6 per cent in the age group of 48-59 months (table 3) and severe anaemia is highest (6.0 per cent) in the age group 24-35 months. Nevertheless, even though the state performing better child health care programmes, the anaemic levels were still high.

### **Relationship between Women's Nutritional Status and background factors**

Undoubtedly, the socio-cultural and economic characteristics play a significant role in shaping the women's nutritional status. The table 4 furthermore supports this fact that the disparities in background conditions increase women's chances of being malnourished.

**CED:** Chronic energy deficiency is more prevalent among the adolescent women (15-19: 44.1 per cent) followed by young women (20-24: 33.3 per cent). Further, CED is particularly pronounced for rural women (33 percent) and women who are illiterate (31.2 per cent), ST (53.9 per cent) and women living in poorest wealth index (46.8 per cent). However, chronic energy deficiency was less likely among women who fall in the richest wealth index (9.7 per cent) and women who had higher education (15.7 per cent) and OBC women (23.2 per cent). The other important findings drawn from this table was that CED grade III (severe thinness) was doubled among adolescent mothers, (11.8 per cent) rural women (7.3 per cent), illiterate women (7.5 per cent) and it was more widespread among ST women (21.2 per cent), and women living in households having a poorest wealth index (13.6 per cent).

**Obesity:** According to NFHS-III 25.9 per cent of ever married non-pregnant women in Tamilnadu were overweight/ obese. But this percentage is considerably higher for some sub-groups of women (richest wealth index women: 49.2 per cent; Muslim Community women: 42.2 per cent; and old age women (40-44): 40.0 per cent). Further, the problem of overweight and obesity were also higher among higher educated women (36.3 per cent) urban women (35.7 per cent) and OBC women (28.1 per cent)). Richest wealth index mothers, Muslim mothers, Old age mothers, and higher educational attainment were significant risk factor for extreme obesity (grade II). In contrast the obesity is less common in the early ages of ever-married women and women living in poorest wealth index.

**Table No.4. Percentage distribution of ever married women by their Nutritional Grade (BMI) with their Background Characteristics**

Background Characteristics	Severe Thinness (<16.0)	Moderate Thinness (16.0–17.0)	Mild Thinness (17.0–18.5)	CED <18.5	Low Normal (18.5–20.0)	Well-Nourished (20.0–25.0)	I degree obesity (25.0–30.0)	II degree obesity (>30.0)	Total Women
<b>Mother's age** 525.914</b>									
15-19	11.8	12.0	20.3	44.1	20.4	26.7	5.1	3.7	808
20-24	7.7	9.0	16.6	33.3	15.7	34.1	10.2	6.7	966
25-29	4.5	5.1	13.8	23.4	16.1	35.7	17.4	7.3	935
30-34	4.1	5.7	12.6	22.4	12.3	34.7	21.0	9.5	894
35-39	4.4	3.9	9.2	17.5	10.3	40.2	21.6	10.4	818
40-44	3.6	2.8	9.1	15.5	9.9	35.1	24.6	14.9	756
45-49	3.6	3.8	9.4	16.8	9.4	40.3	23.0	10.5	553
<b>Residence** 421.489</b>									
Urban	4.5	4.3	10.0	18.8	10.9	34.6	22.6	13.1	3104
Rural	7.3	8.5	17.2	33.0	17.2	35.5	10.7	3.7	2626
<b>Religion** 99.256</b>									
Hindu	5.9	6.6	13.7	26.2	14.2	35.0	16.5	8.1	5062
Muslim	2.9	3.3	11.7	17.9	10.0	29.7	21.3	20.9	239
Christian	5.5	3.3	9.8	16.0	11.2	39.1	21.5	9.5	419
Other	0.0	0.0	20.0	20.0	0.0	0.0	40.0	40.0	10
<b>Caste** 97.071</b>									
SC	5.7	8.4	16.3	30.4	14.9	35.0	12.9	6.7	1469
ST	21.2	13.5	19.2	53.9	9.6	19.2	7.7	9.6	52
OBC	5.6	5.4	12.2	23.2	13.5	35.2	18.7	9.4	4193
<b>Literacy level** 136.768</b>									
Illiterate	7.5	7.0	16.7	31.2	15.3	36.6	11.2	5.8	1165
Primary	5.8	5.7	13.9	25.4	15.3	36.3	15.4	7.6	1191
Secondary	5.8	6.8	12.6	25.2	13.2	33.2	18.6	9.8	2698
Higher	2.8	3.6	9.3	15.7	10.7	37.1	24.4	12.1	676
<b>Wealth Index** 896.548</b>									
Poorest	13.6	10.9	22.3	46.8	16.6	30.0	3.6	3.0	440
Poorer	8.6	10.2	20.0	38.8	18.8	30.9	8.2	3.3	719
Middle	7.5	7.5	16.8	31.8	16.4	36.3	11.0	4.4	1577
Richer	4.1	5.5	10.8	20.4	12.7	39.2	19.7	8.0	1593
Richest	1.7	2.1	5.9	9.7	8.6	32.4	29.9	19.3	1401
Total NFSH III	5.8	6.2	13.3	25.3	13.8	35.0	17.1	8.8	5730
Total NFSH II	5.1	7.2	14.5	26.7	17.0	38.6	13.2	3.4	

The interesting observation is that the change in food habits and largely sedentary lifestyle may contribute to the current trend of overweight.

The logistic regression results are given in table 5. The odd ratios (Exp (B)) indicate the effect of each of the predictor variables on the prevalence of CED, controlling for other variables included in the model. Almost in each of the variables the odds decrease with the categories of a variable when compared to the respective variable's first category, indicating a decreasing chance for experiencing CED when improving the background conditions of women. The most significant variables were mothers' age, and their wealth index.

**Table No.5. Odds Ratios from Logistic regression examining the effect of selected SED variables on CED condition of women in Tamil Nadu**

SED variables	Coefficients (odds)	Significance	Odds Ratios
<b>Current Age**</b>			
15-19 (Ref)		.000	1.000
20-24	-.468	.000	0.626
25-29	-1.039	.000	0.354
30-34	-1.141	.000	0.320
35-39	-1.587	.000	0.205
40-44	-1.667	.000	0.189
45-49	-1.557	.000	0.211
<b>Residence*</b>			
Urban (Ref)			1.000
Rural	.193	.010	1.213
<b>Religion</b>			
Hindu (Ref)		.124	1.000
Muslim	.011	.950	1.012
Christian	-.290	.036	0.748
Others	.932	.265	2.540
<b>CASTE*</b>			
SC (Ref)		.012	1.000
ST	.894	.004	2.444
OBC	-.029	.695	0.971
<b>Educational Level*</b>			
No Education (Ref)		.008	1.000
Primary Education	-.250	.012	0.779
Secondary Education	-.328	.001	0.720
Higher Education	-.353	.024	0.703
<b>Wealth Index**</b>			
Poorest (Ref)		.000	1.000
Poorer	-.365	.004	0.694
Middle	-.637	.000	0.529
Richer	-1.139	.000	0.320
Richest	-1.897	.000	0.150
Constant	.945	.000	2.572

-2 Log Likelihood 5730,786

No. of cases: 5730



**Table No.6. Odds Ratios from Logistic regression examining the effect of selected SED variables on Obesity condition of women in Tamil Nadu**

SED variables	Coefficients (odds)	Significance	Odds Ratios
<b>Current Age**</b>			
15-19 (Ref)		.000	1.000
20-24	.759	.000	2.136
25-29	1.307	.000	3.696
30-34	1.677	.000	5.352
35-39	1.893	.000	6.637
40-44	2.171	.000	8.771
45-49	1.880	.000	6.555
<b>Residence**</b>			
Urban(Ref)			1.000
Rural	-.618	.000	0.539
<b>Religion</b>			
Hindu (Ref)		.023	1.000
Muslim	.366	.014	1.442
Christian	.124	.312	1.133
Others	1.450	.083	4.263
<b>Caste</b>			
SC (Ref)		.973	1.000
ST	.053	.901	1.054
OBC	.018	.829	1.018
<b>Educational Level**</b>			
No Education (Ref)		.000	1.000
Primary Education	.177	.119	1.193
Secondary Education	.422	.000	1.524
Higher Education	.257	.080	1.293
<b>Wealth index**</b>			
Poorest (Ref)		.000	1.000
Poorer	.579	.011	1.784
Middle	.816	.000	2.261
Richer	1.317	.000	3.730
Richest	2.104	.000	8.201
Constant	-3.863	.000	0.021

-2 Log Likelihood 5472.389

No. of cases: 5714

The above logistic regression results (table 6) undoubtedly confirms that in general the probability of obesity enhances with improving their positions in each of the socio-economic variables. The most significant variables were age, residence, educational level, and mother's wealth index.

Anaemia: More than half of the women in age 15-49 in Tamilnadu had some degree of anaemia (37.4 per cent have mild anaemia, 13.1 per cent have moderate anaemia and 2 per cent have severe anaemia). The prevalence of incidence of anaemia is highly prominent among women living in poorest wealth index (63 per cent), Muslim women (58.2 per cent), SC category (56 per cent) and illiterates (57.7 per cent). Poorest mothers, ST mothers, and old age mothers were significant risk factor for prevalence of extreme anaemia (severe) in Tamilnadu (Table 7). On the whole, the incidence of anaemia among the ever married women in Tamilnadu by their background condition also shows the similar pattern as what observed in CED and obesity condition.

**Table No.7. Percentage of ever married women by their Anemic level with their Background Characteristics**

Background Characteristics	Severe Anaemia	Moderate Anaemia	Mild Anaemia	Not Anaemia
<b>Age</b>				
15-19	1.0	12.0	37.5	49.4
20-24	1.7	14.5	38.4	45.4
25-29	1.5	10.1	38.8	49.6
30-34	1.7	11.2	36.4	50.7
35-39	2.6	14.2	35.6	47.6
40-44	2.8	16.3	37.7	43.2
45-49	3.8	14.6	37.0	44.6
<b>Residence</b>				
Urban	1.7	12.7	36.7	48.8
Rural	2.5	13.5	38.2	45.8
<b>Educational Level</b>				
Illiterate	2.9	15.8	39.0	42.3
Primary	2.8	13.8	39.0	44.5
Secondary	1.6	13.3	37.0	48.1
Higher	1.3	6.3	33.1	59.3
<b>Religion</b>				
Hindu	2.0	12.9	38.1	47.0
Muslim	2.2	19.1	36.9	41.8
Christian	2.3	13.1	29.4	55.3
Other	0.0	.0	25.0	75.0

Caste				
SC	3.0	14.5	38.3	44.2
ST	4.3	14.9	25.5	55.3
OBC	1.7	12.6	37.2	48.5
Wealth Index				
Poorest	4.4	16.0	42.6	37.0
Poorer	2.6	14.8	37.3	45.3
Middle	2.9	13.9	37.8	45.5
Richer	1.5	13.6	37.7	47.2
Richest	0.7	9.8	34.9	54.6
<b>TOTAL III</b>	<b>2.1</b>	<b>13.1</b>	<b>37.4</b>	<b>47.4</b>
<b>NFHS II</b>	<b>2.6</b>	<b>14.4</b>	<b>38.5</b>	<b>44.5</b>

The importance of nutrition as a foundation for healthy development is often underestimated. Poor nutrition leads to high prevalence of CED and it contributes to further deterioration in their nutritional status. The table 8 clearly shows that women with BMI less than 18.5 have higher incidence of anaemia (59.0 per cent) and this percentage declines when their BMI level increases. Severe and moderate thinness was more pronounced among women who are suffered from severe anaemia. The non-anaemic women were found to have high degree of obesity. Hence, it is well clear that the body mass index seems to be highly correlated factor with anaemia.

**Table No.8. Percentage distribution of women by their BMI with their anemic condition**

BMI condition / Anemic	Severe Thinness	Moderate Thinness	Mild Thinness	Low Normal	Well Nourished	I Obesity	II Obesity	Total
Severe	13.2	14.0	18.4	14.0	28.9	7.9	3.5	114
Moderate	8.3	10.1	17.4	16.3	31.6	12.0	4.4	725
Mild	5.5	6.0	14.4	14.5	36.2	16.5	6.9	2069
Non Anemic	5.3	5.4	11.7	13.4	36.9	20.0	7.3	2625
<b>Total</b>	<b>5.9</b>	<b>6.4</b>	<b>13.6</b>	<b>14.2</b>	<b>35.8</b>	<b>17.4</b>	<b>6.7</b>	<b>5533</b>

**Table No.9. Percentage distribution of Children's Nutritional Status with the their Mother's Nutritional Grade (BMI)**

Children's Nutritional Status		Mothers' Nutritional Status			
		CED <18.5	Normal 20.0–25.0	obesity >25.0	No. of Children
Anemic level** € 19.645	Severe	46.9	40.6	12.5	32
	Moderate	30.7	51.7	17.7	362
	Mild	23.4	49.8	26.8	261
	Non Anemic	22.6	52.2	25.2	345
Wt/A ** € 27.471	Severe underweight	39.4	45.5	15.2	66
	Moderate underweight	33.5	49.6	16.9	254
	Well nourished	21.3	52.8	25.8	914
Ht/A** € 48.433	Severe Stunted	39.3	45.3	15.4	117
	Moderate stunted	33.8	49.3	16.9	219
	Mild Stunted	26.1	55.7	18.2	253
	Well- nourished	18.6	52.2	29.1	645
Wt/Ht* €12.569	Severe wasting	28.7	57.4	13.9	101
	Moderate wasting	29.8	51.1	19.1	141
	Mild wasting	25.2	53.1	21.7	337
	Well- nourished	22.9	50.4	26.7	655
Baby Weight at Birth** € 14.193	Low Weight > 2000	30.6	48.4	21.0	62
	Normal 2000 - 2500	27.5	49.6	22.9	284
	Above Normal 2501 - 3500	22.9	51.5	25.6	719
	Over weight < 3500	10.8	53.0	36.1	83

The table 9 highlights the close correlation between mother's BMI with incidence of anaemia among children. The women with BMI less than 18.5 (CED) had 46.9 per cent of severe anaemic children; it includes 12.5 per cent of severe anaemic children among women with severe thinness (BMI <16.0). Further, the table shows that the moderate and mild anaemic children were closely associated with CED. Where as, the severe anaemic nature among children were less common women with obesity (12.5 per cent) in Tamilnadu. It is note that the normal women had about 52 per cent of non-anaemic children.

Environmental and socio-economic factors influence childhood growth in height and weight more than genetic factors [Habicht et al. 1974]. The table 9 shows linkage between women's BMI and children's anthropometric indices. As expected, women with poorer nutritional status, as indicated by the CED condition, had registered higher risk of severe stunted and severe underweight

children (39 per cent each). Further, the severe stunted children were also associated with women's BMI. A similar relationship (which witnessed CED with anaemic condition) was also observed in anthropometric indices and, among the well-nourished (and obesity) women who had less significant risk of underweight, stunting and wasting children.

So it is clear that the severe underweight children were predominant among low BMI women in Tamilnadu (around 44 per cent), and a significant percentage was also noticed among severe wasting, of around 40 per cent.

**Birth Weight:** It is well accepted that the mother's nutritional status can significantly influence the course and outcome of pregnancy. Low birth weight can result from inadequate body reserves and deficient dietary intake (Prema 1978, Prentice, 1987), have shown that prenatal dietary supplementation is correlated with birth weight and have concluded that such a programme could decrease the infant mortality rates in many poor countries around the world.

Ghosh's (1979) study on the low birth weight infants for 18 years reveals that the growth performance of these infants was poor compared with other infants and children of the same socio economic groups born with normal birth weight. Apparently children suffering from intra-uterine growth retardation are programmed to grow and develop in a substandard growth trajectory, thus swelling the numbers of stunted and under weight children with low learning capacity and adults with low body mass index with low productivity, Women with CED in the reproductive age will in all probability deliver low birth weight infants.

The percentage distribution of Children's weight at birth with their mother's Nutritional Grade (BMI) is given in table 9. Women with low BMI (<18.5) had just little less than one-third of low weight infants (>2000). On the other hand, the over weight infants (3000+g) were born to women in I degree and II degree obesity condition (36.2 per cent). Therefore, it is very clear from the above table that the severe thinness nature of mother had more probability of giving low weight babies. Hence, it is well documented from this analysis that the mother's nutritional status certainly has exercised its influence on the outcome of pregnancies.

## Conclusions

The study's overall goal is to understand the links between women's nutritional status specifically chronic energy deficiency and child's nutrition status in Tamilnadu. The prevalence of CED rate was less in Tamilnadu (25.3 per cent) as compared to national average.

Although the incidence of this CED was higher among ST women (53.9 per cent), poorest women (46.8 per cent), uneducated women (31.2 per cent),

and rural women (33.0 per cent), a contrast trend was observed in the high standard of wealth index (49.2 per cent), Muslim women (42.2 per cent), highly educated women (36.5 per cent), old age women (39.5 per cent) and urban women (35.7 per cent), had high degree of obesity (I degree and II degree). It is therefore concluded that the Tamilnadu state facing the burden of both the nutritional disorders. On the one side, it has the high incidence of CED among the poor people and on the other side the people who have the new changing lifestyles and dietary habits suffer from obesity. Therefore the state should take appropriate steps to tackle these two extreme crises.

It is also evident that the mother's BMI has a positive association with children's anaemic condition. This risk of anemic among children is more, among women with BMI less than 18.5. In addition, the well nourished and obesity women have non-anaemic children. Similarly, the women with poorer nutritional status have infants of severe chronic and acute under nutrition.

The study strongly supports that the mother's nutritional status can significantly influence the weight of the baby at birth. Low birth weight infant (>2000g) was more likely to occur (30.6 per cent) among the women with low BMI (<18.5) and over weight baby was more common among I and II degree obesity women. Therefore, it is well established that the mother's nutritional status had bearing on the weight of the baby.

In general, under and malnutrition starts in the womb and may extend throughout the life cycle. Malnutrition remains a silent emergency in Tamilnadu, though the state government had made significant progress in the past several decades in improving the health and well-being of its people particularly women and children.

The overall nutritional status in Tamilnadu is at reasonable level through the various nutritional intervention programmes, though the most vulnerable groups - women and children suffer from various form of malnutrition.

The risk of malnutrition is higher among the children whose mothers suffer from chronic energy deficiency. Mother's present nutritional status in turn depends on her childhood nutritional status. Concerted efforts are needed to break the vicious circle (mother-child-mother) of malnutrition among poor. It is emphasized that reduction of child malnutrition would greatly depend on delivery of effective and sustainable interventions to children and their mothers.

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## **ICT AWARENESS AND TEACHING COMPETENCY OF PROSPECTIVE B.ED TEACHERS**

**\* F.L. Antony Gracious, \*\* P. Annaraja**

### ***Abstract***

The present study ICT Awareness and Teaching Competency of prospective B.Ed teachers was probed to find the relationship between ICT Awareness and Teaching Competency of Prospective B.Ed Teachers. Data for the study were collected using self made Teaching Competency Scale and ICT Awareness Scale. The investigator used stratified random sampling technique for selecting the sample. The sample consists of 242 Prospective B.Ed Teachers. For analyzing data; 't' test and Pearson's product moment co-efficient were the statistical techniques used. Finding shows there was no significant relationship between ICT Awareness and Teaching Competency of prospective B.Ed teachers.

*Key Words:* Teaching Competency, ICT Awareness, Prospective B.Ed teachers

### **Introduction**

The prime function of education is to draw out the potentialities of the child and develop them to meet the challenging situation in life. Proper education will keep the child to understand the society and to adjust with the social environment. For the development of the child we are providing education to adjust this world. Where as the school education can be better through proper teacher education; it can be nurtured through teacher education. Teacher education is providing quality education to their prospective teachers in educational philosophy, educational psychology and educational technology apart from the techniques of teaching.

### **Significance of the study**

Today we are living in a world of science and technology, where an explosion of knowledge is taking place and stepping into the modern technocratic age. For a meaningful life of an individual needs academic excellence to adjust to his environment. Education is the process of helping the child to adjust to the changing world. Therefore, we can say "education as the reconstruction or

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reorganization of experience, which adds to the meaning of experience and which increases the ability to direct the course of subsequent experiences”. In the technologically sophisticated modern work fields, one should aware of to equip the ICT technologies.

ICT include electronic networks embodying complex hardware and software linked by a vast array of technical protocols. ICT can be defined as “anything which allows us to get information, to communicate with each other, or to have an effect on the environment using electronic or digital equipment”. Some authors use the term learning technologies, while others simply describe it as technology. ICT is becoming a ubiquitous component of the physical and social world occupied by young children. For a better teaching, teaching competency is important to handle better learning of an individual. Teaching competencies are applicable to express aims and behavioural objectives of teaching; to specify assessment appropriate to the objectives of teaching; to select and prepare appropriate equipment and materials for teaching; to consider individual differences between students in planning of teaching; to organize teaching-learning activities to achieve the objectives and also plan activities to contribute personality development of students. It is an important part of the private and life of the people as well as their teachers. Since the teacher can interact with students of different ages from infants to adults, students with different abilities and students with learning disabilities. If a student is to be prepared for their future, then it’s an essential attribute of effective teacher is awareness of the realities of the world in psychology and technology. Then only the prospective B.Ed teachers can mould future generation. So the investigator wants to study the variables ICT Awareness and Teaching Competency of prospective B.Ed teachers.

### **Statement of the problem**

Statement of the problem is entitled as “ICT Awareness and Teaching Competency of prospective B.Ed teachers”. The investigator adopted the following definitions for the terms used in this title.

### **Ict awareness**

ICT stands for Information Communication Technology; ICT refers to usage of electronic devices. ICT Awareness are technical and technological, Browsing or Surfing, Designing or Authoring, Communicating or Teaching and Maintenance or Hardware / Software skills; which are needed for an effective teacher to teach effectively.

## **Teaching Competency**

Teaching Competency is the competency of the teacher and their planning and preparation of lessons for teaching, class room management, knowledge of subject, interpersonal relationship, attitude towards the children, usage of teaching aids and time management during their teaching – learning.

## **Prospective B.Ed Teachers**

Prospective B.Ed Teachers are the student-teachers who undergo a pre-service training on teaching learning process that provides experiences for development towards good teaching. B.Ed is skill process, undergoing training in teaching skills at the colleges of Education.

## **Objectives**

1. To find the relationship between ICT Awareness and Teaching Competency of Prospective B.Ed Teachers.

## **Null Hypotheses**

1. There is no significant difference between age above 22 and age below 22 Prospective B.Ed Teachers in their ICT Awareness.
2. There is no significant difference between married and unmarried Prospective B.Ed Teachers in their ICT Awareness.
3. There is no significant difference between UG and PG Prospective B.Ed Teachers in their in their ICT Awareness.
4. There is no significant difference between age above 22 and age below 22 Prospective B.Ed Teachers in their Teaching Competency.
5. There is no significant difference between married and unmarried Prospective B.Ed Teachers in their Teaching Competency.
6. There is no significant difference between UG and PG Prospective B.Ed Teachers in their in their Teaching Competency.
7. There is no significant relationship between ICT Awareness and Teaching Competency of Prospective B.Ed Teachers.

## **Method**

Teaching Competency Scale and ICT Awareness Scale developed by the investigators were used for the data collection. Content Validity was found through educational experts and reliability of the tools was found through test-retest method. The reliability of Teaching Competency Scale and ICT Awareness Scale were 0.76 and 0.88 respectively. The investigator has adopted survey

method for this study. Population for this study were Prospective B.Ed Teachers studying in colleges of Education affiliated to the Tamilnadu Teachers Education University, Chennai at Tirunelveli, Thoothukudi and Kanyakumari districts. The investigator used stratified random sampling technique for selecting the sample. The sample consists of 242 Prospective B.Ed Teachers. For analyzing data; 't' test and Pearson's product moment co-efficient were the statistical techniques used.

### Data Analysis

**Table -1: Difference between ICT Awareness of Prospective B.Ed Teachers by their age**

Dimensions	Age	N	Mean	S.D	't' value	Remarks
Network	Above 22	96	2.38	1.431	0.062	Not Significant
	Below 22	146	2.36	1.480		
Internet	Above 22	96	3.60	2.003	0.722	Not Significant
	Below 22	146	3.78	1.764		
Protocol	Above 22	96	3.64	1.958	0.203	Not Significant
	Below 22	146	3.58	2.013		
Communication	Above 22	96	2.99	1.310	0.906	Not Significant
	Below 22	146	3.14	1.286		
Basic	Above 22	96	2.72	2.025	0.244	Not Significant
	Below 22	146	2.78	1.874		
ICT in Education	Above 22	96	1.83	1.185	0.584	Not Significant
	Below 22	146	1.75	1.094		
Hardware	Above 22	96	2.56	1.238	1.491	Not Significant
	Below 22	146	2.82	1.378		
Software	Above 22	96	2.03	1.325	0.256	Not Significant
	Below 22	146	1.99	1.339		
ICT Awareness	Above 22	96	21.77	5.592	0.693	Not Significant
	Below 22	146	22.25	4.967		

(Table value of 't' at 5% level of significance is 1.96)

**Table -2: Difference between ICT Awareness of Prospective B.Ed Teachers by their Marital Status**

Dimensions	Marital Status	N	Mean	S.D	't' value	Remarks
Network	Married	41	2.20	1.400	0.831	Not Significant
	Un Married	201	2.40	1.470		
Internet	Married	41	3.73	1.924	0.079	Not Significant
	Un Married	201	3.71	1.852		
Protocol	Married	41	3.66	1.905	0.195	Not Significant
	Un Married	201	3.59	2.008		
Communication	Married	41	2.90	1.375	0.977	Not Significant
	Un Married	201	3.12	1.279		
Basic	Married	41	2.63	2.107	0.443	Not Significant
	Un Married	201	2.78	1.898		
ICT in Education	Married	41	1.63	1.067	0.913	Not Significant
	Un Married	201	1.81	1.142		
Hardware	Married	41	2.59	1.245	0.706	Not Significant
	Un Married	201	2.75	1.345		
Software	Married	41	1.95	1.161	0.279	Not Significant
	Un Married	201	2.01	1.366		
ICT Awareness	Married	41	21.29	4.921	1.030	Not Significant
	Un Married	201	22.21	5.274		

(Table value of 't' at 5% level of significance is 1.96)

**Table -3: Difference between ICT Awareness of Prospective B.Ed Teachers by their Levels of study**

Dimensions	Levels of Study	N	Mean	S.D	't' value	Remarks
Network	UG	196	2.36	1.466	0.121	Not Significant
	PG	46	2.39	1.437		
Internet	UG	196	3.79	1.844	1.296	Not Significant
	PG	46	3.39	1.915		
Protocol	UG	196	3.64	2.001	0.638	Not Significant
	PG	46	3.43	1.940		
Communication	UG	196	3.10	1.315	0.354	Not Significant
	PG	46	3.02	1.220		
Basic	UG	196	2.78	1.938	0.321	Not Significant
	PG	46	2.67	1.921		
ICT in Education	UG	196	1.77	1.108	0.445	Not Significant
	PG	46	1.85	1.229		
Hardware	UG	196	2.73	1.332	0.379	Not Significant
	PG	46	2.65	1.320		
Software	UG	196	1.98	1.318	0.468	Not Significant
	PG	46	2.09	1.396		
ICT Awareness	UG	196	22.18	5.108	0.742	Not Significant
	PG	46	21.54	5.691		

(Table value of 't' at 5% level of significance is 1.96)

**Table -4: Difference between Teaching Competency of Prospective B.Ed Teachers by their age**

Dimensions	Age	N	Mean	S.D	't' value	Remarks
Classroom Management	Above 22	96	12.69	5.147	4.458	Significant
	Below 22	146	15.59	4.822		
Teaching Aids	Above 22	96	16.30	6.000	4.629	Significant
	Below 22	146	19.70	5.295		
Extra Curricular Activities	Above 22	96	6.58	2.904	4.279	Significant
	Below 22	146	7.94	2.021		
Curricular Activities	Above 22	96	12.23	4.787	4.682	Significant
	Below 22	146	15.33	5.196		
Communication	Above 22	96	16.33	6.558	4.487	Significant
	Below 22	146	20.01	6.028		
Teaching Methodology	Above 22	96	14.71	6.649	4.839	Significant
	Below 22	146	18.56	5.642		
Ethics of Teaching	Above 22	96	9.40	4.318	3.963	Significant
	Below 22	146	11.69	4.468		
Rapport with Students	Above 22	96	3.19	1.531	4.066	Significant
	Below 22	146	3.99	1.472		
Teaching Competency	Above 22	96	89.81	35.159	4.854	Significant
	Below 22	146	111.18	32.359		

(Table value of 't' at 5% level of significance is 1.96)

**Table -5: Difference between Teaching Competency of Prospective B.Ed Teachers by their Marital Status**

Dimensions	Marital	N	Mean	S.D	't' value	Remarks
Classroom Management	Married	41	14.85	6.031	0.567	Not Significant
	Un Married	201	14.35	4.956		
Teaching Aids	Married	41	17.66	6.122	0.836	Not Significant
	Un Married	201	18.49	5.758		
Extra Curricular Activities	Married	41	7.73	2.941	0.932	Not Significant
	Un Married	201	7.33	2.397		
Curricular Activities	Married	41	13.68	5.497	0.556	Not Significant
	Un Married	201	14.18	5.211		
Communication	Married	41	18.22	7.627	0.361	Not Significant
	Un Married	201	18.62	6.247		
Teaching Methodology	Married	41	16.88	7.356	0.172	Not Significant
	Un Married	201	17.06	6.128		
Ethics of Teaching	Married	41	10.59	5.445	0.302	Not Significant
	Un Married	201	10.82	4.349		
Rapport with Students	Married	41	3.66	1.892	0.049	Not Significant
	Un Married	201	3.67	1.467		
Teaching Competency	Married	41	102.39	40.299	0.062	Not Significant
	Un Married	201	102.77	33.966		

(Table value of 't' at 5% level of significance is 1.96)



**Table -6: Difference between Teaching Competency of Prospective B.Ed Teachers by their Levels of Study**

Dimensions	Levels of Study	N	Mean	S.D	't' value	Remarks
Classroom Management	UG	196	15.37	4.733	6.282	Significant
	PG	46	10.46	4.961		
Teaching Aids	UG	196	19.52	5.056	7.083	Significant
	PG	46	13.37	6.252		
Extra Curricular Activities	UG	196	7.84	2.187	6.005	Significant
	PG	46	5.54	2.873		
Curricular Activities	UG	196	15.19	4.865	7.403	Significant
	PG	46	9.43	4.209		
Communication	UG	196	19.83	5.985	6.881	Significant
	PG	46	13.13	5.741		
Teaching Methodology	UG	196	18.24	5.705	6.673	Significant
	PG	46	11.87	6.351		
Ethics of Teaching	UG	196	11.67	4.316	6.892	Significant
	PG	46	6.98	3.389		
Rapport with Students	UG	196	3.93	1.478	5.870	Significant
	PG	46	2.54	1.295		
Teaching Competency	UG	196	109.98	31.722	7.373	Significant
	PG	46	71.70	31.575		

(Table value of 't' at 5% level of significance is 1.96)

**Table -7: Relationship between ICT awareness and Teaching Competency of Prospective B.Ed Teachers**

Sample	Calculated 'g' value	Table 'g' value	Remarks
Total (242)	0.078	0.113	Not Significant

## Findings

Findings based on the hypotheses and followed by data analysis are given as follows;

1. Table -1 shows that; there is no significant difference between age above 22 and age below 22 Prospective B.Ed Teachers in their ICT Awareness.
2. Table -2 shows that; there is no significant difference between married and unmarried Prospective B.Ed Teachers in their ICT Awareness.
3. Table -3 shows that; there is no significant difference between UG and PG Prospective B.Ed Teachers in their in their ICT Awareness.

4. Table -4 shows that; there is a significant difference between age above 22 and age below 22 Prospective B.Ed Teachers in their Classroom Management, Teaching Aids, Extra Curricular Activities, Curricular Activities, Communication, Teaching Methodology, Ethics of Teaching, Rapport with Students and Teaching Competency.
5. Table -5 shows that; there is no significant difference between married and unmarried Prospective B.Ed Teachers in their Teaching Competency.
6. Table -6 shows that; there is a significant difference between UG and PG Prospective B.Ed Teachers in their in their Classroom Management, Teaching Aids, Extra Curricular Activities, Curricular Activities, Communication, Teaching Methodology, Ethics of Teaching, Rapport with Students and Teaching Competency.
7. Table -7 shows that; there is no significant relationship between Teaching Competency and ICT Awareness of Prospective B.Ed Teachers.

### **Conclusions**

Based on findings; study shows that there is no significant difference between the ICT Awareness of Prospective B.Ed Teachers by their age, levels of study and marital status. In teaching competency; Age below 22 Prospective B.Ed Teachers are better than age above 22 in their Classroom Management, Teaching Aids, Extra Curricular Activities, Curricular Activities, Communication, Teaching Methodology, Ethics of Teaching, Rapport with Students and Teaching Competency. There is no significant difference between the Teaching Competency of Prospective B.Ed Teachers by their marital status. UG Prospective B.Ed Teachers are better than PG in their Classroom Management, Teaching Aids, Extra Curricular Activities, Curricular Activities, Communication, Teaching Methodology, Ethics of Teaching, Rapport with Students and Teaching Competency. But there is no significant relationship between Teaching Competency and ICT Awareness of Prospective B.Ed Teachers. So the findings conclude that ICT awareness have to be improved; where as younger prospective B.Ed teachers are good in their Teaching Competency; shows better future of education.

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## **A STUDY ON THE PROBLEM OF EVE TEASING IN INDIA**

**(WITH REFERENCE TO UNIVERSITY OF LUCKNOW)**

**\* Anoop.K.Singh, \*\* Kirti Vikram Singh**

### ***Abstract***

Eve-teasing is a euphemism used in India and Bangladesh for public sexual harassment or molestation of women by men with eve being a reference to the biblical eve. Considered a problem related to delinquency in the youth a form of sexual aggression, and growing menace throughout the Indian subcontinent, eve-teasing ranges to severity from sexually suggestive remarks, inadvertent brushing in public places, catcalls, to outright groping and sometimes with a coy suggestion of 'innocent fun', just as euphemism used to describe it in the region, making it appear innocuous and hence warrant no liability on the part of the perpetrator, that is why, many feminist and voluntary organizations have suggested that the expression 'eve teasing' be replaced by a more appropriate expression. According to them, considering the semantic roots of the term in India eve teasing refers to the temptress nature of eves, making teasing a norm rather than an aberration. (Gangoli, 2007:63)

In fact it is a crime easy to commit, but difficult to prove as eve-teasers often devise indigenous ways to attack women, even though many feminist writers term it as 'little rapes'. (Dobash, 1998:58) Though the problem received public and media attention in 1960s, it was in the coming decades, when more and more women started going out to colleges and work independently which means no longer accompanied by a male escort which had been a norm in traditional society that the problem grew to an alarming proportion. (Natrajan, 2008).

***Key words:*** Eveteasing, Sexual harassment, Harassment, human rights.

Eve-teasing is a euphemism used in India and Bangladesh for public sexual harassment or molestation of women by men with eve being a reference to the biblical eve. Considered a problem related to delinquency in the youth a form of sexual aggression, and growing menace throughout the Indian subcontinent,

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eve-teasing ranges to severity from sexually suggestive remarks, inadvertent brushing in public places, catcalls, to outright groping and sometimes with a coy suggestion of 'innocent fun', just as euphemism used to describe it in the region, making it appear innocuous and hence warrant no liability on the part of the perpetrator, that is why, many feminist and voluntary organizations have suggested that the expression 'eve teasing' be replaced by a more appropriate expression. According to them, considering the semantic roots of the term in India eve teasing refers to the temptress nature of eves, making teasing a norm rather than an aberration. (Gangoli, 2007:63)

In fact it is a crime easy to commit, but difficult to prove as eve-teasers often devise indigenous ways to attack women, even though many feminist writers term it as 'little rapes'. (Dobash,1998:58) Though the problem received public and media attention in 1960,s ,it was in the coming decades ,when more and more women started going out to colleges and work independently which means no longer accompanied by a male escort which had been a norm in traditional society that the problem grew to an alarming proportion. (Natrajan,2008). To curb this menace govt. intended to take remedial measures by judicial and law enforcement .also seen during this period was a marked rise of not just number women coming forward to report incidence of eve-teasing like cases of sexual harassment due to changing public opinion against eve-teasers. What also grew in this period was the severity of eve-teasing incidence, which in some cases lead to acid –throwing an. The very foundation of India as a nation is based on non-violence. However, it is indeed a matter of shame that Indian Women are not only considered inhuman but also have to face violence, harassment and teasing constantly. As a matter of fact, barring a few legally recognized crimes against women, such as dowry and sati, most of the atrocities against them are not counted as crimes even. Unfortunately, even women have recognized violence against them as fait accompli, statistically speaking, globally crime against women have been increasing. In India, crimes against women have been increasing at the rate of 20 per cent per annum. Of, all the crimes taking place in the country, 7 per cent crimes are held against women. Rape, molestation, teasing, sexual misbehavior, abduction, prostitution, dowry related crimes, feticide, infanticides etc. are some of the crimes committed against the women. Of these, eve teasing is the most common anti-social act that the woman has to face in her day-to-day life.

Eve teasing is not a myth but a reality. It exists and exists everywhere. It has been a serious menace in our society. The commission of this crime is an indicator of how far the women folk are insecure in our society. Eve teasing which involves the verbal and physical harassment of women is the scourge of the urban society. Eve teasing and its aggravated form, sexual harassment of women are crimes, which are almost a recognized male sport. It is the response

that women get for staying within the Lakshman Rekha of the home. It is probably the result of the deep-rooted male psyche to put down women who do not fit the notions of propriety. A woman cannot go out in the street without the fear of being harassed by strange men. In busy crowded areas the women get pawed and pressed, jostled, rubbed and squeezed, the miscreant taking advantage of the press of the crowd and indulging in what physical intimacy the situation permits. The miscreants hurl indecent remarks. All women suffer from the fear of being teased, irrespective of her age, health, appearance, mental state etc. This has affected the peace of mind of women and they are not able to move freely and participate in the public life of the community. Sexual harassment crosses all professions, social strata and the level of income. It can be found in private organizations as well as in a government office, though some professions seen more prone to it than others. This situation poses real problems, especially for working women. Women are subjected to various forms of molestation, physical and mental torture and eve teasing at home, in street and public place, places of entertainment, campus of educational institutions, prisons, rescue homes, crowded places like markets, mela, festivals, railway platforms and bus stands, running trains and buses, workplace etc. This is a challenge to our constitution, which ensures all citizens the right 'to move freely throughout the territory of India'.

### **Definitions of Eve Teasing**

- ◆ According to Indian Law 'Whenever a person utters any word makes any sound or gesture or exhibits an object or intrudes upon the privacy of a woman with intent to insult the modesty of such woman the offence under section 509 IPC is committed.'
- ◆ Openstoria Directory Encyclopedia on eve teasing describes it, "is a euphemism used in India for sexual harassment of molestation of women by men. Considered a growing problem through out the country, eve teasing in severity from sexually colored remarks to outright groping."
- ◆ State Government (N.Delhi, 1984) on eve teasing describes it as "when a man by either by speaking or by signs or by visible representation or by gestures does any act in public place, signs, recites or utters any indecent word or song or ballad in any public place to the annoyance of any women."
- ◆ Ashraf, Nehal (1997) in his work 'Crime Against Women' included following deeds under eve teasing.

### Crime against Women - Molestation, Eve Teasing and Sexual Harassment

State / India	Molestation			Eve-Teasing & Sexual Harassment		
	I	P	R	I	P	R
India	34175	100	3.1	9984	100.0	0.9
Andra Pradesh	3595	10.5	4.5	2508	25.1	3.1
Arunachal Pradesh	67	0.2	5.8	0	0.0	0.0
Assam	899	2.6	3.1	19	0.2	0.1
Bihar	451	1.3	0.5	13	0.1	0.0
Chattisgarh	1450	4.2	6.4	132	1.3	0.6
Delhi	762	2.2	4.8	225	2.3	1.4
Goa	30	0.1	2.0	8	0.5	0.1
Gujarat	802	2.3	1.5	104	0.1	0.2
Haryana	380	1.1	1.7	597	6.0	2.6
Himachal Pradesh	286	0.8	4.5	29	0.3	0.5
Jammu-Kashmir	830	2.4	7.3	371	3.7	3.3
Jharkhand	293	0.9	1.0	36	0.4	0.1
Karnataka	185	4.6	2.8	71	0.7	0.1
Kerala	2339	7.0	6.8	175	0.5	1.8
Madhya pradesh	6426	18.8	9.7	792	7.9	1.2
Maharashtra	3228	9.4	3.1	919	9.2	0.9
Manipur	25	0.1	1.0	0	0.0	0.0
Meghalaya	44	0.1	1.8	0	0.0	0.0
Mizoram	49	0.1	5.2	4	0.0	0.4
Nagaland	7	0.0	0.3	0	0.0	0.0
Orissa	2238	6.5	5.8	14	1.8	0.5
Punjab	308	0.9	1.2	43	0.4	0.2
Rajasthan	2503	4.1	7.3	28	0.3	0.0
Sikkam	38	0.1	6.6	0	0.0	0.0
Tamilnadu	1764	5.2	2.7	665	6.7	1.0
Tripura	161	0.5	4.7	1	0.0	0.0
Uttar Pradesh	1835	5.4	1.0	2881	28.9	1.6
Uttarakhand	100	0.3	1.1	89	0.9	1.0
West Bengal	1572	4.6	1.8	54	0.5	0.1

**Notes:** I- Incidence P- Percentage R-Rate (Number of Crimes per 1,00,000 inhabitants)

**Source:** India, Ministry of Home affairs, National Crime Records Bureau. (2006).

Crime in India 2005. New Delhi. P.249, 251, 253.

- ◆ Indulging in cat-calls, waiving wolf whistling, winking and uttering indecent remarks about female anatomy or singing obscene songs in such a way so as to be heard by women. Songs are deliberately chosen from popular film so that these could appear innocuous if it came to an argument.
- ◆ Nudging past hurriedly, pressing against women, trying to pinch the bottoms or breasts and disappearing in the crowd. If caught they pretend that rubbing was all-accidental. They get a free hand during the breakdown of power. In the process some times the aged women are not spared from this kind of menace.
- ◆ Eve- teasers get up in crowded buses and trains, prefer to stand or sit next to ladies and depending on the situation, the teaser some times get himself sand witched with her in the crowded and leans on her.
- ◆ In recent years, in some universities these forms of eve teasing have replaced with brazen acts as dupatta snatching, back patting and in some cases even forced kissing.
- ◆ Eve teasing has also taken the form of telephoning a girl and uttering obscene and suggestive words.
- ◆ Mailing anonymous love letters in the filthiest languages.
- ◆ Exhibiting male genital in front of women and thereby deriving strange prevented sexual pleasure of it.

This definition has been made operational definition for the present study.

### **Law and Eve-teasing**

Eve teasing by itself is not an offence under any law at present in India. But the other countries of the world have recognized it as the most heinous violence. Till recently, it came under human right violation and sex-based differentiation in India. In *Vishaka case* the Supreme Court forwarded certain guidelines in this respect holding employees of the concerned organization responsible for harassment of working -women. According to the Supreme Court guidelines forcefully establishing physical relationship, requesting or demanding sexual favour, using lewd language, exhibiting vulgar picture or film using verbal or non- verbal vulgar language will come under the category of sexual harassment. A close reading of the following sections of the Indian Penal Code would clearly indicate that they would cover the substance of the act.



*Section 294,IPC-* It states that ‘ whoever to the annoyance of others (a) does any obscene act in any place, or (b) sings, recites or utters any obscene act in any public place, or (b) sings, recites or utters any obscene song, ballads or words in or near any public place’ is liable to be punished with imprisonment or with fine. (Cognizable, Bailable and Trialable offence).

*Section 354,IPC-* Assault or criminal force to a women with the intend to outrage her modesty- whoever assaults or uses criminal force to any women, intending to outrage or knowing it to be likely that thereby outrage her modesty, shall be punished with imprisonment of either description of term which may extend to two years, or with fine both.

*The Indecent Representation of Women (Probation) Act (1987)-* Although it is not known to have been used I cases of sexual harassment, the provisions of this act have the potential to be used if an individual harasses another with books, photographs, paintings, films, pamphlets packages etc. containing ‘ indecent representation of women’, they are liable for a minimum sentence of two years.

### **Constitutional Safeguards**

*Article 14:* The state shall not deny any person’s equality before law, and equal protection of Laws with in the territory of India.

*Article 15:* The state shall not discriminate against any citizen on the grounds of religion, race, caste, sex, and place of birth or any of them.

*Article 15(3):* It permits special provisions in favour of women.

*Article 16:* Equality of opportunity in the matter of public employment or appointment under the state irrespective of sex.

*Article 42:* The state shall make just provision for securing just and humane conditions of work and maternity relief.

### **Statement of the Problem**

There has been a huge change in the life style, values, cultural norms and attitudes of the people with time. Although modernization has made life of the people comfortable on hand but it has also increased the rates of crime and atrocities against the women. The people on a large scale are practicing not only the old methods of violence but also the new and the more barbaric ones. One such forms of violence have been the increasing attacks often very fatal ones on young girls by their so-called jilted lovers.

Amongst the most serious problems faced by the women, especially in the resent times, are sexual harassments and eve teasing. Both these problems

have put a blot on the Indian society. In recent years the rate of these crimes have gone on the higher side and the women are forced to accept some forms of sexual harassments as a part of their life, for which they cannot do anything but to remain silent. Verbal eve teasing has become habitual in the society, so the reaction of the women over it is usually spontaneous and the most obvious ones, but not many women are ever able to display their reactions over physical eve teasing, due to fearfulness and embarrassment. Very less research and documentation has been done on this specific evil and its impact on the personality of the women. So this study shall not only bridge the gap in our knowledge, but will also provide a better understanding on the eve teasing mechanism and reaction of girls towards this social evil.

There is no other way to win back the social equality and respect of the females, other than fighting against these social evils, which has crept in the society. Thus the first step, which must be taken in this direction, should be spreading awareness about the legal rights of the women so that they may no longer be the victim of in just and irrational society. So this work aims to find out level of legal awareness among the respondents regarding this social violence.

It is the most common allegation made on the part of the women, when a sexual harassment takes place; that, it was her fault. It is one of the most horrifying common crimes where the victim is treated as the offender, her sexual history, manners of dressing is highlighted to decide whether or not she 'asked for it'. The task of the authorities and the general public is made easy as they shrug off their responsibilities by shifting the blame to the women it self.

Now a days not only the women but also the adolescence girls are also becoming the victims of this social violence. A conventional and an unduly fixed mental image of how an ideal Indian women should behave, dress or wear are constructed which makes a huge impact over any discussion on sexual harassment topic.

Women in Indian society are not new to the violence, humiliation, atrocities and exploitation, which are being practiced against them by the members of the society. Though, the changing times have made people to accept that the violence against the women is increasing at a rapid rate and now it would be better to adopt the 'sooner and the better theory' if any changes are intended to be brought in the society and in the position of women.

### **Objectives of the Present Study**

- ◆ To find out the nature and extent of eve- teasing.
- ◆ To explore the views of the girl students on eve teasing.
- ◆ To find out the causes of eve teasing.

- ♦ To find out the awareness regarding the laws on eve teasing.
- ♦ To suggest measures to remove the problem.

### **Context of Study**

The study was done in the context of University of Lucknow with sample size of 400 respondents (girl students) to explore their views regarding eve-teasing.

### **Universe of Study**

The universe of the study under taken was Lucknow, Lucknow University Campus area.

### **Sampling, Tools & Techniques of Data Collection.**

The method of data collection in present study was Focused Group Discussion & Structured Interviews and Quasi- Participant Observation. Focused Group Discussion and Interviews were undertaken in order to understand the general views of the girl students about eve teasing, as it brings together different people and gives the opportunity to verify some facts about the problem. Focused group participants were drawn from the Sociology & Social Work Department of University of Lucknow. Simple Random Sampling was done and out of 1200 girl students (approx.) studying in Under graduate, Post graduate, and Diploma Courses, 400 were selected and interviewed. Few dedicated students of Sociology and Social Work department facilitated them. The researcher along with the facilitators contacted the participants for focus group discussions and interviews, explained the purpose of the study to the, arranged venues for the discussions & interviews. Both primary and secondary sources of data collection were used. The main issues discussed and checked in focused group discussions and interviews were:

- ♦ Experiences regarding eve teasing.
- ♦ Places used for eve teasing.
- ♦ Methods of eve teasing.
- ♦ Probable age groups of accuse.
- ♦ Reasons behind the increase of the problem.
- ♦ Major causes of eve teasing.
- ♦ Feelings in such situations.
- ♦ Steps taken against the teasers.
- ♦ With whom the incidents were shared and their reactions.
- ♦ Reasons for not approaching the university authorities or the police.
- ♦ Problems faced while lodging complains against the act.

- ♦ Respondent's reaction on seeing teasing with the other girls.
- ♦ Awareness regarding the laws related to eve teasing.
- ♦ Punishment to the accuse.

## **I-Nature and Extent of Eve teasing**

### **Marital status of the Respondents**

<b>Marital Status</b>	<b>No. Respondents</b>	<b>Percentage</b>
Married	60	15.00
Unmarried	340	85.00
<b>Total</b>	<b>400</b>	<b>100.00</b>

The table above gives us an idea about the respondent's marital status. In this study the researcher discovered that 15 per cent of the respondents were married, while 855 of the respondents were unmarried. So the researcher found that most of the victims of eve teasing were unmarried.

### **Religion**

<b>Religion</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Hindu	232	58.00
Muslim	112	28.00
Sikh	20	5.00
Christian	30	7.50
Other	6	1.50
<b>Total</b>	<b>400</b>	<b>100.00</b>

The table above gives the distribution of the respondents according to the religion. In this study the researcher came to know that 28 per cent of the respondents were Muslims, where as 58 per cent of them were Hindus, 5 per cent of them were Sikhs and approximately 9 per cent of them belonged to other communities. So the researcher discovered that most of the victims belonged to the Hindu community who generally are found in the bulk in our society.

### **Caste**

<b>Caste</b>	<b>No. of Respondents</b>	<b>Percentage</b>
SC	40	10.00
ST	32	8.00
OBC	24	6.00
General	304	76.00
<b>Total</b>	<b>400</b>	<b>100.00</b>

The table above indicates the distribution of the respondents according to the caste. In the present study the researcher found that approximately 76 per cent of the respondents belonged to the General caste and 10 per cent of them belonged to the Scheduled Caste groups, while 8 per cent of them were Scheduled Tribes and 6 per cent of them were OBC's.

### **Education**

Education	No. of Respondents	Percentage
Under Graduate	48	12
Graduate	180	45
Post-Graduate	132	33
Other	40	10
<b>Total</b>	<b>400</b>	<b>100.00</b>

The table above gives us an idea about the distribution of the respondents according to their educational qualifications. In the present study most of the respondents were (45per cent) Graduates. While 33 per cent respondents were Post- Graduates and about 12 per cent of them were Under Graduates. In conclusion it can be said that women of all the educational levels were victims of eve teasing.

### **Socio-Economic Status**

Socio-Economic Status	No. of Respondents	Percentage
Middle	320	80.00
Upper Middle	80	20.00
<b>Total</b>	<b>400</b>	<b>100.00</b>

The table above gives us an idea about the socio-economic status of the respondents. In the present study the investigator found out that a large number of the respondents i.e. 80 per cent belonged to middle class, while 20 per cent of them belonged to the upper middle class. So it can be concluded that majority of the victims were from the middle class.

### **Occupation**

Occupation	No. of Respondents	Percentage
Employed	160	40
Unemployed	240	60
<b>Total</b>	<b>400</b>	<b>100.00</b>

The table above gives the distribution of the respondents on the basis their occupational status. Researcher discovered that 60 per cent of the respondents were unemployment where as only 40 per cent of them were employment.

### Family Structure

Family	No. of Respondents	Percentage
Joint	108	27.00
Nuclear	292	73.00
<b>Total</b>	<b>400</b>	<b>100.00</b>

The above table clearly indicates the family structure of the respondents. Here the researcher found that 27 per cent of the respondents were living in the joint families and the rest 75 per cent in the nuclear families.

### Experience of Eve Teasing

Experience	No. of Respondents	Percentage
Yes	380	95.00
No	20	5.00
<b>Total</b>	<b>400</b>	<b>100.00</b>

The table above shows that 95 per cent of the respondents had experienced eve teasing in their day-to-day life. Only 5 per cent told that they have no such experience.

### Number of Experience

Number	No. of Respondents	Percentage
Once	38	10.00
Often	266	70.00
Daily	50	13.16
Any other	26	6.84
<b>Total</b>	<b>380</b>	<b>100.00</b>

A question regarding number of experiences of eve teasing was asked. About 70 per cent of the respondents told that very often they have to face such an incident, were as 10 per cent of them felt that such an incident happened only once. About 13.16 per cent of the respondents had to face eve teasing daily. Thus data highlights that a large number of the respondents faced eve teasing very often.

### Places Used for Eve Teasing

Places	No. of Respondents	Percentage
In Dark	23	06.01
In bus	145	38.16
Road side	187	49.21
Any other	25	06.58
<b>Total</b>	<b>380</b>	<b>100.00</b>

The table above highlights the places used in eve teasing. This indecent act mostly happens either in very crowded places or in the places where it is difficult for the victim to get help. The table above reveals that majority of the respondents were teased on the road-side (49.21 per cent), whereas 38.16 per cent of the incidents took place in the crowded buses. Only 5 per cent of the incident took place in dark. It can be concluded that about 49.21 per cent cases of eve teasing took place on the roadsides because there the victims cannot easily approach for help.

### Methods Used in Eve Teasing

Methods	No. of respondents	Percentage
Indecent Remarks	100	26.32
Obscene calls and E-mails	22	5.79
Pinched/Pocked	30	7.89
Sang obscene songs	114	30.00
Try to outrage modesty	7	1.84
Touch any part of Body	79	20.79
All Above	28	7.37
<b>Total</b>	<b>380</b>	<b>100.00</b>

The eve teasing most commonly took the form of indecent remarks, touch any part of body, try to outrage modesty, pinched/ pocked, sang obscene songs or in the form of obscene calls and e-mails.

The table above shows the methods used in eve teasing. It is evident from the table that in 26.32 per cent of the cases indecent remarks were passed, while in 30.00 per cent of the cases obscene songs were sung, in 20.79 per cent of the cases the culprit tried to touch the body parts of the respondent, while in 7.89 per cent of the cases they were pinched or pocked. About 5.79 per cent of the respondents had to receive obscene calls and e-mails from the culprits. While 7.37 per cent had to face all the above. Even 1.84 per cent of the respondents were tried to be raped. Thus the data suggests that singing obscene songs is the most common method of eve teasing.

### Probable Age Group of Accused

Age group	No. of Respondents	Percentage
Adolescent	65	17.11
Middle age	224	58.95
Old Age	87	22.89
Any other	4	1.05
<b>Total</b>	<b>380</b>	<b>100.00</b>

Age of the accuse plays an important role in this kind of study. It is generally believed that adolescents are more prone in all these kinds of activities. The table above indicates that only 17.11 per cent accused were adolescent were involved in the act of eve teasing. About 58.95 per cent of them were middle aged, and 22.89 per cent were in old age and 1.05 per cent belonged to any other.

To conclude, it can be said that 58.95 per cent accused were middle-aged men. Thus, the assumption that the adolescent were the more involved in such activities is wrong.

### Eve Teasing in College Premises

Teasing in College	No. of Respondents	Percentage
Yes	122	32.11
No	258	67.89
<b>Total</b>	<b>380</b>	<b>100.00</b>

The table above clearly indicates that only 32.11 per cent of the respondents had faced the incident of eve teasing in the colleges. About, 67.89 per cent respondents did not face it in the college premises. Thus, it can be concluded that even the college premises are not safe place for the girl.

## II-Views of the Respondents and Measures taken by the Authorities

### Feeling in Such Situation

Feelings	No. of Respondents	Percentage
Revengeful	11	38.95
Guilty	148	1.84
Irritated	7	50.79
Helpless	193	2.89
Any other	21	5.53
<b>Total</b>	<b>380</b>	<b>100.00</b>



The table above gives us an indication about the feelings of the victims in such situations. The table above shows that in 50.79 per cent of cases victims felt irritated, in 38.95 per cent of the cases, they felt revengeful, in 2.89 per cent of the cases they felt helpless and in 1.84 per cent cases they felt revengeful.

Thus, it can be safely concluded that more than half of the victims (50.79 per cent) felt irritated in such situations.

### **Steps Taken Against the Teaser**

Steps Taken	No. of Respondents	Percentage
Yes	171	45.00
No	209	55.00
<b>Total</b>	<b>380</b>	<b>100.00</b>

Both eve teasing and sexual harassment calls for embarrassment for the victim. In order to know their action against the teaser, the researcher asked the questions regarding the steps taken by them against the teasers.

The table above clearly indicates that more than half of the respondents (55.00 per cent) did not take any step against the accused. While, 45.00 per cent victims took the step against the accused persons.

### **Share Such Incidence**

Incidence Shared	No. of Respondents	Percentage
Yes	345	90.79
No	35	09.21
<b>Total</b>	<b>380</b>	<b>100.00</b>

The table above highlights that only 09.21 per cent of the victims shared such incidents with others, while 90.79 per cent of them remained silent, as they felt that people might say that they themselves are responsible for the incident, because girls provoke boys.

### **Person with Whom Problem was Shared**

Shared With	No. of Respondents	Percentage
Parents	131	37.97
Relative	6	01.74
Friends	182	52.75
Any other	26	07.54
<b>Total</b>	<b>345</b>	<b>100.00</b>

Out of 380 respondents, about 92.46 per cent of them shared the incident with their nearest person. In this more half (52.75 per cent) shared the incident with their friends, while 37.97 per cent of them shared it with their parents,

about 01.74 per cent of them shared it with their relatives and 07.54 per cent of them with others.

### Reaction on Sharing

Reaction	No. of Respondents	Percentage
Shocked	48	13.91
Indifferent	124	35.94
Sympathetic	82	23.76
Angry	13	0.77
Any other	78	22.61
<b>Total</b>	<b>345</b>	<b>100.00</b>

The table above highlights the reaction of the people after listening about the incident. About, 13.91 per cent of them felt shocked, while 35.94 per cent acted indifferently, about 23.76 per cent showed sympathy towards the victim, while 0.77 per cent got angry with them. Approximately 22.61 per cent gave any other reaction.

### Informed College Authorities

Informed	No. of Respondents	Percentage
Yes	21	05.52
No	101	26.58
Not Applicable	258	67.89
<b>Total</b>	<b>380</b>	<b>100.00</b>

When the respondents were asked that whether they informed their college authorities about such acts, only 05.52 per cent of the victims answered in affirmative, while 26.58 per cent of the respondents did not informed their college or university authorities regarding the matter. While, 67.89 per cent of the respondents told that they were never teased in the university campus.

### Action Taken

Action Taken	No. of Respondents	Percentage
Yes	11	52.38
No	10	47.62
<b>Total</b>	<b>21</b>	<b>100.00</b>

The table above shows that out of 380 applicable respondents, 122 were teased in the university campus, and out of them only 21 (05.52 per cent) lodged complains to the authorities and only for 52.38 per cent of 21, steps were taken and for 47.62 per cent, steps were not taken and 94.47 per cent were not applicable, who were not teased in the university.

### Approached Police For Help

Approached	No. of Respondents	Percentage
Yes	30	07.89
No	350	92.11
<b>Total</b>	<b>380</b>	<b>100.00</b>

The table above highlights that only 07.89 per cent victims have ever approached police for help while 92.11 per cent did not inform the police about the incidents. So, it can be safely concluded 92.11 per cent of the cases were unreported in the police station because the victims do not approached the police due to fear.

### Reaction of Police

Reaction	No. of Respondents	Percentage
Lodged Complain	10	33.33
Did not Lodge	20	66.67
<b>Total</b>	<b>30</b>	<b>100.00</b>

Out of 380 respondents having the experience of eve teasing, only 30 (07.89 per cent) of them asked the police to intervene, out of them only 33.33 per cent of the victim were able to get their complain registered in the police station. While police did not accepted the complains of 66.67 per cent of the victims, even after being approached by the victims.

### Source who Guided Respondent to Police Station

Source	No. of Respondents	Percentage
Friends	7	70.00
Any other	3	30.00
<b>Total</b>	<b>10</b>	<b>100.00</b>

The tables above reveals that 70.00 per cent cases approached to the police were guided by the friends and about 30.00 per cent by any other & 97.37 per cent cases were not applicable.

Thus we can conclude that parents are generally reluctant to guide their daughters or the victims to lodge the police complaint due to fear of being insult in the society.

### Person who Accompanied The Respondents to Police Station

Person	No. of Respondents	Percentage
Friend	7	70.00
Any other	3	30.00
<b>Total</b>	<b>10</b>	<b>100.00</b>

The study reveals that friends of the victim reported eve teasing to the police. While 97.37 per cent are not applicable, as they did not lodge any reports against the culprits.

### **Problem Faced While Lodging Complain**

<b>Problem Faced</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Yes	5	50.00
No	5	50.00
<b>Total</b>	<b>10</b>	<b>100.00</b>

In the table above we see that out of 10 cases (33.33 per cent) who went to register complain in the police station, only 50.00 per cent victims were able to lodge a complain against the accuse. Thus, we can conclude that often police person takes the cases of eve teasing lightly.

### **Respondents Reaction on seeing Teasing with other girls**

<b>Reactions</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Leave the Situation	38	10.00
Try to catch accused	26	06.84
Help the girls	244	64.21
None	92	24.21
<b>Total</b>	<b>380</b>	<b>100.00</b>

When the respondents were asked what would they do or how they will react if they see other girls being harassed in the same manner in which they were teased. About 64.21 per cent of the respondents said that they will help the victim, 10.00 per cent of them said that they will leave the place, while 06.84 per cent respondents said that they will try and catch the accuse and 24.21 per cent said that they shall do nothing.

### **Reason for Teasing Girls**

<b>Reasons</b>	<b>No. of Respondents</b>	<b>Percentage</b>
To satisfy sexual Desires	174	45.79
To make girls Inferior	76	20.00
Jealous of Women's Progress	53	13.94
Peer pressure	15	03.94
All Above	11	02.89
Any other	51	13.42
<b>Total</b>	<b>380</b>	<b>100.00</b>

In the present study the respondent's opinion regarding the causes of eve teasing was also taken. The data revealed that about 45.79 per cent of the

respondents believed that people tease the girls in order to satisfy their sexual desires, 20.00 per cent of the respondents felt that girls were teased in order to make them feel inferior. While 13.94 per cent of the respondents felt the people who are jealous of women's progress generally does such acts. About 03.94 per cent of the respondents felt that peer pressure compels them to act in such a way. While 02.11 per cent of the respondents felt that all of the above reasons are responsible and 13.42 per cent gave other reasons.

Thus it can be concluded that the major reason why people involve themselves in the acts of eve teasing is that they want to satisfy their sexual desires, as revealed in the study by 45.79 per cent of the respondents.

### **Reasons of Increasing the Problem**

Reasons	No. of Respondents	Percentage
Dresses of Girls	171	45.00
Electronic Media	152	40.00
Print Media	19	5.00
Any other	38	10.00
Total	380	100.00

The act of eve teasing cannot be explained on the basis of a single factor. Several reasons of eve teasing came in the light after the victims were asked questions regarding the reasons behind the increasing of this problem.

About 45.00 per cent of the respondents felt that some times the dressing sense of the girls make them the victims of eve teasing. While 40.00 per cent of the respondents felt that electronic media and 5.00 per cent felt that print media is responsible, as it has profound influence on the society and it defiles the minds of the people. About 10.00 per cent gave other reasons.

### **Awareness of laws Related to Eve Teasing**

Awareness	No. of Respondents	Percentage
Yes	171	45.00
No	209	55.00
Total	380	100.00

From the table above it is evident that women are still unaware about the existing legislations regarding sexual harassment and eve teasing. As the data reveals that only 45.00 per cent of the respondents were aware of the laws related to eve teasing and more than half, that is 55.00 per cent were not aware.

### Means of Awareness

Means	No. of Respondents	Percentage
Print Media	150	39.47
Electronic media	160	42.10
Both	39	10.26
Awareness campaign by NGOs	31	08.16
<b>Total</b>	<b>380</b>	<b>100.00</b>

As 55.00 per cent of the respondents were unaware about the laws related to eve teasing so they were asked about the means of awareness, because all of the respondents were educated. The table above indicates that 39.47 per cent of the respondents believed that through print media and electronic media (42.10 per cent), awareness could be increased. About 10.26 per cent believed that both the print and electronic media are effective tools to educate the people. While 08.16 per cent of them felt that NGO's should launch an awareness campaign for making the people aware about the laws related to eve teasing.

### Punishment Recommended

Punishment	No. of Respondents	Percentage
Fine	41	10.79
Imprisonment	72	18.94
Both	247	65.00
Other	20	05.26
<b>Total</b>	<b>380</b>	<b>100.00</b>

The table above indicates that the majority of victims i.e. 65.00 per cent recommended both fine and imprisonment as the punishment for the accuse, about 10.00 per cent of them believed that only fine should be imposed, while 18.94 per cent said that only imprisonment is the remedy. About 05.00 per cent recommended other types of punishments for the accuse.

### Analysis of the Findings

Here an analysis of the findings has been done. This analysis is based on the data collected on the basis of the interviews with the respondents. The conclusions, which are drawn here, are not speculations but the existing realities.

- ♦ Women of all the age groups are the victims of this increasing problem.
- ♦ Mostly the unmarried women are targeted. The data collected reveals that about 85.00 per cent of the respondents were unmarried. This problem also happens with the married women but it is comparatively low.

- ◆ Consciously or unconsciously general caste girls face this problem the most i.e. 76.00 per cent, which is more than one third of the cases.
- ◆ One major finding of the study is that, the problem of eve teasing is so deeply rooted in our society that about 95.00 per cent of the respondents had to face it.
- ◆ The data suggests that a large number of respondents experience teasing often, that is 70.00 per cent and it mostly takes place on the roadsides that is 49.21 per cent.
- ◆ The most common methods used for teasing is passing indecent remarks and singing of obscene songs (30.00 per cent).
- ◆ In the study it was proved that middle-aged people are mostly involved in teasing girls (58.00 per cent) in comparison to the adolescents and the older people.
- ◆ More than half of the victims felt irritated whenever they are teased by anyone, while 38.95 per cent of them felt revengeful.
- ◆ Family and peer group plays important role in decision-making of the girls.
- ◆ It was discovered that that girls felt more comfortable in sharing such incidents with their friends instead of parents.
- ◆ On listening the problem people gave indifferent reaction (35.94 per cent), it may be because the problem is becoming very common in the metros. But an eve teasing, if not properly tackled can have adverse effect on the personality of the victim.
- ◆ Even the college premises are not a safe place for the girls as 32.11 per cent of the girls were teased in the college or university premises. Most of the girls who were teased in the campus itself did not inform their college authorities due to the fear of being insult, and those who informed the authorities were not satisfied with their actions. They felt that the authorities were very slow to react.
- ◆ Very few victims took the help of the police as 92.11 per cent of the cases went unreported. In half of the cases, which were reported to the police, FIR was not launched.
- ◆ It was discovered that boys tease girls in order to satisfy their sexual desire and in encouraging this problem electronic media played an important role.

- ♦ About 45.00 per cent of the girls were aware of the laws related to the problem of eve teasing, and majority of them felt that media is the most effective tool of spreading the legal awareness.

### **Causes of Eve Teasing**

On the basis of in-depth interviews & discussions with the respondents and review of literature on eve teasing, the following emerged as the main causes of eve teasing.

- ♦ First and the foremost is the abandonment of the traditional moral values, the lack of religious education and absence of the sobering effect of the family and the teacher.
- ♦ Secondly, those people who are the victims of violence, neglect and stressful family situations in childhood become rowdy in their young age.
- ♦ Thirdly, there is the pernicious influence of cinema and cheap literature on the minds of the people. The current advertisements trying to promote the sale of various commodities often indecently expose the female anatomy, which defiles the mind of man, which ultimately leads to eve teasing, and sexual harassment of women.
- ♦ Fourthly, there is a rush to the metropolis from the neighboring states in search of employment or otherwise on sudden exposure from a conservative set up to a modern outlook experience a cultural dichotomy and in an attempt to be upwardly mobile indulge in criminal activities. This further influenced by the stressful working conditions. This has largely attributed to the increase in crime against women.
- ♦ Fifthly, there is lack of fear of punishment or adverse publicity or social disgrace. The attitude of police is casual towards these offences and they refrain from registering cases falling under this category, the victimized women themselves shy away from getting such cases registered for the fear of their future and public humiliation. Even if some of the cases get registered, they do not reach their final stages due to legal delay and the perpetrators of such crime go Scot-free, which is really unfortunate and increase to the problem.
- ♦ Sixthly, people who suffer from personality disorders and are frequent users of alcohol, often indulge in sexual harassment of women and eve teasing.
- ♦ Lastly, the provocation coming from the opposite sex like the style of dressing, talking, walking etc, consciously or unconsciously invite such hazards.



### **Suggestion from Respondents**

Following are some suggestions given by the respondents for the prevention of eve teasing:

- ◆ There should be strict reinforcement of legislation.
- ◆ Women should be made aware about their rights.
- ◆ Healthy interaction between boys and girls is necessary.
- ◆ Women should learn the techniques of self-defence. They should keep with them the devices like chilly powder, sprays that can be used as an agent of self-defense.
- ◆ Accuse should be punished as soon as possible. Fine and punishments are the devices, which can be used for teaching them a lesson.
- ◆ The university or the educational institutions should publicize their policy regarding the harassment of the women in Hindi and English widely, especially through prospectuses, notice boards etc. Names and phone numbers of appropriate authority should also be publicized.
- ◆ The mechanism for registering complaints should be made safe, accessible and sensitive both in police departments and in higher educational institutions.
- ◆ Arrangements should be made for appropriate psychological, emotional and physical support (in the form of counseling, security and assistance) to the victims, if she desires so.
- ◆ Attitudinal change among masses for giving respect to the females can prevent the problem to some extent.

### **Suggestions from the Police Department**

Investigators had a talk to the officials in the police station/post outside the University in order to find out the solutions to the increasing problem of eve teasing in the Lucknow University campus area. They gave following suggestions.

- ◆ University should appoint few persons from the proctoral board as mobile security persons for keeping a watch and check on the harassment of any women in the campus area.
- ◆ Complain boxes should be installed in the University where every one should be allowed to drop any incident/case etc. relating to harassment.
- ◆ The university in co-ordination with the police department should organize self-defense training programmes, and girl students must be motivated to participate in such programme.

- ◆ Girls should avoid wearing provocative dresses in the university area as it calls for their harassment.
- ◆ There is need to spread awareness among the girls on the laws and steps they can take in such situations.

### **Remedial Measures**

- ◆ There is a need to create awareness in the society so that the attitude of general public and police may become more sympathetic towards the victim.
- ◆ The girls should be made bold so that they can deal with the ruffians on their own. The bully is generally a coward. If he gets even a slap from the opponent, he takes to his heels. Training in 'Judo' and 'Karate' to girls is very helpful and for this the government must open training centers.
- ◆ Incase, the girls feel that she is likely to be overpowered while she has been cornered in a lonely area, she can be slightly tactful in her seemingly sweet behavior till she is able to sight others who can come to her rescue o.
- ◆ Whatever the incident, the victim girls should not shirk reporting the incident to the police though she might involve inconvenience and even controversy in some quarters. An eve teaser who remains un-reported gets encouraged in his exploits and encourages other also.
- ◆ The public has to also play an important role in curbing the evil. It has to show its indignation in making the parliament pass stringent laws for the police to enforcing them vigorously.
- ◆ The public has also to help damsels in distress and not behave in an unconcerned and impersonal way. It must encourage the victims to report the incidents to police and help the police and the courts in punishing the offenders by disposing truthfully and by being not won over by the threats or lures of the culprits.
- ◆ Public opinion also has to build up, against the eve teasers. Community action like having a morcha or dharna out side the house of eve easer will go a long way in acting as deterrent to eve teasing.
- ◆ The parents should also be watchful about their children. They must ensure that they dress properly without an effort to expose the anatomy unnecessarily, which invites the attention of the evil minded.
- ◆ It is also worthwhile for parents to discuss sex with the children and remove from their mind the unhealthy curiosity about it. Failing this they

gather dangerous knowledge from footpath publications, which are worse than anything else. Talk about sex taboo in Indian society. Society needs to change its attitude towards sex education. In fact, eve teasing is only a superficial manifestation of the imbalance in the relationship between man and women.

- ◆ There is also a need to strengthening the women's voluntary organizations, since the voice of an individual woman carries no weight. In fact, a woman is accused of being outspoken if she expresses her radical views. However, if a group of women of like-minded views join together form an organization to articulate their resentment about women's oppression and harassment, they can easily make appropriate impact. It is, therefore, necessary to activate vigorously a large number of women's organizations.
- ◆ There should be comprehensive and complete ban on indecent representation of women in television, advertisement, literature, magazine, films and other media.
- ◆ The NGOs should play an important role to help women who are victims of any form of harassment. The number of such NGOs should be increased and their power strengthened who can communicate about the personal problems of women with their family members, police and the courts.
- ◆ It is necessary to promote and advertise the agencies and voluntary bodies that offer legal- aide free of cost.
- ◆ It is of prime importance to sensitize the men towards women.
- ◆ Employment of women police person in large number is also necessary and they must be entrusted to deal with the cases involving the women.

In ultimate analysis it is to be understood that more than pious wishes, legal amendments and lofty pronouncement, it requires will and dogged perseverance on the part of both government and women to ensure for the latter a place of pride and respectability in the society.

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## **RISK FACTORS OF VERTICAL TRANSMISSION AMONG CHILDREN ATTENDING THE ICTC BHU VARANASI**

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### ***Abstract***

**Background and Objectives :** HIV infection was detected in our country in 1986 in a sex worker in Chennai (Tamil Nadu), a southern state of India whereas the virus was originated in Africa during 1959-1960. The first AIDS case was detected in 1981 in U.S.A. It has now become a global epidemic. Presence of a HIV infection everywhere highlight the spread from urban to rural areas, from the high risk to the general population and from the permissive to conservative societies. The major contributors to the spread of disease are migrants with low literacy status. About 85 per cent transmission of disease is horizontal. The estimate of HIV infected population in 2007 was 2.4 million in India.

Globally the epidemic is fastly increasing from highest risk group to bridge population and then general population. Antenatal clinic data indicate a rising HIV prevalence among women, which contributes to increasing HIV infection in children. The prevalence of HIV infection in India was 0.60 per cent among women attending antenatal clinics (ANC).

The objectives of this study are to find out the prevalence and risk factors with 95 per cent CI and status of presenting various morbidities.

*Key words:* HIV, weakness, loose motion, tuberculosis, anorexia, co-morbidities, nuclear family and joint family.

### **Introduction**

Across the globe, AIDS is responsible for an increasing number of deaths each year. UNAIDS/WHO of the estimated 2.1 million killed in 2007 around half a million were children aged below 15 years. At the end of 2007, an estimated 2.5 million children globally were living with HIV (1).

According to NACO (2007), 2.5 million people are currently living with HIV/AIDS in India with adult prevalence of 0.3 per cent . It is estimated that 70,000 children below the age of 15 are infected with HIV and 21,000 children

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are infected every year through mother-to-child transmission (Updated NACO estimates 2007) (2). The country has an increasing population of children living with HIV and those who have lost either one or both parents to an AIDS-related illness. However, there are no official estimates available on children affected and orphaned by HIV and AIDS in India. Some of the HIV high prevalence state in India such as Karnataka, Tamil Nadu, Andhra Pradesh, Maharashtra, Manipur and Nagaland are grappling with increased numbers of children infected and affected by HIV and AIDS.

Most children living with HIV - around 9 out of 10 - live in Sub-Saharan Africa, the region of the world where AIDS has taken its greatest toll. Large numbers of children with HIV also live in the Caribbean, Latin America and South / South East Asia. Around 90 per cent of all children living with HIV acquired the infection from their mothers during pregnancy / birth / breastfeeding (3).

Paediatric HIV infection is a growing health challenge worldwide, with an estimated 1500 new infections every day. In developed countries, well established prevention programmes keep mother-to-child transmission rates at less than 2 per cent. However, in developing countries, where transmission rates are 25 - 40 per cent, interventions are available to only 5 - 10 per cent of women. Children with untreated natural infection progress rapidly to disease, especially in resource-poor settings where mortality is greater than 50 per cent by 2 years of age. As in adult infection, antiretroviral therapy has the potential to rewrite the natural history of HIV, but is accessible only to a small number of children needing therapy (4).

An estimated 50 000 HIV-infected children are born every year in South Africa, compared with around 25 per year and 190 per year in the UK and USA, respectively (5).

## **Objectives**

1. To assess the extent of HIV infections among study subjects.
2. To assess the differentials of positivity rates for various socio-demographic characteristics and
3. To find out the odds ratio and 95% CI for various co-morbidities.

## **Material & Method**

The present study is based on Prospective data, which were collected from VCTC (now renamed as ICTC), Department of Microbiology, I.M.S., B.H.U., Varanasi, during the period September-2006 to August-2007. The cases were either referred from different OPD's of the Sir Sunderlal Hospital of B.H.U.

or called for screening if their parent was HIV positive. Nearly all the cases were from eastern Uttar Pradesh, Western Bihar, Western Madhya Pradesh and Jharkhand. About 2-3 ml. of blood samples was collected in a plain vial. All the samples either symptomatic or asymptomatic cases were tested for HIV positivity using strategy II/III as per WHO/NACO guidelines. This study is based on all 436 children (aged 0-14 years) out of total 5400 screened cases.

The data for this study was collected from (Voluntary Counseling and Testing Centre (VCTC) (now renamed as ICTC), IMS, BHU, Varanasi from September, 2006 to August, 2007. Out of 5400 screened cases, 436 were children in the age group 0-14 years who visited the S.S. Hospital, for their treatment or called for screening if their parent was HIV positive. 2-3 ml blood sample was taken in a plain vial. HIV testing was done by following strategy-II/III guidelines of WHO-NACO.  $\chi^2$  test was used to determine significant association if any between the study variables and HIV positivity. Multinomial logistic regression method was used to compute the Odds ratio and adjusted odd ratio (95 per cent CI) for the risk factors of HIV.

### Statistical Analysis

To find out the association between different risk behavior factors and sero-positivity status Chi-square test has been used and data were analyzed by using SPSS package 15.0. Multinomial logistic regression method was used to compute the Odds ratio and 95 per cent CI for the risk factors of HIV.

### Results

The percentage distribution of HIV positivity status according to age, gender, residential status, educational status, occupation, family type and history of hospitalization of the children is represented in table1. The distribution of children in the age groups 0-4, 5-9 and 10-14 were 24.8 per cent, 48.2 per cent and 27.1 per cent along with positivity 20.4 per cent, 26.7 per cent and 0 per cent respectively. This positivity is not related to age exposure infection, this HIV infection among children is due to vertical transmission. The gender wise positivity status of this infection was not found significant ( $P=0.36$ ). The positivity percentage was found 16.9 per cent and 23.2 per cent in rural and urban habitant children respectively but there is statistically insignificant association ( $P=0.141$ ). Among illiterate children the positivity was 23.5 per cent in compared to 15.3 per cent among having up to primary education and 0 per cent among the children with higher education than primary level. Among studying children, the positivity percentage was 0 per cent as compared to 25.2 per cent among non studying children. Approximately double positivity percentage was observed in joint family as compared to nuclear family. The children having the history of hospitalization had one and half times higher positivity as compared to non-hospitalized children.

According to per capita income (PCI) of the family, 276 (63.3 per cent) children belong up to Rs.600/= per month with a positivity percentage of 20.3 per cent and 13.8 per cent in the PCI group of above Rs.600/= pm. This shows that positivity rate is approximately one and half times higher in low per capita income group as compared to high PCI group. Although the difference is not observed statistically significant ( $P=0.09$ ).

The HIV positivity rate according to various co-morbidities is presented in table 2. The data shows that approximately fifty percent children had their HIV positive status suffering with weakness, loose motion, anorexia and tubercular infections.

Out of 73 (16.7 per cent) study subjects suffering with fever, 12 (16.4 per cent) were seropositive (OR=0.885, 95 per cent CI; 0.451-1.737). 58(13.3 per cent) children were suffering from weakness and 28 (48.3 per cent) of them were seropositive (OR= 6.123, 95 per cent CI; 3.378-11.098). Approximately 50 per cent seropositivity was observed in children suffering from loose motion, anorexia and tuberculosis with OR=4.889(95 per cent CI; 1.533-15.590), OR=4.432(95 per cent CI; 1.653-11.883) and OR=5.002 (95 per cent CI; 2.303-10.865) respectively. 16.9 per cent seropositivity was observed in children suffering from other co-morbidities (OR=0.909, 95 per cent CI; 0.529-1.564). It is very significant to see that 44 (16.7 per cent) children were seropositive and were apparently healthy. All the positive study subjects had their father and mother both seropositive. Out of 110 (27.7 per cent) children who had lost their parents 22 (20 per cent) of them were seropositive.

## Discussion

In spite of large number of seropositive children around the world, AIDS is often assumed to be disease that kills only young and adults indulge in risky sexual behavior and drug addiction. In Africa more than 1 in 3 new born infected with HIV die before the age of one, over half die before reaching their second birthday and most are dead before they are 5 years old(6). Sex and HIV education must be provided to children at school level to reduce the infection and also mitigate the stigma and discrimination of HIV/AIDS.

Table 1 illustrates that seropositivity reduces as the educational status is increased. So, all children and young people should receive primary education along with effective health and HIV education to mitigate the epidemic. As majority of Indian population reside in rural areas, majority of the study subjects also belong to rural areas and 62(16.9 per cent) were seropositive out of all (78) seropositive. It is also found that joint family trend is usually followed in our country. The percentage of children residing in joint family were 229(52.5 per cent) with seropositivity of 22.7 per cent as compared to 12.6 per cent in nuclear family.



## Conclusion

The prevalence of HIV was 17.9 per cent among children in the age group 0-14 years ranging from 16.9 per cent in rural to 23.2 per cent in urban. Odds ratio was 1.49 with 95 per cent CI (0.80 - 2.77). The positivity rate was observed 20.4 per cent and 26.7 per cent in the age group 0-4 and 5-9 years with zero positivity in the age group 10 - 14 years. The prevalence was approximately double in the joint family (22.7 per cent) as compared to nuclear family (12.6 per cent). About 50 per cent prevalence was observed among the children suffering with weakness, loose motion, tuberculosis & anorexia. Both father and mother of positive children had the positive status. 82.1 per cent father and 76.1 per cent mother of all study subjects were HIV positive. More than one fourth children had lost their father / mother or both. These children are innocent but facing the problem of acceptance in society, care by the parents, co-morbidities, quality of life etc. due to activities performed by the parents.

Counseling and support for children and their families can considerably improve their quality of life; relieve suffering and assistance in the practical management of illness. Along with the primary education sex and HIV education must be provided at different stages to reduce the pandemic.

In order to develop appropriate means of enabling and protecting people, either as children or adults, against the epidemic, adequate and judicious attention need to be imparted to the rights and realities of childhood.

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**Table 1 HIV positivity status accordingly to socio-demographic variable among the study subject**

Variable	No. of study subject	HIV +ve cases in (%)	$\chi^2$ -value/ P-value
<b>Age group (year):</b>			
0-4	108(24.8)	22(20.4)	37.17
5-9	210(48.2)	56(26.7)	P<0.001
10-14	118(27.1)	0(0.0)	
<b>Gender :</b>			
Male	248(56.9)	481(19.4)	0.84
Female	188(43.1)	30(16.0)	P=0.36
<b>Residential status:</b>			
Rural	367(84.2)	62(16.9)	1.57
Urban	69(15.8)	16(23.2)	P=0.141
<b>Educations :</b>			
Uneducated	213(48.9)	50(23.5)	14.07
Upto primary	183(42.0)	28(15.3)	P<0.001
Above Primary	40(9.2)	0(0.0)	
<b>Occupation:</b>			
Not student	310(71.1)	78(25.2)	38.61
Student	126(28.9)	0(0.0)	P<0.001
<b>Family type:</b>			
Nuclear	207(47.5)	26(12.6)	7.62
Joint	229(52.5)	52(22.7)	P=0.006
<b>Hospitalised:</b>			
Yes	85(19.5)	24(28.2)	7.69
No	351(80.5)	54(15.4)	P=0.006
<b>Per Capita Income:</b>			
1-600	276(63.3)	56(20.3)	2.95
601 and above	160(36.7)	22(13.8)	P=0.09

**Table – 2 Distribution of seropositivity percentage among the study subjects according to the co-morbidities**

Variable	No. of study subject	HIV +ve cases in (%)	$\chi^2$ -value/ P-value	Old ratio	95% CI
<b>Fever:</b>					
Yes	73(16.7)	12(16.4)	0.126		
No	363(83.3)	66(18.2)	NS	0.885	0.451-1.737
<b>weighloss:</b>					
Yes	19(4.4)	0(0.0)	4.33		
No	417(95.6)	78(18.7)	p=0.022	1.230	1.175-1.288
<b>weakness:</b>					
Yes	58(13.3)	28(48.3)	42.05		
No	378(86.7)	50(13.2)	p<0.001	6.123	3.378-11.098
<b>Loose motion:</b>					
Yes	12(2.8)	6(50.0)	8.66		
No	424(97.2)	72(17.0)	p=0.010	4.889	1.533-15.590
<b>Cough:</b>					
Yes	24(5.5)	0(0.0)	5.53		
No	412(94.5)	78(18.9)	p=0.008	1.234	1.177-1.292
<b>Anorexia:</b>					
Yes	17(3.9)	8(47.1)	10.25		
No	419(96.1)	70(16.7)	p=0.005	4.432	1.653-11.883
<b>tuberculosis:</b>					
Yes	29(6.7)	14(48.3)	19.53		
No	407(93.3)	64(15.7)	p<0.001	5.002	2.303-10.865
<b>others:</b>					
Yes	130(29.8)	22(16.9)	0.118		
No	306(70.2)	56(18.3)	p=0.423	0.909	0.529-1.564
<b>Apparently Healthy:</b>					
Yes	264(60.6)	44(16.7)	0.682		
No	172(39.4)	34(19.8)	p=0.242	0.812	0.495-1.332
<b>Father +ve:</b>					
Yes	326(82.1)	78(23.9)	21.14		
No	71(17.9)	0(0.0)	p<0.001	0.761	0.716-0.808
<b>Mother +ve:</b>					
Yes	302(76.1)	78(25.8)	30.54		
No	95(23.9)	0(0.0)	p<0.001	0.742	0.694-0.793
<b>Parents expired:</b>					
Yes	110(27.7)	22(20.0)	0.012		
No	287(72.3)	56(19.5)	p=0.507	1.031	0.594-1.789

## **SOCIAL DISCRIMINATION AND HARASSMENT AGAINST THE KOTHIS (MEN WHO HAVE SEX WITH MEN) IN PUDUCHERRY - A QUALITATIVE STUDY**

**\*A. Kirubakaran, \*\*T. Subramanyam Naidu**

### ***Abstract***

Men who have sex with men (MSM) community are a highly complex, diverse and multi gendered population. Normally there are two clear distinctions to this population, one that is clearly visible and the other which is invisible as they exist as a part of the normative male population. MSM in India have faced hostility and social discrimination. The socio political environment of the country is not favored for MSM. Even the legal system with regressive laws like section 377 of the IPC violates the rights of MSM. MSM are the target due to their perceived abnormal identities and sexualities. Stigma and discrimination often results in lack of access to health care and other social resources, increasing the susceptibility of MSM to health risks such as HIV and STI's. This qualitative investigation explores the experience and context of stigma, harassment and discrimination among Kothi (MSM) in Puducherry region. In this study 25 kothi were interviewed and collected the information about their social discrimination and harassment faced by them.

*Key words:* Discrimination, harassment, Kothi (MSM), social stigma

### **Introduction**

Discrimination is sociological term referring to the treatment towered or against a person of a certain group in consideration based solely a class or category. Discrimination is the actual behavior towards another group. It is often based on ignorance, prejudices and negative stereotypes, because many people fear what seems strange or unknown they react with suspicion or even violence to anyone whose appearance, culture or behavior is unfamiliar.

From the Kama Sutra to numerous ancient temple carvings, it is evident that men who have sex with men (MSM) and *Hijras or Kothi/Aravanis* (transgender women or male-to-female transgender persons) have existed in India for thousands of years (Venkatesan Chakrapani et.al.2007). Strong condemnations of same-sex behavior or attractions are also notably absent from

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Hindu religious doctrine. Despite Indian society's general climate of acceptance and tolerance, however, there appears to be limited public knowledge and understanding of men who have sex with men (MSM) or same-sexual orientation. Discriminatory practices, which may occur outside of the conscious awareness of persons, who constitute the key institutions of society, may emerge from family, community, medical, and legal systems. Indirect forms of oppression, such as stigmatization and discrimination, are engaged by individuals or groups as methods of social control to prioritize and enforce their particular beliefs, worldviews, and their power within a society (Galtung, 1969; Link&Phelan, 2001). Forces may be complicit, if not actively engaged in stigmatizing and discriminating Practices against MSM. Overall, stigma and discrimination against MSM may need to be explored as a product of structural societal forces, as opposed to traditional models that focus on stigma as an individual-level phenomenon (Galtung, 1969; Parker Aggleton, 2003).

### **Study area**

The qualitative study was conducted in Puducherry. Puducherry is a former French colony. It is situated 160 km South of Chennai on the coramandal coast. It has an area of 492 square km and total population is around 12 lacks. Puducherry is known for its cosmopolitan culture.

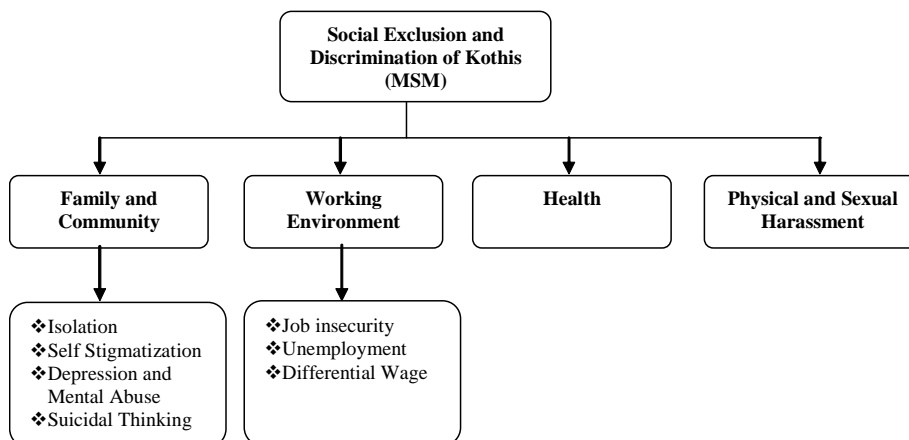
### **Methodology**

In this study non probability sampling methods is used, this can be also called convenient sampling. It depends upon the convenient availability of the samples, whenever the kothi (MSM) are seen in cursing point and drop in center of NGO. The techniques used for conducting in the study are; case study methods and focus group discussion. 25 individual have been interviewed for case study and around 50 kothi has been used for focus group discussion. The study was conducted with the help of community based organization (Sahodaran). This NGO's primarily serve for MSM community including those who are HIV positive and those who engage in sex work.

### **Discussion**

Kothis (*Kothi is a male who show obvious famine mannerism and who involve mainly, if not only in receptive anal / receptive oral intercourse with men and also the persons who cross-dress and penetrate their male partners*) are socially excluded and also they were discriminated to attain their human rights.

The study had made an attempt and explored the ways in which they have been exploited of discriminated had been listed below under different heads.



### Discrimination by Family and community

A proverb says that “*every ass loves his bray*” which means that even the five sensed animals has love and affection towards his kid, but in case of Kothis life it fails, after knowing that his son is an Kothi/Arvani they start ignoring them and even exclude them from the family and they were also used to ill-treat them by abusing wards and at the outmost they were also send out of their family. The present study had observed that among 25 Kothis case study sample about 45 per cent of them were forcible sent out of their house and even their parents feel shame to tell that they are their son.

The rest of 55 per cent of them were allowed to stay at their house but at the same time they were made to stay isolated. They were not allowed to mingle with their relatives and family ceremonial gathering too. This people were avoided to seek any support either by financial and or moral support from their own family members. Some time they were not even provided with their basic needs for a human being like food, cloth etc, and these pathetic situation made them to come out from family to hunt for their financial need.

The following two case studies explain their bitter experiences faced by them being a Kothi (MSM) behavior.

A 24 years old Kothi, respondent respected stigmatization as well as leave from their own family member and relatives, which made him to lose his invaluable source of support from his family. Knowing that he was a Kothi by some means. The family members in response to explore his sexual orientation they had started to abuse and had a violence of attempt on him, which made him mentally depressed and had made a suicide attempt. He was rescued by his fellow Kothi’s and he was taken for counseling by the NGO counselors.

Another Kothi presently aged 28 responded that he is the only son of his family. When he was 14 years old he found that he was very much attracted by

male and fell shy and working with male. “I was more attracted to wear female costume in absences of my family. I used to decorate my self with female costume, and even I had started to have sex with a Panthi (Male sexual partner) secretly. Some how my parents had come to know the activities and they started scolding and using abused words, physical punishment to stop such activities. Even though my mind says that I am physically a man and I should not have sex with man. My sexual urge attracts towards man, even after valuable advice I was made to send out from family. Now I am residing along with my fellow Kothis”.

### **Discrimination and violence in working Place**

Another dimension of discrimination to the Kothi community occurs in their work place. If they were identified that he is a Kothi, no one come forward to offer a job. Even if they got employed after great struggle, majority of them were employed as daily wages labourer (painting labour, construction labour etc.) and salesmen in the shops. The study inferred from the respondent that Kothi cannot able to sustain the job in a single place not more than six month permanently, because of the reason that the employee pay them with very meager salary/wage or the sexual assault by their fellow colleagues.

Among 25 Kothi respondent the study had inferred that only 11 Kothis are employed and the rest 14 Kothis are unemployed. Even among these 11 employed Kothis seven of them employed as daily wage labourer and four of them are working as salesmen/helper in the shop. A daily wages Kothi is paid less salary when compared to other co labourers.

A 32 year old Kothi respondent says that, he was working in a building construction site as helper, he got very less wages then other co labourer by the contractor, because the contractor knew him that he is a Kothi, when the Kothi person asked about his reduction of wage, the contractor denied his service. So in this way the Kothis are discriminated and abused in the work place.

### **Health care Oppression**

The Kothis were discriminated and stigmatized by the health care providers and by the hospital staffs by outright insults and refusal of service which directs them to approach substandard medical practitioners. It has been observed from the study many Kothis feels very much uncomfortable to report their health ailments and symptoms which will disclose their MSM sexual behavior, which will create a distress by the service providers. The study inferred that among 25 Kothis 17 Kothis used to consult for treatment from the NGO's clinical physician, eight Kothis used to take treatment to their ailments from private physicians. They avoid visiting the Government Hospitals, because of many reasons, like they had to disclose their personal problems at public.

A 33 years Kothi respondent said that, once he went to a government hospital, for some illness to consult the doctor, but in the receptionist refused to registrar out patient card on his name, when he pronounced a female name and finally he entered his name by knowing his gender. The problem starts when he joined in the female Q, the female patients did not permit him to stand in their Q and insist him to stand in male Q, but he had refused to do so. There he was abused by the filthy words by both the gender patients, among the one of the patient ill-treated and scolded that you people use to play sex with all type of people and act as an carrier of contagious diseases and come over for spreading, which made him not to take treatment in the government hospitals even at the time of death bed. At last the medical ward attendant came to resolve the problem to allowing him take treatment as a last patient. This ill-treatment from the people in the hospital made him not to take treatment in the public hospitals.

### **Physical and Sexual Harassment**

Consequences of stigma and discrimination of the Kothis by Physical and sexual harassment by the social elements are more frequent incident. Among 25 case study sample with the Kothi, it was observed that 13 Kothis shares their bitter experiences tortured by the rowdies and social elements one among the Kothi, said that rowdies used to keep on eyes on us, and when they get chance, grab the money and abused and sexually assault us. Due to their future survival, they can not complain against rowdies. Once the Kothi approached to police station for their justice and protection, but they were completely rejected and the same time orally and physically abused by the Police in the Police station. Apart from that, some time the Panthi forced us to have anal sex with them.

A 31 years old Kothi responded said that, two year back, when he was employed as security in a private company, one day he was, returning from his duty, the labour from the same company who is friend of me invited for a party in his house with five more friend of him and they had forced me to have liquor with him. When I was completely in an unconscious stage, one by one had started to have anal sex with me which I could able to recognize only in the morning and left me alone and run away form the room. After sexually abused, I was severely injured in anal with continuous bleeding and I could not able to convey this to any one due to shame, at the same time I am in urgent need treatment for it, so I had taken medicine from medical shop to heal the wound. This incident made him to quit his job from the company.

### **Summary and Conclusion**

The present study inferred that the Kothi identified (MSM) in Puducherry are facing social discrimination stigma and harassment. They are discriminated and harassed from family, society and community, sexual partner, rowdies,



Policeman and health care providers. The study had observed that out of 25 case studies sample about 45 per cent of the Kothis are forcibly sent out of their house, even their parents fell shame to inform they are their sons. They were not allowed to mingle with their relatives and social gatherings. Kothis were not provided with basic needs and support from him own family. This situation made them to come out from the family to hunt for their financial need and also involve in sexual activities. Discrimination to the Kothi community occurs in their work place too. Kothis are denied to offer job by the employee. Among 25 Kothis respondent 11 Kothis are employed in daily wages and as salesman job, rest of them unemployed. Even wages also paid for Kothis are very less than that of their co-workers. The Kothis were discriminated and stigmatized by the health care providers and hospitals staff by outright insult and refusal of service which direct them to approach substandard medical practitioners. Among 25 Kothis 17 Kothis used to consult for treatment from NGOs clinical physician and eight Kothis used to take treatment from private physician. They neglect to visit the government hospitals. They had to disclose their personal problems at public. The study inferred that among 25 Kothis respondent 13 Kothis were tortured by the rowdies. Rowdies were extorting money from the Kothis. Some time the Panthis forced them, to have anal sex without wearing condom it was also noted that even sometime the Panthi with his friends use to have group sex with Kothi and they do not pay for his service. This kind of incident may have higher risk of HIV infection to the Kothi.

### **Suggestion**

- ◆ As like in the Western countries, the Kothis should also be recognized and their legal rights should be amended as a bill in India.
- ◆ The basic human rights should be made available for the destitute Kothis.
- ◆ Knowing that a boy has been notified as Kothi, their parent should not exclude them from their family. Necessary awareness and counseling should be given to their parents to be affectionate with them, which will help the Kothis not to indulge in immoral activities.
- ◆ Awareness programmes through media should be hosted to treat the Kothis has fellow human being and they should be treated a one among them.
- ◆ Legal laws should be strengthened to stop the sexual and physical torture by the local rowdies and gangsters.
- ◆ Police should accept the complaints by the Kothis to assure equal justices without delay.

- ♦ A separate wing should be operated in the government hospital for the Kothis medical welfare.
- ♦ Minimum rights of reservation should be provided in the education and in employment.
- ♦ Initiative has to be taken by the NGOs / Government organization to create awareness about SHG and eligible Kothis should be provided with government bank loan with subsidiary.
- ♦ Through small scale industry promotion wing the Kothis should be given industrial training to get more employment opportunities or to start their own business.

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